

## MORE THAN 3,000 HI-FI COMPONENTS

How To Set A System Budget Tape Recording Systems
Features, Specs, And Prices Of Receivers, Speakers, CD Players, Tape Decks, And More


"
$\$ 1099.95$ ea.

## The Polk Revolution Continues!

## "Polk reinvents the loudspeaker" Hisb Fidelis Magazine


d. early six years ago the audio world was stunned by Mathew Polks introduction of rewolutionary SDA technology. While other designers had been concentrating on small refinements to existing loudspeaker technolog: Mathew Polk opened the door to new frontiers of exciting realism in sound.

Thue Stereo SDA technology maintains stereo separation all the way to your ears, something which no conventional speaker can achieve. Conventional speakers make it sound like the musicians are trapped in the speaker boxes or in the small space between them. Polks patented SDA speakers ill the entire width of your listening room with sonic images so breathakingly real that is just like having the musicians in the room with you. They must be experienced to be believed!

## Introducing the SDA SRS 2.3

Introduced two years ago, the flagship SDA Signature Reference System (SDA SRS) is the ultimate expression of loudspeaker technology: A two-time winner of the prestigious Audio Video Grand Prix Award, the SDA SRS was recently chosen by the editors of Stereo Review magaxine for their ulimate dream system.

Now being introduced, the SDA SRS 2.3 ofiers all of the beneits of third generation SDA technology in a slightly more modest package. It is the perfect speaker for those listeners who demand the best and most exciting listening experience but who cannot accommodate the larger SDA SRS.

Words can never fully express the thrilling experience of listening to the new SDA SRS 2.3. Efiortess reproduction at live concert levels, distortion free, body-tingling bass and room-illing stereo imaging are executed so flawlessly that when you close your eyes you'll forget that you are listening to speakers at all: Visit your local Polk dealer and experience them for yourself


Matthew Polk's award winting SDA SRS 1.2 and the SDA SRS 2.3.


Every audio component we engineer is a work of art in its own right. Each one has the integrity of design and technological virtuosity for which we are known.


Presenting our newest receiver, the TA-1A: A milestone product that marks the availability of our first entry-level system, putting The Sound of Nakamichi within the reach of every music lover. Combine the TA.1A Tuner Amplifier with our OMS-1A Compact Disc. Player and CR-1A Cassette Deck and behold a sound so rich, yet so affordable, that the quality and value will startle you.

Combined, these components create harmony and radiance, forming a unique synergy, a perfect match. The ideal system.
From the ultimate to the entry level, Nakamichi audio products are designed to produce one thing: the reverie of musical flight.
After all, we know that nothing can make the spirit soar like music.

## $\Gamma$ Nakamichi

For the name of your nearest authorized Nakarnichi home audio or mobile sound dealer, please call or write

Nakamichi America Corporation 19701 South Vermont Ave Torrance, CA 90502 (800) 4212313 (800) 223-1521 (Californıa) Nakamichi Canada (800) 663.6358


## FEATURES

Sound Finance
By Michael Smolen
By Michael Smolen \& William Wolfe
PRODUCT LISTINGS4
Tape Systems
Tape Systems ..... 16
Receivers ..... 31
Power Amplifiers ..... 45
Preamplifiers ..... 64
Integrated Amplifiers ..... 76
Tuners. ..... 82
Compact Disc Players ..... 90
Cassette Decks ..... 109
Open-Reel Tape Decks ..... 118
Turntables ..... 119
Cartridges \& Tonearms ..... 124
Speakers ..... 132
Headphones ..... 171
Signal Processors ..... 178
Accessories ..... 185
Pocket Stereo ..... 202
Blank Tape ..... 206
Audio Glossary ..... 209
Directory of Manufacturers ..... 217

Cover components (clock wise from top right):
Kenwood KR-V127R A/v receiver
(listing on page 32);
Nakamichi CR-3A cassette deck
(listing on page 112);
Conrad-Johnson Sonographe SD-1 CD player (listing on page 102);
Precise Monitor 7 speaker (listing on page 163); Technics SL-1200MKII turntable (listing on page 122); Yamaha NS-I speaker (listing on page 170).

## Stereo Review"s <br> STEREO BUYERS` GUIDE 1989

WILIIAM WOLFE Editor
LOREN FALLS Art Director
BCIB ANKOSKO, Senior Editors
WILLIAM GOLDMAN
LAURA KELLY Associate Editor
MARK LAZARUS Editorial Assistant
JERRY TAN Database Coordinator
barbara aiken Project Coordinator
LOUISE BOUNDAS Editorial Director
MICHAEL SMOLEN Executive Director
WINSTON A. JOHNSON
Vice President and Publisher

## ADVERTISING

Advertising Director: Nick Matarazzo 212-719-6035
National Sales Manager. Charles L. P. Watson 212-719-6038
Consulting Director, Richard J. Halpern 2|2-719-6025
Account Manager: Sharon Dube
212-719-6037
Assistant to the Publisher: Nadine L. Goody
Classified Advertising: 800-445-6066
Midwestern Managers: Arnold S. Hoffiman, Jeffrey M. Plaster 312-679-1100

Western Managers: Bob Meth, Paula Borgida 213-739-5130

Tokyo Office: Iwai Trading Co., Ltd. 603 Ginza Sky Heights Building. 18-13. Ginza 7-Chome, Chuo-Ku, Tokyo, Japan 104 Japan Representative: J.S. Yagi Telephone: 03-545-3908

Production Director: Karen L. Rosen
Produrtion Manager, Barbara Ross
STEREOREVIEW PRESENTS IS PUBLISHED BY DIAMANDIS COMMUNICATIONS INC., a wholly-owned subsidiary of
Hachette Publications, Inc.
President and CEO: Peter G. Diamandis Executive Vice President: Robert F. Spillane Senior Vice President, Finance, and CFO:

ArthurSukel
Senior Vice President, Manufacturing \& Distribution: Murray Romer
Senior Vice President, Operations \& Administration: Robert J. Granata
Vice President, Controller: David Pecker
Vice President, General Counsel:
Catherine Flickinger
Vice President, Circulation, Leon Rosenfield; Vice President, Communications, Phyllis Crawley;
Vice President, Marketing, Anthony F. Incalcatera; Vice President, Research, Bruce Gershfield; Senior Vice President, Sales, James A. Frahm.

Stereo Review Presents is published four times a year by Diamandis Communications Inc., a whol-ly-owaed subsidiary of Hachette Publications Inc. 1515 Broadway, New York, NY 10036.
COPYRIGHT 1988 BY DIAMANDIS PUBLI-
CATIONS INC. ALL RIGHTS RESER VED.
PERMISSIONS: Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to Charles J. Lillis, Product Merchandising, Diamandis Communications Inc., 1515 Broadway, New York, NY 10036.



# SOLINOFNACEE 

Budgeting before you buy can increase the fun of shopping for a new stereo system.


HI-FI equipment can bring a great deal of pleasure into your life. It may tempt some record collectors to play air guitar, do Elvis impersonations, or conduct phantom symphony orchestras in their listening rooms, but the majority of record collectors prefer to sit quietly and listen less athletically.

Today's advanced technologysuch as the compact disc system, the laser videodisc, surround sound, and digital signal processing-make this a particularly exciting moment to be in the market for new components. If you are ready to buy a whole new stereo system-even with limited funds-you can have a very good time shopping.

Selecting new components calls for the same kind of care you'd devote to buying a new house or car. If you have a job as a bank teller (or a magazine writer), you wouldn't be shopping for a ten-bedroom, twen-ty-acre estate in the country, but you could probably handle a very nice condo on the city's perimeter. Similarly, just because you have only $\$ 500$ to spend on a stereo system doesn't mean you can't achieve good sound in your apartment's living room.

A stereo system means different things to different people. To some it can be as simple as a good Walk-
man-type portable cassette player with a pair of external speakers (price: about \$225). To others it can mean separate components so large, complex, and powerful that to house them you'd need an extra wing on your mansion (price: if you have to ask, you can't afford it).

## Aduance Preparation

Well, what can you afford? What equipment do you actually need? How much should you spend on which parts of it? Finding answers to those questions requires some instructive and pleasing homework. And the first thing you have to do has nothing to do with budgeting. It has to do with listening.

Before you can buy any kind of hi-fi system, you ought to know what music should sound like, and the only way to do that is to go out and listen to live performances. Go to concerts and make mental notes of what makes music sound goodthe impact of sharp transients, the contrast of soft and loud passages, the wide range of frequencies, and the absence of recorded noises. Try to remember what real music sounds like so you can select a system that comes as close to that ideal as possible.

Also, listen to high-quality sound systems at the homes of friends or in upscale audio showrooms. This


will give you a good idea of what good reproduction can sound like, and while you may not be able to afford such a "reference" system, it will set a standard, a goal to aim for in the future.
The next thing you must consider is where you'll be listening to your stereo system. Large speakers may impress you in the showroom with bass you can feel as much as hear, but if you live in a thin-walled apartment next to someone with a pacemaker, you'll never hear that bass at home. The size of your listening room is also important because it must contain the equipment you buy and is the space you want to fill with sound. Large rooms require more amplifier power or more efficient speakers for reproduced music to be as loud as in small rooms.

Because different materials reflect or absorb sound differently, the decor of your listening room will influence the sound your system produces. A room with heavy drapes, overstuffed furniture, and plush carpeting will absorb sound. A powerful receiver and careful speaker placement (not behind the couch) might be required for acceptable sound reproduction in such an acoustically "dead" room. A room that is acoustically "live"-with hardwood floors, bare walls, and a lot of chrome and glass furniturewill reflect sound waves and won't require as much power or as effi-
cient speakers as a dead room. Exactly where you intend to place the speakers should be considered before shopping since placement affects overall tonal balance and perceived stereo imaging, not to mention the appearance of the room.

The last thing you need to do before figuring your hi-fi budget is to decide what your main sound source will be. For example, if you plan to buy nothing but CD's for the rest of your life, there's no need to spend money on a turntable. Instead, you may want to apply that money toward an amplifier or receiver with a good dynamic-headroom rating, to cope with the expanded dynamic range of compact discs, and better speakers, to handle a CD's extended frequency response and powerful transients. And if you never listen to the radio, you certainly shouldn't buy a receiver. Instead, look at integrated amps.

You can build a single-soundsource system (integrated amplifier, turntable, and speakers) for as low as about $\$ 300$, or you can go all out with a multisource component system costing up to $\$ 100,000$ or even more. Follow the preshopping recommendations above, read magazine test reports, and study buying guides such as Stereo Review's Stereo Buyers' Guide or Compact Disc Buyers' Guide. They will show you the wide selection of components in every price range and help you to narrow down your choices.


## Finally. A that reproduces not just bits a



dcom's new GCD-575 Compact Disc Player has been worth waiting for. Now there's a CD player with analog audio circuits as technically advanced as its digital stages.

Since the human ear can only appreciate musical sounds in their analog format, Adcom began with the objective of producing the first affordable CD player whose direct-coupled audio output would deliver the long anticipated technical benefits of digital sound.

Class "A" Makes A Difference
Designers and engineers usually use Class " $A$ " audio circuits where price is no object. In its purest form, Class "A" offers a highly sophisticated level of audio amplification, often demanded by those who can distinguish outstanding sonic performance from the merely average. Adcom's GCD-575 employs a no-compromise, Class "A" analog audio amplifier section which provides superior resolution by more clearly defining low-level information.

## CDplayer all of the music, ad bytes of it.



This higher resolution makes an audibly dramatic difference in the musicality of CD reproduction. To achieve this result, the analog audio circuits in the GCD-575 were based on the same proprietary high speed linear amplifiers used in Adcom's GFP-555 preamplifier, universally recognized for its outstanding musical integrity.

No other CD player at any price uses these superb audio components.

## Digital Sound At Its Best

Adcom's selectable analog frequency/phase contour circuit enhances the musicality of CD's which have been poorly mixed, or digitally over equalized. Subtly contoured by the AFPC, many of these CDs become more listenable, with much of the fatiguing harshness and "glare" reduced. In addition, the stereo image and sound stage becomes more focused allowing for a more natural sonic presentation.
(Over please)

# The Adcom GCD-575 

## Details You Can Hear

Importantly, Adcom's CD player is designed with a low output impedance ( 100 Ohms ) so that it can operate up to its maximum capability with a wide variety of associated equipment. It is not only compatible with virtually all input stages of amplifiers, preamplifiers, tuner/preamplifiers, etc., but also permits the use of longer interconnecting audio cables, when required, with minimal signal deterioration.

Additionally the GCD-575 is supplied with a high quality, low-loss audio cable to prevent the sonic smear that conventional audio cables tend to cause. The use of this special cable and the 100 Ohm output impedance permits the GCD-575 to be used with Adcom's SLC-505 passive straight line controller. If no other source equipment will be used, the variable output (front panel controlled) can be used directly into your power amplifier, bypassing the preamplifier circuits normally required by other CD players.

A multi-winding power transformer, connected to three separate tightly regulated power supplies for the audio, digital and display circuitry, insures isolation of the different functions and optimal operation of each without interference.

The four special heavy feet installed on the GCD-575 are reversible metal castings. On one side, the flat surface insures a wide contact area. The reverse side is cast with built-in "Iso-points" which, when used in a three-foot configuration, operates as a "tripod" support system.

A special polarity-inverting switch permits you to reverse the normal positive polarity to negative (inverted) polarity. This corrects playback of CDs in which the polarity was incorrectly recorded (inverted), or for use in systems in which one of the components causes a reversal of correct polarity.


Full Function Remote Control

## Specifications

Frequency Response: $5 \mathrm{~Hz}-20 \mathrm{kHz}$, $+0.1,-0.5 \mathrm{~dB}$
Signal-to-noise Ratio: 105 dB
Dynamic Range: 98 dB
THD: 0.0025\%
IMD (70Hz difference): @ 5kHz 0.00018\%

Channel Separation ( $\mathbf{1 k H z}$ ): 95dB
Interchannel Phase Shift:
@ 20kHz Less than $1.8^{\circ}$
Output Impedance: Fixed $100 \Omega /$ Variable $100 \Omega$ /Digital $75 \Omega$
Output Level: Fixed 2.5V RMS
Variable Greater Than 4.5V RMS
Digital 0.5 V peak-to-peak
Sampling Rate: 176.4 kHz
Quantized Bits: 16-bit linear
Power: $120 \mathrm{VAC} / 60 \mathrm{~Hz}$
(Available in $220 / 240 \mathrm{~V}, 50 \mathrm{~Hz}$ )
Dimensions: $17^{\prime \prime}$ ( 430 mm )W $\times$ $11-1 / 4^{\prime \prime}(285 \mathrm{~mm}) \mathrm{D} \times$ 3-7/16" $(87 \mathrm{~mm}) \mathrm{H}$
Weight: 12 lbs . ( 5.5 kg. )
Optional: Model RM-3 rack mount adaptors. Available with white front panel.

Specifications subject to change without notice.

## More Features For Better Value

Other features include a full function remote-control system with random access track capability; low group-delay digital and analog filters; triple-beam laser format; a direct digital output; playback of 3-inch discs without an adaptor; and a very-high-quality headphone output.

The GCD-575's advanced facilities include:

- Programming of up to 24 tracks
- Programming of any phrase
- Audible fast forward and reverse
- Adjustable introscan
- Auto space

Display functions include:

- Elapsed time on track or disc
- Time remaining on track or disc
- Programmed tracks
- Track being played
- Number of tracks up to 20


## Why Should You Listen To Us?

Over the years, Adcom has earned a reputation for delivering superb performance at a modest price. The GCD-575 keeps faith with this tradition.

Once again, Adcom clears an innovative path through the jungle of confusing claims about "digital" sound, and provides a logical and direct path to musical purity.

If you've been waiting for a CD player which faithfully reproduces all of the music, not just bits and bytes of it, you'll want to visit your nearest authorized Adcom dealer right now... because while it may be true that all good things come to those who wait, you've waited long enough for a CD player this good.

11 Elkins Road, East Brunswick, NJ 08816 U.S.A. (201) 390-1130

Distributed in Canada by PRO ACOUSTICS INC. Pointe Claire, Quebec H9R 4X5

## Budget Systems

There are two ways to approach the budget system-as a singlesource system or as an all-purpose system. Let's say you have $\$ 500$ to $\$ 600$ to buy a single-source system (all amounts are based on manufacturers' suggested retail prices) and you've determined that CD's are going to be your source. One way to budget this system would be $\$ 150$ for an integrated amplifier, $\$ 200$ for a CD player, and $\$ 150$ for speakers. The positive aspects of this type of system far outweigh the negative ones. While $\$ 150$ is not a lot to spend on a pair of loudspeakers, you'll be amazed at how good a CD player can make inexpensive speakers sound. Also, while $\$ 150$ will probably buy a maximum of around 35 watts of power, speakers at that price are generally very efficient.

With $\$ 600$ you could shoot for a more general-purpose systemspending, for example, $\$ 150$ for a receiver or integrated amplifier, $\$ 150$ for loudspeakers, $\$ 150$ for a cassette deck or CD player, $\$ 100$ for a turntable, and $\$ 50$ for a phono cartridge. For better sound you might try $\$ 150$ for an integrated amp or receiver, $\$ 250$ for speakers, and either $\$ 200$ for a CD player or $\$ 150$ for a turntable and $\$ 50$ for a phono cartridge.

It's not hard to see that shifting
around $\$ 25$ here and there can create quite a different system. There is one guideline, however, that applies equally to the budgetpriced system and the extravagant component system. Always spend as much money as you possibly can on the speakers, as these are what you're going to be listening to all of the time. While it's practically impossible to hear the difference between a half-dozen $\$ 150$ receivers, you can hear the difference between six different loudspeakers in the same price range.

## The Vast Middle Range

Truly excellent sound becomes a reality in the $\$ 800$ to $\$ 1,500$ range. With this kind of budget, there is little reason to limit yourself to a sin-gle-source system, and you'll be able to consider better amplification systems and such "extras" as equalizers ( $\$ 60$ to $\$ 1,500$ ) and surroundsound decoders (\$150 to \$849). Remember, though, that with some surround-sound decoders you'll need a second amplifier for the rear channel, as well as extra speakers.

In the $\$ 800$ to $\$ 1,200$ range a "basic" system budget might be divided into $\$ 400$ for speakers, $\$ 300$ for a receiver or integrated amplifier, and $\$ 300$ dollars for either a CD player or a turntable and cartridge. An allpurpose system could contain a $\$ 300$ receiver or integrated ampli-



If you're able to go for the full $\$ 5,000$, sit yourself down in the high-end room of a reputable audio salon and listen to speakers costing between $\$ 1,000$ and $\$ 2,000$ a pair. When you find something you like, buy it; you'll still have $\$ 3,000$ left for the rest of the system!

As a member of the high-end school, you'll also have the opportunity to purchase some of the myriad accessories available for keeping both your equipment and your recordings in optimum playing condition. Examples include all kinds of noise-reduction systems, electronic stylus cleaners, full-system remote controls, turntable and CD player isolation systems, high-performance speaker and patch cables, record vacuums, special contact-enhancement formulas, programroute selectors, demagnetizing systems, special headshells, super antennas, cooling systems, and every possible cleaning and polishing formula ever conceived.

## This System's for You

Although the component prices and price ranges discussed have been based on manufacturers' suggested retail prices, you should never pay retail price for anything! Try all kinds of stores-audio salons, stereo chain stores, discount outlets,
and department stores. Each has its own advantages and disadvantages, and one or another may be right for you because of price, service, selection, location, or just how you feel about a particular store or salesman. A store with good service and friendly, knowledgeable salespeople can be very helpful if your system doesn't sound as good at home as it did in the store.
Remember, you're buying this system for your ears and your music. Take both along when you shop. Depending on the sound sources you plan to purchase, take along a favorite CD, LP, or tape cassetteor all three-when you shop. Choose contrasting selections that you are very familiar with, and remember you are testing components, especially speakers, for how well they reproduce all types of musical sounds, from the soft piano or violin tones of a Mozart concerto to the thundering Moog Taurus bass found on a Genesis record. And finally, before hooking anything up, read all of your owner's manuals, no matter how poorly written. It can save you both time and money while you educate yourself in the pleasures of musical reproduction.
Most important, however, have fun. That's what it's all about anyway, isn't it?


# THE LOUDSPEAKER SYSTEM THAT HAS THE CRIIICSPURRING. 

"Awesome low end, extraordinarily smooth middles and highs, and remarkably good depth." -J. Gordon Holt, Stereophile.
> "The audio equivalent of dinner at Le Francais".
> -Rich Warren, Nortb Shore Magazine.

"...the cutting edge of technology ...left people open mouthed as they left the listening room". -Nancy Malitz, Gannett News Service.
"...the latest industry incarnation of an 'ultimate' listening system". -Ron Scibilia, Audio Times.
"It wasn't the size, the contents or even the price that turned heads, but the knockout sound." -Larry Jobnson, Ovation Magazine.

Recently, at a carefully selected location in Milford, Pennsylvania, some of the most discerning ears in the business were invited to hear something they'd never heard before. The Altec Lansing Biasw* 550. The first speakers in the world with Pentamplified sound.

And as you can see, the response was overwhelming.

But then the Bias 550 is a system unlike any other. Discrete amplifiers for each of five bandwidths,
adjustable by remote control. Providing each speaker cabinet with 750 watts of perfectly sculptured sound.

The Bias 550 is the finest example yet of our commitment to total high fidelity. The flagship to a range of loudspeakers that have consistently pushed back the frontiers of audio reproduction. For more information and an Altec Lansing catalog, call 1-800-ALTEC 88***



> Migh performance and h style for jusi under $\$ 5,000$

IHE desire for high syyle doesn't have to conflizt with the denand for high performance-at least when designing a tape-tased audio system. To put together a gcod-look ng, good-sour ding system, I was given a ticket of $\$ 5,000$, a tidy sum that represents both the solic middle ground for setious autio enthusiasts and, not surprisingly, the average price of Stereo Review readers' systems.
The NAD 6300 cassette deck ( $\mathbf{\$ 8 9 8}$ ) is a good starting point. It's smart because it insludes bath Dolby; B and Dolby C noise reduction and both Dolby HX Pro and Dyneq heedroom-extension circuits for nearly unparalleled high-frequency response. The 6300's fromt panel is as clean as that of a $\$ 100$ no-fills model, yet its performance specs rival those of many fine decks costing more than twice as much. It's also Iexible: A CAR switch compresses dynamic range and boosts jass and treble on recordings for the noisy automotive en-ironment, and Dolby-compatible PLAY TRIM cireuitry cempensates for high-frequency problems in playing tapes made on other decks.
As source components I chose the Yamaha R ${ }^{2}-900$ U © 999 ), a receizer with a great uner, ferible aucio/video switching, and a rated 85 -watt-per-channel continuous output enhanced by the Absolute Linear Amplification circuit; the dbx DX5 compact dise player (\$6-9), whish combines ease of use with excellent performance and proprictary signal-processing circuits; and a Denon DP-35FB d rect-drive turatable ( $\$ 320$ ) fitted with e Signet MR 5 .)ml cartridge ( $\$ 350$ ). The RX-900U drives a pair of Design Accustics P'S-5's (\$350), nini-bookshelf speaker systems wit a particularly clean high end and micrange. Low frequencies are managec by a Velodyne ULD-12 (\$1,195), a 12-inch subwoofer with built-in 250-watt amplifer that sounds as good as it looks Late-night listening isn': a compromise with Azden's DSR-50 phozes ( $\mathbf{S 8 0 1}$.

The total system price of $\$ 4,691$ leaves you just enough to buy some CD's, LP's, and blank tapes. Take a week of from work. You have some taping to do.

[^0]

# SVATEMS 

> A recordist's dream for less chan the price of a good sports car

GIVEN unlimited spending ability, I could probably have come up with an even more elaborate system than the one waiting to be assembled and powerec up in the accompanying photos. As it stands, howev$\mathrm{er}, \$ 37,870$ is at least the down payment on a house, and I'd stack this system up against just about anything.

Any stereo system, for recording or otherwise. is only as good as its basics-the power amplifier, preamplifier, and speakers. I chose two of dbx's new BX1 power amplifiers $(\$ 3,700$ each ) and the dbx CXI preamplifier $(\$ 2,500)$ to drive two pairs of Polk SDA-SRS loudspeakers ( $\$ 2,990$ a pair). The amps provide a minimum of 400 watts per channel into 8 ohms, the preamp includes a dbx-tweaked Dolby Pro

BYMICHAELSMOLEN Photo by Roberto Brosan



The heart of the sustem: dhx's BXI hwo- three-, or four-channel configurable power ainp. CXI preamp, and TXI tuncr.


Processing and switching are handled by Soundcrafismen's AE2000 and dhX's 224X.DS, 3BX-DS, and DAV-600G.


For ease of use, a sustem like this should be installed with tape decks at eye level and switching devices at chest level.

Logic Surround decoder, digital time-delay ambience circuits, and three buffered tape loops. The SDA-SRS, Polk Audio's flagship system, simply must be heard to be appreciated. I think "sound stage" was redefined when these speakers were introduced in 1984.
Multitrack formats aside, and acknowledging that digital tape decks must still be purchased in Japan, a recording system of this caliber must offer all available taping possibilities. For my main cassette deck I chose Nakamichi's Dragon $(\$ 2,195)$, with a Tandberg 3014 A $(\$ 2,500)$ serving as back-up and dubbing partner. For DAT recording Onkyo's DT-2001 (about $\$ 1,800$ ) is my choice of what's currently available overseas. For open-reel recording I chose an old standby, the Revox B77 (\$2,250), that has been around for years and is still a standard by which other open-reel machines are measured. Finally, if you've never tried any digital PCM recording onto halfinch VHS videotape, you shouldwith Toshiba's DX-900 (\$1,300).

The Linn Sondek LP 12 turntable $(\$ 1,165)$ was an obvious choice. Even the "tweakiest" high-end audiophiles tend to compare almost everything else to the stalwart Linn. It's outfitted with SME's spectacular Mark IV tonearm ( $\$ 1,250$ ) and Talisman's silkysmooth Virtuoso DTi cartridge (\$1,200).

Other sources for the system include the remarkable-sounding Tandberg TCP 3015 A CD player $(\$ 2,500)$ and a dbx TXI tuner ( $\$ 600$ ) to match the amp/preamp.

Effective routing and processing of signals in a system of this size is a key to its sonic success, and here I turned to Soundcraftsmen for the very flexible AE2000 one-third-octave graphic equalizer/analyzer (\$799) and to dbx for a plethora of signal processors, including a DAV-600G signal router (\$399), a 3BX-DS compander/ambience generator (\$499), and a 224X-DS Type II noise-reduction system (\$299). For surround sound I chose Yamaha's DSP-1 (\$999).

Accessories for the system include two Neumann KMS84 microphones ( $\$ 1,000$ each) for live recording and AKG's studio-quality K340 headphones ( $\$ 235$ ) for careful monitoring of the recorded signal and late-night sessions.

Rock on!

$$
\frac{\text { ELITE }}{\text { BY PIONEER }}
$$

## HOME IMPROVEMENT.

1


To build a player this superior demanded incredible attention to detail Example: The PD-91's analogue circuitry is pure Class A for lowest distortion and highest musicality. Inside, you'd see four separate power supplies and eleven voltage regulazors-to keep critical smallsignal audio information free from interference.

To additionally minimize electrical interaction, portions of the PD-91's circuitry are defeat-able--like front panel illumination, headphone amplifier and the ana ogue output section when digital outputs are being used.

The PD-91 incorporates an outboard power transformer, Pioneer's exclusive copper-plated honeycomb chassis and special ceramic components to combat extrancous vibrations that can destroy signal integrity.

The PID-91's special linear motor delivers the world's fastest track aocess ( $1 / 2$-second). You also get flexible seven-way programming, full random play, and, of course, full remote control. Optical as well as coaxial outputs make the PD-91 future-perfect as well.

Want instant Home Improvement in your music system? Then come treat your ears to the PD-91. For your nearest Elite dealer, call 1-800-421-1404.

© 1988 Pionneer flectre nics (WAA) Inc., Long Beach, C:A

## THE ELITE LD-S1 LASERVISION PLAYER.

If you want to discover what looking sharp is all about, it's time you took a look at the LD-S1. Because the LD-S1 not only delivers the world's sharpest pictures, it gives you the world's best sound, stunning digital sound simply unavailable from any VCR.

You'll see cleaner, truer pictures-over 420 lines of resolution-due to Pioneer's exclusive Accu-Focus laser pickup and Video Noise Reduction circuit. Together, they yield an unprecedented 48 dB video signalto -noise ratio.

You'll hear the best sounding video ever. Because the LD-S1 uses twin, glitchfree D/A converters and a digital filter with four-times oversampling to produce an $\mathrm{S} / \mathrm{N}$ ratio of 105 dB .

What's more, our exclusive Full-Floating Disc Drive and Magnetic Disc Clamp isolate and stabilize the disc for remarkably reduced picture jitter-an inherent problem videotape players can't begin to solve.

The LDD-S1's 8-bit digital field memory also gives you a new dimension of viewing
pleasure. You'll get perfect pictures on freeze frame, and new effects like still pictures with sound and strobe motion with sound. And now for the first time, you can enjoy all these specia! effects while watching movies, opera and concerts on extended-play (CLV) discs.

See the ultimate sight and sound machine at your Elite dealer today. Because in the world of sight and sound, image is everything.

For more information, call 1-800-421-1404.

© 19:7 Piomex Electronics (USA) Inc., Lang Beach, CA

## UPGRADE YOUR IMAGE.

# TURBOCHARGE YOUR CD PLAYER. 




## THE ELITE A-91D INTEGRATED AMPLIFIER.

Now that the compact disc has taken the world by storm, ordinary amplifiers are failing their driving test. Because ordinary amplifiers simply can't handle the dynamic range and purer signal that digital sound delivers.

Fortunately, the A.91D is far from ordinary. Because the A-91D is built with one thought in mind-to maximize the performance of digital sound.

With 170 watts per channel into 4 ohm speaker loads, and 120 watts into 8 ohms, the A-91D unleashes digital's full dynamic range. Extra-large capacitors and huge finned cast-iron enclosed transformers further contribute to the A-91D's high current capacity and stability into speaker loads as low as 2 ohms.

Along with all this power comes unprecedented purity. You can plug the latest CD players with optical outputs directly into the A.91D, and reap the rewards of independent digital conversion circuitrywith twin, glitch-free D/A converters, a digital filter with fourtimes oversampling, and an analog lowpass filter made
distortion. What's more, critical signal paths are kept extraordinarily short for less electronic interference and cleaner sound.

When it comes to digital sound, there's no such thing as good vibrations. That's why the A.91D uses a special antivibration honeycomb design in the chassis frame. In isolation barriers between electronic sections. Even in all five insulator feet. A large aluminum volurre control knob with a specially balanced brass shaft also absorbs distortion-causing vibration, and printed circuit boards are mounted in rubber for the same reason.

The A-91D is not only ready for digital, it's ready for the future. With six digital inputs (2 optical), and three digital outputs (l optical).

So if you want your digital sound to drive you to new heighes, you need to drive your digita- components with the Elite A.91D.

For more information, call 1-800-421-1404
from quality discrete parts. The A-91D also uses Pioneer's exclusive Non-Switching"' Type III amplifier circuit to totally eliminate switching

© 1987 Pioncer ミlectionics (USA) inc., Long Beach, CA

## THE ELITE M-90 AND C-90 REFERENCE COMPONENTS

Hum, hiss, crosstalk, vibration: distortion in your audio signal.

Graininess, specks, flecks, jitter: extraneous noise in your video image.

Garbage.
The Elite C-90 pre-amp and M-90 power amp are no-compromise components designed to get rid of it. By keeping critical signal paths as short as possible. By offering you direct CD connection. By introducing motorized volume control, separate audio and video power
transformers, and unique video processing controls like noise reduction, sharpness and detail. By giving you the purest possible audio and video that digital technology has to offer. In the words of audio critic Julian Hirsch in Stereo Review, "The C-90's signal to noise ratio is considerably better than that of any CD player...that makes the C-90 the true peer of any digital sound source-the only preamplifier we have tested that can make that claim." The C-90 also cleans up your video. Because it


## HE GARBAGE.

# THE ELITE REGISTER 

ALABAMA
Florence
Ingram Audio

## ALASKA

Anchorage
Magnum Electronics
Kodiak
Island TV
ARIZONA
Phoenix
Integrated Systems
Jerry's Audio
Prescott
Audio
Entertainment
Systems
Tucson
Jerry's Audio
ARKANSAS
Fayetteville
Amp Audio
Little Rock
Walloch Home Center
Pine Bluff
Stereo Junction
CALIFORNIA
Alamo
Laser Faire
Alhambra
Audio Video Center
Berkeley
Honkers Sound Co.
Burbank
The Lasers Edge
Canoga Park
The Lasers Edge
Encino
Audio Video
Electronics
Glendale
Marconi Radio
Goleta
House of Audio
Video
Greenbrae
Videola
Irvine
Sound Quest
Los Angeles
Royal Sound
Mill Valley
Videola
Mission Viejo
Videolaser
Monrovia
Video Place
Palo Alto
Western Audio
Imports
Sacramento
Paradyme
San Bernardino
Video Mart
San Diego
Convoy Audio Video Stereo Design
San Francisco Audio Excellence
Wong's Hi Fi
San Jose
Quement
Electronics
Santa Cruz

Santa Maria
Lombards Discount Stereo
Santa Monica
Jonas Miller Sound
Simi Valley
House of
Audio Video
Tustin
Digital Ear
Woodland Hills
Wilson
Audio Video
Entertainment
COLORADO
Colorado Springs
U.S. Tech of

Colorado Springs
Denver
Listen Up
CONNECTICUT
Danbury
Sounds Alive
East Hartford Hi Filmage
Greenwich
Aud Vid
Groton
Leiser Sound
Newington Sound Playground
Norwich
Leiser Sound
Orange
Sounds Alive
Stamford
Sounds Alive
Wallingford
Best Buys
Waterbury
Zinno Music
Westport
Sounds Alive
DELAWARE
Wilmington
Laser Sight
\& Sound

## FLORIDA

Altamonte Springs
Boss Audio
\& Video
Boca Raton Verns Electronics
Daytona
Electronics
Environment
Ft. Lauderdale Sound Design \&
Engineering
Melbourne
Audio Mart
Merritt Island
Audio Mart
Miami
Audio Coll
Audio Plus
Kalu
Overseas
Electronics
Victors International
Pinellas Park
Cooper For Stereo
Royal Palm Beach
Family Video Super

Stuart Sound \& Vision
GEORGIA
Doraville
Ellie's Hi Fi
Tifton
Berger's Audio \& TV

## HAWAII Honolulu

Anderson's Camera
\& Hi Fi Store
IDAHO
Idaho Falls
Phase Four Stereo
Pocatello
Phase Four Stereo
ILLINOIS
Burbank
Digital TV
Chicago
Mills Recording
Belmont Electronics
Darien
K-BTV
Lansing
Unitek Electronics
Morton
Northpoint
Video, Audio
\& Appliance
Peoria
Northpoint
Video, Audio
\& Appliance
Quincy
First in Video
MusicWorld
INDIANA
Anderson
Disc-O-Tech
Angola
King's Antenna
Crown Point
Crown Electronics
Fort Wayne
Huntington
Lehman Electronics
Logansport
Todd's

## Warsaw <br> Butterfly <br> IOWA

Fort Dodge
Sound World
Marion
The Audio Room
Orange City
The Movie Express
KANSAS
Overland Park
Audio Video
Electronics
ESP Industrial
Communications

Salina
Del's TV \& Tape Center

Kentucky
London
Sounds Around
Town
Louisville
Audio Video by
Design
LOUISIANA
Baton Rouge
Art Colley's Audio
Specialties
Metairie
Alterman Audio
New Orleans
Alterman Audio
MARYLAND
Annapolis
H.A. Hi Tech

Gaithersburg
Audio Buys
MASSACHUSETTS
Auburn
Leiser Sound
Cambridge
Audio Video
Environments
Framingham
Natural Sound
Littleton
Music Shack
Nantucket
Berts Electronics
Seekonk
Leiser Sound
Shrewsbury
Leiser Sound
Waltham
The Instant
Replay
MICHIGAN
Ferndale
Jam Hi Fi Sound
Specialists
Plymouth
Digital
Entertainment
MINNESOTA
Edina
Laser Ware
Scholes
Enterprises
Fairmont
Bill's Radio \& TV
Minneapolis
Peterson
Entertainment
Design
Richfield
Pro Line Audio
St. Paul
Robert Paul TV

MISSISS
Hoopers Electronic Supply
MISSOURI
Kirksville
Wright Tire \&
Appliance
Kirkwood
Warner
Communications
Oakville
Quality Sight and
Sound
MONTANA
Great Falls
Rocky Mountain Hi Fi
NEW JERSEY
Cherry Hill
Soundworks
Cliffside Park
Entertainment
Environment
Hamilton Square
Rock Dreams
Livingston
Electromedia Design
Millburn
Professional Audio
New Brunswick
Hi Fi Haven
Woodbridge
Woodbridge Stereo
Wyckoff
Conklin's Aupio Video
NEW YORK
Hicksville
Designatron
Huntington Station
Audio Breakthrough
Manhasset
Audio Breakthrough
Merrick
Performance
Audio \& Video
New York
Audio Breakthrough
Bryce Audio
Custom Media
Design
East Side Stereo
Hi Fi Electronics
Lyric Hi Fi
Sound by Singer
Rego Park
Watts That Sound/
Continental Sound
Rochester
Rowe Photo
Scarsdale
The Listening Room
Watertown
The Happy Ear
White Plains
Audio Design
Lyric HiFi

## CIRCLE NO, 35 ON READER SERVICE CARD

NORTH CAROLINA SOUTH CAROLINA
Albemarle
Music Mart
Durham
Kerr's Audio Visions
Fayetteville

Columbia
Laser Experience
Hartsville
Haynes
Electronics
Hilton Mead
Island
Audio Visual
Resources
Georgetown
Stereo Video
Center
SOUTH DAKOTA
Sioux Falls
Warren Supply
TENNESSEE
Knoxville
Hi FiHouse
Memphis
New Wave Audio
and Video
Nashville
Hi Fi Buys
TEXAS
Dallas
Custom Video
ElPaso
Casa Sonido
Fort Worth
Marvin
Electronics
Houston
Audio Video Plus
Laredo
Jett Sales
Lubbock
American Audio
Video
UTAH
Midvale
Inkley's


## $a / d / s /$

R4 70-W/ch Receiver
Alphanumeric display on front panel indicating input source or received radio station. Digitalsynthesized tuner with 30 memory presets for AM or FM stations; wireless remote control (which also controls other $\mathrm{a} / \mathrm{d} / \mathrm{s} /$ components); digital volume and tone controls; RS-232 port allows control through personal computer; capable of multi-room remote control. Amp section: $70 \mathrm{~W} / \mathrm{ch}$ into $8 / 4$ ohms; dynamic headroom 2 dB . Tuner section: IHF sens 26 dBf stereo: signal strength for $50-\mathrm{dB}$ quieting 35 dBf stereo; capture ratio 1.5 dB ; alt-ch sel 65 dB ; max $\mathrm{s} / \mathrm{N}$ 75 dB mono, 70 dB stereo. $2.8 \times 17.5 \times 14.8-\mathrm{in} ; 23$ lb.
$\$ 1,400$

## RC1 Unified Remote Control

Infrared wireless remote controls R4 and other a/d/s/ components
$\$ 140$

## AKAI <br> AA-V435-B 125-W/Ch AM/FM Receiver

$125 \mathrm{~W} / \mathrm{ch}$ AM/FM receiver with universal remote: 70 programmable functions: Dolby surround sound with $7 \mathrm{~W} /$ ch rear: motor driven volume; variable loudness; 9 audio; 4 video inputs; S-VHS terminals: RF signal selector ( $31 \mathrm{n} / 1$ Out); sound insert: simulate stereo; source direct; 10-key direct tuning; 20-station random preset; processor terminal; speaker A/B\$649

AA-V335-B 100-W/ch AM/FM Receiver
$100 \mathrm{~W} / \mathrm{ch} 4 \mathrm{M} / \mathrm{FM}$ receiver with motor driven volume; variable loudness; 9 audio; 4 video inputs; $S$ VHS terminals; RF signal selector ( $3 \mathrm{In} / \mathrm{I}$ out) sound insert; simulated stereo; source direct; 10-key direct tuning: 20-station randam preset processor terminals; speaker A/B.
$\$ 549$

## AA-V235-B 60-W/ch AM1/FM Receiver

$60 \mathrm{~W} / \mathrm{ch} \mathrm{AM} / \mathrm{FM}$ receiver with 62 function unified remote; motor driven volume; variable loudness; 9 audio; 4 video inputs; 10-key direct toning; 20-station random preset; source direct mode; processor terminal; speaker A/B.
$\$ 449$

## ACOUSTIC RESEARCH

## AR X-10 AM/FM Stereo Receiver

Receiver with infrared remote to control power. volume, tuning. input selection, and AR CD player functions. Features audio and video dubbing: closetolerance metal-film resistors and film capacitors for RIAA: concealed bass, midrange, treble, balance, tonedefeat. loudness, filter, tape, FM/AM, memory, and speaker-switching controls; $8 \mathrm{AM} / 8 \mathrm{FM}$ station presets; gold-plated phono inputs. Inputs for MM phono; MC phono: tape; AUX; CD player; video sound source: vGR I; vCR 2. Amp section: 100 continuous average W/ch from $20-20,000 \mathrm{~Hz}$ into 8 ohms with less than $0.03 \%$ THD, 130 W into 4 ohms; dynamic headroom 2 $\mathrm{dB} ; 200-\mathrm{ms}$ dynamic power 150 W ; 40-ampere current capability. FM section: $50-\mathrm{dB}$ quieting sens stereo $25 \mu \mathrm{~V}(33.2 \mathrm{~dB}$ ); FM S/N (at 65 dB ) 75 dB stereo, 80 dB mono; thD stereo $0.3 \%$; capture ratio 1.0 dB ; AM rejection 60 dB ; alt-ch sel $75 \mathrm{~dB} \ldots \$ 849$

AR X-07 AM/FM Stereo Receiver
Receiver with infrared remote to control power,
volume, tuning, input selection, and AR CD player functions. Features audio and video dubbing: closetolerance metal-film resistors and film capacitors for RIAA: concealed bass. midrange, treble. balance. loudness, mono, tape, vCR, luning, and speakerswitching controls; 8 AM/8 FM station presets; goldplated phono inputs. Inputs for MM phono; MC phono; tape; Alli; CD player; video sound source; VCR I; vCR 2. Amp section: 70 continuous average W/ch from $20-20000 \mathrm{~Hz}$ into 8 ohms with less than $0.03 \%$ THD. 80 W into 4 ohms: dynamic headroom 2 dB; 200-ms dynamic power 90 W ; 40-ampere current capability. FM section $50-\mathrm{dB}$ quieting sens stereo 40 $\mu \mathrm{V}(37.2 \mathrm{~dB})$; $\mathrm{FM} \mathrm{S} / \mathrm{N}$ (at 65 dB$) 75 \mathrm{~dB}$ stereo, 80 dB mono; THD stereo $0.3 \%$; capture ratio $1.0 \mathrm{~dB} ; 4 \mathrm{M}$ rejection 60 dB ; alt-ch sel 70 dB
$\$ 749$

## BANG \& OLUFSEN

## Beocenter 9000 30-W/ch Music Center

Remote-controlled music center with AM/FM tuner. cassette deck, and CD player. Features remote control: glass operating panel; computer-intelligence system; timer programming; datalinked source inputs: Tuner section: $20 \mathrm{AM} / \mathrm{FM}$ station presets:

automatic search: stereo/mono switch; internal lithium battery for memory backup; double-acting automatic gain control. CD section: quadruple-oversampling digital filter; motorized lid; variable-speed search in both directions: track step: 30-track random programming. Cassette section: autoreverse; motorized lid: Dolby HX Pro: Dolby B and C noise reduction; Auto Azimuth Guidance; Auto Record Level: 23-track programming: track step . . . \$3,295

## Beomaster 5500 50-W/ch AM/FM Receiver

Includes Master Control Panel remote control and handheld infrared remote: presets for 20 AM and FM stations; Auto Power Handling Control; doubleacting auto gain control in FM; volume, bass. treble. and balance controlled from knob on MCP remote; works with other Beosystem 5500 components for multi-room remote control; direct selection of any FM or AM station by frequency; station search; silver and black finish. Power output $50 \mathrm{~W} / \mathrm{ch}$ into 8 ohms: dynamic headroom $1.5 \mathrm{~dB} ; 50-\mathrm{dB}$ quieting sens 40 dBf ; capture ratio $1.7 \mathrm{~dB} .16 .5 \times 3 \times 12.75 \mathrm{in}: 19.2$ lb.
$\$ 2,150$

## Beomaster 3300 25-W/ch AM/FM Receiver

Works with other Beosystem 3300 components for multi-room remote control; sensi-touch capacitance controls; volume controlled from wireless remote; 4

FM. I AM presets; auto power with source selection; bass ( $\max +9 .-14 \mathrm{~dB}$ at 40 Hz ). treble ( $\max +9$. -14 dB at $12,500 \mathrm{~Hz}$ ), balance controls; loudness switch; programmable volume level; Auto Power Handling Control; mounts on wall with accessory brackets; headphone jack; drives 2 pairs of speakers. $25 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $50-\mathrm{dB}$ quieling sens 43 dBf stereo; capture ratio $1.7 \mathrm{~dB} ; 24.5 \times 2.75 \times 10 \mathrm{in} ; 15.4$ lb.

## CARVER

150-W/ch A VR100 Audio/Viden Receiver
Magnetic Field Amplifier: 6 A $\mathrm{M} / 6 \mathrm{FM}$ presets; Asymmetrical Charge-Coupled \&M Detector; Sonic Holography; bass control boosts or cuts $100 \mathrm{~Hz} \max 8 \mathrm{~dB}$; treble boosts or cuts $10,000 \mathrm{~Hz}$ max $8 \mathrm{~dB} ; 4$ video inputs. 3 vidco outputs, with switching and dubbing: antenna/cable switching; surround-sound processor with 50 W ; 20-function remote. $150 \mathrm{~W} / \mathrm{ch}$. Tuner section: FM sens $1 \mathrm{HF} 2.0 \mu \mathrm{~V}$; FM $50-\mathrm{dB}$ quieting sens $4.5 \mu \mathrm{~V}$ mono or stereo; capture ratio 1.5 dB ; AM distortion at $2 \mu \vee 0.6 \%$.
$\$ 1.199$

## 125-W/Ch AM/FM Receiver 6250

Features magnetic field amplifier; 6 AM/FM station presets; asymmetrical charge-coupled FM detector; sonic holugraphy; bass, mix, and treble controls; 2 video inputs; 20 -function remote control; $125 \mathrm{~W} /$ ch: FM sensitivity IHF $2.0 \mu \mathrm{~V}$.
. $\$ 899$


150-W/ch AM/FM Receiver 150
Designed for noise-free stereo FM and adequate power for CD's; PLI fully digital-synthesized AM/FM stereo tuner section; Magnetic Field Amp; Asymmetrical Charge-Coupled FM Detector: phono input; video/digital audio input; aux input; 2 tape inputs; 6 station presets; mono switch; bass, mid. treble controls; balance control; switches for tone defeat. speaker selection. tape monitoring. tape dubbing. FM muting. am noise filter, loudness contour. $150 \mathrm{~W} / \mathrm{ch}$ into 8 ohms. FM section (sterco. 75 ohms, with Charge-Coupled Detector engaged): usable sens 16.3 $\mathrm{dBf}(1.78 \mu \mathrm{~V}): 50-\mathrm{dB}$ quieting sens $23.5 \mathrm{dBf}(4.0$ $\left.{ }_{\mu} \mathrm{V}\right)$
\$749

## 100-W/ch AM/FM Receiver 6200

Features magnetic field amplifier; $64 \mathrm{M} / 6 \mathrm{FM}$ station presets; asymmetrical charge-coupled FM detectrol: bass control boosts or cuts 100 Hz max 8 dB ; treble boosts or cuts $10,000 \mathrm{~Hz}$ max 8 dB : 20-function remote control; $100 \mathrm{~W} / \mathrm{ch}$; FM sensitivity IHF 2.0 ${ }_{\mu} \mathrm{V}$.

## . $\$ 699$

## DENON

## DRA-1m25 AM/FM Receiver

Features $120 \mathrm{~W} / \mathrm{ch}$ and full function remote control. Inputs for turntable, 2 tape decks. CD player. VCR.

Pre-out main jacks; 5-way speaker terminals: 16 station tuner presel; fluorescent; presel FM scan; variable loudness eq: simulcast copy function: simulated stereo circuit. TIII $0.006 \%-3 \mathrm{~dB}$ at rated output; (M1) $0.005 \%$; FR $20-50.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ : $\mathrm{s} / \mathrm{N}$ I 10 dB ; $6.37 \times 17.08 \times 15.51-\mathrm{in} ; 26.46 \mathrm{lb} . . . . .$. . . . . . $\$ 950$ DRA-825, Similar to above with $90 \mathrm{~W} / \mathrm{ch} . .$. . $\$ 800$

## DRA-625 AM/FM Receiver

$65 \mathrm{~W} / \mathrm{ch}$ AM/FM receiver with remote control. Fealures liquid cooled heat sinks, variable loudness $\mathrm{E}(\mathrm{O}$. one-louch source selection, pre-out jacks. 3-way speaker terminals. 16 -station random presel memory tuning: auto scanning: last channel tuned memory. THI) $0.0095 \%-3 \mathrm{~dB}$ at rated output; IMI) $0.025 \%$; FR $20-50.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ : s/N phono 88 dB -Fm $82 \mathrm{~dB}-$ CD/uner/tape $98 \mathrm{~dB} ; 5.39 \times 17.08 \times 13.77-\mathrm{in}: 21$ lb. $\$ 550$ DRA-425, Similar to above with $50 \mathrm{~W} / \mathrm{ch}$. . . . \$450

## DRA-35V AM/FM Receiver

Features $40 \mathrm{~W} / \mathrm{ch}$; 16 -station preset tuning; auto seek: variable loudness control; last-channel memory; nonswitching Class A amp; A/v in/out: electronic input switching.
DRA-25 AM/FM Receiver
Stereo receiver features straight amplification design: ('I) direct switch; variable loudness $t(0$ : liquid heatcooled sink: high-linearity phono stage; 16-station random preset memory: microprocessor assisted tuning system; Fl. display; auto-scan; up/down manual tuning: last-channel-tuned memory. $30 \mathrm{~W} / \mathrm{ch}$ min rms into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.05 \%$ THD; FM 50 dB quieting sens $23 \mu \mathrm{~V}$ (stereo); capture ratio 1.5 dB : AM suppression 50 dB.
$\$ 380$

## FISHER

## R625B 120-W/ch AN/FM Receiver

AM/FM receiver with 38 -function wireless remote control. Features 5 -band graphic equalizer: motorized volume control; 24 AM/FM station presets; autoscan tuning: built-in FM muting; Ft. display: 120 W/ch rms into 8 ohms at $20-20,000 \mathrm{~Hz}$ with $<0.09 \%$ THD: loudness switch
\$450

## RS615B 60-W/ch AM/FM Receiver

4M/FM receiver with 37 -function wireless remote control. Features 5 -band graphic equalizer: motorized volume control: 24 AM/FM station presets;

autoscan tuning: built-in FM muting: ft display: 60 W/ch rms into 8 ohms at $20-20,000 \mathrm{~Hz}$ with $<0.09 \%$ THID: loudness switch $\qquad$

## RS605B 40-W/ch ANI/FM Receiver

AM/FM receiver features 5 -band graphic equalizer:equalizer: 24 Am/FM station presets; autoscan tuning: built-in FM muting: HL. display; $40 \mathrm{~W} / \mathrm{ch}$ rms into 8 ohms at $20-20,000 \mathrm{~Hz}$ with $<0.09 \%$ total harmonic distortion; loudness switch $\$ 300$

## HARMANKARDON

hk990 Vxi 90-W/ch AM/FM Receiver
AM/FM receiver with digital synthesized quartzlocked tuning and remote control. Features high current/high voltage design; active tracking tuner circuitry; 6 AM/I2FM presets; seek iuning; I.ED signal strength meter; two tape monitors; two A/V monitors: interactive video switching: $C D$ high level inputs: external processor jacks; MC head amp; subsonic filter; mono; loudness; tape copy selector; 2way A/V: speaker switching: metal chassis. . \$1,099

hk880 Wi $60-W /$ ch AM/FM Receiver
AM/FM receiver with digital synthesized quartelocked tuning and remote control. Features high current/high voltage design: 6 AM 12 FM presets; seek tuning; LED signal strength meter; two $A / V$ tape monitors: interactive video switching: CD high level inputs; external processor jacks; subsonic filter: mono: loudness: 2-way tape copy selector: speaker switching: metal chassis. $\$ 749$
hk550 Vi 45-W/ch AM/FM Receiver
AM/FM receiver with digital synthesized quartzlocked tuning. Features high current/high voltage design; 6 Am 12 FM presets; seek tuning; two tape monitors: CD, video, and aux high level inputs; loudness; speaker switching; metal chassis. . . . \$529

## hk440 Vix 30-W/ch AM/FM Receiver

AM/FM receiver with digital synthesized quartzlocked tuning. Features high current/high voltage design; 6 AM 12 Fm presets; seek tuning; two tape monitors: CD and video high-level inputs: loudness: speaker switching: metal chassis .
$\$ 389$

## hk330 Vi 25-W/ch AM/F'M Receiver

AM/FM receiver with digital-synthesized quartzlocked tuning: 6 AM/ 12 FM presets: select tuning: two tape monitors; $C D$ and video high level inputs; loudness; speaker switching.
$\$ 319$

## HITACHI

## MX-W50 Hi-Fi System/CD Player

CD slimline system with infrared remote control. Features CD player; twin cassette deck, digital tuner, amplifier; dual tape deck controled by microprocessor for feather touch operation: double auto reverse: digital-synthesized quartz tuner locks in station signal; 4 -way selection repeat; vibration free floating suspension system; resume play function; built-in limer; single D/A converter 20 -station memory; 50 W/ch; $0.9 \%$ THD 5 -band graphic equilizer: dolby NK equalization switch for all tape types; FR FM 88-108 MHz : FR AM $522-1611 \mathrm{MHz}$; Jacks for headphone. line-in, phono, speaker, ext antenna: $25.72 \times 5 \times 14.5$ in: 22 lb. . $\$ 899$
MX-W51, Same as above with HS-W50 Speakers. Speakers feature $8^{\prime \prime}$ poly-coat-cone type woofer: $5^{\prime \prime}$ poly-coat-cone type midrange: 1" polycarbonate dome type tweeter: nominal power inpul 70 W : SPL 90 dB ; imp 8 ohms.
$\$ 1.299$

## JVC

## RX100IVBK Audio/Video Receiver

Audio/video receiver with surround-sound capability. Features programmable remote control with L.CD: Digital Acoustics processor: digital Dolby surround: computer-controlled digital synthesizer tuner: preset memory for $40 \mathrm{Am} / 40 \mathrm{FM}$ stations; auto memon; preset scan; auto QSC; dB indicator: variable stop level; station name indicator: LCD on unit; tape I, tape 2, DAT, VCR 1, VCR 2, phono, CD inputs. dubbing capability: 3 video inputs; 7-band electronic SEA graphic equalizer with 5 user-programmed and 5 pre-programmed equalizations; interactive CCS; high-gain phono equalizer for $\mathrm{MM} / \mathrm{MC}$ cartridges: loudness; sleep timer: connections for two pairs of speakers: CATV antenna control unit. $120 \mathrm{~W} / \mathrm{ch}$ driven into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.007 \%$ THID. Front surround: $110 \mathrm{~W} /$ ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.007 \%$ thid; rear surround: $15 \mathrm{~W} / \mathrm{ch}$ into 8 ohms at 1.000 Hz with no more than $0.07 \%$ THD
$\$ 1,200$

RX999VBK Audio/Video Receiver
A/V receiver with programmable remote control. Features digital Dolby surround; hall; stadium: adjustable digital delay; 3 video inputs: computercontrolled electronic 7-band SEA graphic equalizer with 5 user-programmed settings and 5 pre-programmed settings; digital synthesizer tuner with 40 4M/40 FM station presets; auto memory; preset scan; auto QSC: dB indicator: Dynamic Super-A with (im Driver; 1 (1) display: interactive CCS; 5-deck connections with full dubbing: loudness and connections for two pairs of speakers; CATV antenna control unit. $100 \mathrm{~W} /$ ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.007 \%$ THI). Front surround: $90 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.007 \% \mathrm{THI}$; rear surround: $15 \mathrm{~W} / \mathrm{ch}$ into 8 ohms at 1.000 Hz with no more than $0.7 \% \mathrm{TH}$ )
$\$ 840$

## RX777VBK Audio/Video Recejver

A/V receiver with digital Dolby surround, hall. stadium, and adjustable digital delay. Features 2 video inputs; digital synthesizer tuner with 40 Am/40 FM station presets: auto memory: preset scan; 7-band SEA graphic equalizer; ticD on unit; interactive CCS: loudness and connections for two pairs of of speakers; CATV antenna control unit: programmable remote control. $80 \mathrm{~W} /$ ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.007 \%$ ThID. Front surround: 75 W/ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.007 \%$ thid; rear surround: $7 \mathrm{~W} /$ ch into 8 ohms at 1.000 Hz with no more than $0.7 \% \mathrm{THD}$. . . . $\$ 630$ RX777VSBK. As above with unified A/V remote control.
. \$570

## RX555BK AM/FM Receiver

AM/FM receiver with A/V remote control. Features loudness and connections for two pairs of speakers; digital synthesizer tuner with $40 \mathrm{Am} / 40 \mathrm{Fm}$ station presets; auto memory; preset scan: LCD on unit: interactive CCS; 7-band SEA graphic equalizer with equalized dubbing: CATV antenna control unit. 60 W/ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.007 \%$ THD
\$420

## RX333BK AM/FM Receiver

AM/FM receiver with full-function remote control. Features loudness and connections for two pairs of speakers; digital synthesizer tuner with $40 \mathrm{Am} / 40$ FM station presets; auto memory; preset scan; L.CD on unit; interactive CCS: 5-band SEA graphic equalizer: CATV antenna control unit. $45 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $40-20,000 \mathrm{~Hz}$ with no more than $0.08 \%$ THD.

## RX222BK AM/FM Receiver

AM/FM receiver with full-function remote control. Features loudness and connections for two pairs of speakers; digital synthesizer tuner with $40 \mathrm{Am} / 40 \mathrm{Fm}$ station presets; auto memory; preset scan; LCD on unit: interactive CCS; CATV antenna control unit. 35 W/ch into 8 ohms from $40-20,000 \mathrm{~Hz}$ with no more than $0.08 \%$ THI)
$\$ 280$

## RX150BK AM/FM Receiver

Features digital synthesis tuning: 8 AM/8 FM station presets: auto loudness contour: connections for 2 pairs of speakers; FM mode/muting switch. 25 W/ch into 8 ohms from $40-20,000 \mathrm{~Hz}$ with no more than $0.5 \%$ THD .
\$200

## KENWOOD

## KR-V127R Audio/Video Receiver

AM/FM receiver with voltage interface gauge (VIG) power amplifier circuit. Features programmable full remote control; three video inputs; video dubbing with audio injection: Dolby/Theater/Stadium Surround: 20-Station Name Preset System (SNSP); 5category music select presets; 7-band electronic graphic equalizer; 7-band spectrum analyzer; automemory entry: equalizer recording switch; MM/MC cartridge selector: speaker $\mathrm{A} / \mathrm{B}$ selector: $10 \mathrm{~W} /$ ch rear speaker amplifier: THD $0.008 \%$; IMD $0.008 \%$ : FR $20-$
$20,000 \mathrm{~Hz}: \mathrm{S} / \mathrm{N}$ ratio 82 dB ; graphic equalizer center frequency 60 Hz at I kHz : usable sens $10.8 \mathrm{dBf}: 50 \mathrm{~dB}$ quieting sens 74 dB
$\$ 699$

## KR-V107R Audio/Video Receiver

AM/FM receiver with voltage interface gate (VIG) power amplifier circuit. Features unified full remote control; three video inputs; video dubbing with audio injection: Dolby/Theater/Stadium Surround: 20-Station Name Preset System (SNPS); 5-category music select presets; preset scan with music calendar: 7band electronic graphic equalizer; 7-band spectrum analyzer; FM auto-memory entry; equalizer recording switch: speaker $\mathrm{A} / \mathrm{B}$ selector: $10 \mathrm{~W} / \mathrm{ch}$ rear speaker amplifier: THD $0.008 \%$; IMD $0.008 \%$; FR $20-20,000 \mathrm{~Hz}$ $\pm 0.5 \mathrm{~dB}, \mathrm{~s} / \mathrm{N}$ ratio 82 dB ; graphic equalizer center frequency 60 Hz ; usable sens $10.8 \mathrm{dBf} .5 .25 \times 16.56 \times$ $14.5 \mathrm{in} ; 23.1 \mathrm{lb}$.
$\$ 599$
KR-V87R Audio/Video Receiver
AM/FM receiver with voltage interface gate (VIG) power amplifier circuit. Features system memory; unified full remote control: audio injection; Dolby

surround: 20-Station Name Preset System (SNPS); preset scan; 7-band electronic graphic equalizer: FM auto-memory entry; equalizer recording switch: speaker A/B selector: $10 \mathrm{~W} /$ ch rear speaker amplifier; THD $0.008 \%$; IMD $0.008 \%$; FR $20-20.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; $\mathrm{S} / \mathrm{N}$ ratio 73 dB : graphic equalizer center frequency 60 Hz ; usable sens 10.8 dBf ; 50 dB quieting sens 14.2 dBf . $5.06 \times 16.56 \times 12.69 \mathrm{in}$ : 18.1 lb .
. \$499

## KR-V77R Audio/Video Receiver

AM/FM receiver with unified full remote control. Features system memory with NiCad backup battery; video dubbing with audio injection: matrix surround sound; 20-Station Name Preset System (SNPS); preset scan: manual scan; 7-band electronic graphic equalizer; equalizer recording switch; speaker $A / B$. A+B selector: THD $0.03 \%$; IMD $0.03 \%$; frequency response $20-20.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; signal-to-noise ratio 73 dB : graphic equalizer center frequency 60 Hz : usable sensitivity 10.8 dBf ; 50 dB quieting sensitivity 14.2 dBf : IF rejection ratio 86 dB . $5.06 \times 16.56 \times 12.69$ in: 18.1 lb .
. \$399

## KR-A57R AM/FM Receiver

Features 55 watts per channel; unified remote control: 5 -band graphic equalizer; matrix surround; 20 Station AM/FM random preset memory; 10-key direct frequency input; preset scan; electronic inpout selectors; two video sound inputs; speaker A/B selector; THID 0.03 : IMD 0.03 ; FR $20-20.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}$ ratio 73 dB ; graphic equalizer center frequency 60 Hz : usable sens 10.8 dBf : 50 dB quieting sens 17.2 dBf ; IF rejection ratio $86 \mathrm{~dB} .4 .31 \times 16.56 \times 9.31 \mathrm{in} ; 10.1$ lb. .

## KR-A47 40-W/ch AM/FM Receiver

Receiver with 16 -station AM/FM random preset memory. Features preset scan; automatic/manual luning: electronic inpul selectors: video surround: speaker A/B selector; THD 0.03\%; 1MI) 0.03\%; FR $20-$ $20.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; $\mathrm{S} / \mathrm{N}$ ratio 73 dB ; graphic equalizer center frequency 60 Hz ; usable sens 10.8 $\mathrm{dBf} ; 50 \mathrm{~dB}$ quieting sens 17.2 dBf : IF rejection ratio 86 $\mathrm{dB} .4 .31 \times 16.56 \times 9.0 \mathrm{in}$; 11.7 lb .

## KYOCERA

R-861 Receiver
Features $100 \mathrm{~W} / \mathrm{ch}$ (continuous rms, both channels driven into 8 ohms, from $20-20,000 \mathrm{~Hz}$, with no more
than $0.02 \%$ THD): 3-band parametric EQ for tonal adjustment: switchable MM/MC phono preamp: preamp out/main amp in jacks; subsonic filter; quartz-frequency synthesis tuning with high-speed 2.500 Hz comparator for low noise: switchable If bandwidth; defeatable bass/treble controls; Dolby FM de-emphasis swith: 7 AM and 7 FM preset stations: high-blend feature. $\mathrm{FM} \mathrm{S} / \mathrm{N} 76 \mathrm{~dB}$ stereo, 82 dB mono; slew rate $50 \mathrm{~V} / \mu \mathrm{sec}$; rise time $1.0 \mu \mathrm{sec}$ : $\mathrm{S} / \mathrm{N}$ (IHF-A) phono MC 74 dB . phono MM 85 dB . high-level inputs 100 dB .
$\$ 1,200$

## R-661 Receiver

Features $70 \mathrm{~W} / \mathrm{ch}$ (continuous rms, both channels driven into 8 ohms, from $20-20,000 \mathrm{~Hz}$, with no more than $0.02 \% \mathrm{TH}$ ) $)$; defeatable bass and treble controls for tonal adjustment: switchable MM/MC phono preamp; preamp out/main amp in jacks; subsonic filter: quartz-frequency synthesis tuning with highspeed $2,500 \mathrm{~Hz}$ comparator for low noise; switchable IF bandwidth: 7 AM and 7 FM presets; high-blend feature. $\mathrm{FM} \mathrm{S} / \mathrm{N} 74 \mathrm{~dB}$ stereo, 80 dB mono; slew rate $50 \mathrm{~V} / \mu \mathrm{sec}$; rise time $1.0 \mu \mathrm{sec}$ : $\mathrm{S} / \mathrm{N}$ (IHF-A) phono MC 64 dB . phono MM 82 dB , high-level inputs 100 dB.
. $\$ 900$

## R-461 Receiver

Inputs for Mm phono, 2 tape. 2 AUX. CD player. Amp section: 50 continuous average $W$ /ch from 20-20.000 Hz with no more than $0.02 \%$ THD driven into 8 ohms: dynamic headroom 2.1 dB : IHF IMD 0.02\%; FR 30$15.000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$. FM section: alt-ch sel $55 \mathrm{~dB}: 50-\mathrm{dB}$ quieting sensitivity mono $17 \mathrm{dBf}(50 \mathrm{~dB})$, stereo 37.2 dBf ( 50 dB ); max $\mathrm{S} / \mathrm{N}$. A-wtd, mono 77 dB , stereo 72 dB ; THD mone $0.08 \%$, stereo $0.12 \%$; channel separation 48 dB at $1,000 \mathrm{~Hz}$; capture ratio 1.2 dB . AM section: loop sensitivity $300 \mu \mathrm{~V}$. $18.12 \times 4.31 \times 12.12$ in: 18.5 lb .
$\$ 650$

## R-261 Receiver

Inputs for MM phono, tape, aux, CD; Amp section 30 continuous average $W$ /ch from $20-20.000 \mathrm{~Hz}$ with $<0.05 \%$ THD into 8 ohms: dynamic headroom 2.1 dB : IHF and IMD 0.02\%; FR $30-15,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; FM section alt ch selection; 55 dB ; 50 dB quieting sens mono 17 dBf ; stereo 37.2 dBf ; max $\mathrm{S} / \mathrm{N}$ : A-wtd, mono 77 dB ; stereo 72 dB ; THD mono $0.08 \%$; stereo $0.12 \%$; $\operatorname{sep} 48 \mathrm{~dB}$ at 1.000 Hz ; capture ratio 1.2 dB : AM: loop sens $300 \mu / \mathrm{V}: 18.12 \times 4.31 \times 12.12 \mathrm{in} . . . . . .$.

## LUXMAN

R-117 160-W/ch AM/FM Receiver
Receiver with full-function system remote control including video and video sound switching. Features low-impedance drive capability; CD straight mode; FET differential phono input; 5 gang varactors, dual gate MOSFET's; pre-out/main-in. Power output 160 W/ch from $20-20,000 \mathrm{~Hz}$ with $<0.03 \%$ THD; IMD $<0.03 \%$ ( $35 \mathrm{~W} / 8$ ohms); $\mathrm{S} / \mathrm{N} 88 \mathrm{~dB}$ (MM), 70 dB (MC), 98 dB (CD, tape, A/v): FM sensitivity (stereo) 36 dBf ; FM S/N (stereo) 75 dB ; FM total harmonic distortion (stereo) $<0.1 \%$.
$\$ 1.200$
R-115. Similar to above with $75 \mathrm{~W} / \mathrm{ch}$; remote control: audıo switching/video switching. . . . . $\$ 800$ R-113. Similar to above with $35 \mathrm{~W} / \mathrm{ch}$ : THD $<0.08 \%$. No remote control . . . . . . . . . . . . . . . . . . . . . . . $\$ 450$

## McINTOSH

## MAC 4300V AM/FM Receiver

AM/FM $100 \mathrm{~W} / \mathrm{ch}$ stereo receiver with remote control. Features MPX filter; 6 station presets; signal-strength indicator: LED display of station frequency: 1 un switched outlet; loudness; I, 2, and I+2 speaker selector: 5-band equalizer; scan: headphone jack. Amp: THD $0.02 \%$; IMD $0.02 \%$; FR $20-20,000 \mathrm{~Hz}$ $+0 /-0.5 \mathrm{~dB}$; SN 100 dB . Tuner: $\mathrm{S} / \mathrm{N} 75 \mathrm{~dB}$ stereo; FR $20-15,000 \mathrm{~Hz}+0 /-1.0 \mathrm{~dB}$ stereo; THD $0.08 \%$ at 1.000 Hz ; FM S/N 70 dB stereo; FM capture- ratio 1.5 dB : Front panel is brushed black anodized with gold trim; side panels are machined solid walnut with finish: $18.47 \times 6.06 \times 14 \mathrm{in} ; 34 \mathrm{lb} 5 \mathrm{oz} \ldots .52,995$

MAC 4275 AM/FM Receiver
A M/FM $75 \mathrm{~W} / \mathrm{ch}$ stereo receiver. Features MPX filter; 5 station presets; signal-strength indicator; LED display of station frequency; Power Guard circuit; I unswitched outlet; loudness; 1, 2, and I + 2 speaker selector; 3-band equalizer; scan; headphone jack. Amp: THD $0.03 \%$; IMD $0.03 \%$; FR $20-20,000 \mathrm{~Hz}$ $+0 /-0.5 \mathrm{~dB}$; sN 100 dB . Tuner: $\mathrm{S} / \mathrm{N} 75 \mathrm{~dB}$ stereo; FR $20-15,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$ stereo; THD $0.1 \%$ at $1,000 \mathrm{~Hz}$; Front panel brushed black anodize with gold anodize trim; side panels are machined solid walnut with satin laquer finish; $18.25 \times 5.25 \times 15.5 \mathrm{in} . . . \$ 1.798$

## MARANTZ

SR3600BI. 120-W/ch Receiver
Receiver with Dolby Surround Sound. Features quartz-locked digital synthesis tuning; manual scan; 5 -band EQ; remote control; $40 \mathrm{AM} / \mathrm{FM}$ presets; preset scan; VCR to VCR dubbing: 3 band tone control: speaker . $/$ /B switch; center channel output ... $\$ 879$

## SR3500BL 110-W/ch Receiver

Receivet with $40 \mathrm{AM} / \mathrm{FM}$ station presets. Features quartz-locked digital synthesis tuning; manual scan; 5-band EQ; preset scan; VCR to VCR dubbing: 3 band tone control; speaker $A / B$ switch; cable $F M$ input; MMMC phono input selector; matrix sound . . . $\$ 749$

## TA-170AV 165-W/ch Receiver

Receiver with 16 -preset digital tuning. Features 5 band graphic equalizer; quartz-locked digital synthesis tuning: electronic volume: VCR to VCR dubbing: power meter; inputs for MM phono, tape, CD player; alt-ch sel 50 dB : $50-\mathrm{dB}$ quieting sens, mono 15 dBf , stereo 37 dBf ; max $\mathrm{S} / \mathrm{N} 68 \mathrm{~dB}$; THD stereo $0.3 \%$; sep 42 dB ; capture ratio $1 \mathrm{~dB} .16 .5 \times 7.25 \times 13 \mathrm{in} ; 34 \mathrm{lb} \$ 650$

## TA-135AV 130-W/ch Receiver

Receiver with 16 -preset digital tuning. Features remote control; 5 -band graphic equalizer; electronic volume; VCR to VCR dubbing: power meters; inputs for MM phono, tape, CD player; alt-ch sel 50 dB ; 50 -dB quieting sens, mono 15 dBf , stereo 37 dBf : max s/N 68 dB ; THD stereo $0.3 \%$; sep 42 dB ; capture ratio 1 dB . $16.5 \times 7.25 \times 13 \mathrm{in} ; 30 \mathrm{lb}$. $\qquad$

## TA-10W 100-W/ch Receiver

AM/FM receiver with 16 presets. Features remote control: 5-band EQ: quartz-locked digital synthesis tuning: inputs for MM, phono, tape, CD, 2 video sources; VCR to VCR dubbing: $100 \mathrm{~W} / \mathrm{ch} ; \mathbf{0 . 1 \%}$ THD. $16.62 \times 5.87 \times 12.62 \mathrm{in} ; 23.7 \mathrm{lb}$
$\$ 500$
SR330BL 60-W/ch Receiver
Receiver with 32 AM/FM presets. Features VCR to VCR dubbing: 3 band tone control; speaker $A / B$ switch; audio/video integration; matrix sound. . . . . . . \$449

## SR3200BL 35-W/ch Receiver

Features 16 AM/FM station presets. Features triple tone control; digital tuning; tape monitor; speaker A/B switch
. \$329

## SR-560 45-W/ch Stereo Receiver

Features 16 preset digital tuning; 7 band EQ; inputs for MM phono, tape, CD, 2 video sources; VCR to VCR dubbing; $0.3 \%$ THD; 11.2 dBf IHF sens. $16.5 \times 3.62 \times$ $10 \mathrm{in} ; 11.9 \mathrm{lb}$.
$\$ 250$

## SR-340 25-W/ch Stereo Receiver

Features 5-band equalizer; 16 preset tuning: inputs for MM phono, tape, $\mathrm{CD} ; 0.3 \% \mathrm{THD} .16 .5 \times 3.62 \times 10 \mathrm{in}$ : 9.7 lb.
$\$ 200$

## MITSUBISHI

M-AV1 125-W/ch Audio/Video Receiver
A/V receiver with $125-\mathrm{W} / \mathrm{ch}$ features $25-\mathrm{W} / \mathrm{ch}$ Dolby Surround Matrix surround; remote control; motorized volume control; bass and treble controls: tone defeat: audio mute; preamp loudness; subsonic filter; high-cut filter; record selector; 16 presets with menu-
switching; on-screen displays of all functions; adjustable LCD display; preset scan; FM muting; headphone jack; 4 audio/video equipment inputs; 3 audio equipment inputs; 2 audio tape outputs; I video tape output; monitor outputs; pre-amp loop; THD 0.05\%. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1,000$

## M-AV2 80-W/ch Audio/Video Receiver

A/V receiver with 80-W/ch features Dolby Surround Matrix surround; remote control; motorized volume control; bass and treble controls; tone defeat; audio mute; preamp loudness; subsonic filter; high-cut filter; record selector; 16 presets; preset scan; FM muting; headphone jack; 4 audio/video equipment inputs; 3 audio tape outputs; 1 video tape output; monitor outputs; pre-amp loop; THD $0.05 \%$. . $\$ 800$

M-AV3 80-W/ch Audio/Video Receiver
A/V receiver with $80-\mathrm{W} / \mathrm{ch}$ features Dolby Surround Matrix surround; remote control; motorized volume control; bass and treble controls; tone defeat; audio mute; preamp loudness; subsonic filter; high-cut filter; 16 presets; preset scan; FM muting; headphone jack; 4 audio/video equipment inputs; 2 audio tape outputs; I video tape output; monitor outputs; THD 0.05\%

## NAD

7600 Monitor Series AM/FM Receiver
Wireless remote control; $150 \mathrm{~W} / \mathrm{ch}$; power envelope circuitry; +6 dB dynamic headroom; bridgeable; high current output stage; heigh resolution phono pre-amp; MC pre-pre-amp; bass EQ semi-parametric tone controls; wide/narrow IF mode; speaker imp selector; close tracking Soft Clipping; rack mountable .
$\$ 1598$

## 7400 Monitor Series AM/FM Receiver

14 pre-sets; $100 \mathrm{~W} / \mathrm{ch}$ stereo reciever; power envelpe circuitry; +6.2 dB dynamic headroom; motorized volume; MM/MC switch on descrete 4 transistro phono pre-amp; bridgeable; pre-amp out/main in; rack mountable.
\$1098

## 7100 Monitor Series AM/FM Receiver

14 pre-sets; $50 \mathrm{~W} / \mathrm{ch}$ stereo receiver; power envelpe circuitry: +6.6 dB dynamic headroom; MM/MC switch on discrete 4 transistor phono pre-amp; bridgeable: pre-amp out/main in; rack mountable
. . \$748

## 7240PE AM/FM Receiver

$40 \mathrm{~W} / \mathrm{ch} ;+6 \mathrm{~dB}$ dynamic headroom; speaker imp selector: Soft Clipping circuit: Bass EQ high current output stage; low noise phono pre-amp . . . . . . \$498

## 7225PE AM/FM Receiver

$20 \mathrm{~W} / \mathrm{ch} ;+4 \mathrm{~dB}$ dynamic headroom; power envelope circuitry; pre-amp out/main in; 5 -way speaker binding posts; Soft Clipping curciut . . . . . . . . . $\$ 348$

## 7020e AM/FM Receiver

$20 \mathrm{~W} / \mathrm{ch}$; high current output stage; Soft Clipping circuit. . $\$ 278$

## NAKAMICHI

## SR-4A AM/FM Stereo Receiver

Stereo receiver with Stasis power amp, multi-regulated power supply, extensive video switching. Inputs for MM phono, MC phono, tape, CD player, video sound source; vCR/laser disc. 60 continuous a verage W/ch from $20-20,000 \mathrm{~Hz}$ with no more than $0.1 \%$ THD into 8 ohms; dynamic headroom $\mathrm{t} .3 \mathrm{~dB} ; 200-\mathrm{ms}$

dynamic power 80 W . $\mathrm{FM} 50-\mathrm{dB}$ quieting sens stereo 37.5 dBf , $\mathrm{S} / \mathrm{N} 74 \mathrm{dBA}$ al 65 dBf ; THD stereo $0.07 \%$; capture ratio 1.5 dB ; AM rejection 60 dB ; alt-ch sel 60 dB. $16.94 \times 3.94 \times 19.56 \mathrm{in} ; 22 \mathrm{lb}, 4 \mathrm{oz}$.
$\$ 995$

## SR-3A AM/FM Stereo Receiver

Stereo receiver with Stasis power amp, multi-regulated power supply, defeatable subsonic filter. Inputs for MM phono, MC phono, tape, CD player, video sound source; 2 video sources. 45 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ with no more than $0.1 \%$ THD into 8 ohms; dynamic headroom $1.5 \mathrm{~dB} ; 200$-ms dynamic power 64 watts. $F M 50-\mathrm{dB}$ quieting sens stereo 37.5 dBf; $\mathrm{s} / \mathrm{N} 74 \mathrm{dBA}$ at 65 dBf ; THD stereo $0.07 \%$; capture ratio 2 dB ; AM rejection 60 dB ; alt-ch sel 55 dB .16 .94 $\times 3.94 \times 14.56 \mathrm{in} ; 18 \mathrm{lb}, 12 \mathrm{oz}$.
. $\$ 695$

## SR-2A AM/FM Stereo Receiver

Stereo receiver with Stasis power amp, multi-regulated power supply. Inputs for mm phono, tape, CD player. 30 continuous average $\mathrm{W} /$ ch from $20-20,000$ Hz with no more than $0.1 \%$ THD into 8 ohms; dynamic headroom $1.7 \mathrm{~dB} ; 200$-ms dynamic power 45 watts. FM $50-\mathrm{dB}$ quieting sens stereo $37.5 \mathrm{dBf} ; \mathrm{s} / \mathrm{N}$ 74 dBA at 65 dBf ; THD stereo $0.07 \%$; capture ratio 2 dB ; AM rejection 60 dB ; alt-ch sel $55 \mathrm{~dB} .16 .94 \times 3.94 \times$ $14.56 \mathrm{in} ; 16 \mathrm{lb}, 9 \mathrm{oz}$
$\$ 449$

## TA-IA Tuner Amplifier

Features 35 W continuous average output: $<0.10 \%$ THD into 8 ohms; MM phono overload 150 mV ; MM phono $\mathrm{S} / \mathrm{N}>78 \mathrm{~dB}$ : $10 \mathrm{AM} / \mathrm{FM}$ presets; sens 12 dBf ; signal strength for 50 dB quieting; multi-regulated power supply: 5 audio inputs; separate bass and ireble controls; loudness control; fixed 6 dB per octave subsonic filter; MOSFET vari-acp tuner; auto-seek an manual tuning; 2 switched AC convenience outlets. .
. \$329

## NEC

AVR-1010 Audio/Video Receiver
AM/FM receiver with built-in Dolby and matrix surround-sound processors. Features unified remote control with LCD readout that can operate other NEC audio and video components; four built-in power amps (one for each front and rear ch); quartz-PLL digital-synthesis luning; $16 \mathrm{Am} / \mathrm{FM}$ station presess; preset scan; FM mute; selectable wide/narrow IF bandwidth; 3 volume level/channel balance presets; computer-controlled volume and input selection; audio mute; a master volume control; front/rear volume control; front-left, front-right, rear-left, and rear-right volume controls; rear and front bass/treble controls; digital delay; headphone jack; tape monitor; mono output. Inputs for phono. CD player, tape deck, AUX, TV, and VCR. Tuner section: FM usable sens $10.8 \mathrm{dBf}(0.95 \mu \mathrm{~V})$; FM S/N 74 dB stereo. Amp section: $100 \mathrm{~W} /$ ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with $0.02 \%$ THD (front), $50 \mathrm{~W} / \mathrm{ch}$ into 8 ohms (rear). $17 \times 5.5 \times 17 \mathrm{in} ; 35 \mathrm{lb}$
$\$ 899$


AVR-710 Audio/Video Receiver
AM/FM receiver with built-in Dolby and matrix surround-sound processors. Features unified remote control that can operate other NEC audio and video components; four built-in power amps (one for each front and rear ch); quartz-PLL digital-synthesis tuning: 16 AM/FM station presets; preset scan; FM mute; 3 volume level/channel balance presets; computer-
controlled volume and input selection; audio mute; a master volume control; front/rear volume control; front-left, front-right, rear-left, and rear-right volume controls; rear and front bass/treble controls. Inputs for phono, CD player, tape deck, AUX, TV, and VCR. Tuner section: FM usable sens $13.2 \mathrm{dBf}(2.5 \mu \mathrm{~V})$; FM $\mathrm{s} / \mathrm{N} 72 \mathrm{~dB}$ stereo. Amp section: $70 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-20,000 \mathrm{~Hz}$ with $0.02 \%$ THD (front), $35 \mathrm{~W} / \mathrm{ch}$ into 8 ohms (rear). $17 \times 5.5 \times 17 \mathrm{in} ; 33 \mathrm{lb} \ldots \$ 69$

## R-510 Audio/Video Receiver

Remote-controlled AM/FM receiver with 16 AM/FM station presets. $50 \mathrm{~W} / \mathrm{ch}$ into 8 ohms with $0.02 \%$ THD .
$\$ 499$

## NIKKO AUDIO

AVR-65 Audio/Video Receiver
Remote-controlled AM/FM, UHF, CATV stereo receiver with built-in MTS/SAP decoder and 139 -channe! tuning. Features quartz-locked tuner; 2 video inputs/outputs; 10 AM/ 10 FM presets. $65 \mathrm{~W} / \mathrm{ch}$ into 8 ohms with $0.05 \%$ THD; FR $20-20,000 \mathrm{~Hz}, \mathrm{~s} / \mathrm{N} 65 \mathrm{db} . \$ 900$

NR-1050R Audio/Video Receiver
Remote-controlled receiver with $100 \mathrm{~W} / \mathrm{ch} ; 2$ tape inputs; 20 station presets; bi-directional dubbing; $L / R$ mic; L/R line; 4-band graphic EQ.
$\$ 599$
NR-850R. Same as above with $65 \mathrm{~W} / \mathrm{ch}$
\$519

## R-550 Receiver

55 W/ch at 8 ohms; 1.63 dB dynamic headroom with $10-100,000 \mathrm{~Hz}$ per bandwidth; $10 \mathrm{AM} / 10 \mathrm{FM}$ presets; 6-inputs; processor select system; 2 video/image input/output terminals provide bi-directional dubbing; auto record out allows any source to be autmatically routed to all four outputs; THD. $04 \%$; FR $20-20,000 \mathrm{~Hz} / \mathrm{CD}$ input; $\mathrm{s} / \mathrm{N} 80 \mathrm{~dB}$; sep 51 dB ; channel sel 75.8 dB
$\$ 450$


R-400. Identical to R-550 except for processor feature and single direction video dubbing.
$\$ 350$

## ONKYO

## TX-SV7 Audio/Video Receiver

Audio/video AM/FM receiver with Onkyo's RV. AV7M universal remote control to operate receiver plus a variety of other audio and video componetns. Features built-in MTS decoder for stereo broadcasts; built-in surround-sound processor with Dolby, matix, and hall surround sound; simulated stereo; 12 AM/FM station presets; FM mute; inputs for 4 speakers; bass, treble, and balance controls. Inputs for CD player, phono; VDP, VCR, tape 1, and tape 2. 100 $\mathrm{W} / \mathrm{ch}, 75 \mathrm{~W} / \mathrm{ch}$ (front) and $25 \mathrm{~W} / \mathrm{ch}$ (rear) in surround mode.
\$1,000

## Integra TX-108 AM/FM Receiver

Computer-controlled AM/FM receiver with full-function wireless remote control that can also operate selected Onkyo turntables, tape decks, and CD players. Automatic precision reception system controls stereo/mono, local/Dx, high-blend on/off, and NR on/off functions. Features real-phase power supply; dynamic bass expander; dynamic transient expander; simulated stereo; preset memory scan; motorized volume control; FM/video simulcast capability. Inputs for MM and MC phono; tape; tape 2; CD player; video sound source; VCR; VDP. Amp section: 100 continuous average $W$ /ch from $20-20.000 \mathrm{~Hz}$ into 8 ohms with $<0.02 \%$ THD. FM section: $50-\mathrm{dB}$ quieting sens $40 \mu \mathrm{~V}$ (37.2 dB1) stereo; capture ratio 1.3 dB ; alt-ch sel $70 \mathrm{~dB} .18 .88 \times 5.88 \times 18.12 \mathrm{in} ; 33$ lb .


## For Compact Disc, Computer, Video, Cassette and D.A.T. all in one unit!

Jewels stored vertically or horizontally to your own impeccable taste, our rich colored Ivory shelves are removable to adapt to any collection. Our rotating Benjamin and Samantha line allows for multi-storage in tight quarters. The Elizabeth line is stackable, wall mounted or desk top suitable. All cabinets available in choice of 5 colors.

## ELIZABETH LINE

A. Holds 308 jewels vertically, 276 stored horizontally measures $6^{3} 4^{\prime \prime} \times 201 / 4^{\prime \prime} \times 48^{\prime \prime}{ }^{\prime \prime} 298^{\text {*" }}$
B. Holds 154 Jewels vertically, 138 stored horizontally measures

C. Holds 102 Jewels vertically, 90 stored horizontally measures $63 / 4^{\prime \prime} \times 13: 1 / 4^{\prime \prime} \times 24^{\prime \prime} \quad{ }^{5} 119^{\prime \prime}$
D. Holds 52 Jewels vertically, 46 stored horizontally measures $63 / 4^{\prime \prime} \times 133 / 4^{\prime \prime} \times 1314^{\prime \prime} \quad{ }^{18} 69^{\circ}$
E. Holds 24 Jewels vertically, 22 stored horizontally measures $6^{3} / 4^{\prime \prime} \times 71 / 4^{\prime \prime} \times 13^{1 / 4^{\prime \prime}}{ }^{3} 39^{m}$ "Fue Shipping" on 2 or more cabinets CIRCLE NO. 72 ON READER SERVICE CARD

BENJAMIN LINE

- Stores 204 Jewels vertically, 180 stored horizontally measures $13 \% 4^{\prime \prime} \times 133 / 4^{\prime \prime} \times 25^{\prime \prime} \quad 329^{\prime \prime \prime}$

SAMANTHA LINE

- Stores 104 Jewels vertically. 92 stored horizontally measures $13 \% 4^{\prime \prime} \times 133 / 4^{\prime \prime} \times 141 / 4^{\prime \prime} \quad{ }^{3} 129^{\prime \prime \prime}$


Call 1-800-458-1312 for easy ordering!

- Finger touch bronze

Dk. Oak glass doors

- Acrylite adjustable

Med. Oak shelves

- Solid brass hardware

Lt. Oak

- $100 \%$ solid oak casing
- 1 year warranty
- Satisfaction Guaranteed

Black


Call or write for further information 147 Columbia Avenue • Holland, MI 49423

## Integra TX-88 AM/FM Receiver

Computer-controlled AM/FM receiver with full-function wireless remote control that also operates selected Onkyo turntables, tape decks, and CD players. Automatic precision reception system controls stereo/mono, local/Dx, high-blend on/off, and NR on/off functions. Features real-phase power supply: dynamic bass expander; simulated stereo: preset memory scan; motorized volume control: FM/video simulcast capability. Inputs for MM phono; tape; tape 2; CD player; video sound source; VCR; VDP. Amp section: 80 continuous average W/ch from $20-20,000 \mathrm{~Hz}$ into 8 ohms with $<0.025 \%$ THD. FM section: $50-\mathrm{dB}$ quieting sens $40 \mu \mathrm{~V}(37.2 \mathrm{~dB})$ stereo; capture ratio 1.5 dB ; alt-ch scl $70 \mathrm{~dB} . .$. . . . . $\$ 730$ CW-N88. Optional woodgrain side panels for TX88. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$65/pr

## TX-850 AM/FM Receiver

Stereo receiver with $68 \mathrm{~W} / \mathrm{ch}$ rms. Features $160 \mathrm{~W} / \mathrm{ch}$ dynamic output into 2 ohms; low impedance drive discrete output section; 4-mode APR tuner; 20-station random memory with battery-free backup; selective tone control; CD direct input; stereo image expander; dynamic bass expander; sleep time function: integtrated system remote capability with supplied controller. Amp: $\mathrm{FR} 20-30,000 \mathrm{~Hz} \pm$ I dB. Tuner: capture ratio 1.5 dB ; $\mathrm{S} / \mathrm{N} 67 \mathrm{~dB}$ stereo; THD $0.25 \%$ stereo $\$ 500$ TX-850M. As above with system remote. . . . $\$ 550$

## TX-830 AM/FM Receiver

Stereo receiver with $58 \mathrm{~W} / \mathrm{ch}$ rms. Fealures $150 \mathrm{~W} / \mathrm{ch}$ dynamic output into 2 ohms; low impedance drive discrete output section; 3-mode APR tuner: 20-station random memory with battery-free backup; selective tone control: CD direct input; simulated stereo; sleep time function: integtrated system remote capability with supplied controller. Amp: FR $20-30,000 \mathrm{~Hz} \pm 1$ dB . Tuner: capture ratio $1.5 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 67 \mathrm{~dB}$ stereo: THD $0.3 \%$ stereo . . . . . . . . . . . . . . . . . . . . . . . . $\$ 400$ TX-830M. As above with system remote. . . . . \$450

## TX-810 AM/FM Receiver

Stereo receiver with $45 \mathrm{~W} / \mathrm{ch} \mathrm{rms}$. Features $58 \mathrm{~W} / \mathrm{ch}$ dynamic output into 2 ohms; low impedance drive discrete output section; 2-mode APR tuner: 16 -station random memory with battery-free backup; selective tone control
$\$ 310$

## TX-80 AM/FM Receiver

Remote-controlled AM/FM receiver with a computercontrolled automatic precision reception system to control the stereo/mono and local/Dx functions. Features electronic feather-touch input selectors; direct tone controls: $16 \mathrm{Am} / \mathrm{Fm}$ station presets. Inputs for MM phono, CD player, tape $1 /$ video sound, tape 2 . Amp section: $33 \mathrm{~W} / \mathrm{ch}$ min rms into 8 ohms from $20-$ $20,000 \mathrm{~Hz}$ with no more than $0.3 \%$ THD; FR $20-30,000$ $\mathrm{Hz} \pm$ I dB. FM section: usable sens $19.2 \mathrm{dBf}(5 \mu \mathrm{~V})$ stereo; $50-\mathrm{dB}$ quieting sens $38.2 \mathrm{dBf}(45 \mu \mathrm{~V})$ stereo: capture ratio $1.5 \mathrm{~dB} .17 .12 \times 3.88 \times 12.5 \mathrm{in}$ : 16.5 lb.
$\$ 250$

## PARASOUND

## R/HD Receiver Series

All Parasound R/IID recievers feature cwos electronic logic switching; high current/high speed discrete outputs; high speed linear phono gain stage; oversized power supply: preamplifier output jacks; tedfunction indicators', separate CD adn video inputs, $A / B$ speaker pairs. separately switched; mono mode select; allmetal chasis and panel; 3-AC convenience outlets; headphone jack.

## R/HD-900R Receiver

Full feature, wireless remote control reciever. Features motor driven analog vol control; 16 station presets, $8 \mathrm{AM} / 8 \mathrm{FM}$; separate low and high filters; separate record output selector: 2-way tape dubbing: external processor loop jacks; relay protection; THD $<0.2 \%$; dynamic headroom 1.5 dB ; FR $20-20.000 \mathrm{~Hz}$ $\pm 1 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 90 \mathrm{~dB} ; 17.25 \times 4 \times 1.25 \mathrm{in} \ldots . . . \$ 585$

## R/HD-600 Receiver

Features 16 station presets, $8 \mathrm{AM} / 8 \mathrm{FM}$; variable loudness contour; 2-tape monitors; relay protection; THD $<0.2 \%$ : dynamic headroom 1.5 dB ; FR 20$20.000 \mathrm{~Hz} \pm 1 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}: 17.25 \times 4 \times 1.25$ in $\$ 400$

## R/HID-300 Receiver

Features 12 station presets, $6 \mathrm{AM} / 6 \mathrm{FM}$; switchable loudness contour, single tape monitor; THI) <0.2\%: dynamic headroom 1.5 dB ; FR $20-20.000 \mathrm{~Hz} \pm \mathrm{IdB}$; $\mathrm{s} / \mathrm{N} 90 \mathrm{~dB}: 17.25 \times 3.06 \times 9.75$ in $\$ 300$

## PHILIPS

FR 980 Audio/Video Surround Sound Receiver
Built-in Dolby Surround decoding and amplification; front channels rated 125 watts: 15 watts rear channels; dynamic power of 180 watts, 290 watts; Surround mode switch features matrix, spatial, stereo, mono: 7 brand graphic equalizer with programmable acoustic memory; 50-key universal audio/video remote with LCD display: motor-driven rotary volume control for both channels: digitally synthesized AM/FM tuner with 19 presets; video split screen with video noise reduction: Record Selector provides parallel recording capability; MM or MC phono settings; ambience control switch; 9 audio inputs: 4 audio outputs: 4 video inputs: 3 video outputs: 4 M and FM antennas; headphone outlet: function display; pre-set Scanning function for AM/FM tuner; remodulator output jack for optional re-modulator. $\mathrm{S} / \mathrm{N}$ ratio 75 dB : THD $0.1 \%$ : video input sens $1 \mathrm{v} \mathrm{p}-\mathrm{p} / 75$ ohms. $4.4 \times 16.8 \times 15.2 \mathrm{in} ; 35 \mathrm{lb}$.
$\$ 999$
FR 880 Audio/Video Surround Sound Receiver
Built-in Dolby Surround decoding and amplification: front channels rated 75 watts; 15 watts rear channels; dynamic power of 110 watts, 175 watts, 190 watts; Surround mode switch features matrix, spatial, stereo, mono; 44-key universal audio/video remote with LCD display: motor-driven rotary volume control for both channels; digitally synthesized AM/FM tuner with 19 presets: 9 audio inputs: 4 audio outputs: 4 video inputs; 3 video outputs; AM and FM antennas; headphone outlet: function display: pre-set Scanning function for AM/FM tuner; re-modulator output jack for optional re-modulator. $\mathrm{S} / \mathrm{N}$ ratio 75 dB : THD $0.1 \%$; video input sens 1 v p-p/ 75 ohms. $4.4 \times 16.8 \times 15.2 \mathrm{in}$; 25 lb
$\$ 649$

## PIONEER

VSS-9300S A/V Receiver
A/V receiver with Dolby Pro Logic surround processor and digital delay. Features type III non-switching amp rated at 125 W front $\times 30 \mathrm{~W}$ rear: motor-driven volume control; 4 audio inputs; video adaptor loop: 4 video inputs: stadium sound; simulated surround

sound; FL. display: programmable remote control: video enhancer with split-screen monitoring: VCR noise filter; 5 -position remote-operated acoustic tonal setting memory; pre-outs and main input terminals; $30 \mathrm{AM} / \mathrm{FM}$ presets; memory scan; manual, automatic, and direct-access tuning: HITS (Hyper Intelligent Tuning System) enables memory display by radio call letter and categories
. \$935

## VSX-7300 A/V Receiver

A/V receiver with Dolby Pro Logic surround processor and digital delay. Features type III non-switching amp rated at 125 W front $\times 30 \mathrm{~W}$ rear: 4 audio inputs;
video adaptor loop; 4 video inputs; stadium sound; simulated surround sound: FL display: programmable remote control; video enhancer with split-screen monitoring: VCR noise filter; 5 -position remoteoperated acoustic tonal setting memory: pre-outs and main input terminals; $30 \mathrm{Am} / \mathrm{FM}$ presets; memory scan: manual. automatic, and direct-access tuning.
.$\$ 760$
VSX-5300 A/V' Receiver
A/V receiver with Dolby Pro Logic surround processor and digital delay. Features type 111 non-switching amp rated at 100 W front $\times 15 \mathrm{~W}$ rear: 3 audio inputs; 3 video inputs; stadium sound; simulated surround sound: FL display: programmable remote control: video enhancer with split-screen monitoring: 30 AM/FM presels.
$\$ 635$

## VSX-3300S A/V Receiver

A/V receiver with Dolby Pro Logic surround processor and digital delay. Features type 111 non-switching amp rated at $80 \mathrm{~W} / \mathrm{ch}$ : 3 audio inputs: 3 video inputs: 5-band graphic EQ; FL display: programmable remote control; video enhancer with split-screen monitoring: 24 AM/FM presets. $\$ 635$ VSX-3300. As above with normal Pioneer SR remote control.
$\$ 395$
SX-2300 AN/FM Receiver
AM/FM receiver with quartz-synthesized tuning and $60 \mathrm{~W} / \mathrm{ch}$. Features speaker matrix sound; simulated stereo for mono sources: $24 \mathrm{Am} / \mathrm{FM}$ presets: memory scan; auto tuning: 5-band graphic EQ: A/B speaker selector: FL display: microcomputer control: 5 audio inputs. Imp 8 ohms; fR $20-20,000 \mathrm{~Hz}$; THD $0.07 \%$.
$\$ 250$
SN-1300 AN/FM Receiver
AM/FM receiver with quartz-synthesized tuning and $40 \mathrm{~W} / \mathrm{ch}$. Features $24 \mathrm{Am} / \mathrm{FM}$ presets; memory scan; auto tuning: 5-band graphic EQ; A/B speaker selector: FL display; microcomputer control; 5 audio inputs. Imp 8 ohms: FR $20-20,000 \mathrm{~Hz}$ : THD $0.07 \% \ldots$... $\$ 210$

## PROTON

D940 AM/FM Receiver
Receiver with Dynamic Power on Demand (DPD) circuitry and Schotz NR. Features high dynamic power capabilities (rating 8/4/2 ohms to $160 / 280 / 380$ W/ch); 4-gang FM front end; 2-gang AM front end; selectable phono section for MM and MC phono: speaker EQ: separate low-noise MC amp; active volume control: infrasonic filter. Inputs for MM, MC phono: phono 2: tape: AIX: exira AUX: CD; video sound source. Amp section: 40 continuous average W/ch from $20-20.000 \mathrm{~Hz}$ with less than $0.02 \%$ THD into 8 ohms; dynamic headroom 6 dB ; IHF IMD $0.008 \%$ : FR $20-20.000 \mathrm{~Hz} \pm 0.2 \mathrm{~dB}$. FM section: alt-ch sel 55 dB ; adj-ch sel 90 dB ; $50-\mathrm{dB}$ quieting sens 33.2 dBf stereo: $\mathrm{S} / \mathrm{N} 70 \mathrm{~dB}$ stereo: THD stereo $0.2 \%$; sep 45 dB at $1,000 \mathrm{~Hz}$; capture ratio $1.5 \mathrm{~dB} .16 .5 \times 4 \times 10.12$ in: 20 lb .
$\$ 489$

## AV- $\mathbf{3 0 0} \mathrm{AM} / \mathrm{FM}$ Receiver

Digitally synthesized stereo receiver. Features Schotz PI.L detector. Inputs for MM phono, tape, HUX. video sound source. Remote control optional. 30 continuous average W/ch from $20-20.000 \mathrm{~Hz}$ with $<0.02 \%$ THD into 8 ohms: includes Dynamic Power on Demand which boosis dynamic power to 120 W (8 ohms) with 6 dB dynamic headroom: IHF IMD $0.015 \%$; FR $17-35,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$. FM section; $50-\mathrm{dB}$ quicting sens, sterco, $2.8 \mu \mathrm{~V}$; max $\mathrm{S} / \mathrm{N}$, A-whd, sterco 70 dB ; THD stereo $0.2 \%$; sep 50 dB at 1.000 Hz ; capture ratio 1.5 dB . AM section: sens $300 \mu \mathrm{~V} / \mathrm{m} \$ 459$

## RCA

MP'I200) Audio/Video Preamp Tuner
Dimensia A/V control center with unified remote control and on-screen status indication when used with Dimensia monitor lets you select inputs from up


# For the Changing times The New 6-Disc Realistic ${ }^{\circ}$ CD Changer 

Now there's a more convenient way to enjoy the best in sound-the new compact disc changer from Radio Shack. You can load up to six discs in its magazine, st back, and enjoy hours of superb dig tal stereo. Or, program up to 32 selections from the six discs to play in any sequence. Eiher way, you can pzuse, replay, program and search, using the wireless infrared remote control.
The large LED display simplifies remote operation. Manual and automatic search make it easy to find selections.
This higr-peformance changer has a heavily cushioned deck mechanism and Tri-Spot laser pickup system for accurate tracking. Two-times oversampling provides superior sound. And Radio Shack stocks
extra magazines so you can protect all af your CDs and have them loaded in your prefered order, ready for play anytime.

Come in and try the Real stic CD-6000. It's affordably priced at only $\$ 359.95$-so you can enjoy the convenience of a changer for less than the price of some single-disc players. Sold only at Radio Shack. Low as \$18 per month *.

# Padro shaek The Technology Store ${ }^{T M}$ 

## a division of tandy corporation

Prices apply at particlpating Radio Shack stores and dealers. - Rado Shack Value Pluce Revolsfing Credit. Actual payment may vary tepending upon accoint balance.
to 13 Dimensia components and 5 nonsystem components. Features automatic input selection; remote control volume, mute, direct access and station scan. and off/on; SystemLink cabling; simultaneous recording and playback; auto status indication; auto switching; quartz-PLL synthesis tuning; $20-$ station random tuning memory; preset channel scanning; FM search tuning; electronic volume control; signal processing loop; preset turn-on volume; fluorescent display; muting; bass, treble, and balance controls; 4 AC con venience outlets. Tuner section: FM sens $12.2 \mathrm{dBf} ; \mathrm{s} / \mathrm{N} 73 \mathrm{~dB}$ (mono); image rejection 45 dB ; sel 60 dB ; $\operatorname{sep} 40 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; capture ratio 1.5 dB ; FM FR $30-15,000 \mathrm{~Hz} .14 .63 \times 4.13 \times 13.38 \mathrm{in} \$ 349$


#### Abstract

REALISTIC

\section*{AV-900 FM/AM/TV A/V Receiver}

Receives VHF TV broadcasts (decodes MTS stereo and SAP), UHF broadcasts, cable-TV channels; $140-$ channel TV tuner; wireless remote control (needs 2 AAA batteries); video signal processing and dubbing: digital-synthesized tuner; stores 4 pairs of cable/FM channels; RF output on channel 3 or 4; baseband output for monitors. Inputs for phono, tape, CD player, two VCR's, surround-sound decoder. 35 W/ch into 8 ohms $\$ 600$




STA-2700 Remote-Controlled Receiver
Quartz tuning; 6 AM and 6 FM presets; search tuning: digital frequency display; 5-part LED signal-strength meter; 2-part dual output power meters; 2-way tape dubbing and 2 -deck monitoring; loudness control; MPX blend; FM muting: high filter; sonic filter; function LED's; overload and overheating protection. VCR and cassette dubbing capability; 36-key multifunction integrated system remote control; connections for AM loop and indoor/outdoor FM antennas; inputs for CD, phono, tape, VCR-1, VCR-2/VDP, and processor; outputs for headphones, A, B, and $A+B$ speakers; motorized volume control; matteblack finish; pale-blue FL display. Amp: $60 \mathrm{~W} / \mathrm{ch}$, THD $<0.05 \% ; \mathrm{S} / \mathrm{N} 76 \mathrm{~dB}$. Tuner, FM usable sens 11.2 dBf mono; $\mathrm{S} / \mathrm{N} 70 \mathrm{~dB}$; THD $<0.25 \%$. $5 \times 17 \times 13.25 \mathrm{in}$; 21 lb
\$460

## RZ-3000 50-W/ch A/V Receiver

Features quartz-PLL synthesizer AM/FM stereo tuner; 30 random station presets; preset scan; station call memory; extra-large heatsink; Jow-impedance capability; VCR and cassette dubbing capability; 20-key multi-function integrated system remote control; connections for AM loop and indoor/outdoor FM antennas; inputs for CD , phono, tape-1, tape-2/monitor, and VCR/VDP; outputs for A, B, and A+B speakers; motorized volume control; matte-black finish; pale-blue FL display; headphone jack. Amp: 50 W/ch, THD $<0.09 \%$; $\mathrm{S} / \mathrm{N} 76 \mathrm{~dB}$. Tuner. FM usable sens 11.2 dBf mono; $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$; THD $<0.3 \%$. $5 \times 17 \mathrm{x}$ $13.25 \mathrm{in} ; 21 \mathrm{lb}$.
$\$ 370$

## RZ-1000 32-W/ch A/V Receiver

Features quartz-PLL synthesizer AM/FM stereo tuner; 30 random station presets; preset scan; station call memory; extra-large heatsink; low-impedance capability; connections for AM loop and indoor/outdoor Remote requires 2 AA batteries. $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms.
$\$ 500$

## STA-2380 Digital Synthesized Receiver

 AM/FM-stereo receiver with 6 AM and 6 FM presets and IMX stereo expander to extend sound stage and improve imaging precision. Up/down scan, lock; 5 segment fluorescent signal strength meter; dual 7-step output meter MPX blend; high filter cleans up recordscratch. Drives 2 pairs of speakers; headphone jack; 2 AC outlets. Inputs for MM phono; tape; tape 2; aux; CD player. Amp section: $60 \mathrm{~W} / \mathrm{ch}$ into $8 \mathrm{ohms}, 98 \mathrm{~W}$ into 4 ohms. FM section: $50-\mathrm{dB}$ quieting sens stereo $40 \mu \mathrm{~V}(32 \mathrm{dBf})$; max stereo $\mathrm{S} / \mathrm{N} 70 \mathrm{~dB}$ with 65 dBf ( $1,000 \mu \mathrm{~V}$ ) A-whd; $\mathrm{s} / \mathrm{N} 84 \mathrm{~dB}$ phono 100 dB aux; capture ratio I dB;AM rej 50 dB ; alt-ch sel $70 \mathrm{~dB} \$ 400$

## STA-117 Digital Synthesized Receiver

6 AM/6 FM presets; 300 -/75-ohm FM and AM antennas; quartz digital tuning; feather-touch manual or auto tuning; 3-LED signal-strength meter; loudness control; subsonic filter. Inputs for MM phono; tape; aux; CD player. Amp section: $30 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $\mathrm{s} / \mathrm{N} 84 \mathrm{~dB}$ phono; FM section: $50-\mathrm{dB}$ quieting sens stereo $39.8 \mu \mathrm{~V}(32 \mathrm{~dB})$; max $\mathrm{S} / \mathrm{N}$ with $65 \mathrm{dBf}(1,000$ $\mu \mathrm{V}) \mathrm{A}$-wid stereo 60 dB ; capture ratio 1.5 dB ; separation 40 dB ; FM tuner $2.8 \mu \mathrm{~V}$ AM rej 50 dB ; altch sel 50 dB
. \$260

## STA-785 Digital Synthesized Receiver

Digital synthesized AM/FM receiver with Quartz digital tuning. Features search up or down; feathertouch controls; 6 AM/6 FM presets; FM muting: 5LED signal-strength meter; loudness control. Inputs for MM phono; tape; aux; CD player. Amp section: $50 \mathrm{~W} / \mathrm{ch}$ into 8 ohms. FM section: capture ratio 2 dB ; Response $40-20,000 \mathrm{~s} / \mathrm{N} 56 \mathrm{~dB}, 67 \mathrm{aux}$; AM rej 4 S dB ; alt-ch sel 50 dB .
\$200
STA-130 22-W/ch AM/FM Receiver
AM/FM 22 W/ch stereo receiver. Features PLL tuning: loudness button; FM muting; drives 2 pairs of speakers; stereo/mono switch; bass, treble, volume, balance controls; overheating and overload protection. 5-LED output power meter; Inputs for MM phono; tape; aux; CD player. Amp section: $22 \mathrm{~W} / \mathrm{ch}$ into 8 ohms. FM section: capture ratio 3 dB ; alt-ch sel 50 dB .

## STA-19 5-W/ch Personal Receiver

AM/FM 5-W/ch personal reciever with inputs for FM, AM, phono, tape. Features Auto-Magic fine tuning: jack for mini headphones; jack for mini cassette players; special EQ switch; loudness control. $5 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $\mathrm{S} / \mathrm{N} 70 \mathrm{~dB}$ phono, 72 aux; IHF sens 23.3 dBf; sep at $1,000 \mathrm{~Hz} 35 \mathrm{~dB}$
$\$ 120$

## REVOX

B285 AM/FM Receiver
AM/FM stereo receiver with two microprocessors for control of input sensitivities, output levels, and operating functions. Features alphanumeric multimode LCD display; 29 AM or FM presets; level and reception mode (mono/stereo, blend) separately programmable for each preset station; programmable volume limit; - 20 dB button; subsonic filter; loudness contour; programmable output levels for A and B speaker pairs; comprehensive speaker protection circuits; serial data bus for external control devices; wireless infrared remote control (transmitter optional). Inputs for phono, tape, CD player, tape 2. Amp section: 70 continuous average $W / \mathrm{ch} 20-20,000 \mathrm{~Hz}$ with no more than $0.03 \%$ THD into 8 ohms; dynamic headroom $2.5 \mathrm{~dB} ;$ FR $20-20,000 \mathrm{~Hz} \pm 0.3 \mathrm{~dB}$. FM section: alternate-ch sel 96 dB ; adjacent-ch sel 16 dB ; $50-\mathrm{dB}$ quieting sens, mono $1.6 \mu \mathrm{~V}$ ( 15.2 dB ), stereo $19 \mu \mathrm{~V}(36.8 \mathrm{~dB})$; max $\mathrm{S} / \mathrm{N}, \mathrm{A}$-wtd, mono 84 dB , stereo 80 dB ; THD mono $0.15 \%$, stereo $0.3 \%$; sep 43 dB at $1,000 \mathrm{~Hz}$; capture ratio 2 dB . AM section: FR $120-$ $3,000 \mathrm{~Hz} \pm 6 \mathrm{~dB}$; sens $36 \mu \mathrm{~V} ; 33 \mathrm{lb} \ldots \ldots . . \$ 2,995$

## ROTEL

## RX 875 AM/FM Receiver

70 W bridgeable to 180/W AM/FM receiver. Digital tuning with 16 station presets; THD $0.03 \%$; IMD $0.05 \%$; $\mathrm{s} / \mathrm{N}$ ratio 75 dB ; inputs for video . . . . $\$ 599$ RX 855. As above, 14 presets, $50-\mathrm{W} / \mathrm{ch} . . . .$.

RX850A AM/FM Receiver
$30-\mathrm{W} / \mathrm{ch}$ receiver with 16 random presets. Features

## RT850 tuner circuitry

RZ-3000 50-W/ch A/V Receiver
Features quartz-PLL synthesizer AM/FM stereo tuner; 30 random station presets; preset scan; station call memory; extra-large heatsink; low-impedance capability; VCR and cassette dubbing capability; 20-key multi-function integrated system remote control; connections for AM loop and indoor/outdoor FM antennas; in puts for $C D$, phono, tape-1, tape- $2 /$ monitor, and VCR/VDP; outputs for A, B, and A+B speakers; motorized volume control; matte-black finish; pale-blue FL display; head phone jack. Amp: 50 W/ch, тно $<0.09 \%$; $\mathrm{s} / \mathrm{N} 76 \mathrm{~dB}$. Tuner. FM usable sens 11.2 dBf mono; $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$; THD $<0.3 \% .5 \times 17 \times$ $13.25 \mathrm{in} ; 21 \mathrm{lb}$.
.$\$ 370$

## RZ-1000 32-W/ch A/V Receiver

Features quartz-PLL synthesizer AM/FM stereo tuner; 30 random station presets; preset scan; station call memory; extra-large heatsink; low-impedance capability; connections for AM loop and indoor/outdoor FM antennas; inputs for CD, phono, tape-I, tape$2 /$ monitor, and VCR/VDP; outputs for $A, B$, and A+B speakers; matte-black finish; pale-blue FL display; headphone jack. Amp: $32 \mathrm{~W} / \mathrm{ch}$, THD $<0.09 \%$; $\mathrm{S} / \mathrm{N} 75 \mathrm{~dB}$. Tuner: FM usable sens 11.2 dBf mono; $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$; тнD $<0.3 \% .5 \times 17 \times 13.25 \mathrm{in} ; 14.5$ mo

## X830 AM/FM Receiver

Stereo receiver with LeD dial pointer. Features inputs for phone, tape, CD player, video sound source; amp section: 20 continuous average $\mathrm{W} /$ ch from 20-20,000 Hz; THD $0.08 \%$; IHF IMD 0.08\%; FR (phono) 20-15,000 $\mathrm{Hz} \pm 0.3 \mathrm{~dB}$; FR (tape, CD , video) $10-38,000 \mathrm{~Hz}+1$, $3 \mathrm{~dB} ; \mathrm{FM}$ section: alt-ch sel 65 dB ; $50-\mathrm{dB}$ quicting sens, mono $4 \mu \mathrm{~V}$ (17.2 dBf), stereo $60 \mu \mathrm{~V}(40.7 \mathrm{~dB})$; $\mathrm{S} / \mathrm{N} 65 \mathrm{~dB}$; capture ratio $2.0 \mathrm{~dB} .17 \times 3.88 \times 13 \mathrm{in}$; 12.7 lb .
. $\$ 249$

## SAE

R-102 Stereo Receiver
AM/FM stereo receiver utilizes an on-board computer to eliminate dependency between front-panel layout and audio circuits. $50 \mathrm{~W} / \mathrm{ch}$ at $0.025 \%$ THD. All controls grouped by function. Features alphanumeric and digital readouts for input functions, tone, volume. balance settings. station frequency and tuner memories; 3 digital tone memories; tuner memory scan; phono power amp; high-current main power amp.
$\$ 499$


## SANSUI

## S-X1200 120-W/ch AM/FM Receiver

AM/FM receiver with random presetting of 16 FM and AM stations. Features channel call and preset scan; connections for two VCR's with bidirectional dubbing; sound attacker to add sonic impact to video image; LED power meters; processor terminals; hiblend; variable loudness; Amp section: 120 continuous average $W / \mathrm{ch} 20-20,000 \mathrm{~Hz}$ with no more than $0.015 \%$ THD into 8 ohms; FR $10-70,000 \mathrm{~Hz}+1,-3 \mathrm{~dB}$. FM section: $50-\mathrm{dB}$ quieting sens.(Mono) 10.8 dBf ; $17.31 \times 5.34 \times 17.12$ in; black finish; 30 lb. . $\$ 1,000$ X900. Similar to S-X1200 except $80 \mathrm{~W} /$ ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.02 \%$ THD
. $\$ 725$

## RZ-7000 70-W/ch A/V Receiver

Features quartz-PLL synthesizer AM/FM stereo tuner; 30 random station presets; preset scan; station call memory; 5 -band graphic equalizer with 5 factory-set patterns; memory for 30 user-set patterns for tuner, and 5 other user-set patterns; 3 extra-large heatsinks; low-impedance capability; VCR and cassette dubbing capability: 36 -key multi-function integrated

## Without <br> these components your stereo system will sound likedirt.

system remote control; connections for AM loop and indoor/outdoor $F M$ antennas; inputs for $C D$, phono, tape, VCR-1, VCR-2/VDP, and processor; outputs for headphones, $\mathrm{A}, \mathrm{B}$, and $\mathrm{A}+\mathrm{B}$ speakers; motorized volume control; matte-black finish; pale-blue Fl. display. Amp: $70 \mathrm{~W} / \mathrm{ch}, \mathrm{TH})<0.02 \% ; \mathrm{s} / \mathrm{N} 76 \mathrm{~dB}$. Tuner. FM usable sens 11.2 dBf mono; $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB} ; \mathrm{THD}$ $<0.2 \%$.
$\$ 600$

## RZ-5000 60-W/ch A/V Receiver

Features quartz-PLL synthesizer AM/FM stereo tuner, 30 random station presets; preset scan; station recall memory; extra-large heatsink; low-impedance capability; VCR and cassette dubbing capability; 36-key multi-function integrated system remote control; connections for AM loop and indoor/outdoor FM antennas; inputs for CD, phono, tape. VCR-I, VCR2/VDP, and processor; outputs for headphones, $\mathrm{A}, \mathrm{B}$, and $A+B$ speakers; motorized volume control; matte-black finish; pale-blue Fl display. Amp: 60 W/ch. THI) $<0.05 \%$; $\mathrm{S} / \mathrm{N} 76 \mathrm{~dB}$. Tuner. FM usable sens II. 2 dBf mono; $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$; THI) $<0.25 \%$. $\$ 460$

## SCOTT

STA 1510 Integrated Amp With Tuner
Separate integrated amp and tuner sold together; wireless remote control; 7-band graphic equalizer, I.ED power meters; digital station readout; goldplated input jacks. Inputs for MM phono, tape, CD/DAT, video sound source. Amp section: 150 W/ch into 8 ohms. $F M$ section 50 dB quieting sens stereo $10 \mu \mathrm{~V}(25 \mathrm{~dB})$; $\max \mathrm{S} / \mathrm{N} 65 \mathrm{~dB} . . . . .$. . $\$ 550$
STA 1010. As above, $110 \mathrm{~W} / \mathrm{ch}$.
$\$ 450$

## RS50 AM/FM Receiver

Receiver with remote control. Features 7-band graphic equalizer, electronic volume control; power meter, loudness control; high filter, 8 AM/8 FM station presets. Inputs for MM phono, tape, CD/DDAT, vidco sound source. Amp section: $50 \mathrm{~W} /$ ch into 8 ohms. FM section: usable sens $5 \mu \mathrm{~V}$ (19.2 dBI)
$\$ 250$

## RS 30 AM/FM Stereo Receiver

Quartz digital-synthesizer tuning section; power output meter; high filter, presets for 8 AM/ 8 FM stations. Inputs for MM phono; tape; CD/DAT. Amp section: $25 \mathrm{~W} /$ ch into 8 ohms. FM section: usable sens 5


## SHARP

SA-X50AV Audio/Video Receiver
Receiver with multiple audio/video inputs and outputs. Features Pll-synthesis tuner, auto scan tuning; 12 presets; 5 -band graphic equalizer, videoenhancer circuit; surround sound. Inputs for tape, CD, video sound source, video 1, video 2. Amp section: 50 continuous average $W$ /ch from 40-20,000 Hz into 8 ohms with $<0.5 \%$ THD.
. \$250

## SA-X35 AM/FM Receiver

Features quartz digital-synthesis tuner; 5-band graphic equalizer, auto scan tuning; loudness switch; A, B, A + B speaker selector; $6 \mathrm{Am} / 6 \mathrm{FM}$ presets. Inputs for MM phono, tape, CD player. Amp section: 35 continuous average $W /$ ch $20-20,000 \mathrm{~Hz}$ with no more than $0.5 \%$ THD into 8 ohms; IHF IMD $0.15 \%$; FR $15-35.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. FM section: adjacent-ch sel 56 dB ; max $\mathrm{s} / \mathrm{N} 68 \mathrm{~dB}$ stere; THD $0.3 \%$ stereo; sep 32 dB at $1,000 \mathrm{~Hz}$. Black or silver. $17 \times 3.69 \times 10.5 \mathrm{in} ; 10$ lb.
\$200

## SHERWOOD

## RA-1340R Dolby Surround Receiver

Receiver with full-function infrared wireless remote control. Features surround sound; 2 video inputs; video enhancer; 5 -band graphic equalizer, direct switch; quartz-locked computerized tuning; 30 preset stations; preset scan; automatic tuning; dual- gate MOSFET: tape monitor, headphone jack; IMD 0.04\%; $\mathrm{s} / \mathrm{N}$ ratio 79 dB ; FR $9-100,000 \mathrm{~Hz}$; usable sens 11.2
$\mathrm{dBf} ; 50 \mathrm{~dB}$ quicting sens 19.2 dBf ; THD $0.15 \%$; 50 dB stereo sep at I kHz; alt-ch sel $70 \mathrm{~dB} .5 .1 \times 17.3 \times 15.0$ in.. $\$ 649$

## RA-1240R Receiver

Receiver with full-function infrared wireless remote control. Features surround sound; video sound input; 5-band graphic equalizer; quartz-locked computerized tuning; 30 preset stations; preset scan; automatic tuning; dual- gate mosFET; tape monitor; headphone jack; $70 \mathrm{~W} / \mathrm{ch}$; IMD 0.05\%; s/N ratio 75 dB; FR $8-40,000 \mathrm{~Hz}$; usable sens $11.2 \mathrm{dBf} ; 50 \mathrm{~dB}$ quieting sens 39.2 dB ; THD $0.2 \%$; capture ratio 2 dB ; alt-ch sel $60 \mathrm{~dB} .5 .1 \times 17.3 \times 15 \mathrm{in}$ $\qquad$

## S-277ORCP AM/FM Receiver

Digital-synthesized AM/FM-stereo receiver with digitally controlled 7-band EQ and LED spectrum analyzer. Features 4 EQ memories; 16 station presels; video dubbing; infrared remote control; surround sound; front-panel 2 -ch-audio VCR input; MOSFET input stage; inputs for tape, CD player, video sound source: amp section: 74 continuous average $\mathbf{W} / \mathrm{ch}$ from $20-$ $20,000 \mathrm{~Hz}$ with less than $0.3 \%$ THD into 8 ohms ; capture ratio 1.5 dB ; AM rejection 55 dB ; alt-ch sel 70.
$\$ 430$

## S-2750CP AM/FM Receiver

AM/FM-stereo receiver with 5-band graphic EQ. Features 16 station presets; surround sound; MOSFET input stage; auto-scan tuning: quartz-PLL digitalsynthesized tuning; inputs for tape, CD player, video sound source; amp section: 55 continuous average W/ch from $20-20,000 \mathrm{~Hz}$ with less than $0.2 \%$ тиD into 8 ohms; capture ratio 2 dB ; AM rejection 50 dB ; alt-ch sel $65.17 .36 \times 4.62 \times 9.25 \mathrm{in}$; $15 \mathrm{lb} \ldots . . \$ 250$

## S-2730CP AM/FM Receiver

AM/FM-stereo receiver with quart-PI.L digital-synthesized tuning. Features 16 station presets; auto scan; surround sound; MOSFET input stage. Inputs for tape; aux; CD player, video sound source. Amp section: 35 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ with less than $0.2 \%$ thD into 8 ohms. rm section: $50-\mathrm{dB}$ quieting sens stereo $50 \mu \mathrm{~V}(39.2 \mathrm{~dB})$; THI) stereo $0.5 \%$; capture ratio 2 dB ; AM rejection 50 dB ; alt-ch sel $65.17 .36 \times 4.62 \times 9.25 \mathrm{in}$; 13.5 lb .
$\$ 200$

## RA-1 140 Stereo Receiver

Features surround sound; vidco sound input; digital readout; LEI) peak power indicators; loudness control; quartz-locked computerized tuning; 24 preset stations; automatic tuning: dual gate MOS-FET front end; tape monitor, headphone jack. THI) $0.2 \%$; IMD $0.3 \%$; $\mathrm{S} / \mathrm{N}$ ratio; 75 dB ; FR $8-40,000 \mathrm{~Hz}$; usable sens 11 $2 \mathrm{dBf} ; 50 \mathrm{~dB}$ quieting sens $39.2 \mathrm{dBf} ; 4.1 \times 17.0 \times 15.0$ in.
$\$ 189$

## SONY

## STR-GXIOES A/V Receiver

Audio/video receiver with programmable Remote Commander. Features $150 \mathrm{~W} / \mathrm{ch}$ continuous into 8 ohms, $20-20,000 \mathrm{~Hz}$, with $0.007 \% \mathrm{THI}$; spontancous twin drive power supply design; copper-plated GChassis design constructed with non-metallic compound; separate power supplies for system control and audio circuit stages; audio/video switching capability ( 3 video sources); video and tape dubbing capability; S -video terminals; defeatable subsonic filter, 3-band, low noise, high-gain negative feedback type tone controls; source direct switch; quartz frequency-synthesis tuning: wave optimized digital stereo decoder, 20 station presets. Tuner section: $\mathrm{s} / \mathrm{N}$ 84 dB ; THD $.08 \%$; sel 90 dB ; sep (at $1,000 \mathrm{~Hz}$ ) 60 dB.
$\$ 1,200$

## STR-GX9ES A/V Receiver

Audio/video receiver with programmable Remote Commander. Features $130 \mathrm{~W} / \mathrm{ch}$ continuous into 8 ohms, $20-20,000 \mathrm{~Hz}$, with $0.008 \%$ THD; spontaneous twin drive power supply design; G-Chassis design constructed with non-metallic compound; separated power supplies for system control and audio circuit
stages; audio/video switching capability (3 vidco sources); video and tape dubbing capability; S-video terminals; defeatable subsonic filter, 3-band, low noise, high-gain negative feedback type tone controls; source direct switch; quartz frequency-synthesis tuning; wave optimized digital stereo decoder; 20 station prescts. Tuner section: $\mathbf{S} / \mathrm{N} 84 \mathrm{~dB}$; THD . $08 \%$; sel 90 dB ; $\operatorname{sep}(\mathrm{at} 1,000 \mathrm{~Hz}) 60 \mathrm{~dB}$.
\$1,000

## STR-GX7ES A/V Receiver

Audio/Video receiver with programmable Remote Commander. Features $120 \mathrm{~W} / \mathrm{ch}$ continuous into 8 ohms, $20-20,000 \mathrm{~Hz}$, with $0.008 \%$ THD; spontaneous twin drive power supply design; G-chassis design constructed with non-metallic compound; separate power transformers for the system control and audio circuitry; audio/video switching capability ( 3 video sources); S-video terminals; low-noise, negativefeedback type tone controls; source direct switch; quartz frequency-synthesis tuning: 20 station presets. Tuner section: $\mathrm{s} / \mathrm{N} 76 \mathrm{~dB}$; THD . $2 \%$; sel $65 \mathrm{~dB} . \$ 750$

## STR-AV1000 A/V Receiver

Audio/video receiver with programmable Remote Commander. Features $120 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; surround-sound capability; 7-band electronic graphic equalizer, 7 -band spectrum analyzer, motorized volume control; music index; EQ Link memorizes equalizer settings for radio stations; video inputs and outputs; direct comparator tuner; dual power supplies; 20 station presels. Amp: fr $5-80,000 \mathrm{~Hz},+0$, -1 dB with $.008 \%$ THD. Tuner. $\mathrm{s} / \mathrm{N} 76 \mathrm{~dB}$; THD $.2 \%$; sens $11.2 \mathrm{dBf} / 2 \mu \mathrm{~V}$
. $\$ 700$

## STR-GX6ES A/V Receiver

Audio/Video receiver with programmable Remote Commander. Features $100 \mathrm{~W} / \mathrm{ch}$ continuous into 8 ohms, $20-20,000 \mathrm{~Hz}$, with $0.03 \% \mathrm{THD}$; spontancous twin drive power supply design; G-chassis design constructed with non-metallic compound; separate power transformers for the system control and audio circuitry; audio/video switching capability ( 2 video sources); low-noise, negative-feedback type tone controls; source direct switch; quartz frequency-synthesis tuning; 20 station presets. Tuner section: $\mathrm{s} / \mathrm{N} 76$ dB ; тHI) $2 \%$; sel 65 dB ; $\operatorname{scp}($ at $1,000 \mathrm{~Hz}) 50 \mathrm{~dB} \$ 600$

## SI'R-A V900 A/V Receiver

Audio/video receiver with full-function remote control. Features $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; surround-sound capability; 7-band electronic graphic equalizer, 7 band spectrum analyzer, motorized volume control; music index; video inputs and outputs; direct comparator tuner; dual power supplies; 20 station presets. Amp: FR $5-80,000 \mathrm{~Hz}$, with $.008 \%$ THD. Tuner. $\mathrm{S} / \mathrm{N} 76$ dB; THD . $2 \%$
$\$ 480$

## STR-GX5ES A/V Receiver

Audio/Video receiver with programmable Remote Commander. Features $80 \mathrm{~W} / \mathrm{ch}$ continuous into 8 ohms. $20-20,000 \mathrm{~Hz}$, with $0.08 \% \mathrm{THD}$; spontaneous twin drive power supply design; G-chassis design constructed with non-metallic compound; separate power transformers for the system control and audio circuitry; audio/video switching capability (I video source); low-noise, negative-feedback type tone controls; source direct switch; quartz frequency-synthesis tuning; 20 station presels. Tuner section: $\mathrm{s} / \mathrm{N} 76$ dB; THD . $2 \%$; sel 65 dB ; $\operatorname{sep}($ at $1,000 \mathrm{~Hz}$ ) $50 \mathrm{~dB} \$ 470$

## STR-AV700 A/V Receiver

Audio/video receiver with full-function remote control. Features $70 \mathrm{~W} / \mathrm{ch}$ into 8 ohms ; surround-sound capability; 5 -band electronic graphic equalizer, motorized volume control; music index; video inputs and outputs; direct comparator tuner, dual power supplies; 20 station presets. Amp: FR $10-70,000 \mathrm{~Hz}$, $+00^{-}-1 \mathrm{~dB}$ with $.08 \%$ THD
$\$ 400$

## STR-AV500 A/V Receiver

Audio/video receiver with full-function remote control. Features $55 \mathrm{~W} / \mathrm{ch}$ into 8 ohms ; surround-sound capability; 5 -band electronic graphic equalizer, 20

Now that the picture on our big screen televisions is just about perfect, we decided to work on something else.



Our $35^{\prime \prime}$ direct-ticu monitor/receiser has our exclusive Diamond Vision ${ }^{8}$ Il picture tube and a wide band video amplifier capable of 560 lines of resolution, compared to the normal 340 lines.

The Home Theater System speakers havea 12" cast trame uoofer. 5" midrange and a titanium dome tueecer. And individual controls let you wary the midrange and tueeter levels.

It's not the easiest thing being perfectionists.

Just when you've developed a 35 -inch television that's every bit as clear and sharp as conventional size sets, you see something else that could stand some improvement.

Or, in this case, you hear it.

Introducing Mitsubishi Home Theater Systems. Our new series of integrated components that does for sound what wéve always done for sight: Make it larger than life.

Now, along with a panoramic picture, our Home Theater components can give
your favorite movies, sporting events and programs the kind of fidelity a television alone could never produce.

Thanks largely to our new M-AV1 audio/video receiver. Not only does it produce a wallshaking 125 watts of power,* but it comes equipped with the

same kind of Dolby Surround ${ }^{\text {Tw }}$ sound you hear in theaters.

On-screen displays give you simple instructions for switching from the VCR to the CD

One remote controls everything in chis ad
player to the cassette deck and so on. And a single illuminated remote lets youcontrol everything from the comfort of your own recliner.

For a demonstration, minus the recliner, visit an authorized Mitsubishi Home Theater Systems dealer.

And see with your own ears how great it sounds.
For the narne of your awthorized Mitsubishis Home Theater Systens dealer, cill (800) 556-1234 ext 145 In Calformia, (800) 441.2345 ext. 145. Cabine! colors and fimishe's may wary Dollby and Dolly Surround are rradermarks of Dolly Laboratories Lucensing Corp. Diamond Vision II is a registered trade mark of Mitsubishi Electric Corporation *125 uasts/channel min RMS both channels driven into 8 OHMS from 20 Hz 20 kHz with no more than $0.05 \%$ THD (c) 1988 Mitsubish Electric Soles America, Inc.
station prescis. Amp: FR $10-70.000 \mathrm{~Hz},+0,-1 \mathrm{~dB}$ with . 3\% THD. Tuner: $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$; THD $.2 \%$; sens 11.2 $\mathrm{dBf} / 2 \mu \mathrm{v}$
$\$ 340$

## STR-A V300 A/V Receiver

Audio/video receiver with full-function remote control. Features $40 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; surround-sound capability: 3-band electronic graphic equalizer; motorized volume control; video inputs and outputs: direct comparator tuner; dual power supplies; 20 presets. Amp: FR $10-50,000 \mathrm{~Hz},+0,-1 \mathrm{~dB}$ with $.8 \%$ THD. Tuner: $\mathrm{S} / \mathrm{N} 70 \mathrm{~dB}$; THI) . $2 \%$; sens $11.2 \mathrm{dBf} / 2$ $\mu \mathrm{V}$ \$270

## STR-AV200 A/V Receiver

Audio/video receiver with full-function remote control. Features $40 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; motorized volume control; video input and output; direct comparator tuner. Amp: FR $10-50,000 \mathrm{~Hz},+0,-1$ dB with $.8 \%$ THD. Tuner: $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$; THD . $2 \%$; sens $11.2 \mathrm{dBf} / 2 \mu \mathrm{v}$
$\$ 210$

## TANDBERG

IPR 3080 Programmable Receiver
Remote-controllable FM receiver with zero-feedback design and remote control. Features high current power amplifier: digital tuner with 26 presets; separate program and record source selectors. Inputs for MM and MC phono. CD, DAT, video, and tape. 80 W/ch. Rosewood side panels. . . . . . . . . . . . $\$ 2.500$

## TEAC

## AG-55 Receiver

55 W/ch AM/FM receiver with LED power meters. 7 band graphic EQ: CD, AYXand TV/VCR inputs; high cut filter and bass boost EQ switch; dual speaker terminals: Quartz synthesized PLL tuner; 8 AM/FM random access station memory; auto station scarch; LED frequency display. FR $20-30,000 \mathrm{~Hz}$ : THI) $0.5 \%$ FM-usable sens. mono 11.2 dBf ; image rejection 45 $\mathrm{dB}: 4.5 \times 17.13 \times 11.44-\mathrm{in}$; $16.43 \mathrm{lb} . . . . . .$. . $\$ 300$ AG-35. Similar to above with $35 \mathrm{~W} / \mathrm{ch}$ and withou graphic EQ. \$200

## TECHNICS

## SA-R530 100-W/ch A/V Receiver

A/V receiver with 96-key intelligent remote control and digital Dolby surround-sound processor. Features 7 -band electronic graphic equalizer with 5 factory preset curves and 5 user assignable curve memories; quartz digital tuner; 24 preset channel memory and Station File preset organization system; 7-band FL spectrum analyzer; motor-driven volume control; rear-mounted thermally triggered fan: $3 \mathrm{~A} / \mathrm{V}$ inputs; 6 audio inputs; video output for monitor; fullfunction FL display: 6 digital A/V surround modes including Dolby and stereoplex simulated stereo; auto-simulcast tuning. $100 \mathrm{~W} / \mathrm{ch}$. both channels driven into 8 ohms, with $<0.007 \%$ THD from 20 $20,000 \mathrm{~Hz}$
$\$ 695$

## SA-R430 100-W/ch A/V Receiver

A/V receiver with 44-key intelligent remote control and matrix surround-sound processor. Features 7 band electronic graphic equalizer with 5 factory preset curves and 5 user assignable curve memories; quartz digital tuner: 24 preset channel memory and Station File preset organization system; 7-band FL specirum analyzer: motor-driven volume control; 2 A/V inputs; 4 audio inputs: full-function FL display. $100 \mathrm{~W} / \mathrm{ch}$, both channels driven into 8 ohms, from $<0.007 \%$ THD from $20-20,000 \mathrm{~Hz}$
\$520

## SA-R330 70-W/ch A/V Receiver

Audio/video receiver with 42-key intelligent remote control. Fealures 7 -band electronic graphic equalizer: quartz-locked digital tuner; 24 preset channel memory and Station File preset organization system: 7 band spectrum analyzer with fluorescent display; motor-driven volume control: $2 \mathrm{~A} / \mathrm{V}$ inputs; 4 audio
inpuls; video outpul for monitor; full-function Fl display. $70 \mathrm{~W} / \mathrm{ch}$, both channels driven into 8 ohms, with $<0.008 \%$ THD from $20-20,000 \mathrm{~Hz}$. . . . . $\$ 355$

## SA-R230 50-W/ch A/V Receiver

A/V receiver with 32-key intelligent remote control. Features 5 -band electronic graphic equalizer; quartz digital tuner; 24 preset channel memory and Station File preset organization system; motor-driven volume control; 2 A/V inputs; 4 audio inputs; video output for monitor; full-function fL display 50 W/ch, both channels driven into 8 ohms, with $<0.09 \%$ THI) from $20-20.000 \mathrm{~Hz}$
$\$ 290$

## SA-160 40-W/ch AM/FM Receiver

Receiver rated at $40 \mathrm{~W} / \mathrm{ch}$, both channels driven into 8 ohms. from $20-20,000 \mathrm{~Hz}$ with $<0.5 \% \mathrm{THD}$. Features 5-band graphic equalizer with LED tips; quartz digital tuner with FL alphanumeric display; 24 preset channel memory and Station File preset organization system; 5 audio inputs . . . . . . . . . $\$ 225$

## SA-180 35-W/ch AM/FM Receiver

Features quartz digital tuning section; 16 station presels; auto scan; 3-LFD signal-strength display; drives main and remote speakers; loudness; headphone jack; electronic protection. Inputs for tape deck, CD) player, turntable. $35 \mathrm{~W} / \mathrm{ch}$ : FM sens 11.2 dBf: FM sel 65 dB .
$\$ 210$

## VECTOR RESEARCH

VRX-9200R Audio/Video Receiver
120-W/ch A/V receiver with full-function remote control. Features motorized rotary volume control; built-in Dolby Surround; $4 \times 40-\mathrm{W}$ pre-out/main-in jacks; 8 discrete output transistors; video signal routing: A/V processing loop; video monitor output; dedictated CD input; quartz-synthesis tuning: 20 station presels; preset scan; mono/stereo switch; A/B RF antenna inputs; FM autoscan; 2 tape monitors with dubbing in either direction; $2 \mathrm{~A} / \mathrm{V}$ monitors with dubbing; MC head amp; high and subsonic filters; parallel speaker switching: surround level, front/rear balance
$\$ 750$

## VRX-8200R Audio/Video Receiver

$110-\mathrm{W} / \mathrm{ch} \mathrm{A} / \mathrm{V}$ receiver with full-function remote control. Features motorized rotary volume control; built-in matrix surround; pre-out/main-in jacks: 8 discrete output transistors; video signal routing; A/V processing loop; video monitor output; dedictated CD input; quartz-synthesis tuning; 20 station presets; preset scan; mono/sterco switch; A/B RF antenna inputs; FM autoscan; 2 tape monitors with dubbing in either direction: mC head amp; high and subsonic filters; parallel speaker switching

......... $\$ 600$

## VRX-6200 Audio/Video Receiver

$65-\mathrm{W} / \mathrm{ch} \mathrm{A} / \mathrm{V}$ receiver with full-function remote control. Features motorized rotary volume control; built-in matrix surround; pre-out/main-in jacks video signal routing: $A / V$ processing loop; video monitor output; dedictated CD input; quartz-synthesis tuning: 16 station presets; mono/stereo switch; RF antenna inputs; FM autoscan; 2 tape monitors with dubbing; loudness contour: parallel speaker switch ing.
$\$ 450$

## VRX-5200R A/V Receiver

$50 \mathrm{~W} / \mathrm{ch} \mathrm{A} / \mathrm{V}$ receiver with discrete output stage. Features 20 random AM/FM presets; dedicated CD inputs; A/V processing loop: 2 switched/unswitched outlets; spearate FM mute and mono; video monitor out: quartz-synthesized tuning: rotary volume control with leD; pre-out main-in jack; video signal routing: 75 ohm connector; AM/FM autoscan. Amp: THD $0.07 \%$; IMD $0.07 \%$; FR $10-50,000 \mathrm{~Hz}$. Tuner: S/N 70 dB ; THI) $0.35 \%$; FR $50-15,000 \mathrm{~Hz}$; sep 42 dB . 17 x $4.5 \times 13.5 \mathrm{in} ; 17 \mathrm{lb}$
$\$ 370$
VRX-3600R A/V Receiver
$40 \mathrm{~W} / \mathrm{ch} \mathrm{A} / \mathrm{V}$ receiver with discrete output stage.

Features 20 random AM/FM presets: dedicated CD inputs; A/V processing loop; 2 switched/unswitched outlets; spearate FM mute and mono; video monitor out; quartz-synthesized tuning: rotary volume control with LeD; pre-out main-in jack; video signal routing: 75 ohm connector; AM/FM autoscan. Amp: THD $0.08 \%$; IMD $0.08 \%$; FR $10-50,000 \mathrm{~Hz}$. Tuner: $\mathrm{S} / \mathrm{N}$ $68 \mathrm{~dB}:$ THD $0.4 \% ;$ FR $50-15,000 \mathrm{~Hz} ; \operatorname{sep} 42 \mathrm{~dB} .17 \times 4.5$ $\times 13.5 \mathrm{in} ; 15 \mathrm{lb}$
$\$ 320$

## VRX-2700 A/V Receiver

$30 \mathrm{~W} / \mathrm{ch} \mathrm{A} / \mathrm{V}$ receiver with discrete output stage. Features 20 random AM/FM presets; dedicated CD inputs; A/V processing loop; 2 switched/unswitched outlets; spearate FM mute and mono; video monitor out: quartz-synthesized tuning; rotary volume control with LED; pre-out main-in jack; video signal routing: 75 ohm connector; AM/FM autoscan. Amp: тH: $0.09 \%$; imD $0.09 \%$; FR $10-50,000 \mathrm{~Hz}$. Tuner: $\mathrm{S} / \mathrm{N}$ 68 dB ; THD $0.5 \%$; FR $50-15.000 \mathrm{~Hz} ; \operatorname{sep} 40 \mathrm{~dB} .17 \times 4.5$ $\times 13.5 \mathrm{in} ; 13 \mathrm{lb}$
\$199

## VR-2300 Receiver

25-W/ch receiver features $A / B$ speaker switching; analog flywheel tuning: loudness contour: headphone jack: tape monitor. Inputs for CD and MM phono
$\$ 150$

## YAMAHA

## RX-1100U Audio/Video Receiver

AM/FM receiver with integrated system remote control. Features digital tuner; absolute linear amplification; high dynamic power; low-impedance drive capability: 16 -station random access preset tuning: digital fine tuning; continuously variable loudness control; dual tape monitor inputs; pre-main coupling terminals; 3 video source inputs: video and audio record out selectors; video enhancer with level and detail control; switching for three pairs of speakers; LED indicator on volume knob. $125 \mathrm{~W} / \mathrm{ch}$ min rms into 8 ohms from $20-20,000 \mathrm{~Hz}$ with less than $0.015 \%$ THD. Black finish; 30 lb
$\$ 999$

## RX-900U Audio/Video Receiver

AM/FM receiver with integrated system remote control. Features digital tuner; absolute linear amplification; high dynamic power; low-impedance drive capability; 16 -station random access preset tuning; digital fine tuning; continuously variable loudness control: pre-main coupling terminals; 3 video source inputs; video and audio record out selectors: video enhancer with level and detail control; switching for two pairs of speakers. $85 \mathrm{~W} / \mathrm{ch} \mathrm{min}$ rms into 8 ohms from $20-20,000 \mathrm{~Hz}$ with less than $0.015 \%$ THD. Black finish; 29 lb .
$\$ 799$

## RX-700U Audio/Video Receiver

AM/FM receiver with integrated system remote control. Features digital tuner; low-impedance drive capability; 16-station random access preset tuning: two video source inputs; video and audio record out selectors; video enhancer with level control; $65 \mathrm{~W} / \mathrm{ch}$ min rms; тно less than $0.015 \%$; black finish. 17 lb .
\$599

## RX-500U AM/FM Receiver

AM/FM receiver with wireless remote control. Features digital tuner; high dynamic power: low-impedance drive capability; continuously variable loudness control; switching for two pairs of speakers. $50 \mathrm{~W} / \mathrm{ch}$ minimum rms into 8 ohms from $20-20,000 \mathrm{~Hz}$ with less than $0.015 \%$ total harmonic distortion. Black finish; 15 pounds
\$399

## RX-300U AM/FM Receiver

Features digital tuner: high dynamic power; lowimpedance drive capability; 16 -station random access preset tuning: 10 -segment signal-strength meter; tape monitor selector; dynamic bass extension conIrol; continuously variable loudness control. $37 \mathrm{~W} / \mathrm{ch}$ min rms into 8 ohms from $20-20,000 \mathrm{~Hz}$ with less than $0.015 \%$ THD. Black finish: 15 lb .
$\$ 299$


## ACCUPHASE B\MADRIGAL

## P-600 Stereo Power Amplifier

7 parallel push-pull output stage with mosFet predriver incorporating push-pull circuitry in all stages; digital peak power display; bridge connection switch: I-dB-per-step input-level control. Drives 2 -ohm speaker with guaranteed output of $700 \mathrm{~W} / \mathrm{ch} .300$ W/ch into 8 ohms: 1.000 W into 8 ohms bridged: damping factor $300 \mathrm{IHF} 50 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}<125 \mathrm{~dB}$ IHF-A: rated input $2 \mathrm{~V}: 18.94 \times 9.19 \times 18.75 \mathrm{in} \ldots \$ 7.000$

## M-1000 Power Amplifier

Two separate power units with push-pull drive in bridged connection. each power unit employs 14 parallel push-pull pairs of wide-band transistors: low imp drive of 1.600 W into 1 ohm, 1.100 W into 2 ohms; cascode push-pull and MosFET drive stage: digital power meter; 40-kilohm balanced input; 20 kilohm unbalanced phono jack; mounting provisions for cooling fans; distortion of $0.05 \%$ at $1-4$ ohms. $0.01 \%$ at $4-16$ ohms: $18.94 \times 9.41 \times 19.25 \mathrm{in}$; 121.4 lb.
$\$ 9,500$
P-500 Stereo Power Amplifier
Basic amp with power meters; bridge conection allows $1,000 \mathrm{~W}$ mono into 4 ohms, $500 \mathrm{~W} / \mathrm{ch}$ into 2 ohms. $250 \mathrm{~W} /$ ch into 8 ohms: $19 \times 8.6 \times 17.5 \mathrm{in} ; 73.7$ lb.
$\$ 6,000$
P-300V 180-W/ch Power Amplifier
With power meters. $180 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; bridgeable for 500 W into 8 ohms. 300 W into 2 ohms; 17.5 $\times 6.4 \times 14.7 \mathrm{in} ; 50.6 \mathrm{lb}$.
$\$ 4,250$

## ACOUSTIC RESEARCH

AR P-10 Power Amplifier
Power amp with massive transient (HFF dynamic) power capibility of $1,200 \mathrm{~W} / \mathrm{ch}$ in 2 ohms, 800 W into 4 ohms. and 400 into 80 hms . 150 continuous average W/ch from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.3 \%$ THD 200 W into 4 ohms; $200-\mathrm{ms}$ dynamic power 300 W : dynamic headroom 4.3 dB ; $\mathrm{s} / \mathrm{N} 95 \mathrm{~dB}$; slew rate $30 \mathrm{~V} / \mu \mathrm{S}$ : IMD $0.03 \% .4 .33 \times 17 \times 14.5$ ind.
$\$ 849$

## ADCOM

## GFA-555 Power Amplifier

High-current amp able to drive 1 -ohm loads with no current limiting and low feedback. Bridgeable for mono operation. $200 \mathrm{~W} / \mathrm{ch}$ into 8 ohms: $350 \mathrm{~W} / \mathrm{ch}$ into 4 ohms with $<0.09 \%$ THD and $<0.05 \%$ IMD: constant damping factor $>10020-20,000 \mathrm{~Hz}, \$ 750$ GFA-555W. As above with white front panel . $\$ 800$ GFA-555S. With silver front pancl. . . . . . . . . $\$ 800$ RM-7. Optional rack-mount adaptors for GFA555. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$20/pr RM-7W. As RM-7 in white. . . . . . . . . . . . . . \$25/pr RM-7S. As RM-7 in silver . . . . . . . . . . . . . . \$25/pr

## GFA-545 Power Amplifier

High-current amp able to drive low-imp. including 1ohm loads. Features low-negative-feedback design: constant damping factor; toroidal transformer; no current limiting except for fuses: instantaneous distortion alert when distortion products higher than 1\% at speaker outputs; direct-coupled design. 100 continuous average $W$ /ch from $20-20,000 \mathrm{~Hz}$ into 8 ohms
with no more than $0.09 \%$ THD, $150 \mathrm{~W} /$ ch into 4 ohms: IMD $0.008 \%$. $5.5 \times 17 \times 12.5-\mathrm{in} ; 25 \mathrm{lbs} . . . . .$. GFA-545W. As above with white front panel . $\$ 550$ GFA-545S. With silver front panel. . . . . . . . . $\$ 550$ RM-5. Optional rack-mount adaptors for GFA545. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$20/pr RM-5W. Optional rack-mount adaptors for GFA545 in white . . . . . . . . . . . . . . . . . . . . . . . . . \$25/pr RM-5S. As above in silver . . . . . . . . . . . . . \$25/pr

## GFA-535 Power Amplifier

High-current amp able to drive low-imp loads. Features low-negative-feedback design; constant damping factor; hookup for 2 sets of speakers; instantaneous distortion alert when distortion products higher than 1\% at speaker outputs; directcoupled design; separate power transformers for each ch. 60 continuous average $W /$ ch from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.09 \%$ THD. $100 \mathrm{~W} / \mathrm{ch}$ into 4 ohms: IMD $0.008 \% .3 .25 \times 17 \times 12.5$-in $\$ 300$ GFA-535W. As above with white front panel . $\$ 350$ GFA-535S. With silver front panel. . . . . . . . . . \$350 RM-3. Optional rack-mount adaptors for GFA545. . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 20 / \mathrm{pr}$ RM-3W. As RM-3 in white . . . . . . . . . . . . . . \$25/pr RM-3S. As RM-3 in silver. $\$ 25 / \mathrm{pr}$
a/d/s/

PA4 High-Current 150-W/ch Power Amp
Designed for wide bandwidth and high eurent; all discrete transistors; polypropylene capacitors; metalfilm resistors; 10 bipolor output devices per ch; openloop bandwidth of $<100 \mathrm{MHz}$ to avoid rate limiting and stability with complex speaker loads; toroidal transformers for low noise and high current; drives 2 pairs of speakers: power and speakers switched from $\mathrm{a} / \mathrm{d} / \mathrm{s} / \mathrm{CC4}$ control center or R4 receiver: bridgeable: clipping led's. $150 \mathrm{~W} / \mathrm{ch}$ into 4 or 8 ohms; 250 W into $1 \mathrm{ch} .2 .8 \times 17.5 \times 14.8-\mathrm{in} ; 27 \mathrm{lb}$
$\$ 1.200$

## AUDIO DESIGN ASSOCIATES

PBA-500 Subwoofer Amplifier
Continuously variable level, frequency and bandwidth controls. 20 segment LED output meter; toroidal power transformer: fan cooled: front panel switch and fuse; 800 W bridged mono from $20-200 \mathrm{~Hz}$ with no more than $0.05 \%$ THD into 8 ohms; 1200 W into 4 ohms; slew rate $10 \mathrm{~V} / \mu \mathrm{sec}$; ImD $0.08 \% ; 19 \times 7.5 \times 12.5$ in; 49 lb .
$\$ 4.295$

## PF-300 Power Amplifier

MOSFET power amplifier capable of driving $1 / 2$-ohm loads continuously. Front panel power switches, indicators and fuses: dual mono design with independent toroidal transformers; fan cooled; $200 \mathrm{~W} / \mathrm{ch}$ from $20-20.006 \mathrm{~Hz}$ with no more than $0.05 \%$ THD into 8 ohms: 300 W into 4 ohms; slew rate $10 \mathrm{v} / \mu \mathrm{sec}$; IMD 0.08\%; 48 lb : $19 \times 7 \times 15.5 \mathrm{in} . . . . . . . .$. . $\$ 1.695$

## PT-200 Power Amplifier

Dual-mono power amp capable of driving 1 ohm loads. Features 44 -segment triangular LED output meters with peak indication: front panel power switches, indicators, fuses; stepped attenuator gain controls; soft elipping circuit; dual toroidal power transformers; fan cooled; standard EIA rack-mountable. 60 continuous a verage $W /$ ch from $20-20.000 \mathrm{~Hz}$ with no more than $0.06 \%$ THD into 8 ohms: 110 watts
inti) 4 ohms: $\mathrm{s} / \mathrm{N} 102 \mathrm{~dB}$ : slew rate $12 \mathrm{~V} / \mu \mathrm{sec}$; IMD $0.15 \%$. $28 \mathrm{lb} ; 19 \times 3.5 \times 16.88 \mathrm{in} . . . . .$. . . . . $\$ 1.995$

## PF-300 Power Amplifier

MOSFET power amplifier capable of driving $1 / 2$-ohm loads continuously. Front panel power swithes. indicators and fuses; dual mono design with independent toroidal transformers: $100 \mathrm{~W} / \mathrm{ch}$ from 20-20.000 Hz with no more than $0.09 \%$ THD into 8 ohms: 160 W/ch into 4 ohms: slew rate $15 \mathrm{~V} / \mu \mathrm{sec}$ : ImD $0.07 \%$; 37 1b: $19 \times 5.25 \times 15.5$ in
$\$ 1.695$

## PBA-150 Subwoofer Amplifier

Subwoofer amp with continuously variable adjustable level, frequency and bandwidth controls. Features 20 -segment led output meter. Front panel power switch. indicator, fusc: fan cooled; standard E1A rack-mountable. 100 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-200 \mathrm{~Hz}$ with no more than $0.06 \%$ IHD into 8 ohms: 125 watts into 4 ohms: $\mathrm{s} / \mathrm{N} 101 \mathrm{~dB}$ : slew rate 10 $\mathrm{V} / \mu \mathrm{sec}$; IMI) $0.07 \%$. 20 lb : $19 \times 5.25 \times 12.5 \mathrm{in} \$ 1.495$

PF-200 Power Amplifier
MOSFET power amp capable of driving l-ohm loads. Features 4 -segment LED output meters; front panel power switch: indicator and fuse: toroidal power transformer; fan cooled; standard EIA rack-mountable. 60 continuous average $W /$ ch from $20-20.000 \mathrm{~Hz}$ with no more than $0.07 \%$ THD into 8 ohms: 110 watts into 4 ohms: $\mathrm{S} / \mathrm{N} 95 \mathrm{~dB}$; slew rate $10 \mathrm{~V} / \mu \mathrm{sec}$; IMD $0.07 \%$. 25 lb : $19 \times 5.25 \times 15.5 \mathrm{in}$.
$\$ 1.295$

## PT-50 Power Amplifier

Compact power amp capable of handling 2 ohm loads. Features 10 -segment LED output meters; rear panel power fuse; front panel gain controls; toroidal power transformer; fan cooled; standard EIA rackmountable. 25 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-$ 20.000 Hz with no more than $0.02 \%$ IHD into 8 ohms: 49 watts into 4 ohms; S/N 104 dB : IMD $0.04 \% .8 \mathrm{lb} ; 19$ $\times 1.75 \times 11.5 \mathrm{in}$.
\$895

## AUDIO DYNAMICS

## B200 Power Amplifier

Configurable 2-13-/4-channel power amplifier with individual left/rear. left/front. right/rear, and right/ front volume controls. Features speaker on/off switch: oversized power display with front/rear display switches; direct input: power output into 2 channels: $260 \mathrm{~W} / \mathrm{ch}$ into 8 ohms ; power output into 4 channels: $90 \mathrm{~W} / \mathrm{ch}$ into 8 ohms, $120 \mathrm{~W} /$ ch into 4 ohms.
\$699

## AUDIO RESEARCH

## D250 240-W/ch Vacuum-Tube Power Amplifier

 High-detnition power amp with controlled turn-on, warm-up for maximum power-tube life. Features patented cross-coupled circuit. 240 continuous average W/ch from $20-20,000 \mathrm{~Hz}$ with no more than $1 \%$ THD into 8 ohms; FR $20-20.000 \mathrm{~Hz} \pm 1 \mathrm{~dB} ; \mathrm{S} / \mathrm{N} 90 \mathrm{~dB}$ : IMD $0.1 \%$ : $10.5 \times 19 \times 21$-in. . . . . . . . . . . . . . $\$ 6.990$
## M300 Mono 300-W Power Amplifier

Hybrid design with field-effect transistors (for front end) and vacuum tubes (in output stage); crosscoupled circuit; front-panel replaceable line and screen woltage fuses with LED indicators: 2 integral low-noise cooling fans (switchable for " Hi " or "Lo");
standby switch for warmup or interruptions; auto muting for silent shutdown: gold-plated inputs connect ground before hot; output taps for 1, 2, 4, or 8 ohms: front and rear handles. 300 minimum continuous W from $16-25,000 \mathrm{~Hz}$ with $<0.051 \%$ THD into 8 ohms; power at clipping 330 W : FR $10-60,000 \mathrm{~Hz}-3$ $\mathrm{dB} ; \mathrm{S} / \mathrm{N} 90 \mathrm{~dB}$; slew rate $25 \mathrm{~V} / \mu \mathrm{sec} ; 10.5 \times 19 \times 16-\mathrm{in}$; 110-lb net
$\$ 4,995$

## D125 Power Amplifier

Stereo hybrid power amp rated at 120 W into 4-8-16 ohms. Input stage FET based; output stage with 2 "quad" banks of 6550 power output tubes: self monitoring circuits; tube-saver circuit; internal fan cooling: automatic muting at shutdown; $8.75 \times 19 \times$ $16.5 \mathrm{in} ; 84 \mathrm{lb}$.
$\$ 4.450$

## D115 100-W/ch Vacuum-Tube Power Amplifier

 High-Definition power amp with controlled turn-on, warm-up for maximum power-tube life. Features patented cross-coupled circuit; front-panel fusing for line and screen. 100 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ with no more than $1 \%$ THD into 8 ohms; FR $20-20,000 \mathrm{~Hz} \pm 1 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$; slew rate 15 $\mathrm{V} / \mu \mathrm{sec}$; IMD $0.1 \%$; input imp sens 1.1 V for rated output; input imp 75 kohms nominal; noise $<90 \mathrm{~dB}$ below rated power, broadband-unweighted. $7 \times 19 \times$ $16.5-\mathrm{in} ; 80-\mathrm{lb}$ shipping weight.$\$ 2.995$

## M100 100-W/ch Mono Tube Power Amplifier

Basic power amp with auto servo DC balance, frontpanel bias adjustment and indication. 100 continuous average $W$ /ch from $20-20,000 \mathrm{~Hz}$ with no more than $1 \%$ tHD into 8 ohms: FR $2-60.000 \mathrm{~Hz}+0 /-3 \mathrm{~dB}$; $\mathrm{S} / \mathrm{N} 90 \mathrm{~dB}$; dynamic headroom $<1 \mathrm{~dB}$; slew rate 15 $\mathrm{V} / \mu \mathrm{sec}$ : imD $0.2 \%$; input sens 0.7 V rms for 100 W .7 x $19 \times 18.3-\mathrm{in} ; 53 \mathrm{lb}$
$\$ 2,495$
D70 60-W/ch Vacuum-Tube Power Amplifier
High-Definition vacuum-tube power amp with continuous turn-on, warm-up for maximum power-tube life. Features patented cross-coupled circuit; front panel fusing for line and screen. 60 continuous average $W /$ ch from $20-20,000 \mathrm{~Hz}$ with no more than 1\% THD into 8 ohms; FR $20-20,000 \cdot \mathrm{~Hz} \pm 1 \mathrm{~dB}: \mathrm{S} / \mathrm{N} 90$ dB ; slew rate $12 \mathrm{~V} / \mu \mathrm{sec}$; IMD $0.1 \%$; input sens 0.95 V for rated output: input imp 75 kohms nominal; noise 90 dB below rated power, broadband-unweighted; 7 x $19 \times 14.5-\mathrm{in} ; 63-\mathrm{lb}$ shipping weight.
$\$ 1,995$
D1 20 120-W/ch Solid-State Power Amplifier
High-Definition solid-state stereo power amp with Analog Module technology, unique linear output circuit. Stable under any load condition. Features internal bridging switch for mono operation; power supply fuse on front panel; fuse-failure LED indicator. Output power $120 \mathrm{~W} / \mathrm{ch}$ into $8 \mathrm{ohms}, 10-20,000 \mathrm{~Hz}$ at $<0.25 \%$ THD: FR $\quad 1.2-75.000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; power bandwidth $0.6-100,000 \mathrm{~Hz}-3 \mathrm{~dB}$; input sens/imp 1.5 V rms/60k ohms: harmonic distortion $<0.004 \%$ at $1,000 \mathrm{~Hz}$, I W: IMD $<0.035 \%$ at rated power: slew rate $40 \mathrm{~V} / \mu \mathrm{sec}$ : rise time $2 \mu \mathrm{sec}$; damping factor 300 , $10-20,000 \mathrm{~Hz}$ : power consumption 1.000 W max: $5.25 \times 19 \times 10.5-\mathrm{in}: 50-\mathrm{lb}$ shipping weight $. . \$ 1,995$

## AUDIO BY VAN ALSTINE

## Tanscendence Fet-Valve Power Amplifier

Hybrid power amplifier utilizing a combination of vacuum tubes for voltage gain and MOSFET's for current gain. Features $>200 \mathrm{~W} / \mathrm{ch}$ into 8 ohms at less than $0.01 \%$ THD; no output transformers; low imp drive capability. $17 \times 14.5 \times 7.5 \mathrm{in}$ : $38 \mathrm{lb} \ldots \$ 1.995$

## Mos-Fet 280D Power Amplifier

$160 \mathrm{~W} / \mathrm{ch}$ into 8 ohms power amplifier. Features $0.01 \%$ THD; low impedance drive capability. $17 \times 10 \times$ $5 \mathrm{in} ; 28 \mathrm{lb}$
$\$ 775$

## Mos-Fet 240D Power Amplifier

Full-complementary power MOSFET amplifier. Features precision metal resistors: precision film capacitors; high-voltage, high-current semiconductors: 120

W/ch into 8 ohms with less than $0.01 \%$ THD. $13 \times 14 \times$ 7 in: $27 \mathrm{lb} . . .$. . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 550$

## BEDINI AMPLIFIERS

## BA-803 Class A Amplifier

Solid state class A amplifier with $200 \mathrm{~W} / \mathrm{rms}$ into 8 ohms and $400 \mathrm{~W} / \mathrm{rms}$ into 4 ohms. Dynamic headroom $3 \mathrm{~dB} ; \mathrm{THD}<.15 \% 8$ ohms rated power, 20 $20,000 \mathrm{~Hz} ; 1 \mathrm{MD}<1 \%$; damping factor $500 \mathrm{~min} ; \mathbf{s} / \mathrm{N}-$ 105 dB ; Slew rate $55 \mathrm{~V} / \mu \mathrm{sec} ; 7.5 \times 19 \times 18.35: 50$ lb. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1,995$ BA-802. Same as above with $150 \mathrm{~W} / \mathrm{rms} 8$ ohm; 300 W/rms 4 ohm. . . . . . . . . . . . . . . . . . . . . . . . \$1,495 BA-801. Similar to above with $70 \mathrm{~W} / \mathrm{rms} 8$ ohms; 140 W/rms 4 ohm. . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 995$

## BELLES RESEARCH

## BELLES 450 Stereo Power Amplifier

Solid-state power amplifier with dual complementary bi-polar transistor circuitry and power MOSFET. All components are mounted on a single circuit board. Features van den Hul cable wiring: highquality capacitors and resistors; torodial power transformer. 200 continuous $W /$ ch from $20-20,000 \mathrm{~Hz}$ with no more than $.01 \% \mathrm{Ti}$ TD into $8 \mathrm{ohms} ; 55 \mathrm{lb} ; 10 \mathrm{x}$ $17 \times 13$ in
$\$ 1,495$
BELLES 150 Stereo Power Amplifier
Solid-state power amp with dual complementary bipolar transistor circuitry, and power MOSFET's.All

components are mounted on a single circuit board. Features van den Hul silver mono-crystal wiring: high-quality capacitors and resistors: toroidal power transformer. 75 continuous W/ch from $20-20,000 \mathrm{~Hz}$ with no more than $.09 \%$ THD and IMD into 8 ohms; damping factor $>175 ; 22 \mathrm{lb} ; 7 \times 17 \times 8.5 \mathrm{in} \ldots \$ 595$

## THE DAVID BERNING COMPANY

EA-2100 Tube Power Amplifier
All-triode stereo vacuum-tube power amp with low coloration. Features high-frequency power-conversion system for fully regulated power supply: low power consumption: 10 to 20 year tube life. 100 continuous a verage $W /$ ch from $20-20,000 \mathrm{~Hz}$ with no more than $2 \%$ total distortion into 8 ohms; FR 7. $70,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 100 \mathrm{~dB}$; dynamic headroom 2 dB ; slew rate $15 \mathrm{~V} / \mu \mathrm{sec}$; input imp $100,000 \mathrm{ohms}$; output imp 4, 8,16 ohms; negative feedback 8 dB ; sens I V for 170 W out: clipping level (soft clipping) $170 \mathrm{~W}: 5.25 \times 19 \times 19$-in; $40 \mathrm{lb} . . . . . . . .$. . $\$ 2.695$

## B\&K COMPONENTS

PRO-600 250-Watt Power Amplifier
High-powered amp with fan-cooled driver stage. 250 continuous a verage $W /$ ch from $20-20,000 \mathrm{~Hz}$ with no more than $0.09 \%$ THD into 8 ohms, 400 W into 4 ohms; FR $5-45.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; $\mathrm{S} / \mathrm{N} 95 \mathrm{~dB}$; dynamic headroom 0.1 dB ; slew rate $15 \mathrm{~V} / \mu \mathrm{sec}$; IMD $0.09 \%$; bridgeable to $800 \mathrm{~W} .6 \times 19 \times 15$-in: $40 \mathrm{lb} . . \$ 1,298$

## Sonata Series 200 Mono Amplifier

Mono amp with 200 W into 8 ohms and 350 W into 4 ohms. FR $1-100,000 \mathrm{~Hz}$; THD .09 at $1,000 \mathrm{~Hz}$; min load imp .75 ohms; class AB;DCcoupled circuitry; optional balanced inputs
$\$ 898$
EX-442 Dual-Mono Power Amplifier
Dual-mono power amp with gold-plated input and
output connectors. 200 continuous average W/ch: FR $5.45 .000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N} 95 \mathrm{~dB}$; dynamic headroom 0.5 dB ; slew rate $15 \mathrm{~V} / \mu \mathrm{sec}$; IMD $0.09 \% ; 300 \mathrm{~W}$ into 4 ohms: 42-ampere peak-to-peak current capability. 6 x $19 \times 15$-in: 35 lb . $\$ 895$

## ST-202 PLUS Power Amplifier

Power amp designed to deliver high-wattage to speakers. 200 continuous average $\mathrm{W} / \mathrm{ch}$ from 20 20,000 with no more than $0.9 \%$ THD into 8 ohms; dynamic headroom $1.8 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 95 \mathrm{~dB}$; slew rate 11 $\mathrm{V} / \mu \mathrm{sec}$; IMD $0.09 \% .6 \times 19 \times 15$-in; $30 \mathrm{lb} . . . . . \$ 698$

## ST-202 150-Watt Power Amplifier

Power amp with gold-plated connectors for driving 8 and $4-\mathrm{ohm}$ loads. 150 continuous W/ch from $20-$ $20,000 \mathrm{~Hz}$ with no more than $0.9 \%$ THD into 8 ohms: FR $5-45,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$; dynamic headroom 1.5 dB ; slew rate $11 \mathrm{~V} / \mu \mathrm{sec}$; IML) $0.09 \%$ : 200 W into $4 \mathrm{ohms} .6 \times 19 \times 15-\mathrm{in} ; 25 \mathrm{lb} . . . . . \$ 648$

## ST-140 Class A Power Amplifier

Power amp with Class A design up to output stage. 105 contiuous average $W$ /ch from $20-20.000 \mathrm{~Hz}$ with no more than $0.09 \%$ THD into 8 ohms. 100 W into 4 ohms: FR $5-45,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$ : dynamic headroom 1.4 dB ; slew rate $11 \mathrm{~V} / \mu \mathrm{sec}$ : $\mathrm{mDD} 0.09 \% .6 \mathrm{x}$ $19 \times 14$-in: 25 lb . $\$ 498$

## BOULDER AMPLIFIERS

## Boulder 500 150-W/ch Power Amp

28 metal $250-\mathrm{W}$ transistors for total of $7,000 \mathrm{~W}$ : convection cooling; LED meter at $-40,-20,-6 \mathrm{~dB}$; clip LED indicators for + and - voltage or current: gold-plated connectors (3-pin input D3F, RCA phono, 5-way output); conductive-plastic level controls: recessed panel controls; toroidal power transformer; screw-on feet: complete protection circuitry with visual indicators for short circuit, DC input offset, and thermal abuse: rear-panel switch-selectable input modes and multiple connectors. Optional plug-in Jensen input transformers. $150 \mathrm{~W} / \mathrm{ch}$ into 8 ohms, $250 \mathrm{~W} / \mathrm{ch}$ into 4 ohms, 500 mono into 8 ohms; peak power for 10 ms 150 W stereo into $8 \mathrm{ohms}, 300 \mathrm{~W}$ stereo into 4 ohms, 600 W mono into 8 ohms; slew rate full Vp -p closed loop $35 \mathrm{~V} / \mu \mathrm{s}$ stereo: peak current for $10 \mathrm{~ms}>50$ amperes; $\operatorname{sep} 95 \mathrm{~dB}$ at $<1,000 \mathrm{~Hz}, 80$ dB at 10.000 Hz . $17.25 \times 7 \times 15.5 \mathrm{in} ; 51 \mathrm{lb} . \$ 3,295$ International version for $100 / 120 / 220 / 240 \mathrm{~V}$ ac. $50 / 60 \mathrm{~Hz} . . .$. . . . . . . . . . . . . . . . . . . . . . . . $\$ 3,595$

Speaker Cables
For use with Boulder power amps only. Also available with gold spade connectors on one or hoth ends.
CS06. 6 ft . stacking banana both ends, coax $\$ 85 / \mathrm{pr}$ CS12. 12 ft , stacking banana both ends, coaxial . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$121/pr CS25. 25 ft , stacking banana both ends, coaxial . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$199/pr NS01. Terminator pair for use at speaker . . . . . $\$ 39$

## BRYSTON

## 68 500-W/ch Power Amplifier

Mono power amp with high voltage and current. Max $120+$ amperes instantaneously into I ohm; $1,000 \mathrm{~W}$ into 4 ohms with average current of 22 amperes: 1.000 W into 1 ohm with 35 amperes average: ground lift switch. 500 continuous W/ch from $20-20.000 \mathrm{~Hz}$ with no more than $0.005 \%$ THD into 8 ohms: $\mathrm{S} / \mathrm{N}$ 105 dB ; slew rate $>60 \mathrm{~V} / \mu \mathrm{sec}$ : IMD $0.005 \%$; 55 lbs: $5.75 \times 19 \times 12-\mathrm{in}$.
$\$ 1,800$

## 48 250-W/ch Power Amplifier

Fully complementary class-AB power amp with bridging switch, $1,500-\mathrm{sq}-\mathrm{in}$. heat-sink area; regulated power supplies to all voltage gain stages; ch sep back to line cord; red LeD clipping indicator. Output power $200 \mathrm{~W} / \mathrm{ch}, 800 \mathrm{~W}$ bridged into 8 ohms, $20-20,000 \mathrm{~Hz}$ at $0.01 \%$ THD; IMD $0.01 \%, 10 \mathrm{~mW}-200 \mathrm{~W}$ : noise -100 dB ; slew rate $60 \mathrm{~V} / \mu \mathrm{sec}$; power bandwidth I-100.000 Hz ; damping factor 500 at $20 \mathrm{~Hz}, 8$ ohms; input
sens/imp $1.25 \mathrm{~V} / 50 \mathrm{k}$ ohms; $5.25 \times 19 \times 13.5-\mathrm{in} \$ 1,595$ 3B. Similar to 4 B except $100 \mathrm{~W} / \mathrm{ch}, 400 \mathrm{~W}$ bridged; input sens/imp I V/50k ohms; 500-sq-in. heat-sink area; $9^{*}$ D. $\qquad$ 2B. Similar to 3B except 50 w/.............. 200 w bidsed input sens/imp $0.75 \mathrm{~V} / 50 \mathrm{k}$ ohms; $250-\mathrm{sq}$-in. heatsink area; $3.5 \times 19 \times 10-\mathrm{in} \ldots . . . . . . . . . . .$.

## 4-Way Switch Box

No active components; designed for high-current applications. For Bryston equipment only. . . . \$199

## CAMBRIDGE AUDIO

A250 Mono Power Amplifier
Seperate power amplifier with power-on switch only. Rated at 250 watts per channel into 8 ohms and has a peak current capability of $45 \mathrm{amps} . \mathrm{S} / \mathrm{N}>100 \mathrm{DB}$. THD 0.5\%
. $\$ 1,800 / \mathrm{pr}$

## A75 Power Amplifier

Separate power amp with power-on switch only. FR 5$50,000 \mathrm{~Hz}<1 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}>100 \mathrm{~dB}$; THD $0.5 \% \ldots \$ 798$

## ASO Power Amplifier

Separate power amplifier with power-on switch only. $60 \mathrm{~W} / \mathrm{ch}$ into 8 ohms. Peak current capability of 35 amps. Can be connected for bridge mono operation by rear panel switch, giving 150 W into 8 ohms (clipping at 200 W ). $\mathrm{S} / \mathrm{N}>100 \mathrm{DB}, \mathrm{THD}>0.5 \%$. $\$ 579$

## CARVER

M 4.01 375-W/ch Power Amplifier
Magnetic Field stereo power amp with LED dual peakresponding power displays, infrasonic and ultrasonic filters. $375 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; dynamic headroom/ch 500 W at 4 and 8 ohms; 16 lb . $\qquad$ . $\$ 799$

## M-500t 250-W/ch Power Amplifier

Stereo power amp with Magnetic Field circuitry in slim cabinet; peak-responding power meters; cool operation; anodized brushed aluminum in dark pewter finish. $250 \mathrm{~W} / \mathrm{ch}$ into 8 ohms ; slew rate 40 V/ $\mu \mathrm{sec}$.
$\$ 650$

## M1.0t 200-W/ch Power Amplifier

Magnetic Field amplifier with high headroom and dual peak-responding power LED's. Features electronic protection; sonic transfer modification. 200 W/ch into 8 ohms; dynamic headroom 3 dB ; slew rate $200 \mathrm{~V} / \mu \mathrm{s} .19 \times 3.5 \times 10.5 \mathrm{in} ; 20 \mathrm{Jb}$
\$610

## M400t 200-W/ch Power Amplifier

Stereo power amp with Magnetic Field circuitry that eliminates oversize heat sinks. Features dual vertical LED peak-level display; dark pewter finish. $200 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; slew rate $40 \mathrm{~V} / \mu \mathrm{sec} ; 6.75 \times 6.75 \times 6.75$ in..
$\$ 560$

## M-0.5t 140-W/ch Power Amplfier



Magnetic field power amplifier produces $140 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; peak responding LED; electronic protection circuitry. $19 \times 3.5 \times 0.5 \mathrm{in} ; 20 \mathrm{lb} \ldots . . .5549$

## M200t 120-W/ch Power Amplifier

Magnetic Field power amp produces $120 \mathrm{~W} /$ ch into 8 ohms. Dark pewter finish; LED's indicate power and use of speaker-protection circuitry. $17.3 \times 9 \times 2.55 \mathrm{in}$; $10.25 \mathrm{lb} . .$. . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 450$

## Z-1 Wide-Band Z Coupler

Imp-matching device enables Carver Magnetic Field
power amp to be used with receiver or integrated amp. Receiver or integrated amp outputs drive power amp through Z-1 coupler, which presents an optimum noninductive load to the amp in the receiver or integrated amp.
. $\$ 49$

## CELLO

7000-00 Performance Amplifier Set
2 mono amps (left and right) and 2 mono supplies (left and right) for stereo; power output section has 40 output devices per ch. $\$ 13,125$

## CLASSE AUDIO

## DR-3-VHC Power Amplifier

Power Amplifier features THD $0.01 \%$; sens 800 mV ; $45 \mathrm{~W} /$ ch into 8 ohms ; bandwidth $20-20,000 \mathrm{~Hz}$; Class pure A output; dynamic headroom 0.1 dB ; bridgeable; $300 \mathrm{~W} / 4$ ohms; 102 tb .
$\$ 4,250$

## DR-9 Power Amplifier

Power amplifier features balanced inputs/outputs; THD $0.01 \%$; sens 1000 mV ; $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; bandwidth $20-20,000 \mathrm{~Hz}$; Class AB output; dynamic headroom 6 dB ; imp 1 ohm ; bridgeable: $800 \mathrm{~W} / 4$ ohms; 64 lb.
$\$ 3,495$

## DR-3B Power Amplifier

Power amplifier features THD $0.01 \%$; sens $800 \mathrm{mV} ; 25$ W/ch into 8 ohms; bandwidth $20-20,000 \mathrm{~Hz}$; Class Pure A output; dynamic headroom 7 dB ; imp 0.1 ohms; bridgeable; $200 \mathrm{~W} / 4$ ohms; $72 \mathrm{lb} . .$. . $\$ 2,995$

## CONRAD-JOHNSON

Premier One B Vacuum-Tube Power Amp
Low-noise precision parts in audio circuitry; LED bias indicators. Output power $150 \mathrm{~W} / \mathrm{ch}$ into 4, 8, or 16 ohms; $\mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$.
$\$ 5,750$
Premier Five Vacuum-Tube Mono Power Amp
Low-imp power supplies and extensive use of polystyrene capacitors; LED bias indicators. 200 W into 8 ohms; $\mathrm{s} / \mathrm{N} 94 \mathrm{~dB} ; 9 \times 19 \times 20.5-\mathrm{in}$.; $90 \mathrm{lb} . . . \$ 3,750$ MV100. Similar to above except stereo and 90 W. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.950$ MV50. Similar to Premier Five except stereo, 45 W/ch into 8 ohms; $\mathrm{S} / \mathrm{N} 94 \mathrm{~dB} ; 40 \mathrm{lbs} . . . .$. . $\$ 1,685$

## COUNTERPOINT

## SA-4 Power Amplifier

Power amp with 130 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ with no more than $0.2 \%$ THD into 8 ohms; $\mathrm{s} / \mathrm{N} 92 \mathrm{~dB}$; dynamic headroom 2 dB ; IMD $0.65 \% ; 6.7 \times 19 \times 19-\mathrm{in} ; 60 \ldots . . . . . . . .$.

## SA 20/20 Power Amplifier

Mono hybrid power amp with tube front end and MOSFET output stage. Features no overall loop feedback; warm-up and shut-off auto speaker muting. Includes vacuum-tube rectification. 600 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.5 \%$ THD, 988 W into 4 ohms, $1,500 \mathrm{~W}$ into $1 \mathrm{ohm} ; 20$-ms peak amperage into 0.1 ohm 50 amperes; $\mathrm{S} / \mathrm{N} 84 \mathrm{~dB}$; slew rate $0.6 \mathrm{~V} / \mu$; $\mathrm{IMD} 0.02 \%$. 6.7


## SA 20 Power Amplifier

Hybrid power amp with tube front end and MOSFET output stage. Features no overal! loop feedback; warm-up and shut-off auto speaker muting: internal switching to operate as a bridged mono amp for 3 x power. Includes vacuum-lube rectification. 220 continuous average $W /$ ch from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.5 \%$ THD, 420 W into 4 ohms, $1,000 \mathrm{~W}$ into 1 ohm; $20-\mathrm{ms}$ peak amperage into 0.1 ohm 50 amperes; $\mathrm{S} / \mathrm{N} 84 \mathrm{~dB}$; slew rate 0.6 $\mathrm{V} / \mu$; $\mathrm{IMD} 0.02 \% .6 .7 \times 19 \times 19-\mathrm{in} ; 55 \ldots . . \$ \$ 2,095$

## SA-12 Power Amplifier

Hybrid power amp with tube front end and MOSFET
output stage. Features no overall loop feedback; warm-up and shut-off automatic speaker muting. 85 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ with no more than $1 \%$ THD into 8 ohms; FR $5-100,000 \mathrm{~Hz}$ $\pm 0.2 \mathrm{~dB} ; 3 / \mathrm{N} 92 \mathrm{~dB}$; dynamic headroom 2 dB ; channel-torch sep $>85 \mathrm{~dB}$ from $100-10,000 \mathrm{~Hz} ; 4.5 \mathrm{x}$ $19 \times 12.5-\mathrm{in} .$.
$\$ 1.045$

## CROWN

Macro-Tech 1200 295-W/ch Power Amplifier
$295 \mathrm{~W} / \mathrm{ch}$ into $8 \mathrm{ohms} ; 555 \mathrm{~W} / \mathrm{ch}$ into 16 ohms or 790 W/ch into 8 ohms mono; four second turn-on; pushbution power switch; mono/stereo switch; LED power indicator; steel chassis; FR $20-20,000 \mathrm{~Hz} \pm 0.1$ dB SPL/W/m; THD $<0.05 \%$; IMD $<0.05 \%$; slew rate $>13$ volts $/ \mu \mathrm{sec}$; damping factor $>1,000$; draws 60 watts or less on idle. $19.0 \times 3.5 \times 16.0 \mathrm{in}$; n 44.62 lb.

PS-400 165-W/ch Power Amplifier
$165 \mathrm{~W} / \mathrm{ch}$ into $8 \mathrm{ohms} ; 360 \mathrm{~W} / \mathrm{ch}$ into 16 ohms or 520 W/ch into 8 ohms mono; four second turn-on with minimum thumps; pushbutton power switch; independent input-level controls; mono/stereo slide switch; 2 LeD signal-presence indicators; all-aluminum chassis; FR $20-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; THD $<0.001 \%$ from $20-400 \mathrm{~Hz}$; IMD $<0.05 \%$; slew rate 16 volts $/ \mu \mathrm{sec}$; draws 40 watts or less when idle. $19.0 \times 7.0 \times 10.13 \mathrm{in} ; 55 \mathrm{lb} . . . . . . . . . . .$.

Macro-Tech 600 215-W/ch Power Amplier $215 \mathrm{~W} /$ ch into 8 ohms; $395 \mathrm{~W} / \mathrm{ch}$ into 16 ohms or 510 W/ch into 8 ohms mono; four second turn-on; pushbutton power switch; mono/stereo switch; LED power indicator, steel chassis; $\mathrm{FR} 20-20,000 \mathrm{~Hz} \pm 0.1$ dB
when idle. $19.0 \times 3.5 \times 16.0 \mathrm{in} ; 39.56 \mathrm{lb} . \ldots$. $\$ 1,199$
Micro-Tech 1200 295-W/ch Power Amplifier
$295 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $555 \mathrm{~W} / \mathrm{ch}$ into 16 ohms or 790 W/ch into 8 ohms mono; power rocker switch; mono/stereo switch; LeD power indicator, steel chassis; FR $30-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; THD $<0.05 \%$; IMD $<0.05 \%$; slew rate $>13$ volis $/ \mu \mathrm{sec}$; damping factor $>1,000$; draws 60 watts or less when idle. $19.0 \times 3.5 \times 16.0 \mathrm{in} ; 40.56 \mathrm{Jb} . . . . . .$. . $\$ 1,199$

## DC-300A II 165-W/ch Power Amplifier

$165 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; 340 watts into 16 ohms or 545 watts into 8 ohms mono; instantaneous turn-on with minimum thump and no program delay; independent input level controls; power switch with pilot light; mono-stereo switch; LED indicators; all-aluminum chassis; FR $0-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; THD $<0.001 \%$ from $20-400 \mathrm{~Hz}$; IMD $<0.05 \%$; slew rate 8 volts $/ \mu \mathrm{sec}$; draws 40 watts or less when idle; $19.0 \times 7.0$ $\times 9.75 \mathrm{in} ; 45 \mathrm{lb}$.
\$1,049

## Micro-Tech 600 215-W/ch Power Amplifier

$215 \mathrm{~W} /$ ch into 8 ohms; $395 \mathrm{~W} / \mathrm{ch}$ into 16 ohms or 510 W/ch into 8 ohms mono; power rocker switch; mono/stereo switch; LED power indicator, steel chassis; FR $20-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$ SPL/W/m; THD $<0.05 \%$; $\mathrm{IMD}<0.05 \%$; slew rate $>13$ volts $/ \mu \mathrm{sec}$; damping factor $>1,000$; draws 60 watts or less on idle. $19.0 \times 3.5 \times 16.0 \mathrm{in} ; 37 \mathrm{lb}$
$\$ 949$

## PS-200 95-W/ch Power Amplifier

$95 \mathrm{~W} / \mathrm{ch}$ into $8 \mathrm{ohms} ; 190$ watts into 16 ohms or 280 watts into 8 ohm mono; four second turn on with minimum thumps; pushbutton power switch; inputlevel controls; mono/stereo slide switch; 2 LED signal presence indicators; all-aluminum chassis; FR 20 $20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; THD $<0.01 \%$ from $20-$ 400 Hz ; IMD $<0.05 \%$; slew rate 16 volts $/ \mu \mathrm{sec}$; draws 30 watts or less when idle. $19.0 \times 5.25 \times 10.13 \mathrm{in} ; 25$
lb. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 819$

## PSA-2 265-W/ch Power Amplifier

$265 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $520 \mathrm{~W} / \mathrm{ch}$ into 16 ohms or 760 W/ch into 8 ohms mono; four second/instantaneous turn-on; aluminum chassis; mono/stereo slide

# "It is so clearly superior to past amplifiers in the low- to mid-priced range-not to mention most amplifiers two to three times its pricethat I can unhesitatingly recommend it for even the most demanding high end system." <br> Anthony Cordesman 

volume 8, no. 4

ADCOMGFA-555High Power, High Current.


## The complete review:

## A BEST-BUY <br> BREAKTHROUGH <br> OR THE START OF A NEW WAVE?

I am reluctant to call any given transistor power amp a "best buy" or breakthrough From my talks with designers and other audiophiles, it is clear that the state of the art in power amplifiers is about to change. From where I stand, the Adcom GFA-555 is the first sample of this new wave. It is so clearly superior to past amplifiers in the low - to mid-priced range - not to mention most amplifiers two to three times its price-that I can unhesitatingly recommend it for even the most demanding high end system.
The GFA- 555 does everything well, and most things exceptionally well. It provides superb, well-controlled bass with far better speaker load tolerance than most amps. Its midrange and treble are remarkably low in coloration. There is no hint of hardness, and none of the loss of inner detail common to transistor amplifiers.

## "The Adcom's soundstage is sufficiently superior that even those who claim all power amplifiers sound alike might hear the difference.'

With the exception of the Krells, I have never heard a more detailed, natural, and extended upper four octaves in a transistor amp. The Adcom may even be a legitimate rival to the Krell; it's brighter and more dynamic, and somewhat more open. And, like the Krell, it gives the impression, on really good material, that the amplifier simply isn't there, on really good material. Nor is the Adcom romantic or sweet, like New York Audio's new Moscodes. Rather, it offers natural upper octave detail that the latter miss. Other amplifiers have similar upper octave performance, but I unhesitatingly recommend the Adcom over the very stiff competition from Tandberg and Threshold.

The Adcoms' soundstage is sufficiently superior that even those who claim all power amplifiers sound alike might hear the difference. It comes very close to the better tube power amplifiers in providing detailed, stable, realistic imaging with natural depth. It is not an Audio Research D-250, but is extraordinarily holographic - 1 suspect almost embarrassingly so. This kind of soundstage has previously cost at least $\$ 2000$

I am also highly impressed with this amplifier's dynamics. Once again, it is not going to survive a one-on-one with the Audio Research D-250 or Conrad Johnson Premier Fives, but it rivals any transistor power amplifier in its power class that I have heardincluding high-powered receivers or amps with trick power supplies - at any price. It provides these dynamics into virtually any load without bloat, restriction of sound, or change in timbre. For all the nonsense published by most manufacturers about driving complex loads, this amplifier actually delivers.

The Adcom does not lose sweetness and detail as its power goes up. I am normally leery of transistor amplifiers rated much above 100 warts; they too often blur detail and harmonic information, and this sonic price tag is far more costly than the added power is worth. This does not happen with the Adcom unless the distortion lights are blinking, and they only blink when the amp is delivering well over its rated 200 watts per channel ( 8 ohms ) or 325 watts ( 4 ohms ). By comparison, once-outstanding high power amplifiers like the Hafler DH-500 now sound annoyingly veiled

With a minor dealer modification, you can even drive 1 ohm loads like the Scintilla. I can't measure whether the Adcom delivers its rated 800 watts per channel into 2 ohms, or 20 amps peak, but I can tell you that it does a superb job of driving this superb speaker. Anything in its price range (or even close) generally changes timbre and degenerates when driving the Scintilla at 1 ohm
> "For all the nonsense published by most manufacturers about driving complex loads, this amplifier actually delivers."

I'm going to have to say a few words about its technology before 1 give Adcom a swelled head. You'll be happy to note that the manufacturer claims for the GFA-555 a simple gain path, a 700 watt toroidal transformer, a well- regulated high current power supply, new ultra-stable bias circuitry, direct coupling, no current limiting, and no output inductor. More substantively, its harmonic shape mixes suitable yinyang whule avoiding the curse of pyramidology. This, of course, means that it weighs 34 pounds, has simple rack-mount black styling, pilot lights, warning lights (to indicate distortion levels above $1 \%$ ), and measures exactly $75 / 1{ }^{\prime \prime}$ by $121 / 4^{"}$ by $19^{\prime \prime}$.

More pragmatically, the technical specifications ate significant in that they represent reasonable bandwidth ( $4-150,000 \mathrm{~Hz}$ ), damping (150-200), gain ( 27 dB ), and noise ( -106 dB ). Of these, only the noise specification is outstanding. No attempt is made to beat distortion records: $.09 \%$ THD at rated power into 8 ohms, and $.25 \%$ into 4 . I have heard so many power amplifiers with in: finitely (well, an order of magnitude) better specifications sound so much worse; this may be the amplifier whose sound could convince Stereo Review, High Fidelity. etc. that their present measurements are virtually worthless.

I suspect that the Adcom is going to force many designers in the $\$ 1000-1500$ range to either make radical improvements in their products over the next six months, or look at the possibility of retiring from competition. This is a "must". amplifier to audition before you spring for anything close in
> "I suspect that the Adcom is going to force many designers in the \$10001500 range to either make radical improvements in their products... or look at the possibility of retiring from competition."

price. If the Adcom is simply the first of a whole wave of good amplifiers, it will help revitalize the high end for the average audiophile, and force most manufacturers into more reasonable pricing. Now, Adcom, if you can only come up with a preamp as good!

AHC
ADCOM
11 Elkins Road, East Brunswick, NJ 08816
U.S.A. (201) 390-1130

Distributed in Canada by: PRO ACOUSTICS INC. Pointe Claire, Quebec H9R 4X5

Manufacturer's note: Approximate retail prices listed in order of mention in review:

| Adcom GFA-555 | $\$ 750$ |
| :--- | ---: |
| Krell | $2300-7500$ |
| N.Y. Audio Moscode | $900-1200$ |
| Tandberg | $1000-2000$ |
| Threshold | $1490-3150$ |
| Audio Research D-250 (MK II) | 6000 |
| Conrad Johnson Premier 5 (pair) | 6000 |
| "higr powered recevvers" | $?$ |
| "amps with trick power supplies" | $?$ |
| Hafler DH-500 | 850 |

switch; FR $20-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m} ;$ THO $<0.002 \%$; IMD $0.01 \%$; slew rate $>30$ volts $/ \mu \mathrm{sec}$; dumping factor $>700$; draws 90 watts or less when idle. $19.0 \times 7.0 \times 14.75$ in
.$\$ 819$
D-75 35-W/ch Power Amplifier
$35 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; 95 watts into 8 ohms mono; $<110 \mathrm{~dB}$ hum and noise in the range $20-20,000 \mathrm{~Hz}$; instantancous turn-on with minimum thump and no program delay; two input-level controls; power switch; mono/stereo switch; 2 signal-presence indicators; 1 power indicator; ground link; FR $20-20,000 \mathrm{~Hz}$ at I watt into 8 ohms (stereo); IMD $<0.05 \%$; slew rate 6 volts $/ \mu \mathrm{sec}$; $\pm 15$ watts power consumption when idle. $19.0 \times 9.0 \times 1.75 \mathrm{in} ; 10 \mathrm{lb}$
\$524

## DB SYSTEMS

## DB-6A Power Amplifier

Stereo power amp able to drive 1 -ohm loads. Features $12-\mathrm{dB}$ /octave infrasonic filter; peak-clipping LED's; electronic clamp. Output power $40 \mathrm{~W} / \mathrm{ch}$ continuous into 8 ohms from $20-20,000 \mathrm{~Hz}$ at $0.003 \%$ THD; THD $0.0008 \%$ at $1,000 \mathrm{~Hz}$; IMD $<0.002 \%$; FR 20 $40,000 \mathrm{~Hz}+0 /-1 \mathrm{~dB}$; input sens/imp $1 \mathrm{~V} / 50$ kilohms: $\mathrm{s} / \mathrm{N} 112 \mathrm{~dB}$ at 1 V A-wid: slew rate $15 \mathrm{~V} / \mu \mathrm{s}$ : damping factor $>400,20-1,000 \mathrm{~Hz} .4 .9 \times 16 \times 12.8$ in. . DB-6A-M. Similar to DB-6A except bridged mono amp at 140 W continuous with $0.008 \%$ THD; slew rate $30 \mathrm{~V} / \mu \mathrm{sec}$.
\$795
19* Rack adaptor . . . . . . . . . . . . . . . . . . . . . . . . $\$ 55$
Mono conversion of DB-6A to DB-6A-M ..... $\$ 39$ DB-6A-M(2). Similar to DB-6A-M except pair of mono amplifiers. . . . . . . . . . . . . . . . . . . . . . \$1.550

## BX1 Power Amplifier

dbx

Configurable 2-/3-/4-channel power amplifier with 3 sets of fuses and complementary circuitry throughout. Features high-quality film capacitors; $8 \times 250-\mathrm{W}$ high-speed bipolar devices/ch; $2 \times 3,200 \mathrm{va}$ toroidal transformers with 2 taps each; separate rectifiers for each ch; $\pm 55-\mathrm{V}$ power-supply rails. Contains no fans or limiting circuitry. Quietly shuts down under thermal stress. Power output into 2 channels: 400 $\mathrm{W} / \mathrm{ch}$ into 8 ohms, $650 \mathrm{~W} / \mathrm{ch}$ into 4 ohms, $800 \mathrm{~W} / \mathrm{ch}$ into 2 ohms, $1,400 \mathrm{~W} / \mathrm{ch}$ into 1 ohm . Power output into 4 channels: $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms, $200 \mathrm{~W} / \mathrm{ch}$ into 4 ohms, $325 \mathrm{~W} / \mathrm{ch}$ into 2 ohms, $400 \mathrm{~W} / \mathrm{ch}$ in 1 ohm; slew rate $200 \mathrm{~V} / \mu \mathrm{S}$.
$\$ 3.700$

## DENON

POA-2400 Stereo Power Amplifier
Features Denon Optical Class A design, and Twin Pure Current Supply. $200 \mathrm{~W} / \mathrm{ch}$ into 8 ohms with no more than 0.01 THD. High speed protection circuits; bar-line multi display. IMD <0.002\%; FR 1-300,000 $\mathrm{Hz}+0,-3 \mathrm{~dB}$ at $1 ; \mathrm{S} / \mathrm{N} 123 \mathrm{~dB}$; self diagnostic function; $7.36 \times 17.08 \times 16.88 ; 38.5 \mathrm{lb} \ldots . . \$ 750$

## POA-6600 Mono Power Amplifier

Mono power amp with Dual Super Non-NFB circuit for high-speed signal transmission. Features pure current power supply; separate power supply block chassis; Cannon type balance input connector; conventional RCA input jack with selector switch; frontpanel level control; extra large speaker terminals: peak indicators; high-speed reset-type protection circuit; remote power on/off switching from DAP5500 or PRA- 1100 preamps. 250 W min rms into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.02 \%$ THD; dynamic power 800 W at 1 ohm ; IMD $0.002 \%$; $\mathrm{S} / \mathrm{N} 123 \mathrm{~dB}$; slew rate $\pm 500 \mathrm{~V} / \mu \mathrm{sec}$. $\qquad$ . $\$ 750$ POA-4400 Mono Power Amplifier. As above with 150 W .
$\$ 750$

## DENNESEN ELECTROSTATICS

Antares II Power Amplifier
$75 \mathrm{~W} / \mathrm{ch}$ MOSFET power amp; no more than $0.1 \%$ THD
into 8 ohms: FR $10-100,000 \mathrm{~Hz} \pm 1 \mathrm{~dB} ; \mathrm{S} / \mathrm{N} 90 \mathrm{~dB}$; dynamic headroom 3 dB ; slew rate $30 \mathrm{~V} / \mu \mathrm{sec}$; IMD $0.1 \%$; $5.25 \times 19 \times 8-\mathrm{in} ; 30 \mathrm{lb}$
$\$ 595$
Orion. Similar to above except with 150 watts/ mono. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$1,500

## DISCRETE TECHNOLOGY

Distech Dual-Mono Power Amplifier
Solid-siate power amplifier. Features matched frontend transistor pairs; darlington pair; cascode voltage section; high-grade polypropylene capacitors; platinum interconnect on input. FR $3-100,000 \mathrm{~Hz}+0 /-3$ dB; damping factor at $50 \mathrm{~Hz} 200 ; 200 \mathrm{~W} .$. . $\$ 2,600$

## Distech LSII Power Amplifier

Power amp with MOSFET output and Distech AC power cable. 100 continuous average $W /$ ch from 20 $20,000 \mathrm{~Hz}$ into 8 ohms with less than $0.95 \%$ THD, 200 W into 4 ohms: $200-\mathrm{ms}$ dynamic power 200 W ; dynamic headroom $3.2 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$ below 10 -watt output: slew rate $40 \mathrm{~V} / \mathrm{ms}$ IMD $<0.09 \%$. $16 \times 5 \times 14 \mathrm{in}$; 25 lb
$\$ 950$

## ELECTROCOMPANIETBY MUSIC ANDSOUND IMPORTS

## Ampliwire Power Amps

All Electrocompaniet power amps are Class AB, DC servo controlled. and feature thermal shutoff safety filter in output stage for undistorted use with any type of speaker.
250. Inverts phase. $250 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $480 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; FR $0-100,000 \mathrm{~Hz}$; THD $0.003 \% .45 \mathrm{lb}$. Approx
\$3,995
100. Does not invert phase. $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms $180 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; FR $0-100,000 \mathrm{~Hz}$; THD $0.003 \%$. 40 lb . Approx
$\$ 2,195$
65. Does not invert phase. $75 \mathrm{~W} / \mathrm{ch}$ into 8 ohms: 135 W/ch into 4 ohms; FR $0-100.000 \mathrm{~Hz}$; THD 0.004\%. 32 lb. Approx.
$\$ 1,495$

## FORTE AUDIO

## Model la Power Amplifier

Dual-channel, non-inverting power amp using FET/bi-polar frontend topology and operating in pure class A throughout fron-end and power output stages. Input stage is direct coupled and biased with regulated constant-current sources. Output stage employs 20 high-speed power devices and uses no active protection circuits. Does not impose a fuse or isolation inductor at the output and maintains constant damping over the full frequency band. Gold-plated input and output connectors. Glassepoxy circuit boards. Custom toroidal power transformer. Rated power $50 \mathrm{~W} / \mathrm{ch}$ at $0.05 \%$ THD into 8 ohms; FR $20-20,000 \mathrm{~Hz}$; bandwidth -3 dB points of 7 and $100,000 \mathrm{~Hz}$; slew rate $40 \mathrm{~V} / \mathrm{msec}$; imp 75,000 ohms; $19 \times 7 \times 11 \mathrm{in} ; 36 \mathrm{lb}$
\$950

## Model 3 Power Amplifier

Similar to model la except higher power with output stage operating in high-bias class AB. Rated power $200 \mathrm{~W} / \mathrm{ch}$ at $0.05 \%$ THD into 8 ohms; FR $20-20,000$ Hz ; bandwidth -3 dB points of 7 and $100,000 \mathrm{~Hz}$; slew rate $40 \mathrm{~V} / \mathrm{msec} ; \operatorname{imp} 75,000 \mathrm{ohms} ; 19 \times 7 \times 11 \mathrm{in}$; 36 lb
$\$ 990$

## FOSGATE-AUDIONICS

## M-100 Power Amplifier

Mono amp designed for surround applications. Features $60 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $100 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; moderate feedback; silent turn-on/-off; input level control; FR $15-40,000 \mathrm{hz} \pm 1 \mathrm{~dB}$; THD $<0.03 \%$; IMD < $0.03 \%$.
. \$269
S-100. As above, stereo . . . . . . . . . . . . . . . . . . . $\$ 429$
T-100. Tri-channel version of M-100 . . . . . . . . $\$ 599$

## M-60 Power Amplifier

Mono amp designed for use in $A / V$ system. Can be used for center front channel applications. 2 can be
used for stereo compact complementary/symmetry output stage. Low TIM and TID. Includes gain adjust and clipping indicator. 45 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.1 \%$ THD, 60 W into $4 \mathrm{ohms} ; 200-\mathrm{ms}$ dynamic power 65 W ; dynamic headroom $1.5 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 95 \mathrm{~dB}$; slew rate $15 \mathrm{~V} / \mu \mathrm{S}$; IMD $0.1 \% .6 .56 \times 3.56 \times 6.56 \mathrm{in} ; 5 \mathrm{lb} . \$ 179$

## HAFLER

## NL-600 MOSFET Power Amplifier

Excelinear near-zero-phase shift circuit with J-FET double differential push-pull cascoded 'tube-like' input and current-mirroring 2nd stage. 16 MOSFET outputs; direct coupled; stable into all loads; high capacitance ( $72,000 \mathrm{mfd}$ ); Excelinear speaker tweaking adjustment; gold inputs and outputs: mono bridging switch; variable speed DC fan cooling. 305 W/ch into 8 ohms with $<0.05 \%$ THD, $20-20,000 \mathrm{~Hz}$; $<0.04 \%$ IMD from 1-305 W: $450 \mathrm{~W} / \mathrm{ch}$ into 4 ohms: 900 W mono into 8 ohms; input sens 2.4 volts for 305 W @ 8 ohms; FR $10-50,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}: \mathrm{s} / \mathrm{N}>100$ dB @ $305 \mathrm{~W}: 7 \times 19 \times 13 \mathrm{in}: 50 \mathrm{lb}$
$\$ 1,195$

## DH-500 Power Amplifier

Stereo power amp designed to deliver $>255 \mathrm{~W} / \mathrm{ch}$ with $<0.025 \%$ distortion into 8 ohms; $>400 \mathrm{~W}$ into 4 ohms (can be bridged, using optional bridging kit, to deliver $>800 \mathrm{~W}$ into 8 ohms). Employs MOSFET's on compact enclosed multispeed fan-cooled heat sink. Fuses and relay protect speakers against turn-on thumps or DC shifts: self-protective capability of the mOSFET's eliminates need for amp protection. Factory assembled $\$ 900$
Kit.
$\$ 775$

## XL-280 MOSFET Power Amplifier

J-FET double differential input and 12 mOSFET output. Excelinear speaker tweaking adjustment; gold inputs; mono bridging switch; speaker protection fuses. $145 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $<0.05 \%$ THD, $20-$ $20,000 \mathrm{~Hz} ;<0.04 \%$ IMD; $S / \mathrm{N}>100 \mathrm{~dB} ;$ FR $10-50,000$ $\mathrm{Hz} \pm 0.1 \mathrm{~dB}: 200 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; 400 W into mono. $5.25 \times 17 \times 10.5 \mathrm{in} ; 27 \mathrm{lb}$; assembled . . $\$ 650$ Kit. .
\$575

## DH 120 Power Amplifier

Stereo power amp stable with L and R level controls. stereo/mono switch, AUX speaker outputs which feed a matrix signal for ambience effects. 62 continuous average $\mathrm{W} /$ ch from $20-20,000 \mathrm{~Hz}$ with no more than $0.006 \%$ THD into 8 ohms; FR $10-40,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; $\mathrm{s} / \mathrm{N}>100 \mathrm{~dB}$; damping factor 219 to $1,000 \mathrm{~Hz}$; sep 85 dB at $1,000 \mathrm{~Hz}$; input imp 22 k ; slew rate $30 \mathrm{~V} / \mu \mathrm{sec}$; $15.75 \times 3.25 \times 9 \mathrm{in} ; 18 \mathrm{lb}$; assembled
.$\$ 425$
Kit.
\$375

## HARMAN KARDON

Citation Twenty-Two 200-W/ch Power Amp
Selectable high-current and high-voltage output; dual-voltage design; dual power transformers; goldplated input jacks and speaker terminals; $8130-\mathrm{W}$ power transistors per ch; clipping indicators; LED power meters: anodized brushed aluminum blue/ black finish with rubber trim. $200 \mathrm{~W} / \mathrm{ch}$ into 8 ohms , 400 W bridged into mono; current capability $\pm 120$ amps; neg feedback 12 dB
$\$ 1.099$
Twenty-Four. Similar to above except $100 \mathrm{~W} / \mathrm{ch}$; current capability $\pm 60 \mathrm{amps} ; 4130-\mathrm{W}$ power transistors per ch; damping factor 75 into 8 ohms . . . $\$ 699$

## HEYBROOK By

 D'ASCANIO AUDIO
## P-2 Power Amplifier

Hand-assembled power amp with toroidal transformer capable of $30-\mathrm{amp}$ output. Features circuits designed with close-tolerance, high-quality components. Thick aluminum chassis acts a heatsink over entire surface, equalizing temp within the case and maintaining a stable relationship between internal components. 80 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-$
$20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.05 \%$ THD. 120 W into 4 ohms: $\mathrm{s} / \mathrm{N} 60 \mathrm{~dB}$ : IMI) $0.05 \%$ : instantancous peak current $\pm 30 \mathrm{~A} .17 \times 4 \times 12 \mathrm{in}$; 18 Ib.
\$1,298

## HITACHI

HMA120A VSW Power Amplifier
Power display of 10 led's per ch. $120 \mathrm{~W} /$ ch into 8 ohms: 200 -ms power 120 W . $14.5 \times 5 \times 13 \mathrm{in}: 17.7$ lb.
$\$ 250$

## JADIS By MADRIGAL

## JA-200 160-W/ch Tube Power Amp

Pure Class A power amp with power capability and dynamic behavior to drive difficult loads with low distortion. 4 chassis ( 2 amps . 2 power supplies). 160 $\mathrm{W} / \mathrm{ch}$ into 4 and 8 ohms. 210 lbs.
$\$ 17,500$

## JA-80 60-W/ch Tube Power Amp

Pure Class A; core of output transformer acts like solid core for high efficiency: 2 chassis. $60 \mathrm{~W} / \mathrm{ch}$ into 4 and 8 ohms. 154 lbs
$\$ 11.500$

## JA-30 30-W/ch Class-A Power Amp

Dual-mono (2 chassis): each transformer hand built for symmetry in resistance and self-inductance of coils: transformer encapsulated for oplimal selfdamping and thermal stability. $30 \mathrm{~W} / \mathrm{ch}$ into 4 and 8 ohms. 97 lbs .
$\$ 5,750$

## JRM

Power Tower Power Amplifier
Basic integrated mono power amplifier features 2 dB dynamic headroom; power bandwidih 0.6-75.000 Hz : slew rate $100 \mathrm{~V} / \mu \mathrm{S}$; тнD $0.02 \%$; all-cascode design
$\$ 2.500 / \mathrm{pr}$
Power Tower/B Pro Power Amplifier
Basic integrated mono power amplifier features 1.5 dB dynamic headroom: power bandwidth 0.6-75,000 Hz : slew rate $100 \mathrm{~V} / \mu \mathrm{S}$; THD $0.02 \%$ : all-cascode design. $\$ 3.100 / \mathrm{pr}$

## JVC

## AX2911BK Power Amplifier

Digital pure-A circuit for Class-A operation: Dynamic Super-A: D/4 converter direcily connected to amp; built-in I)/A converter with quadruple-oversampling digital filter: 3 digital connections: one optical. one coaxial, and one input/output for DAT; separate layoul for digital and analog circuits: high-gain phono equalizer for MM/MC cartridges; low-noise motordriven volume control; bass response control; goldplated terminals: multi-function display; wireless remote control. $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-$ $20,000 \mathrm{~Hz}$ with no more than $0.003 \%$ тнI) . $\$ 1,100$

## KENWOOD

Basic M2A Stereo Power Amplifier
Features Super Dynamic Linear Drive (DLD) dualoutput power amplifier: low-impedance drive capability; dynamic power (EIA) $616 \mathrm{~W} / \mathrm{ch}$ into 2 ohms; wide range FL peak power meters with selectable peak-hold and two hold times; Sigma Drive Type B; full circuit protection with thermostat-controlled fan cooling; two speaker pair selection; gold-plated input terminals: headphone jack: power indicator: muting relay. 220 continuous average $W /$ ch from 20-20,000 Hz with no more than $0.004 \%$ THD into 8 ohms: damping factor $1,000 \mathrm{at} 50 \mathrm{~Hz}, 17.31 \times 6.25 \times 14.69$ in: 34.1 lb
. \$695

## Basic MID Stereo Power Amplifier

Features Voltage Interface Gate with Dynamic Linear Drive (VIG-DLD) amplifier; low-impedance drive capability: dynamic power (EIA) $210 \mathrm{~W} / \mathrm{ch}$ into 2 ohms; FL peak power meters; full circuit protection: Sigma Drive type B; two speaker pair switching:
headphone jack: muting relay. 125 continuous average $W$ /ch from $20-20.000 \mathrm{~Hz}$ with no more than $0.005 \%$ THI into 8 ohms; damping factor 1,000 at 100 $\mathrm{Hz} .17 .31 \times 5.69 \times 13.31 \mathrm{in}: 21.5 \mathrm{lb}$
\$445

## KINERGETICS

KBA-202 Gold Series 200-W/ch Power Amp
Zero overall feedback (feedback in output stage only): fully cascoded J-FET input stage: mono construction; IC servo control to eliminate capacitors in signal path: 24 output transistors: power supply for front end of each ch: 4 toroidal transformers: 3100-joule power supply; military-grade glass circuit boards with 2-sided ground plane and 20-0z copper traces; AB operation; does not invert phase: hysteresis-distortion cancelling circuit. $200 \mathrm{~W} / \mathrm{ch}$ into 8 ohms. 400 into 4; headroom 3 db ; input imp 50,000 ohms; slew rate $100 \mathrm{~V} / \mu \mathrm{sec}$; voltage gain 30 (absolute): power bandwidth $1-400,0100 \mathrm{~Hz}$; small-signal bandwidth I$1,000,000 \mathrm{~Hz}: 59 \mathrm{lb} ; 19 \times 6 \times 19 \mathrm{in} . . . . . \$ 1,995 / \mathrm{pr}$

## KBA-75 Gold Series 75-W/ch Power Amp

I-kVA power supply: dual-coil toroidal Iransformer: auto servo-controlled DC offset adjustment; constant current sources for Class A operation: high-power output transistors with wide linear region; no phase inversion; hysteresis-distortion cancelling circuit. 75 W/ch into 8 ohms. 150 into 4: headroom 3 db : input $\mathrm{imp} 50,000$ ohms; slew rate $65 \mathrm{~V} / \mu \mathrm{sec}$; voltage gain 30 (absolute); power bandwidth $1-300,000 \mathrm{~Hz}$ : smallsignal bandwidth $1-1,000,000 \mathrm{~Hz}$ : 45 lb : $19 \times 6 \times 16$ in.
$\$ 1.295$

## SW-200 Stereo Amplifier

System includes $150 \mathrm{~W} / \mathrm{ch}$. Output 300 W : crossover 100 Hz : compusound circuils: $17.25 \times 4.75 \times 8$ in............................................... . $\$ 599$ SW-200 Mono Amplifier. Same as above but output 150 W
$\$ 399$

## KLYNE AUDIO ARTS

## SKX 120 Power Amplifier

Dual-mono power amp with $120 \mathrm{~W} / \mathrm{ch}$ driven into 8 ohms. Features solid state construction: balanced and unbalanced inputs; separate power supplies for each channel: high-current complementary bipolar outputs; class $A / A B ;$ FR $0.5-200,000 \mathrm{~Hz} .17 \times 4.75 \times$ 18.5 in ; 45 lb . Approx.
$\$ 4.000$

## KYOCERA

B-910 150-W/ch Power Amplifier
Class $A B$ power amp with triple push-pull highfrequency power stages; ceramic base/chassis; $D C$ configuration; large-culless-core power transformer: large honeycomb heatsinks; direct and subsonic inputs. I 50 continuous average $W /$ ch $20-20.000 \mathrm{~Hz}$ with no $>0.02 \%$ THD into 8 ohms; FR DC- 200.000 Hz $\pm 3 \mathrm{~dB}$ at $\mid \mathrm{W}: \mathrm{s} / \mathrm{N} 120 \mathrm{~dB}$ : damping factor $150(50$ Hz ); $200 \mathrm{~W} / \mathrm{ch}$ into 4 ohms with $0.03 \%$ THD; power bandwidth $10-50,000 \mathrm{~Hz}$ : input sens $1.5 \mathrm{~V}(30$ kilohm); $17 \times 8.25 \times 15.75 \mathrm{in} ; 59.5 \mathrm{lb} \ldots . . . \$ 2,000$

## LAZARUS ELECTRONICS

## 200/200 Dual Hybrid Amplifier

$200 \mathrm{~W} / \mathrm{ch}$ hybrid amplifier. Features individual regulation for each voltage amplification stage: 1.2 V input sensitivity: Class A tube MOSFET hybrid circuitry.. $\$ 1.750$

## H-1 Hybrid Power Amplifier

Pure (not sliding scale) Class A tube MOSFET hybrid power amp may be operated as a fully differential mono amp or as a stereo amp. May be configured (by dealer) as either Class $\mathbf{A}$ or Class $\mathrm{A} / \mathrm{B} .50$ continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than 0.2 THI), 100 W into 4 ohms; 200 ms dynamic power 600 W : dynamic headroom 3 dB .8 ohms resistive: $\mathrm{s} / \mathrm{N} 80 \mathrm{~dB}$; IMD $0.2 \%$ : peak current 75 amperes. $19 \times 3.5 \times 16.5 \mathrm{in} ; 35 \mathrm{lb} \ldots . . .$. . $\$ 1,599$

## LINN PRODUCTS

## 1.K280 Sterec Power Amplifier

80 continuous average $W /$ ch from $20-20,000 \mathrm{~Hz}$ companion to LKI preamp. $3 \times 12.75 \times 10.5-\mathrm{in}$ : 19 lb.
\$1,495

## LINEAGE

PA-200 Sterco Power Amplifer
Features all-discrete audio circuitry: full-complementary direct-coupled filed-effect transistor design: complementary differential inputs; Class $A$ operation in gain/driver stages: MoSFET outpul stages with Class ABI operation; DC servo to eliminate all capacitors from audio stages: gold-plated input and outpul connectors; protection circuitry acting entirely outside of signal path; front-panel overload indicators. High-current ultra-stable design optimized for low distortion under rapidly changing speaker loads. Nominal rated power $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; 1 100.00 Hz landwidth with no slew rate limiting. Matte silver with removable teak pedestal base. $17 \times$ $12 \times 6.36$ (with base). 5.25 (without base) in $\$ 1.650$

## LUXMAN

## M-117 Power Amplifier

Features $200 \mathrm{~W} / \mathrm{ch}$ and low impedance drive capability: 3 pairs of large power devices; high energy power supply: $60.000 \mu \mathrm{~F}$ of total filtering capacitance: goldplated binding post speaker terminals; gold-plated input terminals: variable and fixed inputs. . \$1.100

## McINTOSH

MC-2500 Stereo Power Amplifier
$500 \mathrm{~W} / \mathrm{ch}$ power amplifier with Power Guard circuit. Features patented McIntosh Sentry Monitoring circuit which constantly monitors the signal to the output transistors to protect them from damage; left and right channel gain control; speaker on/off switch; peak-reading. peak-locking power meters; meter range selector: headphone jack. Power output: 500 W/ch both channels driven from $20-20.000 \mathrm{~Hz}$ with less than $0.02 \%$ THD: IMD $<0.02 \%$ if instantancous peak power output is less than $1,000 \mathrm{~W} / \mathrm{ch}$ both channels driven: $\mathrm{FR} 20-20,000 \mathrm{~Hz}+0 /-0.25 \mathrm{~dB}, 10-$ $100,000 \mathrm{~Hz}+0.25 /-1 \mathrm{~dB}$; damping factor $>30$; input imp 50.000 ohms: input sens switchable. 0.75 or 2.5 V (level control provided for higher input voltages). Power Guard: THD not to exceed 2\% with up to 20 dB overdrive at I kHz. Power Requirements: $120 \mathrm{~V} 50 / 60 \mathrm{~Hz} 0.7$ to 22 amps .15 amps UL/CSA. Standard $19^{*}$ rack mounting; 129 lb .
$\$ 3.495$
M1C-7270 Stereo Power Amplifier
$270 \mathrm{~W} / \mathrm{ch}$ power amplifier with Power Guard circuit. Features McIntosh Autotransformer: left and right channel gain control; peak-reading, peak-locking power meters: meter selector. Power output: 270 W/ch both channels driven from $20-20,000 \mathrm{~Hz}$ with less than $0.02 \%$ THD); IMD $<0.02 \%$ if instantancous peak power output is less than $600 \mathrm{~W} / \mathrm{ch}$ both channels driven: FR $20-20.000 \mathrm{~Hz}+0 /-0.25 \mathrm{~dB}, 10-$ $100.000 \mathrm{~Hz}+0 /-2 \mathrm{~dB}$; damping factor $>30$; input impedance 20.000 ohms: input sensitivity switchable, 0.75 or 2.5 V (level control provided for higher input voltages). Power Guard: THD not to exceed $2 \%$ with up to 20 dB overdrive at 1 kHz . Power Requirements: $120 \mathrm{~V} 50 / 60 \mathrm{~Hz} .13 \mathrm{amps} .16 .2 \times 7.13$ $\times 14.5$ omr. 82 lb

MC-2002 Stereo Power Amplifier
$200 \mathrm{~W} / \mathrm{ch}$ power amplifier with Power Guard circuit. Features McIntosh Sentry Monitor circuit; DC failure protection; power line surge protection: peak responding power meters. Power output: $200 \mathrm{~W} / \mathrm{ch}$ into 8 ohms both channels driven from $20-20.000 \mathrm{~Hz}$ with less than 0.01\% THD: IMD $<0.02 \%$ at any power level below rated power both channels driven; FR 20 $20,000 \mathrm{~Hz}+0 /-0.25 \mathrm{~dB}, 10-100,000 \mathrm{~Hz}+0 /-3.0$ dB ; damping factor $>100$; input impedance 20.000
ohms; input sens switchable, 1.4 or 2.5 V ; IHF dynamic headroom 1.7 dB at 8 ohms. Power requirements: $120 \mathrm{~V} 50 / 60 \mathrm{~Hz}, 0.6-15 \mathrm{amps} .16 .19 \times 7.13 \times$ 14.5: 50 Jb .
$\$ 1,850$

## MELOS AUDIO

## TM-90 ST Power Amplifier

Stereo power amp with toroidal power transformer, regulated power supplies using tubes and transistors. Wide bandwidth output transformers; triple triode driver tubes; LED indicators. $80 \mathrm{~W} / \mathrm{ch}$; total harmonic distortion no more than $0.5 \%$; frequency response 8 $45.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 85 \mathrm{~dB}$; sens at rated power $1.5 \mathrm{~V} .17 .5 \times 7.5 \times 13.5 \mathrm{in} \ldots . . . . . . . . . .$.

## MARK LEVINSON by MADRIGAL

## No. 20 100-W/ch Mono Reference Amp

Class-A highly biased mono amp with fully regulated power to all audio stages; internal spike and surge suppression; RF filtering of raw AC from outlet to reduce noise; separated + and - supply rails each with their own toroidal power transformer, full-wave bridge rectification, and filter capacitors to prevent cross modulation between rails; electronic regulation to refine power used by signal-carrying circuits; 3 high-current devices to drive output stage; electronic protection against abuse; all gain stages controlled at clipping: balanced inputs with Camac connectors; Neutrik-XLR connector; internal switching to adjust for operation at $90-240 \mathrm{~V} \mathrm{AC}$. 100 watts per channel into 8 ohms, 200 W into 4 ohms. $17.5 \times 8.25 \times 22$ inches; 90 pounds Faceplate also available in 19* width.
\$ $10,800 / \mathrm{pr}$

## No. 23 Dual-Mono 100-W/ch Power Amp

2 separate mono amps in single chassis; AC mains filtering; film capacitors; surge limiting; 2 power supplies for each $L$ and $R$ ch; oxygen-free copper bars supply output stage with $+84-\mathrm{V}$ DC rails; triple bypassing; output supply capacitance of 146,000 $\mu$ farads and 2-1.2 KVA transformers produce 240 joules of stored energy; full-wave bridge rectifier: independent tracking for + and - rails; only bipolor devices in gain stages; inverting input for full balanced connection; 50 -kohm imp through audio bandwidth; output stage operates in class AB; controlled clipping; external line and internal fuses; thermal sensors. $100 \mathrm{~W} /$ ch into $8 \mathrm{ohms}, 200$ into 4 . 350 into 2 ; gain 26 dB ; damping factor $>700$ ( 50 Hz ref to 8 ohms ); 83 lb ; $17.5 \times 8.5 \times 15$ in ( $18^{\circ} \mathrm{d}$ with handles).
$\$ 4.700$

## ML-11 Stereo Power Amplifier

All discrete circuitry; Class-A operation in voltage gain and driver stages; Class AB2 operation in output stage. Power supply of 320 VA toroidal power transformer, 2 12-ampere bridge rectifiers, 410,000 $\mu \mathrm{F}$ filter capacitors, for separate rectification and 20 joules of energy storage for each ch. Six $200 \mathrm{~W}, 15$ ampere power transistors per ch enable ML-11, when pulsed, to develop 25 volts peak, at peak currents up to 12.5 amperes ( 312.5 W peak) per ch. Optional externally programmable voltage-limiting circuit reduces voltage output to protect speakers; gold-plated binding posts for output connections and Camac input connectors; hand-brushed black anodized faceplate. $8.62 \times 19 \times 12 \mathrm{in} ; 25 \mathrm{lb}$
$\$ 2.100$

## By CONRADJOOHNSON

## Motif MSI00 100-W/ch Power Amp

With mOSFET output stage; extensive use of largevalue polystyrene capacitors. 100 continuous average W/ch from $20-20,000 \mathrm{~Hz}$ with no more than $0.1 \%$ total harmonic distortion into 8 ohms; frequency response $20-20,000 \mathrm{~Hz} \pm 0.10 \mathrm{~dB}$; signal-to-noise ratio $100 \mathrm{~dB} ; 7 \times 19 \times 18.5 \mathrm{in}$.; 45 lb . . . . . . . $\$ 3.250$ MS50. Similar to MSIO0 with 50 watts per channel output

## NAD

2600 Monitor Series Power Amplifier
Monitor Series power amplifier with $150 \mathrm{~W} / \mathrm{ch}$. Features power envelope circuitry; +4 dB dynamic headroom; stereo/mono power amp; bridgeable: high voltage, high current capacity; speaker impedance selector; input level controls; close tracking Soft Clipping circuit; rack mountable.
$\$ 798$

## 2200PE Power Amplifier

Stereo/mono power amp. Features high voltage, high current design; bridgeable; new soft clipping circuit; audible clipping indicator on front panel. 100 continuous average $W$ /ch from $20-20,000 \mathrm{~Hz}$ with no more than $0.03 \%$ THD into 8 ohms; FR $3-80,000 \mathrm{~Hz}+0,-3$ $\mathrm{dB} ; \mathrm{s} / \mathrm{N}>9 \mathrm{I}$; dynamic headroom +6 dB ; slew rate $>35 \mathrm{~V} / \mu \mathrm{sec} .16 .5 \times 4.8 \times 14.5 \mathrm{in}$
$\$ 628$

## 2400 Monitor Series Power Amplifier

$100 \mathrm{~W} / \mathrm{ch}$; power envelope circuitry: 480 W IHF dynamic power; +6.2 dB dynamic headroom; input level controls; A.B. A \& B speaker switching: Soft Clipping circuit; bridgeable; land and normal inputs; rack mountable.
$\$ 598$

## 2100 Monitor Series Power Amplifier

$50 \mathrm{~W} / \mathrm{ch}$; power envelope circuitry; 270 W IHF dynamic power; +6.6 dB dynamic headroom; input level controls; A,B,A \& B speaker switching; Soft Clipping circuit; bridgeablc; lab and normal inputs; rack mountable.
$\$ 398$

## 2240PE Power Amplifier

$40 \mathrm{~W} / \mathrm{ch}$ : power envelope circuitry; +6 dB dynamic headroom; speaker imp selector; Soft Clipping circuit
\$328

## NAKAMICHI

## PA-7 Power Amplifier

Power amp utilizes Stasis topology. Features 700-W toroidal power transformer; 33,000 microFarad $\times 4$ filter capacitors; dual rectifiers; 16 transistors per ch.


200 continuous average $W /$ ch from $20-20,000 \mathrm{~Hz}$ with $<0.1 \% \mathrm{THD}$ into 8 ohms; FR $7-150.000 \mathrm{~Hz}+0$. $-3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}>120 \mathrm{~dB}$; dynamic headroom 1.7 dB ; IMD $<0.1 \%$; output current capability 18 amps continuous ( 50 amps peak); dynamic output pouer 300 W/ch into 8 ohms; power bandwidth 5-50.000 $\mathrm{Hz}(8$ ohms, $100 \mathrm{~W}, 0.1 \% \mathrm{THI}) ; 17.12 \times 7.88 \times 16.56$ in; $59 \mathrm{lbs}, 8 \mathrm{oz}$
$\$ 1.850$
PA-5. Similar to above but $100 \mathrm{~W} / \mathrm{ch} .17 .12 \times 5.31 \times$


## NEC <br> Renaissance Series

## M-50 Monaural Power Amplifier

Single-channel power amp with 3 switch-selected inputs. Features variable-frequency low- and highcut filters; vibration-free construction; large Fl power meter; separate circuit construction; industrial-grade twin-crossbar relays with gold-plated contacts; sculptured brass terminals; heavy-duty speaker terminals. Rated power output 50 W into 8 ohms from 20$20,000 \mathrm{~Hz}$ with $0.004 \% \mathrm{THI}, 100 \mathrm{~W}$ into 4 ohms with $0.006 \%$ THD; dynamic power 240 W into 2 ohms.
direct input; FR $5-300,000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N}>115 \mathrm{~dB}$ (direct input). $8.3 \times 4.7 \times 15 \mathrm{in}$; 18 lb .
$\$ 375$

## NIKKO AUDIO

Alpha 2000 Power Amplifier
Power amplifier with transistors mounted directly on pin-fin sink structure; protection circuitry guards

against stray $D C$, input short, dynamic power bursts, and thermal problems; back panel features AWG-24 output speaker termials.; gold plated input jacks; cannon connectors; BTI circuit to bridge mono operation: power bandwidth $5-40,000 \mathrm{~Hz}$; FR 5 $100,000 \mathrm{~Hz}+0 /-0.5 \mathrm{~dB}$; тHD $.002 \%$; $\mathrm{S} / \mathrm{N} 120 \mathrm{~dB}$; channel sep 65 dB ; sens 1000 mV ; imp 47 k ohms.
$\$ 1.800$
Alpha 800 Power Amplifier
Power amplifier with transistors mounted directly on pin-fin sink structure; protection circuitry guards against stray DC, input short, dynamic power bursts adn thermal problems; back panel features AGW-24 output speaker terminals; gold plated input jacks: power bandwidth $5-80,000 \mathrm{~Hz}$; FR $5-100,000 \mathrm{~Hz}$ $+0 /-2 \mathrm{~dB}$; THD . $003 \%$; $\mathrm{s} / \mathrm{N} 101 \mathrm{~dB}$; sens 1000 mV ; imp 47 k ohms.
$\$ 1,300$
Alpha 600 Power Amplifier. Similar to Alpha 800 but: FR $5-100,000 \mathrm{~Hz}+0 /-\mathrm{IdB}$; THD $.002 \%$; $\mathrm{s} / \mathrm{N} 10$ dB ; sens 1000 mV ; imp 50k ohms
$\$ 760$ Alpha 400 Power Amplifier, Similar to Alpha 600 but: $\mathrm{s} / \mathrm{N} 115 \mathrm{~dB}$; imp 47 k ohm . . ............ $\$ 550$

## ONIX BY MUSIC HALL

OA601
Power amplifier, $60 \mathrm{~W} / \mathrm{ch}$.
OA401
Power amplifier, $40 \mathrm{~W} / \mathrm{ch}$.

## ONKYO

Grand Integra M-510 Power Amplifier
Dual-mono power amp with real-phase power supply. Features 3 separate power supplies (left. right. aux for lights, meters etc.); speaker-imp range down to I ohm; calibrated power meters accurate to 1 dB ; A + B speaker systems; adjustable meter sens. 300 continuous average $\mathrm{W} / \mathrm{ch}$ into 8 ohms from 20 20.000 Hz with no more than $0.005 \%$ THID; $500 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; 2 -ms dynamic power 400 W into 8 ohms; S/N 120 dB ; IMD $0.003 \%$; dynamic power 750 $W$ into 4 ohms, $1,300 \mathrm{~W}$ into 2 ohms
$\$ 4.500$

## Grand Integra M-508 Power Amplifier

Dual-mono power amp with real-phase power supply. Features $4 \times 2$ high-current storage capacitor block; calibrated high-speed power meters; A + B speaker systems; low-imp drive capability; variable and direct inputs. 200 continuous average W/ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.003 \%$ THD; 200 -ms dynamic power 265 W into $8 \mathrm{ohms} ; \mathrm{S} / \mathrm{N}$ 122 dB ; 1MD 0.002\%; dynamic power 460 W into 4 ohms, 685 W into 2 ohms.
$\$ 1.200$

## Integra M-504 Power Amplifier

Dual-mono power amp with real-phase power supply. Features peak-reading power meters: $A+B$ speaker systems; low-imp drive capability; highcurrent output stage; heavy-duty 5 -way banana-plug speaker connectors. 150 continuous average $\mathrm{W} / \mathrm{ch}$

# Ultimate Power. 



With a worldwide reputation for sonic excellence, the new Luxman Receivers also deliver more power than before. . .

## Ultimate



R-117 AM/FM Stereo Remote-Control Receiver.

For over 60 years, Luxman components have earned the highest accolades for their musical warmth and transparency. In the past, however, Luxman's receivers were designed to deliver optimum results with analog source material and conventional loud-speaker designs. Now, the increased popularity of the compact disc format has created a new demand for higher performance.

## The digital era.

Compact discs have a dynamic range that far exceeds that of phonograph records and cassette tapes. This requires receivers with greater reserve power to smoothly handle the most intense volume levels.

In addition, the clarity and wider dynamics of CD's have encouraged speaker manufacturers to introduce new designs with improved sonic performance. However, several of these new speaker designs expose receivers to extremely low impedance loads that demand higher current output.

Plus, the CD's remarkable sonic realism has also ignited a whole new interest in listening to music that, in many households, has resulted in multiple speaker arrangements and multiple-room speaker installations. These combined loads pose additional threats to the stability and clarity of a receiver with insufficient reserve power.

## The new Luxman receivers.

To ensure the sonic integrity of CD's into a variety of speaker loads, Luxman has incorporated
massive power supplies with high energy reserves to ensure distortion-free transients. High-current, bipolar transistors are then carefully selected in matched pairs to preserve total sonic integrity at high dynamic levels.

This rugged design technique accommodates the highest demands of both digital software and low impedance loads. But high power is only half of the story. . .

## Ultimate fidelity.

The heart of a Luxman receiver is still the warm, musical feeling that has resulted from decades of research on how vacuum tube amplifiers reproduce music so faithfully.

To achieve this same type of "tube-like" transparency and naturalness, Luxman receivers employ transistors in a voltage-driven amplification configuration that performs the main current conversion only at the output.

In addition, sophisticated circuit designs, including Duo-Beta circuitry, STAR circuit patterns and LED bias circuitry, are utilized to obtain that extra degree of musical purity that conventional receivers ignore.

## Ultimate power.

The best of both worlds. It's the purity and musical warmth of the original source, plus high dynamic power output. This combination ensures total sonic integrity at all volume levels. In today's Luxman receivers, we call it "Ultimate Power".

# Power. 



R-115 A.W/F.V Stereo Remote-Control Receiver.


R-1/3 A.U/F.M Stereo Receiver.
"Ultimate Power" Receivers.
The R-117, rated at 160 ) watts per channel, is capable of supplying up to 600 watts of dynamic power into 4 -ohm loads, and 700 dynamic watts into 2-ohms. The amplifier section is backed by a massive triple-shielded high-energy power transformer and fast recovery rectifier diodes to maintain high energy reserves under all load conditions.

Similarly, the R-115, rated at 70 watts, can provide up to 200 dynamic watts into 4 ohms, and 270 watts into 2ohm loads. And, with its heavy, double-shielded power transformer and high efficiency, it provides a full 3 dB of dynamic headroom.

Both incorporate a new 5-gang varactor, dualgate MOSFET FM front end, with automatic hiblend circuitry, that ensures clean, distortion-free FM performance.

The R-113, the most affordable model in Luxman's new line of receivers, includes a highspeed dynamic amplifier that delivers up to 100 dynamic watts into a 2 -ohm load. And a highefficiency toroidal power transformer is coupled with high energy storage capacitors to provide the dynamics and steady-state reserves necessary for the most demanding musical transients.

All three receivers employ voltage amplification circuitry that ensures the "tube-like" musical warmth of traditional Luxman amplifiers. In addition, CD Straight circuitry routes the input signals past all signal processor and switching functions to
provide optimum accuracy, imaging and impact when listening to compact discs.

Complementing this performance are an array of advanced features that lend versatility and precise control over a wide range of functions. Both the $\mathrm{R}-117$ and R-115 even include a hand-held remote that can operate a complete system of components.

## Technology Perfected, by Luxman

| Features | R-113 | R-115 | R-117 |
| :---: | :---: | :---: | :---: |
| 20 AM/FM random access memorics | X | X | X |
| Auto seek tuning | X | X | X |
| AM/FM memory scan | X | X | X |
| Cable-ready FM fine-tuning | X | X | X |
| FM muting | X | X | $\chi$ |
| F.M IF bandwrdth swich |  | X | X |
| Multipath detection circuit \& indicaltur |  |  | X |
| (I) straight swich | X | X | $X$ |
| Tone defeat swicch |  | X | X |
| MC/MM cartidge switch |  |  | X |
| Tape monitor swicch | X | X |  |
| Record-out selector switch |  |  | $\chi$ |
| Three-posiison loudness switch |  |  | $X$ |
| Multi-function remote control |  | $X$ | X |
| Unifired remore DIN jacks |  | X | X |
| Unificd remote serial output jack |  | X | X |
| Remore eye connection (I)IN) |  | $\chi$ | X |
| Sigenal processor jacks/swich | X | X | X |
| Pre-our jacks | 1 pair | 1 pair | 2 pairs |
| Main-in jacks |  |  | 1 pair |
| Speaker terminals accept singe banana | 3-way | 3-way | 3-way |

LUXMAN

## "Ultimate Power" Receivers.

| lerformance Sixecificalions | R-113 | R-115 | R-117 |
| :---: | :---: | :---: | :---: |
| Raved continuous power output, per channet. ( 8 chms, 20117-20khz) | 35\% | 70w | 160w |
| DNnamic power output, per channel ( $1 \mathrm{kHz}, 20 \mathrm{~ms}$ ) : |  |  |  |
| 8 ohms | $50 \%$ | 140W | 40 W |
| 4 ohms | 84\% | 200w | 600w |
| 2 ohms | 100W | 270w | 700 W |
| Denamic hexdroom, 8 ohms | 1.5 dB | 3 dB | 4.4 dB |
| Toul harmonic distortion ( $20 \mathrm{H} / 2 \cdot \mathrm{~g}$ (kh/f/4 fated powei) | 0.08\% | 0.03\% | 0.03\% |
| IM distorion (SMPTE) | 0.0\%\% | 0.03\% | 0.03\% |
| Damping fator ( 50 Hza , 8 chm loed) | 40 | 50 | 80 |
| Input sensitivity/impedance: |  |  |  |
| Phono (MC) | N/A | N/A | $0.22 \mathrm{mV} / 100$ chms |
| Phono (MiNi) | $2.5 \mathrm{mV} / 47 \mathrm{~N}$ chms | $2.5 \mathrm{mV} / 47 \mathrm{R}$ ohms | $2.5 \mathrm{mV} / 47 \mathrm{R}$ ohms |
| C(1), Tepe, Vindeo | $150 \mathrm{mV} / 47 \mathrm{~K}$ chms | $150 \mathrm{mV} / 47 \mathrm{~N}$ chms | $150 \mathrm{mV} / 47 \mathrm{~N}$ ohms |
| Input overlond: |  |  |  |
| Phono (MC) | N/A | N/A | 13.2 mV |
| Phono (M1. ${ }^{\text {( }}$ | 300 mV | 150 mV | 150 mv |
| ( D ), Tepe, Vindeo | 9 V | 9 V | 97 |
| Signt-to-ñoisc fatio (1HF-A) : |  |  |  |
| Phono MC (re 0.5 mV ) | N/A | N/A | 70 dB |
| Phono M1. (re 5 mV ) | 8, dB | 9 ${ }^{3} \mathrm{~B}$ | 68 dB |
| C(1), Tipe, Video (re 0.5 V ) | $\% \mathrm{~dB}$ | \$\% dB | 100 dB |
| Frequency response: |  |  |  |
| Phono. R1AA 30Hz-30kHz | $\pm 0.5 \mathrm{~dB}$ | $\pm 0.5 \mathrm{~dB}$ | $\pm 0.5 \mathrm{~dB}$ |
| Cl), Tape, Video (e-3.0 dB | 5He-300kh\% | 5 H c-180kHz | SHz-1\%0kHz |
| Toesl contol range: |  |  |  |
| Bass | $\pm 10 \mathrm{~dB}$ a 10042 | $\pm 10 \mathrm{~dB} \mathrm{ax} 100 \mathrm{~Hz}$ | $\pm 10 \mathrm{~dB}$ ar 100 Hz |
| Treble |  | $\pm 10 \mathrm{~dB}$ at 10 kHz | $\pm 10{ }^{-18}$ at 10kfte |
| Subsonic filcer: |  |  |  |
| Turnover frequency | 18H12 | 151z | 151\% |
| Slope | 6 dB /octue | 6 difocere | 6 dB /octave |
| loudness compensation: |  |  |  |
| At 100Hz | +6 dB | +6 dB | +3, +6 dB |
| Ar 10 kHz | $+4 \mathrm{~dB}$ | +4d] | +2, +4 dB |
| FM TUNER SECTION: |  |  |  |
| Usable sensitivity (IHF) (mono) | 10.8 dBr | 10.3 dBf | 10.3 dr |
| Sensitivin, 50 dB quicting: |  |  |  |
| Muno | $1+.0 \mathrm{dBf}$ | 13.2 dBf | 13.2 dBr |
| Sterco | 3\%.0 dBf | 36.6 dm | 36.6 dBf |
| S/N ratio (1HF" ${ }^{\text {che }}$ : |  |  |  |
| Mono | MO dB | Ho dB | 80 dB |
| Stereo | 74 dB | 75 dB | 75 dB |
| Traed harmonic discorion: |  |  |  |
| Mono ( kHz ) | 0.1\% | 0.03\% | 0.04\% |
| Stereo ( kH Hz ) | 0.18\% | (0.10\% | 0.10\% |
| Stereo separation (IkH7):Wide I,F.Narrow I.F. | 45 dB | N/A | N/A |
|  | N/A | 50 dB | 50 dB |
|  | N/A | 35 dB | 35 dB |
| Auto hi-blend threstold (3 dB at loki fa) | N/A | 35 dBf | 35 JBf |
| Adjecent channel selectivity:Wide I.F.Narrow I.F. | (6) dB | N/A | N/A |
|  | N/A | 50 dB | 50 dB |
|  | N/A | 75 dB | 75 dB |
| (3pture ratio (at +5 dB ) | 1.5 dB | t.f dB | 1.5 dB |
| Image rejection (ar 10\%.1 MHa) | 4) dB | 160 dB | 100 dB |
| Spurious response rejection | \%) dB | 100 dB | ICOI dB |
| Frequency response ( 30 Hz - 15 k (1/a) | +0.5.-1.0 dB | +0.5.-1.0 dB | +0.5.-1.0 dB |
| AM TUNER SECTION: |  |  |  |
| lisable sensicivin (1000kHz) | 350p V/m | 500) $\mathrm{V} / \mathrm{m}$ | Sixp V/m |
| S/N ratio ( $1000 \mathrm{kH} / \mathrm{l}$ (100 mV) | 50 dB | 50 dB | 50 dB |
| 'Tixal harmoric distortion (3)\% Mod) | 0.2\% | 0.5\% | 0.5\% |
| Selectivin ( $\ddagger 10 \mathrm{kl} / \mathrm{z}$ ) | 30 dB | 50 dB | 50 da |
| GENERAL: |  |  |  |
| Power supply | 120V AC, 60H2 | 120V AC, $60 \mathrm{H}^{\text {H }}$ | 120V AC, 6016 |
| Power consumprion (no signal) | 55 watts | th warts | 66 watts |
| Dimensions ( WxHx ) ${ }^{\text {a }}$ | 174*"x46" $\times 13 \mathrm{~K}^{\prime \prime}$ | $1764 \times 51 / 2$ "x16 11/16" | 17\%"x5K"x16 $11 / 16^{\circ}$ |
| Veight | 13.4 lb . |  | 35.2 lb . |

## LUXMAN

For your authorized dealer, call: 1-800-4 LUXMAN
into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.003 \%$ THD, $240 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; $\mathrm{S} / \mathrm{N} 120 \mathrm{~dB}$; IMD $0.002 \%$; dynamic power 190 W into 8 ohms, 360 W into 4 ohms, 480 W into 2 ohms. $17.12 \times 7.25 \times 16.75$ $\mathrm{in} ; 49 \mathrm{lb}$.
.$\$ 830$

## Integra M-502 Power Amplifier

Dual-mono power amp with linear switching. Features $140 \mathrm{~W} / \mathrm{ch} \mathrm{rms} ; 425 \mathrm{~W} / \mathrm{ch}$ dynamic output into 2 ohms; full dual-mono design: low-impedance drive discrete output section; 4-way speaker selector $\$ 650$ CW-M504. Wood sidepanels for above . . . . . . . \$85

M-5160 Power Amplifier
Features Delta power supply: $150 \mathrm{~W} / \mathrm{ch}$ rms; 4 -way speaker selector
$\$ 360$


## PARASOUND

## D/AS-10001I Power Amplifier

FET digital/analog servo amplifier. Features 60 MHz output transistors, 4 per channel; gold-deposited $80,000 \mathrm{mfd}$ electrolytic capacitors; gold-plated RCA jacks; . $25^{\circ}$ phone jacks; 5 -way terminals; front panel level controls; mono bridging; 3-relay protection; digitally switched, bi-state power supply; 19" rack mount optional: THD $<0.1 \%$; FR $20-20,000 \mathrm{~Hz} \pm 0.5$ $\mathrm{dB} ; \mathrm{S} / \mathrm{N}>110 \mathrm{~dB} ; 17.25 \times 5.5 \times 12.5 \mathrm{in} \ldots . . \mathrm{S} 920$

## HCA-800II Discrete Amplifier

High current discrete amplifier. Features 60 MHz outputs; gold deposited $36,000 \mathrm{mfd}$ electrolytic capacitors; mono bridging with rear panel switch: goldplated RCA jacks; $.25^{\prime \prime}$ phone jack; 5-way terminals; front panel level controls; speaker $A / B$ terminals: headphone jack; relay protection $19^{\circ}$ rack mountable; THD $<0.1 \%$; FR $20-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}>104$ $\mathrm{dB} ; 17.25 \times 3.75 \times 11.75 \mathrm{in} \ldots . . . . . . . . . .$.

## HCA-500 Discrete Amplifier

High current discrete amplifier. Features no integrated circuits; oversized power transformer: RCA jacks; $.25^{\circ}$ phone jacks; 5-way terminals; front panel levelcontrols; relay protection indicator: $19^{-1}$ rack mountable; THD $<0.25 \%$; FR $20-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; $\mathrm{s} / \mathrm{N}$ $>100 \mathrm{~dB} ; 17.25 \times 3.75 \times 11.75 \mathrm{in} . . . . . . . . .$. . $\$ 265$

## PERREAUX

PMF5550 500-W/ch Power Amplifier
Features Class-A operation up to $50 \mathrm{~W} / \mathrm{ch} .500 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.03 \%$ THD; suitable for 4 ohm use; continuous current output $30 \mathrm{amps} ;$ FR $20-20,000 \mathrm{~Hz} \pm 0.02 \mathrm{~dB}$, $10-100,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; ch $\operatorname{sep} 60 \mathrm{~dB} 20-20,000 \mathrm{~Hz}$; damping factor over 200 from $10-1000 \mathrm{~Hz}$; input sens 1.5 volts rms for rated output at $100 \mathrm{~Hz} .20 .25 \times 19 \mathrm{x}$ 20.5-in.
\$6,500
PMF3150 Dual-Channel Power Amplifier
Class A operation up to $30 \mathrm{~W} / \mathrm{ch} .300 \mathrm{~W} / \mathrm{ch}$. into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.03 \%$ THD; suitable for 4 ohm use; MOSFET circuitry; THD/IMD 0.03\%; max current output 10 amps continuous per ch.; bandwidth 0.5 dB from 10 Hz to $3,000,000 \mathrm{~Hz}$ at 1 watt; channel $\operatorname{sep}>70 \mathrm{~dB}$; damping factor $>400$ from 10 Hz to $1,000 \mathrm{~Hz}$; input sens 1.5 volts rms for rated output at $1,000 \mathrm{~Hz} \$ 3,000$

PMF2350 Power Amplifier
Features $200 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.01 \%$ THD; Class-A operation to
$20 \mathrm{~W} / \mathrm{ch}$; channel $\operatorname{sep} 20-20,000 \mathrm{~Hz} 70 \mathrm{~dB}$; damping factor 1,000 at 200 Hz , over 400 from 10 to $1,000 \mathrm{~Hz}$; input sens 1.5 volis rms for rated output at 1.000 Hz . $6.25 \times 19 \times 6.25-\mathrm{in} ; 34 \mathrm{lb}$.
$\$ 2,500$

## PIONEER

Elite M-90 Power Amplifier
Features CD direct input with volume control; lowimpedance driving capability; independent $L / R$ mono construction; copper-plated chassis; nonswitching Type-II circuit; 2 pair speaker outputs; FL power level indicator, rosewood-finished vinyl-covered side panels. 200 continuous average W/ch from $5-50,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.003 \%$ THD; dynamic power 300 W at 8 ohms, 550 W at 4 ohms. $10.4 \times 22.5 \times 21.2$ in . . . . . . . . . . . . . . . . $\$ 950$

## PROTON

D1 200 Power Amplifier


100-W/ch stereo power amp with Dynamic Power on Demand (DPD) to deliver as much as $1,500 \mathrm{~W} / \mathrm{ch}$ (2 ohms) at peak demand, with 6 dB headroom. Features one- touch bridging and wide-range poweroutput meters. $16.5 \times 4.31 \times 9.75 \mathrm{in} ; 33 \mathrm{lb} \ldots . . \$ 699$

## AA-1150 Power Amplifier

50-W/ch dual-mono power amp with Dynamic Power on Demand (DPD) to deliver as much as 450 W/ch at peak demand, with 7 dB headroom. Features separate power supplies for each channel: dual peaklevel power meters; LED DPD indicator; protection circuitry: gold-plated connectors: high-current capacity; power switch. S/N 115 dB ; THD $0.02 \%$; IMD $0.02 \%$; damping factor $>150.19 \times 4.3 \times 14.4 \mathrm{in}$; $25.3 \mathrm{lb} \$ 499$

## PS AUDIO

200CX Power Amplifier
Features 200 W into 8 ohms, 400 W into 4 ohms; noise -90 dB ; THD $0.02 \%$; slew rate $250 \mathrm{~V} / \mathrm{msec} .69 .9$ lb.
$\$ 1,950$

## 100C Power Amplifier

Features 120 W into 8 ohms, 200 W into 4 ohms noise -90 dB ; THD $0.02 \%$; slew rate $250 \mathrm{~V} / \mathrm{msec} .35$ lb.
$\$ 1,195$

## QUICKSILVER AUDIO

Mono Power Amplifier
Hand-wired, tube-type amp using no transisitors or circuit boards. 60 continuous average $\mathrm{W} / \mathrm{ch}$ from 20 $20,000 \mathrm{~Hz}$ into 8 or 4 ohms. Can drive 0.5 -ohm loads. $30 \mathrm{lb} ; 9.25 \times 6.06 \times 14.36$ in . $\mathbf{7 2 0}$

## QUAD

Model 606 Power Amplifier
Power amp with feed-forward error correction (current dumping) combines clarity of Class A operation with efficiency of Class B. Designed to play dynamic program into speakers. Is not rated for continouous power. Protection circuitry uses a sensor on AC -input side of power supply to integrate current over time. No fuses or relays located in signal path. Detailed static and dynamic power curves available upon request from manufacturer. THD (continuous sine wave in 8 -ohm resistive load any level up to 130 W ) $<0.01 \%$ at $20 \mathrm{~Hz},<0.01 \%$ at $1,000 \mathrm{~Hz},<0.03 \%$ at
$20,000 \mathrm{~Hz} ;$ FR $20-20,000 \mathrm{~Hz}-0.25 \mathrm{~dB} .12 .75 \times 5.5 \mathrm{x}$ $9.5 \mathrm{in} ; 27 \mathrm{lb}$.
$\$ 1,295$
Model 306 Power Amplifier
Power amp with feed-forward error correction (current dumping) combines clarity of Class A operation with efficiency of Class B. Designed to play dynamic program into speakers. Is not rated for continouous power. Protection circuitry uses a sensor on AC-input side of power supply to integrate current over time. No fuses or relays located in signal path. Detailed static and dynamic power curves available upon request from manufacturer. THD (continuous sine wave in 8 -ohm resistive load any level up to 50 W ) $<0.01 \%$ at $20 \mathrm{~Hz},<0.01 \%$ at $1,000 \mathrm{~Hz},<0.03 \%$ at 20.000 Hz ; FR $20-20,000 \mathrm{~Hz}-0.25 \mathrm{~dB} .12 .75 \times 2.75 \mathrm{x}$ $8.25 \mathrm{in} ; 11 \mathrm{lb}$.
$\$ 695$

## RCA

MPA120 Power Amplifier
Dimensia power amplifier with automatic power-on and on-screen volume graphics when used with Dimensia monitor. Features fluorescent output display with peak hold; LED power and overload indicators; quick-connect speaker terminals; display on/off switch: headphone jack: A/B speaker switching; AC convenience outlet. Power output: $120 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.015 \%$ THD; $\mathrm{s} / \mathrm{N} 88 \mathrm{~dB} .14 .63 \times 4.75 \times 13.75 \mathrm{in} \$ 399$

MPA100 Power Amplifier
Dimensia power amplifier with automatic power-on and on-screen volume graphics indication when used with Dimensia monitor. Features quick-connect speaker terminals: headphone jack; A/B speaker switching: AC convenience outlet. Power output: 100 W/ch into 8 ohms from $20-20.000 \mathrm{~Hz}$ with no more than $0.015 \%$ THD; $\mathrm{s} / \mathrm{N} 88 \mathrm{~dB} .14 .63 \times 4.75 \times 13.75$ in. .
\$299

## REVOX

B242 Power Amplifier
High-output power amp capable of driving loads from $2-8$ ohms at rated levels. Features dual independent power supplies: DC voltage control; electronic short-circuit protection; temperature sensor to actitate fan cooling: auto on/off switching responds to signal from preamp; $4 / 8$-ohm speaker output switch; LED bar-graph output meter: heavy-duty output connectors. 200 continuous average $\mathrm{W} / \mathrm{ch}$ from 20 20.000 Hz with no more than $0.03 \%$ THD, 300 W into 4 ohms; dynamic headroom 2.5 dB into 8 ohms; $\mathrm{s} / \mathrm{N}$ 117 dB ; rise time $-2 \mu \mathrm{~s}$; damping factor $200(1 \mathrm{kHz} 8$ ohms); sep 80 dB at $1,000 \mathrm{~Hz}$. $18 \times 6 \times 14 \mathrm{in} ; 37.5$ th.
$\$ 3,000$

## ROTEL

## RB890 Stereo Power Amplifier

Power amp with 160 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.03 \%$ THD; bridgeable to 480 watts/ 8 ohms; high-current close-tolerance components.
$\$ 749$
RB870BX Stereo Power Amplifier
100 watt power amp bridgeable with RA870 (integrated amp) for 300 watts into 8 ohms. . . . . . . $\$ 549$

RB850 Stero Power Amplifier
$50 \mathrm{~W} / \mathrm{ch}$ bridgeable to 150 W into 8 ohms.
$\$ 299$

## JEFF ROWLAND DESIGN GROUP

Model 7 Monaural Power Amp
Solid-state mono power amp with FET front-end circuitry and bipolar outputs. Features direct-coupled zero-negative-feed back circuitry to eliminate all capacitors and inductors from signal path; seperate power supplies for front-end circuitry; torodidal power supplies with 132,000 -microfarad capacitance for over 500 joules of energy; remote AC power switching: internal voltage switching (100V-240v

AC). Balanced or unbalanced inputs standard with XLR connector. Adjustable input imp for optimum input cable termination. Class A operation to over 50 watts. 350 W continuous power output into 8 ohms , $1,100 \mathrm{~W}$ into 2 ohms, stable below 1 ohm. 150 amps

peak output current, 50 amps continuous. Damping factor $>300,20 \mathrm{~Hz}-20,000 \mathrm{~Hz} ; 135 \mathrm{lb} \mathrm{ca} ; 19 \times 8.75 \times$ 24 in
. \$9,800/pr

## Model 5 Stereo Power Amplifier

Solid-state power amp with FET front-end circuitry and bipolar outputs. Features direct-coupled zero-negative-feedback circuitry; seperate power supplies: torodial power transformer with 164,000-microfarad total capacitance; remote AC power switching; internal universal voltage switch; balanced or unbalanced inputs standard with XLR connector; adjustable input imp; Class A operation to over 35 watts. $150 \mathrm{~W} / \mathrm{ch}$ continuous power output into $8 \mathrm{ohms}, 475 \mathrm{~W}$ into 2 ohms, stable below 1 ohm; damping factor $>175,20-$ $20,000 \mathrm{~Hz} ; 75 \mathrm{amps}$ peak output current; 30 amps continuous. $103 \mathrm{lb} ; 19 \times 8.75 \times 24 \mathrm{in} \ldots . . . \$ 5,500$

## Model 3 Mono Power Amplifier

Solid-state power amp with bipolar outputs with FET inputs. Features direct-coupled zero-negative-feedback circuitry; seperate power supplies for front-end; toroidal power transformer stable to 1 ohm; remote power switching; balanced or unbalanced inputs standard: adjustable input imp. 100 W into 8 ohms , 220 into 4 ohms, 330 into 2 ohms; peak output current over 55 amps . $15.2 \times 5.25 \times 14 \mathrm{in}$; 441 b .
\$4,550/pr

## SAE

X10A Power Amplifier
Hypersonic Class A power amp. Features gold-plated connectors; toroidal transformer; wide/narrow band inputs; LED true power meters; anodized gray finish. 100 continuous average $W /$ ch from $20-20,000 \mathrm{~Hz}$ with no more than $0.025 \%$ THD into 8 ohms; FR $20-$ $20,000 \mathrm{~Hz} \pm 0 \mathrm{~dB} ; \mathrm{S} / \mathrm{N} 110 \mathrm{~dB}$; dynamic headroom 1.2 dB ; slew rate $20 \mathrm{mps} / \mu \mathrm{s}$; ImD $0.02 \%$; $19 \times 3.5 \times$ $12.5 \mathrm{in} ; 28 \mathrm{lb}$.
. $\$ 900$

## A502 Power Amplifier

Power amp with automatic bridging circuit. 200 continuous average W/ch from $20-20,000 \mathrm{~Hz}$ with no more than $0.025 \%$ THD into 8 ohms; 600 W mono operation. Features dual-speaker system switching; peak and average LeD power display. Rack mountable. FR $20-20,000 \mathrm{~Hz} \pm 0 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 110 \mathrm{~dB}$; dynamic headroom 1.2 dB ; IMD $0.025 \%$; $19 \times 5.25 \times 14$ inches; 48 lb
$\$ 799$

## A202 Power Amplifier

Power amplifier with $100 \mathrm{~W} / \mathrm{ch}$ and balanced, discrete outputs. Features dual-speaker switching;
peak and average level LeD power display. Rack mountable. 100 continuous average $W /$ ch from $20-$ $20,000 \mathrm{~Hz}$ with no more than $0.025 \%$ total harmonic distortion into 8 ohms; frequency response $20-20,000$ $\mathrm{Hz} \pm 0 \mathrm{~dB}$; signal-to-noise ratio 110 dB ; dynamic headroom 1.2 dB ; intermodulation distortion $0.025 \% ; 19 \times 3.5 \times 14 \mathrm{in} ; 31 \mathrm{lb}$

## SANSUI

B-3000 120-W/ch Power Amplifier
Features $120 \mathrm{~W} / \mathrm{ch}$ driven into 8 ohms from $20-$ $20,000 \mathrm{~Hz}$ with $0.05 \%$ THD; DC servo circuit; 2 power meters; range control; separate heatsinks for left and right channels; short detection; zero voltage detection; thermal detection; headphone jack; outputs for 2 speaker systems. IMD $0.01 \%$; FR $5-100,000 \mathrm{~Hz}$; S/N 120 dB .
\$260

## B-1000 75-W/ch Power Amplifier

Features $120 \mathrm{~W} /$ ch driven into 8 ohms from 20 $20,000 \mathrm{~Hz}$ with $0.05 \%$ THD; DC servo circuit: 2 power meters; range control; separate heatsinks for left and right channels; short detection; zero voltage detection; headphone jack; outputs for 2 speaker systems. IMD 0.01\%; FR $5-100,000 \mathrm{~Hz} ; \mathrm{S} / \mathrm{N} 120 \mathrm{~dB} . . .$. . $\$ 210$

## SONOGRAPHE BY CONRAD-JOHNSON

SA 120 120-W/ch Power Amp
Features MOSFET output stage; $120 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $\mathrm{S} / \mathrm{N} 100 \mathrm{~dB} ; 5.25 \times 18 \times 12-\mathrm{in}$.
\$895

## SONY

TA-N77ES 270-W/ch Power Amplifier
Features spontaneous twin drive power supply; lowimpedance drive capability; mono operation at 580 W into 8 ohms from $20-20,000 \mathrm{~Hz}$ with $0.007 \%$ THD: chimney-style heatsinks; fixed and variable inputs 2 independent protection circuits: peak level power meters; 2 sets of speaker terminals. 270 W continuous into 4 ohms, $20-20,000 \mathrm{~Hz}$ with $0.006 \%$ THD; damping factor 100 ; slew rate $150 \mathrm{~V} / \mu \mathrm{sec}, 300 \mathrm{~V} / \mu \mathrm{sec}$ (inside)
$\$ 1,200$

## SOUNDCRAFTSMEN

## A5002 Power Amplifier

Power amp with Class H Vari-Proportional circuitry and autobuffer for continuous operation into 2 ohms, 4 ohms, and 8 ohms. Features auto crowbar-protection circuit for output protection without current limiting; $20 \mathrm{LED} / \mathrm{ch} 0-1,000 \mathrm{~W} \pm 3 \mathrm{~dB}$ ( 4 ohms) meters; front-panel switching for 2 pairs of speakers: true clipping indicators; input level controls. Output power $250 \mathrm{w} / \mathrm{ch}$ into $8 \mathrm{ohms}, 375 \mathrm{w}$ into 4 ohms continuous rms, $20-20,000 \mathrm{~Hz}$ at $<0.09 \%$ THD; $\mathrm{S} / \mathrm{N}$ $>105 \mathrm{~dB}$; slew rate $>50 \mathrm{~V} / \mu \mathrm{S}$; $\mathrm{TIM}<0.02 \%$; dynamic headroom $>2 \mathrm{~dB}$.
. . $\$ 949$ A5001. Same as A5002 except no LED meters and no input level controls.
$\$ 799$

## Pro-Power Four Power Amplifier

Ultra-high-current MOSFET power amp with dual $20-$ segment leD meter true clipping indicators, 2-pair speaker switching. 205 continuous average $\mathrm{w} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.05 \%$ THD, 300 w into 4 ohms, 450 w into 2 ohms; $\mathrm{S} / \mathrm{N} 105 \mathrm{~dB}$; slew rate $40 \mathrm{~V} / \mu \mathrm{s}$; IMD $0.05 \%$. $19 \times 5.25 \times$ $11 \mathrm{in} ; 28 \mathrm{lb}$
$\$ 799$
Pro-Power Three. As above without level controls and LED meters. . . . . . . . . . . . . . . . . . . . . . . . . $\$ 699$

## Pro-Reference Two Power Amplifier

MOSFET stereo power amp with 20-LED power meters. Features switching for 2 pairs of speakers; input level controls; true clipping indicators; brushed aluminum with charcoal finish rack-mount front panel. Output power $100 \mathrm{w} / \mathrm{ch}$ into 8 ohms, $200 \mathrm{w} / \mathrm{ch}$ into 4 ohms, continuous rms, $20-20,000 \mathrm{~Hz}$ at $<0.05 \%$ THD; $\mathrm{S} / \mathrm{N}$ $>105 \mathrm{~dB}$; damping factor 200 .

Pro-Reference One. Same as above without LED meters.
$\$ 599$
PCR800 Power Amplifier
Phase-control-regulation MOSFET stereo power amp. $205 \mathrm{w} / \mathrm{ch}$ continuous rms; $20-20,000 \mathrm{~Hz}$ into 8 ohms; THD 0.05\%; TIM unmeasureable; $\mathrm{S} / \mathrm{N}>105 \mathrm{~dB} ; 18 \mathrm{lb}$; $5 \times 8.25 \times 12 \mathrm{in}$. $\qquad$ $\$ 499$ PM840 Power Amplifier. Same as above except high current circuitry added for $300 \mathrm{~W} / \mathrm{ch}$ at 4 ohm; 450 W/ch at 2 ohm .
$\$ 549$

## SPECTRASCAN

## BPA-101B Class AB Power Amplifier

Utilizes propriety-nested, multiple-feedback loops. DC-coupling with highly regulated power supply. Instant recovery from overload or clipping and protection against overload, overheating. or short circuits without the use of current limiting. $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms, $174 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; switchable to bridge operation for 350 W mono into 8 ohms . Slew rate $40 / \mathrm{V} \mu \mathrm{sec}$; FR $2-20,000 \mathrm{~Hz}$; THD $.008 \%$; IMD $0.07 \%$ : signal-to-noise ratio $98 \mathrm{~dB}: 5.25 \times 19 \times 14$ inches; 40 pounds.
$\$ 1,530$

## SUPERPHON

DM $220100 \mathrm{~W} / \mathrm{ch}$ Power Amplifier
$100 \mathrm{~W} / \mathrm{ch}$ power amplifier with rated power bandwidth $20-20,000 \mathrm{~Hz}$
$\$ 899$

## SUMO

## NINE PLUS Power Amplifier

Class A power amplifier without any active bias circuits or thermal tracking networks. Features bal-anced-bridge configuration; push-pull quadrature feedback circuits; Discrete-Darlington output stage: direct-coupled circuitry from input to output. Power output $65 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-20,000 \mathrm{~Hz}$ with $<0.1 \%$ THD; FR $20-20,000 \mathrm{~Hz} \pm 0.25 \mathrm{~dB} ; 14 \times 8.5 \times 7$ in; 35 lb .
\$1,199

## Andromeda Power Amplifier

Class AB power amplifier with full-wave quadrant differential balanced-bridge topology using 4 independent push-pull feedback loops. Power output 200 W/ch continuous average into 8 ohms; THD $0.05 \%$; im $0.05 \%$; slew rate $20 \mathrm{~V} / \mu \mathrm{sec}$; sens 1.8 V for rated output; dynamic headroom $1.5 \mathrm{~dB} ; 19 \times 8.75 \times 7 \mathrm{in}$; 35 Jb
\$1,099

## NINE Power Amplifier

Class A power amp with auto-biasing technology obviating thermal tracking, conventional bias, and protection circuitry. Power output $60 \mathrm{~W} / \mathrm{ch}$ continuous average into 8 ohms; total harmonic distortion $0.25 \%$; intermodulation distortion $0.05 \%$; slew rate $15 \mathrm{~V} / \mu$ sec; sens 1.0 V for rated output; $19 \times 8.75 \times 7 \mathrm{in}$; 35 lb.
$\$ 799$

## Polaris Power Amplifier

Class $A B$ power amp that does not invert phase. Power output $100 \mathrm{~W} / \mathrm{ch}$ continuous average into 8 ohms; THD $0.05 \%$; IM $0.05 \%$; sens 1.27 V for rated output; dynamic headroom $1.5 \mathrm{~dB} ; 25 \mathrm{lb}$. With custom front panel and handles. $\qquad$

## TANDBERG

TPA 3016A 220-W/ch Power Amplifier
Stereo power amp with high-current ( $100 \mathrm{amp} / \mathrm{ch}$ ) output design. Features separate power supply and toroidal transformer for each ch; zero feedback with 16 power MOSFET's in the output stage; $120,000-$ microfarad storage capacity; stable to 1 ohm ; clectronically controlled auto fan. $220 \mathrm{~W} / \mathrm{ch} .17 .13 \times 8.7 \times$ $13.75 \mathrm{in} ; 62 \mathrm{lb}$.
$\$ 4,000$
TPA-3026A 150-W/ch Power Amplifier
Stereo power amp with high-current ( $45 \mathrm{amp} / \mathrm{ch}$ ) output design. Features selected all-metal film resis


Bryston 4B Power Amplifier

## Bryston's Critical Acclaim

- "I have heard quite a few preamplifiers costing 3 times as much as this Bryston .5B, and not only would few of them sound better or be more acoustically accurate, but many would suffer by comparison." Audio Ideas Guide
- 'Overall tonal balance of the Bryston .5B preamplifier was beyond reproach, and I was particularly pleased with the clean, smooth reproduction of high frequencies."

Audio Magazine
"At the incredibly competitive price of the Bryston .5B preamplifier, we can only strongly recommend its purchase!'"

Son-Hi-Fi

- "This Bryston .5B is a high-end product in every sense of the word, even in its simplicity, and it deserves to be known as the bargain of the decade in state-of-the-art preamplifiers."

Audio Ideas Guide

- 'Speed, huge transient attack, and powerful bass response were our first subjective impressions. This Bryston 4B has dynamic range to burn."

Audio Magazine
"The new $3 B$ is neutral and self-effacing, with little character." Hi-Fi Sound Magazine

- "The Bryston TF-1 is superb, in fact the very best transformer we can recall hearing."

Hi-Fi Sound Magazine

- "The Bryston TF-1 is the best MC transformer I have yet heard, and is so well shielded that its signal-to-noise figure matches any other step-up device on the market, and probably exceeds most." Audio Ideas Guid
"I would say that the LP playback qualities of the $12 B$ with either moving coil or moving magnet cartridges are state of the art."

Audio Ideas Guide

In Canada:
: Cirngericil il MARKEING LTD.
57 Westmore Dr., Rexdale, Ontario, Canada M9V 3 Y6
(416) 746-0300

In the United States:

## [inirnsulun VERMONT

RFD *4, Berlin, Montpelier, Vermont 05602 (802) 223-6159
tors and polypropylene capacitors; zero negative feedback and discrete components. $150 \mathrm{~W} / \mathrm{ch}$ with no more than $0.02 \%$ THD into 8 ohms; $\mathrm{S} / \mathrm{N} 100 \mathrm{~dB} ; 17.13$ $\times 5.25 \times 13.75 \mathrm{in} ; 24 \mathrm{lb}$
$\$ 2,500$

## TECHNICS

SE-A3MK2 300-W/ch Power Amplifier
Features computer-drive linear-feedback Class-A circuitry; concentrated power block; extra-large transformers and capacitors for stable power supply; 4stage Darlington output circuitry: auto-load imp detector, computer-protection circuitry; large, fast peak-power meters; extra $2-\mathrm{Hz}$ low-cut input terminals; main/remote/main and remote/off pushbution speaker selectors; thick aluminum cabinet. Output power $300 \mathrm{~W} / \mathrm{ch}$ into 8 ohms: FR DC- $200,000 \mathrm{~Hz} \pm 3$ dB ; input sens/imp $55 \mathrm{mV} / 4-16$ ohms main or remote, 8 -16 ohms main and remote; damping factor 2008 ohms, 1004 ohms; $16.94 \times 8.19 \times 19.97$ in; 86 lb. .
$\$ 2,400$
SE-A 100 170-W/ch Power Amplifier
Features I voltage and I current amplifier per ch (voltage amps isolated from load by Class AA bridge circuit which drives current amp to avoid influence of complex, fluctuating speaker imps on voltage/current phase relationship, preventing counter electromotive force); massive power supply: 3 transformers (L-ch current amp, R-ch current amp, L/R voltage amps) using LC-OFC windings; $91,200-\mu$ farad filtering: magnetic isolation; vibration damping. 170 W/ch into 8 ohms, 240 W into 4; dynamic headroom $0.7 \mathrm{~dB} .17 \times 8.25 \times 18.75 \mathrm{in} ; 70 \mathrm{lb}$
$\$ 1,920$

## SE-A5MK2 150 W/ch Power Amplifier

DC power amp with linear feedback and computer drive to neutralize transient crossover distortion. Features parallel 3-stage Darlington output; powerlinear circuit to compensate for speaker imp variation; power-output meters. $150 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; FR DC-150,000 Hz $+0 /-3 \mathrm{~dB}$; IMD $0.002 \% 8$ ohms; LF damping factor $100 ; 16.94 \times 7 \times 16.36 ; 40.6 \mathrm{lb} \$ 1,035$

## THRESHOLD

## SA/12 Class A Power Amplifier

Similar to SA/l except 300 W pure class A output, no meter, 600 ohm balanced input capability, ultraprecision bias tracking circuitry with oplical isolation, independent rail power supply including dual Iransformers. DC coupled with response of DC $100,000 \mathrm{~Hz}$. Slew rate $100 \mathrm{~V} / \mathrm{msec} ; 200 \mathrm{pk}$ ampere capability; $19 \times 9.5 \times 25 \mathrm{in} ; 130 \mathrm{lb}$
\$6,000

## S/1600 Class A/AB Statis Power Amplifier

Similar to S/500 except $800 \mathrm{~W} / \mathrm{ch}$; 600 ohm balanced input capability; ultra-precision bias tracking circuitry with optical isolation; independent rail power supply including dual transformers; DC coupled with response of $\mathrm{DC} \cdot 100,000 \mathrm{~Hz}$; slew rate $100 \mathrm{~V} / \mathrm{msec}$; 200 pk ampere capability; $19 \times 9.5 \times 25 \mathrm{in}$; 130 lb.
\$6,000

## SA/1 Class A Stasis Power Amplifier

Single-ch, noninverting complimentary-symmetry power amp with N-ch JFETs in front-end signal path and proprietary Stasis output stage. This is a binary ropology in which a pure Class A voltage amp connected directly to the loudspeaker load determines signal integrity while operating in conjunction with a high-amperage currect mirror also operated in pure Class A and connected directly to the load. No global feedback is used. Output stage bias accuracy is maintained through Threshold's proprietary optoisolated optical bias technology. Frontend gain stages biased for Class-A operation at all signal levels and are subject to primary and secondary levels of cascode shielding. Output stage employs 40 ultra-wide-bandwidth power transistors each rated at 200 $\mathrm{V}, 20$ amperes. No fusing is imposed between output and load. Input and output connectors have goldplated contact surfaces. Circuit boards are military
grade glass-epoxy and all internal connections are hand soldered. Operation is allowed into any load as permitted by power-supply fuses and thermal-protection circuitry. Large illuminated front-panel peak power meter covers -30 to +3 dB . Power supply $1,000 \mathrm{w}$ toroidal transformer, $120,000 \mu \mathrm{~F}$ capacitance. Rated power 160 W rms into 8 ohms of resistive or reactive imp $20-20,000 \mathrm{~Hz}$ at no more than $0.05 \%$ THD; idling bias 320 W ; bandwidth at -3 dB points, 7 Hz and $100,000 \mathrm{~Hz}$; slew rate $50 \mathrm{~V} / \mu \mathrm{sec}$; IMD $0.05 \%$; input imp 75,000 ohms; output imp 0.03 ohms; output current capability 40 amperes continuous, 150 amperes peak; $19 \times 9.5 \times 17.5 \mathrm{in} ; 79 \mathrm{lb} \$ 2,750$

SA/2. Similar to SA/1 except no output power meter. 100 continuous W/ch from $20-20,000 \mathrm{~Hz}$ with no more than $0.05 \%$ THD into 8 ohms; idling bias $\mathbf{2 4 0}$ watts; FR $7-100,000 \mathrm{~Hz}$ at -3 dB points; $\mathrm{s} / \mathrm{N}-100$ dB unweighted, referenced to rated output; slew rate $50 \mathrm{~V} / \mu \mathrm{sec}$; ImD $0.1 \%$; 30 continuous, 100 peak ampres output capability. Output stage employs 28 ultra-wide bandwidth, 200 V .20 ampere, 250 W rated devices. Power supply uses 700 W continuous rating toroidal transformer, $60,000 \mu \mathrm{~F}$ capacitance. $19 \times 9.5 \times 13.12 \mathrm{in} ; 56 \mathrm{lb}$.
$\$ 2,750$
SA/3 Class A Stasis Power Amp. Similar to SA/2 except dual ch, lower power configuration. $50 \mathrm{~W} / \mathrm{ch}$ rms both channels driven from $20-20,000 \mathrm{~Hz}$ with no more than $0.05 \%$ THD into 8 ohms; idling bias 240 watts; frequency bandwidth 7 Hz and $100,000 \mathrm{~Hz}$ at -3 dB points; $\mathrm{s} / \mathrm{N}-100 \mathrm{~dB}$ unwtd referenced to rated output; slew rate $50 \mathrm{~V} / \mu \mathrm{S}$; IMD $0.1 \%$; 16 continuous, 80 peak amperes capability/ch. Output stage employs 14 ultra-wide bandwidth, 200-V, 20 ampere, $250-\mathrm{W}$ rated devices per ch. Power supply uses $700-\mathrm{W}$ continuous rating toroidal transformer, and 60,000 microfarads capacitance. $19 \times 9.5 \times 13 \mathrm{in}$; 56 lb
\$2,750

## S/500 Class A/AB Stasis Power Amplifier

Dual-ch, noninverting complementary-symmetry power amp employing the same signal-path and optical topology as SA-series amps except current bootstrap section of Stasis ouput stage is operated under high bias as Class A/AB. No global feedback employed. Front-end gain stages and voltage amp section of Stasis output stage are biased for Class A operation at all signal le vels. Front-end signal transistors are subject to primary and secondary levels of cascode shielding. Modular construction. $250 \mathrm{~W} / \mathrm{ch}$ rms from $20-20,000 \mathrm{~Hz}$ with no more than $0.1 \%$ THD into 8 ohms; idling bias 240 watts; frequency bandwidth at -3 dB points 7 Hz and $100,000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N}$ -100 dB unwtd referenced to rated output; slew rate $50 \mathrm{~V} / \mu \mathrm{s}$; IMD $0.1 \%$; 12 continuous, 100 peak amperes capability/ch. Output stage employs 20 ultra-wide band width, $200-\mathrm{V}, 20$-ampere, $250-\mathrm{W}$ rated devices per ch. Power supply uses $1,000-\mathrm{W}$ continuous rating toroidal transformer, and 120,000 microfarads of capacitance. Output imp 0.1 ohm $20-20,000 \mathrm{~Hz}$. 19 x $9.5 \times 17.5 \mathrm{in} ; 78.5 \mathrm{lb}$.
\$3,700
S/300 Class A/AB Stasis Power Amp. As model S/500 except rated power $150 \mathrm{~W} / \mathrm{ch}$ rms into 8 ohms , both chs driven $20-20,000 \mathrm{~Hz}$ at $0.1 \%$ THD; output transistor complement fourteen $200-\mathrm{V}, 20$-ampere devices/ch; power supply 700-W toroidal transformer, $60,000 \mu \mathrm{~F}$ capacitance; output current capability 10 amperes/ch continuous, 80 amperes/ch peak; $19 \times$ $9.5 \times 13 \mathrm{in} ; 56 \mathrm{lb}$. $\qquad$ . \$2,750 S/200 Class A/AB Stasis Power Amp. As model S/300 above except rated power $100 \mathrm{~W} / \mathrm{ch}$ rms into 8 ohms, both chs driven $20-20,000 \mathrm{~Hz}$ at $0.1 \%$ THD; idling bias 160 watts output transistor complement eight $200-\mathrm{V}, 20$-ampere devices/ch; power supply $400-\mathrm{W}$ toroidal transformer, $30,000 \mu \mathrm{~F}$ capacitance: max output current 8 amperes/ch continuous, 50 amperes/ch peak; $19 \times 9.5 \times 17.5 \mathrm{in} ; 44 \mathrm{lb} . . \$ 1,800$

## VECTOR RESEARCH

VA-1450 Power Amplifier
Features high-current, 8-output transistors, dual
transformers; bridgeable to 200 W mono; phase inverted line-out; 100 continuous average $\mathrm{W} / \mathrm{ch} 20-$ $20,000 \mathrm{~Hz}<0.08 \%$ THD into 4 ohms; dynamic headroom 2.5 dB ; IHF IMD $0.08 \%$; FR $10-40,000 \mathrm{~Hz}$ $\pm 1 \mathrm{~dB} .17 \times 3 \times 12 ; 21 \mathrm{lb}$

## WINGATE AUDIO

2000A Class A Power Amp
Class A power amplifer with 100\% mosFET. Features no negative feedback; dual-mono construction; MOSFET regulated power; toroidal power transformer: ultra-wide bandwidth. 100 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ with no more than $0.5 \%$ total harmonic distortion into 8 ohms; FR $0.1-250,000 \mathrm{~Hz}$ $+0,-3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}>100 \mathrm{~dB}$; dynamic headroom 1.6 dB ; slew rate $100 \mathrm{~V} / \mu \mathrm{sec}$ : intermodulation distortion $0.5 \%$; gain 30 dB ; input imp 25,000 ohms; $19 \times 8.12 \mathrm{w}$ 22 in ; 67 lbs
$\$ 3,900$
$4000 \mathrm{M} .250-\mathrm{W}$ mono block, same performance as 2000A except power output 250 W , damping factor $>60$; current drive capability 128 amperes peak to peak, continuous current drive 46 amperes $4,995 / \mathrm{pr}$

## WRIGHT AUDIO

## Stereo 70 Power Amplifier

$35 \mathrm{~W} / \mathrm{ch}$ vacuum-tube stereo power amplifier. Features all hand-wired circuitry; solid red oak base; sens 1.3 V rms input for 35 W output; input imp 470 kilohms; output imp 4, 8, 16 ohms each channel: binding post terminals; damping factor 15 ; power consumption $190 \mathrm{~W}, 110-120 \mathrm{~V}, 50 / 60$ cycles. 33 lb . Already assembled.
$\$ 850$
Kit.
$\$ 750$

## YAMAHA

## MX-10000 Power Amplifier

Limited Centennial Edition power amplifier. Features dual-amp class-A operation; hyperbolic converting non-switching circuitry; power MOSFET's; high-precision analog dB scale peak level meter. 250 W/ch minimum root mean square into 8 ohms from $20-20,000 \mathrm{~Hz}$ with less than $0.0005 \%$ total harmonic distortion. Titanium grey with high luster walnut end panels; 120 lb .
$\$ 7,000$

## MX-1000U Power Amplifier

Power amplifier with hyperbolic conversion amplification circuit. $260 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from 20-20,000 Hz with less than $0.003 \%$ THD. Features A + B + C speaker switching: 26 -segment LeD power level meters; on/off switch; independent L/R level control; 4 digit numerical power output display; LED meter and digital peak hold display; meter display load selectors; compatible with banana plugs. $600,000 \mu \mathrm{~F} \times 2$ power supply capacity.
\$1,199

## MX-800U Power Amplifier

Power amplifier with hyperbolic conversion amplification circuiṭ. $170 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from 20-20,000 Hz with less than $0.003 \%$ THD. Features $\mathrm{A}+\mathrm{B}+\mathrm{C}$ speaker switching: 26 -segment leD power level meters; on/off switch; independent $L / R$ level control; meter display load selectors; compatible with banana plugs. $600,000 \mu \mathrm{~F} \times 2$ power supply capacity . $\$ 849$

## MX-600U Power Amplifier

Power amplifier with hyperbolic conversion amplification circuit. $135 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from 20-20,000 Hz with less than $0.003 \%$ THD. Features A+B speaker switching; 12-segment LED power level meters; on/off switch; independent L/R level control: compatible with banana plugs. $600,000 \mu \mathrm{~F} \times 2$ power supply capacity.
$\$ 529$

## M-35B Power Amplifier

Features 2 or 4 channel output; independent level control; high dynamic power; low impedance drive capability. $40 \times 2$ or $20 \times 4 \mathrm{~W} / \mathrm{ch}$ min rms into 8 ohms from $20-20,000 \mathrm{~Hz}$ with less than $0.003 \%$ THD; 13 lb.

## When you've arrived. Proton.

Your audio-video system should be a reflection of your lifestyle. That's why you'll want the ultimate in picture, sound and design.

Introducing Proton's new AV27 audio-video system.

At the heart of the system is our superb, remote-controlled 300 Series audio components with exclusive Dynamic Power on Demand ${ }^{1 m}$ (DPD ${ }^{1 m}$ ) Since its introduction, DPD has received the highest acclaim. It does what no other technological innovation has for CD, other digital recordings, or hi-fi video listening pleasure. DPD boosts the amp's output up to four times its rated power, to let you hear even the highest musical peaks clearly, without distortion.

When you put the 300 Series together with our new matching speakers, you'll have a combination that sounds as extraordinary as it
moks. And, it's the perfect complement to Proton's stunning new 27" flat screen stereo monitor/receiver.

The Proton AV27 audio-video system. Once you own it, you'll know you've arrived
The ultimate audiofideo guide is yours free for the asking.

Proton's Ultimate System Guide for AudioNideophiles tells you everything about the innovative technology and design that go into creating the renowned Proton line.

For your copy, which includes a list of the Proton retailers near you, call (800) 772-0172. In California, (800) 428-1006.

## PROTON

c L<br>737 W Artesia Blvd Compton CA 90220



The complete report:
Sometimes products are too cheap for their own good, and people don't take them seriously: the Superphon Revelation Basic Dual Mono preamp, Rega RB300 arm, AR ES-1 turntable, Shure V15-V MR cartridge, and the B\&K ST-140 power amp. They can't be any good because they cost so little, right?

Wrong, of course.
Adcom appears to be having the same problem with their $\$ 299.95$ GFA- 535 amp . Credibility.

Now if this amplifier were imported from England and sold for $\$ 599.95$, then maybe it would be taken seriously. And highly praised, no doubt.

For the baby Adcom is one of the finest solid-state amps I have heard. No, not the best; I'm not sure what is the best. But it's an amplifier that is so good for so little money as to be practically a gift.

Actually, when Rob Ain from Adcom called, I was about as enthusiastic about the GFA-535 as you were before you finish reading this piece. But Rob insisted, "You've gotta hear this amp."

He brought it over the next day, along with the GFP-555 preamp ( $\mathbf{\$ 4 9 9 . 9 5 \text { ), and we put }}$ both pieces into the rest of the system: a Shure Ultra 500 in a Rega RB300 arm on an AR ES-1 table, with Quad ESL-63 speakers on Arcici stands. Then we chatted for a half hour or so while the electronics warmed up.

And then, simultaneously, the two of us decided to shut up and listen.

## Adcom GFA-535 power amplifier.

"I've never heard the Quad ESL-63 sound better," Rob said. Of course, he was hardly an impartial observer, but the sound was extraordinarily clean, detailed, and musical. If it wasn't the best sound $I$ have ever heard from Quads, it was pretty close.

This humble $\$ 300$ amplifier was driving a pair of very revealing $\$ 3000$ speakers and giving a very good account of itself. (We listened first to some Goran Sollscher classical guitar.)
"So how come this product isn't flying off the dealers' shelves?" I asked Rob.
"I don't know. Everyone wants the GFA-555 with 200 watts per channel. Including people who don't need it."
"Does the GFA- 555 sound any better?" I asked.
"It's our aim to have all our amps sound pretty much the same. You pay more money, you get more power."

Rob pointed out that while the GFA- 535 is rated at 60 Wpc , it puts out more like 80 . And while I did not do any measurements, my experience with other amps tells me Rob's right. I suppose Adcom doesn't want to steal sales from its GFA-545, rated at 100 Wpc and selling for $\$ 200$ more.

After a couple of hours, Rob left, grinning from ear to ear, and I later sat down to listen alone. True, when I tried certain Telarcs and pushed hard I could get the amplifier to cliptwo LEDs quickly light up (very useful). But the Quads were running out of the ability to use the power anyway. My first impressions
were confirmed: the GFA-535 is one of the best amplifiers around for driving Quads. Spendor SP-1s, too.

Suddenly, it hit me what this meant. Conventional wisdom had been dealt a severe blow. You know, the old saw that you should never power a good pair of speakers with a

## "The GFA-535 reminds me of...amplifiers that sell...for about three and five times the price."

cheap amplifier. Here was a cheap amp-one of the cheapest on the market-that sounded good with Quads, Spendors, later Vandersteens. Probably Thiels, too-at least the CS1 What it means is you can stretch your speaker budget a bit and get the speakers you really want, then economize by buying an Adcom GFA-535 for $\$ 299.95$. True, you may be a little power shy, but probably not much. And to say the least, the GFA- 535 would make a decent interim amp.
What does the GFA- 535 sound like? (You thought I'd forget that part, right?) Well, this is one of the most neutral amps I've heard.

## "...the baby Adcom is one of the finest solidstate amps I have heard...so good for so little money as to be practically a gift:'

While it doesn't sound particularly tubelike, it avoids the typical transistor nasties through the midrange and into the treble. I wouldi't call it sweet-there's no euphonic coloringbut it isn't cold or sterile. What it is, is smooth. And detailed. Far more detailed than I would ever imagine a $\$ 300$ amplifier could be. The GFA- 535 reminds me of the Eagle 2A and PS Audio 200C, amplifiers that sell, respectively, for about three and five times the price. Of course, they have more power. And they are more detailed. The point is, the Adcom comes close. Very close.

The bass, like everything else, is neutral, certainly not fat and overdone. But it's here where
you notice that this amp is not a powerhouse. You just don't get the solidity and extension you get with a very powerful (and expensive) solid-state amp. Nor do you get the breadth and depth of soundstage that you often find with a very powerful amp. The Adcom GFA535 sounds a wee bit small, which it is.

My only criticism, and it's more of a quibble, is that the speaker connectors are nonstandard and unique (so far as I know). You insert bared speaker wire into a hole and twist the connector tight a quarter turn. Most speaker cables will fit, but some will not. Certainly MIT won't. Neither will the best Kimber, the kind with eight clumps of strands. The less costly four-clump Kimber will, and proved an excellent choice. My sample amp was quiet-
> "This amplifier is so good and so cheap that I think any CD owner who buys an integrated amp is nuts."

no hum -and ran cool. There are selectors for two sets of speakers. And the 535 looks nice.
And talk about economy: If you're not into L.Ps anymore, you could buy a Mod Squad, dbx, or Old Colony line-level switching box -or possibly a B\&K Pro 5 preamp, with its switchable line amp section (only $\$ 35(0)$, or the Adcom SLC- 505 passive preamp ( $\$ 150$ )-and run it with a CD player. In fact, if you are into CD only (no tape, no tuner, no phono), you could buy a CD player with a variable volume output and run it directly into the Adcom. This amplifier is so good and so cheap that I think any CD owner who buys an integrated amp is nuts.
In its price category, the Adcom GFA-535 is not only an excellent choice; it's the only choice. The real question is whether you should buy one even if $\$ 299.95$ is much less than you planned to spend for an amp-ie, whether you should put the money into a better CD player or pair of speakers instead.

11 Elkins Road, East Brunswick, NJ 08816 U.S.A. (201) $390-1130$ Distributed in Canada by: PRO ACOUSTICS INC. Pointe Claire, Quebec H9R 4X5


## ACCUPHASE BY MADRIGAL

## C280L. Class A Preamplifier

All-stage Class A push-pull arrangement and DC. servo-controlled direct-coupled unit amps and signal paths. Built-in head amp for MC cartridges; separate power transformers for each ch ( +26 dB or +32 dB ); MC input-imp selector switch; separate $R$ and $L$ input-level control; 2 -stage selectable loudness compensation. Phono input 2 mV . phono (head amp on): $0.1 \mathrm{mV} / 0.5 \mathrm{mV}$ selectable; line/tuner input 126 mV : rated output 2 V ; line/tuner $\mathrm{S} / \mathrm{N} 110 \mathrm{~dB}$ : phono $\mathrm{S} / \mathrm{N} 85$ dB: phono $\mathrm{s} / \mathrm{N}$ (head amp on) $72 \mathrm{~dB} \ldots .$. . $\$ 7.850$

## C270 Class A Preamplifier

Cascode push-pull circuits on all stages; separately regulated power supply for each gain stage in each ch: fully balanced input and output for CD player: 10 inputs: selectable loudness compensation. Inputs for MM phono; tape; tape 2; CD player: CD player/balanced: luner: 4 line-level sources. $\mathrm{s} / \mathrm{N} 92 \mathrm{~dB}, 34.4$ lb.
$\$ 5.750$

## C200V Preamplifier

Preamp and control center with II inputs: separate tone controls for each ch with selectable turnover frequencies; some inputs and outputs accessible from front panel. Inputs for MM phono. MC phono, tape. tape 2. tape 3; aux, phono 2, phono 3. CD player. tuner: line 2: line 3. Max output 8.0 V ; MM phono sens 0.5 mV for $0.5-\mathrm{V}$ output al 1.000 Hz : MM phono input overload level $300 \mathrm{mV} .30 \mathrm{lb} \ldots .$.

## ACOUSTIC RESEARCH

## AR C-06 8-Input Preamlifier

Features infrared remote control of inputs and volume via T-04 tuner cable link: switchable Mm input capacitance: gold-plated phono inputs: separate headphone amp. Inputs for MM phono; MC phono: tape: tape 2: CD player: tuner: video. FR $13-50.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$ : тHI) $0.005 \%$; phono sens/imp 0.8 $\mathrm{mV} / 47$ kilohms (Mc). $60 \mu \mathrm{~V} / 180$ kilohms (MM); phono overload level 180 mV (MM). 15 mV (MC):CD input sens/imp $50 \mathrm{mV} / 15$ kilohms; tuner/tape input sensitivity/impedance $50 \mathrm{mV} / 33$ kilohms. $3.31 \times 17 \mathrm{x}$ 13 inches. .
$\$ 399$


#### Abstract

\section*{ADCOM}

GFP-5s5 Preamplifier Features two-sided copper-plated circuit board for low noise and hum; switchable phono-input capacitance: switchable gain on phono input: tape dubbing: separate headphone amp; 2 sets of outputs (AC• coupled. $1 x$ coupled): signal-processor loop; 5 pairs of high-level inputs. Can record from one input while listening to another input. Inputs for MM phono: MC phono; tape: tape 2; ('D) player; tuner; video. FR IC'$400.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; тHI) $0.005 \%$; MM phono sens 0.4 mV for $0.5-\mathrm{V}$ output at $1,000 \mathrm{~Hz}$; sens for linelevel inputs $40 \mathrm{mV} .17 \times 3.25 \times 12.75 \mathrm{in} \ldots . . \$ 500$ GFP-555W, As above with white front panel . $\$ 550$ GFP-555S. With silver front panel. . . . . . . . . $\$ 550$

\section*{GTP-500 Preamplifier/Tuner}

Preamplifier with built-in tuner can be used with Adcom or other power amps. Wireless remote control included. Remote sensors available for remote control from different rooms. Preamp section


features inputs for MM phono; tape: tape 2; CD player; tuner. Tuner section features quartz-referenced digitally synthesized tuning; auto up and down scan; $84 \mathrm{M} / \mathrm{FM}$ presets; 5 -LED signal-strength display; high-blend circuit: 2 sets of outputs (AC coupled. DC coupled). $\mathrm{S} / \mathrm{N}$ phono A-wtd 85 dB : IMD preamp $0.0015 \%$; sens tuner 36.5 dBf stereo; THI) tuner $0.09 \%$ stereo at $1.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}$ tuner 75 dB stereo; sep tuner 52 dB at $1.000 \mathrm{~Hz} .17 \times 3.25 \times 12.75 \mathrm{in} \ldots .$. GTP-500W. As above with white front panel . $\$ 650$ GIP-500S. With silver front panel. . . . . . . . . $\$ 650$

## Accessories

RM-3. Optional rack-mount adaptors for GFP-555 and GTP-500.
\$20/pr RN-3W. RM-3 in white . . . . . . . . . . . . . . . . \$25/pr RM-3S. RM-3 in silver . . . . . . . . . . . . . . . . \$25/pr XR-500. Optional remote sensor for GTP-500 . \$90

## AUDIO DESIGN ASSOCIATES

## ADP-8 Preamplifier

Preamplifier with 8 -input capability. Features 5 sterco source inputs: 3 stereo tape inputs: 1 siereo signal processor loop input; input imp <47k ohms; max input level $\pm 8$ volts: 3 main outputs: 3 tape outputs; 1 processor loop output: output imp $>100$ ohms: max output level $\pm 12$ volts: FR $20-20.000 \mathrm{~Hz}$ $\pm 0.25 \mathrm{~dB}$; THD $0.05 \% ; \mathrm{s} / \mathrm{N}-85 \mathrm{~dB}$; volume, balance. bass, mid, treble and source selection controls: 1 switched outlet. $3.5 \times 19 \times 13.5 \mathrm{in} ; 9 \mathrm{lb} \ldots . . \$ 995$

## AUDIO DYNAMICS

## (200) Preamplfier

Audio/video preamplifier with built-in Dolby and matrix surround-sound processors. Features simulated stereo; bass. midrange, and treble tone controls; tone-defeat switch; loudness switch: muting switch: external processor loop; dubbing; separate rec and listening selectors for recording one source while listening to another: inputs for MM/MC phono; tuner: All x : CD player: video montior: 3 audio or video tape decks: FR $10-50,000 \mathrm{~Hz}+0,-3 \mathrm{~dB}$ (line level), $20-$ $20.000 \mathrm{~Hz} \pm 0.25 \mathrm{~dB}$ (phono). $4.0 \times 11.75 \times 12.62$ in . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 599$

## AUDIO RESEARCH

## SP-11MKII Stereo Hybrid Preamp

High-Definition. preamp with both vacuum tubes and field effect transistors. Inputs for MM phono/mC phono; tape; tape 2: aux; CD player; tuner: video. Fcatures auto muting for warm-up. brown-out, powerline interruption: manual muting: bypass switch for audiophile-quality program material: absolute phase switch; level control: toroidal power transformer. FR $0.1->200,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{S} / \mathrm{N} 110 \mathrm{~dB}$ : THI) $<0.005 \%$; MM phono sens 0.088 mV for 0.5 V output at 1.000 Hz : MM phono input overload level 350 mV at $1,000 \mathrm{~Hz}$; scns for line-level inputs 18 mV . $46 \mathrm{lb} ; 5.25 \times 19 \times 10.25-\mathrm{in}$.
$\$ 4.995$

## SP9 IIybrid Stereo Preamp

On-board power supply: auto mute circuit for warmup. voltage drop; switchable muting: 2 tape inputs, 2 tape outputs: 2-position tape-monitor switching: gold-plated input/outpul jacks connect ground before hot. disconnect hot before ground; shielded toroidal power transformer; internally adjustable phono-
section imp: 26 D ) 8 vacuum tubes ( 1 in phono stage. I in line stage); compatible with many MC cartridges: black front panel extra. FR (high level, $\pm 0.5 \mathrm{~dB}$ ) 5 $50,000 \mathrm{~Hz}$; magnetic phono, $\pm 0.3 \mathrm{~dB}$ of R144. $30-$ 40.000 Hz ; max output 2 V rms ; distortion $<0.01 \%$ at 2 Vrms out; input imp 50 k ohms (all high level):

phono 47 k ohms (changeable). $5.25 \times 19 \times 10.25-\mathrm{in}$ : 13 lb net. 22 lb shipping weight
$\$ 1.695$

## MCP33 Vacuum-Tube Preamp

Preamp for low-output MC cartridges. Features front-panel gain and imp selectors. FR $20-50,000 \mathrm{~Hz}$ $\pm 1 \mathrm{~dB}$ : max output 10 V : THI) $0.005 \%$ at 100 mV : 1mD $0.01 \%$ at $100 \mathrm{mV}: 5.25 \times 19 \times 12.38$-in: 14 lb. .
$\$ 1.395$

## SP-7 Solid-State Stereo Preamp

With Analog Module technology. Inputs for MM phono: tape: aux: tuner: aux 2. Features manual and auto muting; close-tolerance segmented gain control; front-panel receptacle switch that operates 3 relaycontrolled outlets with $1,600-\mathrm{W}$ capacity: low-surge turn-on circuitry: isolated ground construction that floats all inputs and outputs: rejection filters for low RFI. TVI. CB interference. FR $1-50.000 \mathrm{~Hz} \pm 0.25 \mathrm{~dB}$ high-level. $10-40,000 \mathrm{~Hz}$ phono; THD and ImI) $<10.002 \%$ at 2 V rms; MM sens 0.5 mV for 0.5 V output at 1.000 Hz : gain phono/high-level to main outputs $60 / 26 \mathrm{~dB}$; input/output imp $50 \mathrm{k} / 250$ ohms; phono overload 500 mV at 1 kHz ; output level 2 V rms: noise high-le vel/phono $250 / 2 \mu \mathrm{~V}: 3.5 \times 19 \times 8.5$; 20 lb shipping weight.
$\$ 995$

## AUDIO BY VAN ALSTINE

## Transcendence Fet-Valve Preamplifier

Class-A compound hybrid construction preamp. Fealures toroidal power transformer; regulated power supply: power bandwidth $>800.000 \mathrm{~Hz}$ : RIAA phono inpuls; 2 sets of tape inputs with tape-10-tape monitoring: 3 sets of line-level inputs for digital and analog sources; EPL inputs and outputs; precision volume and balance controls: separate bass and treble tone controls for each channel; two pairs of audio outputs: amp-driven headphone jack: 200 W rated speaker selector switch. $13.5 \times 12.5 \times 4.5 \mathrm{in}$; 11 lb.

## Fet Three Plus Preamplifier

Features dual phono, dual tape and two additional high-level inputs; tape-to-tape monitoring; precision volume and balance controls; bass and trebel controls; two audio outputs; headphone jack: EPL loop; audio circuits use fast FET op-amps with hybrid currentamps; THD $<0.003 \%$. A vailable at lower price in simpler chassis. $17 \times 9.3 \mathrm{in}$; $13 \mathrm{lb} . \ldots . .$. . $\$ 795$

Super Pas Three Preamplifier
Vacuum-tube preamp. Features precision volume
and balance conirols; RIAA equalization; phono and 3 or 5 line-level inputs; tape monitoring capability $13.5 \times 9 \times 4.5 \mathrm{in} ; 9 \mathrm{lb}$. Factory wired.... Kit.

## Fet Three Preamplifier

Features linear fast FIT op-amp circuits: tighttracking volume and balance controls; balanced tone controls; matched phono circuits; luner. tape, and Al/ inputs: 2 switched ac outlets. $13.5 \times 8.5 \times 3$ in; 7 lb.
$\$ 340$

## BEDINI AMPLIFIERS

## B(-800) (lass A Preamplitier

Class A flat preamp with inputs for 2 tapes, CD. IDAT. tuner, phono: volume and balance controls; FR $1-110,000 \mathrm{~Hz}+0 .-3 \mathrm{~dB} ;$ THD $<.1 \% ;$ (MD $<.03 \%$; KIAA phono deviation $10-30.000 \mathrm{~Hz} \pm .25 \mathrm{~dB}: 5 / \mathrm{N}$ phono to rec out $-100 \mathrm{~dB} /$ line to pre out $-110 \mathrm{~dB} ; 5 \mathrm{x}$ $19 \times 13.88-\mathrm{in}$; 12 lb
$\$ 1.495$

## BC-866 Class A Preamplifier

Class A flat preamp with inputs for phono. tuner. tape. (D). Al $1 \mathbf{~ ; ~ b a l a n c e ~ a n d ~ v o l u m e ~ c o n t r o l s ; ~} F$ R 1 $110.000 \mathrm{~Hz}+0 .-3 \mathrm{dH} ; \mathrm{THI})<.15 \% ;(\mathrm{MI})<.05 \%$; RIAt phono deviation $20-25.000 \mathrm{~Hz} \pm .25 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ phono to rec out $-90 \mathrm{~dB} /$ line to pre out $-100 \mathrm{~dB} ; 3 \times 19 \times 8.5-$ in: 9 lb .
$\$ 695$

## BELLES RESEARCH

## BEIII.E.S 50 Stereo Preamplifier

Solid-state preamp with user flexibility of functions. Features discrete nospet bipolar hybrid circuitry: class $A$ direct coupled outputs; van den Hul wiring:

unregulated high energy power supply: 30 v 4 torodial transformer;defeatable subsonic filter: two way tape dubbing flexibility; inputs for phono low level and high level; tuner, CD player, video Al X . tape I. tape 2: FR $20-20.000 \mathrm{~Hz} \pm .1 \mathrm{~dB} ; \mathrm{S} / \mathrm{N} 86 \mathrm{~dB}$; THI) $05 \%$; 11 lb: $2 \times 17 \times 10-\mathrm{jn}$
\$895

## THE DAVID BERNING COMPANY

## TF-12 Preamplifier

Dual-mono tube preamp with differential triode design. Features digitally controlled switching matrix (I-dH sleps over $80-\mathrm{dB}$ range) for volume and balance functons 10 avoid colorations; IEl) dot-matrix displays relative levels of both channels in dBs; highfrequency resonant power supply; wireless remote control of volume. balance. and mute; high-gain line section ( 32 dB ). Inputs for AM phono: MC phono: tape; A1M: (I) player; tuner; video. FR $5-100.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$ : WM phono sens 0.38 mV for $0.5-\mathrm{V}$ output at 1.000 Hz ; sens for line-level inputs $32 \mathrm{mV} . \$ 2,950$

## B\&K COMPONENTS

Sonata Series NC-101 Preamplifier
MM/Mc switchable preamp. FR $1-150,000 \mathrm{~Hz}-0,-5$ dB : IHI $) 0.02 \% ; 2$ tape loops; 2 tone controls: MM sens .8 mV : MM s/N 80 dB ; MC $\mathrm{s} / \mathrm{N} 80 \mathrm{~dB}$; Tiffany connectors; optional balanced output.
$\$ 898$

## Pro-10NIC Preamplifier

Preamp with built-in MC stage. Inputs for MM phono. MC phono, tape. A1 X. CD player, tuner. FR $1-100,000$ $\mathrm{Hz} \pm 3 \mathrm{~dB}$; max output 6 V ; THI) $0.01 \%$; IMI) $0.01 \%$ 111 f : MM phono sens 0.5 mV for $0.5-\mathrm{V}$ output at 1.000 Hz: MM phono input overload level 100 mV , sens for line-level inputs $0.450 \mathrm{mV} .3 .5 \times 19 \times 10$-in; $12 \mathrm{lb} \$ 648$

Pro-10 Preamplifier
Preamp with separate power supply and gold-plated connectors for positive contact and reliability. Inputs
for MM phono, tape, $41 \lambda$, CD player, video, tuner. FR $1-100.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max output 6 V ; THD $0.01 \%$; IMI) $0.01 \%$ IHF; MM phono sens 0.5 mV for $0.5-\mathrm{V}$ output at $1,000 \mathrm{~Hz}$ MM phono input overload level 100 mV . sens for line-level inputs $0.450 \mathrm{mV} .3 .5 \times 19$ $\times 10$-in.
$\$ 598$

## Pro-5 Preamplifier

Preamp features 5 high-level inputs: 1 phono stage with 57 dB gain; balance, volume, bass, treble controls: gold-plated RCA connectors: moving-coil

capacity. Inputs for MM phono, tape, tl Y, CD player tuner, video. FR $1-100,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{S} / \mathrm{N} 100 \mathrm{~dB}$; Mm phono sens 0.7 mV for $0.5-\mathrm{V}$ output al 1.000 Hz : MM phono input overload level 105 mV at 1.000 Hz sens for line-level inputs $0.636 \mathrm{mV} .3 .5 \times 19 \times 10-\mathrm{in}$ 12 lb
$\$ 398$

## BOULDER AMPLIFIERS

## Modular Preamp Sistem

Each module has gold-plated connectors. uses common power supply and measures $4.2 \times 3.5 \times 14.25 \mathrm{in}$. MS10. Phono preamp module does RIAA EQ and gain: $2990 \mathrm{amps} / \mathrm{ch}$ : gain adjust: inputs for high-level MC and MM: max gain 46 dB ; optional input for lowlevel MC"s has 20-dB gain: RCA inputs standard. 3 pin optional: unbalanced RCA outputs: sclid-state balanced output for pro use
$\$ 838$ MS11. As above with triple F switchable Bessel 3-

pole low-cut filter at 10,20 , or 30 Hz
$\$ 986$
-Pin Connectors For unbalanced feet to halanced input (in addition to RCA connections). . ..... $\$ 44$ Solid-State Balanced Output. Inverting BA990's, 3pin connectors . ........... . . . . . . . . . . . . . . $\$ 336$ Solid-State MC Input. Bridging, with $20-\mathrm{dB}$ gain

S25
Transformer MC Input. With Jensen MC Iransformers $\$ 489$
MS21. Selector-switch module with inputs for phono, CD, tuner, tape 1 and 2, Allx: dubs between decks $\$ 449$
MS31. Output-controller module sets volume and balance, switches stereo/mono. normal/reverse image, and mute ( $-\mathbf{2 0} \mathrm{dB}$ ); unbalanced output: RCA type and 3-pin connectors. Optional balanced output.
$\$ 652$
1S32. Similar to MS31 except adds high-imp buffered inputs, Penny \& Giles volume control, individual-ch polarity switches. Optional balanced input and/or output. ...................... . $\$ 1.191$ Solid-state balanced output adds inverting BA990's. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 292$ Transformer balanced output . . . . . . . . . . . . . $\$ 489$ MS01. Power supply module for up to 4 of above modules; bidirectional tracking voltages; toroidal power Iransformers: oversize heatsinks; current limiting: LED indicaves power or unregulated voltage.
CP02. Shor power cable (1 needed for each module)
CP06. Long power cable (I needed for remoting phono preamp). . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 30$
MF01. Mainframe houses I of above modules \$155 MF02. Mainframe houses 2 of above modules. Half rack size $\$ 163$
MF04. Mainframe houses 4 of above modules. Full
rack size with removable rack-mount cars. . . . \$21I Dis00. Blank module panel for covering unused slots. . $\$ 55$
CA(\%). 6-ft pair interconnects for connecting phono preamp remotely
$\$ 69$ CA01. $8^{*}$ pair of gold-plated RCA interconnects for connecting modules in frame $\$ 49$ Price varies with options: complete system with MS10, MS21, MS31. MS01. MF04, CP02, and CA01.
$\$ 2.841$

## BRYSTON

## 12B Preamplifier

Control preamp can play 1 source while taping or remoting another. Features stereo/mono/mute switch: 14-V headroom. Inputs for MM phono, MC phono, tape, tape 2. CD player, tuner; video. S/N -84 dB; IHD 0.005\%: $1.75 \times 19 \times 11$-in . . . . . . . $\$ 1.595$ 11B. Second MM input instead of MC input \$1.175

## 5B Preampffier

Basic preamp with inputs for MM phono. tape. (D) player, tuner. $F R 20-20.000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$ : max output 14 V : THD $0.005 \%$; IMI) $0.005 \%$ IHF: $1.75 \times 19 \times 9-\mathrm{in}$ : 9 lb.
$\$ 650$

## CAMBRIDGE AUDIO

## C75 Preamplifier

Inputs for MM/MC phono (switchable). tape. tape 2. Features dubbing capabilities; straight-line design; solid-wood end panels. FR flat within 0.1 db $20-$ $80,000 \mathrm{~Hz}$; TH1, $0.005 \% 20-20,000 \mathrm{~Hz}$; max output 12 V : Mm input 2.6 mV at 47 kilohms; MC input 0.3 mV at 47 kilohms: $\mathrm{S} / \mathrm{N}$ мм 82 dB , line 96 dB . . . . . $\$ 698$

## C 50 Preamplifier

Connections for $\mathbf{4}$ input sources plus tape. Features passive tone controls with tone bypass switch and two outputs. one being a passive direct output after the volume control and the other a normal output.MM or MK switchable phono inputs with discrete circuitry. Sesmented passive RIAA EQ. THD $0.005 \%$. Sold only as a combination with the A50 power amp. combinatior price
$\$ 999$

## CARVER

## 4000-1 Sonic Holography Preamplifier

With Sonic Hologram Generator designed to recreate 3-dimensional sound field of recording site and locate instruments precisely in space. Features MC preamp; surround-sound decoder: Digital Time Lens: Auto Correlator NR: L and R bass and treble controls with turnover frequency switches, tone defeat: cartridge matching: 2-way tape dubbing. monitoring: external signal processor input: infrasonic filter. NR $20 \mathrm{~dB}(20-$ $200 \mathrm{~Hz}), 10 \mathrm{~dB}(2,000-20,000 \mathrm{~Hz})$; Sonic Hologram image resolution $5 x$ horizontally, $20 x$ vertically.
$\$ 1.220$

## C-1 Sonic Holography Preamplifier

Features Sotiic Hologram Generator; separate L and R bass and treble controls, tone defeat: Mc phono input: $18 \mathrm{~dB} /$ octave infrasonic filter; tape/source monitor with 2 -way tape-dubbing: provision for external processor.
$\$ 610$

## C-2 MM/MC Preamplifier

Switchable input for MM or MC cartridges: infrasonic filter ( $18 \mathrm{~dB} /$ octave below 20 Hz ); bass and treble controls; tone control bypass; 2 tape inputs: provision for 2 -way dubbing; atlx input: external processor loop; mode switch; rear-panel jack for high-level gain (choice of 15 or 25 dB ): anodized aluminum dark pewter front panel
$\$ 450$

## CELLO

## 1003-00 Encore Preamp

Features universal phono section; gain $36 \mathrm{~dB}, 46 \mathrm{~dB}$. 60 dB : loading $49 \mathrm{k}, 10 \mathrm{k} / 220 \mathrm{pF}$. $1 \mathrm{k} / .02 \mathrm{pF}$; balanced

## PREAMPLIFIERS

line input (optional): 8 single-ended line inputs: buffered tape outputs; balanced line out plus 2 singleended line outputs; choke input power supply; phase switch: 2 tape monitors
$\$ 5.000$

## Audio Suite

Open-architecture mainframe accepts up to 10 slidein sertical modules for phomo. tape. CD, video. Dat. and tuner inputs: houses pro modules including mic preamp/mixers. tape heud recording and mastering amplification. upcoming digital-to-analog convertors. monitor amps for headphones or speakers. Can control multi-room and multi-medta systems.
Mainframe chassis.
$\$ 1.575$
P101 MC phono input module . . . . . . . . . . . \$3.150
P100 MM phono input module . . . . . . . . . . . \$1.785
P100 high-gain MM phono input module .. \$1.785
P200 tape input module.
$\$ 1.050$
P200 (CD) input module. . . . . . . . . . . . . . . . . $\$ 1,050$
P200 tuner input module . . . . . . . . . . . . . . . . $\$ 1,050$
P200 aux input module . . . . . . . . . . . . . . . . . \$1.050
P200 video input module . . . . . . . . . . . . . . . . \$1,050
B301 output module . . . . . . . . . . . . . . . . . . . . . \$1.050
B100 MM phono input module . . . . . . . . . . . \$1.050
B201 Camac line input module . . . . . . . . . . . . . $\$ 735$
B200 R(A line input module. . . . . . . . . . . . . . . . $\$ 630$
P301 output module . . . . . . . . . . . . . . . . . . . . \$3,000
P200 isat input module . . . . . . . . . . . . . . . . $\$ 1,050$

## Accessories

Blank bay assembly . . . . . . . . . . . . . . . . . . . . . . . $\$ 63$
Blank front plates. . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 42$
Blank rear plates. \$21

## Etude ('ontrol Unit

4 inputs for sources such as ( $D$ players, tuners, tape. and video: 59-position volume control. . . . . \$1.000

Master Supply
120 V AC
$\$ 2.250$

## CLASSE AUDIO

DR-7 Preamplifier
Preamplifier features FR $20-20.000 \mathrm{~Hz} \pm 0.2 \mathrm{~dB}$; max output 8 V : THID $0.01 \%$; balanced inputs/outputs: sens $50 \mathrm{mV} ; 2$ tape \& processor loops; MM \& MCS/N


80 dB ; MC input; dual chassis; 5-transformer power supply

## DR-S Preamplifier

Preamplifier features FR $20-20,000 \mathrm{~Hz} \pm 0.2 \mathrm{~dB}$; max output 8 V: THI) 0.01\%; balanced inputs/outputs: sens 50 mV : I tape; polarity inverter optional; MM \& MC S/N 80 dB ; MC input: direct phono bypass: regular or balanced output stages
$\$ 1.995$

## CONVERGENT AUDIO TECHNOLOGY

## SL-1 Reference Preamplifier

Preamplifier with all-vacuum-tube design. Features 12 separate regulators, with I for each stage: adjustable loading; external power supply; switched metal film resistors for volume and balance controls. Inputs for MM phono: MC phono: tape; aux: CD player:
uner: video. FR $0.1-1,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$; sep 90 dB ; THD $0.0005 \%$; MM phono sens 0.125 mV for 0.5 V output at $1,000 \mathrm{~Hz}$; MM phono input overload level 250 mV at 1.000 Hz : sens for line-level inputs 25 $\mathrm{mV}: 28 \mathrm{lb}: 19 \times 5.24 \times 12.5 \mathrm{in}$. $\qquad$ $\$ 3.900$ SL-2 Preamplifier. Same as above except singlechassis version: $20 \mathrm{lb} . .$. . . . . . . . . . . . . . . . . $\$ 1.995$ SI,-2L. Preamplifier. Same as SI-2 except there is no phono stage.
$\$ 1.695$

## CONRAD-JOHNSON

## Premier Seven Preamp

Vacuum-tube preamp with FR2-100.000 Hz and . $25 \%$ THD. Two tape processor loops and moving coil input.
$\$ 7.850$
PV9 Vacuum-Tube Preamp
With low-noise precision metal-film resistors; polystyrene capacitors in audio circuitry; facilities for 2 tape recorders: 2-way dubbing: phono, tuner. Aux inputs; 2 amp outputs; front-panel mute control. FR $20-20.000 \mathrm{~Hz} \pm 0.25 \mathrm{~dB}$ phono: $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$ below 10 mV phono, 84 dB below 2.5 V output high level: (1H) and Imi) $0.05 \%$; gain 40 dB phono, 29 dB high level: max output 25 V : phono overload 500 mV at 1 kHz ; $4.75 \times 14 \times 11.25-\mathrm{in}$
$\$ 2.950$
PV8 Vacuum-Tube Preamp
With cathode follower outputs and solid-state voltage regulator designed for minimal AC imp; regulated filament supplies virtually eliminate infrasonic noise resulting from ac line fluctuations. Features 1\% tolerance mil-spec deposited tin-oxide audio circuit resistors; audio circuit capacitors are polystyrene dielectric; volume control tracks within 0.5 dB ; auto muting at turn-on, turn-off: 2 tape recorder loops with 2 -way dubbing; 5 -function mode switch; precision tracking volume control. Max output 40 V RMS: FR 2-> $100,000 \mathrm{~Hz}$; $<0.5 \%$ THD and IMD; hum and noise $20-20,000 \mathrm{~Hz}$. phono 72 dB below 10 mV input. high level 84 dB below 2.5 V output; output imp $<200$ ohms: $10 \times 16 \times 3.75-\mathrm{in} . ; 15 \mathrm{lb} \ldots .$. . $\$ 1.685$

## PV7 Vacuum-Tube Preamp

Stereo preamp with low-noise metal film resistors. polypropylene and polystyrene capacitors in audio circuitry, 2 -deck tape monitoring with 2 -way dubbing: inputs for phono, tuner, tape, allx; 2 amp outputs.FR $20-20.000 \mathrm{~Hz} \pm 0.25 \mathrm{~dB}$ phono: $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$ below 10 mV in phono, 84 dB below 2.5 V out highlevel: THD and IMI) $0.05 \%$; gain 35 dB phono. 28 dB high-level; max output 25 V : phono overload 500 mV at $\mathrm{kHz}: 4.75 \times 14 \times 11.25-\mathrm{in}$.
$\$ 695$
PV7 MC-Same as above with moving coil input $\$ 810$

## COUNTERPOINT

SA-11 Line-Level Control Amplifier
Full-featured line-level control center includes indus-trial-grade stepper motors to control 2 massive custom-built 41 -posion attenuators. Features full vacuum-tube power supply and audio circuitry: wireless hand-held remote control; Isolinear design for max isolation and extreme linearity. Inputs for tape: tape 2; aux: CD player; tuner: video. $6.7 \times 19 \times$ $19 \mathrm{in} ; 70 \mathrm{lb}$
$\$ 5.495$

## SA-9 Phono Equalizer/Preamplifier

Full-vacuum-tube phono-cartridge preamplification and equalization system with completely independent MC and mm circuits. Isolinear design for max isolation and extreme linearity. Inputd for MM and MC phono. FR $1.350 .000 \mathrm{~Hz} \pm 3 \mathrm{~dB} .4 .5 \times 19 \times 12.5-\mathrm{in}$; 25 lb
$\$ 3.995$
SA-9/11 Combo. Features, functions, and inputs of SA-9 and 11 combined
$\$ 9.490$

## SA-5.1 Preamplifier

Preamp with inputs for MM phono. mC phono, tape. tape 2, AllX. CD player, tuner. FR $0.5-88,000 \mathrm{~Hz} \pm 0.1$ dB: max output 70 V : THD $0.08 \%$; IMD $0.08 \%$ iHF; MM phono sens 0.5 mV for $0.5-\mathrm{V}$ output at $1.000 \mathrm{~Hz} ; \mathrm{MM}$
phono input overload level $700 \mathrm{mV}: 2.03 \times 19 \times$ 17.03-in: 24 lb .
$\$ 1.895$
SA-3.1 Preamplifier
Preamp with inputs for MM phono. MC' phono. tape. tape 2, all $\mathrm{X}, \mathrm{CI}$ ) player, tuner. FR $2.5-30.000 \mathrm{~Hz} \pm 0.1$ dB; max output 70 V : THD $0.18 \%$; IMD $0.18 \%$ IIIF; MM phono sens 2.5 mV for $0.5-\mathrm{V}$ output at $1,000 \mathrm{~Hz}: \mathrm{MM}$ phono input overload level 800 mV ; $2.03 \times 19 \times$ 17.33-jn: 18 lb .
$\$ 1.045$

## SA-2 Preamplifier

Preamp with inputs for MC phono. FR 0.5-350,000 $\mathrm{Hz} ; \max$ output $38 \mathrm{~V} ; 2.03 \times 19 \times 17.03-\mathrm{in} ; 18$ lb.
$\$ 1.045$

## SA- 1000 Preamplifier

Preamp with inputs for MM phono, MC phono, tape. CD player, tuner. FR $2 \cdot 30,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$ : max output 30 V : THD $0.25 \%$; IMD $0.3 \%$ IHF; MM phono sens 0.8 mV for $0.5-\mathrm{V}$ output at $1.000 \mathrm{~Hz} ; \mathrm{Mm}$ phono input overload level $500 \mathrm{mV}: 2.23 \times 19 \times 7.1$-in; 13 lb. .

## CROWN

PSI.-2 Preamplifier
Features seven inputs; versatile tape copying: sevensecond turn-on; power switch; tape I and 2 monitor switch: detented treble and bass controls; centerdetented output balance control; loudness switch: black polyester vinyl coated aluminum with black splatter coated steel: aluminum chassis; FR $10-50.000$ $\mathrm{Hz}_{7} \pm 0.25 \mathrm{~dB}$; THI) $<0.0025 \%$ at rated output; 19.0 x $1.75 \times 11.5 \mathrm{in}$ : 11 lb .
$\$ 595$

## DB SYSTEMS

DBR-15B \& 2A Preamplifier
Rack-mount precision pream and tone control with power supply. Combines DB-IB. DB-5 in a 19" rack unit. Auxiliary cable included. . $\$ 935$ With oak cabinet
$\$ 1.085$

## DB-IA \& 2A Preamplifier

Stereo preamp with separate DB-2A regulated power
 $\pm 0.001 \%$; FR phono $10-40.000 \mathrm{~Hz} \pm 0.07 \mathrm{~dB}$. highlevel $2-50,000 \mathrm{~Hz}+0 /-1 \mathrm{~dB}: \mathrm{s} / \mathrm{N}$ A-wtd 89 dB phono. 90 dB line; filters: low-cut flat, $20 \mathrm{~Hz}, 36 \mathrm{~Hz}$ at 6 dB /octave phono only, high-cut flat. $5 \mathrm{kHz}, 10,000$ Hz at 6 dB /octave; output imp 1 kilohm; max output voltage 6 V into 10 kilohms $/ 3,000 \mathrm{pF}$ : input sens for 1 V output: phono 2 mV into 50,000 ohms $/ 100 \mathrm{pF}$, high-level 120 mV into 50 kilohms: $8.5 \times 7 \times 3.2$ in. DB-1B \& 2A. DB-IA with low-noise high-level stage ( -94 dB ref | V), reduced crosstalk, tight tracking volume control, all gold-plated jacks and solid oak cabinet with hand-rubbed tung-oil finish. $12 \times 3.6 \times 7$ in. $\$ 650$ DBR-1A. Same as DB-1A except mounted on 19" rack. Includes DB-2 A power supply . . . . . . . $\$ 535$ DB-1A-HI. \& DB-2A. Preamplifier similar to DB-IA with 5 high-level inputs and no phono section. FR 1$250.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : $\mathrm{s} / \mathrm{N} 92 \mathrm{~dB}$ : thD $0.0006 \%$; sens for line-level inputs 120 mV
$\$ 375$
DB-1B-HL. \& DB-2A. Preamplifier similar to DBA. HL with lower noise ( -94 dB ref I V); reduced crosstalk: tight tracking volume control: loudness compensation switch; gold-plated jacks; cabinet made of solid oak with hand-rubbed and buffed tungoil finish
$\$ 530$

## dbx

## CX1 Preamplifier

Audio/video preamp with 2-channel switchable alldigital delay for ambience recovery. The built-in Dolby Pro Logic surround system has a 5 -ch calibration signal and input-level adjustments for precise setup. Inputs for MM and MC phono, tuner. CD player, VCR. AllX, and 3 tape decks or 2 tape decks
and I VCR (with video). Outputs for front L\&R and side/rear stereo or Dolby Surround with center ch. 3 stereo-to-lape jacks, and a video-signal montior. Features stereo audio external-processor loop: audio/ video dubbing: independent recording and listening selectors; switchable tone controls (conventional bass/treble curves or low-bass only/spectral tilt): switchable infrasonic and high filter for all sources; precision-tracking 5 -ch volume control: ch-mode controls for $L / R$ stereo, $R L$ reverse, $L$ or $R$ only. $\mathrm{L}+\mathrm{R}$ mono, and $\mathrm{L}-\mathrm{R}$ positions; headphone jack: anti-resonance chassis and aluminum feet. . \$2.500

## DENNESEN ELECTROSTATICS

## JC-80 Preamplifier

Dual mono, all FET, Dx-coupled, fully complementary, push-pull, A preamp. No interstage coupling caps: feedback input stage: virtually unslewable: passive RIAA; each stage separately regulated. Completely mono. invertable phase. MM phono. MC phono, tape 1, tape 2, AllX. FR I-15,000 Hz $\pm 0.1 \mathrm{~dB}$; max outpul 20 V ; THD $0.005 \%$; IMD $0.005 \%$; MM phono sens variable mV for 0.5 oulput at 1.000 Hz : MM phono input overload level $350 \mu \mathrm{~V}: 19 \times 1.75 \times 12$ in: 10 lb .
$\$ 2.250 \mathrm{ca}$

## Sirius Preamplifier

Full-featured straight-line preamp with split passive RIAA and FFT input. Inputs for MM phono, tape, tape 2. AldX. FR $5-100,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$ : max output 10 V : THD $0.01 \%$; IMD $0.01 \%$; MM phono sens 2.5 mV of 0.5 V output at 1.000 Hz ; MM phono input overload level 200 mV ; sens for line level inputs $125 \mu \mathrm{~V}$. $19 \times 2 \times 8$ in; 7 lb. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 489$ Sirius II. Dual mono: external power supply. . \$650

## DENON

DAP-5500 Digital Preamplifier
Preamplifier with built-in $\mathrm{D} / \mathrm{A}$ converter. Digital section features 4 D/A push-pull Super Linear Converter system; separate digital and analog chassis: 3 digital inputs (one optical, 2 coaxial); coaxial digital tape-monitor loop; four-times-oversampling digital filter: optical isolators between digital and analog sections: D/A converter output jacks. Audio section features Unity Gain Interface amplifier; Cannontype inpul/output: 2 RCA line-in: 1 RCA line out: front-panel mounted RCA input/output jacks; Iwo tape loops: source direct switch: separate power supplies for digital and analog sections; nonresonant, vibration-resistant chassis. $5.2 \times 17.09 \times 15-\mathrm{in} \$ 1.500$

PRA-1200 Stereo Preamplifier
Stereo preamp with video inputs and switching facility. 8 audio inputs: headphone amplifier; variable loudness control: MM \& MC phono. THD $<0.001 \%$ : S/N MC 79 dB . MM 96 dB ; FR $1-300,000 \mathrm{~Hz}$ $+0.2 \mathrm{~dB}-3 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 105 \mathrm{~dB}: 4.8 \times 17.08 \times 11.81 \mathrm{in} ; 11$ lb. $\$ 475$

## DISCRETE TECHNOLOGY

## Compact Pro-Reference Preamplifier

Solid-state preamp. Features aluminum rack-mountable enclosure: high-current power supply; volume and power controls: designed to be matched with one of 3 different amplifier modules; direct-coupled circuit: switchable cartridge loading: switchable gain: Distech cable: modular construction; low imp main outputs. With MC Amplifier. . . . . . . . . . . . . $\$ 2.995$ With Phono Amplifier Module . . . . . . . . . . . . $\$ \mathbf{\$ 2 , 4 9 5}$ With Line Amplifier Module. . . . . . . . . . . . . \$1,895

## ELECTROCOMPANIETBY MUSIC AND SOUND IMPORTS

Electrocompaniet preamps feature + R 5-100.000 1/z $\pm 0.5 \mathrm{~dB}$ : max output 15 V ; usi phono $\mathrm{s} / \mathrm{N} 84 \mathrm{~dB}$ : high-level sens 100 mb ; no tone controls: halance and volume only: w, input imp 47 kilohms: exiernal power supplies.

EC-1 Preamp. Includes MC; MM phono. 2 tape processor loops. luner and inverts phase. Approx.
$\$ 1.995$
Prella. As above except no MC phono and no phase inverling. Approx
$\$ 1.395$

## FORTE AUDIO

## Model 2 Class A Preamplifier

Dual-channel, non-inverting hybrid topology. lownoise. matched integrated gain devices enhanced with discrete pure class A biasing, active constantcurrent sourcing. and imp buffering. Accepts input from high and low output MC and MM cariridges: 4 high-level sources and tape recorder. Record/monitor facilities for recorder allow listening to one source while recording another. internal selection of mip and capacitive cartridge loading. External power supply in separate chassis: gold-plated signal connectors: glass-epoxy circuit boards. Dist $<0.02 \%$ at 3 V ; noise $<-100 \mathrm{dBA}$ referenced to I V input: gain +20 dB ; $\operatorname{imp} 25,000$ ohm; $19 \times 1.75 \times 7$ in

## HAFLER

## DH-110 Discrete Preamplifier

Preamplifier operates all discrete devices (no integrated circuits in signal path) in full symmetry format. Controls: volume, balance, bass, treble, input selector, phono selector, monitor selector, mono/ stereo, high-pass filter: external processor loop, tone control engage. Features rack-mounting capability: single active circuit board: step-action volume control: integral muting circuit: 2 pairs of audio outputs: low-imp power supply: full power bandwidth to $200,000 \mathrm{~Hz}: 2$ phono, tuner, AllX, 2 tape deck, EPL inputs: 2 tape (buffered), 2 line, EPL outputs; headphone jack. THD $<0.0006 \%$ at $1.000 \mathrm{~Hz}, 3 \mathrm{~V}$ RMS: phono input FR $20-20,000 \mathrm{~Hz}+0 /-0.25 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ weighted 87 dB : rated outpul 3 V rms, $4-210,000 \mathrm{~Hz}$ : THD $<0.001 \% 20-20,000 \mathrm{~Hz} ; 17 \times 3 \times 8.5 \mathrm{in}$; 10 lb : Assembled.
$\$ 500$
Kit.
. $\$ 425$
DH-100 Preamplifier Series 2
"No frills" preamp with RIAA EO utilizing $1 \%$ tolerance components; low-imp power supply: power on delay circuit, Inputs for mM phono. tape. AllX, tuner. Features volume, balance, treble, bass, tape monitor, power controls; 2 switched outlets. FR $20-$ $20.000 \mathrm{~Hz} \pm 0.25 \mathrm{~dB}$; max outpul 8 V : THD $<0.005 \%$; IMD below residual noise of current test instruments: MM phono sens 10 mV for $0.5-\mathrm{V}$ output: $13.5 \times 3 \times 9$ in: 7 lb . Assembled.
$\$ 275$ Kit. . $\$ 225$

## HARMAN KARDON

## Citation Twenty-Five Preamplifier

Preamplifier with remote control. Features inputs for CD, A/V 1, A/V 2, tape 1, tape 2, VCR 1, VCR 2, and phono: passive equalization in open-loop mode: moving coil head amp with resistance trim: moving magnet capacitance trim: hi-cut filter: subsonic filter: switchable bass and treble turnover; tone defeat; mono switch: headphone jack. Frequency response

$25-250,000 \mathrm{~Hz}$ : total harmonic distortion . $002 \%$; slew rate $120 \mathrm{~V} / \mu \mathrm{sec}$; estimated rise time $1.4 \mu \mathrm{sec}$; RIAA equalization $\pm 0.2 \mathrm{~dB}$ :
. $\$ 849$

## Citation Twenty-One Preamplifier

nputs for CD, CD direct, video sound, tuner, phono, 2 tape decks: ultrawideband fully discrele circuitry: switch for mono operation; front-panel headphone jack with adjustable level; frequency response 25 -


## Yes, now you can own Total Harmonic DISTORTION by Charles Rodrigues!

This handsome, 128-page paperback-with 118 classic cartoons, a foreword by William Livingstone, and an illustrated autobiographical sketch by Rodrigues himself-is only \$7.95. Enjoy your favorites again, catch the gems you missed, and share the laughs with friends!

## Makes a great gift!

Get two copies for the full stereo effect!

TO ORDER: Send check or meney order for $\$ 7.95$ per copy. plus $\$ 1.50$ for postage \& handling to:

## Perfectbound Press

## Suite 4118A

1120 Ave. of the Americas New York, NY 10036

Type or print mailing address with order. New York State residents add $65 ¢$ sales tax per copy. Outside U.S.: add $\$ 1.75$ postage \& handling for first copy and 50 e for each additional copy (U.S. bank funds only). Allow six to eight weeks for U.S. delivery, longer outside U.S.
$250,000 \mathrm{~Hz}$; total harmonic distortion $.002 \%$; slew rate $120 \mathrm{~V} / \mu \mathrm{sec}$, estimated rise time $1.4 \mu \mathrm{sec}$; RIAA equalization $\pm 0.2 \mathrm{~dB}$; . $\$ 849$

## Citation Twenty-One Preamplifier

Inputs for CD. CD direct, video sound, tuner, phero. 2 tape decks; ultrawideband fully discrete circuitry; low negative feedback: active/passive symmetrical RIAA EQ: gold-plated jacks; mono switch; low-noise Iransistors: discrete MC head amp; subsonic filter (6 dB/octave. $<3$ at 15 Hz ); phase-correct loudness $(+10$ at $50 \mathrm{~Hz},+3$ at 250$)$; bass and treble max boost/cut 10 dB : tone defeat. Max output $10 \mathrm{~V} \$ 599$

## HEYBROOK BY D'ASCANIO AUDIO

## C-2 Preamplifier

Hand-assembled preamplifier with versatile input selections and black finish. Features special circuitry for CD input to prevent overloading: aluminum chassis: rear-panel power switch. Inputs for MM and Mc phono, tape, AllX. CD player, tuner, and video. FR $10-50,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; MM phono sens 85 mV for 0.5 V output at $1,000 \mathrm{~Hz}$ : line-level sens $160 \mathrm{mV} .17 \times 3 \mathrm{x}$ $13 \mathrm{in}: 8 \mathrm{lb}$.
.$\$ 898$

## HITACHI

## HPT120AVSW AM/FM Preamp/Tuner

Quartz digital-synthesized tuner section: $20 \mathrm{AM} / \mathrm{FM}$ presets; unified infrared remote control with LCD display: audio inputs for phono, CD. tape: video inputs for TV, VCR, videodisc player: electronic volume and balance controls; 5-band graphic equalizer; video signal enhancer, rosewood end caps . $\$ 450$

## JADIS By MADRIGAL

## JP-80 2-Part Tube Preamplifier

2 separate chassis (preamp and power supply). Uses no directly-delivered voltages to avoid noise generated by main input voltage. High voltage generated by custom-built oscillator circuit and amp. Inputs for MM phono; tape; aux, $\mathrm{s} / \mathrm{N} \mathbf{4 6 - 6 0 ~ d B}$; MM phono sens 5 mV for $0.5-\mathrm{V}$ output at $1.000 \mathrm{~Hz} .48 .5 \mathrm{lb} . \$ 9.750$

## JRM

## Preamp

Moving-coil input preamplifier with 2 tape and processor loops features optional tone controls; 10 V max output: THD $0.01 \%$; FR $0-50,000 \mathrm{~Hz}+0,-1$ dB . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 450 / \mathrm{pr}$

## KENWOOD

## Basic C2 Preamplifier

Preamp with 2 -step $M M$ and 3 -step $M($ inputs. Features single NFB-loop phono equalizer amplifier: 2-way tape dubbing with monitoring: source (rec out) tape selector: 2 at $\mathbf{x} /$ video inputs: Kenwood NF-CR tone controls with selectable turnover; Super-coupled volume control for low noise at low volume; 4 -way filter system; loudness switch; mono/stereo switch: headphone jack with level control: output on/off switch; power and output Led indicators. Frequency response $1-350.000 \mathrm{~Hz}-0.3 \mathrm{~dB}$; THD $0.002 \%$ phono, $0.001 \%$ line; input sens/imp MM $2.5 \mathrm{mV} / 47$ kilohms. line $150 \mathrm{mV} / 47$ kilohms; signal-to-noise ratio 110 dB ; MM 88 dB ; $17.31 \times 3.06 \times 12.63$ inches: 9.9 pounds $\$ 310$

## Basic C1 Preamplifier

Features CD/AUX input; MM/MC cartridge selector; advanced single NFB loop phono equalizer a mplifier; 2 tape inputs with dubbing and monitoring; subsonic filter; continuously variable loudness control: Kenwood NF-CR tone controls: LED input indicators; power-on muting relay. Frequency response 1 $250.000 \mathrm{~Hz}-0.3 \mathrm{~dB}$; total harmonic distortion $0.005 \%$ phono, $0.004 \%$ line: input sens/imp MM 2.5/47 kilohms. line $150 \mathrm{mV} / 47$ kilohms; $\mathrm{s} / \mathrm{N} 108 \mathrm{~dB} \$ 240$

## KC-206 Audio/Video Preamplifier

Audio/video preamp with unified remote control. Features 7-band graphic equalizer; CD input; 2 video sound inputs; 2-way tape dubbing with monitor, FL display: EQ recording switch; subsonic filter; autofunction selector system (main/remote). FR 10 $70.000 \mathrm{~Hz}-3 \mathrm{~dB}$; input sens/imp $150 \mathrm{mV} / 33$ kilohms (line). $2.5 \mathrm{mV} / 47 \mathrm{kilohms}$ (phono); $\mathrm{s} / \mathrm{N} 103 \mathrm{~dB}$ (line), 79 dB (phono). $16.56 \times 3.5 \times 10.75 \mathrm{in}: 6.6 \mathrm{lb} . . \$ 230$

## KINERGETICS

## KPA-1 Preamplifier

Designed to eliminate hysteresis distortion: MC phono. MM phono inputs, 2 tape loops; remote power supply: adjustable imp and capacitance for phono inputs; polarity switch. FR $2-500,000 \mathrm{~Hz}$; slew rate $>20 \mathrm{~V} / \mu \mathrm{sec} ;$ gain $60 \mathrm{~dB} ; 20 \mathrm{lb}$ : $19 \times 2.5 \times 16.25 \mathrm{in} \$ 795$

## KLYNE AUDIO ARTS

## SK-5A Preamplifier

Full-function stereo preamplifier with ultra-low distortion and high-resolution design. Features control to invert absolute phase: balanced differential outputs. Inputs for luner: CD/AUX; tape: MM/MC phono; output imp 600 ohms: input imp phono $0-47,000$ ohms. $2.5 \times 19.0 \times 12.5 \mathrm{in}$ : 12 lb .
\$3,250
SK-4A. As above, straight-line version without line amps, phase inversion switch. or mode switch $\$ 2,450$ With optional line amps installed. . . . . . . . . \$2,695

## SK-6 Preamplifier

Full-function stereo preamplifier with low distortion and high-resolution design. Features six high level inputs with optional uiser installable MM/MC phono board; independent listen and rec circuitry; inputs for phono/At/X, CD, tuner, tape 1, tape 2, and video/At X ; outpul imp 300 ohms; input imp phono $0-$ 47K ohms. $2.5 \times 19.0 \times 11.5 \mathrm{in}$; $10 \mathrm{lb} . . . .$. . $\$ 1.450$ With optional phono board.
\$1,950

## LAZARUS ELECTRONICS

## Cascade Deluxe Preamplifier

Hybrid preamplifier with vacuum tubes and FET's. Features MC output; 6 inputs; full switching capability; auto muting: front panel mute; power switching: tiffany connectors for phono. CD and main outputs: slim line chassis; black, fully anodized aluminum chassis: 74 dB gain: switchable phono loading $\$ 1.200$

## Cascade Classic Preamplifier

Vacuum tube preamp. Features 6 inputs: auto muting: font panel mute and power switching: 50 dB gain; 47k input impedance
\$950

## MC-1 Pre-Preamplifier

Moving coil step-up pre-preamplifier. For using low output MC cartridges with tubes; 28 dB gain; 150 ohm preset loading; adjustable phono load.
$\$ 650$

## Prices Listed

are manufacturers' suggested retail prices
(also referred to as list prices); actual selling prices are set by individual dealers. All prices are subject to change without notice.

## Cascade Basic Preamplifier

Tube preamp with inputs for MM phono; tape; tuner. FR $10-32,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N} 90 \mathrm{~dB}$; THD $1.2 \%$; MM phono sens 1.5 mV for $0.5-\mathrm{V}$ output at $1.000 \mathrm{~Hz} ; \mathrm{Mm}$ phono input overload level $>250 \mathrm{mV}$ at $\mathrm{I}, 000 \mathrm{~Hz}$ : line-level sens inputs 50 mV .
$\$ 650$

## LINN PRODUCTS

LK1 Remote-Controlled Preamp
Stereo microprocessor preamp with independently

adjustable input-level matching; all switching and level adjustments on board are electronic. Input for moving magnet phono; moving cartridge phono input: tape 1 and tape 2 inputs: auxiliary tuner input. $3 \times 10.5 \times 10.5 \mathrm{in} ; 9 \mathrm{lb}$.
$\$ 1,050$

## LINEAGE

CP 100 Control Preamplifier
Class-A preamp with all-discrete audio circuitry. Features full-complementary direct-coupled widebandwidth design using all Field-Effect transistors; D $\mathbf{X}$ servo to eliminate all capacitors in signal path except as required for phono equalization; complementary differential inputs: $\mathbf{2}$-stage phono equalizer: electronic input switching; front-panel phono gain for both MM and MC phonos; rear-panel control with continuously variable resistive cartridge loading: tone controls for low bass and upper treble; tone in, mute, stereo/mono, and polarity inven switches: gold-plated connectors. Inputs for phono; tuner: CD player; video sound source; aux; 2 tape monitors for 2 -way dubbing. Rated output 3 V rms ; max output 15 V. Includes separate power supply to provide 3 switched AC convenience outlets. Matte silver with removable teak pedestal base. $17 \times 12 \times 6.36 \mathrm{in}$ (with base)
$\$ 1,995$

## LOGAN LABS By SYMDEX

## PA-10B Preamplifier

Electron tube phono-only preamp with separate power supply. Features symmetrical layout for both channels; muting function for no system crash due to power loss; slow turn-on circuitry to prevent thermal shock to tubes. Input for MM phono, for compatible MC the 1010T is required. Frequency response 1$3,000,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; $\max$ output 160 V ; total harmonic distortion $<0.2 \%$; IMD $<0.2 \%$; separate transformer; $19 \times 3.5 \times 7$ in. . . . . . . . . . . . . $\$ 5,495$ HLE-1010T. Companion pre-preamplifier for PA10B
$\$ 3.495$

## MARK LEVINSON BY MADRIGAL

ML-6B Modular Preamps
Mono preamps in 2 separate chassis (with separate power supplies) with only essential control functions and connection. L-series open-frame plug-in modules; all audio circuitry completely discrete and operates in Class-A: each chassis has 1 L1 line amp and 1 phono amp module for any cartridge; LI provides up to 26 dB gain with $0.003 \%$ THD typical and $0.002 \%$ IMD; $\mathrm{s} / \mathrm{N} 100 \mathrm{~dB}$ (unwtd below 2 V reference); gain of L2 phono module 38 or 44 dB ; L3 gain 67 dB ; L3A gain 55 dB . Phono module THD $\pm 0.008 \%$, IMD $0.005 \%$. PLS-154 power supply maintains load regulation of $0.05 \%$ with wideband noise output $18 \mu \mathrm{~V}$. Camac connectors for all input and output connections; gold-plated cartridge-loading sockets on main circuit board and internal switches to select 10,20 , or 26 dB of line gain. With L2.
\$7.460/pr With L3 or L3A
$\$ 8,250 / \mathrm{pr}$

# F <br> EverySSellGetsFeedback. 


J.T. Tusa, o ovihheme

C.O.. Moline. Ilinous
comments I want to knock downa wall. M.K., Atlanta. Georgia

COMMENTS I LOUE THE TREE stump puming Bass:
C.R., EI Paso, Texas

COMMENTS God.bless Low and your nondesful contrifution to nusic!
P.G., Olwnpia, Wushingtom
COMMENTS c wouldn't buy
amf other brand, the last
ones lasted 15 years.
R.S., Schaumberg, Illinois

R.F., Aberdeen, Washington

COMMENTS I used to listen to my wife, now I listen to my Cerwin-Vego speakers. Thank Youl
L.L., Brookeville. Marviand

R.K., South Pasadena, California

Our customers have a way with words. In fact, every week we receive hundreds of customer comments. All of which we learn a little something from. And most of which serve as a pretty good indication that Cerwin-Vega speakers will give you great sound, years of service, and maybe even something more.

Writer's cramp.

## PREAMPLIFIERS

## M11.-7A Preamplifier

Inputs for 5 line sources, monitors 2 tape decks, with choice of 3 plug-in phono sections for virtually any cartridge. All audio circuitry completely discrete and operates in Class-A mode. Fitted with 2-LI line amps. PLS- 154 power supply maintains load regulation of $0.05 \%$ with wideband noise output of $18 \mu \mathrm{~V}$; external 5-pin self-locking connector parallels. Camac phono inputs for cartridge loading: 10 or 20 dB of line gain. LI provides up to 26 dB of gain. with $0.003 \%$ THD and $0.002 \%$ IMD typical, typical $\mathrm{s} / \mathrm{N}$ of 100 dB unwtd below 2 V ref. Hand-brushed black anodized finish. ML-7: $2.25 \times 19 \times 10.12 \mathrm{in}$ : PLS-154: $4.36 \times 4 \times 10.62 \mathrm{in}: 14 \mathrm{lb}$. With no phono section.
$\$ 4.720$
With L2 phono module. Gain 38 or $44 \mathrm{~dB}, \$ 5.725$ With L3 or L3A. L3 gain 67 dB : L3A gain 55 dB.
$\$ 6.420$

## No $26 \mathrm{~W} / \mathrm{Il}$ Igh Gain Phono Preamplifier

Matrix style IX switching; relays hermetically scaled. bifurcated contacts of silver with gold plating: 6 -line level inputs; (D); tuner; Aux-1; phono/aux-2: tapes I \& 2: 2-tape inputs; non-buffered tape outputs; absolute phase of main outputs or stereo/mono operation selection on front panel: independently switchable gain for each channel; internal gain adjustment provided through fre mount switches for each

channel providing gain of 6.12 .18 at the unbalanced ouput or 12.18 , or 24 dB at the balanced output: custom-made Penny and Giles conductive plastic volume potentiometer; dual monaural design with separate circuitry for each channel; PLS-226 chassis contains 3-power supplies, 2 provide unregulated $1 \times$ current for 2 audio channels and 3rd separately rectifies and filters circuit-supplies power to relay control circuit: 2 custom-made toroidal transformers; Faraday shields reduce ac line-coupled noise: 9 gold-plated contacts for connecting cable; pos, neg. and ground for each audio channel; 4 discrete, fully independent regulators; 3-pin Neutrik XLR connectors: all-aluminum chassis; Preamp $2.8 \times 17.5 \times 13.1$ in; PLS- $2262.8 \times 7.6 \times 13.1 \mathrm{in} ; 321 \mathrm{lb} \ldots . . \$ 4.750$ No $26 \mathrm{~W} / \mathrm{L}$ ou Gain Phono. Same as above but with low gain phono. . . . . . . . . . . . . . . . . . . . . . . $\$ 4.750$ No 26 No Phono. Same as above but without phono . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3,990$

No 261.-10A Stereo Preamplifier
Simplified version of L-series circuitry in single circuit board configuration. All audio circuitry completely discrete and operates in Class A. Inputs for 2 line sources, monitors tape deck, phono section for virtually any cantidge. Camac connectors. Line section provides up to 22 dB of gain with typical distortion of $0.004 \%$ THI) and $0.004 \%$ ImD and typical $\mathrm{s} / \mathrm{N}$ of 95 dB unwtd below 2 V reference. Phono section offers selectable gain of 42,53 or 63 dB . Six internal switches and gold-plated loading sockets allow infinite carridge-loading capability. Typical distortion for phono circuit are $0.014 \%$ IMD and $0.005 \%$ IMD and $\mathrm{S} / \mathrm{N}$ typically -72 dB . Internal power supply with high-speed push-pull regulator: biased for Class A: load regulation of $0.05 \%$, widehand noise output 23 V; 7 or 17 dB line gain. Handbrushed anodized finish. $2.25 \times 19 \times 10.12$ in $\$ 3.325$

## MI.-12A Stereo Preamplifier

For use with ML-II power amp. or with other power amp if used with PLS- 124 power supply (see below). Inputs for MM phono, MC phono, tape, tlid, tuner. Phono section accepts any cartridge. gain 42. 53, or 63 dB and gold-plated sockets for precise cartidge loading. Line-level section gain 4.9 . 13 , or 17 dB to
match amps, speakers, sources. Gold-plated Camac connectors for inputs and outputs and separate level controls for each section. Hand-engraved black anodized front panel. Phono $\mathrm{S} / \mathrm{N}>75 \mathrm{~dB}$ unwid at 63 dB gain; THI 0.006\% and IM1) 0.004\% SMPTE at 6 V output: $\mathrm{s} / \mathrm{N}<92 \mathrm{~dB}$ below I V ref........ $\$ 1,600$ PLS-124. Optional power supply with separate rectification and filtering for each ch. Ripple 40 mV before regulation in ML-12A.
. $\$ 455$

## MCINTOSH

C-34V A/V Control Center
A/V control center with Compandor system for controlling sources’ dynamic range. Features inputs for laser, tape 1-3. VCR 1/2, TV, tuner, phone; 3 switched, 2 unswitched outlets in rear; provision for 2 sets of speakers; record and listen selectors; built-in 5 band equalizer: master volume control; $38 \mathrm{lb} \$ 2,195$

## C-31V A/V Control Center

A/V control center with wireless IR remote control. Features McIntosh Electronic Precision Ladder Altenuator; 5-band equalizer: adjustable loudness contour: 9 source inputs; switehing of 2 VCR 's with twoway dubbing: remote-control expandable allowing remote control in two additional listening areas. .
$\$ 1.895$

## MELOS AUDIO

MA-222 Hybrid Preamplifier
Dual mono construction: 2 heavy aluminium chassis; zero feedback circuitry; dual toroidal transformers; 10 regulated power supplies; heavy gold plate connectors; inputs for 2-CDs, phono, tuner, 2-Aux: 2 tape monitor loops; 3 main outputs; phase reversal switch; phono gain $65 \mathrm{~dB} ;$ FR $5-300.000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$ imp 20 ohms: maximum overall gain $85 \mathrm{~dB} \quad \$ 2.895$

## CD-T Preamplifier

CD-T preamplifier combined with (D)-T II compact disc player and a flexible all tube line preamplifier. Features 1 CD input: input for tuner, video aux, aux phono; 2 tape monitor loops; 2 main outputs: 26 dB of gain; max output 26 V : output imp 100 ohms; futly regulated power supplies, toroidal transformer: goldplated connectors.
$\$ 1.895$

## GK-1 + 1 Preamplifier

Vacuum-tube preamp with remote power supply and stepped attenuators. 3 selectable MC and MM phono sections; each amplification stage powered by one of nine regulated power supplies; passive RIAA EQ; auto muting circuit protection. FR $2-300,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; THD $0.07 \%, 20-20.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N} 65-85 \mathrm{~dB}$ (phono/sens dependent): $19 \times 3.5 \times 13.25 \mathrm{in}$; 15 lh (preamp) $\$ 1.395$

## MERIDIAN by MADRIGAL

## 201 Control Unit

Multi-room remote capability and ability to play 2 different sources simultaneously in any combination of 14 remote locations. Inputs for MM phono; MC phono: tape 1 \& 2; aux: CD player; tuner . . \$1,150 209. Remote master control works with 201 and other Meridian 200 -series components: controls 8 inputs, volume, and mute
$\$ 150$

## THE MOD SQUAD

Line Drive Preamplifier
Passive preamplifier features Noble film potentiome ters. Lorlin selector switches: wonder wire; wonder solder; Tiffany connectors and lc/ofe teflon insulat ed wires: selector for 5 sources; mode selector; mute: tape 1 or 2; balance control; jacks for 2-pair of power amps.
.$\$ 50 \mathrm{C}$

## MOTIF by CONRAD-JOHNSON

MC7 Dual-Mono Preamplifier
Dual-mono all-FET preamp with remote power sup-
ply. Features precision-matched field-effect transistors for channel-to-channel balance: exclusive use of polystyrene capacitors throughout audio circuits and power supply regulators. Inputs for MM phono, MC phono, tape, tuner. FR $5-100.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; $\max$ output 10 V : THD $0.1 \%$; IMD $0.1 \%$ IHF; MM phono sens 0.35 mV for $0.5-\mathrm{V}$ output at 1.000 Hz ; MM phono input overload level 150 mV . sens for line-level inputs 50 mV ; $3.5 \times 19 \times 12$-in.: $15 \mathrm{lbs} . . .$. . $\$ 3.500$

## MC8 Stereo Preamplifier

Similar to MC7 except sterco with internal power supply. Inputs for MM phono; MC phono; tape; tape 2; CD player: tuner. FR $5-100.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; THD $0.1 \%$; MM phono sens 0.35 mV for $0.5-\mathrm{V}$ output at 1.000 Hz : sens for line-level inputs 50 mV ; mM phono input overload level 150 mV at $1,000 \mathrm{~Hz} .3 .5 \times 19 \times 12 \mathrm{in}$ : 15 lb
$\$ 2.250$
NC9 Stereo Preamplifier. Line only preamp \$1.295

## NAD

1700 Monitor Series Preamp/Tuner
Remote control including motor-driven volume control; semi-parametric tone controls; EPL.; bass EQ: 2-way tape-dubbing; 50 dB stereo separation; $\mathrm{s} / \mathrm{N}$ ratio $>80 \mathrm{~dB}$; IF wide/narrow: 14 resets, mixed AM and FM; rack mountable
$\$ 798$

## 1300 Monitor Series Preamplifier

Features high-resolution phono preamp; bass EQ; null switch to amplify L-R difference signal: low-noise MC pre-preamp; external processor loop; semiparametric tone controls (bass center switchable to 50.120 . or 250 Hz . treble to $3,000,6,000,12,000 \mathrm{~Hz}$ ) with $1.5-$ octave bandwidth. 12-dB max boost or cut; 2-way tape dubbing: infrasonic filter. Max output 12 V : RIAA response accuracy $\pm 0.3$
$\$ 498$

## 1240 Preamplifier

Features discrete transistors in phono preamp; inputs for MM or MC' phono. CD player, tuner, tape, video. aux 1, aux 2; treble boost or cut max 7 dB at 10,000 Hz . bass boost or cut max 10 dB at 50 Hz ; switchable infrasonic filter down 3 dB at 12 Hz at 12 dB /octave; high-current ( 15 V ) headphone amp; bass EQ; 2 outputs: cartridge capacitance loading. RIAA response accuracy $\pm 0.5 \mathrm{~dB}$.
. \$248

## NAKAMICHI

CA-7A Control Amplifier
Preamp with full-system wireless remote control of Nakamichi series 7 or 5 components. Features total isolation of digital and analog sections: isolated ground technology: acoustical fine-tuning system; motor-driven volume control; inputs for MM \& MC phono, 2 tape. 2 AUX, tuner. CD; 2 outputs; multiroom remote control with RS-7 remote sensor. Input sens/imp MC (switchable) $40-80-160 \mu \mathrm{~V} / 100 \mathrm{ohms}$. MM $2.5 \mathrm{mV} / 50$ kilohms, line $150 \mathrm{mV} / 12.5$ kilohms; THD $<0,002 \%$; FR $1-100,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} \ldots . \$ 2,595$

## CA-5 II Control Amplifier

Features 5 high-level inputs; phono input; copies between 2 tape decks in either direction; recording deck monitors copying procedure; all inputs and 2 sets of output terminals are gold-plated; remote power connector optional (SPC-1 power strip); MMor MC-cartridge phono input; output level; bass; balance; treble; low-noise FETs: bipolar transistors; multi-regulated isolated ground power supply; max pre-out level 7 V : $1 \%$ THD at $20-20.000 \mathrm{~Hz}$; max input level 1.000 Hz ; stereo sep 110 dB at 100 Hz CD; FR (tuner/CD/Aux/Tape) $\quad 1-100.000 \mathrm{~Hz}+0 /-3$ dB . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.095$

## NIKKO AUDIO

## Beta 600 Preamplifier

Two-band parametric equalizer with variable level. variable bandwidth, and selectable frequency turn

## PREAMPLIFIERS

over controls. 2-record out selectors; CD direct circuit isolated from other analog circuitry with the shortest signal path as possible; $\mathrm{s} / \mathrm{N} 104 \mathrm{~dB}$; MM/MC selector: 2 -output terminals; gold-plated pin jacks; mechanical switches; t HI$) .002 \%$; $\mathrm{s} / \mathrm{N} 100 \mathrm{~dB}$; chan nel $\operatorname{sep} \mathrm{Hz} 76 \mathrm{~dB}$ at $1,000 \mathrm{~Hz} ; 1^{\circ}$ rack mountable with black dic-cast aluminum front plates. . . . $\$ 600$

## Beta 400 Preamplifier

Preamplifier with variable level and variable bandwidth. and selectable frequency turnover controls: CD direct circuit isolated from other analog circuitry with the shortest signal path as possible; $\mathrm{S} / \mathrm{N} 104 \mathrm{~dB}$; MM/MC selector: 2-output terminals; gold-plated pin jacks; mechanical switches; total harmonic distortion $.002 \%$; s/N 100 dB ; channel sep Hz 76 dB at 1.000 Hz
$\$ 440$

## NOVA

## CPA-100A Preamplifier

All-discrete, all-JFEt preamplifier with option for MC amp. Inputs for MM. MC phono; tape; tuner; CD player. Max output 12 V ; THD $0.01 \%$; IMD $0.01 \%$; MM phono sens 2.5 mV for 0.5 V output at 1.000 Hz ; MM phono input overload level 250 mV : phono gain 34 or 40 dB switchable; line-level sens 98 mV . Black finish with oak side panels. $19 \times 4 \times 9.5 \mathrm{in}$; 14 lb . $\$ 1.995$ PPA-202. JFEI MC head-amp card plugs into CPA100A. Features selectable input imp; 3 gain settings; MC phono input. High-overload capability allows greater than 1 V rms undistorted output. FR 0.05-1.5 $\mathrm{mHz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 71 \mathrm{~dB} ;$ th1) $0.01 \% .6 .75 \times 3 \times 1.5$ in.
$\$ 300$

## ONKYO

Grand Integra P-308 Preamplifier
Dual-mono preamp with electrically separate left and right circuitry and 2 sets of preamp outputs: output \#] is from precision-paired master volume control using ALPS potentiometers, output \#2 includes fines balance adjustment via stepped left and right precision resistor aattenuators. Features passive tone control system; dual record output selectors; individual stereo/mono switching for output I and 2 ; contra bass equalization. Wood side panels included. Inputs for MM phono; MC phono; tape; tape 2; tape 3; AllX. Aux 2: tuner: CD player and DAT with input common-mode noise filters. FR $0.8-170,000 \mathrm{~Hz} \pm 3$ dB : phono $\mathrm{S} / \mathrm{N} 92 \mathrm{~dB}$; тHD $0.0005 \%$. $18.25 \times 4 \times 15.88$ in; 19 lb .
. $\$ 660$

## Integra P-304 Preamplifier

Dual-mono preamp with electrically separate left and right circuitry. Features direct tone controls with passive equalization; dual record output selectors: adjustable phono gain and load imp. Inputs for MM phono: MC phono; tape; tape 2; tape 3; aldx. allX 2; tuner; CD player. FR $0.8-170.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; phono $\$ / \mathrm{N} 85 \mathrm{~dB}$; THD $0.005 \%$. $17.75 \times 4 \times 15.88 \mathrm{in} . . \$ 530$

P-3160 Preamplifier
Preamplifier with selective tone control. Features CD direct input; simulated stereo circuitry; direct play

function; motorized volume control; RI remote compatible with supplied controller; 7 inputs; sleep timer function when used with Onkyo T-4120 tuner: front panel VCR jacks

## PARASOUND

## P/FET-900 Class A Preamplifier

FET class A preamplifier. Features FET discrete transistors; electronic logic switching; polypropylene
capacitors; regulated power supply: gold-plated jacks; muting relay; variable loudness contour; $10-\mathrm{amp}$ power switch: 3 tc outlets; mono switch; 2-tape monitors; 2-direction dubbing; separate CD, Video inputs; FR $10-80.500 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; $\mathrm{JHD}<.005 \%$; s/N $95 \mathrm{~dB} ; 17.25 \times 2.5 \times 9.5 \mathrm{in}$.
$\$ 395$

## PERREAUX

SM3 Preamplifier
High-voltage moSFET design; inputs for mM/mC cartridges; luner; tape, CD. FR $20-50,000 \mathrm{~Hz} \pm 0.25$ dB ; input sens MC175 $\mu \mathrm{V}$ rms@ $1 \mathrm{kHz} / 47$ kilohms. 100 pF , MM 1.8 mV rms ; AUX/CD $350 \mathrm{mV} \mathrm{rms} / 20$ kilohms, all other inputs 100 mV rms $/ 25$ kilohms; THD/IMD phono $0.005 \%$, all other inputs $0.008 \%$ : channel $\operatorname{sep} 70 \mathrm{~dB}, 20-20,000 \mathrm{~Hz}$, all inputs. $1.75 \times 19$ $\times 13.5-\mathrm{in} ; 13 \mathrm{lb}$
$\$ 2,200$

## SA33 Class A Preamplifier

Features tone controls and large power supply. Gold plated input/output sockets. High voltage mOSFETdesign; inputs for MC/MMcartridges: tuner, tape, CD. FR $20-50,0000 \mathrm{~Hz} \pm 0.25 \mathrm{~dB}$; input sens $\mathrm{MC} 200 \mu \mathrm{~V}$ rms at $1 \mathrm{kHz} / 47$ kilohms, $100 \mathrm{pF}, \mathrm{Mm} 2.8 \mathrm{~m}$ vrms; aux, CD $350 \mathrm{mvrms} / 250 \mathrm{~K}$ ohms; THD/IMDPhono $0.005 \%$, all other inputs $<0.009 \% 20 \mathrm{~Hz}-20,000 \mathrm{~Hz}$ at rated output; channel $\operatorname{sep} 68 \mathrm{~dB} 20-20,000 \mathrm{~Hz}$, all inputs. $1.75 \times 19 \times 13-\mathrm{in} .12 \mathrm{lb}$
$\$ 1.750$

## PIONEER

C-90 A/V Preamplifier
Features wireless remote control; motorized rotary volume control; 5 audio inputs; 5 video inputs ( 3 input/outputs. 2 input only): 3 different power supplies; copper-plated chassis; 2 video outputs: recording selector/tape-dubbing switch; subsonic and high/low filters; loudness, muting, and tone controls: video enh ancer (detail, sharpness. and noise cancel). $9 \times 21.7 \times 19$ in
$\$ 900$

## PROTON

## 1100 Preamplifier

Stereo preamp with separate MC phono input. Features built-in headphone amp; bass equalizer switch: listen/record selector; high-level pre-out 18 V . total harmonic distortion $0.003 \%(20-20.000 \mathrm{~Hz}, 2 \mathrm{~V}$ output); IMD $0.003 \%$ ( 2 V output); FR 20-20,000 $\pm 2$ dB ; high-level input resistance 30 kilohms: line-level input sens $150 \mu \mathrm{~V}, 2.5 \mu \mathrm{~V} \mathrm{MM}$ phono, $0.2 \mu \mathrm{~V}$ highlevel MC, $0.1 \mu \mathrm{~V}$ low-level MC: S/N A-wtd 105 dB line level, 94 dB MM phono, 79 dB MC phono; bass control at $100 \mathrm{~Hz} \pm 10 \mathrm{~dB}$; treble control at $10,000 \mathrm{~Hz} \pm 10$ dB; bass EQ at $75 \mathrm{~Hz}+3 \mathrm{~dB}$; infrasonic filter at 20 Hz -3 dB , slope $-12 \mathrm{~dB} /$ oct: phono input capacitance selectable between 100, 200, 320 p -f; phono overload MM $290 \mu \mathrm{~V}(1.000 \mathrm{~Hz} .0 .1 \%$ total harmonic distortion); MM , phono total harmonic distortion $0.006 \%$ at 4.5 V ouptut. $0.01 \% \mathrm{MC}$ phono; RIAA response $\pm 0.2 \mathrm{~dB}$ MM phono, $\pm 0.3 \mathrm{~dB}$ MC phono. $16.5 \times 2.5 \times$ 13 in
$\$ 399$

## AP-1000 Preamplifier

Stereo preamp with separate record and listen selectors. Features bass. presence, and treble controls with bypass circuitry dual-mono construction with separate power supplies for both channels; two discrete

preamplifiers: phono preamp section with FET's; selectable input capacitance for MM cartridges; multiple gain levels for MC cartridges; bass EQ switch;
insuts for phono, tuner, CD, video, tape 1, tape 2: headphone jack. THD $0.003 \%$; IMD $0.003 \%$; FR 20$20000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; high-level input resistance/capacitance 26,000 ohms $/ 47 \mathrm{pF}$; residual noise 0.02 mV ; video $\mathrm{S} / \mathrm{N} 103 \mathrm{~dB}$ : tape play $\mathrm{S} / \mathrm{N} 103 \mathrm{~dB}$; MMphono $\mathrm{s} / \mathrm{N} 91 \mathrm{~dB}$ : mC phono $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB} .16 .5 \times 3.2 \times 13.5 \mathrm{in}$ : 14.3 lb .
$\$ 259$

## PS AUDIO

### 5.5 Preamplifier

Full-function preamp. Features all mosfet circuitry; dual-mono power regulation; extra-large transformer: moving-magnet and moving-coil phono sections: 5 gain selections for phono cartridge; cartridge loading: high-level bypass: remote power supply. THD $<0.01 \%$; IMD $<0.01 \%$
$\$ 1.195$

### 4.6 Preamplifier

Full-function preamp. Features moving-magnet and moving-coil phono sections; 5 gain selections for phono cartridge: cartridge loading; high-level bypass; remote power supply. THD $<0.01 \%$; IMD $<0.01 \%$ : м м noise -82 dB ; мс noise $-78 \mathrm{~dB} .15 \mathrm{lb} \ldots \$ 659$

## QUAD

Quad 44 Control Unit
Preamp/control system with lift/step bass control to boost low-frequency output of small speakers, attenuate bass output when operating as filter to give $5-\mathrm{dB}$ drop at 2 frequencies; $\pm 2-\mathrm{dB}$ tilt control that shifts tonal balance; variable filter slope control at 5.000 , $7.000,10.0000 \mathrm{~Hz}$ : all tone controls have defeat positions: balance/mono switch; radio, aux, disc, tape 1, tape 2 input selectors with optional microphone or MC phono inputs available. Input sens/imp 1 mV at 35 mV in/47 kilohms phono, 100 mV at 5 V in/39 kilohms tape, 1 M ohm radio and aux; $\mathrm{FR} \pm 0.5$ dB $30-20.1000 \mathrm{~Hz}$ phono RIAA. $30-20,000 \mathrm{~Hz}-0,+1$ dB ; high-level distortion $0.02 \%$; residual noise -104 dB A-wid. $12 \times 4 \times 8$ in
. $\$ 995$
Quad 34 Control Unit
Preamp control unit with tilt control: bass control: inputs for disc, tape. tuner, aux; 3 push-button filters; bass lift and step. Distortion worst case any input $0.5 \%$. Residual noise A-wid volume control at minimum $-105 \mathrm{~dB} ; \mathrm{FR} \pm 0.3 \mathrm{~dB}$ any input except phono. FR phono RIAt $\pm 0.5 \mathrm{~dB}$.
$\$ 795$

## RCA

MPT200 Audio/Video Preamp Tuner
Dimensia A/V control center with unified remote control and on-screen status indication when used with Dimensia monitor lets you select inputs from up to 13 Dimensia components and 5 nonsystem components. Features automatic input selection; remote control volume, mute, direct access and station scan, and off/on; SystemLink cabling; simultaneous recording and playback: auto status indication; auto switching; quartz-PLL synthesis tuning: 20station random-tuning memory; preset channel seanning: FM search tuning; electronic volume control: signal processing lood; preset turn-on volume; fluorescent display; muting; bass, treble, and balance controls; 4 AC convenienre outlets. Tuner section: FM sens $12.2 \mathrm{dBf} ; \mathrm{s} / \mathrm{N} 73 \mathrm{~dB}$ (mono); image rejection 45 dB ; sel 60 dB ; $\operatorname{sep} 40 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; capture ratio 1.5 dB; FM FR $30-15,000 \mathrm{~Hz}$. $14.63 \times 4.13 \times 13.38$ in $\$ 339$

## REVOX

## B252 Preamplifier

Microprocessor-controlled preamp with input sensitivities programmable into nonvolatile memory and infrared remote control. Inputs for MM phono; MC phono; tuner; tape; tape 2; AUX; phono 2: CD player; EQ. FR $20-20.000 \mathrm{~Hz}+0 .-0.2 \mathrm{~dB}$; THD $<0.01 \%$; $\mathrm{S} / \mathrm{N}$ 96 dB (line input), 75 dB (phono input); Mm phono sens $1.6-93 \mathrm{mV}$ for $5-\mathrm{mV}$ output; sens for line-level inputs 160 mV to 2.3 V . $17.7 \times 6 \times 13 \mathrm{in} . . . \$ \$ 1.400$

## PREAMPLIFIERS

## ROTEL

## RC870BX Stereo Preamplifier

Flat preamp (no tone controls) with inputs for mm phono, mi phono, tape 2. Frequency response 4$100,000 \mathrm{~Hz}+0.5 \mathrm{~dB},-0.3 \mathrm{~dB}$ rotal harmonic distortion 0.004\%: 1 MD 0.004\%; MM phono input overload level $180 \mathrm{mV} . \quad \mathrm{Mm} / \mathrm{MC}$ signal-to-noisc ratios $80 / 70 \mathrm{~dB}$
RC850 Stereo Preamplifier similar to above hut has tone controls.
$\$ 249$

## JEFF ROWLAND DESIGN GROUP

## Coherence One Preamplifier

Solid-state FET preamp with companion regulated power supply. Accepts all MM and MC cartridges directly. Direct-coupled design from inpul to output. Split-passive R1AA equalizer minimizes phono equalizer errors. No negative feedback: propriety design optimizes low-level signal recognition. Provides inputs for 1 phono and 3 high-level inputs. Tape rec outputs selectable from any input. Features phase reversal and full muting from front panel: separate right/left channel balance controls: master volums: balanced outputs standard: outputs mute upon powerup or error. $19 \times 1.75 \times 1.3$ inches; 37 pounds

## SAE

X1P X-Series Preamplifier

- Computer direct-line fully discrete preamp. Features separate power supply. loading for MM and MC phono inputs. rack mountable. Inputs for ma phono. MC phono. tape. AUX. FR $20-20.000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$; max output 17 V : THI) $0.01 \%$ : M1 $0.01 \%$ : MM phono sens 0.07 mV for 0.5 V output at $1.000 \mathrm{~Hz}: 19 \times 1.75 \times 12.5$ in: 14 lb .
$\$ 1.200$


## P102 Preamplifier

Computer direct-line preamp with 3 digital tone memories. electronic volume and balance controls. Features sequential audio muting to provide crossfade between input sources: alphanumeric displays of all functions. Inputs for mm phono. Me phono. tape. lape 2. tux. phono 2. (D player. tuner. external processor. Frequency response $20-20.000 \mathrm{~Hz} \pm 0.5$ dB : max output 7.5 V : THI) $0.025 \%$; MI) $0.025 \%$ IHF; MM phono sens 160 mV for $0.5-\mathrm{V}$ output al 1.000 Hz : MM phono input overload level $240 \mathrm{mV}, 19 \times 3.5 \times 14$ in: 17 lb. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 449$

## SANSUI <br> C-1000 Control/Preamplifier

Preamplifier with full-function remote control. Features multiple audio inputs: 2 video inputs; motordriven volume control; delay-line video enhancer: monitor output; keyboard instrument input: variable loudness: remote mute. Preamp ouipui $1.000 \mathrm{mV} / 1.5$ kilohms: FR $10-100.000 \mathrm{~Hz} .3 .6 \times 17 \times 9.4 \mathrm{in}: 7.1$ lb.
$\$ 190$

## SOUNDCRAFTSMEN

## IDX $\mathbf{4 2 0 0}$ Preamplifier/Equalizer

Combination preamp/equalizer with digital audio and video inputs. Features in/out balancing to 0.1 dB ; phono preamp has variable cartridge loading ( $50-$ 800 pF . 100/47.000 ohm ) adjustable $\pm 20 \mathrm{~dB}$ gain MC
'The listings are based on data provided by the manufacturers. For more product information, contact an authorized dealer or the manufacturer directly. Manufacturers' addresses and phone numbers are listed in the directory beginning on page 217 .
variable reluctance or MM cartridge inputs: 3 -way tape dubbing: 2 external signal-processor loops: conventional line outputs plus separate autobridge line outpuls for auto mono bridging of most amps; $E Q$ $\mathrm{s} / \mathrm{N} 114 \mathrm{~dB}$ : passive-coil filters with 15 dB boost or cut for each octave: differential/comparator circuitry for true 0.1 dB unity-gain equalizer balancing: $19^{\prime \prime}$ rackmount front panel: includes frequency spectrum analyzer test record and instant reset Computene charts: $5.25 \times 19 \times 11 \mathrm{in}$. $\$ 699$

DX4000. Same as DX4200 without graphic equalizer but with 3 external signal-processor loops . . . . $\$ 439$

## Pro-Control Four-Control Center/Preamp.

Digital ( -mos mostrol.. Features five tape monitors for audio or video tape. CD, tuner and phono inputs. Two signal processor loops. sub-sonic filter, and direct mode to bypass all processing. Headphone jack, auto-bridge circuit to triple amplifier output. frequency response $20-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$; total harmonic distortion $<0.005 \%$; signal-to-noise ratio: phono 97 dB . high-level 116 dB . Rack mount fron panel. $19 \times 3.5 \times 10.5$ inches . . . . . . . . . . . . . . $\$ 699$ Pro-Control Three Control Center/Preamp. Same as above. except with two tape monitors and one signalprocessing loop.
$\$ 49$

## DX 3000 Preamplifier

Features bass and treble controls: 2 tape monitors with dubbing: stereo video inputs: loudness compensation: signal-processor input/output. Inputs for MM phono, tape. tape 2. CD player, tuner, video. (I) inputs matched to high dynamic range of players. FR $5-60.000 \mathrm{~Hz}+0 .-1 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 95 \mathrm{~dB}: \mathrm{THI} 0.01 \%$ : MM phono sens 1.4 mv for $0.5-\mathrm{v}$ output at 1.000 Hz ; NM phono input overload level 200 mV at 1.000 Hz ; sens for line-level inputs $140 \mathrm{mv} .19 \times 236 \times 10 \mathrm{in}$ : 10 lb. .
\$329

## SHERWOOD

## AP-7020 Preamplifier

Features discrete pure complementary flat amplifier: loudness switch: ultra-low bass EQ; gold-plated phono jack; switchable MM/MC phono gain amplitier: switchable tone control turn-over frequency: direct switch (tone bypass): active high and subsonic filter: record out selector switch: 2 sets of pre-amp outpul jack: external processor in/out jack: muting switch. $4.1 \times 17.3 \times 11 \mathrm{in}$.
$\$ 479$

## AM-7040 Preamplifier

Features high speed MOSFET; huge power reserve: overload protection: multi-stage LED power indicator: variable output level control: independent $\mathrm{L} / \mathrm{R}$ power iransformer: variable and fixed inputs: heavyduty speaker terminals; $6.4 \times 17.3 \times 15.7 \mathrm{in} .$. . $\$ 949$

## SONOGRAPHEBY CONRAD-JOHNSON

## SCl FET Preamp

All-fET preamp with matched-fET polypropylene and polystyrene capacitors for all audio circuits discrete power-supply regulation: inputs for phono tuner, CD. video. tape 1 and 2. Frequency response 5 $100,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$ : $\max$ outpul 10 V : total harmonic distortion $0.1 \%$; 1MI) $0.1 \%$; phono overload $150 \mathrm{mV}: 3.5 \times 18 \times 12$-in.
\$595

## SONY

## TA-E77ESD Preamplifier

Preamplifier with built-in $16-\mathrm{bit}$. linear digital-10analog converter with quadruple-oversampling digital filter. Features automatic matching of sampling rate: audio/video switching capability; S-video in puts and oulputs: source direct switch: 12 total input sources; passive tone control circuitry: record out selector: adaptor terminals: 3-mode cartridge selector. IMI) $0.001 \%$; total harmonic distortion $0.001 \%$ scparation $>90 \mathrm{~dB}$; FR $5-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} \$ 1.2(10$

## SPECTRASCAN

## ICA-10 Preamplifier

High gain. high voltage input buffer-amplifier eliminates cartridge interaction. Low noise me head amp; input for Mm. CI). video, tuner, tape $1 \& 2.2$ sets of outputs. Frequency responsc $3-250.000 \mathrm{~Hz}$ : total harmonic distortion line amp $.05 \%$; M1).05\%; signal-to-noise ratio 100 dB ; sens 100 mV for 1.0 V output: $3.75 \times 19 \times 9.5-\mathrm{in}: 17 \mathrm{lb}$.
$\$ 1.345$

## SUMO

## Athena Preamplifier

Stereo preamp with built-in moving-coil head amp. Features discrete circuitry utilizing 1\% metal film resistors and metalized polypropylene capacitors: gold-plated input/output jacks: separate record/ mode select functions; linear-phase-matrix subsonic filter: high-level bypass: laser-trimmed stepped volume conlrol. FR $20-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$; crosstalk 80 dB: IHD/IM $<0.01 \%$ below 10 V output.... . $\$ 699$

## SUPERPHON

Revelation II Preamplifier
Features 2 tape and processor loops: max output 5 V : 150 mV MM phono overload: MM phono input impedance 47K ohms C.D. Maxx Preamplifier

Features 1 tape and processor loop; max outpul 3 V.

## TANDBERG

1CA 3018 Control Preamplifier
Preamplifier with zero-negative-feedback design. All high-level inpuls have overload rating of 20 V : toroidal transformer with separate winding for each ch: separate power supply for each ch: selected metalfilm resistors and polyprylene capacitors; no tone conirols: separate record and program selection. $17.13 \times 3.25 \times 13.75 \mathrm{in}: 12.5 \mathrm{lb}$
$\$ 2,500$

## TCA 3038A Control Preamplifier

Fully remote controlled unit similar to above. Servo controlled volume (when used with remote): tone controls: tone defeat: loudness; MM and MC; DAT. CD, video, and tape inputs. Remote optional. Rosewood panels: $17.13 \times 3.25 \times 13.75 \mathrm{in}$; $11 \mathrm{lb} . \$ 1.350$

## TECHNICS

SU-A210 Class AA Preamplifier
Features Class it circuilng to separate voltage amplification from current amplification. Voltage amp operates in Class $A$ driving Class ta bridge circuit which provides ideal load characteristics for max lincarity and isolation from imp fluctuations. Class at Eu circuit isolates voltage amp from loadimp flucluations. Active Servo power supply. Switches video signals form $\mathrm{A} / \mathrm{V}$ inputs as well as audio signals from 8 inpuls with video output for monitor. Inputs for MM phono; MC phono: tape: tape 2/VCR; aux: phono 2: CD player; tuner: video (AV 1). FR 0.5$180.000 \mathrm{~Hz}+0 . \pm 3 \mathrm{~dB} .17 \times 5 \times 14.25 \mathrm{in}: 20 \mathrm{lb} \$ 1.250$

## SU-A4MK2 Stereo DC Preamplifier

Features amorphous step-up transformer for extended linear response; full- match ing phono equalizer for all types of cartridges: all Class 4 with ICI. ultra-lownoise FET input: low output imp allows remote power amp placement: shelving tone controls for $E Q$ : presettable CD/aux/video input selector: 4 -ganged master volume control: infrasonic and high filter switches: loudness switch; separate rec selector with Iwo-way dubbing: two tape monitors. Maximum output voltage rated at 8 volts: $16.94 \times 3.81 \times 14.19$ inches: 17.6 pounds.
$\$ 1.190$

## SU-A6MK2 Stereo DC Preamplifier

Features shelving tone controls, selectable turnover frequencies. infrasonic filter, audio muting. Inputs

More For My Money

L'd always thought you needed big speakers to get good sound. So every couple of years, some department store would have a sale and I would buy the biggest speakers I could find for the money. Then I moved across the country to take a new job. I left my old speakers behind. I was sure they wouldn't fit in my new apartment and I was ready for new ones anyway.

After the move, I went shopping for new speakers at a specialty hi-fi store near my apartment. I told the salesman to show me something under $\$ 500$. He took me into a room full of all kinds and sizes of speakers.

The first speakers he demonstrated were fantastic. The bass was big and tight. The stereo image was beautiful. Surely it was the biggest pair in the room.
"I don't have the room for those big speakers," I said. "And besides, I'm sure I can't afford them."

He stopped the demonstration to show me a KLIPSCH ${ }^{8} \mathrm{~kg}^{2}$, a compact and elegant model. "Yeah, this is more my size," I said, "let's hear a pair of these."
"You just did," he said.
I bought those $\mathrm{kg}^{2} \mathrm{~s}$. I paid a lot less than I had planned. And, believe me, I got a lot more for my money.

For your nearest KLIPSCH dealer, look in the Yellow Pages or call toll free, 1-800-223-3527.

## PREAMPLIFIERS

for MM phono, MC phono, tape 3, tape 2. aux 2. phono 2, CD player, tuner, computer, VCR, DAT recorder, TV. Max output 8 V: $16.94 \times 3.88 \times 14.19$ in.
$\$ 875$

## THRESHOLD

Model FFT ten/hl Control Preamplifier
Dual-ch, high-level noninverting field-effect transistor preamp dedicated specifically to line-level signal applications. Accepts 5 high-level sources and 2 tape decks with full flexiblity in record/monitor signal routing. External power supply in separate chassis. Input J-FETs operated in parallel, doubling transconductance and lowering noise and distortion. Secondary gain stages use cascoded moshets to supress voltage fluctuations, allowing low distortion even when driving loads less than 500 ohms. Circuit boards are miltary-grade glass-epoxy with gold-over-nickel-over-copper-plated paths. Gold-plated connectors with Teflon insulation. Precision metal film and wirewound resistors are used throughout. Bandwidth response 1.5 Hz and $125,000 \mathrm{~Hz}$ at -3 dB points; distortion $0.01 \%$ at 3 V rms from 20-20,000 Hz into 1.000 -ohm load; crosstalk no greater than
-75 dB at 20.000 Hz with $1.000-\mathrm{ohm}$ source; noise no greater than -110 dBA referenced to I V input; input imp 25.000 ohms, nominal; output imp 100 ohms. Controls for program source selector: record signal routing: monitor signal selection; mode selector: balance control; audio level control. $1.75 \times 19 \mathrm{x}$ 6.5 in.
$\$ 2,000$

## Model FFIT nine Preamplifier

Dual-ch noninverting field-effect transistor preamp. Accepts inputs from high- and low-level Mc, MM or other velocity-output characteristic phono cartridge, 3 high-level sources, and 2 tape decks with full flexiblity in record/monitor signal routing. Cartridge section uses single gain-variable preamplification stage for MC and MM cartridges. Cartridge loading selected by internal DIP switch assemblies. Signalpath topologies and power-regulation circuits derived from FET ten research. External power supply in separate chassis. Circuit boards are miltary-grade
glass-epoxy with gold-over-nickel-over-copper-plat ed paths. Gold-plated connectors with Teflon insulation. Precision metal film and wirewound resistors are used throughout. FR bandwidth 1.5 Hz and $125,000 \mathrm{~Hz}$ at -3 dB points: distortion $0.01 \%$ at 3 V rms from $20-20,000 \mathrm{~Hz}$ into 10,000 -ohm load: highlevel input imp 25.000 ohms, nominal; outpul imp 100 ohms. Controls for program source selector: record signal routing; monitor signal selection; independent channel balance control; audio level control. $1.75 \times 19 \times 6.5$ in
$\$ 1.750$
FET ten/pc Phono-Cartridge Preamp
Dual-ch noninverting field-effect transistor preamp dedicated specifically to phono-cartridge gain applications. Accepts inputs from high- and low-level Mc; MM or other velocity-output characteristic phono cartridge and provides RIA.A equalized output suitable for preamp high-level inputs. Single gainvariable high-performance stage provides signal increase required by different cantridge types. Combination of active low-frequency and active and passive high-frequency equalization make up RIAA equalization. Up to 16 different cartridge-loading characteristics may be user selected with internal inte switch assemblics. External power supply in separate chassis. Circuit boards are miltary-grade glass-epoxy with gold-over-nickel-over-copper-plated paths. Gold-plated connectors with Teflon insulation. Precision metal film and wirewound resistors are used throughout. Crosstalk no greater than -70 dB at $20,000 \mathrm{~Hz}$ with 1,000 -ohm source; output impedance 420 ohms. $1.75 \times 19 \times 6.5 \mathrm{in}$.
$\$ 1,200$

## WINGATEAUDIO

## 1000 Audio/Video/Digital Preamp

Same performance as 550 except: 30 V output with $<$ $0.02 \%$ total harmonic distortion; IMD $<0.02 \%$; MM phono overload 400 mV : moving magnetic phono signal-to-noise ratio $>105 \mathrm{~dB}$ : moving cartridge phono signal-to-noise ratio $>85 \mathrm{~dB}$; separate audio. video, and digital switching; dual-mono construction; dual independent power supplies: dual chassis; switch-selectable phase polarity $\$ 2.900$

". . . So you're Joseph Paul Carruthers and you were president of Audivex speakers. You made many claims for your speakers. Tell me, Joseph. what is 'flux impulse driver"'. And 'no-lag midrange crossover'? What about 'vectored ubiquitous maxi-woofer,' what is that. Joseph?"'

990 Audio/Video/Preamp
Same performance as the 550 plus separate audio and video switching: remote control
$\$ 1,995$

## 660 Audio/Video Preamplifier

Same performance as the 550 plus separate audio and video switching.
$\$ 1,695$

## 550 Audio Preamplifier

100\% FET: no negative feedback: MOSFET regulated power: toroidal power transformer: ultra-wide bandwidth: 20 V output with no more than $0.05 \%$ total harmonic distortion; frequency response $0.1-250.000$ $\mathrm{Hz}+0,-3 \mathrm{~dB}$ : intermodulation distortion $<0.05 \%$; MM phono overload 400 mV : MM phono signal-tonoise ratio $>100 \mathrm{~dB}$. MC phono signal-to-noise ratio 80 dB : selectable phono input impedance . . $\$ 1,395$

## YAMAHA

## CX-10000 Digital Preamplifier

Limited Centennial Edition digital control amplifier with built-in digital sound field processor and $1 / 4$ converter. Features hi-bit quadruple oversampling: hi-bit precision D/A conversion; digital-direct connection: digital input/output port: digital parametric equalizer; 16 user-memory programs combining digital sound field and/or digital parametric equalizer; wireless remote control. Titanium grey with high luster walnut end panels: 65 lb
$\$ 7,500$

## HX-10000 Phono Head Amplifier

Limited Centennial Edition phono head amplifier. Features two independent moving-coil head amplifiers (selectable for phono I and phono 2). Titanium gray cabinet with high luster, hand-rubbed walnut end panels: 20 pounds
$\$ 2.500$

## CX-1000L Digital Preamplifier

Digital preamplifier with built-in hi-bit 8 -timesoversampling digital filter. Features hi-bit twin D/A converters; 4 digital ( 4 coaxial. 3 optical) audio inputs and 4 video inputs; continuously variable loudness control; 5 audio record outputs and 2 video record outputs; 12-position record out selector: provisions for simultancous audio and video recording on two VCR's: I optical, 2 coaxial digital audio record outputs: automatic sampling frequency switching: 6 position moving magnet or moving coil phono cartridge load selector; source direct switch; audio mute; remote control.
$\$ 1.199$

## CX-800L' Preamplifier

Preamplifier with 8 audio and 3 video inputs. Features 4 audio and 2 video record outputs; 9 . position record out selector: provision for simultaneous audio/video recording on two VCR's source direct switch; phase invert switch; continuously variable loudness control: 6-position MM and MC cartridge load selector: bass and treble controls: subsonic filter for frequencies below 30 Hz ; remote control.
$\$ 699$

## CX-600L Preamplifier

Preamplifier with 6 audio and 2 video inputs. Features 2 audio and 1 video record output: 6 position record out selector: source direct switch: continuously variable loudness control: MM and MC cartridge switch; bass, treble, and midrange controls: subsonic filter for frequencies below 30 Hz ; remote control.
$\$ 449$
The listings are based on data provided by the manufacturers. For more product information, contact an authorized dealer or the manufacturer directly. Manufacturers' addresses and phone numbers are listed in the directory beginning on page 217.


# Mastery. Reliability. Convenience. 

## A new hybrid from Audio Research

 leads the way in amplifier technology.The Hybrid Lineage
Audio Research has been a leader in developing innovative hybrid audio circuits combining
the linearity and harmonic accuracy of vacuum tubes with the low noise and long service life of tield-effect transistors.
You'll hear that lineage in the D125's ability to produce musical dynamics with palpable authority, and low-level information with a transparency and lack of grain that mimics reality. Given a first-class program source, the D125 brings to the soundstage a three-dimensionality and precision unique in this price range.
Unparalleled Convenience and Reliability
The D125 was also designed to provide day-to-day reliability and convenience.
Sophisticated protection circuitry assures that potentially damaging input signals won't stress the eight 6550 output tubes.
Routine maintenance couldn't be easier. Tube balancing is controlled automatically, while Plate Current Controls allow the owner to keep performance optimized as tubes age. Even when output tubes are replaced, the D125 won't need to be returned to the dealer for rebiasing.


## ACCUPHASE by MADRIGAL

## E-303X 150-W/ch Integrated Amp

Power meters; 3-position loudness compensation; inputs for MM phono, MC phono, tuner, tape, tape 2. AUX, phono 2. CD player, line 2. $150 \mathrm{~W} / \mathrm{ch}$ into 8 ohms: $250 \mathrm{~W} / \mathrm{ch}$ into 2 ohms; MM phono sens 0.22 mV for 0.5 V output at $1,000 \mathrm{~Hz}$; sens for line-level inputs $13.9 \mathrm{mV} ; 45.2 \mathrm{lb} ; 17.5 \times 6.4 \times 14.6$ in $\$ 3.500$

## E-302 120-W/ch Integrated Amp

3-position loudness compensation and power meters. Inputs for MM phono; MC phono; tape; tape 2; phono 2; CD player; 3 line inputs. $\mathrm{S} / \mathrm{N} 120 \mathrm{~dB}$; MM phono sens 0.22 mV for 0.5 V output at $1,000 \mathrm{~Hz}$; sens for line-level inputs $7.1 \mathrm{mV} ; 120 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; $180 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; $35.6 \mathrm{lb} ; 17.5 \times 5.75 \times$ 14.6 in.
$\$ 2.750$
E-205 80-W/ch Integrated Amp
Parallel push-pull output stage driven by MOSFET driver stage; large power supply; direct-coupled circuitry with DC servo; high-gain equalizer: MCinput imp selector: 9 inputs; turnover selector switch; tape monitor and dubbing switches; subsonic filter; outputs for 2 pairs of speakers; speaker selection switch; mono switch. Inputs for MM phono; MC phono: tape; tape 2; CD player; tuner; 3 line-level inputs. Champagne-gold or black-anodized finish. 80 W/ch into 8 ohms, $100 \mathrm{~W} / \mathrm{ch}$ into 4 ohms. $17.5 \times 5.75$ x 14.56 in ; 30.8 lb . . . . . . . . . . . . . . . . . . . . . . $\$ 1,700$

## AUDIO DYNAMICS

## CA-2000E Integrated Amplifier

$100-\mathrm{W} / \mathrm{ch}$ integrated amplifier. Features CD-direct switch; infrasonic filter: CD, tuner, AUX, and 2 tape inputs; two phono preamps; separate low-noise classA moving coil preamp: dubbing capability; separate power-supply regulators; CD and phono jacks are gold-plated: wireless universal remote control for Audio Dynamics products.
$\$ 799$

## AUDIO DESIGN ASSOCIATES

## MRA-808 Multiroom Amp Mainframe

Contains 8 integrated amplifier modules. Each module features digitally controlled volume, bass and treble. $40 \mathrm{~W} /$ ch continuous from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.03 \%$ THD; $60 \mathrm{~W} /$ ch into 4 ohms; slew rate $10 \mathrm{~V} / \mu \mathrm{sec}$; IMD $0.02 \% ; 50 \mathrm{lb} ; 19 \times 12.5$ $\times 14.5$ in
$\$ 9.927$

## DCA-40 Digital Control Amplifier

Integrated amp with inputs for MM phono, tape, tape 2, AllX. CD player, tuner. Features electronic digital volume control; separate phono preamp. 40 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ with no more than $0.06 \%$ THD into 8 ohms; 50 W into 4 ohms; FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; THD $0.06 \% .6 \mathrm{lbs} .19 \times 3.5 \times 12$ in.

$$
a / d / s /
$$

Atelier A2 80-W/ch Amplifier
Stereo integrated amp with separate input selectors for recording and listening. Features 2 tape monitor loops; phono preamps for MM and MC cartridges; preamp output and main amp input jacks; LED displays: clipping indicators; power output $100 \mathrm{~W} / \mathrm{ch}$
into 4 ohms, $80 \mathrm{~W} / \mathrm{ch}$ into 8 ohms, $70 \mathrm{~W} / \mathrm{ch}$ into 2 ohms. $2.8 \times 17.5 \times 14.8$-in; $20 \mathrm{lbs} . . . . . . . . . . . ~ . ~ \$ 699$

## AKAI

AM-93-B 120-W/ch Integrated Amplifier
Features $120 \mathrm{~W} / \mathrm{ch}$ with zero drive DC -servo main amp; 4-digital direct inputs ( 2 optical for CD/DAT); dual D/A converter; 18 -bit processing: 8 -times oversampling: digital filter; source direct mode; IIposition input selector; low-noise Mm/MC phone EQ $\mathrm{amp} ; 0.008 \% \mathrm{THD}$ resonance free rigid chassis structure
$\$ 1,099$

## AM-73-B 100-W/ch Integrated Amplifier

Features $100 \mathrm{~W} /$ ch with zero drive DC -servo main amp; 4-digital direct inputs (1 optical for CD/DAT); dual $\mathrm{D} / \mathrm{A}$ converter; 4 -times oversampling; digital filter: source direct mode; 11-position input selector ( 3 tape monitor); 0.008\% THD; resonance free rigid chassis structure.
$\$ 799$
AM-52-B 70-W/ch Integrated Amplifier
Features $70 \mathrm{~W} / \mathrm{ch}$ with dual-pole DC-servo; sourcedirector switch; low-noise MM/MC phono EQ amp; 7position input selector ( 2 tape monitor); speaker A/B selector w/large binding posts; $0.005 \%$ THD; processor terminals for EQ.
. \$399

## AM-32-B 50-W/ch Integrated Amplifier

Amplifier with dual-pole DC-servo delivers 50-W/ch. Features source direct mode switch; low-noise moving magnet/moving coil phone EQ amp; 7-position input selector ( 2 tape monitor); speaker $\mathrm{A} / \mathrm{B}$ selector with large binding posts; $0.005 \%$ total harmonic distortion processor terminals for $\mathrm{EQ} . .$. . . . . . $\$ 349$

## ARCAM

Arcam Delta 90 Integrated Amplifier
Amplfier with toroidal power transformer delivers $70-\mathrm{W} / \mathrm{ch}$ into 8 ohms . Features inputs for mm/mC cartridges, tuner, CD and two-tape recorders; bypassable limited range tone controls; mono switch; two loudspeaker outputs; THD $0.02 \%$ at 60 W ; FR 40$20,000 \mathrm{~Hz}-3 \mathrm{~dB} .16 .93 \times 10.43 \times 3.54 \mathrm{in} \ldots . . \$ 749$

Arcam Alpha+ Integrated Amplifier
Amplifier with toroidal power transformer delivers $30-\mathrm{W} / \mathrm{ch}$ into 8 ohms. Features 5 inputs; sensible tone controls; headphone socket with loudspeaker mute; THD $0.02 \%$ at 25 W ; FR $60-20,000 \mathrm{~Hz}-3 \mathrm{~dB} .15 .75 \times$ $9.1 \times 3.74$ in $\$ 299$

A60+ Integrated Amplifier
Amplifier with $40-\mathrm{W} / \mathrm{ch}$ into 8 ohms features four inputs including one dedicated to CD ; optional MC60 plug-in preamplifier board; two tape outputs: switchable hi filter and mono functions; sensible tone controls; headphone socket with loudspeaker mute; total harmonic distortion $0.03 \%$ at $35 \mathrm{~W} .17 .72 \times 9.45$ $\times 2.36$ in
\$399
Arcam Delta 60 Integrated Amplifier
Purist integrated amplifier with $50-\mathrm{W} / \mathrm{ch}$ into 8 ohms: $20-20,000 \mathrm{~Hz}$; inputs for MM/MC, straightwire passive preamp section into a high gain power amplifier; tuner, CD mono/stereo switch; speaker 1 and 2 ; THD $0.02 \%$ slew rate 25 ; sens $120 \mu \mathrm{~V}$; Delta Box converter,

## AUDIO BY VAN ALSTINE

CA-150 Plus Integrated Amplifier
Features Van Alstine Fet Three Plus hybrid preamplifier circuitry: 240D full complementary power MOSFET amp circuits driven from high-current toroidal power transformer and 2-stage power supply with isolated regulated preamp sections; precision tracking volume control and balance control; phono, $C D$. and tuner inputs; dual tape-to-tape monitoring and dubbing capability; drives two pairs of speakers simultancously or separately; headphone jack: 75 W/ch into 8 ohms with less than $0.01 \%$ THD. $13.5 \times$ $12.5 \times 4.5 \mathrm{in} ; 15 \mathrm{lb}$
. $\$ 750$

## CAMBRIDGE AUDIO

P55 Intergrated Amplifier
Features passive segmented equalization on mmandmCinputs. Power output is $70 \mathrm{~W} /$ ch into 8 ohms, tone on/off control.THD $0.05 \%$. . . . . . . $\$ 648$

## P40 Integrated Amplifier

Features passive segmented phono section; MC/MM switchable inputs; large toroidal input transformer $40 \mathrm{~W} / \mathrm{ch}$ : THD $0.05 \%$; S/N M M 80 dB . MC 73 dB , line 80 dB. $2.5 \times 17.5 \times 11 \mathrm{in} .: 17 \mathrm{lb}$
$\$ 498$

## CREEK AUDIO BY MUSIC HALL

## 5050 Integrated Amplifier

$50-80 \mathrm{~W} / \mathrm{ch}$. Multi-function with MM and MC, video, $C D$, tuner, 2 tape to tape in and outs, tape monitor, tape to tape dubbing, active/passive tone controls, pre-amp out, power amp in, 4 speaker switching (A, A \& B, B). Amp also bridgeable to mono unit to provide 2 mono amps, $100 \mathrm{~W} / \mathrm{ch} .$. . . . $\$ 950$

## 4040/S2 40-W/ch Integrated Amplifier

Inputs for MM phono, CD, tuner, tape in and out. Designed for extreme clarity and warmih. $40 \mathrm{~W} / \mathrm{ch}$ into 8 ohms.
\$425
4140/S2. Similar to above but with $45-65 \mathrm{~W} / \mathrm{ch}$; MC switch: increased sens and gain.

## DENON

## PMA-1520 Integrated Amplifier

$130 \mathrm{~W} / \mathrm{ch}$ integrated amplifier. Features Denon Optical Class A circuitry. Digital multi-interface decoder; 7 audio inputs phono AUX1,2, CD, tuner. tape 1, 2. 3 way speaker terminals; CD direct: THD. $003 \%-3 \mathrm{~dB}$ at rated output; IMD. $003 \%$; FRI$250,000 \mathrm{~Hz}-3 \mathrm{db}$ at $1 \mathrm{~W} ; \mathrm{S} / \mathrm{NI} 20 \mathrm{~dB} ; 6.37 \times 17.08 \times$ $15.43-\mathrm{in}$; 29 lb .
$\$ 1,000$ PMA-920. Similar to the PMA-1520 above except with $115 \mathrm{~W} / \mathrm{ch}$ $\$ 600$ PMA-720.90 W/ch . . . . . . . . . . . . . . . . . . . . . . $\$ 450$


PMA-250 Integrated Amplifier
Features high-speed power transistors; simple and straight signal path: CD-direct switch: inputs for phono. CD, tuner, AllX, tape monitor; dual-concentric volume controls; headphone jack: large speaker terminals for audiophile quality connections. 25 W/ch min rms into 8 ohms from $20-20.000 \mathrm{~Hz}$ with no more than $0.08 \%$ THD; dynamic power $52 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; imD $0.03 \%$.
$\$ 200$

## DUAL BYORTOFON

PA5060 Integrated Amplifier
60 watt/ch integrated amplifier with high current output capability and Mc phono input. Black. $\$ 380$

## PA5030 Integrated Amplifier

30 watt/ch integrated amplifier with high current output capability and MC phono input. Black . \$280

## ELECTROCOMPANIET BY

MUSIC AND SOUND IMPORTS
AW100 Integrated Amplifier
Integrated Amp features $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms: 180 W/ch into 4 ohms; fr $0-100,000 \mathrm{~Hz}$; THD $0.003 \%$; 30 lb.
$\$ 1.495$

## HITACHI

HA-007SW 65-W/ch Integrated Amp
Drives 2 pairs of speakers: inputs for 2 vidco sources. phono, CD. tuner, videodisc player, tape; bass and treble controls; balance control: loudness control: subsonic filter: Pure Drive Circuit: mosfer's; rosewood end caps. $65 \mathrm{~W} / \mathrm{ch}$ into 8 ohms ; damping factor 60 at $1.000 \mathrm{~Hz}: 19 \mathrm{lb}$
. $\$ 400$

## HARMAN KARDON

PM665 Vxi 150 -W/ch Integrated Amplifier
Inputs for $\mathrm{A} / \mathrm{V}$, aux, tuner, CD player, phono (MM or MC): VCR/tape monitor switches 2 decks and source; drives 2 pairs of speakers; selectable turnover frequencies (bass 200 or 400 Hz , treble 2.000 or 6.000 ); tone defeat: mono switch; capacitance trim (normal, $+100,200.300 \mathrm{pF}$ ): phase-correct loudness; high and low filters; 2-way tape dubbing: lit mute button ( 20 dB down); preamp out and main in jacks; active/passive phono section: 2 power transformers: $8150-\mathrm{W}$ power transistors. $150 \mathrm{~W} / \mathrm{ch}$ into 8 ohms: dynamic power 500 W : current capability $\pm 80$ amps
$\$ 999$
PM655 Vxi. As above. $90 \mathrm{~W} / \mathrm{ch}$; curtent capability $\pm 45$ amps for 260 W on peaks. $\qquad$ $\$ 699$ PM645 Vixi. As above. $90 \mathrm{~W} / \mathrm{ch}$; current capability $\pm 30$ amps; external processor loop instead of preamp out/main in jacks. $\qquad$ $\$ 479$ PM640 Vxi. As above. $45 \mathrm{~W} / \mathrm{ch}$; current capability $\pm 18 \mathrm{amps}$; neg feedback 20 dB ; no low or high filter.
$\$ 329$

## JVC

AX1100BK Integrated Amplifier
Features Pure Signal Transceiving: separate CD ground: separate CD input with differential input: Dynamic Super-A power amp; Gm selector; Gm volume; 2-amp construction; inputs include CD 1 . CD 2, DAT, and 5 others: high-gain phono equalizer for MC/MM cartridges: connections for two pairs of speakers. $120 \mathrm{~W} /$ ch into 8 ohms from $20-20.000 \mathrm{~Hz}$ with no more than $0.003 \%$ THD
$\$ 720$

## KENWOOD

KA-3300D 150-W/ch Integrated Amplifier
Basic series digital integrated amplifier with dual built-in 16 -bit $\mathrm{D} / \mathrm{A}$ con verters. Features optical interface with DP-3300 CD player: VIG-DLD (Voltage Interface Gate with Dynamic Linear Drive) power amplifier: quadruple oversampling digital filters: 7 pole Butterworth FDNR analog low-pass filters; 3
sampling frequencies ( $48 / 44.1 / 32 \mathrm{kHz}$ ); coaxial digi tal input; 3 tape inputs; dual rec-out selector: 2-way dubbing: digital-direct and line-straight switches: dual MM/MC phono equalizer amplifiers; Kenwood NF-CR tone controls with selectable turnover: highrigidity chassis: audio insulator feet; Sigma Drive Type B: variable loudness: subsonic filter; mono/stereo switch; volume control: gold-plated input jacks; $150 \mathrm{~W} /$ ch min rms; тH1) $0.004 \%$ : $\mathrm{s} / \mathrm{N} 110 \mathrm{~dB} .6 .69 \mathrm{x}$ $17.31 \times 16.56 \mathrm{in}: 39.2 \mathrm{lb}$.
$\$ 1.199$

## KA-880D 100-W/ch Integrated Amplifier

Basic series integrated amplifier with VIG-I)LD power amplifier. Features low-impedance drive capability; independent CD input; CD-direct and linestraight switches: 3 tape inputs; dual rec-out selector: 2-way dubbing with monitor switch; MM/MC cartridge selector with NFB loop equalizer amplifier Kenwond NF-CR bass and trebie controls; Sigma Drive Type B; - 30 dB muting; loudness switch; subsonic filter: mono/stereo switch: 2 speaker systems operation: $100 \mathrm{~W} / \mathrm{ch} \mathrm{min} \mathrm{rms}$; THiD $0.008 \%$; $\mathrm{s} / \mathrm{N}$ $108 \mathrm{~dB} .5 .69 \times 17.31 \times 13.5 \mathrm{in}: 22 \mathrm{lb} . . . . .$.

## KA-770D 80-W/ch Integrated Amplifier

Basic series integrated amplifier with DLD power amplifier. Features low-impedance drive capability; independent ('D input: CD-direct and line-straight switches; 3 tape inputs; dual rec-out selector: 2-way dubbing with monitor switch: mm/MC carridge selector with NFB loop equalizer amplifier: Kenwood NF-CR bass and treble controls: -30 dB muting: loudness switch. subsonic filter: mono/stereo switch 2 speaker systems operation: $80 \mathrm{~W} / \mathrm{ch}$ min rms: THD $0.008 \% ; \mathrm{s} / \mathrm{N} 108 \mathrm{~dB} .5 .69 \times 17.31 \times 13.5 \mathrm{in} ; 20.24$ lb.
\$360

## KA-76 100-W/ch Integrated Amplifier

Features 7-band graphic cqualizer: dual-range tED power meters; CD/AUX input; 2 tape inputs with 2way tape dubbing and monitor: cqualizer recording switch; loudness switch; muting: A/B speaker selector: headphone jack; $100 \mathrm{~W} / \mathrm{ch}$ min rms: THD $0.05 \%$ : $\mathrm{s} / \mathrm{N} 100 \mathrm{~dB} .4 .5 \mathrm{I} \times 16.56 \times 10.88 \mathrm{in} ; 14.7 \mathrm{lb} \ldots \$ 300$

KA-127 125-W/ch Integrated Amplitier
Features 7 -band graphic equalizer and power meters: $125 \mathrm{~W} / \mathrm{ch} \mathrm{min}$ rms: CD/atix input; motorized volume control; unified full remote control system: auto-function: bi-directional tape dubbing: dual vidco sound inputs; connections and switching for two pairs of speakers: full circuit protection: headphone jack: THD $0.05 \%$; IMD $0.03 \%$; FR $10-70.000 \mathrm{~Hz}+0 \cdot 18$. -3 dB : $\mathrm{s} / \mathrm{N}$ ratio $75 \mathrm{~dB}: 4.68 \times 16.56 \times 10.68 \mathrm{in} ; 17.6$ lb.
\$369
KA-87 100-W/ch Integrated Amplifier
Features 7 -band graphic equalizer: $100 \mathrm{~W} / \mathrm{ch}$ min rms; l.ED power meters: separate CD input: autofunction; bi-directional tape dubbing: dual video sound inputs connections and switching for two pairs of speakers; full circuit protection; headphone jack: THD $0.05 \%$; IMD $0.03 \%$; fR $10-70.000 \mathrm{~Hz} ; \mathrm{S} / \mathrm{N}$ ratio $75 \mathrm{~dB} ; 4.31 \times 16.56 \times 10.87 \mathrm{in} ; 15.84 \mathrm{lb} . . \$ 269$

## KA-V1000R Integrated Amplifier

$80-\mathrm{W} / \mathrm{ch} .30-\mathrm{W} / \mathrm{ch}$ for rear. 6 video and audio inputs: full-function wireless remote control additional learning 58 functions programmable: 16 -bit digital delay; four mode surround sound including I2olby: 3 indepedent rec selecotrs: super VHS and BETA input; built-in sharpness and detail enhancer: onscreen data display: motor-driven rotary volume control.
$\$ 875$

## KYOCERA

A-910 150-W/ch Integrated Amplifier
Ceramic base/chassis; cutless-core power transformer: DC con iguration with DC servo control: fineceramic linear modularized phono stages. Inputs for MM phono. MC phono. tape. tape 2. 4ux. phono 2. CD player, tuner, video. FR $10-100.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$;
max output 0.25 V at rated sens; $\mathrm{S} / \mathrm{N} 96 \mathrm{~dB}$; MM phono sens 3.2 mV for 0.5 V output at 1.000 Hz ; sens for line-le ved inputs 250 mV : 150 continuous average W/ch from $20-20.000 \mathrm{~Hz}$ with no $>0.02 \%$ THD into 8 ohms: dynamic headroom 1.2 dB : slew rate $90 \mathrm{~V} / \mu \mathrm{s}$ : $200 \mathrm{~W} / \mathrm{ch}$ into 4 ohms with $0.05 \%$ THI); damping factor $150(1 \mathrm{kHz}): \mathrm{s} / \mathrm{N} 78 \mathrm{~dB} .17 \times 5.75 \times 16.5$ in.
$\$ 1.500$

## LUXMAN

I. V -109 Disital Direct Integrated Amplifier

Integrated amplifier with built-in D/A converter. Features digital interaction with Luxman D-109 (I) player, 2 digital direct inputs; line straight switch front panel video input jack; signal-processor switch: rec-oul dubbing selectors; sampling frequency indicator: tape/video monitor selector: mono/stereo switch; -.30 dB attenuator switch; bass/treble controls. $150 \mathrm{~W} / \mathrm{ch}$; total harmonic distortion/intermodulation distortion $<0.09 \%$; frequency response 5 $200,000 \mathrm{~Hz}-3 \mathrm{~dB}$; signal-to-noise ration (line straight)(I)/line, tape $>110 \mathrm{~dB}: 17.25 \times 6.56 \times 18.13$ in: 44 lb.
$\$ 1,500$

## IV-105L: Integrated Amplifier

Features BRID (hybrid) and STAR circuitry: DuoBeta; voltage-driven amplification; tape and video dubbing: front-panel inputs ( $4 / \vee 2$. audio-video): recout selector: video amp and switching capability. Inputs for MM phono; MC phono; tape; tape 2; A/v: $4 / \mathrm{V}$ : CD player: tuner. 80 continuous average $\mathrm{W} / \mathrm{ch}$ from $20-20,000 \mathrm{~Hz}$ into 8 ohms with no more than $0.25 \% \mathrm{THI}$; $200-\mathrm{ms}$ dynamic power 200 W at 4 ohms: $f$ R (audio High level inputs) $3.5-300,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. $20-20.000 \mathrm{~Hz} \pm 0.2 \mathrm{~dB}$ phono. $10-6 \mathrm{MHz}$ video $\pm 1$ $\mathrm{dB}: \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}(\mathrm{MM}) .70 \mathrm{~dB}(\mathrm{MC}) .96 \mathrm{~dB}$ (tuner, tape. (D. video audio): $I M 1) 0.03 \% .17 .25 \times 5.19 \times 13.88 \mathrm{in}$ : 25.3 lb
$\$ 1.000$
I.E-109 Phono Pre-Amp

Designed as companion for LV-109. Features separate $\mathrm{Mc} / \mathrm{MM}$ inputs: variable gain and impedance switches, Mc straight circuit; subsonic filter; 3 step attenuator selector. THD $0.005 \%$; FR $20-20.000 \mathrm{~Hz} \pm 3$ dB : input sens/imp phono 1 ( Mc straight) $150 \mu \mathrm{~V} / 100$ ohms. pnono 2 ( M M 0 dB ) $2.5 \mathrm{mV} / 47 \mathrm{~K}$ ohms. phono $2(\mathrm{mc} / 22 \mathrm{~dB}) 260 \mu \mathrm{~V} / 3.40 .100 \mathrm{ohms}$. Phono 2 (MC 32 $\mathrm{dB}) 90 \mu \mathrm{~V} / 3.40 .100$ ohms. $17.25 \times 2.5 \times 12.19 \mathrm{in}: 9.9$ lb.
. $\$ 500$

## McINTOSH

MA-6200 Integrated Amplifier
Features $100 \mathrm{~W} /$ ch into 4 ohms. $75 \mathrm{~W} /$ ch into 8 ohms. 42 lb

## MARANTZ

PM-nt 140 -W/ch Integrated Amplifier
$140 \mathrm{~W} / \mathrm{ch}$ integrated amp features Quanter-A design; AVSS (automatic voltage supply shift); matched complementary mosfet output devices in triple pushpull circuit: CD/phono direct switch; tone defeat switch toroidal power transformer: ceramic damped capacirors; copper-plated chassis; separate monitor/ dubbing selectors for 2 tape decks plus Ver: built-in MC step-up transformer; switches for mono mode. subsonic filter, muting. speakers on/off: total harmonic distortion $0.01 \%$; rosegold with rosewood side pancls.
\$3.000
PM-94BL. Similar to PM-95G above except with black finish.
$\$ 2.800$
PM1-841) 100-W/ch Integrated Amplifier
$100 \mathrm{~W} / \mathrm{ch}$ integrated amp features Quatter-A design: avss lautomatic voltage supply shift); matched complimentary mosfet output devices: $C D /$ phono direct switch; tone defeat switch; ceramic damped capacitors: copper-plated chassis: separate monitor/dubbing selectors for 2 tape decks plus video cassette recorder: built-in moving coil step-up transformer: mona mode switeh; THO $0.015 \%$ :

PM-741)BI. 105-W/ch Integrated Amplifier
$105 \mathrm{~W} / \mathrm{ch}$ black integrated amp features Quanter-A design: avss (automatic voltage supply shifi): (D/phono direct switch; tone defeat switch: ceramic damped capacitors; copper-plated chassis; separate monitor/dubbing selectors for 2 tape decks; tone defeat; switches for mono mode, subsonic filter, muting. speakers on/off: IMI) $0.03 \%$; тHD $0.03 \%$. 8.12 $\times 19.5 \times 16.5 \mathrm{in} ; 23.1 \mathrm{jb}$

PM-25BI, 30-W/ch Integrated Amplifier $30 \mathrm{~W} / \mathrm{ch}$ integrated amp features $\mathrm{CD} / \mathrm{phono}$ direct switch; independent heal sinks: $20-20,000 \mathrm{~Hz}$ bandwidth; THI) $0.1 \%$; IMI) $0.03 \% .4 .62 \times 16.5 \times 12 \mathrm{in}$; 11.7 lb. $\$ 299$

PM-65AVBI. 65-W/ch Integrated Amplifier $65 \mathrm{~W} / \mathrm{ch}$ integrated amp features CI)/phono direct switch: 3 monitor loops; 4 position record out; video switching; $20-20,000 \mathrm{~Hz}$ bandwidth; total harmonic distortion $0.03 \%$ : intermodulation distortion $0.03 \%$. $5.37 \times 16.37 \times 14.37 \mathrm{in}$ : 22 lb $\$ 499$

## MISSION ELECTRONICS

Cyrus II $60 \mathrm{~W} / \mathrm{ch}$ Integrated Amplifier
Integrated amp with high peak current delivery. Nonmagnetic. precision fabricaled die-cası alloy case and chassis; separate listen and record selectors: inputs for CD, tuner, hi-fi, video, tape recorder, and MM and MC phono cartridges: direct connected. front panel mounted headphone socket without loudspeaker swithching: metal film resistors; polypropylene capacitors; polystyrene capacitors; drives any loudspeaker load: fully compatible; FR $20-20.000 \mathrm{~Hz}_{2} \mathrm{~s} / \mathrm{N}$ $83 \mathrm{~dB} ; 8.5 \times 3 \times 13.5 \mathrm{in} ; 5 \mathrm{~kg}$.
$\$ 799$
Cyrus I $30 \mathrm{~W} / \mathrm{ch}$ Integrated Amplifier
Integrated amp with high current delivery. Nonmagnetic, precision fabricated die-cast alloy case and chassis; separate listen and record selectors; inpuls for CD, tuner. hi-fi. video, tape recorder, and both MM and MC phono cartridges; direct connected. front panel mounted headphone socket without loudspeaker switching: close-tolerance metal film resistors. polypropylene capacitors, polystyrene capacitors; fully compatible: $8.5 \times 3 \times 13.5$ inches; 9 pounds

## NAD

3400 Monitor Series Integrated Amplifier
Full remote control: $100 \mathrm{~W} / \mathrm{ch}$; power envelope circuitry; +6.2 dB dynamic headroom; bridgcable: lab input: pre-amp out/main in; semi-parametic tone controls; Soft Clipping: bass EO; rack mountable\$798

## 3240 PE Integrated Amplifier

$40 \mathrm{~W} / \mathrm{ch}$ : +6 dB dynamic headroom; power envelope circuitry; bass E(: speaker imp selector; high current; Soff Clipping.
$\$ 398$

## 3225PF. Integrated Amplifier

$25 \mathrm{~W} / \mathrm{ch}$; power envelope circuitry: 85 W hif dynamic power: +4 dB dynamic headroom: Soft Clipping: discrete 4 transistor phono pre-amp; preamp out/main amp
$\$ 248$

## NEC

A-910 Integrated Amplifier
Features unified remote control that can operate other NEC audio and video components: inputs for MM/MC aphono. tuner, CD player, tape deck. AllX. IV and VCR sound sources: independent record and input selectors for listening to one source while recording another: mute switch; bass and treble controls; bipolar power supply for video output to keep degradation of video signal to a minimum. 100 W/ch into 8 ohms from $20-20.000 \mathrm{~Hz}$ with $0.006 \%$ THID, $130 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; dynamic headroom 2 dB ; frequency response $10-40,000 \mathrm{~Hz} \pm 1 \mathrm{~dB} .17 \times 5.1$ $\times 13.4 \mathrm{in}$.
$\$ 649$

AV-360 Integrated Amplifier
Remote-controlled integrated amp with built-in Dolby, hall, matrix. and synthetic stereo surroundsound processors. Features image enhancer; surround indicator: 30 watts per channel into each of 4 channels in normal mode
$\$ 649$

## AV-350 Integrated Amplifier

Remote-controlled integrated amp with built-in Dolby, hall. and mairix surround-sound processors. Features 16 -bit digital delay: simulated stereo from mono sources: 3 volume/balance presets; video image enhancer; separate front and rear tone controls: a master volume control; front/rear volume control; front-left, front-right. rear-left, and rear-right volume controls: 4 built-in amplifiers that can be bridged into 2 . Inputs for 2 audio and 4 video sound sources. $30 \mathrm{~W} / \mathrm{ch} \times 4 \mathrm{ch}, 60 \mathrm{~W} / \mathrm{ch}$ bridged. $17 \times 4.3 \times$ $13.4 \mathrm{in}: 21 \mathrm{lb}$.
$\$ 579$

## AV'-330 Integrated Amplifier

Integrated amp with 24 -key infrared wireless remote control. Features built-in Dolby, hall, and synthetic stereo surround-sound effects; digital delay circuit; 4 amplifiers: 30 watts per channel for front speakers. 15 watts per channel for rear speakers: 3 memory presets: visual channel balance display: input levels and balance controls; audio/video input/output array: high-cut filter; bass-emphasis switch; headphone output
$\$ 499$

## A-610 Integrated Amplifier

Features unified remote control that can operate other NEC audio and video components; inputs for MM/MC phono, tuner, CD) player, tape deck. AllX TV and V('R sound sources; independent record and input selectors for listening to one source while recording another; mute switch; bass and treble controls. $60 \mathrm{~W} / \mathrm{ch}$ inte 8 ohms from $20-20,000 \mathrm{~Hz}$ with $0.006 \%$ 1HD. $80 \mathrm{~W} / \mathrm{ch}$ into 4 ohms; dynamic headroom 2 dB ; $\mathrm{FR} 10-40,000 \mathrm{~Hz} \pm \mathrm{I} \mathrm{dB} .17 \times 5.1 \times$ 13.4 in.
$\$ 469$

## AVA-505 Integrated Amplifier

Integrated amplifier designed for dynamic surroundsound and Dolby Pro-Logic. Features 3- or 5-channel amplification; high dynamic power ( 222 W total): all ic construction; separate volume controls for front. surround. and center; built-in speaker protection relay. 5 -channel a mplification: $30 \mathrm{~W} \times 4$ and $60 \mathrm{~W} \times 1$ (center). 3-channel BTL-mode amplification: $60 \mathrm{~W} x$ 3. $0.03 \%$ thid; $\mathrm{s} / \mathrm{N} 90 \mathrm{~dB} .17 \times 4.3 \times 13.4 \mathrm{in} ; 20.3$ lb.
\$449
AV-260 Integrated Amplifier
Remote-controlled integrated amplifier with built-in Dolby, hall. and matrix surround-sound effects.


Features 3 memory presets; separate left and right input level controls; audio and video.inpul/output array; $30 \mathrm{~W} / \mathrm{ch}$
$\$ 349$

## Renaissance Series

PL.A-610 1 ntegrated Amplifier
Remote-controlled integrated amp with built-in Dolby Pro-Logie, hall. matrix. and concert surroundsound processors. Features 16 -bit digital delay circuit: 3 -position sound memory function; pre-out, main-in, and monaural-out terminals; 2 audio/video inpuls/oulputs: 2 audio/video inputs; 1 audio input/output: 1 audio input: I center out: 2 monitor outpuls; I monaural oulput. . . . . . . . . . . . . . . . \$599

## NIKKO AUDIO

IA-600 Integrated Amplifier
Integrated amp with $120 \mathrm{~W} / \mathrm{ch}$ FTC into 8 ohms. Features 1.76 dB headroom: $5-60,000 \mathrm{~Hz}$ power bandwidth; 10 inputs for CD , tuner, phono, aux, tape


1 \& 2, video 1 \& 2. signal processor, CD direct: permits any source to be routed to all 4-outputs and allows listening to one source while recording a nother; Ret connectors for pre-out and main-in; Mm or Mc selectors. 20 dB muting: subsonic filter; stereo/mono swith: bass. treble and balance knobs are back lit: THI) $003 \% \mathrm{~dB}$ : $F$ R $5-100,000 \mathrm{~Hz}$. $\$ 660$ IA 400 . Similar to IA- 600 but $80 \mathrm{~W} / \mathrm{ch}$ FTC at 8 ohms: power bandwidth $10-70 \mathrm{kH} 7$. . . . . . . . . . . . . . $\$ 530$

## ONIX AUDIO By MUSIC HALL

OA 21 50-W/ch Integrated Amplifier
Inputs for MM or MC phono, tape, CD player. tuner: 300 VA toroidal input transformer: $20.000 \mu$ farad capacitors; MM or MC board. $50 \mathrm{~W} / \mathrm{ch}$ into 8 ohms; FR $15-40,000 \pm 3 \mathrm{~dB}: 15 \times 3 \times 9 \mathrm{in}$ : $11 \mathrm{lb} . . . . \$ 775$

OA 20 35-W/ch Integrated Amplifier
Inputs for MM, CI) player, tuner. and tape. 35 W/ch .
$\$ 375$

## ONKYO

Grand Integra A-G10 Integrated Amplifier
Features linear 18 -bit D/A converter: $150 \mathrm{~W} / \mathrm{ch} \mathrm{rms}$; dual mono design with real phase power supplies; Oplo-Drive power supply for differential amp: 8-times-oversampling digital filter: separate left and right Opto-Drive D/A converters; opto-coupling: optical and coaxial digital outputs: absolute analog phase reversal: source direct mode; remote control; wood sidepanels.
$\$ 1.100$

## A-8800 Integrated Amplifier

Features linear 18 -bit IDA converter; $100 \mathrm{~W} / \mathrm{ch}$ rms: low-imp drive discrete output section: Oplo-Drive power supply for differential amplifier: quadrupleoversampling digital filter: separate left and right Opto-Drive D/A converters: optical and coaxial digital inputs; pre-out/main-in terminals . . . . . $\$ 900$

## A-8190 Integrated Amplifier

Features real-phase power supply; full audio and video input switching: 6 audio and 2 video inputs including MM/MC phono; direct CD input with goldplated terminals; direct tone control with contrabass: pre-out terminals: dubbing capability; heavy-duty speaker terminals. $100 \mathrm{~W} / \mathrm{ch}$ min rms into 8 ohms from $20-20.000 \mathrm{~Hz}$ with no more than $0.008 \%$ thD; dynamic power $303 \mathrm{~W} / \mathrm{ch}$ into $2 \mathrm{ohms}, 235 \mathrm{~W} /$ ch into 4 ohms; $150 \mathrm{~W} / \mathrm{ch}$ into 8 ohms : frequency response 2 $50.000 \mathrm{H7}+0,-1 \mathrm{~dB}$.
$\$ 530$ CW-A90. Optional woodgrain side panels for A8190.
$\$ 70$

## A-8170 Intergrated Amplifier

Integrated ampiifier features super-servo and delta power supplies: full audio and video input switching: 6 audio and 2 video inputs including moving magnet/moving coil phono; direct CD inpul: direct tone controls with contrabass; heavy-duty speaker terminals. $80 \mathrm{~W} / \mathrm{ch} \mathrm{min}$ root mean square into 8 ohms from $20-20.000 \mathrm{~Hz}$ with no more than $0.008 \%$ thil: dynamic power $224 \mathrm{~W} / \mathrm{ch}$ into 2 ohms. 170 $\mathrm{W} / \mathrm{ch}$ into $4 \mathrm{ohms} .115 \mathrm{~W} / \mathrm{ch}$ into 8 ohms ; frequency

## INTEGRATEDAMPLIFIERS

response $2-50,000 \mathrm{~Hz}+0,-1 \mathrm{~dB} .17 .12 \times 5.81 \times$ $15.31 \mathrm{in}: 24.7 \mathrm{lb}$ $\$ 420$

## A-8150 Integrated Amplifier

Features delta power supply: seven audio inpuls including мм/м¢ phono; ( $D$ direct input: selective tone control: off, $\mathrm{A} / \mathrm{B}$, and $\mathrm{A}+\mathrm{B}$ speaker selection: discrete output stage. $60 \mathrm{~W} / \mathrm{ch} \mathrm{min}$ rms into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.06 \%$ THD; dynamic power $135 \mathrm{~W} / \mathrm{ch}$ into 2 ohms . $110 \mathrm{~W} /$ ch into 4 ohms. $78 \mathrm{~W} /$ ch into 8 ohms: FR I. $5-30,000 \mathrm{~Hz} \pm 1$ dB. $17.12 \times 4.31 \times 10.69 \mathrm{in}$ : 15.4 lb .
$\$ 280$

## PHILIPS

## FA 860 Integrated Amplifier

High current/low impedance drive capability; FTC rated at 65 watts. 80 watts: dynamic power 90 walts. 150 watts. 180 watts: separate power supplies and heat sinks; 4 gang volume control: CD Direct and 6 other inputs: gold plated terminals for CD Direct and phono input: phono amplifier for either MC or Mmcartridge: equalization curve to IEM standard: active tone conirol; parallel, selectable loudspeaker oulputs for each channel; muting/protection circuit: source and tape selected display: metal cabinet: headphone output; gold-plated speaker relays; loudness and mono switches: 2 tape monitors: tape copy keys; slide balance control; bi-polar push-pull output stages. Output power 8 ohms : THD $0.008 \%$ at 65 watts at 8 ohms ( ( kHz ): IмD) $0.03 \%$ at 65 watts at 8 ohms: linear inputs FR 18-70,000 Hz $\pm 1.0 \mathrm{~dB}$ : equalized inpuls FR $40-20.000 \mathrm{~Hz} \pm 1.0 \mathrm{~dB}: \mathrm{s} / \mathrm{N}(\mathrm{D})$ Direct 106 dB. $4.5 \times 16.5 \times 1.3 \mathrm{in}$
$\$ 439$

## FA 960 Integrated Amplifier

High current/low impedance drive capability; FTC rated at 100 watts. 125 watts; dynamic power supplies and heat sinks for each channel: CD Direct function and 6 other inputs: Record Selector for parallel recording: Tone Defeat key to bypass bass and treble controls: gold plated terminals for CD Direct and Phono inputs; high accuracy phono amplifier for either MC or MM cartridges; equalization curve to IEC' standard; active tone control; parallel, selectable loudspeaker outputs for each channel: muting/protection circuit; source and tape selected display: metal cabinet; headphone output: gold plated speaker relays; loudness and mono switches; 2 tape monitors; tape copy keys; slide balance control: bi-polar pushpull output stages. Output power 8 ohms; total harmon-ic distortion $0.008 \%$ at 100 watts at 8 ohms ( 1 kHz ): intermodulation distortion $0.03 \%$ at 100 watts at 8 ohms: line inputs frequency response 18 $70,000 \mathrm{~Hz} \pm 1.0 \mathrm{~dB}$ : pho-no input frequency response $40-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; signal-to-noise ratio CD Direct $106 \mathrm{~dB} .5 .75 \times 16.5 \times 13.25$ inches $\ldots . . \$ 549$

## PIONEER

Elite A-91D Digital Integrated Amplifier
Integrated amplifier with digital circuit for CD's. Features line direct switch: non-resonating frame chassis, insulators, and heat sink; non-switching circuit type III; separate voltage- and current-amplifying stages; 2 high capacity, magnetically-shielded transformers; independent digital conversion circuitry: dual digital-to-analog converters: digital filter: quadruple-oversampling: analog low-pass filter: six digital inputs (two optical): three digital outputs (one optical); optical transfer distortion canceller $\$ 1,600$

## VSA-910 Integrated Amplifier

Integrated amplifier with continuous average power output of 100 watts per channel minimum at 8 ohms from $20-20,000$ Hertz with $<0.005 \%$ total harmonic distortion. Features surround sound mode with continuous average pow-er output of $70 \mathrm{~W} / \mathrm{ch}$ in front speakers, $30 \mathrm{~W} / \mathrm{ch}$ in rear: non-switching circuit type II; I Dolby, stadium, and simulated surround with digital delay: 4 video inpuls: split-screen video enhancer: programmable smart remote; acou-stic memory: Super Bass
$\$ 8.30$

A- 717 Integrated Amplifier
Integrated amplifier with continuous average power output of $100 \mathrm{~W} / \mathrm{ch}$ min at 8 ohms from 20-20,000 Hz with $<0.003 \%$ THI). Features non-switching circuit type III: separate voltage- and output-amplifying slages; separate circuil blocks: anti-resonance. anti-vibration design: line direct switch: $\$$ inputs: hybrid booster for MC cartridges; independent power switch for phono: gold-plated phono and CD inputs. $17 \times 6.25 \times 16.75 \mathrm{in}: 41 \mathrm{lb} .14 \mathrm{oz}$
$\$ 750$

## PROTON

## D540 Integrated Amplitier

High-current, high-dynamic power amplifier with Dynamic Power (in Demand (I)PD). Features phono section with MC and MM phono selections; active volume control: anti-clipping circuit. 40 continuous W/ch from $20-20.000 \mathrm{~Hz} ; \& \mathrm{R} 20-20,000 \mathrm{~Hz} \pm 0.2 \mathrm{~dB}$ : $\mathrm{s} / \mathrm{N} 85 \mathrm{~dB}$ (unwcighted). 105 dB (A-wid): dynamic headroom 6 dB , dynamic power rating: IHF 20 ms at 8 ohms is $160 \mathrm{~W}, 40 \mathrm{hms} 280 \mathrm{~W} .2$ ohms $380 \mathrm{~W}: 100 \mathrm{~ms}$ duration 8 ohms is $150 \mathrm{~W}, 4$ ohms $220 \mathrm{~W}, 2$ ohms 230 W: 200 ms 8 ohms is $150 \mathrm{~W}, 4$ ohms $190 \mathrm{~W}, 2$ ohms $200 \mathrm{~W} .16 .5 \times 3.5 \times 12.5 \mathrm{in}: 19.14 \mathrm{lb}$
$\$ 319$

## AM-300 Integrated Amplifier

$30 \mathrm{~W} / \mathrm{ch}$ integrated amp with DPD for 6 dB of headroom and a dynamic power rating at $8 / 4 / 2$ ohms of $120 / 200 / 220 \mathrm{~W}$. Features low imp drive capability: remote control; low-noise Mc amp; selectable Mc/mM input. THD $0.01 \%$ : damping factor 90 dB : line input sens 150 mV : line input imp 47 K ohms/220pF: phono input sens мм/MC $2.5 / 0.25 \mathrm{mV}$, pnono input imp MM/MC 47K ohm/ 100 ohm: crosstalk at 1.000 Hz is $75 \mathrm{~dB} ; 5 / \mathrm{N} 100 \mathrm{~dB}$ for tape and video. . . $\$ 289$

## AM-200 Integrated Amplifier

$20 \mathrm{~W} / \mathrm{ch}$ integrated amp with up to 52 W of dynamıc power at ohms with $0.15 \%$ THI). Features low imp drive capability: bass EO: selectable phono preamp load capacitance for any mM cartridge: cassette deck loop. IMD) 0 : $5 \%$; damping factor $>150$; FR 20-20,000 $\mathrm{Hz} \pm 0.2 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 102 \mathrm{~dB} .16 .5 \times 3 \times 10 \mathrm{in}: 11.4 \mathrm{lb} \$ 249$

## REALISTIC

## SA-150 Stereo Minj Amplifier

Inputs for tuner, tape deck, turntable. Mono/stereo button: tone control: headphone jack: walnut-grain vinyl. $9 \times 2.5 \times 6$ in
$\$ 60$
SA-10 Stereo Micro Amplifier
Inputs for ceramic phono, tuner, tape deck. Stereo/mono button: tone control; L/R volume control. 7.9 $\times 3.25 \times 5.5$ in
$\$ 30$

## ROTEL

RA870BX Integrated Amplifier
Integrated amp with $100 \mathrm{~W} /$ ch from $20-20.000 \mathrm{~Hz}$

bridgeable to 300 W . Mc input: ( O direct input with level control: high current. $0.03 \%$ thi): $0.05 \%$ intermodulation distortion
$\$ 649$

## RA840BX2 Integrated Amplifier

$50 \mathrm{~W} / \mathrm{ch} 20-20.000 \mathrm{~Hz}$ : Upgraded power supply with metal bypass caps. Close tolerance selected components: high tolerance: $0.05 \% \mathrm{THD}: 0.08 \%$ IMD): MM/MC phono inputs; high current
$\$ 379$

RA820BX2. Similar to RA840BX2 except no Mc phono and 30 continuous $W /$ ch from $20-20.000 \mathrm{~Hz}$ with no mere than $0.05 \%$ THI) into 8 ohms; (MI) $0.08 \%$
$\$ 279$

## RA840BN3 Integrated Amplifier

$50-W /$ ch amplifier with 3 gain stage front end: close tolerance selected components: high current design MC
$\$ 399$

## SAE

## 1102 Integrated Amplifier

$60 \mathrm{~W} / \mathrm{ch}$ integrated amp with on board computer to eliminate dependency between front-panel control switches and audio circuits. Max זHI from 20 Hz $20,000 \mathrm{H}_{z} 0.025 \%$ at full rated power both ch driven. All controks are grouped together by function with alphanumeric and digital LED display for input

functions. tone seltings and volume level. Features 2 way tape copy: external loop: Mm \& mC phono inputs: 3 programmable digital tone memories; sequential audio muling (fade out/in when switching inputs): high-current power-amp stage; prak/average if:D power display
$\$ 499$

## SHARP

Optonica SM-A75 A/V Surround-Sound Integrated Amp
Features 11 surround effects; 3 user-programmable modes: $.5 \mathrm{~W} / \mathrm{ch} .{ }^{\circ} 4$ ch system: 2 monitor output controls; Hi display: Super Bass; A/V cross playback: wireless remote control: adjustable time delay: adjustable feedback level; dubbing selection; 9 audio inputs/s video inputs: 3 audio outputs/4 video outputs. signal-to-noise ratio 89 dB ( 75 dB phono): (MD) $0.8 \%$ : (CD frequency response $15-30,000 \mathrm{~Hz}$ in front, $15-17,000 \mathrm{~Hz}$ in rear
$\$ 600$

## SHERWOOD

## AI-1210R Integrated Amplifier

Feature, surround sound; full-function infrared wireless remote control; video sound input: loudness control: direct switch; low-noise phono amplifier: subsonic filter: 100 watts per channel: headphone input jack; peak power indicator; mute switch; intermodulation distortion $0.04 \%$ : signal-to-noise ratio 79 dB : frequency response $8-70,000 \mathrm{~Hz} ; 5.1$ x $17.3 \times 13.0 \mathrm{in}$
$\$ 449$


AI-1 10 Integrated Amplifier
Features surround sound; video sound input: loudness control; direct switch; 50 watts per channel; lownoise phono amplifier, rotary-type volume control: internıodulation distortion $0.1 \%$.
\$219


#### Abstract

SANSUI AU-X901 Integrated Amplifier Vintage series stereo integrated amp with Alpha Xbalanced technology. Features direct-balanced input for Sansui CD players; independent record selector with OFF position; power amp direct connection; high-gain phono EU for MM and MC cartridges with FET input; bass and treble controls: selectable bass turnover: gold-plated input/output terminals; A-B speaker switching: subsonic filter; loudness contour: ext processor loop. Inputs for phono; tuner; tape; tape 2; tape 3; tape/DAT; ('D player; tuner. 130 continuous


 average $W /$ ch from $10-20.000 \mathrm{~Hz}$ with no more than $0.003 \%$ THD into 8 ohms. $\mathrm{s} / \mathrm{N} 120 \mathrm{~dB}$; mM phono sens $2.5 \mathrm{mV} / 47 \mathrm{k}$ ohms. Slew rate $\pm 200 \mathrm{~V} / \mu$ sec: 17.63 x $6.3 \mathrm{I} \times 17.38$ in: 44.1 lb ; black finish $\ldots .$. . . $\$ 1.000$ AU-X701. Similar to AU-X901 except $100 \mathrm{~W} / \mathrm{ch}$ into 8 ohms with no more than $0.003 \%$ thi) . . . . . $\$ 700$ AU.X501. Similar 10 AU-X701 excepl $80 \mathrm{w} / \mathrm{ch}$ with no more than $0.005 \%$ THI)\$400

## Al'-X301 Integrated Amplifier

Vintage series integrated amplifier with Alpha Xbalanced technology. Features high-gain phono EU for MM and MC cartridges; independent record selector: subsonic filter: A-B speaker switching. 65 W/ch into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.05 \%$ THI)
$\$ 300$

## AU-G99X Integrated Amplifier

Stereo integrated amp with X-balanced technology. Features FL peak power level indicators with meter range switch; mc cartridge preamp; bass, treble, and midrange tone controls; tone-defeat switch; bi-directional tape dubbing with REC selector; low/high filters; muting switch; loudness switch; headphone jack: connections for 2 pairs of speakers. $160 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.003 \% \mathrm{THD} ; \mathrm{s} / \mathrm{N} 110 \mathrm{~dB}$ (line). $88 / 70 \mathrm{~dB}$ (MM/MC phono).
$\$ 1,000$

## SONY

TA-F700ES 105-W/ch Integrated Amplifier Features nonmagnetic G-chassis construction; spontancous twin-drive power supply: super legato linear circuitry: source direct switch to route input signal directly to volume control; passive tone-control circuitry with switch-selectable bass and treble turnover frequencies; defeatable subsonic filter; inputs for 3 tape decks with dubbing capabilities. MM/MC phono, CD player, tuner, and AUX signal; independent record output selector for taping one signal while listening to another: $\mathrm{A}-\mathrm{B}, \mathrm{A}+\mathrm{B}$ speaker switching. 105 continuous $\mathrm{W} / \mathrm{ch}$ into 8 ohms with $0.004 \%$ THD. $140 \mathrm{~W} /$ ch into 4 ohms with $0.008 \%$ IHD. $17 \times 6.38 \times$ $17.25 \mathrm{in} ; 40 \mathrm{lb}$.
$\$ 700$
TA-F500ES 80-W/ch Integrated Amplifier Features nonmagnetic G-chassis construction: spontaneous twin-drive power supply: super legato linear circuitry; source direct switch to route input signal directly to volume control; passive tone-control circuitry: defeatable subsonic filter: inputs for 3 tape decks ( 2 video): m M/M‘' phono, CD player, tuner, and AUX signal: independent record output selector for taping one signal while listening to another; A-B. $\mathrm{A}+\mathrm{B}$ speaker switching. 80 continuous $\mathrm{W} / \mathrm{ch}$ into 8 ohms with $0.006 \%$ THD. $100 \mathrm{~W} / \mathrm{ch}$ into 4 ohms with 0.01 THID. $17 \times 5.75 \times 14.75 \mathrm{in}: 29 \mathrm{lb}$
$\$ 500$

## TECHNICS

SU-V902 100-W/ch Digital Integrated Amplifier Digital integrated amplifier that accepts optical or coaxial digital outputs from CD players and other digital equipment: 4-DAC $18-\mathrm{Bit}$ high resolution internal digital signal processing: $100 \mathrm{~W} / \mathrm{Ch}$ at $0.002 \%$ THI) into 8 ohms. both channels driven from $20-20,000 \mathrm{~Hz} ; 4 \mathrm{D} / \mathrm{A}$ : quadruple-aversampling digital filter: automatic switching between sampling frequencies; subsonic filter; direct digital operation mode.

# Investing in sound? Here's how to make it pay off. 



## Great buys-at a great buy: SAVE 74\%!

Stereo Review is written for people who want to make smart buying decisions. We'll help you tind the right stereo equipment - the first time you buy-and show you how to use it the right way. Because sound information is the key to getting an audio system that gives you what you really want.

We test over 70 stereo products in al! price ranges each year. Stereo Review's product evaluat ons tell you how the components sound. . identify unique features
compare models to others in the same price bracket We warn you about design quirks, distortion, potential problems. We make the components suffer-so you don't have to.

You'll appreciate our straight forwarl explanations of audio technology. Telling you how to get more out of your equipment. Announcing important beakthroughs Clueing you in on professional maintenance tips. The kind of inexpensive know-how that can make a milliondollar difference in how your system sounds.

Even if you already have the perfect system, you'll value Stereo Review's record reviews. An average of 30 a month, in all categories of music. They 'll insure that your system's power isn't wasted on inferior recordings.
Use this coupon to subscribe to Stereo Review at $\mathbf{7 4 \%}$ OFF. It's one of the best sound investments you'll ever make!


## ACCUPHASE BY MADRIGAL

## T-106 AM/FM Stereo Tuner

Quartz-locked synthesis: 14 -station random memory; pulse tuning; double-tuned front end: FM stereo demodulator: AM synchronous detector; signalstrength meter; peak-modulation meter: MPX filter; sel switch; muting switch. FM section: $50-\mathrm{dB}$ quieting sens, mono 17 dBf , sterco $17 \mathrm{dBf}, \mathrm{S} / \mathrm{N} 83 \mathrm{~dB}$ stereo, 79 dB mono (at 80 dBf A-wtd); FR $10-60,000 \mathrm{~Hz}+0$. -0.5 dB ; capture ratio 1.5 dB ; sep 50 dB at $1,000 \mathrm{~Hz}$ : $4 \mathrm{M} \sup 80 \mathrm{~dB}$ at 65 dBf . AM section: sens $20 \mu \mathrm{~V} / \mathrm{m}$ at $20 \mathrm{~dB} \mathrm{~s} / \mathrm{N}: 17.5 \times 5.06 \times 14.56$ in $\ldots . . . .$.

## T-107 Synthesizer FM Tuner

Electronic tuning; 12-station random memory; auto sweep for FM reception; double-tuned front end to reject interference and IMD; differential-gain linear FM detector; If filters with flat group-delay characteristics; resonator-controlled stereo demodulator; multipath and signal-strength meter; MPX filter; muting switch: champagne-gold or anodized-black finishes. fM section: $50-\mathrm{dB}$ quieting sens $17 \mathrm{dBf} ; \mathrm{S} / \mathrm{N}$ stereo 85 dB : FR $10-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; capture ratio 1.5 dB ; sep 50 dB at $1,000 \mathrm{~Hz} ; 4 \mathrm{~m} \sup 80 \mathrm{~dB}$; adj-ch rej 30 dB .


## ACOUSTIC RESEARCH

## AR T-02 AM/FM Tuner

Features infrared remote control of tuning functions; system remote operation; $8 \mathrm{AM} / \mathrm{FM}$ station presets; frequency-syntesized tuning; digital frequency display; smooth flywheel-assisted tuning: manual or auto station search. FM section: FM usable sens (mono) $11.2 \mathrm{dBf}(2.0 \mu \mathrm{~V})$; FM $50-\mathrm{dB}$ quieting sens $37.2 \mathrm{dBf}(40 \mu \mathrm{~V})$ stereo, $14.6 \mathrm{dBf}(3.0 \mathrm{mV})$ mono; $\mathrm{s} / \mathrm{N}$ 75 dB stereo: FR $30-15,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; capture ratio 1.0 dB ; sep 48 dB at $1.000 \mathrm{~Hz} ; 4 \mathrm{M}$ suppression 58 dB ; alt-ch sel 60 dB .4 M section: FR $60-3,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. $3.31 \times 17 \times 13$-in. . . . . . . . . . . . . . . . . . . . . . . . $\$ 499$

## ADCOM

## GTP-500 Tuner/Preamplifier

Preamplifier with built-in tuner can be used with Adcom or other power amps. Wireless remote control included. Remote sensors available for remote control from different rooms. Tuner section features quartz-referenced digitally synthesized tuning; auto up and down scan; 8 AM/FM presets; S-LED signal-strength display; high-blend circuit: 2 sets of outputs (AC coupled. DC' coupled). Preamp section features inputs for MM phono; tape; tape 2; CD player; tuner. $\mathrm{S} / \mathrm{N}$ phono A -wtd 85 dB ; IMD preamp $0.0015 \%$; sens tuner 36.5 dBf stereo; THD tuner $0.09 \%$ stereo at $1,000 \mathrm{~Hz} ; \mathrm{S} / \mathrm{N}$ tuner 75 dB stereo; sep tuner 52 dB at $1,000 \mathrm{~Hz} .3 .325 \times 17 \times 12.75-\mathrm{in} \ldots . . \$ 600$ GTP-500W. As above with white front panel . \$650 GTP-500S. With silver front pane . . . . . . . . . $\$ 650$

## GFP-555 AM/FM-Stereo Tuner

Features quartz-referenced digitally synthesized tuning: auto up/down scan; instant-recall preset tuning: fluorescent digital-frequenty display; $8 \mathrm{AM} / \mathrm{FM}$ presets; 5-1.ED signal-strength display; switchable highblend circuit; mono/mute switch; tuning accuracy of $0.00025 \%$. THD stereo $0.07 \%$ at $1,000 \mathrm{~Hz} ; 50-\mathrm{dB}$ quieting sens stereo $35.5 \mathrm{dBf} ; \mathrm{S} / \mathrm{N} 78 \mathrm{~dB}$ stereo; FR $30-$ $15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; capture ratio 1.5 dB ; sep 53 dB at
$1,000 \mathrm{~Hz}$; AM supression $70 \mathrm{~dB} .3 .25 \times 17 \times 12.5=$
in........................................... . . $\$ 500$ GFP-555W. As above with white front panel . $\$ 550$ GF'T-555S. With silver front panel. . . . . . . . . . $\$ 550$

## Accessories

RM-3. Optional rack-mount adaptors for GTP-500 and GFT-500 $\$ 20 / \mathrm{pr}$ RM-3W. RM- 3 in white. \$25/pr
RM-3S. RM-3 in silver. \$25/pr
XR-500. Optional remote sensor for GTP-500 . $\$ 90$

## a/d/s/

## CC4 Digital Tuner/Preamp

With microprocessor operating system for remotecontrol operation, digital volume and tone controls. and alphanumeric display. Remote IR receiver capability for multi-room remote control: RS-232 port for control by personal computer; digital-synthesized tuning with 30 AM or FM stations: optional remote control. Preamp section: max output $>7 \mathrm{~V}$ rms into 10,000 ohms $/ 1,000 \mathrm{pF}$; volume and balance control range 80 dB in $1-\mathrm{dB}$ steps; bass and treble control range $\pm 10 \mathrm{~dB}$ in $2-\mathrm{dB}$ steps: low bass 0 to +6 dB in 1 dB steps. FM section; sens $<13 \mathrm{dBf}$ mono; $50-\mathrm{dB}$ quieting sens $<40 \mathrm{dBf}$ stereo; capture ratio $<1.5 \mathrm{~dB}$; sel $>65 \mathrm{~dB}$; spurious rejection $>100 \mathrm{~dB}$; stereo $\mathrm{S} / \mathrm{N}$ $>70 \mathrm{~dB}$; sep at $1,000 \mathrm{~Hz}>47 \mathrm{~dB}$. AM section; sens for $6-\mathrm{dB} 5 / \mathrm{N}<10 \mu \mathrm{~V}$; IF rejection $>50 \mathrm{~dB}$ : $\mathrm{S} / \mathrm{N} 44 \mathrm{~dB} .2 .8$ $\times 17.5 \times 14.8-\mathrm{in} ; 18 \mathrm{lb}$
$\$ 1,000$

## Atelier T2 Digital Tuner

AM/FM synthesized tuner with 16 station presets and auto FM search tuning. Features flywheel manual tuning; fine-tuning control; switchable muting; highblend control; LED frequency display; center tuning plus signal-strength displays; AC outlets. FM usable sens mono $1.0 \mu \mathrm{~V}(11.0 \mathrm{~dB})$ stereo $5.5 \mu \mathrm{~V}(26.1 \mathrm{dBf})$; stereo $50-\mathrm{dB}$ quieting sens $15 \mu \mathrm{~V}(34.8 \mathrm{~dB})$; $\mathrm{s} / \mathrm{N}$ mono $>70 \mathrm{~dB}$, stereo $>65 \mathrm{~dB}$; FR $10-14.500 \mathrm{~Hz},+0$, -1 dB ; ch $\operatorname{sep}>38 \mathrm{~dB}$ at $10,000 \mathrm{~Hz}$; capture ratio $<1.8 \mathrm{~dB}$; AM quieting sens $<5 \mu \mathrm{~V}$ for $6 \mathrm{~dB} \mathrm{~S} / \mathrm{N}$; image rejection $>55 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}$ (with $\mathrm{I}, 000-\mathrm{Hz} 5-\mathrm{mV}$ signal) $>44 \mathrm{~dB} ; 2.8 \times 17.5 \times 14.8$-ind; $13.2 \mathrm{lb} \ldots . . \$ 539$

RC1 Unified Remote Control
Infrared wireless remote controls CC4, R4 receiver, CD3 CD player, and other $\mathrm{a} / \mathrm{d} / \mathrm{s} /$ components. $\$ 150$

## AKAI

## AT-93-B AM/FM Tuner

Quartz digital synthesized AM/FM tuner; 20-station random preset; optimum reception system; automatic select antenna $A / B$; band width; blend mode and hi-cut mode; open loop DC amp in audio section: resonance-free rigid chassis structure; separate power supply for RF and audio; timer program preset $\$ 599$

## AT-52-B AM/FM Tuner

Quartz digital synthesized AM/FM tuner; 16-station random preset: if band selector; 5 step signal strength meter; preset station scan
. $\$ 249$

## ARCAM

Arcam Delta 80 AM/FM Stereo Tuner
AM/FM tuner with 12 presets features classic flywheelassisted rotary knob for continuous tuning: three-
color Traffic Lights FM tuning indicator: signal strength meter; sens $1.4 \mu \mathrm{~V} ; \mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$; FR $20-12,000$ $\mathrm{Hz} \pm 0.5 \mathrm{~dB}$; capture ratio $1.5 \mathrm{~dB} .16 .93 \times 10.43 \times 2.36$ inches
. $\$ 599$

## T21 Stereo FM Tuner

FM tuner has both 5 presets and continuously variable tuning. Features bar graph Led frequency scale; signal strength meter; tuning indicator; optional genuine wood veneers in teak, walnut, or rosewood finish; sens $1.3 \mu \mathrm{~V}$; capture ration $1.5 \mathrm{~dB} .17 .72 \times 9.45$ x 2.36 in . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 399$

Arcam Alpha AM/FM Stereo Tuner
AM/FM tuner with flywheel assisted tuning knob and supplied station markers. Features three-color Traffic Lights tuning indicator; sterco beacon; mono switch: AFC switch; sensitivity $1.4 \mu \mathrm{~V}$; signal-tonoise ratio $>68 \mathrm{~dB}$; frequency response $20-12,000$ Hertz $\pm 0.5 \mathrm{~dB}$; capture ration $1.5 \mathrm{~dB} .15 .75 \times 9.1 \times$ 3.74 inches
$\$ 299$

## AUDIO BY VAN ALSTINE

## Transcendence Series Two FM Tuner

FM tuner with discrete audio stage. Features electronic signal seeking: digital readout; 5 non-volatile station presets; mono/stereo switching: variable tuning with between-step capability; isolated active output circuits; all-metal film resistors and capacitors: class-A current-sourced predrivers; separate shunt-regulated and filtered power supply. $17 \times 9 \times 3$ in: 10 lb .
.$\$ 825$
Fet Three FM Tuner
FM tuner with Overload-Immune FET integrated circuitry in the audio stages. Features film coupling capacitors; optimized power supply decoupling circuits; electronic signal-seeking; tuning; digital readout: non-volatile station presets; mono-sterco switching; variable tuning; headphone jack. $17 \times 9 \times 3$ in; 9 lb..

## AUDIO DESIGN ASSOCIATES

## FM-600A Tuner

Analog FM tuner with 6 presets and digital frequency readout. Features AFC tuning; muting: stereo-blend noise filter; stereo/mono mode all front-panel switchable; signal strength/multipath LED meter; 15 -pole IF filter; rear panel left and right output level controls; servo-lock circuitry; standard EIA rack-mountable. FM section: FM usable sens stereo 1.9 mV ; $50-\mathrm{dB}$ quieting sens stereo 2.7 mV ; THD $0.15 \%$ at $1,000 \mathrm{~Hz}$; S/N 65 dB ; FR $15-15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; caplure ratio 1.9 dB; sep 47 dB at $1,000 \mathrm{~Hz}$; adjacent-ch rejection 90


## AUDIO DYNAMICS

## T200 AM/FM Tuner

Digital-synthesis tuner with Schotz noise reduction. Features $8 \mathrm{AM} / 8 \mathrm{FM}$ station presets; auto wide/ narrow-bandwidth switching: extended AM response; auto station scanning; frequency response 15-15,000 $\mathrm{Hz} \pm 0.375 \mathrm{~dB}$; signal-to-noise ratio 77 dB stereo; capture ratio 1.75 dB .
. $\$ 429$
T2000E AM/FM Tuner
Programmable AM/FM tuner. Features remote-con-
trol; Schotz noise reduction; interference rejection; 10 AM/10 FM station presets; capture ratio 1.5 dB ; signal-strength range $\mathbf{2 5 - 6 5} \mathbf{d B}$; sep $30 \mathrm{~dB} . .$. . $\$ 349$

## CAMBRIDGE AUDIO

## T75 AM1/FM Tuner

Digital synthesis luner with FM and AM wavebands. Variable bandwidth. 8 presets on FM and AM, dual FM demodulator with linear if strip
$\$ 799$

## 140 AM/FM1 Tuner

Analog luner with 4 M and 1wo FM wavebands. Dual Mosffi tuning head. dual fM demodulator with linear is strip. pilot tone cancelling stereo decoder and linear phase "Birdie" filter
. $\$ 599$

## CARVER

IX-11a FM/AM Stereo Tuner
Digital quartz-synthesized tuner with Asymmetrical Charge Coupled FM Detector circuit to reduce multipath distortion while retaining full separation. 13 presets; auto/manual scan; wide/narrow bandwidth selector; antenna. FM section: FM usable sens I $\mu \mathrm{V}$ mono: $50-\mathrm{dB}$ quieting sens $3.1 \mu \mathrm{~V}$ : alt-ch sel 110 dB ; adjech rej 110 dB ; capture ratio 1.0 dB ; AM sup 65 dB; image, i-f. spurious-response ratio 110 dB . AM section: sep 35 dB ; s/N 77 dB
$\$ 720$

## TX-2 AM/FM Stereo Iuner

AM/FM tuner with Asymmetrical Charge Coupled FM Detector. FM section: IM usable sens mono 1.8 $\mu \mathrm{V}$. stereo $4.5 \mu \mathrm{~V} ; 50-\mathrm{dB}$ quieting sens stereo $5 \mu \mathrm{~V}$; capture ratio 1.5: sep 43 dB at $1.000 \mathrm{~Hz}: 4 \mathrm{M} \sup 60$ dB ; alt-ch rej 58 dH ; adj-ch rej 28 dB . 4 M section: sens $250 \mu \mathrm{~V}$ with built-in antenna. $20 \mu \mathrm{~V}$ with external antenna.
$\$ 450$

## CREEK AUDIO By MUSIC HALL

T40 FM1 Tuner
FM tuner with auto mute, AFC, local/10, and narrow/ wide switching
$\$ 425$

## DAVIDSON-ROTH

## Day Sequerra FM Broadeast Monitor

Features spectrum analyzer, audio vector oscilloscope; 1-m tuning with 1 KHz accuracy, multipath display: ki: frequency counter. Fully balanced, dual differential RF signal path with FFT circuitry. Modified Travis-Smith detector for flat frequency response over 1.2 MHz deviation bandwidth, reducing stereo distortion to $<0.1 \%$ at I KHz . H HF sens 5.0 dBf mono/ 15.0 dBf stereo: 50 dB quieting sens 12.0 dBF ; $\mathrm{s} / \mathrm{N} 75 \mathrm{~dB}$; FR $30 \mathrm{KHz}-\mathrm{I} 5 \mathrm{KHz} \pm 0.5 \mathrm{~dB}$; $\mathrm{mD} 0.09 \%$. Rosewood, walnut. and black cabinet types a vailable; $7.38 \times 19.5 \times 16 \mathrm{in} ; 45-50 \mathrm{lb} \ldots . . . . . . .$.

## dbx

IXI AM/FM Tuner
Features Schotz dynamic noise reduction; auto IFbandwidth switching: extended NRSC AM response; 6 am/6 FM station presets; mono and high-blend switches. FM FR $15-15.000 \mathrm{~Hz} \pm 0.25 \mathrm{~dB}$; FM S $/ \mathrm{N} 79$ dB stereo; capture ratio 1.5 dB ; FM sens ( 75 -ohm input) $43.7 \mathrm{dBf}(42 \mu \mathrm{~V})$ stereo with $60-\mathrm{dB} \mathrm{s} / \mathrm{N} . \$ 800$

## DENON

## 1 $1-800$ AM/FM Tuner

Fcatures Dynamic-Twin-Drive Pl.t circuits; 3-step if bandwidth selection; 30-station random preset memory: MPX-NR switch: high-sensitivity digital synthesis tuning: low-impedance output: auto-scan tuning: quick manual tuning: step manual tuning: last-channel-tuned memory; large FI display. FM 50 dB quicting sens $20 \mu \mathrm{~V}(37.2 \mathrm{~dB})$ stereo. $1.6 \mu \mathrm{~V}(15.3$ dB ) mono; signal-to-noise ratio 96 dB mono. 86 dB steree: capture ratio 1.2 dB ; AM sup $70 \mathrm{~dB} .3 .5 \times 17.09$ $\times 12.4$-in

TL-600 AM/FM Iuner
Features dynamic PII detection with auto bandwidth selection: $20 \mathrm{AM} / \mathrm{FM}$ presets with stored bandwidth instruction from each station; low-imp outputs; auto or manual scan. Side panels standard. . . . . . . . $\$ 400$

## Tll $550 \mathrm{AM} / \mathrm{HM}$ Tuner

Features front end mosfrt RF; 20-station random preset memory: 2-position IF mode selection; MPX NR switch: auto scan tuning/manual tuning: last-

channel memory, fluorescent display; FM usable sens $0.9 \mu \mathrm{~V}: \mathrm{S} / \mathrm{N}$ mono 84 dB , sterco 78 dB ; THD stereo $0.08 \%$; image rejection 45 dB ; IF rejection $85 \mathrm{~dB} ; 2.79$ $\times 17.08 \times 11.41 \mathrm{in} ; 6.84 \mathrm{lb}$ $\qquad$

## TU-450 AM/FM Tuner

Quartz-locked digital tuner features 16 station presets: digital-synthesis tuning: MPX-NR switch: autoscan tuning: quick manual tuning; manual step tuning: last-channel memory. FM 50 dB quieting sens $23.1 \mu \mathrm{~V}(38.5 \mathrm{dBf})$ sterco. $3.1 \mu \mathrm{~V}(21.2 \mathrm{dBf})$ mono: $\mathrm{s} / \mathrm{N} 80 \mathrm{~dB}$ mono. 76 dB stereo: capture ratio 1.5 dB ; $4 \mathrm{M} \sup 50 \mathrm{~dB} .2 .75 \times 17.09 \times 9.37$-in $\ldots . . . . . . \$ 225$

## DLAL BYORTOFON

## (TS5040 AM1/FM Tuner

High-performance AM/FM tuner features digital synthesis tuning and 40 AM/FM station presets. Black.
. \$220

## HAFLER

## DH-330 A $11 /$ FM Tuner

Quartz-controlled tuner provides exact station selection with a digitally synthesized tuaing system. Features multipath distortion and noise-sensing circuit; 5-station memory; autosearch; digital read out: nonvolatile memory: 3 dual-gate MoSFET's: 5 tuned front end circuits; triple-tuned RF stage volume control and separate output on front panel for taping or headphones; kit is comprised of 4 fully assembled. tested, and aligned circuit boards which plug together. Usable sers 11.3 dBf ; $50-\mathrm{dB}$ quieting sens mono 15.3 dBf . stereo 36.5 dBf ; dist. at $1.000 \mathrm{~Hz}, 100 \%$ modulation mono $0.1 \%$, stereo $0.18 \%$ : capture ratio 1.5 dB ; alternate ch sel 60 dB ; sep 45 db at 1.000 Hz : 35 dB at 10.000 Hz ; $\mathrm{s} / \mathrm{N}$, mono. 72 dB . stereo. 68 dB ; assembled
$\$ 425$

## HARMAN KARDON

Citation Twenty-Three AM/FM Tuner
16 presets: infrared remote control; mono and mute buttons; L(I) readout; Active-Tracking High-Selectivity (Hi Q) Circuit: digital-synthesized quartzlocked tuning; analog fine tuning: flywheel-stabilized tuning knob; scek and manual tuning: anodized brushed aluminum blue/black finish with molded rubber trim; heavy-gauge metal chassis. FM specs: $50-\mathrm{dB}$ quieting sens stereo 15.2 dBf (normal). 19.1 ( Hi Q ): $\mathrm{s} / \mathrm{N}$ stereo 75 dB (normal and Hi Q ); capture ratio 0.75 dB (normal), 1.75 ( Hi Q): alt-ch sel 65 dB (normal). 75 ( Hi Q )
$\$ 649$

## TU920 Active-Tracking AM/FM Tuner

Active-Tracking High-Selectivity (Hi Q) Circuit: digital-synthesized quartz-locked tuning: all-metal chassis; 16 presets; muting; 2 -way seek; manual up/down tuning; 5-LED signal-strength meter: tuned indicator. FM specs: $\mathrm{S} / \mathrm{N}$ stereo 74 dB (normal and Hi Q): capture ratio 1.3 dB (normal). 2.0 ( Hi Q); alt-ch sel 60 dB (normal). 75 (Hi Q) . . . . . . . . . . . . . $\$ 399$ TU911. Sirnilar to above except lacks Active Tracking: signal-strength meter. . . . . . . . . . . . . . . . . . \$299

## TU909 AM/FM1 Tuner

Digital-synthesized quartz-locked tuning: $6 \mathrm{AM} / 12 \mathrm{FM}$ presets; bi-directional seek tuning; black-out LeD:

ultrawideband: manual tuning: tuned indicator: stereo indicator: black metal chassis
\$229

## HITACHI

## HPT120AVSW AM/FM Tuner/Preamp

Quartz digital-synthesized tuner section; 20 AM/FM presets; unified infrared remote control with LCD display; audio inputs for phono, CD, tape; video inputs for TV. VCR, videodisc player; electronic volume and balance controls; 5 -band graphic equalizer; video signal enhancer: rosewood end caps. $\$ 450$

FT-007SW' Quartz Digital AM/FM Tuner
16 AM or FM presets; FCCS drsigned to eliminate intermodulation and interference: auto quieting control function: signal-locked indicator for FM; 2-pole birdy filters; AM toop antenna; digital display to help position FM antenna; rosewood end caps .... \$350

## JVC

FX1100BK AM/FM Tuner
Computer-controlled quartz-PI.I. digital-synsthesis tuner with Opticalink system for reduced digital noise. Features $40 \mathrm{Am} / 40 \mathrm{FM}$ station presets; auto memory; preset scan; variable stop level; dB signalstrength indicator: auto QSC: 6-column alphanumeric display: 2 antenna inputs; program memory and monitor for recording off the air unattended; record calibration signal generator . . . . . . . . . . . . . . . . \$470

## FX555BK AM/FM Tuner

Quartz-pll digital frequency synthesis tuner. Features Opticalink digital noise reduction system; 40 AM/40 FM station presets; preset scan; variable stop level: dB-reference signal-strength indicator; auto memory; proset repeat; preset cancel; multi-mode LCD: AM loop antenna; CATV antenna control unit

## KENWOOD

## KT-990D AM/FM Tuner

Features Pentacle power supply: DLRC (Direct Linear Reception Circuit); DLLD (Direct Linear Loop Director): DCC (Distortion Correcting Circuit): and DPD; usable sens 10.8 dBf ; 50 dB quieting sens 16.2 dBf : $\mathrm{S} / \mathrm{N}$ ratio 78 dB at 65 dBf THD $0.009 \%$ at 1.000 Hz ; alt-ch sel $60 \mathrm{~dB} ;$ FR $20-15,000 \mathrm{~Hz} \pm 0.5$ $\mathrm{dB}: 17.31 \times 3.06 \times 13.06 \mathrm{in}: 8.2 \mathrm{lb}$
\$375

## Basic KT-880D AM/FM Tuner

Basic series fm tuner with Pentacle Power Supply desigm. Features Direct Linear Reception Circuit; computer-controlled tuning system; 10-key directaccess tuning: auto/manual digital tuning: wide/nar-

The listings are based on data provided by the manufacturers. For more product information, contact
an aut horized dealer or the manufacturer directly. Manufacturers' addresses and phone numbers are listed in the directory beginning on page 217.
row FM IF band selector; rec calibration switch; $20-$ station presets; FL display. FM 50 dB quieting sens $38.8 \mathrm{dBf}(24 \mu \mathrm{~V})$ stereo; $\mathrm{S} / \mathrm{N} 76 \mathrm{~dB}$ at $65 \mathrm{dBf}, 83 \mathrm{~dB}$ at 85 dBf (stereo): caplure ratio 1.0 dB (wide), 2.5 dB (narrow); tR $20-15,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} .17 .31 \times 3.06 \times$ $12.25 \mathrm{in}: 7.7 \mathrm{lb}$.
. $\$ 280$

## KT-87 AM/FM Tuner

Quartz-synthesis digital tuner: Station Name Preset System (SNPS) for 12 AM/FM presets or 20 presets without SNPS: 2-event programmable timer; $60-$ minute sleep timer; presel scan: automatic/manual tuning; system remote controllable through KA-127; usable sens $10.8 \mathrm{dBf}(0.95 \mu \mathrm{~V})$ : 50 dB quieting sens, stereo 39 dBf at 65 dBf ; stereo $\mathrm{s} / \mathrm{N}$ ratio 73 dB : THD stereo $0.3 \%$; capture ratio 1.2 dB ; alt-ch sel 50 dB ( $\pm 400 \mathrm{kHz}$ ); FR $30-15,000 \mathrm{~Hz}$; spurious rejection ratio $80 \mathrm{~dB}: 6.5 \times 16.56 \times 9.87 \mathrm{in} ; 6.2 \mathrm{lb} . \ldots . . \$ 189$

## KINERGETICS

## KBT-1 AM/FM-Stereo Tuner

Designed to correct for hysteresis errors in electronics of broadcast station (adjustable correction): circuit designed to compensate for components used in broadcast station's electronics; remote power supply; digital-synthesis tuning: 5 AM, 5 FM presels: scan tuning: selectable IF bandwidth; inputs for 300 - and 75 -ohm antennas; finished in black or silver-anodized brushed aluminum. FM specs: $50-\mathrm{dB}$ quieting sens 36.0 dBf stereo; thil stereo $0.05 \%$ (wide). $0.10 \%$ (narrow) at 1.000 Hz . $100 \%$ modulation, signal level $65 \mathrm{dBf} ; \mathrm{s} / \mathrm{N}$ mono 75 dB , stereo $70 \mathrm{~dB} ; \operatorname{sep} 40 \mathrm{~dB}$ (wide). 45 dB (narrow); capture ratio 1.5 dB ; alt ch sel 70 dB (narrow). 50 dB (wide); image rej 75 dB : pilot and subcarrier rej 60 dB . AM specs: sens to $6 \mathrm{~dB} \mathrm{~s} / \mathrm{N}$ $6.3 \mu \mathrm{~V}$; image rejection 50 dB : IF rejection 50 dB : F R $4.000-6 \mathrm{~dB}$.
$\$ 695$

## KYOCERA

T-910 Digital AM/FM Tuner
Digital PI.L quartz-synthesized stereo tuner. Features Dynamic Noise Reduction: 16 station presets; nonferrous ceramic base/chassis: 2 tm antennas; comput-er-programmed narrow/wideband IF selection. FM section: FM usable sens $1.7 \mu \mathrm{~V}(9.8 \mathrm{dBI}): 50-\mathrm{dB}$ quieling sens mono $3.0 \mu \mathrm{~V}(14.8 \mathrm{dBf})$; THI) $0.07 \%$. mono $0.06 \%$ at $1.000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N}$ stereo 81 dB . mono 84 dB ; capture ratio 1.0 dB ; $\operatorname{sep} 58 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}:$ aM sup 55 dB : alt-ch rej 85 dB narrow, 40 dB normal. Am section: sens $280 \mu \mathrm{~V}$ with built-in antenna. $10 \mu \mathrm{~V}$ with external antenna; 26.5 lb .
$\$ 590$

## LUXMAN

## T-111 AM/FN-Stereo Tuner

Remote 4 M/FM tuner with cable-ready $F M$ fine tuning: unattended program recording: auto-seek AM/FM tuning: auto preset (memory) scanning: 20 random-access AM/FM stations stored in compu-store memory; computer analyzed tuning automatically adjusts internal parameters to optimize performance under variable reception conditions. FM usable sens 10.8 dbf ; 50 dB quieting sens mono 19.0 dbf , stereo 38.0 dbf : $\mathrm{s} / \mathrm{N}$ ratio mono 75 dB , stereo 70 dB : THD $0.2 \%$. mono $0.15 \%$ (at 1.000 Hz ); separation 50 dB (a1 $1,000 \mathrm{~Hz}$ ): capture ratio 1.3 dB (at $65 \mathrm{dBf} \& 98.1$ mHz . .
$\$ 300$
insures against power failure: тH1) $0.25 \%$; alt-ch sel 55 dB; rejection ratio $60 \mathrm{~dB} . . . . . . . . . . . . .$. . . . $\$ 115$

## McINTOSH

## MR-7082 AN/FM Tuner

AM/FM tuner with Signal Locked Loop luning system. Features electronic memory for 7 AM and 7 FM stations; digital frequency readout: DMOS-FET RF amplifier; double-balanced mixer; PLt. MPV decoder: audio output suppression circuits for 19 kHz and 38 kHz carrier; Led tuning meter; electronically regulated power supply: internal audio processor; memory search; wide-band AM; remote control interface. FM section: sensitivity mono $13 \mathrm{dBf}(1.3 \mathrm{~V})$ for 30 dB of quieting: signal strength for 50 dB of quieting. 18/36 dBf mono/stereo; capture ratio 1.5 dB ; IMD $0.08 \%$ from $20-15,000 \mathrm{~Hz}$ with $100 \%$ modulation or less; alt ch sel $55 \mathrm{~dB} ; \operatorname{sep} 50 \mathrm{~dB}$ at I kHz ; FM suppression 60 dB : image rejection 90 dB . 4 M section: sensitivity 35 V: S/N 55 dB HHF, 65 dB at $100 \%$ modulation: THD $0.2 \%$ at $30 \%$ modulation; sel 40 dB HIF; IF response 90 dB. Power requirement $120 \vee 50 / 60 \mathrm{~Hz} 10 \mathrm{~W} .16 \times$ $5.44 \times 13 \mathrm{in}$.
$\$ 1.499$

## MERIDIAN by MADRIGAL

204 FMI Stereo Tuner-Timer
Instant access to 18 preset stations; scan tuning: manual luning in $50-\mathrm{kHz}$ steps: displays frequency. preset number. signal strength, or time; battery backup; timer controls 200 system. $50-\mathrm{dB}$ quieting sens $23 \mu \mathrm{v}$ stereo; sel 56 dB ; capture ratio 1.5 dB : AM sup $>55 \mathrm{~dB}$
$\$ 1.10$ ) 209. Remote master control works with 204 and other Meridian 200 -series components; selects FM stations; controls 8 inputs, volume, and mute: needs $9-\mathrm{V}$ battery .
$\$ 150$

## NAD

4300 Monitor Series Tuner
Features digital frequency synthesis tuning: 55 decibels stereo separation: 80 dB selectivity; 120 dB image rejection: $\mathrm{S} / \mathrm{N}$ ratio exceeds $80 \mathrm{~dB} ; 8 \mathrm{AM} / \mathrm{FM}$ presets; 1F wide/narrow; FM noise reduction; rack mountable.
$\$ 598$

## 4225 Tuner

14 random AM/FM presets; ultralinear if filters: switchable blend circuit; $\mathrm{S} / \mathrm{N}$ ratio exceeds $75 \mathrm{~dB} \$ 248$

## NAKAMICHI <br> ST-7 AM/FM Stereo Tuner

Tuner with Schotz noise reduction. Features signal/ multipath meter; 16 station presets; output level controls ( $\mathrm{R}+\mathrm{L}$ independent). FMiHF sens mono 1.7 $\mu \mathrm{V}(10 \mathrm{~dB})$ ) stereo $3.9 \mu \mathrm{~V}$ ( 17 dBf ); FM usable sens

mono $1.7 \mu \mathrm{~V}$ ( 10 dB ), stereo $3.9 \mu \mathrm{~V}(17 \mathrm{dBf})$ : $50-\mathrm{dB}$ quieting sens mono $2.7 \mu \mathrm{~V}(14 \mathrm{~dB})$. stereo $14 \mu \mathrm{~V}(28$ dBI); THD stereo 0.08\%, mono $0.06 \%$ at $1.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}$ 76 dB stereo. 80 dB mono; $\mathrm{Fk} 20-15.000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$ : capture ratio 1.9 dB ; $\operatorname{sep} 55 \mathrm{~dB}$ at $1,000 \mathrm{~Hz} ; 4 \mathrm{M}$ suppression better than 60 dB ; alt-ch rejection $>60$ dB. $17.12 \times 2.5 \times 11.37 \mathrm{in}$ : 10 lb .6 oz . $\qquad$ $\$ 725$

## NEC

## T-710 Digital AM/FM Tuner

Computer-controlled quartz-PL.L digital-synthesis tuner with $16 \mathrm{Am} / \mathrm{FM}$ station presets. Features auto scan; preset scan; selectable (wide, narrow) IF bandwidth: Fl frequency readout: low-noise dual-gate MOSFET front end; multiplex stereo decoder with a
pilot canceler and active filter: static-resistant lowimp 4 M loop antenna; ladder if filter. Remote controllable when used with NEC unified-remote integrated amplifiers. FM usable sens 10.8 dBf (1.9 $\mu \mathrm{V}$ ). $17 \times 3.2 \times 10.8 \mathrm{in}$.
\$299

## T-610 Digital AN/FMT Tuner

Digital quartz-PLL frequency-synthesis tuner with 16 AM/FM presels. Features auto seek: memory backup; ceramic if filters: LED signal-strength meters: MPX filter: auto scan: low-noise junction FET. Alt. ch. selectivity 60 dB ; stereo separation $0.3 \%$ : $\mathrm{s} / \mathrm{N} 50 \mathrm{~dB}$; image rejection 38 dH
$\$ 229$

## NIKKO AUDIO

Gamma- 400 Tuner
Variable high-blend control tuner with memory scan. Fealures 10 FM and 10 Am presets; muting; narrow/ wide If tand selector; seek; auto/manual tuning:


220k microfarad capacitor for power back up; sens 9.2 dBf ; sel $80 \mathrm{~dB} ; \operatorname{sep} 60 \mathrm{~dB}: \mathrm{S} / \mathrm{N} 86 \mathrm{~dB}:+\mathrm{R} 30-15,000$ $\mathrm{H}_{1}+\mathrm{I}$ dB: 19" rack mountable
. \$440 T-400. Identical to Gamma-400 but it is standard 17.25* width.
. $\$ 420$

## ONIX AUDIO BY MUSIC HALL

## BWDIFMTIuner

Designed for high sensitivity. capture ratio and 4 m suppression.
. $\$ 885$

## ONKYO

## Grand Integra T-G10 FNI Tuner

FM tuner with 5 -mode apk system. Features 20 station random memory with battery-free backup; ultra high sensitivity: chassis damping; dual-antenna inputs; cable FM tuning capability: timer-controlled program preset capability; remote capable with supplied controller: wood side panel
$\$ 850$

## T-9090 WKII FM Tuner

Remote-controlled ultra-high-sensitivity fM tuner with computer-controlled $\triangle P K$ to automatically or manually adjust for stereo/mono, local/Dx, highblend. wide/narrow/super-narrow bandwidth, and $A / B$ antenna switching. Features multi-function digital display; digital readout of signal strength in dBf: 20 station presets: preset scan: auto memorization; timer programming: motorized outpul le vel control. Cable ready.
$\$ 750$

## T-4087 AN/FM Tuner

Tuner with automatic precision reception system to control 4 modes (stereo-muting on/mono-muting off. auto high-blend on/off. local/DX, and if bandwidth wide/narrow). Features 4 separate power supplies for RF amp, IF amp. demodulator, and multiplex decoder: 20 4M/FM station presets; battery-free memory backup; MoSFEI RF amp front end: PLI demodulator. Black finish only. Wood side panels included. FM usable sens $17.2 \mathrm{dBf}(2 \mu \mathrm{~V})$ stereo: $50-\mathrm{dB}$ quieting sens $36 \mathrm{dBf}(17 \mu \mathrm{~V})$ stereo; $\mathrm{s} / \mathrm{N} 77 \mathrm{~dB}$ stereo: FR $30-$ $15,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$ : capture ratio $1 \mathrm{~dB} .18 .25 \times 3 \times$ $14.62 \mathrm{in} ; 12 \mathrm{lb}$.
$\$ 420$

## T-4150 ANI/FM Tuner

Computer-controlled quartz-synthesized AM/FM tuner with 3 -mode apr, 20 station presets, high-blend override, and multi-PLL. FM usable sens 17.2 dBf ( 2 $\mu \mathrm{V})$ stereo; $50-\mathrm{dB}$ quieting sens $36.1 \mathrm{dBf}(35 \mu \mathrm{~V})$ sterco: capture ratio 1.3 decibels (wide); FM frequency response $30-15.000 \mathrm{~Hz}+0.5,-1$ decibels. $17.2 \times$ $2.75 \times 14.5$ inches; 8.2 pounds

## T-4120 AM/FM Tuner

Digital quartz-synthesized AM/FM tuner with 16 station presets. Features digital frequency display: battery-free memory backup: stereo/mono switch; mute on/off; memory and signal-strength indicator. FM usable sens $17.2 \mathrm{dBf}(2 \mu \mathrm{~V})$ stereo: $50-\mathrm{dB}$ quieting sens $36.1 \mathrm{dBf}(35 \mu \mathrm{~V})$ stereo; capture ratio 1.5 dB (wide); FM FR $30-15,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB} .17 .2 \times 2.81 \times$ 10.56 in: 6 lb.
$\$ 210$

## PARASOUND

## T/DQ-260 Digital Quartz Tuner

Quartz referenced, digitally synthesized tuner features 16 presets, $8 \mathrm{Am} / 8 \mathrm{FM}$; scan/manual tuning: mono mode switch: Pll tuning: regulated power supply; all metal chassis and panel; sep 50 dB ; THD $<0.1 \%$; $\mathrm{FR} 20-15,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$ : channel selectivity $66 \mathrm{~dB}: 17.25 \times 2.5 \times 9.5 \mathrm{in}$.
$\$ 285$

## TU3 PLL FM Tuner

5 -section tuned-Varicap RF section; microprocessorcontrolled digital tuning: linear phase filters in IF stage: switchable de-emphasis. $\mathrm{s} / \mathrm{N}$ stereo 68 dBA (at 65 dBf ). usable sens stereo $35.8 \mathrm{dBf}(17 \mu \mathrm{~V})$ : THD stereo 0.14\%; FR $15-30,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; capture ratio 1.5 dB : de-emphasis $25 \mu \mathrm{~s}, 50 \mu \mathrm{~s}, 75 \mu \mathrm{~s}$ (switchable). $1.75 \times 19 \times 13.5-\mathrm{in} ; 13.5 \mathrm{lb} \ldots . . . . . . . .$. . $\$ 1.100$

## PHILIPS

## FTT 565 Digital-Synthesis Tuner

Quartz-locked digital synthesis tuner with 24-station random memory; 2 -level autematic search tuning; multi-functional LCD display: 5-bar LeD signal strength indicator: FM noise reduction; optional remote control; low-noise Tetrode MOSFET front ends, with intrinsic high linearity handle strong signals without distortion, and receives weak signals clearly; FM mixer oscillator is buffered to suppress radio interference; 75 ohm coaxial and 300 ohm balanced inputs accept any type of FM aerial input. Wave range 87.5-108 MHz; sens at 75 ohm, mono 26 $\mathrm{dBs} / \mathrm{N} 1.3 \mu \mathrm{~V}$ at 75 kHz deviation; stereo $46 \mathrm{~dB} \mathrm{~s} / \mathrm{N}$ $25 \mu \mathrm{~V}$ at 75 kHz deviation; THD mono/stereo $0.2 \% / 0.5 \%$; FR $30-15,000 \mathrm{~Hz}+0.5-2 \mathrm{~dB}$; if suppression 80 dB ; audio output $1000 \mathrm{mV} .60 / 66 \times 420 \times 260$ mm; 3 kilograms
\$259

## PIONEER

## Elite F-91 Digital-Synthesizer Tuner

Digital AM/FM tuner. Features ARTS (Active RealTime Tracing System) with active tF filter; digital decoding; 4-ganged tuning capacitor; MOSFET circuit; 24 4M/FM station presets: 3-position muting level; remote compatible; honeycomb chassis. THD $0.02 \%$; alt ch sel 85 dB ; $\mathrm{S} / \mathrm{N} 88 \mathrm{~dB}$.

## F-717 Digital Direct Decoder AM/FM Tuner

Digital-processing tuner. Features electronic twinvaricaps; Pulse-Swallow frequency synthesis; 16 random AM/FM presets; large-loop AM antenna; FET buffer; 3-point signal indicator: AM stereo adaptor terminal. FR $20-15,000 \mathrm{~Hz}$; alt ch sel 56 dB ; sep (at 1 $\mathrm{kHz}) 60 \mathrm{~dB}$; capture ration 1.0 dB $\qquad$ $\$ 325$

## F-551 AM/FM Tuner

AM/FM tuner with quartz-PLL. tuning. Features CCTS (Computer-Controlled Tuning System); hi-blend circuit: 3 -speed search; 24 random AM/FM presets: digital readout of signal strength; digtal frequency display; remote-control capability. FR $30-15,000 \mathrm{~Hz}$ : alt ch sel $65 \mathrm{~dB} ; \operatorname{sep}(a t / \mathrm{kHz}) 40 \mathrm{~dB}$.

## PROTON

440 Digital Tuner
Schotz AM/FM tuner with Schotz Noise Reduction. Features digital station readout; 12 station presets; memory backup holds station settings for 2 weeks
when unplugged: adjustable rear panel output level. FM section: FM usable sens mono $1.8 \mu \mathrm{~V}(10.3 \mathrm{dBf})$; $50-\mathrm{dB}$ quieting sens mono ( 15.3 dBf ), stereo ( 33.2 dBf ): THD stereo $0.2 \%$, mono $0.05 \%$ at $1,000 \mathrm{~Hz}$; $\mathrm{s} / \mathrm{N}$ 70 dB stereo, 75 dB mono; $\mathrm{FR} 20-20,000 \mathrm{~Hz} \pm 0.2 \mathrm{~dB}$; capture ratio $1.5 \mathrm{~dB} ; \operatorname{sep} 45 \mathrm{~dB}$ at 1.000 Hz ; AM $\sup 60$ dB ; alt-ch rej 55 dB ; adj-ch rej 90 dB . AM section: sens $300 \mu \mathrm{~V}$ with built-in antenna. $16.5 \times 2.5 \times 9.75 \mathrm{in}$ : 15 lb.
$\$ 269$

## AT-300 AM/FM Stereo Tuner

AM/FM-stereo tuner with Schotz noise reduction and remote control option; 20 station presets; search \& scan; PLL: FM sens $1.9 \mu \mathrm{v}$ and 50 dB quieting sens (stereo) is 3.5 dB ; THD $65 \mathrm{dBf} 0.1 \%$; $\mathrm{S} / \mathrm{N} 75 \mathrm{~dB}$; sep 50 dB
$\$ 229$

## AT-200 AM/FM Stereo Tuner

AM/FM stereo tuner with dual-mode tuning system. Features search tuning: manual tuning: 12-position touchbution-activated memory for $6 \mathrm{Am} / 6 \mathrm{FM}$ station presets: phase-locked-loop frequency synthesis tuning; 5 -number digital readout; stereo leD indicator; mono/stereo selector; signal strength indicator. Usable sens $1.8 \mu \mathrm{~V}$ : THO $0.2 \%$ : $\mathrm{s} / \mathrm{N} 74 \mathrm{~dB}$ stereo; capture ratio 1.5 dB ; alt ch sel 65 dB ; tf rejection 90 dB ; stereo separation (at 1 kHz ) 45 decibels. $16.5 \times 2.5 \times 10$ inches; 7.5 pounds
$\$ 209$

## QUAD

FM4 FM Tuner
FM-stereo tuner designed to be used with Quad 44 preamp. Features no controls except 8 pushbuttons to store/recall station presets, tuning knob, power switch; bar-graph meter to indicate signal strength, center-channel tuning; dedicated microprocessor that recalls desired station from memory, tunes it, automatically sets muting. automatic frequency control levels. Stations stored in memory remain there for up to 5 years, even with power disconnected. Available in anthracite grey. Mono/stereo 50 -dB quieting sens $2.7 / 25 \mu \mathrm{~V}$; mono/stereo $\mathrm{s} / \mathrm{N}$ ratio $76 / 70$ dB at $1 \mathrm{kHz}, 1 \mathrm{mV}$ A-wtd; mono/stereo distortion $0.05 \% / 0.10 \%$ stereo; capture ratio 2.5 dB ; sel 53 dB ; image/IF rejection $80 / 100 \mathrm{~dB}$; frequency response $20-15,000 \mathrm{~Hz}-0 /-1 \mathrm{~dB}$ : crosstalk 40 dB at 1 kHz : pilot-tone suppıession 60 dB ; deemphasis switchable for 50/75 microseconds; power consumption 6 volis; 321 $\times 207 \times 64 \mathrm{~mm}$; 3 kilograms.
\$695

## RCA

MPT200 Audie/Video Preamp Tuner
Dimensia $A / V$ control center with unified remote control and on-screen status indication when used with Dimensia monitor lets you select inputs from up to 13 Dimensia components and 5 nonsystem components. Features automatic input selection: remote control volume, mute, direct access and station scan, and off/on; SystemLink cabling: simultancous recording and playback; auto status indication: auto switehing: quartz-PLL synthesis tuning: 20station random tuning memory; preset channel scanning: FM search tuning; electronic volume control: signal processing loop; preset turn-on volume; fluorescent display; muting; bass, treble, and balance controls; 4 AC convenience outlets. Tuner section: FM sens $12.2 \mathrm{dBf} ; \mathrm{S} / \mathrm{N} 73 \mathrm{~dB}$ (mono); image rejection 45 dB ; sel 60 dB ; sep 40 dB at 1.000 Hz ; capture ratio 1.5 dB ; FM frequency response $30-15,000 \mathrm{~Hz} .14 .63 \times$ $4.13 \times 13.38$ inches.
. $\$ 339$

## REALISTIC

TM-150 AM/FM-Stereo Mini Tuner
PLL tuning: sterco/mono switch; FM stereo LED: Illuminated tuning dial: built-in AM and FM antennas: builtin terminals for external FM antenna. $9 \times 2.5 \times 6$ inches
$\$ 60$

## REVOX

B260-S FM-Tuner
FM stereo tuner stores 60 preset stations with reception modes in non-volatile memory. allows user to arrange stored stations into separate groups for scanning. Features control prt; max $\mathrm{S} / \mathrm{N}>80 \mathrm{~dB}$; THD $0.07 \%$; alternate channel selectivity; $\mathrm{FR} 20-15,000 \mathrm{~Hz}$ $\pm 0.5 \mathrm{~dB} ; 17.2 \times 4.3 \times 13 \mathrm{in} ; 15.4 \mathrm{lb} \ldots . . . \$ 2,500$ B160 FM-Tuner. Similar to B260-S but stores up to 30 preset stations.
$\$ 1.575$
B250-S Tuner/Amplifier
6 inputs for tuner, tape $\mid \& 2$, aux, $C D$, and phono MM; each input level is adjustable and storeable in non-volatile memory. Optional video-switcher provides 4 video inputs for sound and picture: remote control. Preamp has 2 separate circuits to simultaneously listen/record from 2 different sources; 150 W/ch: THD $<0.015 \%$; $\mathrm{s} / \mathrm{N} 80 \mathrm{~dB}: 17.7 \times 4.3 \times 13 \mathrm{in}: 33$ lb. \$2.500 B150 Tuner/Amplifier. Similar to B250-S but continuous average $60 \mathrm{~W} / \mathrm{ch}$.
$\$ 1,575$

## ROTEL

## RT850A AM/FM Tuner

Quartz-synthesizer tuner with microprocessor circuitry. Features $6 \mathrm{AM} / 6 \mathrm{FM}$ presets, manual and autoscan tuning. FM section: usable sens mono $2 \mu \mathrm{~V}$ ( 11.2 dB ), $50-\mathrm{dB}$ quicting sens mono $3 \mu \mathrm{~V}(14.6 \mathrm{dBf}$ ). stereo $40 \mu \mathrm{~V}$ ( 37.2 dB ): THD stereo $0.2 \%$, mono $0.08 \%$ at $1,000 \mathrm{~Hz}$; $\mathrm{s} / \mathrm{N} 73 \mathrm{~dB}$ stereo. 75 dB mono: FR $30-15,000 \mathrm{~Hz}+0,-2 \mathrm{~dB}$; capture ratio 1.0 dB ; $\operatorname{sep} 48$ dB at $1,000 \mathrm{~Hz}$; AM suppression $58 \mathrm{~dB}: 4 \mathrm{M}$ section: sens $300 \mu \mathrm{~V} / \mathrm{m}: \mathrm{s} / \mathrm{N} 50 \mathrm{~dB}: 2.56 \times 17 \times 11.5-\mathrm{in} ; 8.5$ lb.
\$299
RT830 AM/FM Analog Tuner
AM/FM stereo tuner with LED indicators for signal strength; muting switch. FM section: usable sens mono $2 \mu \mathrm{~V}$ (11.2 dBf). $50-\mathrm{dB}$ quieting sens mono 3.5 $\mu \mathrm{V}(16 \mathrm{~dB})$, stereo $50 \mu \mathrm{~V}(39.4 \mathrm{~dB})$; THD stereo $0.6 \%$. mono $0.3 \%$ at $1.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N} 65 \mathrm{~dB}$ stereo, 70 dB mono: FR $35-13,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$; capture ratio 2 dB ; sep 38 dB at $1,000 \mathrm{~Hz}$ : AM suppression $62 \mathrm{~dB}: 4 \mathrm{M}$ section: vens $300 \mu \mathrm{~V} / \mathrm{m}: \mathrm{s} / \mathrm{N} 45 \mathrm{~dB} ; 2.56 \times 17 \times 12.56$ $\mathrm{in} ; 6.8 \mathrm{lb}$ $\$ 199$

## SAE

## T101 AM/FM Stereo Tuner

Computer direct-line digital tuncr. Features 16 station presets ( $8 \mathrm{Am} / 8 \mathrm{Fm}$ ); auto and manual tuning: signal-strength, multipath, and level indicators: if narrow; high blend; memory scan. FM Section: IHF sens stereo $3.9 \mu \mathrm{~V}(17 \mathrm{~dB})$ : $50-\mathrm{dB}$ quieting sens stereo $32 \mu \mathrm{~V}(35.3 \mathrm{~dB})$; тHD sterco $0.08 \%$ at $1,000 \mathrm{~Hz} ; \mathrm{S} / \mathrm{N}$ stereo 70 dB . FR $30-18,000 \mathrm{~Hz}+1,-2 \mathrm{~dB}$ : capture ratio $1.2 \mathrm{~dB} ; \operatorname{sep} 55 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; alt-ch rejection -100 dB narrow
$\$ 650$

## T102 AM/FM Stereo Tuner

Computer direct-line digital tuner with 16 station

## Prices Listed

are manufacturers' suggested retail prices
(also referred to as list prices);
actual selling prices are set by individual dealers.
All prices are subject to change without notice.
presets: auto and manual tuning: if narrow: high blend. fM section: llif sens stereo $4.1 \mu \mathrm{~V}$ : $50-\mathrm{dB}$ quieting sens $34 \mu \mathrm{~V}$ : THD stereo $0.08 \%$ at 1.000 Hz ; $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$ stereo: fr $30-18.000 \mathrm{~Hz}+\mathrm{I},-2 \mathrm{~dB}$; capture ratio 1.2 dB ; $\operatorname{sep} 55 \mathrm{~dB}$ at 1.000 Hz ; alt-ch

rejection -100 dB narrow; adj-ch rejection -15 dB narrow. $19 \times 3.5 \times 12.5 \mathrm{in}$ .$\$ 349$

## SANSUI

## JU-X701 AM1/FM Tuner

Vintage series tuner featuring random presets for 30 FM and $A M$ stations; numeric keypad for recall; programming two station frequencies for unattended recording: memory scan; RF mode selection: IF bandwidth selection; record calibrator; FM noise canceller; mode switch. Usable sen 38.0 dBf (stereo); THD $0.0095 \%$ (stereo); $\mathrm{s} / \mathrm{N} 98 \mathrm{~dB}$ : if response (at 84 $\mathrm{MHz}) 110 \mathrm{~dB} .17 .63 \times 3.81 \times 11.81 \mathrm{in} ; 10.4 \mathrm{lb} \$ 500$

## IU-N301 AM/FM1 Tuner

Vintage series tuner features digital-synthesis tuning; $6 \mathrm{AM} / 6 \mathrm{FM}$ station presets: FM noise canceller circuit. 50 dB quicting sens 36 dBf (stereo), 16 dBf (mono); $\mathrm{s} / \mathrm{N} 72 \mathrm{~dB}$ (sterco), 78 dB (mono); capture ratio $/ \mathrm{dB}$. $17.69 \times 1.81 \times 8.94 \mathrm{in}: 5.3 \mathrm{lb}$.
. . . . . . . . . . . . . \$210
T-1000 AN1/FM Tuner
AM/FM sterco tuner with quartz-Pl.L. synthesizer tuning. Features 16 station presets; high-blend circuitry: two FM tuning modes, one for strong signals. one for weak signals. 50 dB quieting sens 16.5 dB ; $\mathrm{S} / \mathrm{N} 75 \mathrm{~dB}$; capture ratio $1.5 \mathrm{~dB} .3 .6 \times 17 \times 9 \mathrm{in} ; 6$ lb. . \$145

## SHERWOOD

## TD-7010R Synthesizer Tuner

Quartz pli synthesized tuning system. Features digital display: mosfet front end; auto-tuning: 30 preset stations; preset scan switch: 10 -segment signalstrength meter; hi-blend switch; FM mute switch; AM/FM reception; AM bar antenna; usable sens 9.8 $\mathrm{dBf} ; 50 \mathrm{~dB}$ quieting sens $36.1 \mathrm{dBF} ; \mathrm{FR} 10-15 \mathrm{~Hz} \pm 3$ dB ; THD $0.25 \% ; 50 \mathrm{~dB}$ stereo $\operatorname{sep}$ at 1 kHz ; capture ratio 1.5 dB ; alt-ch sel $70 \mathrm{~dB} ; 3.2 \times 17.3 \times 8.7$ in $\$ 319$

TD-1120 Synthesizer Tuner
Quartz pli. synthesized tuning system. Features digital display: 24-preset stations; MOSFET front end; auto-tuning: AM/FM reception; AM loop antenna;

usable sens $11.2 \mathrm{dBf} ; 50 \mathrm{~dB}$ quieting sens 39.2 dBf ; THD $0.4 \% ; 45 \mathrm{~dB}$ stereo sep at $1 \mathrm{kHz} ;$ FR $10-15 \mathrm{~Hz} \pm 3$ dB ; capture ratio 2 dB ; alt-ch sel $60 \mathrm{~dB} .3 .2 \times 17.3 \times 8.7$ in . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 169$

## SONY

## ST-S730ES AM/FM Tuner

Features radial power-supply design; automatic microprocessor exclusion circuit master clock: SST super sound tracking: woif wave optimized if system: Woind wave optimized direct detector; wonss wave optimized digital sterco decoder; direct comparator circuitry. $\mathrm{S} / \mathrm{N} 92 \mathrm{~dB}$ stereo, 100 dB mono: ThD

$0.0075 \%$ sterco. $0.004 \%$ mono: sens $10.3 \mathrm{dBf} / 0.9 \mu \mathrm{v}$; sel (at 400 kHz ) 70 dB ; $\operatorname{sep}($ at 1 kHz$) 70 \mathrm{~dB} .3 .38 \times$ $18.5 \times 14.75 \mathrm{in} ; 12 \mathrm{lb}, 6 \mathrm{oz}$
$\$ 550$

## ST-S500ES AM/FM Tuner

Features quartz frequency-synthesis tuning: wond wave optimized direct Pll detector with low distortion and noise; W(ODSD wave optimized digital stereo decoder; direct comparator circuitry; $10 \mathrm{fm} / \mathrm{FM}$ station presets; multi-process memory to remember various station settings for each preset; calibration tone presets for off-air taping. S/N 84 dB stereo: FR 15 $15.000 \mathrm{~Hz}+0.2,-0.5 \mathrm{~dB}$; sel 55 dB narrow, 90 dB wide. $17 \times 3.38 \times 13.62 \mathrm{in}: 9 \mathrm{lb} \ldots . . . . . .$.

## SOUNDCRAFTSMEN

## Pro-Tuner Four AM/FM Stereo Digital Tuner

Digital quarz-Pli, tuner with 16 station presets, 5digit station readout, auto scan tuning, and active high-blend filter. $19^{*}$ rack-mount front panel. IHF sens $1.6 \mu \mathrm{~V} ; \mathrm{S} / \mathrm{N} 75 \mathrm{dH}$; distortion $0.08 \%$. $2.36 \times 19 \mathrm{x}$ 12 in.
$\$ 349$

## SUMO

Aurora Slimline Tuner
Digital AM/FM tuner. Features auto seek forward/ reverse; rotary tuning knob; 8 presets for both AM/FM; dynamic impulse noise reduction system; linearphase IF filters; gold-plated output jacks; sens 11 dBf ; alternate ch selectivity 75 dB ; $\operatorname{sep}$ at 1.000 Hz 50 dB ; $\mathrm{s} / \mathrm{N} 82 \mathrm{~dB} ; 19 \times 8.75 \times 1.75 \mathrm{in}$. \$649

## TANDBERG

TPT 3001A Programmable FM Tuner
Features computer-type logic servo tuning system; 8ganged varactor tuning diodes in front end. dual-gate MOSFET's in R-F and mixer stages; 8-station memory preset with louch-bution recall and LeD program readout; wide/normal/narrow if bandwidth selector; autorange signal-strengit with 1.000 -meter-range LED. center tuning/preset frequency meters. Audio circuitry includes selected all-metal film resistors. polypropylene capacitors, and min negative feedback: mono. ANC, servo, mute switches with leI's; 3-circuit muting; output level control; $\mathrm{S} / \mathrm{N} 90 \mathrm{~dB}$; narrow sel 125 dB . Rosewood side panels optional.
$\$ 2.000$
TPT 3031A Programmable FM Tuner
Remote controlled tuner with 4 ganged diodes; dual gate mosfet's in RF stage: 16 station preset; manual/

auto tuning; zero-negative-feedback audio section. Remote control and rosewood side panels optional. $17.13 \times 3.25 \times 13.75 \mathrm{in} ; 11 \mathrm{lb}$
. $\$ 1.200$

## TECHNICS

## ST-G70 AM/FM Tuner

Stereo tuner with 39 Am/FM station presets. Features twin tuner design; automatic IF band width selection;

10-key random access; class AA operation: auto-scan: automatic preset assignment capability; FM signalstrength display: DC twin quartz circuitry; DC linear switching multiplex filter.
$\$ 380$
ST-G450 Digital AM/FM Tuner
Digital AM/FM tuner with 24 -station presets. Features preset channel scan; 10-key direct access: class an operation: FL display; 3-point t.ED signal-strength indicator
. $\$ 270$

## TOSHIBA

## ST-5528 AM/FM Stereo Tuner

Features digital display: 16 station presets: preset memory recall: preset scan; automatic digital tuning lock-in for each available station: system remote control.
$\$ 170$

## VECTOR RESEARCH

## UL-1500 Tuner

Quartz PLl-synthesized tuner. FM section: alt-ch sel 60 dB ; $50-\mathrm{dB}$ quieting sens mono $3 \mu \mathrm{~V}(10 \mathrm{dBf}) ; 50$ dB quieting sens stereo $40 \mu \mathrm{~V}(37 \mathrm{~dB})$; max $\mathrm{S} / \mathrm{NA}$ wid, mono 75 dB . stereo 73 dB ; THD mono $0.08 \%$; stereo $0.2 \% .8 .5 \mathrm{lb} ; 17 \times 3 \times 12.5 \mathrm{in} \ldots . . . . \$ 200$

## YAMAHA

## TX-1000U AN1/FM Digital Tuner

Digital AM/FM stereo tuner with computer servo lock tuning. Features digital fine tuning: absolute linear phase IF amplifier "Alpha" circuitry for 90 dB channel selectivity; 2 -position if mode selector; 4

tuning modes: antenna selector switch; 24 -station random access memory presets; multi-status memory: 4 -letter station name display; 24 -segment signal quality meter; remote control; optical integrated system remote compatible.
. $\$ 549$

## TX-900U AM/FM Digital Tuner

Features integrated system remote compatibility; digital fine tuning: 3-position auto/manual If mode selector; 20 -station random access preset tuning: 4way station memory; high blend; integrated multifunction t.CD display. Black; 9 lb $\qquad$
TX-500U AM/FM Digital Tuner
Features integrated system remote compatibility: direct Pll IF count synthesizer tuning; 2-position if mode selector: 20 -station random access preset tuning: 4-way station memory; high blend; integrated multi-function LCD display. Black; 9 lb ...... \$319

## TX-400U AM/FM Digital Tuner

Features integrated system remote compatibility: direct pl.L synthesizer tuning: 16-station random access preset tuning: integrated multi-function tel) display; auto-search tuning: manual up/down tuning. Black; 7 lb .
$\$ 249$
The listings are based on data provided by the manufacturers. For more product information, contact an authorized dealer or the manufacturer directly. Manufacturers' addresses and phone numbers are
listed in the directory
beginning on page 217 .

# "fifi Had itToDoAllover Again... AndIDo...ThisIs Howld Dolti" 

"Henry Kloss. Member of the Audio Hall of Fame. Creator of Acoustic Research in the 1950 's, KLH in the 1960 's, and Advent in the 1970's-the dominant speakers of their dec-ades-now brings you Ensemble: the bestsounding speaker system of this era."

## Ensemble. By Henry Kloss.

Ensemble is the first of a new generation of stereo loudspeaker systems. It combines two bass units, two mid- to high-frequency satellite units and something you won't find in any hi-fi store on earth:

Your living room. Which now, because of Ensembles unique "double-dedicated" design, becomes a totally integrated part of the sound propagation process gving you perfectly balanced energy throughout the full ten octaves of music.

The first speaker system that doesn't cheat you out of either bass or space.
The fundamental octaves that so much of music is built on...

The almost subaudible but palpable sounds generated by the big pipes of the organ, the bottom of the acoustic or electric bass, the low notes of the synth...

The frequencies completely ignored in the so-called "mini-speakers" now in vogue...

Ensemble provides them. With two dedicated, acoustic-suspension loudspeakers whose jobs are solely to reproduce the botom two octaves of musical significance.

At a compact $12^{\prime \prime} \times 21^{\prime \prime} \times 4.5$ ", they're small enough to be placed where they'll produce the best sound, minimizing "standing waves", and without visually overpowering your room.

Beneath the couch, on top of the bookshelf, or under the potted plant... wherever the ear dictates, they ye won't be offended.

## As for the other 8 octaves of music.

The rest of the sound spectrum, from a nominal crossover of 140 Hz , is reproduced by a stereo pair of two-way satellite units. Each incorporates a low-frequency driver, crossing over at 2,700 Hz to a direct-radiator tweeter that goes beyond audibility.

They are small enough ( 4 " $\times 5^{\prime \prime} \times 8^{\prime \prime}$ high) to set the sound stage wherever you want it. Finished in scratch-proof, gunmetal grey Nextel, they will look good for a lifetime.


## What Henry Kloss tells his friends:

Every time I came out with a new speaker at AR, KLH, or Advent, my friends would ask me, "Henry, is it worth the extra money for me to trade up?" And every time I would answer, " $n o$, what you've already grt is still good enought"

But tatay, with the introduction of Ensemble, I tell them, "Perhaps now is the time to give your old speakers to the children:

## Overcoming the fear of paying too little.

This is more difficult than it may sound. Because the Ensemble System sells for an introductory price of only $\$ 499$. And it can be jaming to accept the notion that a product actually outperforms others costing several times more.

The second thing you must overcome is the misdirected notion that you must go to a dealer showroom and listen to the speakers.

Because the fact is, the only way to appreciate the astonishing sound reproduction of this uncorventional system is to audition it in your own room ervironment. Therefore, we sell direct to you, not to dealers. By phone, by mail, or by our front door. With a straightforward 30 -day money-back return policy.

There is a weger you can make, ifyou don't mind taking moncy from house guests.
Place Evsembles satellites where they re visible. Then hide one of the bass units under the sofa. and put the other on the floor with a plant on iu. When your friends arriv, bet them to point out where the bass is coning from. They'll point to the satellites. Every rime.

## Speaking directly to

 the people who make the speaker.To our knowledge, no other hi-fi manufacureer invites you to call, talk about, and buy the system. ("Hello, Mr. Sony?" Try that.)

In fact, the easiest way to buy Ensemble is to caill us with your credit card in hand, and speak with an expert who will be happy to walk you through every thing you want to know about the system. For literanure, for informa-tion-or to order-the toll-free number is $1-800-252-4434$, Mon.-Thurs., 9-9, Fri. and Sat., 9-6 Eastem Time. (In Canada, 1-800-525-4434.) Fax \# (617) 332-9229.

The Ensemble Stereo System: 2 bass units, 2 satellies, 100 feet of wive, mounting unics. intelligent dxxumentation. and a warm body, (Your Cambridge Soundworks audio exper.)

## CAMBRIDGE SOUNDWORKS

154 Califomia St., Newton. Massachusetts 02158

## $\sqsubset$ Send more intormation

C. Send Ensemble risk-free for 30 days, for $\$ 499$ : I'mpaying by $\square$ Check $\square$ MC $\square$ Visa $\square$ AmEx
Acct. Number $\qquad$ Exp.
Signature
Name
Address
Giry $\qquad$
Phone (Area Code) $\qquad$ Number
FOR IMMEDATESERVICE: 1-800-AKA-HIF MA residents add $5 \%$ sales tax.
*Plus freight. Call and ask.
Suite 102

## "Because I wanted to have the worlds finest amplifier and the world's greatest transfer function, I built the astonishing Silver Seven."

Before you meet the new M-4.0t, Bol Canver wants you to meel its inspiration, the money-is-no-object Siher Seren.
"One of my important design precepts is that power amplifiers should he easily affordable but last year, when I began designing a powerful new amplifier, I temporarily set aside that precept of affordability. The result is the Carver Silver Seven Mono Power Amplifier." Destined to redefine ultra-high-end values forever, the Silver Seven is truly a "money-is-no-object" design. In fact, just a single pair of its fourteen KT88 6550 A
Beam Power output tubes cost more than some hudget amplifiers.

The Silver Seven employs classic,
fully balanced circuit topology and the finest components in existence.

A-450 Ultra Linear output transformers with oxygen-free primary leads and pure silver secondaries.


- Wonder Cap capacitors throughout.
- Inferconnects ase Van den Hul Siber.
- Internal wiring is pure silver:
- Wonder Solder throughout.
- Gold input connectors and high current gold output connectors.

The Silver Seven's polished granite antivibration base floats on four Simm's vibration dampers. The separate power supply's power transformer end-bells are machined from a solid block of high-density aluminum.

Capable of an astonishing 390 joules energy storage, the Silver Seven delivers a conservatively rated 375 urats into 8 ohms from 20 Hz to 20 kHz with no more than $0.5 \%$ distortion. On the 1-ohm tap, peak current is in excess of 35 amps!

Sonically, a pair (for stereo) of the flawless Silver Sevens almost defies description.

# "Because I wanted to share its magnificent sound with you we built the new Carver M-4.0t." 



Superlatives are insufficient.
Whal does this have to do uvith the new M- 0 Ot?

Everything. Because the M-4.0t precisely duplicates the transfer function of the Silver Seven.

Ever wondered why two amplifiers ofidentical wattage can sound different? Or why two designs with different output ratings can sound much the same? In many cases, it's because each power amplifier exhibits a unique relationship berween its input and output signals. Like human fingerprints, this transser function is subdy distinct, defining much of the sonic character of the design. Bob has not only perfected the art of measuring an amplifier's transfer function, but is able to duplicate it in a completely dissimilar amplifier design:'That's how he invested his solid state $M-1.0$ t with the
transfer function of a set of $\$ 5000$ esoteric ube amps several years ago.

This time he's gone one better: Or two
Hes used this powerful scientific method to duplicate the transfer function of the Silver Seven in the new M-4.0t (now you know what the " " "signifies). Mind you, we are not saying the M-4.tot is identical to a pair of Silver Sevens. An M-4.0t weighs 23 pounds versus the Silver Seven at 300 pounds a pair. The Silver Seven stores 390 joules of energy while the $\mathrm{M}-4.0 \mathrm{t}$ stores none. As a Magnetic Field Power Amplifier the M-4.0t instantly draws the power it needs directly from the $A C$ line.

Though in choosing the M-4.0t you may miss the warm glow of the Silver Seven's silver tipped vacuum tubes reflecting in polished bhack lacquer, be assured both amplifiers are the most musical, effortless, and open sounding you lave
evec heard. Bass is full and tight. midrange is detailel., treble is pure and transparent.

Each can float a full symphony orchestra across the hemisphere of your living room with striking realism.

Boh Carver developed this incredible design for one reason: to bring you the best the world has to offer and the best amplifier value ever, and he has succeeded handsomely.

Listen to the new, incredibly affordable M-4.0t at your nearest Carver dealer. Or write us for more information. We'll even send yout data on the Silver Seven. After all, if you ever want to move up from the M-40.t, theres only one posxilhe altemative.


## ACCUPHASE By MADRIGAL

DPP-80/DC-81 Two-Part CD Player
DP-80 transport plays discs and DC'81 digital processor converts digital signals to analog: optical fiber cable. DP-80 features 1 master clock: linear motor laser pickup; <1-sec selection time; ceramicresin mounting floated from chassis; play, search. pause, skip back, fast forward, fast reverse, repeat disc or phrasc: cues by track number; displays current track number. DC:81 features D/A converter with discrete elements; wideband optical-fiber inputs: 16 bit digital signal and deglitch signal for each ch input to ID/A converter through 17 optoisolators: 121-stage double-oversampling digital filter per ch; 9-pole GilC Butterworth active filters: direcity coupled 0-dB gain buffer amp as output stage; de-emphasis circuit consisting of passive elements and buffer amp: independent power transformer for each digital and analog circuit: fixed- and variable-level audio output: XLR-type balanced output; connects to other CD players with 75 -ohm coaxial-cable terminal. $\$ 8.750$

## DP-70 Remote-Controlled CD Player

Play, track search. pause on front panel; number keypad. stop, repeat (all. I, phrase), index search, display (track and index or time), scan. and outputlevel controls behind panel; fixed and variable RCA outputs: XLR balanced output: 75-ohm coaxial cable output: optional wide-band optical-fiber output: digital output pins; track selection in $<1$ sec with linear motor: 4 -times oversampling ( 176.4 kHz ) digital filters: discrete digital-to-analog converter; 5 pole GIC Butterworth low-pass filters; isolating optocouplers: independent power supply for digital and analog circuits; 4 optocouplers input digital data. latch clock signal. deglitch signal to D/A converter: directly coupled 0 -dB-gain buffer amp as output stage with push-pull DC servo direct coupling; metal shielding: passive elements and buffer amp in deemphasis circuit: ceramic composite resin floating mounting: legs lathed from pure brass bar: hairlinefinish golden panel and natural persimmon sideboard; infrared remote needs 2 AA batteries. Passband ripple of digital filters $\pm 0.00005 \mathrm{~dB}$ with attenuation of $<100 \mathrm{~dB} ; 46.4 \mathrm{lb} . . . . . . .$. . $\$ 6,000$

## ACOUSTIC RESEARCH

## (1)-06 CD Player

16 bit, $4 \times$ oversampling CD player. Computer driven laser swing arm; dual digital to analog converters

(analog circuitry employs a Gaussian filter for elimination of filter delay); random access programming of up to 20 tracks in any order: scanning, play, pause and volume control can be performed by remote control. Fixed level and remote variable audio outputs as well as digital output. FR 4-20.000 $\mathrm{Hz} \pm 0.5 \mathrm{~dB} ;$ THD $0.007 \% ; \mathrm{S} / \mathrm{N} 105 \mathrm{~dB}$.

## CD) 16/2R CD Player

Slide-drawer-loading CD player with full-function remote control and advanced error-processing circuitry. Features random 16-track programming; skip forward; skip back; fast forward; fast reverse; repeat track, disc. or program; 7-pole (7th-order) analog filtering: 3-beam laser: displays track number, elapsed time of track, remaining time on disc. and program in memory. $3.12 \times 17.0 \times 11.75 \mathrm{in} . . . \$ 250$

## ADCOM

## G(D-575 CD Player

Dual digital-to-analog. 16 bit linear converters. Selectable Analog Frequency/Phase Contouring circuitry. fixed and variable outputs, triple beam laser. plays $3^{*}$ CD's. Programs up to 24 tracks in any sequence: repeats disc, track. program or any selected sequence or phrase, audible fast sean and fast forward. Displays, simultaneously total tracks up to 20, track being player, programmed tracks, tracks to be player. Timer display. Remote transmitter, FR $5-20,000 \mathrm{~Hz}$ $\pm 0.1,-0.5 \mathrm{~dB}$ : S/N 105 dB : THD $0.0025 \%$ : ch $\operatorname{sep} 95$ dB: IMD (SMPTE) $0.0015 \% ; 3.44 \times 17 \times 11.25-\mathrm{in} ; 12$ lb : black. $\$ 600$ GCD-575. white $\$ 650$

$$
a / d / s /
$$

Atelier CD3 CD Player
Programs 30 tracks in any order; sound audible during fast forward and fast reverse: skip forward: skip back: fast forward: fast reverse: cancel; repeat track, disc, phrase, program; headphone jack with adjustable level: digital filtering (resampling frequency 88.2 kHz ); 3-beam laser. Displays current track number, elapsed time of current track, remaining time on disc, program in memory. Cues by track number, index number. Max line output 2 V : headphone output 2 V. Optional remote control. 20 $\mathrm{lb} ; 2.75 \times 17.5 \times 14.8 \mathrm{in}$.
$\$ 1,200$

## Atelier CD4 Compact Disc Player

Cast laser and transport assembly shock mounted with rubber isolators, aluminum and steel chassis/ housing, and multiple power supplies to isolate digital and analog stages for minimum interaction and noise generation. Servo-laser intensity system switches focus intensity depending on quality of dise to maximize performance. Brick-wall digital filter works in conjunction with advanced multiple-pole low-pass filter. Error correction uses variable-size window: 16-bit D/A converters; fast-focus 3 -beam laser; programming of 16 tracks in random order: repeat disc, track, phrase, or program; random access by time within a track: access by index point: audible fast search. Displays elapsed time from track start, remaining time to dise end, track/program selection number, index, program in memory. . . . . . $\$ 1.000$

## RCI Unified Remote Control

Infrared wireless remote control for CD3, CD4, and other Atelier components
$\$ 150$

## AIWA

## DX-PI Portable CD Player

3 beam laser CD with adaptor to play 3-inch dises as
well as standard size CD's. Ac/DC operation: line out terminal and headphone jack. Compatible with+i batteries for 4.5 hours of operation. FR $20-20.000 \mathrm{~Hz}$

$\pm 2 \mathrm{~dB}: \mathrm{S} / \mathrm{N} 75 \mathrm{~dB}$; THD $0.15 \%$. Package includes: battery case, AC adaptor, carrying strap, and $Y$ output cable
. $\$ 250$

## AKAI

CD-93-B CD Player
3-beam laser pick-up w/linear motor: 18 bits $4 x$ oversampling: digital filter: dual $D / A$ converters: diecast chassis and diecast disc tray; 20-track random programming: FL calendar display: 31 function remote; digital out (optical/coaxial) w/wood side pancls: separate power transformers for digital and analog
$\$ 1.099$

## CD-73-B CD Player

3-beam laser pick-up w/linear motor; 18 bits $4 x$ oversampling: digital filter: dual D/A converters: 20track random programming: FL calendar display; 31 function remote: digital out (optical/coaxial); resonance free rigid chassis structure.
$\$ 799$

## CD-52-B CD Player

3-beam laser; 22 function remote; $4 \times$ oversampling: digital filter; dual D/A converters; 20 track random programming: FL calendar display; digital output; index search; auto space play: A-B repeat; headphone volume
. $\$ 379$

## CD-32-B CD Player

3-beam laser: 21 function remote: $2 x$ oversampling: digital filter; 20 -track random programming; FLD display: digital output: index search: repeat: headphone volume; anti-resonant chassis $\qquad$

## CD-22-B CD Player

3-beam lascr: 21 function remote: $2 x$ oversampling: digital filter; 20 track random programming; digital out; index search; repeat; headphone volume . $\$ 279$

## ANALOGIC DESIGN GROUP

NX Series Vacuum Tube Itybrid CD
Drawer loading CD player with wireless remote control. Features opamps for current/voltage conversion: hybrid analog stages: vacuum tubes for active filtering and final outputs: isolated power supply and transport damping; 20 track random programming: track skip; 3 speed audible fast search; repeat disc-
track-program: 4 times oversampling: 16 bit processing: $2 \mathrm{D} / \mathrm{Aconverters;} \mathrm{cues} \mathrm{by} \mathrm{track} \mathrm{and} \mathrm{index:} \mathrm{display}$ indicates current track number, elapsed time of current track. FR $10-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}: \mathbf{S} / \mathrm{N} 100 \mathrm{~dB}$; THI) $0.09 \%$ at $0 \mathrm{~dB}: 3.5 \times 19 \times 11$-in.
\$1.495

## NX Series FET Hlybrid (D)

Drawer loading CD player with FEToutput/analog filtering circuitry. Features hybrid analog stage: opamps for voltage conversion and FFToutput circuitry; direct coupled ix servo'd: decoupled/isolated analog and digital power supply stages: track skip 3 speed audible track scarch: repeat disc-track-program; 4 times oversampling: 2 Daconverters: 16 bit processing. Display indicates current track number, clapsed time of current track. FR $17-19.000 \mathrm{~Hz} \pm 0.75$ dB: s/N 102 dB A-wtd: THI) $0.01 \%$
$\$ 895$
With infrared remote control.
$\$ 995$

## ARCAM

Arcam Delta 70 CD Player
CD player features 16 -bit D/A converters; quadruple oversampling: 20 -track programming; 3 -speed search; track skip: optional remote; direct/ variable audio outputs; headphone socket; digital output socket: FR $10-10.000 \pm 0.1 \mathrm{~dB}$ : $\mathrm{s} / \mathrm{N}$ ratio 105 dB ; dynamic range $96 \mathrm{~dB} .16 .93 \times 10.63 \times 3.54 \mathrm{in} . \$ 999$

## AUDIO BYYAN ALSTINE

Transcendence FET-Valve CD Player
Drawer-loading CD player with class-A compound hybrid vaccuum tube and power MOSFET filter driver circuits. Features toroidal power transformer: regulated heater supply: 16-bit. quadruple-oversampling digital filter; calibrated dual digital fitlers; exactchannel phase-gain tracking: 20-track programming: repeat: shuffle play: time and track display: 3 -speed music search with cueing: CD-single compatibility: wireless remote control. $16.5 \times 11 \times 3 \mathrm{in}$ : $12 \mathrm{lb} \$ 1,195$

## FET-Three-Plus CD Player

Drawer-loading CD player with custom hybrid module output stages and film coupling capacitors. Filter drivers have $1 / 2$-amp current drive at $200 \mathrm{~V} / \mu$ sec. Player features 16 -bit. 4 -times oversampling with dual digital filters and exact channel phase-gain tracking. Other features include 20 -track (and index number) programming with repeat, skip forward. skip back, and time and track display. Infrared remote control optional. $16.5 \times 11.5 \times 3 \mathrm{in}$; $9 \mathrm{lb} \$ 495$

## FEI-Three (D) Player

Drawer-loading (D) player with fast ( $30 \mathrm{~V} / \mu \mathrm{sec}$ ) overload immune integrated circuit audio stages, and film coupling capacitors. Player features 16 -bit, 4 times oversampling with dual digital filters and exact channel phase-gain tracking. Other features include 20-track (and index number) programming with repeat. skip forward. skip back, and time and track display. Infrared remote control optional. $16.5 \times 11.5$ $\times 3 \mathrm{in}$ : 9 lb .
$\$ 295$

## AUDIO DYNAMICS

## (1)-2000F (CD Player

Slide-drawer-loading CD player with full-function remote control and advanced error-processing circuitry. Features 3-beam laser pickup; 16-track random programming: 16 -bit ID/A converter with qua-druple-oversampling digital filter; CD-single compatible. FR $10-20.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; THD $0.005 \%$ at 1.000 Hz ; dynamic range 96 dB ; ch $\operatorname{sep} 90 \mathrm{~dB}$; $\mathrm{s} / \mathrm{N}$ $96 \mathrm{~dB} .17 \times 2 \times 12.63 \mathrm{in} ; 8 \mathrm{lb}, 3 \mathrm{oz}$
$\$ 399$

## (D-1000E CD Player

Slide-drawer-loading (D player with full-function remote control and advanced error-processing circuitry. Features random 16 -track programming: $16-$ bit linear I)/A con verter: skip forward; skip back: fast forward: fast reverse; repeat track, disc, or program; 7-pole (7th-order) analog filtering; 3-beam laser; FR
$20-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; THD $0.005 \% ; \mathrm{s} / \mathrm{N} 96 \mathrm{~dB}$ : displays current track number. elapsed lime of current track, remaining time on disc, and program in memory. $3.5 \times 17.0 \times 11.75 \mathrm{in}$ : 10 lb
\$250

## BANG \& OLUFSEN

## Beogram 5500 Programmable CD Player

Integrates with Beosystem 5500: programs 20 tracks; adds time of programmed tracks; displays time remaining on disc; skip forward and back: 3-speed forward and reverse: direct access by track number: intro scan; 16-bit quadruple oversampling: Bessel elliptical analog filters: auto space: silver and black: controlled by Master Control Panel (eomes with Beomaster 5500 receiver); $2 \mathrm{D} / \mathrm{A}$ converters: separate power supplies for digital and analog sections: digital output. $16.5 \times 3 \times 12.75 \mathrm{in} . . . . . . . . . . . .$. . . . $\$ 1,100$

## Beogram 3300 Remote-Controlled CD Player

 Communicates with other Beosystem 3300 components (stops when cassette deck comes to end of tape: deck stops when disc ends): front panel displays operating status; sensi-touch controls; display of track number. index number, track time time left on disc: skip forward and back; 4-sec auto space: optional bracketed shelf for wall mounting: 16-bit, quadruple oversampling digital filter. $16.5 \times 3 \times 12.25$ in.$\$ 765$

## Beogram CDX Top-Loading CD Player

Skip forward and back; clear key cancels unwanted tracks or cancels program; quadruple oversampling: search without program audible; digital and analog filters; displays track numbers (up to 20), programmed tracks, elapsed time of track or disc, current track and index number; programs 40 tracks in any order: repeats disc or program up to 4 times; 14 -bit digital-to-analog conversion: integral output cable. $16.5 \times 3 \times 12.25 \mathrm{in} ; 12.4 \mathrm{lb}$
\$765

## CAMBRIDGE AUDIO

## CDI Series Il CD Player

32 bit. 16 times oversampling player with 64 k of error correction. Features include volume and digital polarity inversion from a comprehensive remote handset. Leac beam suspension system. Rosewood side cheeks
$\$ 4,000$

## CD2 S CD Player

16 bit. 16 times oversampling player with 64 k of error correction. No analog stages. Full remote facilities and rosewood side cheeks
$\$ 2.500$

## CD2 CD Player

16 bit. 16 limes oversampling player with 64 k of error correction. No analog stages. THD $0.0025 \%$, dynamic range $>100 \mathrm{DE}$.
$\$ 1.700$

## CARVER

DTL-200 Mk II Remote-Controlled CD Player With 3-beam laser and Digital Time Lens circuitry to change frequency balance and ratio of $L-R$ and $\mathrm{L}+\mathrm{R}$. Programs 12 tracks in any order, 99 in sequential order; skip forward; skip back: fast forward: fast reverse: cancel; repeat track. disc, phrase. and program: 24-function remote control: quadruple oversampling (at 176.4 kHz ); error indication; dual D/A converters. Cues by track and index number. Displays current track number, elapsed time of current track, elapsed time on disc, semaining time on disc. program in memory. Sound audible during fast forward and reverse \$720

## CITIZEN

## CBM-3000 Portable CD Piayer

Portable CD player with optional FM transmitter and remote control keypad. Features 16 -track random access programming; double oversampling: 3beam laser: 16-bit D/A converter; special anti-shock
circuit: headphone jack; line-out jack: IX plug-in: remote jack for optional remote sensor: controls include play/pause, stop/clear, forward/reverse track skip, fast forward. reverse, headphone levęl volume. and power switch: intro scan/A-B: memory enter/repeat; mernory/keylock: LCD displays total number of tracks. total playing time of disc, track in play, elapsed playing time, and A-B repeat. Optional FM transmitter and remote control. Comes with aC adaptor, battery recharger. soft carrying case and connection cord
$\$ 330$

## CBM-2000 Portable CD Player

Portable CD player with aniti-shock circuit that pauses aner shock. then automatically resumes play at point on disc where disrupted. Features 16 -track random programming: stop: memory clear: memory back-up; skip forward/back: repeat track: auto shutoff: headphone jack with adjustable output and audio level: inputs/outputs for DC plug. headphone jack line-out jack: AC adaptor/charger; earbuds; carrying belt: patch cord; rechargeable battery pack. FR 5 $20.000 \mathrm{~Hz}:$ THI) $0.07 \%$ at $1,000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N} 92 \mathrm{~dB} \$ 300$

## CBN1-1000 Portable CD Player

Top-loading portable CD player with feather-touch control panel; 3-beam laser pickup; line in/out jack: line cord for connection with larger system; ic adaptor: battery cradle; carbuds; 16-track programming: controls include repeat, fast forward/reverse, audio scan, memory; displays current track number. time remaining/elapse: dynamic range 90 dB ; FR $20-$ $20,000 \mathrm{~Hz}$ : digital filter circuitry.
$\$ 250$

## CBM-777 Portable CD Player

Features double-oversampling digital filter: 3-beam laser: 1.3 bit $\mathrm{D} / \mathrm{A}$ converter: functions include play/ pause, stop. forward/reverse, skip. fast forward/reverse, repeat. headphone level volume, power: Ac adaptor: FR $20-20,000 \mathrm{~Hz}+1 /-3 \mathrm{~dB}$; тHI) $0.08 \% ; 5.8$ $\times 6.7 \times 1.75 \mathrm{in}$.
$\$ 170$

## dbx

## DX5 CO Player

Remote-controlled CD player with 3 processing circuits (compression. Digital Audio Impact Recovery [DAR], and increased/decreased ambience), each independently bypassable. The compression control is for background listening. making car cassettes, and casier taping of CD's; DAIR adds impact to musical transients: ambience adds or subtracts left-right information in midrange and treble frequencies. Features programming of 16 tracks in any order: repeat track, disc. program, or A-B phrase; skip forward; skip back: audible fast forward and reverse: error LEL) to show disc correction; headphone jack with adjustable level: dual 16 -bit D/A converters; advanced error processing; 2-band compressor; impact circuit. Displays track number, total tracks, elapsed time of track, disc time, and program stored in menory. Cues by track or index number. Oversamples at 176.4 kHz . $17.12 \times 11.88 \times 3.5 \mathrm{in} . ~ . ~ \$ 699$

## DENON

DCD-3300 Compact Disc Player
Features double super-linear converter; quadruple oversampling digital filter: (CALP filter: 1 LC -OFC analog filter; twin power transformers; optical isolator: 5independent power supplies; separated digital and analog circuits; HMC pickup chassis; digital-output terminal: optical digital output terminal; headphone jack: 20-track random programming: 10 -key direct selection; index search; time search; repeat function; auto space: timer play; remote control; emphasis display: 8 -digil FL display
$\$ 1,700$

## DCM-555 Compact Disc Player/Changer

6 CD magazine changer allows for up to 32 selection program play. Continuous playback of all 6 disc's; full random play: program random play; disc sequential random play; program random play; super linear

## COMPACT DISC PLAYERS

converter; real time D/A conversion; quadruple oversampling; full function remote control. FR $4-$ $20.000 \mathrm{~Hz}: \mathrm{S} / \mathrm{N} 98 \mathrm{~dB}$; THD $0.004 \%$; $4.56 \times 17.08 \times$ 14.09; 13.25 lb
$\$ 550$

## DCD-910 CD Player

Features double super-linear converter; quadruple oversampling digital filter; pickup with floating suspension; variable analog output. Auto edit. auto space, and 20 selection music calendar; compatible with $3^{\circ}$ CD's; 2 modes of random playback; program random play; FR $2-20,000 \mathrm{~Hz}$; S/N 102 dB ; THD $.004 \%$; remote control provided; Display track \#, playing time, total tracks, total playing time total remaining time, index number; $4.05 \times 17.08 \times 12.40 \ldots . \$ 499$

## DCD-810 CD Player

Features double super-linear converter; quadruple oversampling digital filter; auto-edit function; compatible with $3^{*}$ CD's; random playback; program play. $\$ 399$
DCD-610 CD Player. Similar to above . . . . . . \$300

## DISCRETE TECHNOLOGY

IS I Mark III CD Player
Front-loading CD player with remote-controlled programming. Features FTS; digital output and headphone jacks; dual 16 -bit D/A converters; quadru-ple-oversampling digital filter; CIRC; 1-beam laser; FR $20-20,000 \mathrm{~Hz}$; dynamic range $120 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 100 \mathrm{~dB}$; ch sep 100 dB ; THD $.003 \%$; IMD $.0033 \% .16 .5 \times 3.2 \times$ $11.03 \mathrm{in}: 6.8 \mathrm{lb}$ $\$ 1,195$ LS I Mark IV, As above with external power supply . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$1,495

## DUAL

CD 5070 CD Player
CD player with 30 -beam pickup. Features 16 -bit D/A converter; double-oversampling digital filter; goldplated connectors; 16 -track random-access programming: 12 -function remote control; headphone jack with adjustable level. FR $5-20.000 \mathrm{~Hz}$; THD $0.006 \%$; dynamic range $>95 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 94 \mathrm{~dB}$ (A wtd). 18.1 x $12.1 \times 3.6 \mathrm{in}$ : 10.5 lb .
$\$ 450$

## EMERSON

## CDD 200R CD Player

Dual disc remote controlled CD player with 32 programmable tracks. Plays 2 discs without a magazine. Fast skip, random play. Repeats track, disc, program, phrase. Oversamples at 44.1 KHz ; FR15$20,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ : THD $0.03 \% ; 3.9 \times 16.5 \times 11.8-\mathrm{in}$; 11 lb
$\$ 400$

## CD175R Remote-Controlled CD Player

Programs up to 15 tracks in any order; skip forward; skip back; 2-speed fast forward and reverse; index search; repeats disc, program, phrase; displays total tracks, total playing time, current track number, elapsed time; 3-beam laser; play and pause indicators. $2.8 \times 17.1 \times 4-\mathrm{in}$.
. . \$350
CD165. Similar to CDI70R except lacks remote control. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$300

## FISHER

## DAC195B/DAC197B CD Player

Compact disc changer with 5-disc capacity and 30 function wireless remote control. Features 3-beam laser pickup; double-oversampling digital filter: random playback; intro scan; individual motorized slide-loading trays; scan; skip; repeat disc, program. track, all discs; 32-track random programming; FL display of disc, track, track time, and time remaining: LED play/pause meter; program indicator; headphone jack with adjustable level.
$\$ 400$

## AD728VB CD Player

CD player with 20 -track random programming and 25 -function wireless remote control. Features music
calendar; linear motor pickup drive; LCD display; 3 beam laser pickup; double-oversampling digital fil ter; automatic edit; forward and reverse scan and skip; headphone jack with adjustable volume . $\$ 350$

## AD724AB CD Player

CD player with 20-track random programming and 6 -function wireless remote control. Features music calendar; linear motor pickup drive; LCD display; 3beam laser pickup; double-oversampling digital filter; forward and reverse scan and skip; headphone jack with adjustable volume
\$300

## GE CONSUMER ELECTRONICS

## 3-7050 Portable CD System

CD system with cassette deck. AM/FM tuner, and speakers. Features LCD display with track, repeat, and memory; search; skip; pause; 8-track programming: Dolby $B$ noise reduction; one-button synchro-dubbing from disc to tape: 5 -band graphic equalizer; $24^{*}$ woofers, 2 piezo tweeters; digital tape counter: cushion eject: 5 -segment signal-strength/power meter; external mic jack; headphone jack. $25.8 \times 10 \times 6.3$ in; 18 lb .
$\$ 400$

## 3-7030 Portable CD System

CD system with cassette deck. AM/FM tuner, and speakers. Features LCD with track, disc rotation, and repeat indications: disc-to-tape synchro-record function; 3-band graphic equalizer; $24^{4 *}$ woofers, 2 piezo tweeters: slide volume controls; automatic tape shutoff; direct off-air recording capability; automatic level control in record; variable level recording monitor; built-in mic; external mic jack: headphone jack. $22.8 \times 5.6 \times 6.5$ inches; 11.4 pounds $\ldots . . \$ 315$

## GOLDSTAR

GCD-613 Programmable CD Player
Programs 9 tracks in any order; repeat disc and program; forward and reverse scan; displays total time, elapsed time, track number: digital and active filter. FR $5-20,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$; dynamic range $>90$ $\mathrm{dB}: \mathrm{S} / \mathrm{N}>90 \mathrm{~dB}$ at 1.000 Hz ; output 2 V rms; THD $0.03 \%$. $13.6 \times 3.6 \times 1 \mathrm{llin} ; 8.8 \mathrm{lb}$
\$250

## GCD-64R CD Player

Features full-function remote control; shuffle play; 20 -selection random memory programming; 3-beam laser pickup; linear skating loading system; automatic music search; automatic repeat capability; headphone jack; multi-function display shows elapsed time, total time, track number, repeat and memory
\$350

## HARMAN KARDON

## HD800 CD Player

CD player with 10 -function wireless remote control. Features discrete analog output section; sample-andhold processor; separate analog. digital, and transport power supplies; samples at 176.4 kHz ; dual 16 -bit linear converters; 3-beam pickup; 36-track programmable memory; audible 2 -speed cue and review; displays track, elapsed time, program number, total number of tracks, total time, and time remaining: track and index search; headphone jack with adjustable level.
\$529

## HD400 CD Player

CD player with 10 -function wireless remote control. Features discrete analog output section; sample-andhold processor; separate analog, digital, and transport power supplies; samples at 88.2 kHz ; 3-beam pickup; 36 -track programmable memory; audible 2 -speed cue and review; displays track, elapsed time, program number, total number of tracks, total time, and time remaining; track and index search
\$399

## HD200 CD Player

CD player with discrete analos output section. Features sample-and-hold processor; separate ana-
log. digital, and transport power supplies; samples at 88.2 kHz ; 3-beam pickup; 36-track programmable memory; audible 2 -speed cue and review; displays track, elapsed time, program number, total number of tracks, and time remaining; 16 -bit $\mathrm{D} / \mathrm{A}$ converter: track and index search.
$\$ 329$

## HITACHI

## DA005 CD Player

Direct PIT servo; 5-stage error correction; 121-band digital filter; programs 15 tracks in any order: skip forward and back; fast forward and reverse; cancel; repeat track, disc, phrase, program; cue by track; 28 function remote; headphone jack; adjustable headphone level; 3-beam laser: I D/A converter; displays current track number, elapsed time of current track. remaining time on disc: sound audible during fast scan; headphone output 2 V ; 11 lb

## DAC-60 6-CD Changer

Magazines hold 6 discs or single disc; digital filtering: programs 32 tracks from unit or remote; repeats all 6 discs; random play; 2 -speed audible search in forward and reverse; headphone jack with level control; displays disc number, track number, clapsed time of disc, total playing time. number of tracks on disc
$\$ 399$

## DA-8200 CD Player

Drawer loading; three-beam laser; 24 selection random memory; random play: 2 -times oversampling digital filter; 4 way selection repeat; vibration free floating suspention system; skip forward/back: fast forward/back; repeat track, disc, phrase, program; cue by track number; cue by index number: headphone jack; digital filtering; single $D / A$ converter; display track number, clapsed time, program in memory; sound audible in fast scan; $15.75 \times 3.25 \times$ $10.75 \mathrm{in} ; 7.5 \mathrm{lb}$
\$249

## DA-C70CW CD Player

12 disc ( 6 disc $\times 2$ ) changer; 3-beam laser; 41 function remote: independent disc exchange; 3 play modes; built-in timer; resume play function; oversampling digital filter, magazine loading: skip forward/back; fast forward/back; repeat track, disc, program; cue by track number; cue by index number; headphone jack: adjustable headphone level: digital filtering: single D/A converter; display of current track number, elapsed time, program in memory; sound audible in fast scan; $15.75 \times 5.13 \times 12.5$ in
$\$ 449$
The following models all have 3-beam laser, self. program search. index search. and random play.

## DA-009 CD Player

10-key direct random access; Roulette Play begins sequential play with random tracks; programs 24 tracks; 5-way repeat; skip: 2 -speed search; display shows programmed tracks; 121-step digital filtering: low-vibration pickup
$\$ 300$

## JVC

## CD Players

## XLZ2555BK CD Player

CD player with quadruple-oversampling digital filter. Features twin high-speed D/A converters; optical digital output; coaxial digital output; double-floating independent suspension system; disc/track title indication; $3^{\prime \prime}$ CD compatible; auto/multi-disc editing key; 5-way repeat with A/B; index play; skip; search; auto/manual search; 3-beam laser pickup; Optical noise reduction; remote control with volume control and numeric keypad: random access programmming of up to 32 tracks; random play; intro scan; headphone jack with adjustable level: FL display; 2 analog outputs; disc title memory.
$\$ 490$

## XL.Z444BK CD Player

CD player with coaxial digital output. Features auto-
editing key; quadruple-oversampling digital filter; dual high-speed D/A converters; Opticalink noise reduction: $3^{* *}$ CD capability; auto/manual search; headphone jack with adjustable level; FL display; 3beam laser pickup; independent suspension system; remote control with numeric keypad; 32-track ran-dom-access programming: random play; intro scan; 5-way repeat with A/B.
$\$ 330$

## XI.V222BK CD Player

CD player with auto/manual editing key. Features multi-function HL display; 3-beam laser pickup; independent suspension system; repeat track, disc, and program; auto/manual search; headphone jack; double-oversampling digital filter; $3^{*}$ CD capability; 32-track random-access programming . . . . . . . $\$ 255$

## $C D$ Changers

## XLM600BK CD Changer

CD changer with 6 -disc magazine section and autoloading single-play drawer. Features magazine/disc title indication with message and program memory: repeat all tracks, single track, and programmed tracks: random play: auto/manual search; multifunction FL display; timer play; 3-beam laser pickup; independent suspension system; remote control with numeric keypad; 32-track programming: headphone jack; double-oversampling digital filter
$\$ 560$

## XLMA00BK CD Changer

CD Changer with 6-disc capacity and wireless remote control. Features 3-beam laser pickup; double-oversampling digital filter; independent suspension system: 32-track random-access programming: random play; repeat all, program, and track; random play; auto/manual search; multi-function Fl display; 6disc magazine
$\$ 430$
XLMM0BK. As above, no remole control ... \$380

## Portable CD Player

## RC-X3 Portable CD System

Combination CD player, AM/FM stereo tuner, double autoreverse cassette deck, amplification, and speakers. Fealures CD synchro-start recording: continuous record; high-speed tape-to-tape dubbing: $24.75^{\prime \prime}$ fullrange speakers: 3 -beam laser pickup; 22 -track random access programming; CD repeat play; CD intro scan; CD search; CD, mic. and headplone outputs; automatic record level with variable monitor . $\$ 330$

## KENWOOD

## DP-3300D CD Player

Basic series CD player with full-function wireless remote control. Features optical interface with KA3300D amplifier: coaxial digital ouptut; pure digital output switch: twin high-speed ladder network 16 -bit D/A converters with FET input; quadruple oversampling digital filters; 7-pole Butterworth FIDNR analog low-pass filter: high-rigidity and multi-insulation; independent power supplies; Optimum Servo Control Type III: 3-beam laser: rapid direct-play system: 4 play modes; 6 -mode real time display; 20-track random program memory; A-B section repeat; music skip; index search key; audible manual search; auto spacing: repeat: music calendar display: auto open switch; auto loading; headphone jack with level control: phase inverter switch. THD $0.001 \%$. dynamic range $97 \mathrm{~dB}, \operatorname{sep} 115 \mathrm{~dB}, \mathrm{~s} / \mathrm{N} 105 \mathrm{~dB}$ (all at $1,000 \mathrm{~Hz}$ ). $17.31 \times 4.31 \times 12.44 \mathrm{in} ; 22.1 \mathrm{lb}$
. $\$ 885$

## DP-990SG CD Player

Basic series CD player with full-function wireless remote control. Features high-rigidity mechanism; multi-insulation system; 16 -bit integrator D/A converter with constant-current drive; double oversampling digital filter: discrete 7-pole Butterworth lowpass filters: independent power supplies and optimum ground pattern; Optimum Servo Control Type III; 3-beam laser; rapid direct-play system; 4 play modes; dual time display: 20 -track random
program memory; A-B section repeat; music skip; track searct; audible manual search; auto spacing: repeat: auto loading; headphone jack with level control. THD $0.002 \%$. dynamic range 96 dB . sep 98 $\mathrm{dB}, \mathrm{s} / \mathrm{N} 98 \mathrm{~dB}$ (all at $1,000 \mathrm{~Hz}$ ). $17.31 \times 3.69 \times 12.31$ in; 11 lb.
$\$ 685$

## DP-880SG (1) Player

CD player with wireless remote control. Features 20 track random programming: Optimum Servo control; 3-beam laser; double oversampling digital filter: l0-key input; track skip \& search; total/track playing time, track number, memory display; repeat; headphone jack. THD) $0.007 \%$. dynamic range 92 dB (at $1,000 \mathrm{~Hz}$ ). Kenwood unified-remote system compatible. $16.56 \times 3.44 \times 10.31 \mathrm{in} ; 8.3 \mathrm{lb}$
$\$ 445$

## DP-M107R CD Changer

Features auto-furction; 6-disc magazine plus single CD; optimum servo control; 3-beam laser pickup; double oversampling digital filter: intro-scan: one touch disc selection; 32-track random program memory: Random Roulette Play; fluorescent display with music calendar, disc, total/elapsed/remaining time, track number and program contents indication; 2 channels; FR $20-20,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; dynamic range $>$ 95 dB at $\mathrm{IkHz} ; \mathrm{S} / \mathrm{N}$ ratio $>93 \mathrm{~dB}$; THI$)<0.009 \%$ at I kHz : w\&F unmeasurable. $4.31 \times 16.56 \times 13.63 \mathrm{in}$ : 13 lb.
$\$ 399$

## DP-M97R (D ( hanger

Features auto-function; 6-disc magazine; optimum servo control; 3-beam laser pickup; double oversampling digital filter; one touch dise selection; 32-track random program memory: fluorescent display with total/elapsed/remaining lime. track number, disc number, and program contents indication; 2 channels: FR $20-20,010 \mathrm{~Hz} \pm 1 \mathrm{~dB}$ : dynamic range $>90$ dB at $\mathrm{lkHz} ; \mathrm{s} / \mathrm{N}$ ratio $>90 \mathrm{~dB} ; \mathrm{THD}<0.02 \%$ at kHz : w\&F unmeasurable. $3.44 \times 16.63 \times 13.21 \mathrm{in}$; 12.1 lb.
$\$ 349$

## DP-87 Remote-Controtled CD Player

Features optimum servor control; 3-heam laser pickup; double oversampling digital filter: 20-track random program memory; fluorescent display with music calendar, total/elapsed/remaining time, track number and program contents indication; auto function; 2 channels; FR $20-20,000 \mathrm{~Hz} \pm \mathrm{I} \mathrm{dB}$; dynamic range $>92 \mathrm{~dB}$ at $\mathrm{IkHz} ; \mathrm{s} / \mathrm{N}$ ratio; THD$)<0.007 \%$ at 1 kHz ; w\&F unmeasurable. $3.63 \times 16.63 \times 10.31 \mathrm{in}: 8.4$ Ib.
$\$ 269$

## DP-57 CD Player

Features auto function; optimum servo control: 3beam laser pickup; double oversampling digital filter; 20-track random program memory: fluorescent display with music calendar, total/elapsed/remaining time, track number and program contents indication; system remote controllable through KA-127: 2 channels; FR $20-20,000 \mathrm{~Hz} \pm \mathrm{IdB}$; dynamic range $>92$ dB at $\mathrm{lkHz} ; \mathrm{s} / \mathrm{N}$ ratio $>92 \mathrm{~dB}$; THD $<0.007 \%$ at 1 kHz ; w\& unmeasurable. $3.63 \times 16.63 \times 10.3 \mathrm{I} \mathrm{in} ; 8.4$ lb.
$\$ 229$

## KINERGETICS

## KCD- 30 Gold Series CD Player

Volume and balance controls on front panel to drive power amp directly; dynamic processing circuits; corrected-slope filter; h ysteresis-distortion cancelling circuit; no capacitors in signal path; servo loop to eliminate DC offer: 3 -speed search; dual D/A converters: I-beam laser; 4 -times oversampling; springisolated transport; program memory for 226 discs: indexing; 19 rack mount. Output level 4 V ; 14 lb ; 19 x $3.75 \times 12.6$ in
$\$ 1.495$

## KCD-20AR Gold Series CD Player

Features remote-control; volume and balance controls on front panel: high-oulput voltage with ability to drive power amp directly; dynamic processing circuits; remote power supply; dual D/A converters;
single-heam with quadruple oversampling: spring isolation of transport; full-function display; indexing: full-function remote option: 19* standard rack mount
$\$ 995$
KCD-20A. Same as above without remote control.
KRC-20, Add-on remote external eye . . . . . . . . \$99

## KYOCERA

DA-910 CLD Player
I-beam laser; digital filtering; programming of 24 tracks in random order; display of current track number, elapsed time of current track, remaining time on cisc, program stored in memory; skip forward; skip back; cancel; repeat track, disc, phrase, program; cue by track number, index number: 8 function remote control; headphone jack (adjustable outpu1). Max line output 5 V ; rin at $1,000 \mathrm{~Hz}$ $0.005 \%: \mathrm{s} / \stackrel{\mathrm{v}}{ } 95 \mathrm{~dB}$; sep $90 \mathrm{~dB} ;$ FR $5-20,000 \mathrm{~Hz} \pm 0.5$ $\mathrm{dB}, 22 \mathrm{lb} ; 17 \times 5.5 \times 13 \mathrm{in}$
$\$ 1,600$

## DA-710 (X CD) Player

Programs 24 tracks in any order, 99 tracks in sequential order: skip forward; skip back: fast forward; fast reverse; cancel; repeat track, disc, phrase, program: 39 -function remote control; headphone jack with adjustable level; digital filtering: 3rd-order analog filtering; dual 1 /A converters; sound audible during fas scan. Cues by track and index number. Displays eurrent track number, remaining time on disc, and program in memory. Headphone output 50 mW . $18.12 \times 3.56 \times 12.12 \mathrm{in} ; 13 \mathrm{lb}$
\$850

## DA-510CX CD Player

Quadruple oversampling digital filters; 2 discrete D/A converters; headphone jack with adjustable volume: gold-plated RCA jacks; 39-function remote control:

program:, 20 tracks; optical isolation between digital and analog sections; digital output
\$700

## DA-610CX (D) Player

3-beam laser; 24-key hand-held remote control can be used in system remote or separately; skip forward; skip back; fast forward; fast reverse; cancel; repeat track. disc. program; programs 15 tracks in any order. 99 tracks in sequential order: headphone jack with adjustable level; 9 th-order analog filtering; single $\mathrm{D} / \mathrm{A}$ converter: sound audible during fast scan. Displays current track number, remaining time on disc, prograr. $18.12 \times 3.56 \times 12.12 \mathrm{in}$.
. $\$ 550$

## DA-410CX CD Player

10-button keypad on front panel and remote; programmability; compatible with timers; anti-resonant construction; ceramic chassis spacers; zirconia ceramic laser guide shafts; double oversampling; 16 -bit D/A conversion; 3rd-order Bessel-derived analog filters; fluorescent display; headphone jack with level control walnut veneer side panels
. $\$ 540$
DA-310CN CD Player
Anti-resonant construction; zirconia ceramic laser guide shafts: 2 -times oversampling: 16 -bit digital-toanalog conversion; 3rd-order Bessel-derived analog filters; :luorescent display: headphone jack with level control: walnut veneer side panels
\$375

## LUXMAN

D-03 CD Player
Drawer loading CD Player with 7-function remote.

## COMPACT DISC PLAYERS

Features one-beam laser; programming of 20 tracks in random order; skip forward/reverse; fast forward/ reverse; cancel; repeat track, disc. program. Displays current track number, elapsed time of current track/ current disc: remaining time: program stored in memory. Cues by track number, index number, time. Max line output 2 V ; THD at $1.000 \mathrm{~Hz} 0.003 \%$ at 97 $\mathrm{dB} ; \mathrm{FR} 5-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} ; 17.81 \times 3.31 \times 13.75 \mathrm{in}$; 18.7 lb .
$\$ 1,500$

## D-109 CD Player

Features full-function remote control; serial remote jacks for connections to other Luxman products; digital output sends digital signal to Luxman LV-109 integrated amp; 1-4 time display functions; programs up to 20 tracks; index scan: A-scan plays first 10 sec of music; A/B switch to mark beginning and end of selected track(s) for repeat: memory check. FR 5$20.000 \mathrm{~Hz}-0.5 \mathrm{~dB}$; THD $0.003 \%$ (1 kHz): dynamic range $100 \mathrm{~dB} ; 17.25 \times 4 \times 15.25 \mathrm{in} ; 27.5 \mathrm{lb} . \$ 1,500$

## D-113 CD Player

Double oversampling digital filter; active 3rd order analog low pass filter; 3 beam laser: system remote capability; 16 program random memory. FR 5-20,000 Hz : THD $0.007 \%$; $\mathrm{S} / \mathrm{N}$ ratio 94 dB
$\$ 650$

## D-102 Programmable CD Player

15 track programmability; skip functions; 10 key input; memory call switch: repeat; headphone level control; timer play switch. FR $5-20,000 \mathrm{~Hz}-0.5 \mathrm{~dB}$; THD $<0,004 \%$ : $\mathrm{s} / \mathrm{N}$ ratio $>96 \mathrm{~dB}$ : dynamic range $>96 \mathrm{~dB} .17 .23 \times 3.38 \times 12.3 \mathrm{tin}: 11.9 \mathrm{lb} \ldots .5550$

## D-90 Remote Control CD Player

15 program random memory; separate power supplies for analog and digital circuits: 3 beam laser; track/index. track elapsed time and disc remaining time display; headphone level control. FR 20-20,000 Hz : THD $0.005 \%$; $\mathrm{s} / \mathrm{N} 91 \mathrm{~dB}$.
$\$ 450$

## D-111 Remote Control CD Player

16 program random memory; 10 key system allows direct track access from remote hand piece: rear panel serial remote jacks accommodate Luxman's unified remote control systems. 3-beam low mass laser pickup: high density magnetic disc clamper; anti-vibration laser pick-up mechanism; active analog linear phase low pass filter; dual DAC's with $2 x$ oversampling digital filter. FR $5-20.000 \mathrm{~Hz}+0.5 /-0.5$; THD $0.06 \%$; s/N ratio 106 dB ; dynamic range $90 \mathrm{~dB} \$ 350$

## D-113D Remote Control CD Player

I6 program random memory; 10 key numeric handpiece and system remote capability: 10 kcy direct access and multi-function display; 3-beam low mass laser pick-up; high density magnetic disc clamper; anti-vibration laser pick-up mechanism: digital direct with optical and co-ax. Performance specifications are dependent on the digital direct amplifier with which the D-113D is used. . . . . . . . . . . . $\$ 550$

## MAGNAVOX

## CDV474 CD-V/LaserVision CD Player

Remote-controlled combination player for CD-Audio. CD-Video, and LaserVision discs. Auto ID of disc type; programming. Video features include fast motion; slow motion; reverse play; freeze frame; random access
\$749-\$799

## CDB650 FTS CD Player

Favorite Track Selection (FTS) memorizes programs from various disc (up to 785 tracks). Extra altered output: music scan; single play; digital output for $C D$ graphics, CD-ROM; skip forward; skip back; 3-speed FF and reverse; $4-\mathrm{sec}$ record-pause insertion; antijamming protection; repeat track. disc, program; headphone jack with adjustable level; infrared remote control: I-beam laser: low-order low-pass digital filtering; high-order analog filter; dual D/A conventers. Cues by track number. Oversamples at 176.4 $\mathbf{k H z}$. Displays current track number, elapsed time of
current track. elapsed time on disc, remaining time on disc. Headphone output $0-5 \mathrm{~V} .16 .5^{\prime \prime} \mathrm{w} \times 3.5^{\circ} \mathrm{h} x$ $11.75^{\circ} \mathrm{d}$ : 9.75 lb .
$\$ 499$

## CDB473 FTS CD Player

Favorite Track Selection (FTS) memorizes programs from various discs (up to 785 tracks): touch-close drawer: 24 -function remote control with 10 -digit keypad and volume control.
$\$ 399$

## CDB472 Remote-Controlled CD Player

Programs 20 tracks in any order; dual 16-bit D/A converters: headphone jack; 6-function remote; skip forward and back; 3 -speed search (audible at 2 slower speeds): repeat: index access; quadruple oversampling digital filtering. Displays track number, index number. minutes. seconds, total tracks or total time. with indications for power. memory, errors, pause. repeat
$\$ 299$

## CDB471 Programmable CD Player

Programs 20 tracks in any order: 3-speed search (music audible at 2 slower speeds); quadruple oversampling digital filter; dual 16 -bit 1 )/A converter; skip forward and back: time or track display
$\$ 259$

## CDB482 CD Player

CD player with dual 16-bit D/A converters. Features CDM4 laser scanning assembly; 9-function infrared remote control; touch-to-close disc tray: 20-track memory programming: 4-digit LED display; next/previous track skip: 3-speed music search with cueing: repeat play; shuffe play: $3^{\text {r }}$ CD-single compatibility: stereo headphone jack: FR $2-20.000 \mathrm{~Hz}$; THD $<0.02 \%$ at max output level; IMD $76 \mathrm{~dB} .16 .5 \times 3 \times 11 \mathrm{in} \$ 229$

## CDB486 (D) Player

6-disc auto-changer CD player with dual 16 -bit D/A converters. Features multi-function play capability; 11 -function infrared remote control; CDM4 laser scanning assembly; auto play; 30 -track memory programming: 5-digit LCD display; next/previous track skip; 3-speed music search with cueing; shuffie play: repeat play; stereo headphone jack; FR 2-20,000 $\mathrm{Hz} \pm 0.5 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ ratio $>90 \mathrm{~dB} ; \mathrm{THI})<0.02 \%$ at max output level: IMD $76 \mathrm{~dB} .16 .5 \times 3.25 \times 12.5 \mathrm{in} . \$ 369$

## CDB473 CD) Player

CD player with dual 16 -bit 1)/A converters. Features 785 lifetime memory Favorite Track Selection; 24function random access IR remote control; remote audio output control; touch-to-close motorized tray loading: random access programming: 3 -speed forward/reverse search; I-second track access time; fullfunction FTD display: digital output jacks; headphone jack with volume control; new CD2 integrated circuits; CDM2 laser assembly; anti-jamming disc/ player protection; single track/normal/autoplay modes; music scan auditioning: next/previous track skip; FR $2-20,000 \mathrm{~Hz}$ : THD $<0.003 \%$ at 1 kHz : IMD $<90 \mathrm{~dB}$ at max output. $16.5 \times 3.5 \times 11.75 \mathrm{in} . \$ 250$

## CDB480 CD Player

CD player with dual 16 -bit D/A converters. Features CDM4 laser scanning assembly: touch-to-close disc tray: 20 -track memory programming: 4-digit IED display; next/previous track skip; 3-speed music search with cueing: repeat play; shuffe play; stereo headphone jack; 3" CD-single compatibility: pause control: FR $2-20.000 \mathrm{~Hz}$; THD $<0.02 \%$ at max out put level; IMD $76 \mathrm{~dB} .16 .5 \times 3 \times 11 \mathrm{in} \ldots . . . .$.

## MARANTZ

## CD-94 CD Player

Features dual 16-bit converters; quadruple oversampling: digital outputs with optically coupled link to optional CIDA-94 separate D/A converter: Favorite Track Selection memorizes over 200 disc programs; shuffle play; random-track programming: intro scan; three independent power supplies for digital, analog. and mechanical sections; programmable wireless remote: black rosewood side panels . . . . . . $\$ 1,700$

CD-94G. As above with rose-gold finish and rose wood side-panels . . . . . . . . . . . . . . . . . . . . \$ $\$ 1.800$

## CDC-6R CD Changer

Features 16-bit. 2 times oversampling double D/A convertors; wireless remote control: random 32-track programming from any or all six discs; shuffle play: FR 5-20,000 Hz; THID $0.03 \% ; \mathrm{s} / \mathrm{N}$ ratio 94 dB ; sep 90 dB. $4.87 \times 17.12 \times 14 \mathrm{in} ; 13.2 \mathrm{lb}$
$\$ 499$

## CD-75DX CD Player

Features dual 16 -bit converters; quadruple oversampling: digital data output for outboard D/A converter: bi-directional track skip; cue and review; random track programming and repeat: satin black finish $\$ 450$ CD-65DX CD Player. Similar to above $\$ 400$

## CDC 320BL. CD Changer

Features wireless remote control; 6-disc magazine; 15 -track programmable: 3-beam laser. $3.25 \times 16.5 \times$ $11.87 \mathrm{in} ; 11.2 \mathrm{lb}$
$\$ 369$

## CD-50 CD Player

Drawer-loading CD player with wireless remote control. Features 3 -beam pickup laser; 16-track random programming: skip forward; skip back: fast forward; fast reverse; repeat track and disc; digital filtering; dual D/A converters; cues by track number: oversamples at 88.2 kHz ; displays current track number, elapsed time of current track, remaining time on disc, $3 \times 16.5 \times 10.88 \mathrm{in}$; 7.7 lb
$\$ 350$

## CD-40 CD Player

Features 16 track programming: 16-bit double oversampling: forward/reverse search/skip; repeat play; track/index display; THD $0.07 \%$ : $\mathrm{S} / \mathrm{N} 90 \mathrm{~dB} ; 3 \times 16.5 \times$ $10.88 \mathrm{in}: 7.7 \mathrm{lb}$
$\$ 300$

## CD-60 CD Player

Features 16 -track programmable memory: wireless remote control; motorized disc-loading: repeat play: numeric track and index display; stop/play/pause, repeat and memory indicators: forward/reverse search and skip; FR $\$-20,000 \mathrm{~Hz}$; THD $0.07 \%$; S/N ratio $90 \mathrm{~dB} ; \operatorname{sep} 80 \mathrm{~dB} .3 \times 16.5 \times 10.87 \mathrm{in} ; 7.7 \mathrm{lb} . . \$ 299$

## McINTOSH

MCD 7005 CD Player
Features wireless remote control with volume control: direct-access track. index, and time selection; volume control through MeIntosh Precision Ladder Attenuator: 8-bit error correction system; twin 16-bit D/A converters with quadruple-oversampling. 32 lb. .
$\$ 1,599$

## MELOS AUDIO

## CD-T II Compact Dise Player

Dual-chassis player with 16 bit quadruple oversampling. Analog filtering an amplification; toroidal transformer and regulated power supplies contained in aluminium chassis; connectors are heavy gold plate; full function CD remote control; output 1.25 V RMS; 100 ohm output imp.
$\$ 1.495$

## CD-T Vacuum Tube CD Player

16 bit quadruple oversampling and digital filtering. Low microphonic tubes used for amplification and filtering. Remote control. scan, index, timer, drawer loading .
$\$ 1.095$

## MERIDIAN by MADRIGAL

207 MKII Professional 2-Part CD Player
Drawer-loading CD player with single-beam laser pick-up assembly in a spring die-cast subehassis with stainless steel guides. Two-box construction allows the electronics unit to be mounted on side or above the transport unit. Features digital to analog converters, 4-digit display with total/elapsed/remaining disc time or vol level and information on track selections: also indicates absolute-phase polarity, repeat and


Our engrieesing philosophy,
simply stated.

## Audio Dynamics

High fidelity. Low complexity. Presenting the new face of performance art, pure and simple.
For the name of an Audio Dynamics dealer near you, call 1.800.541.5696.
circle no. 63 on reader service card Audio Dynamics Corporation, 851 Traeger, San Bruno, CA 94066 (C) 1988 Audio Dynamics Corporation
error correction; built-in preamplifier facilities; inputs for $C D$, line, tape; outputs for fixed, variable, tape and headphones; distortion <0.004\%; $6.3 \times 3.9 \times$ 12.6 in : 18 lb . \$2,250
209. Remote master control works with 207-PRO and other Meridian 200-series components; selects tracks; controls 8 inputs, volume, and mute; needs 9V battery.
$\$ 150$

## MICROSEIKI By ANALOG EXCELLENCE

## CD-M2 CD Player

Remote controls direct track access, programming, display, phrase repeat, skip forward and back, search forward and back, index search; independent power supplies for each digital printed circuit board, analog PCB, servo mechanism, and FL display; quadruple oversampling; Philips laser pickup mechanism; $2 \mathrm{D} / \mathrm{A}$ converters; 3rd-order Bessel analog filter; digital and optical outputs; Brazilian rosewood cabinet; rosewood trim on remote; convertible to 18 bits with outboard processor. FR $2-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$. THD $<0.0015 \% ; \mathrm{s} / \mathrm{N}>104 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; dynamic range $>96 \mathrm{~dB}$ : analog out 2 V rms ; balanced analog out 1 mW/600 ohms; $48.4 \mathrm{lb} . . . . . . .$. . . . . . . . . $\$ 3.995$

## MISSION ELECTRONICS

## PCM II CD Player

Front-loading CD player with touch close disc loading tray. Features scan; A/B repeat; direct access programming: phase inversion switch; headphone jack with adjustable volume on remote; 29-function remote control: dual 16 -bit D/A converters; quadru-ple-oversampling digital filter: 20-track random programming; 3-mode time display; 3-speed search; digital output; four independent power supplies for digital and analog electronics; gold-plated RCA connectors. . . . . . . . . . . . . . . . . . . . . . . . . . . \$ $\$ 1.500$

## PCM 7000 CD Player

CD player with remote control and four separate power supplies. Features 16 -bit quadruple oversampling digital filter; twin D/A/ converters; 20-track random programming: skip forward and back; fast forward; fast reverse; cancel; repeat track, disc, and program; cues by track; 1 -beam laser; displays elapsed time, remaining time, program in memory. $17 \times 3 \times 13.5 \mathrm{in}$.
$\$ 999$

## MITSUBISHI

M-C5100 CD Player
Features dual 18 -bit D/A convertors; 8-times oversampling: both optical and coaxial direct digital outputs: single master clock frequency for all digital circuits: anti-resonant construction: Photo Direct amplifier IC: automatic editing function; music calendar display of disc contents.

## DP-409R CD Player

Auto-changer with remote control 3 beam laser: repeat track and disc skip track and 30 segment programmable; !6-function, infrared wireless remote control. $\qquad$ $\$ 550$
DM-5. 5 CD magazine for use with DP-409R . . \$13

## M-C4100 CD Player

Features five-disc capacity; 20-selecting programmability: audible scan; double oversampling: 16-bit D/A convertors; digital filtering; single clock frequency for all digital circuits; introscan; random play functions: direct random track access; $3^{\prime \prime}$ disc compatibility; headphone jack with separate level control; wireless, full-function, remote control; anti-resonant chassis construction
. $\$ 449$

## DP-209R CD Player

Features 3 beam laser: 36 selection programmable; skip function; repeat play; 10 function remote control; adjustable headphone level

## DP-212R CD Player

Features double oversampling: digital filtering: 36 programmable tracks; random access of any track; two-speed forward/reverse search; index search; repeat play; headphone jack; wireless remote; 3-beam optical tracking
\$249

## DP-109 CD Player

Features 3 beam laser: 36 selection programmable; skip function; repeat play . . . . . . . . . . . . . . . . . $\$ 240$

## THE MODSQUAD

## Prism CD Player

Drawer-loading CD player with 16 -bit digital processing. Features quadruple oversam;oing; wierless infrared remote control; Favorite Track Selection; 20-track random programming: repeats disc, track, program, and phrase (A-B repeat); displays clapsed time of track and remaining time on disc; digital time domain alignment; separate digital and analog power supplies; DC coupling: fixed line outputs; output level 4 Vrms ; headphone jack with variable output level; digital outputs. FR $0.1-20,000 \mathrm{~Hz} \pm 0.05 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 110$ dB ; THD 0.02\%; 8 lb .
$\$ 1.200$

## Focus Plus CD Player

Drawer-loading CD player with damped suspended transport. Features 20 -track random programming: 16-bit digital processing: quadruple oversampling: digital time domain alignment: wireless infrared remote control; repeats disc, track and program; displays elapsed time of curtent track and disc: fixed line outputs; headphone jack with fixed level; output ievel is 4 V rms; Favorite Track Selection; proprictary group delay filter; digital outputs; DC coupling. 7.5 lb.
$\$ 900$
Focus CD Player. As above without proprietary group delay filter, digital outputs, or DC coupling $\$ 650$

## NAD

5300 Monitor Series CD Player
Wircless remote control; dynamic range control; ambience circuit: quadruple oversampling: drawer loading: CDR circuit: separate D/A converters; error display; 3-beam laser; skip and scan forward and back: displays track number, clapsed and remaining time: repeats disc: programming.
$\$ 898$

## 5170 Monitor Series CD Player

Multiple play: 6-disc magazine and single play drawer: 16 bit D/A; $4 x$ oversampling: CDR circuit: intro scan: 32-track programable memory; remote control including volume: rack mountable . . . $\$ 748$

## 5100 Monitor Series CD Player

Drawer loading: 16 -bit decoding with $4 x$ oversampling: CDRcircuit; remote control output level; variable and fixed outputs; 8 separate analog. digital and mechanical power supply sections; normal and delete mode programming: NAD designed analog and digital circuitry: rack mountable.

## 5240 Remote-Controlled CD Player

Wireless remote control; dynamic range control: 3beam laser; skip and scan forward and back; displays track number, elapsed and remaining time: repeats disc; programming of up to 16 tracks . . . . . . . . \$448

## 5220 Programmable CD Player

3-beam laser: skip and scan forward and back: displays track number, elapsed and remaining time: repeats disc: programming of up to 16 tracks; timer compatible
\$348

## NAKAMICHI

OMS-7All Compact Disc Player
Drawer-loading CD player. Features 3-beam laser: digital filtering (resampling frequency 176.4 kHz ); dual 16 -bit. glitch-free D/A converters; programming of 24 tracks in random order; display of current track
number, elapsed time of current track, remaining time on disc, program stored in memory; sound audible during fast forward and fast reverse: skip forward; skip back; fast forward; fast reverse; cancel; repeat disc. program; cue by track number, index number: 7-function remote control; headphone jack with adjustable level. Max line output 2 V ; headphone output 35 mW ; THD at $1,000 \mathrm{~Hz} 0.0025 \%$; $\mathrm{s} / \mathrm{N}$ $>104 \mathrm{~dB}$; sep $>100 \mathrm{~dB}$; FR $5-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} ; 16$ $\mathrm{lb}, 5 \mathrm{oz}: 17.12 \times 3.94 \times 12.12 \mathrm{in}$ $\qquad$ \$1,995 OMS-5AII. As above, no remote control or programming capability. . . . . . . . . . . . . . . . . . . . . . . . \$ $\$, 650$

## OMS-4A CD Player

Drawer-loading CD player with shunt-connected deglitching; multi-regulated power supply; magnetic chuck: remote control. Features programming of 15 tracks in any order; skip forward; skip back; fast forward; fast reverse; cancel; headphone jack with adjustable headphone level; 3-beam laser: 16-bit digital filter; dual D/A converters. Oversamples at 88.2 kHz : Displays current track number, elapsed time on disc. Headphone output $35 \mathrm{~mW} / 40$ ohms.


## OMS-3A CD Player

Drawer-loading CD player with shunt-connected deglitching; multi-regulated power supply; magnetic chuck: remote control. Features programming of 15 tracks in any order; skip forward; skip back; fast forward; fast reverse: cancel; headphone jack with adjustable headphone level; 3-beam laser: 16-bit digital filter; single D/A converter. Oversamples at 88.2 kHz ; Displays current track number, elapsed time on disc. Headphone output $35 \mathrm{~mW} / 40$ ohms. $16.94 \times 3.95 \times 12.69 \mathrm{in} ; 15 \mathrm{lb}$
$\$ 850$

## CDP-2A CD Player

Mid-level CD player featuring 16-bit quadruple oversampling with digital filtering: dual $0 / 4$ converters: third order bessel analog filter: multi-regulated isolat-ed-ground power supplies; 24 memory programming function; wireless remote control with 24 key transmitter: headphone jack with level control: 3-beam laser pickup; FR $20-20,000 \mathrm{~Hz}+0.5 /-1.0 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ $>0.006 \%$ : $16.94 \times 2.94 \times 10.63 \mathrm{in} ; 8 \mathrm{lb} . \ldots . . . \$ 529$

## OMS-IA CD Player

Features 16-bit D/A conversion; double-oversampling digital filtering with 5th order active analog filter: dual-mono anlog circuits; independent digital and analog power supplies; 3-beam laser pickup with astigmatism detection; high-precision servo; synchronized digital timing; floating disc drive with precision centering: 15-track program memory; wireless remote control; bidirectional skip search; dualspeed cucing: repeat play; disc rotational velocity $200-500 \mathrm{rpm}$; FR $5-20,000 \mathrm{~Hz}$ : signal-to-noise ratio $>96 \mathrm{~dB}$; THD $0.007 \%$; channel sep $>88 \mathrm{~dB}$; $16.94 \times$ $2.94 \times 10.63 \mathrm{in} ; 8 \mathrm{lb}, 3 \mathrm{oz}$
$\$ 329$

## NEC

## CD-720 CD Player

Wireless remote control: 16-bit digital filter with quadruple-oversampling; dual D/A converters: optical decoupling: gold plated terminals; digital outpuls; separate power supplies for digital and analog stages: 3 -way edit; fade out; intro-scan; random play; 24 track random programming: 3 -way repeat: 10 -disc memory; programming delete; variable and fixed audio outputs; CD single compatibility
$\$ 579$

## CD-620 CD Player

Wircless remote control: 16 -bit digital filter with quadruple-oversampling: dual D/A converters; digital outputs: gold-plated terminals; separate power supplies for digital and analog stages; 24-track random programmable memory: auto/manual edit functions: random play: 3-way repeat; programming delete; intro-scan: direct access: 2 -speed audible cue and review: CD single compatibility; headphone jack with adjustable level
$\$ 479$

## COMPACT DISC PLAYERS

## CD-520 CD Player

Wireless remote control: 16-bit digital filter with double-oversampling: IJ/A converter; gold-plated terminals: 24-track random programmable memory; automatic edit; auto space; 3-way repeat; intro-scan: direct access: 2-speed audible cue and review; CD single compatibility: headphone jack with adjustable level.
$\$ 359$

## CD-420 CD Player

Wireless remote control: 16 -bit digital filter with double-oversampling: I/A converter: gold-plated terminals: 20-track random programmable memory: auto space: auto space insert; 3-way repeat: direct access; 2 -speed audible cue and review: CD single compatibility: headphone jack with adjustable level.

## NIKKO AUDIO

## CD-500 CD) Player

Features remote control with 10-key direct-access pad: timer play: space play: index programming: pause: fast search; all clear: headphone output with adjustable level. Optionally rack mountable . . $\$ 499$

## CD-300 CD Player

Features remote control; 3-beam laser; 18-track random programming: index programming: pause mode. Optionally rack mountable
\$299

## ONKYO

Integra DX-7500 CD Player
CD player with 18 -bit linear circuitry. Features 8 -times-oversampling digital filter: separate left and right Opto-Drive [1/4 converters: opto-coupling: optical and coaxial digital outputs: DDAC output; fixed and variable analog outputs; separate power transformers for digital and analog stages: 3rd order Gile type analog output filters; 20 -track random programming: random music calendar: integrated system remote compatible with supplied controller.
$\$ 700$

## Integra DX-5500 CD Player

CD player with 18 -bit linear circuitry. Features quadruple-oversampling digital filter: separate left and right Opto-I rive D/A converters; opto-coupling: optical and coaxial digital outputs; fixed and variable analog outputs: separate power transformers for digital and analog stages; 3rd order cilc type analog output filters: 20 -track random programming: random music calendar: integrated system remote compatible with supplied controller.
$\$ 600$

## DX-(600 (CD) Changer

Remote-controlled magazine-loading 6-disc CD changer with opto-coupling system to electrically separate the digital and analog sections. Features programmed playback: random shuffle playback: 3 repeat modes: skip forward: skip back: fast forward: last reverse: direct access to disc and track numbers: multi-function FL display. $17.12 \times 4.5 \times 13 \mathrm{in}$ : 13.2 lb. $\$ 600$ KC'600. Additional 6-disc magazines for DX( 600
$\$ 19.95$ ca

## D) $\mathbf{x}$ ( 400 Cl ) (hanger

CD changer with 6 -disc capacity. Features 3-beam laser pickup; double-oversampling digital filter: 32track random programming: random play: repeat disc, track, and program; integrated system remote capability
$\$ 430$

## DX-530 CD Player

Remote-controlled (D) player with opto-coupling system to electrically separate the analog and digital sections. Features programming of 20 tracks in any order: shutlle play: repeat track, disc, program, A-B phrase, and shuflle play: direct access to tracks: autospeed music search: index search: skip forward; skip back; 2-speed fast forward and reverse; timer func-
ion: headphone jack; motorized volume control output CMN filter: digital filtering; vibration damping: 3-beam laser: digital output terminal, printed circuit boards with specially designed insulation packet to absorb electro-magnetic flux. Display indicates track number, index number, program in memory, remaining time of track/disc/program. clapsed time of track/disc/program. $17.12 \times 3.62 \times$ $14.06 \mathrm{in}: 12.3 \mathrm{lb}$ $\$ 450$

## DX-2500 (D) Player

CD player with coaxial digital output. Features 3 beam laser pickup: double-oversampling digital filter; 16-track programming with edit function: 3mode display with random track sequencing: 10-key direct play: integrated system remote compatible. $\$ 320$

## DX-1500 CD Player

CD player with 3-beam laser pickup. Features dou-ble-oversampling digital filter: 16-track programming with edit function; 3-mode display with random track sequencing: integrated system remote capability
$\$ 260$

## PANASONIC

RX-FD75 Portable Radio/Cassette/CD Player FM/AM/FM stereo radio dual cassette recorder with built-in CD player, LeD clock timer, remote control and automatic tape level setting. Features edit pause: auto-manual recording mode selector: synchro-start function: built in remote control; extra bass system: I.CD clock/timer with sleep function; bass/:reble tone controls; 2-way 4 -speaker system; jacks for 4 (-in. 2 lines out: ext. mic/mic mix, and headphone. CD player features 36 -step random access programing: skip/search/repeat functions; music scan function. Radio cassette recorder features reverse mode selec tor; auto tape selector; feather-touch controls; dolby NR: auto relay playback system: tape program sensor; full auto-stop. Operates on AC power cord (included) or 10-D batteries (not-included): $7.31 \times 25.19 \times 8.56$ in: 15.19 lb
$\$ 650$

## SL.-P390C CD Player

CD auto-changer with 6-disc magazine; 22-key, full function wireless remote control, and large 2-color FL display with music matrix. One-touch dise selection; 36 -step random access programming: random play function; high speed linear motor access system; high resolution digital filter: quadruple oversampling high resolution laser pickup; Fk $2-20.000 \mathrm{~Hz} \pm 0.5$ dB: s/N 96 dB: THD $0.006 \%: 16.88 \times 4 \times 12.38 \mathrm{in}: 12.8$ lb.
$\$ 499.95$
RX-FD55 Portable Radio/Cassette/CD Player
FM/AM/FM stcreo radio dual cassette recorder with

built-in (I) Player and automatic tape level setting. Features edit-pause; auto-manual recording mode selector: synchso start function; extra bass system: 4band graphic equilizer: jacks for $t(-$-in. 2 lines-out: ext. mic/mic mix. and headphone; CI) player features L('D display: 36 -step random access programming. Radio cassette recorder features auto-reverse playback and recording: metal tape capability: feathertouch controls: full auto-stop. Operates on ac power cord (included) or 10-D batteries (not included): $24^{*}$ speakers: $16.81 \times 23.88 \times 6.94 \mathrm{in}$ : $11.44 \mathrm{lb} . . . . \$ 430$

RX-DTS0 Portable Radio/Cassette/CD Player
FM/AM/FM stereo radio dual cassette recorder with built-in ('D player and automatic tape level setting. Features extra bass system; tone controls: jacks for AC-in. IX-in. 2lines-out. ext. mic. headphone optional car battery cord. CD features multi-info LCD display with music matrix indication; 10-key direct access music programming: 36 -step random access programming. Radio cassette recorder features dolby NR; metal tape capability: softeject system: FM stereo/mono mode selector. Operates on $4 C$ power cord (included) or 8-D) batteries (not included); 16.69 $\times 27.19 \mathrm{l} 6.69 \mathrm{in} ; 11.69 \mathrm{lb}$. $\qquad$

## SI. P3800 C C'D Player

Large 2 -color Fl display. Features auto-changer with 6-disc magazine: quadruple oversampling: digital filter: separate Dat for each channel: 36 -step random access programming: random play function; high speed linear motor access system: high resolution laser pickup; independent dise selection; direct access system: multi-function wireless remote: FR 2-20.000 $\mathrm{Hz} \pm 0.5 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 96 \mathrm{~dB}$; THD $0.006 \% ; 16.88 \times 4 \mathrm{x}$ $12.38 \mathrm{in}: 12.8 \mathrm{lb}$
$\$ 399.95$

## SI -NP10 Portable CD Player

Programs 18 tracks; skip forward and back: repeat track. disc. and program; headphone jack with adjustable level; switchable high-cut filter: 1 -beam laser: digital filter. Displays current track number elapsed time of current track or disc, remaining time on disc. Plays up to 5 hrs on battery charge; in black burgundy, or white. Includes rechargeable battery pack. AC adaptor, connection cord, soft case . $\$ 309$

## SL.-P3510 CD Player

Programmable compact disc player with multi function --color FL display. Features high speed linear motor access system; transport designed for $3^{\circ}$ and $5^{\prime \prime}$ CDs; high resolution laser pickup; repeat function for single track, entire disc, or program contents: remote control terminal ready: 20-step random access programming: FR $2-20.000 \mathrm{~Hz} \pm 0.5$ dB : THD C. $006 \% ; 17 \times 3.1 \times 9.5 \mathrm{in}$
$\$ 249.95$

## PARASOUND

D/VF-90 CD Player
Variable high frequency focus adjust CD player Features double oversampling: digital filtering: triple beam laser: souble shock mounting: full feature wireless remote control: 36 audiophile-grade capacitors: gold plated jacks; all metal chassis; 15 selection programming: repeat all/track/any start-stop points: regulated power supply: high-speed audible search: headphone jack level control: FR $5 \mathbf{- 2 0 , 0 0 0} \mathbf{H z}$ : S/N 99 $\ddagger$ B: THI) $<0 / 005 \%$; sep $>86 \mathrm{~dB}$; max search time 3 sec: $17.25 \times 3.5 \times 12 \mathrm{in}$.
. $\$ 400$

## PHILCO

CD2471 CD Player
Program: 20 tracks in any order: 3-speed search (music audible at 2 slower speeds): quadruple oversampling digital filter: dual 16 -bit $\mathrm{D} / \mathrm{A}$ con verter: skip forward and back: time or track display
$\$ 280$

## PHILIPS

## -60 CI) Playe

Features dual. 16 -bit $1 \mathrm{D} / \mathrm{A}$ converter with quadruple oversampling: FTS favorite track selection: die-cast aluminum nonmagnetic main- and subchassis; fast ;rack access: Copy Pause; single-beam pickup: 2 motor front- loading drawer: anti-jamming protection; keypad track selection; 20-track random-access programming: infrared full-function remote control: information display: search forward, reverse keys with 3-speed search keys; Repeat key: Scan key; optical coupler: FR $2-20.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}>105 \mathrm{~dB}$ dynamic range $>96 \mathrm{~dB}$ : sep 105 dB ; THD $0.0015 \%$; ultrasonic noise rejection ( 24.1 kHz ) $>60 \mathrm{~dB}$; w\&F unmeasarable. $4.0 \times 16.8 \times 15.3 \mathrm{in} ; 21.1 \mathrm{lb} . . . \$ 949$

## 880 CD player

Features dual, 16 -bit d/A quadruple oversampling converters; die-cast aluminum nonmagnetic chassis; CDMI MKII single-laser pickup arm; remote digital volume control; FTS favorite track selection; multifunction display with Music Calendar programming: Copy Pause; shuffle function; search forward and reverse keys with 2 -speed music search keys: timer switch; Direct Play/Program modes via 10-key pad; copper heat sinks; FR $2-20.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}>103 \mathrm{~dB}$ : dynamic range $>96 \mathrm{~dB}$; sep $>103 \mathrm{~dB}$; THD $<0.002 \%$; ultrasonic noise rejection ( 24.1 kHz ) $>60$ dB; W\&F unmeasurable. $3.52 \times 16.8 \times 14.52 \mathrm{in}: 22.5$ lb.
\$749

## 680 CD Player

Features dual, 16 -bit D/A converters with quadruple oversampling: CDM 2 single-beam laser pickup: FTS favorite track selection; 10-button remote control; random access programming; 3-speed forward and backward music search; multi-function display of major functions; Skip Up; Skip Down; integrated high-precision servos: motorized tray; digital output jack; FR $2-20,000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N}>100 \mathrm{~dB}$; dynamic range $>96 \mathrm{~dB}$; sep $>96 \mathrm{~dB}$; THI) $<0.003 \%$; ultrasonic noise rejection ( 24.1 kHz ) $>60 \mathrm{~dB}$; w\&F unmeasurable. $16.8 \times 3.0 \times 11.2 \mathrm{in} ; 6.8 \mathrm{lb}$.
\$329

## 875 CD Changer

Features dual, 16-bit D\&A converter with quadruple oversampling; six-disc changer; single-disc tray; optional six-disc magazine for new $3^{\prime \prime}$ singles: 40 -track programming with calendar-type display; FTS favorite track selection; shuffle play; A-B repeat; scan-play remote volume control; headphone volume control: L(D) remote; aluminum-front, metal chassis. . . \$499

## PIONEER

## CD Players

Elite PD-91 CD Player
CD player with 8 -times oversampling digital filter and dual 18 -bit d/A converters. Features 3 rd order low-pass analog Butterworth filter; laser pickup with integral buffer amplifier: 24-track random-access programming: music window search; random play; digital fader with variable fading time; auto program edit: time edit; digital output jacks; coaxial and optical outputs; headphone jack with adjustable level: fl display; 4 separate power supplies; laminated iron plate coated with polyacetal and copperplated honeycomb plates: coil springs with rubber dampers to support subchassis . . . . . . . . . . . $\$ 1,300$

## PD-7100 CD Player

CD player with 8 -times oversampling digital filter. Features remote control; dual 16 -bit linear envelope D/A converters; Class-A FET buffer amplifier; coaxial and optical digital output; 24-track random programming; 20-track music calendar; fade in/fade out; timer start system; digital level control; fl display; Pioneer disc stabilizing system; 2-speed manual search: non-repeating random play; repeat disc, track, and program.

## PD-5100 CD Player

CD player with quadruple-oversampling digital filter. Features remote control; dual 16 -bit D/A converters; 20-track random programming; 20-track music calendar; fade in/fade out; timer start system; FL display of track and elapsed time on disc: Pioncer disc stabilizing system; 2 -speed manual search; nonrepeating random play; repeat function for disc. track, and program.
\$335

## PD-4100 CD Player

CD player with double-oversampling digital filter. Features remote control; dual 16-bit D/A converters; 20-track random programming: 20-track music calendar: fade in/fade out; timer start system; Fl display; Pioneer disc stabilizing system; 2-speed manual search: non-repeating random play; repeat disc, track, and program.

## Changers and Combi-Players

CDL_3030 CD/CDV/L.D Player
Combi-player which plays 8 - and 12 -inch LaserDiscs, CD's. CD-video's, and CD-3's. Features remote control: quadruple-oversampling digital filter; 8 -bit digital-field memory; video special effects; dual D/A converters: optical digital audio output; 20-chapter programmablility; 10-key direct access search; still/ step; 2-speed silent scan; frame-time search; chapter search; 9-step multi-speed play.
$\$ 1.300$

## Flite PD-M900 CD Changer

Magazine-type CD changer with 6-disc capacity and remote control. Features anti-resonance honcycomb/ copper chassis; gold-plated output jacks; anti-vibration insulators: 8 -times oversampling: dual D/A converters; coaxial and optical digital output; MPSS

(magazine program selection system) for 256 -selection programming and magazine/program labēlıng from remote control; time/fade edit; auto-fader; delete: non-repeating random play; direct access disc and track selection; 2 -speed manual search; repeat disc, track, and program hand-brushed lacquer hnish; rosewood-finished side panels
$\$ 825$

## PD-M700 CD Changer

Magazine-type CD changer with 6-disc capacity and remote control. Features 8 -times oversampling; dual D/4 converters; coaxial and optical digital outpat: MPSS (magazine program selection system) for 256selection programming and magazine/program labe!ing from remote control; time/fade edit; auto-fader; delete; non-repeating random play; direct access disc and track selection; $\mathbf{2}$-speed manual search; repeat disc, track, and program
\$720

## PD-M1600 CD Changer

Magazine-type CD changer with 6 -disc capacity and remote control. Features 4 -times oversampling: dual D/A converters: MPSS (magazine program selection system); time/fade edit; auto-fader; delete; nonrepeating random play; direct access disc and track selection; 2-speed manual search; repeat disc. track. and program.
$\$ 585$

## PD-M500 CD Changer

Magazine-type CD changer with 6-disc capacity and remote control. Features 4 -times oversampling; dual D/A converters; 32-track programming: time/fade edit; auto-fader; delete; non-repeating random play; 2 -speed manual search; repeat disc, track, and program.
$\$ 470$

## PD-M400 CD Changer

Magazine-type CD changer with 6-disc capacity. Features double-oversampling; dual D/A converters; 32-track programming: time/fade edit; auto-fader; delete; non-repeating random play; 2-speed manual search; repeat disc, track, and program
$\$ 400$

## PROTON

## AC-300 CD Player

CD player with wireless remote control. Features one-beam laser pickup; Cross Interleave Reed Solomon Code (CIRC) error correction: quadrupleoversampling digital filter; 20-track progammable memory: 3-speed music search; precise audible cueing at two lower speeds; real time digital display of total tracks, total playing time, track number, and elapsed time of each track; repeat disc, track, and program: headphone jack with adjustable level. FR
$20-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; dynamic range 96 dB ; $\mathrm{s} / \mathrm{N} 96$ dB; ch sep (a1 1 kHz ) 94 dB ; THD (at I kHz) $0.003 \%$; IMD $0.003 \%$. $16.5 \times 3.4 \times 11.2 \mathrm{in} ; 7.9 \mathrm{lb}$. $\$ 399$

## QUASAR <br> CD8966 Portable CD Player

Features $5-\mathrm{hr}$ operation with rechargeable battery pack; multi-function trD readout; 18 -step randomaccess programming: hi-cut filter for headphone listening; high-resolution digital filter: 4-step battery check indication.
$\$ 300$

## CD8956 CD Player

IJrawer-loading CD player with direct access. Features high-speed linear-motor access system; skip forward; skip back; fast forward; fast reverse; cancel: programming of 20 tracks in any order; repeat track, phrase, disc, and program; one-beam laser; single D/A con verter: 96 th-order FIR double-oversampling filter; audible fast scan. Cues by track and index number. Displays current track number, elapsed time of current track, elapsed time on disc, remaining time on disc;. $16.94 \times 3.03 \times 0.19 \mathrm{in}$.
$\$ 250$

## CD8936 Portable CD Player

Top-loading portable CD player with direct access and switchable high-cut filter for HP output. Features skip forward: skip back: fast forward; fast reverse: headphone jack; repeat disc and track; one-beam laser: single D/A converter; audible fast scans. Cues by track number. Displays current track number, clapsed time of current track, remaining time on disc. Headphone output $15 \mathrm{~mW} .4 .97 \times 1.25 \times 4.97 \mathrm{in}$; 13.8 oz. . $\$ 240$

## CD8946 CD Player

Programmable CD player features high-resolution digital filter; high-speed linear motor, 20-step ran-dom-access programming: multi-function FL display; preset editing; stop/search forward and reverse; 2speed search with cueing sound. $\mathrm{s} / \mathrm{N} 96 \mathrm{~dB}$ : THD $0.004 \%$; FR $4 \mathrm{~Hz}-20.000 \mathrm{~Hz} \pm 0.3 \mathrm{~dB}$. $16.94 \times 3.03 \times$ 9.44 in.
\$230

## CD8988 CD Player

Remote control CD player features 6 -disc changer; quick response direct entry system; 36-step random access progrom.
\$350

## RCA

## MCD245 Dimensia CD Player

CD player with Dimensia remote-control operation and on-screen status indication when used with Dimensia monitor. Features 15 -track random programming; forward/reverse search for track, index, or scan; repeat: auto switching; system record protection logic; SystemLink cabling; powered disc-loading drawer; directory display panel; independent suspension system; manual function controls; 3-beam laser pick-up. FR $5-20.000 \mathrm{~Hz} \pm 1.0 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}>95 \mathrm{~dB}$; THD $0.005 \%$ (at $1,000 \mathrm{~Hz}$ ); sep 90 dB (at 1.000 Hz ); sampling FR $44.1 \mathrm{kHz} .14 .63 \times 3 \times 10.63 \mathrm{in} . . . \$ 299$

## REALISTIC

## CD- 3200 Portable CD Player

Mini jack for use with headphones and cable for home stereo system; soft-touch controls beep when pressed; auto search; 2-speed scan forward and back; programs 16 tracks; 6-digit LCD readout: snap-on battery pack needs 4 AA batteries. $6.5 \times 5.5 \times 1.3$ in with battery pack; $4.9 \times 4.9 \times 1.06$ in without battery pack.
. \$220

## CD-1600 CD Player

Skips forward and back; 2-speed search forward and reverse; programs 16 tracks; 3-way repeat; index search; repeat tracks; music calander to show program contents; switchable; floating disc tray; auto space; 3-spot laser; wireless remote needs 2 AA batteries

## COMPACTDISC PLAYERS

## CD-2400 Programmable CD Player

Programs 15 tracks: 3 -spot laser; floating disc tray; 4 digit fluorescent display; repeats track, program. disc: scan forward and reverse; bi-directional auto search; 3-way repeat of programmed selections, entire disc or single selection
\$200

## CD 6000 CD Player

Remote control changer-plays up to 6 discs automatically; includes 6 -disc magazine; 32 tracks; $2 x$ over sampling; tri-spot laser; 3-way repeat: dual-mode LED display; auto-search; bi-directional audible skip and search \$360

## REVOX

## B226-S CD Player

Drawer-loading CD player with Revox systemremote compatibility. Features 16 -bit, quadruple oversampling; new generation transport and D/A converters; diplay shows track number, time remaining. time elapsed for both track and disc; fixed and variable outputs: 2-digital outputs: 19-step programing by track/index access from 1-99; audible for ward/reverse search; locate function; headphone jack with adjustable level; FR $20-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ $>100 \mathrm{~dB} ; 17.7 \times 4.3 \times 13 \mathrm{in} ; 18.7 \mathrm{lb} . \ldots . .$. . $\$ 1.800$ B126 CD Player, Similar to BI 50-S . . . . . . . \$ $\$ 1.275$

## ROTEL

## RCD-820BX2 CD Player

20 programmable selections: Repeat functions for disc, track, and entire program; 16-bit quadruple oversampling decoding system; FR $20-20 \mathrm{kHz}$ $\pm 0.08 \mathrm{~dB}$ : THD $0.0025 \% ; \mathrm{S} / \mathrm{N} 100 \mathrm{~dB}$. Regulated power supplies and selected components. $7 \mathrm{lb} . .$. . $\$ 749$

## RCD-850 CD Player

Drawer-loading CD player with programming of 9 tracks in random or sequential order. Features skip forward; skip back; fast forward; fast reverse; cancel: repeat track; repeat disc; 3-beam laser; high-slope

digital filtering: 3rd-order analog filtering; single D/A convertor. Oversamples at 44.1 kHz . Cues by track number. Displays current track number, elapsed time of current track. $17 \times 3.81 \times 11.44 \mathrm{in} ; 9 \mathrm{lb} . . . . \$ 379$

## SAE

## D102 CD Player

Fully programmable, single beam laser, computer direct-line CD player. Features random access function for 20 tracks; LED readout for track, time mode. error alert, and repeat; cucing function; bi-directional. 3-speed audible search modes; previous/next track; error correction; quadruple oversampling at 176.4 kHz through 16 bit processor; 12 function infrared remote control commander; FR $\mathbf{2 - 2 0 . 0 0 0 ~ H z}$ $\pm 0.3 \mathrm{~dB}$; phase linearity $\pm 0.5$ degrees; $\mathrm{s} / \mathrm{N}>100 \mathrm{~dB}$; THD $0.006 \%$; CIRC error correction . . . . . . . . . . $\$ 599$

[^1]key remote control: AMPS; repeat one track, point A to point $B$, and all tracks; random programming for up to 20 tracks: headphone output w/volume control. $\mathrm{s} / \mathrm{N} 105 \mathrm{~dB} ;$ FR $5-20,000 \mathrm{~Hz} .17 .56 \times 3.75 \times 16.13 \mathrm{in}$ : 20.3 lb .
$\$ 650$

## CD-X510M CD Cianger

Dual-cartridge, multi-play, 12-disc CD Changer with single-play tray and CD- 3 adaptor. Features remote control; two 6-disc magazine-type cartridges; random programming: variable music/intro scan; 3 repeat modes; dual D/A converters; double-oversampling digital filter. FR $5-20,000 \mathrm{~Hz}$; dynamic range $>95 \mathrm{~dB}$; $\mathrm{s} / \mathrm{N} 100 \mathrm{~dB}$ : THD (at 1.000 Hz ) 0.004\%. $5.7 \times 17 \times$ 12.63 in .
$\$ 630$

## CD-x501i CD Player

CD player with quadruple-oversampling digital filter. Features dual D/A converters; digital output; FL display; 20 -track random programming; random play: 4 -way repeat variable time music scan: Dynamic Servo System: master clock; flux-free chassis. THD (at I kHz ) $0.003 \%$; fR $4-20.000 \mathrm{~Hz}$; dynamic range $>97 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}>\mathrm{I} 166 \mathrm{~dB} .3 .88 \times 17.7 \times 12.5 \mathrm{in} . . \$ 600$

## CD-X301i CD Player

CD player with double-oversampling digital filter. Features dual D/A converters; Fl display; 20-track random programning; random play; 4 -way repeat: Dynamic Servo System; master clock; FR 4-20,000 Hz ; dynamic range $>96 \mathrm{~dB}$ : THD (at $1,000 \mathrm{~Hz}$ ) $0.003 \%$. $3.75 \times 17 \times 11.1 \mathrm{in}$.
\$390

## CD-X310M CD Changer

Magazine-type CD changer with 6-disc capacity. Features 32 -track random programming; 3-way repeat: 3-beam pickup; full-function remote control; 16-bit linear I)/A converter; AMPS (Automatic Music Program Search) FR $5-20,000 \mathrm{~Hz}$; THD $0.008 \%$ at I $\mathrm{kHz}: \mathrm{s} / \mathrm{N}>93 \mathrm{~dB} .3 .5 \times 16.5 \times 13.3 \mathrm{in} ; 11.2 \mathrm{lb} \$ 390$

## CD-V1000 CD Player

CD player with 24 -track random programming. Features double-oversampling digital filter; 3-way repeat; synchronized operation with some Sansui tape decks; multi-function LED for total time, elapsed time, and time remaining on disc. FR $5-20,000 \mathrm{~Hz}$; dynamic range 95 dB ; THD (at I kHz) $0.003 \%$; output


## SANYO

## CPM1000 CD Changer

10-disc CD-changer with remote control. Features 10-disc magazire: single disc magazine: 24-button remote control; 32-track programmability; random play: intro-scan: 3-beam tracking mechanism: skip \& search mechanism; multi-function FL display; inter-nally-damped suspension system; mic mixing: 3-way repeat operation; 3-beam tracking system; adjustable output level from remote and front panel: timer play $16.75 \times 4.5 \times 12 \mathrm{in}$; $11 \mathrm{lb}, 14 \mathrm{oz}$ $\$ 500$

## MCD45KN CD Boombox

CD Boombox with built-in 4M/FM stereo tuner and cassette player/recorder. CD section features full programmability: CD-3 capability. Tape section features autoreverse. Other features include infrared wireless remote control; surround-sound capability with additional surround speakers; AMSS (Automatic Music Select System); built-in quartz-lock timer; multi-function I.CD bass and treble controls: CD/line output terminals; headphone jack. Comes with free $5{ }^{\prime \prime}$ CD sampler
$\$ 400$

## CP12 Portable CD Player

Ultra-thin portable CD player with new drive mechanism and LSI for compactness. Features 16 -track programming; 3-beam laser; vibration-resistant design; dynamic range 86 dB ; selection skip; selection search; repeat track or disc; phone mute switch rechargeable lead battery provides 4.5 hours of operation. $4.94 \times .75 \times 5 \mathrm{in}: 1302 . \ldots . . . . . . .$.

CP850 CD Player
CD player with infrared wireless remote control. Features 16 -irack programming; multi-function LCD display; 3-beam laser; isolated suspension system; skip forward/reverse; forward/reverse search; repeat disc. $16.75 \times 3.5 \times 10.75 \mathrm{in} ; 7 \mathrm{lb}, 8 \mathrm{oz}$.
$\$ 250$

## CP860 CD Player

CD player with double-oversampling digital filter and 16 -key wireless remote control. Features CD-3 capability; dynamic range 96 dB ; 3-beam pickup; 16 track programmability; skip; search; repeat program; calendar display
\$220

## CP820 CD Player

CD player with double-oversampling digital filter. Features CD-3 capability; dynamic range 96 dB ; 3 beam pichup; 16-track programmability; skip: search: repeat program.
$\$ 160$

## SCOTT

## DA990 CD Player

3-beam laser: digital filtering (oversamples at 88.2 kHz); full-function wireless remote; programs 20 tracks in any order; 16-bit D/A converter; switchable analog filte; headphone jack with volume control; big chrome-plated feet; auto space
$\$ 400$

## DA1000 Dual-CD CD Player

CD player with 2 CD drawers. Features 22-key wireless remote control: 30 -track random programming: CD-3 capability; skip search; index search; 2 speed marual search; 3-way repeat playback: headphone jack with volume control; CD, A/B selector with iED indicator: program selection display; 3 beam pickup: 16 -bit linear D/A converter. THD $0.03 \%$ at $1 \mathrm{kHz} .4 .4 \times 17.1 \times 11.75 \mathrm{in}: 13 \mathrm{lb}$
. \$350

## D. 1963 CD Player

Programs 15 tracks in any order; skip forward; skip back; fast forward: fast reverse; repeat track, disc, program; 8 -function remote control: 3 -beam laser: digital and analog filtering; single $D / A$ converter; sound audible during fast scan. Cues by track number. Displays current track number, elapsed time of current track, elapsed time on disc, remaining time on disc, program in memory. $11.1 \mathrm{lb} ; 17.25 \times 3.75 \times$ 11 in
DA952 As above withour remote contro

## SHARP

## CD Players

## DX-R780 CD Player

CD player with 20 -track random-access programming. Features 10 -key direct access: double-oversampling digital filter; FL display; 3-beam pickup; cue and review; auto program search system; repeat function; digital time counter and mode indicator; wireless remote cuntrol
$\$ 300$

## DX-R750 CD Player

Compact disc player with infrared remote control; APMS; APLD; APSS; cue/review; playback time display in seconds \& minutes. $17 \times 3.13 \times 11.75 ; 9.7 \mathrm{lb} \$ 290$

## DX-660 CD Player

CD player with 20 -track random-access programming. Features 10-led sound level meter; auto program search system; cue and review; repeat function front-loading disc table . . . . . . . . . . . $\$ 230$

## DX-650 CD Player

Compact disc player with 3-beam laser: 20-selection randomaccess programming; APSS; cue/review; repeat function; front-loading disc table . . . . . . \$ $\$ 210$

## CD Changer

DX-C5000 CD Changer
Magazine-type CD changer with 6-disc capability

## COMPACT DISC PLAYERS

Features 32-track random-access programming: memory backup function; single and all repeat function; double-oversampling digital filter; FL display: APSS (auto program search system): monitor search; cushioned floating mechanism . . . . . . $\$ 400$

## Portable CD Players

Optonica CDX-17 Portable CD System
Portable CD player/double cassette deck/AM/FM sterco. Tuner: $10 \mathrm{Am} / 20 \mathrm{FM}$ station presets: $\mathrm{s} / \mathrm{N} 60 \mathrm{~dB}$ stereo; alt ch sel 55 dB . CD: double-ovesampling digital filter; 3-beam pickup; 20-track aPMS random programming: random play; repeat play: continuous play; FR $20-20,000 \mathrm{~Hz} \pm 1 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}>90 \mathrm{~dB}$. Cassette: full-logic controls; double autoreverse; one capstan; w\&F $0.19 \%$ wrms; $\mathrm{s} / \mathrm{N} 62 \mathrm{~dB}$ Dolby B. Other features Dolby B noise reduction; X-Bass sound; $20 \mathrm{~W} / \mathrm{ch}$ amplifier: 35 -key wireless remote control; 2 tripodmountable speakers with FR $70-20,000 \mathrm{~Hz}$; matrix surround sound capability: digital clock timer: 4 band graphic equalizer. . . . . . . . . . . . . . . . . . \$1,000

## WQ-CD83 Portable CD Changer System

Portable 2-disc capacity CD changer/double cassette deck/AM/FM stereo. CD: 16-bit digital filter: 3-beam pickup; 24-track APMS random programming; random play: repeat play; continuous play; FR 20-20,000 Hz . Cassette: full-logic controls; high-speed dubbing; double autoreverse: one capstan; W\&F $0.15 \%$ wrms: $\mathrm{s} / \mathrm{N} 60 \mathrm{~dB}$ Dolby B. Other features: Dolby B noise reduction: X-Bass sound: 3 amplifiers; wireless remote control; 2 speakers; super woofer; matrix surround sound capability; clock timer; 4-band graphic equalizer with LCD spectrum analyzer APSS
$\$ 700$

## WF-CD77 Portable CD System

Portable CD player/double cassette deck/AM/FM stereo. CD: wireless remote control; 16 -bit digital filter; 3-beam pickup; 20-track random programming: random play; repeat play; continuous play Cassette: full-logic controls; high-speed dubbing double autoreverse; one capstan. Other features: Dolby noise reduction; two 2-way speakers; clock timer; 4-band graphic equalizer; APSS (Automatic Program Search System)
\$630

## QT-CD20 Portable CD System

Portable CD player/cassette deck/AM/FM stereo. CD: auto program search system; automatic programma ble music selector; 16-bit digital filter: 3-beam pickup; 20-track random-access programming; random play: repeat play. Other features: two 2-way speakers clock timer; 3-band graphic equalizer. . . . . . . . \$320

## SHERWOOD

CDP-300R CD Player
Drawer-loading CD player remote compatible with Sherwood remote-controlled receivers. Features programming of 20 tracks in any order; skip forward: skip back; fast forward; fast reverse; one-beam laser quadruple oversampling digital filtering; Ist-order linear-phase analog filtering: sound audible during fast scan; display for current track number, elapsed time of current track. and elapsed time on disc. $3.25 \times$ $17.36 \times 9.75 \mathrm{in}$; 11 lb
\$300

## CDP-250R CD Player

Features Sherwood Digi-Link remote compatibility: 3 beam laser pick-up; double oversampling digital filter: 16 selection random programming: motorized front loading disc tray; 3 mode repeat; random-play select: auto space; auto timer play; LCD multi function display

## CD-1160R CD Player

Features Sherwood Digi-Link remote capability; 3beam laser; random programming up to 20 selections; multi-function LCD display; double oversampling digital filter; auto-space for making auto-search capable recording: 4 way repeat feature; motorized
touch-sensitive disc loading; random play alternates playback sequence. $2.8 \times 17.3 \times 10.2$ in ...... $\$ 249$

## SHURE

## D6000 CD Player

Drawer-loading CD player with wireless remote control incuding remote volume. Programs 15 tracks in any order. Features subcode output; skip forward; skip back; fast forward; fast reverse; cancel; repeat track; repeat disc; repeat phrase; repeat program. cue by track: cue by time; 19-function remote; headphone jack; adjustable headphone; three-beam pickup; oversamples at 88.2 kHz : independent L/R digital filters 80 dB attenuation; five-pole active above $30,000 \mathrm{~Hz}$ analog filtering; dual D/A converters: display of current track number; display of elapsed time of current track; display of program in memory; sound audible during fast scan. Headphone output 5 V; II lb; I6.9 x $2.9 \times 12.9$ in.
$\$ 599$

## SONY

## CD Players

## CDP-707ESD CD Player

Programmable CD player with 8 -times-oversampling digital filter. Features CD. 3 capability: 18 -bit linear dual D/A converters; independent converters for left and right channels; error prediction logic circuit; envelope differential detection system; single aspheric lens laser pickup assembly; noncogging linear motor transport; separate power supplies for digital and a nalog circuits; direct digital outputs capable of relaying combination digital data and subcodegraphics signals; optical digital output for transmission of data via fiber-optic cable. Also features Custom File which enables programming and storing of special data for up to 226 separate discs. Custom file is comprised of Disc Memo, a ten-character message which is input by the user and then appears on the display after disc has been loaded, Custom Index, which allows user to input 6 marked index locations on any disc, and Program Bank, which stores a particular track selection and playback sequence for each disc
\$1,800
CDP-507ESD. As above without 18 -bit linear dual D/A converters and twin power transformers. Approx.
$\$ 600$
CDP-307ESD. As above without 8 -times-oversampling digital filter. error protection logic, or coaxial and optical digital outputs.
$\$ 475$

## CDP-950 CD Player

CD player with Remote Commander unit. Features unilinear converter/digital filter; dual D/A converters; envelope differential detection system; monocoque chassis: 5 power supply stages: aspheric optical pickup; 16-bit digital filter with quadruple-oversampling: 20-key direct music selector and delete shufle play capability; 20-selection music calendar; Custom File; variable line output; memory backup; CD-3 capability
$\$ 450$

## CDP-207ESD CD Player

With 20-key direct selection and CD- 3 capability. Features 20 -selection music calendar; convenient play modes; program edit capability; delete shuffle play and automatic timer play. Comes with Remote Commander
\$370

## CDP-750 CD Player

CD player with Remote Commander unit. Features unilinear converter/digital filter; dual D/A converters: envelope differential detection system; monocoque chassis; 5 power supply stages; aspheric optical pickup: 16-bit digital filter with quadruple oversampling; 20-key direct music selector and delete shuffle play capability; 20-selection music calendar; CD-3 capability
\$370

## CDP-550 CD Player

CD player with Remote Commander unit and CD-3
capability. Features unilinear converter/digital filter: dual D/A converters; envelope differential detection system; monocoque chassis; 16 -selection music calendar; fluorescent display; various repeat modes; program edit capability: shuffle play; headphone output level control and auto timer play . . . . . \$280

## CDP-350 CD Player

CD player with shuffle play and CD- 3 capability. Features unilinear converter/digital filter: dual D/A converters; envelope differential detection system; monocoque chassis; 16 -selection music calendar; fluorescent display; various repeat modes; program edit capability; shuffle play; headphone output level control and automatic timer play
\$240

## CD Changers

## CDP-C15ESD CD Changer

10-disc CD changer with DiscJockey cartridge-loading system. Features 18 -bit 8 -times-oversampling digital filter; dual 18 -bit linear D/A converters; direct digital output; EPL (error prediction logic); left/right twin circuit configuration: 9 -section multiple power supplies. Also features Custom File which enables programming and storing of special data for up to 226 separate discs. Custom File is comprised of Disc Memo. a ten-character message which is input by the user and consequently appears on the display every time disc has been loaded, Custom Index, which allows user to input 6 marked index locations on any disc, and Program Bank, which stores a particular track selection and playback sequence for each disc. Also features $10+10$ key direct-access; 20 -selection random music sensor; high-speed search; automatic music sensor; 4 repeat modes; music calendar. $\$ 800$

## CDP-C10 CD Changer

10-disc CD changer employing magazine compatible with Sony car changers. Features unilinear con verter; quadruple-oversampling digital filter: envelope differetial error detection system; multiple power supplies: aspheric optical pickup: 3-beam laser: Custom File
$\$ 620$

## CDP-C7ESD CD Changer

5-disc carousel CD changer with Remote Commander unit. Features quadruple-oversampling 16 -bit digital filter; dual D/A converters; Custom File; 16 selection music calendar: shuffle play; timer switch: variable line output; disc select and output level controls.

## CDP-C70 CD Changer

5-disc carouse! CD changer. Individual discs can be selected at the touch of a button or by using the Disc Select key on the supplied Remote Commander. Discs can be played sequentially, or up to 32 selection can be programmed to play in any order. Features unilinear converter; quadruple-oversampling digital filter; envelope differential error detection system: multiple power supplies; aspheric optical pickup; three-beam laser: shuffle play: 16 -selection music calendar; timer switch; headphone output with level control: Custom File; variable line output . . . . \$450

## CDP-C50 CD Changer

5-disc carousel CD changer. Individual discs can be selected at the touch of a button or by using the Disc Select key on the supplied Remote Commander. Discs can be played sequentially, or up to 32 selection can be programmed to play in any order. Features unilinear converter; quadruple-oversampling digital filter; envelope differential error detection system; multiple power supplies; aspheric optical pickup; three-beam laser; shuffle play; 16-selection music calendar; timer switch; headphone output with level control.
. $\$ 350$

## Porsable Compact Disc Players

D-T10 Portable CD Player
Lightweight CD player with AM/FM quartz tuner

## 6xiom

## Exact Engineering for Exacting Engineers



## COMPACT DISC PLAYERS

Features AMS (automatic music sensor); programming of 21 tracks in any order; 5 repeat modes; skip forward and skip back; audible fast forward and reverse; auto-tracking recovery; oversampling digital filter: pulse-width-modulation integrated circuit to reduce power consumption to 1.8 W ; ultra-thin 3 beam optical pickup with a single aspheric plastic lens; laser pickup assemble integrated with an elastic damper arm. Tuner section features $5 \mathrm{Am} / \mathrm{SFm}$ station presets: local/DX switch. Remote controllable with optional remote commander (RM-DMIK). Includes $\mathrm{BP}-100$ rechargeable battery; AC adaptor; connecting cords; soft carrying case; shoulder strap . . . . . . $\$ 460$

## D-15 Portable CD Player

Features uniliner converter/digital filter; single aspheric lens laser pickup; auto tracking recovery system; internal battery system; BP-2 rechargeable battery: random music sensor 21-track programming; four repeat modes including track, disc, $A / B$, and shuffle; remote control with RM-DM1K remote commander: multi-function back-lit liquid crystal display including battery strength indicator; index search; key hold switch. Includes AC adaptor, rechargeable battery, line-out jacks, carrying case, and strap. $1.03 \times .8 \times 5.3 \mathrm{in}$.
$\$ 360$

## D-T4 Portable CD Player

Portable CD player with AM/FM tuner. Features unilinear converter/digital filter; single aspheric lens laser pickup; auto tracking recovery system; BP-3 rechargeable battery; random music sensor 16 -track programming; four repeat modes including 1, all, A/B, and shuffle; remote control with RM-DMIK remote commander; multi-function back-lit LCD including battery strength indicator: local/DX switch. Comes with AC power adaptor, line-out cord, carrying case, and strap
\$320
D-4. As above without tuner
\$260

## D-160 Portable CD Player

Features AMS auto music sensor; skip forward; skip back; unilinear converter; digital filter; 3-beam laser; back-lighted LCD panel; built-in anti-shock servo with fully floating mechanism for accurate tracking: AC/DC operation; line output; headphone jacks. Includes CPA-1 car cassette adaptor, CPM-100P car mounting plate; patch cords, AC adaptor, and carrying strap. Remote controllable with optional RMDMIK remote commmander
$\$ 260$

## SONOGRAPHE BY CONRAD-JOHNSON

## SD-1 CD Player

Drawer-loading CD player with discrete FET audio circuits and power supplies designed by ConradJohnson. Features programming of 20 tracks in any order; skip forward; skip back; fast forward; fast reverse; repeat disc, program; headphone jack: digital filtering; dual D/A converters; sound audible during fast scan. Cues by track and index number. Oversamples at 176.4 kHz . Displays current track number, program in memory: elapsed time of current track. $3.75 \times 18 \times 12-\mathrm{in} . ; 8.5 \mathrm{lb}$
$\$ 695$

## SOUNDCRAFTSMEN

## CD750 CD Player

CD player with differential/compander circuitry. Features high dynamic range; optional tening; spectral gradient circuit: both circuits bypassable; indexing; digital filter; all-metal chassis; audible scan; random; passage-repeat; 3-beam laser, full function infrared remote control; oversampling: multi-function flourescent display; variable volume control headphone jack; gold-plated output jacks; shockmounted disc-handling: $19 \times 3.25 \times 12$ in $\ldots . \$ 599$

## SYLVANIA

CD1473 FTS CD Player
Favorite Track Selection memorizes programs from
various discs (up to 785 tracks); touch-close drawer 24 -function remote control with 10-digit keypad and volume control.
$\$ 379$

## CD1471 CD Player

Programs 20 tracks in any order; 3 -speed search (music audible at 2 slower speeds); quadruple oversampling digital filter; dual 16 -bit D/A converter; skip forward and back: time or track display. . . . . . \$280

## CD1465 FTS CD Player

With Favorite Track Selection to memorize programs from various discs (up to 785 tracks); dual 16 bit D/A converters
$\$ 279$

## CD1470 CD Player

CD player with 16 -bit D/A converters. Features random access programming: 20-track capability; 3 speed forward/reverse search; next/previous track skip; digital filtering. Includes I free 67-minute Jazz Sampler disc
\$229

## CD1480 CD Player

CD player with 16 -bit D/A converters. Features $3^{\prime \prime} \mathrm{CD}$ compatibility; shuffle play; 20-track memory; CDM4 laser scanning assembly
. \$199

## SYMPHONIC BY FUNAI

## CD 3000A CD Changer

CD changer with Pioneer-style cartridges with 6 -disc capability. Features 16 -bit D/A converter: 3 -beam laser pickup; wireless remote control; 32-track random programming; repeat track. disc, and program; search function; elapsed time display
$\$ 379$

## CD 2000A CD Player

Drawer-loading CD player with 16 -bit $D / A$ converter. Features 3-beam pickup; CD-3 capability: 15-track random programming; feather-touch controls; programmable repeat function; amber elapsed-time display LCD; headphone jack with adjustable level; wireless remote control
$\$ 229$

## CD 1100 CD Player

Drawer-loading CD player with 16-bit D/A converter. Features 3-beam pickup: 15-track random programming; feather-touch controls; programmable repeat function; amber elapsed-time display LCD . . . . $\$ 199$

## TANDBERG

## TCP 3015A CD Player

Features 16 -bit quadruple oversampling: zero negative feedback; no capacitors between the two D/A converters and the line output: digital filter and phase-linear Bessel audio filter; full programmability; separate headphone output volume control. Rosewood side panels and remote control optional. 17.13 $\times 13.5 \times 13.75 \mathrm{in}$; 12.5 jb
$\$ 2,500$

## TEAC

## PD-470 CD Playe

3 beam laser system with twin monaural 16-bit linear D/Aconverters. $4 x$ oversampling digital filter; 20 selection random memory programming: 20 selection memory program calendar; full function wireless remote; fluorescent diplay shows track number. index numbers, elapsed time, program or disc remaining time, remaining time of each selection, and program or disc total time. FR $2-20,000 \mathrm{~Hz} ; \mathrm{S} / \mathrm{N}>95$ dB : THD . $005 \% ; 4.56 \times 17.13 \times 11.19 \mathrm{in} ; 8.38 \mathrm{lb} \$ 400$

## PD-425 CD Player

3 beam laser with 16 bit linear D/A converter. 15 selection random memory programming: wireless infrared remote control; program skip; repeat track, disc and program; multi-function LED display; fast forward or reverse manual search. FR $5-20,000 \mathrm{~Hz}$ $\pm 1 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}>92 \mathrm{~dB} ;$ THD. $005 \% ; 3.38 \times 17.13 \times 11.19$ $\mathrm{in} ; 8.82 \mathrm{lb}$
$\$ 280$
PD-160. Similar to above without remote \$250

## TECHNICS

## CD Players

## SL-P1300 Professional CD Player

CD player with 8 -times-oversampling digital filter and infrared remote control. Features $4 \mathrm{D} / \mathrm{A}$ convert ers ( $2 / \mathrm{ch}$ ); 18 -bit high resolution signal processing A/B repeat; $\pm 8 \%$ pitch control; optical and electrical digital outputs; 2 -speed search dial; audible puse; rocker switch for mixing: cueing by direct CD time code; balanced outputs; wired remote control; 10 -

button keypad: auto-cue; separated digital and analog power supplies; class AA sample and hold circuit: class it output: high-speed linear-motor access system; skip keys; 2 -speed audible search; repeat track, disc. and program; headphone jack with adjustable level; line out via unbalanced (phono) pin connectors; balanced output; sub-code output; fullfunction FL display; cue search. $6.7 \times 16.9 \times 14.8$ in.
$\$ 1,700$

## SL-P1200 Disco CD Player

Top-loading CD player for discos or production cues to any point within track. Rocker control for momentary advance or retard. Features quartz-locked pitch control ( $\pm 8 \%$ ); 2 -speed cueing: rear-panel remote ack for mixer; infrared remote control; auto cue to first note of desired track; FL display; twin high-speed D/A converter: double oversampling ( 88.2 kHz ) digital filter: 9th-order low-pass analog filter: 1-beam laser: high-speed Linear Motor Access locates track start in <l sec; subcode output: skip forward; skip back; fast forward; fast reverse; sound audible during fast scan; repeat track, disc, program; programming of 20 tracks in any order; headphone jack with adjustable level. Cues by track number. index number, time. Displays current track number, elapsed time of current track. elapsed time on disc, remaining time on disc, remaining time in track, program in memory. $17 \times 7 \times 15 \mathrm{in} ; 22 \mathrm{lb}$
$\$ 1,295$

## SL-P1000 CD Player

Features wireless remote with volume control: 20 track programming; A-B repeat; program repeat: heaphone jack with level control; electrical and optical outputs; 10-key number pad on unit and remote; 2 -speed search dial; programmable music scan; 8 -digit display of track number, index number. time for current track. disc, or program; separate digital and analog circuits; gold-plated output jacks: 96th-order double oversampling ( 88.2 kHz ) digital filter; 7th-order analog filter; high-speed laser transport; high-rigidity 3 -layer base; $2 \mathrm{D} / \mathrm{A}$ converters; Class AA isolates voltage amp from sample-and-hold circuit; dual power supplies.
\$1,000

## SL_P990 CD Player

CD player with quadruple-oversampling digital filter and remote control. Features 4 D/A converters (2/ch); 18-bit high-resolution signal processing: auto-cue; separate digital and analog power supplies; optical and electrical digital outputs: signal output meters; oxygen-free wiring; full-function FL display; linear matrix track and programming indicator: 20 -key direct access; random play; headphone jack with adjustable level; disc window; high-speed linearmotor access system; 5-layer anti-vibration chassis: 2 -speed audible search: peak level search for taping; $C D$ edit; music scan; $A / B$ repeat; track repeat dimmer switch; gold-plated output jacks; 32-track programming; timer play.
$\$ 825$

## TO ALL THOSE WHO ALREADY OWN A CD PLAYER,

# OUR CONDOLENCES. 



## ACCULINEAR18-BITTEI



OLR: 20 Integra compact disc player ra


## ENTER THE NEW

Everything has limitations. Including conventional CD players.

That's because 16 -bit digital processing simply isn't accurate enough to retrieve all the data that's on a disc. So some of the music is lost.

Onkyo's linear 18-bit technology, on the other hand, assures you that all the musical information gets processed. So you don't lose anything. Even the subtle clues that tell you about the space the music was recorded in. And how well the engineer chose the microphones.


But getting all the data off the disc is only the first step. Getting it to your ears is at least as important.

That's why Onkyo developed the Acculinear D/A Converter. And individually calibrates each one to minimize crossover distortion. This unprecedented accuracy means you'll be able to listen to music, even at low levels, and still hear the delicate harmonic structures that distinguish a Gibson guitar from a Martin.


Exclusive Opto-Coupling Modules use light to transmit digital data and reduce harshness.

Onkyo's extensive use of optical transmission techniques instead of conventional wiring further increases musical enjoyment. Proprietary Opto-

## + NOLOGYFROMONKYO.



## digital oomain

Coupling Modules at critical circuit junctions eliminate Digital Signal Interference (DSI) and its consequent metallic harshness. So you can enjoy the sound of the Philadelphia Symphony without wondering if the entire string section was playing aluminum violins.

The power supply combines low impedance/low loss transformers, regulators, and capacitors for high stability and isolation.


Dual transformers in the DX. 7500 thoroughly isolate digital and analog stages.

In addition, the critical D/A converters benefit from Opto-Drive, a new Onkyo technology that uses LED/phototransistor arrays for the ultimate in current stability and operating accuracy. Which
means that any sonic variations you hear will be in the music, not in the disc player.
And the best part? We didn't reserve these technical innovations for one outrageously expensive flagship model. All the musical benefits are affordable.

Yes, this is the New Digital Domain.
Audibly significant technology.
Enhanced musical enjoyment.
The New Digital Domain.
Starting at less than $\$ 600$.
Enter it today at your Onkyo dealer.


200 Williams Drive, Ramsey, N.J. 07446 201-825-7950
If you would like further information, write for the White Paper on digital technology.
For your convenience onkro and THE EuYeR GUIDE are providing this special toll free number so ymu can frind out about our new 18 Bit Players. Just call $1-800.678$.8237. and when asked. enter 34520

## SL-P770 CD Player

CD player with quadruple-oversampling digital filter and remote control. Features $4 \mathrm{D} / \mathrm{A}$ converters (2/ch): 18-bit high-resolution signal processing; auto-cue; separate digital and analog power supplies; optical and electrical digital outputs; signal output meters; oxygen-free wiring; full-function FL display; linear matrix track and programming indicator; 20-key direct access; random play; headphone jack with adjustable level; disc window; high-speed linearmotor access system; 2-speed audible search: peak level search for taping: CD edit; music scan; A/B repeat: track repeat: dimmer switch: gold-plated output jacks; 32-track programming; timer . . . \$620

## SL-P550 CD Player

CD player with quadruple-oversampling digital filter and remote control. Features 32-track random-access programming: dual DA converters; electrical digital output: signal output meter; full-function FL display: linear matrix track and programming indicator: 10 key direct access; random play; headphone jack with adjustable level; high-speed linear-motor access system; disc window; high speed transport; peak level search for taping: CD edit: A/B repeat: track repeat: program repeat; 2-speed audible search
$\$ 420$

## SL-P350 CD Player

CD player with quadruple-oversampling digital filter and remote control. Features 32-track random-access programming: dual DA converters; electrical digital output; signal output meter; full-function FL display: linear matrix track and programming indicator; $10-$ key direct access: headphone jack with adjustable level; high-speed linear-motor access system; high speed transport: peak level search for taping: CD edit: track repeat; program repeat; 2-speed audible search
$\$ 340$

## SL_P250 CD Player

CD player with quadruple-oversampling digital filter and remote control. Features 20 -track random-access programming: dual IJA converters; full-function FL display; linear matrix track and programming indicator: 10-key direct access; headphone jack with adjusiable level; high-speed linear-motor access system: high speed transport: peak level search for taping: track, disc, and program repeat; random play: music scan.
$\$ 300$

## SL_P230 CD Player

CD player with quadruple-oversampling digital filter and remote control. Features 20 -track random-access programming: dual DA converters: full-function FI display; linear matrix track and programming indicator: 10-key direct access; headphone jack with adjustable level; high-speed linear-motor access system; high speed transport: track. disc, and program repeat: random play: music scan.
$\$ 280$

## SL_P200 CD Player

CD player with quadruple-oversampling digital fister. Features 20 -track random-access programming: dual DA converters; full-function FL display: linear matrix track and programming indicator: headphone jack with adjustable level: high-speed linear-motor access system; high speed transport; track, disc, and program repeat: remote-compatible $\qquad$ $\$ 250$

## SL-P150 CD Player

CD player with quadruple-oversampling digital filter. Features 20 -track random-access programming: dual DA converters; FL display; high-speed linearmotor access system; high speed transport; track. disc, and program repeat: remote-compatible . $\$ 240$

## SL_XP6 Portable CD Player

Compact, lightweight portable CD player with normal, resume, and random play modes. Features skip keys; memory key; 18-step random-access programming: play: stop; quadruple-oversampling digital filter; AC adaptor: auto power off after 5 minutes in stop mode; headphone jack with adjustable level;
repeat; search; line-out jack; L(1) display. $1.09 \times 5 \times$ 5.09 in: 13.4 oz.................................. $\$ 349$

## SL-XPS Portable CD Player

Top-loading portable CD player with FFl singlebeam laser. Features programming of 18 tracks in any order: skip forward; skip back: fast forward: fast reverse; cancel; repeat track, disc, program; headphone jack with adjustable level: digital filtering: single $\mathrm{D} / \mathrm{A}$ converter; sound audible during fast scan. Oversamples at 88.2 kHz . Displays current track number, elapsed time of current track, clapsed time on disc, remaining time on disc, program in memory. With carrying case and power supply. $4.97 \times 0.91 \times$ 4.97 in .
$\$ 325$

## CD Changers

SL-P600C 6-Disc ('D Changer
Plays 6 discs in magazine; wireless remote; 36-track random programming: 10-key number pad on unit and remote; headphone jack with volume control; high-speed access with 2-purpose search/skip buttons: display of number of tracks, programmed tracks. current track, clapsed time; random and repeat play: floating isolation system: quadruple oversampling digital filter
$\$ 470$

## SL-P400C 6-Dise CD Changer

Plays 6 dises in magazine: wireless remote; 36-track random programming: 10-key number pad on unit and remote: headphone jack with volume control: high-speed access with 2-purpose search/skip buttons; FL display: random and repeat play: quadrupleoversamling digital filter
$\$ 420$

## SL.-P300C 6-Disc CD Changer

Plays 6 discs in magazine; remote-compatible: 36 track random programming: 10-key number pad on unit and remote; headphone jack with volume control: high-speed access with 2-purpose search/ skip buttons; FL display; random and repeat play: quadruple-oversamling digital filter $\qquad$ $\$ 299$

## TOSHIBA

## CD Players

## XR-9037 CD Player

Remote control w/volume control: digital peak search; 20-program random memory; double oversampling and digital filter . . . . . . . . . . . . . . . . $\$ 450$

## XR-9018 CD) Player

CI) player with 16 -track random programming. Features double-oversampling digital filter: 3 -beam laser pickup; quick-program-selector up/down key: automatic repeat capability: LC'D with track. lap, and remaining time; fast forward and reverse; integrated system remote capability; headphone jack with ad justable level.
$\$ 279$
XR-9028. As above. IO-key remote control . . . $\$ 329$

## CD Changers

## XR-9057 (I) Changer

CD changer with 6 -disc capacity and single-play drawer. Features 32 -track random programming double-oversampling digital filter; 3-beam laser pickup: 32-key wireless remote control; intro scan; random play; 9 -digit multi-function display; cumulative time display: 10x audible search: fast forward and reverse; system remote capability ...... . . \$499 XR-9058. As above with system remote. . . . . . $\$ 599$

## Portable CD Players

## XR-9458 Portable (D) Player

Porable CD player with wireless/wired remote control. Features 3 -beam laser pickup; 16-program random memory with repeat: headphone jack with adjustable level: LCD of track. lap. and remaining time: CD- 3 capability.

## XR-9437 Portable CD Player

Compact CD player with am/FM stereo. 9 Fm/5 AM presets: 3 beam laser pick-up; 16-program random memory w/repeat: quick-program select: uses 4 AA batteries or rechargeable NiCad
$\$ 400$

## RT-8088 Portable CD System

Portable CD player with built-in cassette deck, tuner, and speakers. CD section features 20 -program random memory: CD-double-speed recording system: CD-auto-recording system; 20-song music calendar and integrated digital time counter; intro scan; auto spacing: random play; auto sleep. Cassette section features autoreverse; manual reverse; 3-band graphic equalizer. $\$ 400$

## VECTOR RESEARCH

## CD Players

## VCD-900 CD Player

Drawer-loading CD player with full-function remote control (10-key direct-track access, remote volume control). Features programming of 15 tracks in random and sequential order: skip forward: skip back: fast forward; fast reverse; cancel; repeat track, disc, phrase, and program; 3-beam laser: digital and analog filtering: single D/A converter; sound audible during fast scans. Cues by track number. Oversamples at 88.2 kHz . Displays current track number. elapsed time of current track, clapsed time on disc; program in memory. $17 \times 3.5 \times 12.5 \mathrm{in}$; $11 \mathrm{lb} . \$ 399$

## VCD-400 CD Player

Drawer-loading CD player with wireless remote control. Features 3-beam pickup; display of clapsed time and track number; 2-speed audible cue and review; repeat disc and program; automatic-discload/play: 15-track programmable music search sys tem; digital filtering and oversampling. FR $20-20,000$ $\mathrm{Hz} \pm 0.75 \mathrm{~dB}$; dynamic range $>92 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}>95 \mathrm{~dB}$ $\mathrm{TH} \mathrm{D})<0.05 \% .17 \times 3 \times 12.25 \mathrm{in}: 8.5 \mathrm{lb}$
\$259

## CD Changers

## VCD-650CX CD Changer/Cassette Deck

Combination 6 -disc capacity CD changer and fulllogic cassette deck. Features double-oversampling digital filter; synchro-dubbing: 32-track random programming: auto pause; shuffle play; repeat all discs one disc, track, or program: LCD; headphone jack: remote control; Dolby B and C NK; separate L \& R record controls: one-touch dubbing: music search. Compatible with JVC magazines
\$599

## YCD-600R CD Changer

CD changer with double-oversampling digital filter and 6 -disc capacity. Features 1 (1) which displays disc, track, and time simultaneously: audible cue and review; shuflle play; 32-track random programming: direct dise access from remote: repeat of all discs, one disc, track, or program; headphone jack. Compatible with JVC magazines.
\$449

## VCD-500C CD Changer

Magazine-type CD changer wih 6 -disc capacity. Features 3-beam laser pickup: audible cue and review; 32-track random programming; wireless remote control: LCD which displays disc, track, and time simultaneously; repeat of all discs. one disc, track, or program. FR $20-20.000 \mathrm{~Hz} \pm 0.75 \mathrm{~dB}$ : dynamic range $>92 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}>96 \mathrm{~dB}$; THD $<0.01 \%$. Compatible with Pioneer magazines. $16.5 \times 3.5 \times 13$; 11.25
\$449

## YAMAHA

## CDX- 10000 CD Player

Limited centennial edition compact dise player with wireless remote control. Features hi-bit quadruple oversampling digital filter: hi-bit D/A converter: $20-$ bit digital volume control; high-speed linear motor; internal photo-optical coupling: output level control:
digital-out terminals: heavy-duty chassis; 24-rack direct access play; random play; front-panel headphone jack; gold-plated connection terminals. Titanium grey with high luster wainut end panels. $\$ 3,000$

## CDX-5000 CD Player

Drawer-loading CD player with 44 -key wireless remote control. Features hand-selected parts; double floating suspension design; super-high-speed access; hi-bit quadruple oversampling digital filter; hi-bit D/A convertor; Hi-bit digital volume control; photooptical coupling: dual-transformer shunt-regulated power supplies: digital-out terminals: random play: index search; front panel headphone jack; integrated remote system compatible. Black; $55 \mathrm{lb} \ldots . \$ 2,200$

## CDX-1110U CD Player

CD player with hi-bit direct output. Features 18 -bit 8 -times-oversampling digital filter; dual D/A converters; 20-bit digital volume control; microcomputercontrolled 2 -way servo system; independent transformer shunt-regulated power supply; optical and coaxial digital output connectors; high-speed linear motor provides 0.8 second access speed; 3beam laser pickup; 44-key wireless remote control; 24 -track direct access; 24-track random access programming: random play; calendar display; 4-way repeat; index search: 3-way music search; gold-plated terminals: integrated remote control capability
$\$ 1,199$
CDX-910U CD Player
CD player with hi-bit direct output. Features 18 -bit 8 -times-oversampling digital filter: dual D/A converters: 20 -bit digital volume control; microcomputercontrolled 2-way servo system; optical and coaxial digital output connectors; 3-beam laser pickup; 46key wireless remote control: 24-track direct access; 24-rack random access programming: calendar display; 4-way repeat; index search; 3-way music search: gold-plated terminals: integrated remote control capability
$\$ 699$

## CDC-610U CD Changer

CD changer with 10 -disc magazine. Features 18 -bit quadruple-oversampling digital filter: D/A converter: 3-beam pickup; microcomputer-controlled 2-way servo system; 24 -track random access programming: memory play: random play; disc scan; music scan: wireless remote control; 3 -way repeat; index search; 3rd order low-pass analog filter: headphone jack with adjustable level.
$\$ 599$

## CDX-810U CD Player

CD player with hi-bit direct output. Features 18 -bit 8 -times-oversampling digital filter; dual D/A converters: microcomputer-controlled 2-way servo system; 3-beam laser pickup; 44-key wireless remote control; 24-track direct access; 12 -track random access programming; calendar display; 3 -way repeat; index search; 3-way music scarch; gold-plated terminals; integrated remote control capability: coaxial digital output
$\$ 549$

## CDX-510U CD Player

CD player with hi-bit direct output. Features 18 -bit quadruple-oversampling digital filter; 16 -bit D/A converter, microcomputer-controlled 2 -way servo system; 3rd order Bessel-type analog low-pass filter; 3-beam laser pickup; 22-key wireless remote control: 24-track random access programming; calendar display: 3-way repeat: index search; 3-way music search; gold-plated terminals; integrated remote control capability; coaxial digital output; headphone jack with adjustable level.
\$329
CDX-410U CD) Player
CD player with double resolution digital filter. Features 3-beam pickup; 16-bit D/A filter; 3rd order Bessel-type analog low-pass filter; 24-track random programming; index search; 3-way repeat; auto space insert; 3-way music search; headphone jack; micro-computer-controlled 2 -way servo system


- Samariurn Cobalt lea supertweeters
- European ferrcilule dame crivers
- Cast magnesilm f-ame $m$ dranges
- Polypropylene wocters in 3 proprie-ary configuration
- Phase-ccrrect zrossover design
- 24 K Gold bind ng posis
- Elegantly crafted cabinetry
- Solid ter year waranty
distributed exclusinely by: REEL TG FEAL DESIGNS 2-05 CLAFENONT SPAINGFIELD, IL 32703 (217) 529-8:9K


# Headphones that work with your ears, not against them. 

## DT 990 herd-

 paones use "aiffuse sound field equalization." based or new studies $o^{\text {th}}$ hcw the human ear afficts sound. This desig's produces a fint irequency response, accurately recreating sae experience of the listening enuromentHostaphan ${ }^{\text {rw }}$ diaphragms and Necaryne ${ }^{\text {t3 }}$ magrees are two more reasons DT 990s have won technical and eritical acciairy in Earope and America. They "... del:vered a superb sound" and svere " . . remarkably comfortable to wear" accarding to Sterco Kevieal

So if you enjoy losing yourself to the wusic, stort 'y finarg the Beyer dealer in your area. Call the reader response number betw, 0 - write beyerdynamic US, 5-05 Bums Avenue, Fifksจi Ie. NY'11801.

## ACOUSTIC RESEARCH

RD-06 Cassetie Deck
Features Dolby B.C. and HX-PRO. S/N 64 dB , Dolby BI; 73 dB , Dolby C; 55 dB , no Dolby. Wow and flutter 0.035 WRMS; brushless direct drive FG servo DCMotor: rec/play sendust core head; ferrite core crase head. . $\$ 499$

## a/d/s/

C4 3-Head Dolby B/C/HX Pro Cassette Deck Microprocessor operating system for digital record-ing-level and balance controls: full status displays: remote controlled through a/d/s/ R4 receiver or CC4 tuner/preamp; auto bias/EO for all tape types: memorizes adjustable bias and level settings for each tape type; displays elapsed or remaining time; quartz-controlled- PLL capstan motor drive in die-cast metal chassis: timer record and play; auto repeat; music search; mic/line mixing: adjustable headphone output: LEI) rec-level meters; rec-level range 80 dB in 1 dB steps. Speed deviation $<0.5 \%$; W\&F $<0.04 \%$ wid rms; FR with all tape types $20-20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ $>74 \mathrm{dBA}$ with Dolby C and metal tape (optional outboard NR system extends $\mathrm{S} / \mathrm{N}$ to $>93 \mathrm{dBA}$ ). 2.75 x


## RCI Unified Remote Control

Infrared wireless remote controls CC4. R4 receiver, and other $\mathrm{a} / \mathrm{d} / \mathrm{s} /$ components . . . . . . . . . . . . . $\$ 150$

Atelier C3 2-Speed Cassette Deck
Records and plays at 1.88 ips (standard speed) and 3.75 ips (double speed). Remote controlled through a/d/s/ R4 receiver or CC4 tuner/preamp. Quartz-PLL direct-drive-capstan multiple-pole outer-rotor motor; repeat; mic/line mixing: 3 heads: 2 motors; Dolby B; Dolby C: music search: memory stop/play; LEI) meters; headphone jack. W\&F standard speed 0.04\% wrms, high speed $0.035 \%$; FR (with all tape types) standard speed $20-20,000 \mathrm{~Hz}$ h speed $25-22,000 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ (A-wid. all tape types) standard speed: $>66 \mathrm{dBA}$ Dolby B, $>74 \mathrm{dBA}$ Dolby C. high speed: $>60 \mathrm{dBA}$ no NR. $>68 \mathrm{dBA}$ Dolby B. $>76 \mathrm{dBA}$ Dolby C. $2.75 \times 17.5 \times 14.8$-in ........... $\$ 1,000$

## AIWA

AD-WX909 Autoreverse Double Cassette Deck Features 3 heads with micro-grain-surfaced capstan; auto tape/source monitor selector; AlDMs (auto demagnitizing system): Dolby HX Pro (deck 2); Dolby $B$ \& $C$ (both decks): gold-plated CD inputs and LINE/CD front panel selector: high-speed dubbing; feather-iouch $\mathbb{N}$ logic controls: independant digital tape counters; bias fine adjustment for $\mathrm{CrO}_{2} /$ normalbias tape ( $\pm 20 \%$ ); music sensor (both decks); continuous playback. W\&F $0.0055 \%$ deck $1,0.028 \%$ deck; $\mathrm{s} / \mathrm{N} 80 \mathrm{~dB}$ with Dolby C, metal tape above $5,000 \mathrm{~Hz}$ : FR $10-17,000 \mathrm{~Hz}$ normal-bias tape, $10-19,000 \mathrm{~Hz}$ high-bias, $10-20,000 \mathrm{~Hz}$ metal. $4.38 \times 16.94 \times 11.75-$ in: 14.51b.
$\$ 750$

## AD-A70U Autoreverse Cassette Deck

Cassette deck holds up to 5 cassettes for quick-reversc 15 -selection random-programmed playback and se-quential-timed recording. Features 4 motors: Dolby B \& C: blank skip; music search; rec mute; headphone jack; IED meters: electronic tape counter: auto tape
selector. W\&F $0.06 \%$ wrms: FR metal $30-15,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ metal 78 dB Dolby C. $4.25 \times 13 \times 13.62$ in: 13.2 lb
. $\$ 650$
AD-F780 Three Head Cassette Deck
Three head cassctte deck incorporating Super DX recording and playback heads enclosed in a heavyduty die-cast alloy head block. Features Anti-Modulation Tape Stabulizer (AMTS); Dolby HX Professional. B , and C noise reduction. manual recording

calibration system, feather touch ic logic controls with cue and review. fluorescent display and electronic tape counter with memory rewind and repeat, switchable MPX filter, auto tape and rec-mute selectors, and record/play timer standby. FR 20.000 Hz (metal). wow and flutter is $0.035 \% ; \mathrm{s} / \mathrm{N} 78 \mathrm{~dB}$ with Dolby C
$\$ 450$

## AD-180L Double Cassette Deck

Features four channel dubbing that cuts recording time to $25 \%$ of conventional models. 2 heads: 2 motors; auto bias/eq; bias fine tuning; music search; output level control: LeD meters: mike inputs: headphone jack: rec mute; 0.25 - time dubbing cassette deck random programmable: dubbing playback: random Dolby B \& C: 3-way 1-touch synchrodubbing. W\&F $0.038 \%$ wrms; FR $20-13.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ normal-bias tape. $20-15.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ high bias. $20-$ $16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ metal: $\mathrm{s} / \mathrm{N}$ (A-wtd) metal: 66 dB Dolby B. 78 dB Dolby C. $4.38 \times 16.56 \times 12.75-\mathrm{in}$ : 12.3 lb... $\$ 450$

AD-W X808 Double Cassette Deck
Autoreverse cassctic deck with Dolby HX Pro and Dolby B \& C. Features Amorphous head: blank skip continuous playback: double-speed playback; Ic logic control: digital tape counter: auto rec mute; rec/timer standby. W\& $+0.055 \%$ wrms: $\mathrm{s} / \mathrm{N}$ metal: 78 dB Dolby C. 65 dB Dolby B; FR $20-17,000 \mathrm{~Hz}$ normal-bias tape. $20-19.000 \mathrm{~Hz}$ high bias, $20-20.000 \mathrm{~Hz}$ metal. $5 x$ $16.94 \times 12.31$-in; 11 lb .
$\$ 400$

## AD-WX707 1)ouble Cassette Deck

Autoreverse cassette deck with Dolby B \& C. Features bias fine tuning: continuous playback: feather-touch ic logic controls; high-speed dubbing: auto rec mute: auto tape selector: rec/play timer standby (deck 2). S/N 78 dB Dolby C. 65 dB Dolby B: FR $20-16,000 \mathrm{~Hz}$ normal-bias tape, $20-17,000 \mathrm{~Hz}$ high bias, 20-18,000 metal. $5 \times 16.94 \times 12.31-\mathrm{in}$ : $11 \mathrm{lb} \$ 275$

## AD-R40 Auto Reverse Cassette Deck

Two head autoreverse cassette deck with bi-directional auto rewind in playback. Dolby HX Professional. Dolby B-C noise reduction and 03 second autoreverse capability. FR $20-18,000 \mathrm{~Hz}$ with Metal tape: wow and flutter $0.065 \%$; $\mathrm{s} / \mathrm{N} 78 \mathrm{~dB}$ with Dolby C...

AD-S37. Similar to above without autorverse or bi-
directional auto rewind
AD-WX50S Double Cassette Deck
Double cassette deck featuring Dolby band C noise reduction: double speed dubbing; continuous playback: auto tape selector: rec/play timer standby. FR $20.17,000 \mathrm{~Hz}$ with metal tape; $\mathrm{S} / \mathrm{N} 78 \mathrm{~dB}$ with Dolby C: wow and flutter 0.09\%.
$\$ 180$
AD-R30 Autoreverse Cassette Deck
Features 3-way reverse operation for continuous, one cycle, or anidirectional operation; horizontal flat keyboard operation panel; feather-touch ic logic control: Dolby B \& C; bias fine tuning: auto rec mute. w\&F $0.065 \%$ wrms: FR $20-16.000 \mathrm{~Hz}$ normal-bias tape. $20-16.000 \mathrm{~Hz}$ high bias, $20-17,000 \mathrm{~Hz}$ metal; $\mathrm{s} / \mathrm{N}$ 78 dB Dolby C; rec/play DX head; erase double-gap ferrite. $4.3 \mathrm{l} \times 16.56 \times 11.94-\mathrm{in} ; 11.4 \mathrm{lb} . . . . .$. . $\$ 180$ AD-S15. Same as above without autoreverse . $\$ 150$ AD-S27. Same as AD-WX505 (above) but not double cassette
$\$ 120$

## AKAI

GX-95-B 3-Hlead Cassette Deck
3-head single cassette deck with super GX 3-head: 3motor and full-logic control; direct drive; closed loop dosble capstan: Dolby B/C NR; Dolby HX-PRO system; bias control w/calibration tone: FI display meter: real-time counter: music search: auto-time selector: auto monitor; auto play; rec cancel; spot erase system; A-B memory repeat; auto mute; headphone volume; wireless remote; CD/DAT direct/input: resonance free rigid chassis structure: separate amplifier bjock
$\$ 799$

## GK-8-B 3-Head Cassette Deck

3-head single cassette deck with super GX 3-head; 3motor and full-logic control: direct drive: closed loop double capstan: dbx: Dolby B/C NR: bias control; FI. display meter: real-time counter; music search; auto tape selector: auto monitor; rec cancel; timer start: high-speed Ix $\cdot \mathbf{a m p}$ : anti-resonance construction $\$ 599$

GX-52-B Single Cassette Deck
Single cassette deck with twin-field super GX head; 3motor and full-logic control: direct drive: Dolby B/C NR. Dolby HX-FRO system; bias control; FL display meter; real-time counter; music search: auto tape selector: auto play; rec cancel; spot erase system; A-B memory repeat: auto mute; headphone volume: remote ready.
$\$ 499$

## IIX-R453W-B Double Cassette Deck

Double auth reverse cassette deck with high-density head; 3-motor and full-logic control; Dolby B/C NR; high-speed dubbing; continuous play: auto tape selector: music search; intro scan; auto play: blank skio: headphone volume: wireless remote ready $\$ 399$

## G.-R60EN-B Autoreverse Deck

Quick and auto reverse cassette deck with twin-field super GX head: 3-motor and full-logic control; dbx; Dolby B/C NR; FL display meter: auto tape selector: music search; power loading/eject: IC amp design; remote ready. \$399

## IA-R4SIW-B Double Cassette Deck

Double cassette deck with high density head; 3-motor and full-logic control: 15 random record/play programming; high-speed dubbing: continuous play;

## CASSETTE DECKS

Dolby B/C NR: music search; intro scan; auto play: mic mixing: remote-ready
$\$ 379$

## GX-32-B Single Cassette Deck

Single cassette deck with twin-field super GX head; 2motor and full-logic control: Dolby B/C NR: bias control: FI. display meter; music search; auto-tape selector: auto mute: auto play; headphone volume.
$\$ 329$
HX-R41-B Autoreverse Deck
Quick auto reverse deck with high density head: 3motor and full-logic control: Dolby B/C NR: music search; intro scan; auto play; input jacks: remote ready.
$\$ 279$

## BANG \& OLUFSEN

Beocord 5500 Autoreverse Cassette Deck
Automated recording: Auto Azimuth Guidance: auto Dolby B and Dolby C for play; auto and manual rec level: programs 23 tracks; HX Pro headroom extension: lape loads in motorized drawer; black and silver; remote controlled by Master Control Panel. w\&F < $0.09 \%$ wrms: speed deviation $\pm 1.5 \%$ : $\mathrm{s} / \mathrm{N}$ with chrome tape $>64 \mathrm{~dB}$ Dolby $\mathrm{B},>74 \mathrm{~dB}$ Dolby C : $16.5 \times 3 \times 12.75 \mathrm{in}: 18.7 \mathrm{lb}$
\$1,100

## Beocord 3300 Dolby B/HX Pro Cassette Deck

Integrates with Beosystem 3300 for remote control from multiple rooms; black plexiglass and brushed aluminum; optional wall brackets; sensi-touch controls: remote controlled from Terminal $\mathbf{3 3 0 0}$ remote: communicates with 3300 turntable and CD player for coordinated recording: auto search; meters adjust for tape type; sendust heads; auto demagnetization. W\&F $<0.07 \%$ wrms; speed deviation < $1.5 \%$; $5 / \mathrm{N}$ with chrome tape $>65 \mathrm{~dB}$ Dolby $\mathrm{B} ; 16.5 \times 2.75 \times 9.9 \mathrm{in}$ : 8.37 lb .
.$\$ 550$

## DENON

DR-M44HX 3-Head Cassette Deck
Features Dolby HX Pro: Dolby B \& C NR; dualcapstan transport; full-logic control transport: com-puter-controlled silent mechanism; direct-drive FG servo motor; non-slip reel drive: computer-controlled bias fine-tuning; full auto-stop; SF combination head: dual power supply: MPX-filter switch: 4digit tape counter with memory stop; Fl peak level meter; real-time counter; wired remote control; rec pause/mute; one-touch rec/standby; output level control: headphone jack. Includes wood side panels. FR $25-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ with metal tapc; w\&F 0.035\% wrms: $\mathrm{S} / \mathrm{N}>75 \mathrm{~dB}$ (Dolby C).
$\$ 650$

## DR-M30HX 3-Head Cassette Deck

Features wireless remote control: Dolby HX Pro; Dolby B \& C NR; dual-capstan transport; full-logic control transport: computer-controlled silent mechanism; non-slip reel drive; manual bias fine-tuning: full auto-stop: SF combination head: dual power supply: MPX-filter switch; 4-digit tape counter with memory stop: fl peak level meter: balance control: rec pause/mute, auto-space; one-touch rec/standby; output level control: headphone jack. FR 25-20,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$ with metal tape; $\mathbf{W} \& F=0.045 \%$ wrms; $\mathrm{S} / \mathrm{N}$ $>73 \mathrm{~dB}$ (Dolby C).
$\qquad$ . . $\$ 500$

## DR-M24HX Cassette Deck

3 head cassette deck with with Dolby HX, B, C NR. Auto tape select; W\&F . $045 \%$ WRMS; FR metal tape $205-20,000 \mathrm{hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}>73 \mathrm{~dB}$ (Dolby C NR at $3 \%$ THD); $4.52 \times 17.08 \times 11.25-\mathrm{in}$; $12.3 \mathrm{lb} . \ldots . . \$ 450$

## DR-M12HR Cassette Deck

2 head cassette deck compatible with Denon remote control receivers. Dual channel recording amplifiers; Dolby HX, B, C NR: music search fluorescent display; auto tape selector; W\&F.0-45\% wRMS; FRmetal $25-18.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{S} / \mathrm{N} 72 \mathrm{~dB}$ with Dolby C at 3\% THID; $4.52 \times 17.08 \times 11.25 ; 9.9 \mathrm{lb} . . . . . . . . . \$ 350$ DR-M10HR. Similar to above.
$\$ 300$

DR-M07 Cassette Deck
Features Dolby B \& C NR: full-logic control transport: manual bias fine-tuning; full auto-stop; $\mathrm{SF} \mathrm{R} / \mathrm{P}$ head: 3-digit tape counter: LED 6-segment peak level meter; balance control; one-touch rec/standby; headphone jack. FR $40-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ with metal tape; W\&F $0.057 \%$ wrms; $\mathrm{s} / \mathrm{N}>73 \mathrm{~dB}$ (Dolby C) . . . . . . $\$ 250$

## Accessories

ACA-20. Side panels for DR-M30HX, M24HX. MI2HR, and MIOHR cassette decks . . . . . . . . . $\$ 30$

## DUAL By ORTOFON

## CC5050 Cassette Deck

Three-head stereo cassette deck with Dolby B and C NR. FR $20-19 \mathrm{kHz} \pm 3 \mathrm{~dB}$ (metal). Black. ..... $\$ 380$

## FISHER

## CRW980B Double Cassette Deck

Double cassette deck with autoreverse and 6-function wireless remote control. Features 2 full-logic autoreverse cassette mechanisms (l record/play, 1 play only); metal tape capability; ASF (Auto Search Function): Dolby B and C noise reduction; sequential play; one-touch high-speed synchronized dubbing. FL record meters: automatic tape selector: timer standby: MPX filter; headphone jack
. $\$ 400$

## CRW880B Double Cassette Deck

Double cassette deck with autoreverse. Features 2 full-logic autoreverse cassette mechanisms (I record/play. 1 play only): metal tape capability: ASF (Auto Search Function): Dolby B noise reduction; sequential play; synchronized dubbing; 5-LED record meters; automatic tape selector: timer standby: MPX filter: headphone jack.
$\$ 300$

## CRW780B Double Cassette Deck

Double casselte deck with autoreverse. Features 2 autoreverse cassette mechanisms (1 record/play. I play only): metal tape capability: Dolby B noise reduction; synchronized dubbing: 5-LED record meters; automatic tape selector on deck I; timer standby: MPX filter: headphone jack . . . . . . . . \$ 250

## CRW86B Double Cassette Deck

Features autoreverse record/playback for deck 1; synchronized one-touch high-speed dubbing; sequential play; Dolby NR; metal tape capability (both transports): soft-touch controls; switchable MPX filter. Black.
. $\$ 250$

## CRW680B Double Cassette Deck

Double cassette deck with autoreverse. Features 2 cassette mechanisms: metal tape capability: Dolby $B$ noise reduction; synchronized dubbing; 5-LED record meters: automatic tape selector on deck 1; timer standby; MPX filter; headphone jack.
$\$ 200$

## HARMAN KARDON

## CD491 Dolby B/C/HX Pro Cassette Deck

Ultrawideband cassette deck with direct-drive dualcapstan transport; 3 heads; 2 motors: Dolby B; Dolby C: Dolby HX Pro; bias fine trim with record and bias calibration test-tone oscillators: music search; output level control: memory stop/play: logic control: weighted peak-hold LED meters; mic inputs: mic/line mixing: headphone jack; rec mute. Timer controllable. WaF $0.025 \%$ Wrms: FR with all tape types 20 $24,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}$ (A-wtd, with high bias tape) 58 dB no NR, 66 dB Dolby B, 75 dB Dolby C. $\$ 1.049$

## TD392 Dolby B/C/HX Pro Cassette Deck

3 heads for monitoring during recording; sendust record head, narrow-gap high-density ferrite play head: 1 motor; Dolby B; Dolby C: Dolby HX Pro; solenoid logic transport: bias fine trim with test-tone oscillator: output level control: weighted LED meters: headphone jack: rec mute. W\&F $0.05 \%$ Wrms: FR with all tape types $20-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}$ (A-wid, with
high-bias tape) 58 dB no NR. 66 dB Dolby B. 75 dB Dolby C

CD302 Cassette Deck
Cassette deck with sendust record/play head and logic-controlled solenoid transport: Dolby B; Dolby C: Dolby HX Pro; bias fine tuning: output level control: rec mute: headphone jack: defeatable multiplex filter. W\&F $0.05 \%$ Wrms; record-play FR. ferric $20-21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$, high-bias $20-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ metal $20-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; $\mathrm{S} / \mathrm{N}$ (A-wtd). high bias 65 with Dolby B, 73 with Dolby C
. . . . . . . . . . . . $\$ 529$
TD262 Cassette Deck
Cassette deck with ultrawideband frequency response. Features solenoid transport: Dolby HX Pro:


Dolby B; Dolby C; amorphous head; bias fine trim: $7-$ LED peak metering system: record mute; memory; MPX filter; metal tape capability; metal chassis $\$ 419$

## TD212 Cassette Deck

Cassette deck with ultrawideband frequency response. Features solenoid transport; Dolby B; Dolby C: hard permalloy head: bias fine trim; 6-1.ED peak metering system; record mute; memory: MPX filter: metal tape capability: metal chassis . . . . . . . . $\$ 329$

## HITACHI

DW99 Double Autoreverse Cassette Deck
High-speed I-touch dubbing: 20-part Ft. pcak meter with peak-hold selector; timer rec/play; 4-digit FL counter; music scan: random memory program search; 3 motors; Dolby B and Dolby C: blank skip; memory stop/play; unified-remote-control compatibility. W\&F $0.04 \%$ wrms; FR ferric $30-14,000 \mathrm{~Hz} \pm 3$ dB , high bias $30-15.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. metal $30-16,000$ $\mathrm{Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ metal 66 dB Dolby B, 72 dB Dolby C : $12.62 \times 3.5 \times 14.12 \mathrm{in}: 15.5 \mathrm{lb}$.
$\$ 500$
DW77 Double Autoreverse Cassette Deck
Logic control: high-speed dubbing; Dolby B and Dolby C: music scan; random memory program search: 4 motors: auto tape selector: timer rec/play; blank skip: LED meters; rec mute; headphone jack: unified-remote-control compatibility. FR ferric 30 $14,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$, high bias $30-15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. metal $30-16.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{S} / \mathrm{N} 66 \mathrm{~dB}$ Dolby B, 72 dB Dolby C. $14.5 \times 5.12 \times 11 \mathrm{in}: 10.5 \mathrm{lb}$
$\$ 400$
DW33 Double Autoreverse Cassette Deck
High speed; soft-touch controls; auto tape selector: timer rec/play; continuous play; synchronized dubbing start: 2 motors: Dolby B: blank skip: LeD meters; headphone jack. W\&F $0.08 \%$ wrms; FR ferric 30 $14,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$, high bias $30-15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; 30-$ $15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : $\mathrm{s} / \mathrm{N}$ metal 65 dB Dolby B. 14.5 x $5.12 \times 11 \mathrm{in}$.
$\$ 220$

## JVC

TDV711BK Cassette Deck
3 head cassette deck with computer-controlled 2motor full-logic mechanism. Features monitor-capable discrete 3-head configuration: SA head for record; amorphous head for play; closed-loop dual-capstan drive with direct-drive motor: 2 direct inputs; OFC plating on circuit boards; separate circuit construction: DC-configured amps on separate PC boards; low imp voltage-tracking regulated power supply; highrigidity chassis: Dolby HX Pro: Dolby B and C noise reduction: MPX filter: FL digital peak display: level meters and digital counter: auto rec mute: music
scan; timer start; auto tape selector; headphone jack with adjustable level; bias control; gold-piated terminals
\$620

## TDR611BK Cassette Deck

Cassette Deck with Dolby HX Pro and Dolby B and C noise reduction. Features MPX filter; quick autoreverse; 2-motor full-logic mechanism; SA head; direct input; LC-OFC coil in heads; separate circuit construction; low imp voltage-tracking; high-rigidity chassis; Fl digital peak display; level meters; digital counter; auto rec mute; music scan; blank skip; A/B repeat; timer start; auto tape selector; headphone jack with adjustable level . $\$ 480$

## TDR411BK Cassette Deck

Cassette Deck with Dolby B and C noise reduction. Features quick autoreverse with flip reverse head; computer-controlled 2-motor full-logic mechanism; SA head; LED multi-peak level indicator for each channel; auto rec mute; auto tape selector; headphone jack; tape running indicator.
. . . ... \$270

## TDW999BK Double Cassette Deck

Features twin HiFi U-Turn quick autoreverse systems with flip reverse heads in both wells; sequential or simultaneous recording of 2 tapes; computercontrolled full-logic mechanisms; high-speed editing with synchro dubbing: continuous play; Dolby B and C noise reduction; bCD level meters; dual electronic digital counters; auto/synchro rec mute; music scan on both decks; timer start; auto tape selector; headphone jack.
$\$ 440$

## TDW777BK Double Cassette Deck

Features twin HiFi U-Turn quick autoreverse systems with flip reverse heads in both wells; computercontrolled full-logic mechanisms; high-speed editing with synchro dubbing: continuous play; Dolby $B$ and C noise reduction; LCD level meters; dual electronic digital counters; auto/synchro rec mute; music scan on both decks; auto tape selector; headphone jack.
$\$ 380$

## TDW444BK Double Cassette Deck

Features HiFi U-Turn quick autoreverse systems with flip reverse heads on deck $B$; computer-controlled full-logic mechanisms; high-speed editing with synchro dubbing: continuous play: Dolby B and C noise reduction; LCD level meters; auto/synchro rec mute; auto tape selector; headphone jack. . . . . \$300

## TDW330JBK Double Cassette Deck

Features two-motor full-logic mechanisms (1) play/rec, 1 play only); double-speed editing with synchro start; continuous play; Dolby $B$ and $C$ noise reduction; LCD level meters; auto tape selector: headphone jack.
. $\$ 270$

## TDX311BK Cassette Deck

Cassette Deck with Dolby B and C noise reduction. Features computer-controlled 2 -motor full-logic mechanism; SA head; LED multi-peak level indicator for each channel: auto rec mute
. $\$ 250$

## TDW222BK Double Cassette Deck

Features two-motor full-logic mechanisms (1 play/rec, 1 play only): one HiFi U-Turn autore verse sytem with flip reverse head on deck B; high-speed editing with synchro dubbing: continuous play; Dolby B and C noise reduction; LCD level meters; auto tape selector, headphone jack inputs . . . . \$250

## TDW111BK Double Cassette Deck

Features high-speed editing with synchro dubbing: separate LED multi-peak indicators; headphone jack; Dolby B noise reduction: auto tape selector. . . $\$ 180$

## KENWOOD

## KX-97CW Autoreverse Cassette Deck

Features dual, bi-directional recording/playback; high-speed dubbing: full logic computer controlled
tape transport with 2 -motor drive for each mechanism; Dolby C and NR systems; bi-directional relay play; fast forward search: rewind search; single repeat; rewind play and re-recording standby; index scan; automatic tape selector; system remote controllable; auto function; FR $20-15,000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N}$ ratio 72 dB ; THD < 0.6\% at IkHz ; W\&F 0.08\%; $4.69 \times 16.63 \times$ 10.44 in : 11.9 lb .
$\$ 389$

## KX-96W Double Autoreverse Cassette Deck

 Double cassette deck with dual bidirectional rec/play system. Features quick-reverse; two motors; full-logic computer controL: Dolby B \& C NR: high-speed dubbing: continuous relay play; relay and dual recording; direct 16 -program search system; index scan; headphone jack; LED peak meters; auto tape selector. W\&F $0.1 \%$ wrms; S/N 72 dB ; FR $30-15.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$ (Type II). Remote controlled througn KC-206 preamp and Kenwood receivers. $16.53 \times 4.69 \times 10.44$ in; 11.4 lb .\$380

## KX-660HX Full-Logic Cassette Deck

Basic series cassette deck with Dolby HX Pro headroom extension system. Features Dolby B \& C NR with dynamic stabilizer; manual/auto recording bias adjust contrcl; low-imp Permlic rec/play head; silent 2 -motor drive with full-logic computer control: high-rigidity mechanism and head mount; direct 16 program search system; auto-rec mute; blank search; index scan: re-recording standby; repeat with auto blank skip; counter zero stop; master rec and $L / R$ preset level controls; FL wide-range peak meters: FL linear tape counter: auto tape sel; headphone jack; L/R mic inputs; timer rec/play capable. FR 20-18.000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$ (metal); w\&F $0.06 \%$ wrms. $17.31 \times 4.44 \times$ $12.81 \mathrm{in} ; 11 \mathrm{lb}$.
$\$ 300$
KX-77CW' Double Autoreverse Cassette Deek
Features double auto-reverse with One Record/Play and One Play Mechanism; high-speed dubbing; full logic computer controlled tape transport with 2motor drive; Dolby C \& B NR systems; relay play; fast

forward search; rewind search; single repeat; dash \& play; rewind play; re-recording standby; index scan; automatic tape selector; system remote controllable; auto function; FR $20-15,000 \mathrm{~Hz} ; \mathrm{S} / \mathrm{N}$ ratio 32 dB : THD $<0.6 \%$ at 1 kHz : W\&F $0.08 \%$
$\$ 299$

## KX-66CW Double Cassette Deck

Cassette deck with autoreverse play/rec deck and unidirectional playback only deck. Features full-logic computer control; Dolby B \& C NR; 2 motors; highspeed dubbing: continuous relay play; relay recording: direct 16 -program search system; index scan; auto tape selector; auto rec mute; headphone jack: LED peak meters. W\&F $0.1 \%$; S/N 72 dB ; FR 30-15,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$ (Type 11). Remote controlled throug KC206 and Kenwood receivers. $16.56 \times 4.69 \times 10.44$ in; 11.2 lb .
$\$ 280$

## KX-87CR Autoreverse Cassette Deck

Features full logic computer controlled tape transport: Dolby C \& B NR; direct 9-program search system; index scan: automatic tape selector; autorecording mute; left/right microphone inputs; timer record/play function; headphone monitoring jack; system remote controllable; auto function; FR 20 $25,000 \mathrm{~Hz} ; \mathrm{S} / \mathrm{N}$ ratio 73 dB ; THD $<0.5 \%$ at 1 kHz : w\&F 0.06\%; $4.5 \times 16.63 \times 10.63 \mathrm{in} ; 8.4 \mathrm{lb} \ldots . \$ 259$

## KX-76R Autoreverse Cassette Deck

Full-logic control cassette deck with 9-program search system. Features Dolby B \& C NR; index scan;
continuous autoreverse; auto tape selector; auto recording ruute; LEI) peak meters: headphone jack; L/R mic inputs; remote controlled through KC-206 preamp and Kenwood receivers. W\&F 0.06\% wrms: S/N $73 \mathrm{~dB} ;$ FR $30-15.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type 11). $16.56 \times$ $4.5 \times 10.63 \mathrm{in} ; 8.4 \mathrm{lb}$.
. $\$ 250$

## KX-57CW Jouble Cassette Deck

Features high-speed dubbing: Dolby C \& B NR; relay plav: automatic tape selector; timer record/play function; headphone monitoring jack; FR 20-15,000 $\mathrm{Hz}: \mathrm{s} / \mathrm{N}$ ra•io 72 dB : THI) $<0.8 \%$ at lkHz ; w\&F 0.15\%.
$\$ 229$

## K.-56CW Double Cassette Deck

Features one rec/play mechanism; Dolby B \& C NR; twa motors, soft-touch controls; high-speed dubbing: single relay paly; auto tape selector; LED peak meters; headphone jack; L/R mic inputs; timer ready; remote controlled through KC-206 preamp and Kenwood receivers. W\&F $0.15 \%$ wrms; $\mathbf{s} / \mathrm{N} 72 \mathrm{~dB}$; FR 30-15,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$ (Type 11). $16.56 \times 4.69 \times 10.44 \mathrm{in} ; 8.8$ lb.
$\$ 200$

## KX-47C Cassette Deck

Features soft-touch controls; direct program search system offers I selection skip/repeat; Dolby C \& B NR; metal tape selector; LED peak meters; left/right microphone inputs: timer record/play function: FR $20.15,000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N}$ ratio 72 dB ; THD < $0.7 \%$ at lkHz ; w\&F $0.09{ }^{\circ} \mathrm{m} ; 4.18 \times 16 \times 10 \mathrm{in} ; 8.4 \mathrm{lb}$ $\qquad$ $\$ 189$

## KX-46C Cassette Deck

Features soft-touch controls; music search: auto tape selector; LED peak meters; L/R mic inputs; headphone jack: timer ready. W\&F $0.09 \%$ wrms; $\mathrm{S} / \mathrm{N} 72 \mathrm{~dB}$; FR $30-15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type II). $16.56 \times 4.81 \times$ $1056 \mathrm{in} ; 8.4 \mathrm{lb}$.

## KYOCERA

D-811 Dolby B/C/HX Pro Cassette Deck
2 heads; 3 motors: 3 preset bias/EQ's; Dolby B; Dolby C; dual capstans; bias fine tuning; direct drive; digital electronic counter for elapsed and remaining time: output level control; memory repeat stop/play; LED peak-hold meters; soft-touch controls: mike inputs; headphone jack with volume control; rec mute; wireless remote. W\&F $0.02 \%$ wrms; metal 20-22.000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$, high bias $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$, normal $2 \mathrm{C}-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ (A-wtd) metal: 58 dB no NR, 10 dB Dolby B, 20 dB Dolby C ; line-input sens for $0-\mathrm{dB}$ reading 70 mV ; line output level with $0-\mathrm{dB}$ indication 580 mV : mike input sens $0.5 \mathrm{mV} . . \$ 750$

D-611 Dolby B/C Cassette Deck
2 heads; 3 motors; 3 preset bias/EQ's; bias fine tuning: direct drive: output level control: memory repeat stop/play; LED meters; soft-touch controls; mike inputs; headphone jack; rec mute; wireless remote. W\&F $0.035 \%$ wrms; metal $20-22,000 \mathrm{~Hz} \pm 3$ dB . high buas $20-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. normal $20-20,000$ $\mathrm{Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ (A-wtd) metal: 58 dB no NR, 10 dB Dolby B. 20 dB Dolby C : line-input sens for $0-\mathrm{dB}$ reading 70 mV ; line output level with $0-\mathrm{dB}$ indication 580 mV ; mike input sens 0.5 mV . $18.12 \times 4 \times 12.12 \mathrm{in}$ : 16 lb
$\$ 550$

## Marantz

## DT84 Dipital Audio Tape Deck

DAT dech with wireless remote control. Features 48 kHz sampling frequency record; $44.1 / 48 \mathrm{kHz}$ samp!ing frequency play; quadruple oversampling; subcode post recording: 30-track random-program play; cue/review; 2 -way repeat; auto rewind/auto replay: FR $5-20,000 \mathrm{~Hz} ; \mathbf{S} / \mathrm{N} 96 \mathrm{~dB} ;$ THD $0.01 \%$. . . . $\$ 1.900$

SD-55 Stereo Cassette Deck
2 -head cassette deck with dual motor and microprocessor control. Features Dolby B and C NR; variable bias fine tune control; auto tape type sensor: rec mute; MPX filter.

## Double Cassette Decks

SD565 Auto-Reverse Double Cassette Deck
Double cassette deck with autoreverse. record, and playback for both transports. Features 15 -song quick music search; auto tape selector; high-speed dubbing: mixing: auto rec mute: Dolby B \& C NR: 2 heads: 2 motors: memory stop/play: LED meters; soft-touch controls: mic inputs: headphone jack; w\&F 0.05\% wrms; FR $35-15,500 \mathrm{~Hz}$ : $\mathrm{S} / \mathrm{N} 65 \mathrm{~dB} .4 \times 16.5 \times 10.25 \mathrm{in}$ : 11.9 lb .
$\$ 450$
SD160 Double Cassette Deck
Features Dolby B NR: high-speed dubbing; mic input, LED meters; FR $40-13.000 \mathrm{~Hz}$ : $\mathrm{S} / \mathrm{N} 64 \mathrm{~dB}$; $\mathbf{W} \& \mathrm{~F} 0.08 \%$. $4.38 \times 16.5 \times 7.25 \mathrm{in} ; 8.4 \mathrm{lb}$.
$\$ 170$

## Portable Cassette Decks

## PMD 430 dbx Portable Cassette Deck

3-head AC/DX cassette deck with Dolby B. Features fine-bias control: headphone jack with adjustable volume; dual recording level controls; 2 mic inputs: switchable mic attenuation ( $0,-15 .-30 \mathrm{~dB}$ ); compatible with normal/high-bias/metal tape: auto replay: pitch control. $2 \times 9 \times 6.5 \mathrm{in}$ : 3.5 lb
$\$ 550$
RB 430. Rechargeable NiCad battery pack
$\$ 50$

## PMD 420 Dolby B Portable Cassette Deck

Features 2 heads; bias fine tuning: mic inputs; headphone jack: built-in speaker: pitch control: 3position tape selector: switchable limiter: 3-way power: w\&F $0.12 \%$ wrms: FR ferric $40-14,000 \mathrm{~Hz} \pm 3$ dB ; $\mathrm{S} / \mathrm{N} 59 \mathrm{~dB}$; line-input sens 70 mV ; mic input sens $0.3 \mathrm{mV} .2 \times 9 \times 6.5 \mathrm{in} ; 2.9 \mathrm{lb}$.
\$450
PMD 221 Portable Cassette Deck
Features 2 speeds; 3 heads; mic inputs: headphone jack; built-in speaker: built-in mike; pitch control; 3position tape selector: ext mike and speaker jacks: manual or auto level control: switchable limiter: 3way power: $\mathrm{W} \& F \mathrm{~F} 0.12 \% \mathrm{wrms}$; line-input sens 70 mV : line output level 400 mV ; mike input sens 0.3 mV . 2 x $9 \times 6.5 \mathrm{in}: 2.9 \mathrm{lb}$
\$330
PMD 201 Portable Cassette Deck
Features 2 speeds; 2 heads; mic inputs; headphone jack; built-in speaker; built-in mike; pitch control: 3position tape selector; ext mike and speaker jacks: manual or auto level control: switchable limiter: 3 way power: W\&F $0.12 \%$ wrms; FR $40-12.500 \mathrm{~Hz} \pm 3$ dB : line-input sens 70 mV : line output level 400 mV ; mic input sens 0.3 mV . $2 \times 9 \times 6.5 \mathrm{in}: 2.9 \mathrm{lb} . . \$ 280$

## MITSUBISHI

MT-5100 Dual Cassette Deck
Full-logic dual cassette deck with auto-reverse highspeed synchronous one-touch dubbing. Features continuous playback of 2 cassettes: music search; repeat functions; blank skip; automatic muting: Dolby B and C NR: automatic bias calibration according to tape type: remote control . . . . . . . \$450

## DT-160 7 Cassette Auto-Changer

Double cassette deck features high-speed dubbing, 9 segment programmable music search, auto reverse. Dolby B.
\$385
MT-4100 Dual Cassette Deck
Dual-cassette deck features one-touch dubbing from tape 1 to tape 2; double-speed dubbing: 7 -cassette programmable auto-changer: direct-access selection to tracks on any cassette; music search system; blankskip; repeat playback: synchronized recording: autoreverse playback; Dolby B NR: automatic tape selection switching. $\$ 349$

## NAD

6300 Monitor Series Cassette Deck
With Dolby B and Dolby C NR, Dolby HX Pro and Dyneq headroom extension; Play Trim to adjust
playback EQ to compensate for differences in cassettes made on other decks (also allows for overall high-frequency compensation); 3 heads and double Dolby; fine bias tuning: clapsed time counter; compatible with normal. high-bias, metal tape; nonsymmetric dispersed-resonance dual-capstan transport: wireless remote; CAR processor to boost level of soft passages 20 dB . Speed accuracy $\pm 1 \%$; W\&F $0.03 \%$ wid rms; FR 30-19,000 $\pm 3 \mathrm{~dB}$. $\qquad$

## 6100 Monitor Series

Play trim; wow, flutter, and speed performance; CAR circiut: HX PRO and Dyneq: rack mountable. $\$ 98$

## 6240 Dolby B \& C Cassette Deck

Play Trim; Dyneq headroom extension for improved high-frequency response: compatible with normal, chrome. metal tape; bias fine tuning; peak-reading LED meters. Speed accuracy $\pm 1 \%$; W\&F $0.06 \%$ wtd rms; FR $30-19,000 \pm 3 \mathrm{~dB}$; $\mathrm{s} / \mathrm{N} 59 \mathrm{~dB}$ no NR. 68 dB Dolby B, 77 dB Dolby C
$\$ 298$

## NAKAMICHI

Dragon Auto-Reverse Stereo Cassette Deck
Microprocessor-controlled 3-head cassette deck with Dolby B and C. Features Auto Azimuth Correction system; assymetrical diffused-resonance transport: Super Linear Torque direct-drive motors: autoretracting slot guides; tape-pad lifter; auto tape slack take-up; 2 -speed cueing; 2 -speed master fader: auto rec pause: rec-level and bias-calibration controls with 2-tone oscillator: dual-gap ferrite/sendust erase head: separate tape and EQ switches for ZX, SX. and EX cassettes; direct-coupled recording and playback amplifiers: left, right, master input levels; output level control: rec mute; high-output headphone jack: defeatable infrasonic filter; 4-digit LeD electronic counter with memory stop and repeat. W\&F $0.019 \%$ wrms: FR $20-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ with ZX tape: $\mathrm{s} / \mathrm{N}$ Dolby B/C on $66 / 72 \mathrm{~dB}$ at 400 Hz with $3 \%$ THD (Awid with ZX tape at $400 \mathrm{~Hz}, 0 \mathrm{~dB}$ ): sep/crosstalk $37 / 60 \mathrm{~dB}$ at $1.000 \mathrm{~Hz}, 0 \mathrm{~dB}$; input sens/imp $50 \mathrm{mV} / 50$ kilohms line; output level/imp I V/2.2 kilohms line. $45 \mathrm{~mW} / 8 \mathrm{ohm}$ headphones: $17.75 \times 5.31 \times 11.81 \mathrm{in}$; 21 lb
$\$ 2.195$

## CR-7A 3-Head Cassette Deck

Discrete cassette deck with asymmetrical diffusedresonance dual-capstan transport. Features 3 motors; auto bias/EQ: Dolby B; Dolby C: manual azimuth adjust: elasped-time counter: remaining-time

counter: output level control; memory stop/play; LED) meters; soft-touch controls: headphone jack: rec mute: wireless remote: auto \& manual tape/equalizer selection; auto fade; auto repeat. W\&F $0.027 \%$ wrms; FR, ferric $18-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ (A-wtd), metal 66 dB Dolby B, 72 dB : line-input sens for $0-\mathrm{dB}$ reading 50 mV : line-output level with $0-\mathrm{dB}$ indication 1.000 $\mathrm{mV} .17 .12 \times 5.31 \times \mathrm{i} 2 \mathrm{in}: 19 \mathrm{lb}, 13 \mathrm{oz} \ldots . \$ \$ 1.595$

## RX-505 3-Head Cassette Deck

Discrete stereo cassette deck with unidirectional auto reverse to eliminate bidirectional azimuth error. Mechanism turns cassette over at end of side during record or playback. Features asymmetrical dualcapstan closed-loop transport: auto fade ( 20 secs before end of tape): Dolby B and C; DC servo motors: auto record pause; led peak level meters reading from -40 to +10 dB ; dual-speed master fader: punch-in recording: memory stop/play; soft-touch controls. W\&F $<0.04 \%$ wrms; FR $20-20,000 \mathrm{~Hz} \pm 3$ dB all tape types; $\mathrm{S} / \mathrm{N}>70 \mathrm{~dB}$ with Dolby $C$ and metal
tape: $\mathrm{THD}<0.9 \%$ with ZX tape; line-input sens for $0-$ dB reading 50 mV ; line-output level with $0-\mathrm{dB}$ indication 1.000 mV ; $17.75 \times 5.69 \times 11.81 \mathrm{in} ; 22$ 1 b .
$\$ 1.395$
RX-202. Similar to above with 2 heads. W \& F $<0.06 \%$ wrms. $17.75 \times 5.38 \times 10 \mathrm{in}$; 19 lb .13 oz.
$\$ 750$

## CR 5A 3-Head Cassette Deck

Discrete cassette deck with asymmetrical diffusedresonance dual-capstan transport. Features 3 motors: Dolby B; Dolby C: bias fine tuning: output level control; memory stop/play; LED meters: soft-touch controls; headphone jack; rec mute: auto repeat; dual speed-master fader control: independent L/R. W\&F $0.027 \%$ wrms; FR. ferric $18-21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ (all A-wid). metal 66 dB Dolby B. 72 dB Dolby C: lineinput sens for $0-\mathrm{dB}$ reading 50 mV : line-output level with $0-\mathrm{dB}$ indication $1,000 \mathrm{mV} .17 .12 \times 5.31 \times 12 \mathrm{in}$; $18 \mathrm{lb}, 2 \mathrm{oz}$.
$\$ 1.095$

## MR-1 Discrete 3-Head Pro Cassette Deck

Cassette deck with asymmetical dual-capstan dif-fused-resonance transport. Features Dolby B and C: 3 motors; memory stop; rec mute: external NR loop accessed via standard phono jacks; dual 16 -segment peak-reading electronic level meters; Crystalloy recording and play heads: subsonic filter; MPX filter: $\pm 6 \%$ pitch control front-panel $0.25^{\circ}$ unbalanced lineinput jacks; rear balanced XLR input and output jacks; unbalanced $0.25^{\prime \prime}$ rear jacks. Balanced inputs: $\operatorname{imp} 600$ ohms; rated input level +4 dBm : headroom 16 dB to max input level ( +20 dBm ); min input level -6 dBm . Unbalanced inputs: imp 100 kilohms: nominal recording level with input of $-20 \mathrm{dBV}(0.1$ V): nominal input level 0.316 V . Comes with ElA standard rack-mount adaptor. Optional remote control. W\&F $0.027 \%$ wrms. $\pm 0.048 \%$ wtd peak: FR 20 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ at -20 dB
. $\$ 995$

## CR-4A Discrete Head Cassette Deck

Discrete 3-head system. Features asymmetrical dualcapstan direct drive transport with FG-servo capstan motor manual bias \& level calibration; built-in test signals: dolby B/C NR : independent tape and EU selection; 13-scgment 50 dB peak-level meters; onetouch rec/pause: 4 -digit LED counter with memory stop and auto repeat: calibration; concentric record level \& balance control; output level: gold-plated input. output, and headphone jacks; OFC wiring and copper-plated chassis; optional remote control; $\mathrm{FG} ;$ servo. brushless, slotless, coreless D.D. motor: DC motor mechanism; Wow and flutter $< \pm 0.048 \%$ WTD Peak; FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : Dolby-C $>72$ $\mathrm{dB}: \mathrm{THD})<0.8 \%$; sep $>37 \mathrm{~dB} ; 16.94 \times 3.94 \times 10.44 \mathrm{in}$; 13 lb
$\$ 995$

## CR-3A Discrete Head Cassette Deck

Discrete 3-head system. Features asymmetrical dualcapstan transport; bias fine tune; dolby $\mathrm{B} / \mathrm{C}$ NR: independent tape \& EQ selection; 13 -segment 50 dB peak-level meters: 4-digit led counter with memory stop and auto repeat; rec mute; dolby, source/tape. rec mute. stop, play, pause and record indicators; concentric record level and balance controls; output level control: extra-heavy chassis; optional remote control: IX servo motor: DC motor mechanism: wow and flutter $\pm 0.06 \%$ wTI peak; FR $20-20,000 \mathrm{~Hz} \pm 3$ dB : Dolby-C NR $>72 \mathrm{~dB}$; $\mathrm{THD}<0.9 \%$; sep $>37 \mathrm{~dB}$; $16.94 \times 3.94 \times 10.44 \mathrm{in}$ : $12 \mathrm{lb}, 13 \mathrm{oz}$
\$795

## MR-2 2-Head Pro Cassette Deck

Rack-mountable cassette deck with balanced line inputs. Features 3 motors; Dolby B: Dolby C: bias fine tuning: output level control: memory stop; led meters; mike inputs; headphone jack; pitch control: auto repeat: hyperbolic-contour laminated sendust rec/playback head. W\&F $0.06 \%$ wrms: FR, ferric 20 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ (all A-wid), ferric 62 dB Dolby B, 68 dB Dolby C.
$\$ 559$
CR-2A 2-Head Cassette Deck
Microprocessor-controlled silent-mechanism transport: dolby B/C NR with defeatable MPX filter: bias
fine tune; independent tape and EQ selection; 37 dB peak-level meters; 4-digit LED counter: memory stop; auto repeat; timer rec/play; rec mute; concentric record level and balance controls; output level control; headphone jack: optional remote control: DC servo motor; DC motor mechanism; wow and flutter $< \pm 0.11 \%$ WTD peak; FR $20-20,000 \mathrm{~Hz}$; Dolby-C NR $>70 \mathrm{~dB}$; тHD $<1.0 \%$; sep $>36 \mathrm{~dB} ; 16.94 \times 3.94 \times$ 10.44 in ; $11 \mathrm{lb}, 14 \mathrm{oz}$

## CR-1A 2-Head Cassette Deck

Microprocessor-controlled silent-mechanism transport; Dolby B/C NR with defeatable MPX filter: independent tape and EQ selection; 37 dB peak-level meters: 3-digit mechanical counter; memory stop; auto repeat; timer rec/play; concentric record level and balance controls; headphone jack; $\mathbb{D}$. servo motor; DC motor mechanism; wow and flutter < $\pm 0.11 \%$ wTD peakl FR $20-20,000 \mathrm{~Hz}$; Dolby-C NR $>70 \mathrm{~dB} ;$ THD $<1.0 \% ; \operatorname{sep}>36 \mathrm{~dB} ; 16.94 \times 3.94 \times$ 10.44 in ; II lb, 14 oz $\$ 349$

## NEC

K-710 Dual-Well Cassette Deck
Dual-well cassette deck with twin microprocessorcontrolled full-logic mechanisms. Features 2 -speed dubbing: built-in Dolby B and C noise reduction; programmed dubbing and playback of up to 15 tracks: intro-play; continuous play; endless continuous play; music scan forward and back; NEC universal remote controllable; flying-start recording capability: auto rewind and play: auto record mute: 7 . LED level indicators; stereo mic inputs. . . . . . $\$ 399$

K-510 Dual-Well Cassette Deck
High-speed dubbing cassette deck with Dolby B \& C. Features continuous playback; synchro-start dubbing; soft-touch controls
$\$ 249$

## NIKKO AUDIO <br> D-1001II Autoreverse Cassette Deck

Features 3 heads; Dolby B, C, and dbx; automatic bias programming system (ABPS); manual bias system; random program song selection (RPSS); direct program song selection (DPSS); index programming: real-time counter; intro check; auto spacer; $\mathrm{L} / \mathrm{R}$ mic inputs: rec mute; mutiplex filter; peak reading meters. Optional wired remote control and rack mount. FR 25-20.000 Hz metal. $25-19,000 \mathrm{~Hz}$ high bias. 25 17.000 normal; $\mathrm{s} / \mathrm{N} 92 \mathrm{~dB}$ with dbx; dynamic range 110 dB . $\$ 499$
D-8011. Same as above except 2 heads and FR $20-$ $19,000 \mathrm{~Hz}$ metal, $20-18,000 \mathrm{~Hz}$ high bias, $25-17,000$ Hz normal; dynamic range $110 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$ with dbx
$\$ 399$

## ND-850W.Cassette Deck

Double cassette deck
$\$ 430$

## D-60W Double Cassette Deck

Double cassette deck with 6 motors. Features highspeed dubbing; Dolby B \& C noise reduction; ABPS; IP; RPSS; random dubbing song search (RDSS). Optionally rack mountable . $\$ 329$

## D-30W Double Cassette Deck

High-speed dubbing cassette deck with continuous play. Features Dolby B \& C; separate $L / R$ input level controls; multiplex filter; mic inputs; headphone output; soft-touch operation. Optionally rack mountable

## ONKYO

Integra TA-2090 Unidirectional Cassette Deck Computer-controlted cassette deck with Dolby B, C, dbx NR and Dolby HX Pro. Features 3 heads; 3 motors; auto bias/EQ; dual capstans; bias fine tuning: direct drive; elapsed-time counter; remaining-time counter; music search; output level control; memory stop/play; mike input; headphone jack; rec mute;
record calibration controls: sendust heads; MPX filter: fluorescent meters, 2 -color peak hold. Remote control and side panels optional. w\&F $0.02 \%$ wrms; FR $25-17,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-I tape), $25-19,000 \mathrm{~Hz} \pm 3$ dB (Type-II tape). $25-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ tType-IV tape); $\mathrm{s} / \mathrm{N}$ (Type-IV tape) 60 dB no NR. 70 dB Dolby B. 80 dB Dolby C. 87 dB dbx. $17.69 \times 3.93 \times 15.44 \mathrm{in}$; 20 lb $\qquad$ $\$ 900$ CW-20. Optional woodgrain side panels for TA2090. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 60 / \mathrm{pr}$

## TA-2800 Cassette Deck

3-head cassette deck. Features computer-controlled three-motor silent mechanism transport: Dolby B and C noise reduction; Dolby HX Pro; automatic accu-bias; record calibration; real-time counter; switchable MPX filter; forward and reverse AMCS integrated system remote compatibility . . . . . . \$650

## TA-RW490 Double Cassette Deck

Features double autoreverse: double recording; highspeed and real-time dubbing; continuous recording: Dolby B \& C: Dolby Hx Pro; 2 real-time tape counters; program music search for both decks; headphone jack; mike input. Remote control optional . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 630$

## TA-RW470 Double Cassette Deck

Dual computer-controlled, two motor, autoreverse transports. Features Dolby B and C noise reduction;

real-time counter; standard and high-speed dubbing: continuous play; aMCS; integrated system remote compatibility

## TA-2600 Cassette Deck

3-head cassette deck. Features computer-controlled three-motor silent mechanism transport; Dolby B and C noise reduction; Dolby HX Pro; Accu-Bias: real time counter; switchable MPX filter; forward AMCs; integrated system remote compatible . . $\$ 480$

## TA-W450 Double Cassette Deck

Features high-speed and real-time dubbing; conlinuous playback: Dolby B \& C: computer-controlled tape transport with 4 DC motors; automatic music control system; auto space; auto bias/EQ; LED meters; mic input; headphone jack. Remote control optional. w\&F $0.07 \%$ wrms; FR $30-15.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-I tape), $30-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-II tape), $30-17,000$ $\mathrm{Hz} \pm 3 \mathrm{~dB}$ (Type-IV tape); $\mathrm{S} / \mathrm{N}$ (Type-IV tape) 58 dB no NR. $17.12 \times 4.38 \times 10.12 \mathrm{in}$; $10.1 \mathrm{lb} . . . . .$. . $\$ 330$

## TA-R260 Autoreverse Cassette Deck

Features Dolby B \& C; Dolby Hx Pro; 2 heads; 2 motors; computer-controlled silent-mechanism transport; fine-tuning accu-bias; automatic music control system; auto bias/EQ: real-time 4-digit tape counter; blank skip. mic inputs; headphone jack; auto space; led meters. Remote control optional. w\&F $0.07 \%$ wrms; FR $30-14,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-I tape). $30-15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-II tape). $30-16.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$ (Type-IV tape); $\mathrm{s} / \mathrm{N}$ (Type-IV tape) 58 dB no NR, $17.12 \times 4.38 \times 10.38 \mathrm{in}$; 9.3 lb $\qquad$ \$370

## TA-2140 Unidirectional Cassette Deck

Features Dolby B \& C; Dolby Hx Pro; 2 heads; 2 motors: computer-controlled silent-mechanism transport; fine-tuning accu-bias; automatic music control system; auto bias/EQ; real-time 4-digit tape counter; blank skip; mic inputs; headphone jack; auto space; LED meters. Remote control optional. W\&F $0.06 \%$ wrms; FR $30-15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-1 tape). $30-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-11 tape), $30-17,000 \mathrm{~Hz}$
$\pm 3 \mathrm{~dB}$ (Type-IV tape); $\mathrm{S} / \mathrm{N}$ (Type-IV tape) 58 dB no NR. $17.12 \times 4.38 \times 10.38 \mathrm{in} ; 9.1 \mathrm{lb}$

## TA-RW44 Double Cassette Deck

Feaiures autoreverse (deck 2 only); high-speed and normal-speed dubbing: Dolby B; 2 DC'-servo motors; auto bias/EO (deck 2); rec mute; auto stop: lime standby mode; music search (deck 2); soft-touch controls: master level fader, w\&F 0.07\% wrms: FR 30$15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-I tape), $30-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-II tape). $30-17,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-IV tape); S/N (Type-IV tape) 58 dB no NR. $17.12 \times 4.38 \times 10.12$ $\mathrm{in} ; 11.7 \mathrm{lb}$.
$\$ 275$
TA-R240 Astoreverse Cassette Deck
Features Dolby B \& C: 2 heads: 2 motors: computercontrolled silent-mechanism transport; fine-tuning accu-bias; automatic music control system; auto bias/EQ; blank skip; mike inputs; headphone jack: auto space; LED meters. Remote control optional. w\&F $0.07 \%$ wrms: $F R 30-14.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-1 tape), $30-15.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-II tape), $30-16,000$ $\mathrm{Hz} \pm 3 \mathrm{~dB}$ (Type-IV tape); $\mathrm{s} / \mathrm{N}$ (Type-IV tape) 58 dB no NR. $17.12 \times 4.38 \times 10.38 \mathrm{in}$; 9.3 lb .
$\$ 270$

## TA-2130 Unidirectional Cassette Deck

Features Dolby B \& C; 2 heads; 2 motors; computercontrolled silent-mechanism transport; fine-tuning accl-bias; automatic music control system; auto bias/EQ; blank skip; mike inputs; headphone jack: aute space; LED meters. Remote control optional. $w \& F 0.06 \%$ wrms; FR $30-15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-I tape), $30-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (Type-II tape), $30-17,000$ $\mathrm{Hz} \pm 3 \mathrm{~dB}$ ( Type-IV tape); s/N (Type-IV tape) 58 dB no NR . 17.1 ! $4.38 \times 10.38 \mathrm{in} ; 9.1 \mathrm{lb}$.
$\$ 260$

## TA-2120 Cassette Deck

Features computer-controlled transport; Dolby B and C noise reduction; automatic tape selector: auto space record mute; RI remote compatible . . . . \$220

## PARASOUND

D/HX-600 Dolby B, C. HX Pro Cassette Deck Witn Dolbs B and Dolby C NR; Dolby HX Pro headroom extension; sendust-alloy head; LED peak and peak storage meters; Play Trim; polystyrene capacitors: hand-selected parts; single DC servomotor; soft-touch controls. $\mathrm{s} / \mathrm{N} 75 \mathrm{~dB}$ with metal tape and Dolby C: $17.25 \times 4.5 \times 11 \mathrm{in}: 12 \mathrm{lb} . . . .$. . $\$ 360$

## PHILIPS

## FC 567 Dual Cassette Deck

Digitally controlled electronic auto reverse and automatic two-way recording for both decks; ability to record or play up to three hours of continous music; normal and high speed dubbing; mono microphone mixing capabilities; Quick Music Search (QMS) for fast skipping of up to 15 tracks; Memo Key operates in conjunction with QMS to program 16 tracks in any order: Dolby B and C Noise Reduction circuits eliminate tape hiss: led bar indicates peak levels for left and right channels; slide record level controls left and right channels; microprocessor controls; precision ground capstans and pressure rollers: full auto stop to protect tape and transport mechanism in all modes; 3-digit tape counter with reset: automatic tape selection operates when tape is inserted (with Normal, Metal and Chrome tape): timer switch allows play/record with external timer control; tape direction and mode indicators; MPX filter eliminates pilot tone interference on FM recordings: Autospace Record Mute inserts 4 -second pause between tracks; front panel microphone and headphone inputs. Motor type 2 DC Servo 2 DC: speed tolerance $1.5 \%$; W\&F $0.04 \%$ wrms; FR 30-18,000 Hz . $4.0 \times 16.8 \times 10.4 \mathrm{in} ; 11.66 \mathrm{lb}$
$\$ 479$

## FC 566 Cassette Deck

Electronic auto reverse and automatic two-way recording and playback: Quick Music Search (QMS) for fast skipping of up to 15 Iracks; Index Scan plays

## CASSETTE DECKS

first 10 seconds of each track to locate favorite musical passage: Autospace Record Mute inserts 4second pause between recorded tracks; Blank Skip eliminates silences between tracks by automatically forwarding to net recording: Dolby B and C Noise Reduction circuits eliminate tape hiss; Precision ground capstan and pressure roller for smooth tape feed: 4-digit electronic tape counter with memory and reset: automatic tape selection operates when tape is inserted (with Normal, Metal and Chrome indication); two FTD record level displays for peak levels; MPX filter eliminates pilot tone interference on FM recordings: timer switch allows play/record with external timer control: front panel stereo microphone and headphone inputs; concentric controls for separate left and right level settings: tape direction and mode indicators; full auto stop to protect tape and transport in all modes. Motor type I DC Servo I DC: speed tolerance $1.3 \%$; w\&F $0.04 \%$ (wrms); FR $30-$ $18.000 \mathrm{~Hz} .4 .0 \times 16.8 \times 10.4 \mathrm{in}: 9.9 \mathrm{lb} . . . .$.

## PIONEER

Elite CT-91 Cassette Deck
Cassette deck with Dolby B, C, and HX Pro noise reduction. Features full-logic controls; 3 heads; 2 motors: 3 power supplies: bias fine tuning: antivibration design; dual-capstan; amorphous head; Ft display: system remote compatible; electronic real time tape counter; power eject auto monitor; FR 20$22,000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N} 80 \mathrm{~dB}$; W\&F $0.024 \%$ wrms. $5.25 \times$ $16.56 \times 14.63 \mathrm{in}: 21 \mathrm{lb} .3 \mathrm{oz}$
. $\$ 950$

## CI-S800 Casselte I)eck

Three-head. two-motor dualrcapstan cassette deck with remote control. Features full-logic control; Dolby HX Pro bias-variance monitoring: Dolby B and C noise reduction; automatic tape selector: closed-loop dual capstan mechanism; Pioneer cassette stabilizer system: copper-plated honeycomb chassis; three individual power supplies; 15 -segment level display; electronic real-time tape counter; auto record muting between tracks; 15-track music search function; one-touch tape return; auto monitor and power cject
$\$ 750$
CT-W90R Double Cassette Deck
Cassette deck with the Dolby HX Pro signal monitoring and adjustment system. Features two autoreverse transports: two-sided continous recording of each

tape; relay play; Pioneer cassette stabilizer system; independent operation keys for each deck; remote control compatibility: blank search; blank skip; skip search; automatic recording mute.
$\$ 650$

## CT-W700R Double Cassette Deck

Cassette deck with the Dolby HX Pro signal monitoring and adjustment system. Features playback on transport I and recording or playback on transport 2; relay play; Pioneer cassette stabilizer system; independent operation keys for each deck: remote control compatibility; blank search; blank skip; automatic recording mute
$\$ 435$

## CT-S600 Cassette Deck

Two-head cassette deck with full-logic control. Features Dolby HX Pro bias-variance monitoring; Dolby B and C noise reduction: Pioneer cassette stabilizer system; copper-plated honeycomb chassis; 15-segment level display: electronic real-time tape counter; 15-track music search function; one-touch tape return; auto monitor and power eject. . . . $\$ 375$

CT-1280WR Double Cassette Deck
Features autoreverse playback and recording on deck 2; autoreverse playback on deck 1; Dolby B \& C; relay play; high-speed dubhing: full-logic control; music search; skip search; auto tape selector; record mute. Remote controllable with Pioneer "SR" unified remote control. W\&F $<0.09 \%$ wrms; $\mathrm{s} / \mathrm{N} 57 \mathrm{~dB}$ no NR. $16.6 \times 4.75 \times 10.44 \mathrm{in}$
$\$ 360$

## CT-W500 Double Cassette Deck

Cassette deck with the Dolby B and C noise reduction. Features playback on transport I and recording or playback on transport 2; relay play: Pioneer cassette stabilizer system; independent operation keys for each deck; remote control compatibility: blank search; blank skip; automatic recording mute
$\$ 310$

## CT-W300 Double Cassette Deck

Cassette deck with the Dolby B and C noise reduction. Features playback on transport! and recording or playback on transport 2; relay play: Pioneer cassette stabilizer system; independent operation keys for each deck; remote control compatibility\$225

## PROTON

## 740 Cassette Deck

Full-logic-controlled autoreverse cassette deck with Dolby B, C. and dbx. Features 2 heads; 1 motor; auto bias/EQ; elapsed-time counter; music search; output level control; memory stop/play; LED meters; softtouch controls; mic inputs; headphone jack; rec mute; sleep timer function; 9 program memory selection; adaptable to timer for playback or record. W\&F 0.05\% wrms: FR ferric $25-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. high bias 25 $18,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$, metal $25-19,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}$ (A-wtd) ferric: 49 dB no NR. 58.5 dB Dolby B, 68 dB Dolby C, 78 dB dbx , high bias: 53 dB no NR. 62 dB Dolby B. 71.5 dB Dolby C. 85 dB dbx , metal: 53 dB no NR, 60 dB Dolby B. 70 dB DolbyC. 95 dB dbx ; mic input sens 0.35 mV
\$349

## \# $\simeq-$ - ( Cassette Deck

Cassette deck with Dolby B \& C Nr. Features autoreverse (in play and rec); MPX filter: auto bias selector; full-logic controls; FR metal bias 40-17.000 $\mathrm{Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} \mathrm{CrO}_{2} 70 \mathrm{~dB}$; THD $1.5 \%$ (metal tape). $1.8 \%\left(\mathrm{CrO}_{2}\right), 1.2 \%$ (normal tape).
$\$ 319$

## AD-200 Cassette Deck

Cassette deck with one-bution record. Features Dolby B and C noise reduction; defeatable MPX filter; LED peak-level indicators for record and playback; counter indicator: headphone jack; locking rewind and fast forward: tape selector. W\&F; $0.08 \%$; lineinput sens 80 mV : FR $40-15,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (normal. $\left.\mathrm{Cr}^{2}{ }^{2}\right) .40-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (metal). $16.5 \times 4 \times 10 \mathrm{in}$; 8.8 lb .
$\$ 229$

## RCA

MTR225 Double Autoreverse Cassette Deck Dimensia double cassette deck with remote-control operation and on-screen status indication when used with Dimensia monitor. Features Dolby B \& C NR: high-speed dubbing; soft-touch electronic controls; microprocessor control; peak meters; random-access programming: scan-and-play system: automatic tape cueing; auto tape selection; status display; tape mode display: record-le vel control. $\mathrm{s} / \mathrm{N} 70 \mathrm{~dB}$ (Dolby C), 60 dB (Dolby B); W\&F $<0.07 \%$. $14.63 \times 5 \times 10.38$ in $\$ 399$

## REALISTIC

SCT-100 Double Autoreverse Cassette Deck Dolby B and Dolby C; high-speed dubbing; compatible with normal, high-bias, metal tapes; mic inputs; headphone jack; 2 -color 8 -LED peak-level meters; sequential play; soft-touch controls. W\&F 0.08\% wrms; FR ( $\pm 3 \mathrm{~dB}$ ) ferric $40-12,500 \mathrm{~Hz}$, high bias 40 13.000 Hz , metal $40-14.000 \mathrm{~Hz}$; s/N 69 dB Dolby C . 61 dB Dolby $B$

SCT-83 Autoreverse Casselte Deck
Dolby B; Dolby C: music search; solenoid operation; plays 1 side, both sides, or repeats continuously; compatible with normal, high-bias. metal tape; mic and headphone jacks; intro scan. W\&F $0.06 \%$ wrms: $F R( \pm 3 \mathrm{~dB}$ ) ferric $40-14,000 \mathrm{~Hz}$, high bias $40-15.000$ Hz , metal $40-16,000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N} 70^{\circ} \mathrm{dB}$ Dolby C, 62 dB Dolby B.
$\$ 220$
SCT-74 Double Cassette Deck
Dolby B and Dolby C; high-speed dubbing; compatible with normal, high-bias, metal tapes; LED's for power and recording; mic inputs; headphone jack. W\&F 0.12\% wrms; FR ( $\pm 3 \mathrm{~dB}$ ) ferric $60-10.000 \mathrm{~Hz}$. high bias $60-12.000 \mathrm{~Hz}$. metal $60-14.000 \mathrm{~Hz}$. . $\$ 180$

## SCT-45 Double Cassette Derk

4 heads; 2 motors; Dolby B; manual azimuth adjust; elapsed-time counter; mic inputs; headphone jack. W\&F 0.1\% wrms; FR ( $\pm 3 \mathrm{~dB}$ ) ferric $40-12.500 \mathrm{~Hz}$. high bias $40-13,000 \mathrm{~Hz}$, metal $40-14,000 \mathrm{~Hz}: \mathrm{S} / \mathrm{N}(\mathrm{A}$ wid) ferric 60 dB Dolby B. $16.5 \times 5 \times 8.8 \mathrm{I} \mathrm{in} ; 8 \mathrm{lb}, 10$ oz.
\$130

## SCT-46 Double Cassette Deck

Dolby B; 2 heads; high-speed dubbing; headphone and mic jacks: Synchro-Start; continuous play; 2color LED level meters; permalloy rec/play head. W\&F 0.1\% wrms; FR ( $\pm 3 \mathrm{~dB}$ ) ferric $30-14,000 \mathrm{~Hz}$. high bias $30-15,000 \mathrm{~Hz}$, metal $30-16,000 \mathrm{~Hz}$ : $\mathrm{s} / \mathrm{N}$ ( $\mathrm{A}-$ wid) 66 dB with metal tape and Dolby B.... $\$ 150$

SCT-35 Dolby B Cassette Deck
2 heads; $L / R$ record level controls; 2 -color peak level meters; auto-stop; tape counter; pause: soft-cject door: bias/EQ selector for normal. high-bias, metal tape; $0.25^{\prime \prime}$ mic and headphone jacks. FR 40-14.000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$ metal and high bias, $40-12.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ normal: W\&F $<0.09 \%$ wrms. $4.63 \times 15.38 \times 8.63$ in. .
$\$ 90$

## SCP- 30 Cassette Player

Plays metal, high-bias, normal tapes; pause: auto stop; simulated walnut cabinet. $8 \times 4.5 \times 5.25$ in $\$ 50$

## 8-Track Cartridge Player

TR-169 8-Track Cartridge Player
Stereo 8-track player; auto or manual program change; output level control. $4 \times 10 \times 7 \mathrm{in} \ldots . . \$ 50$

## REVOX

B215 3-Head Cassette Deck
Cassette deck with 3 microprocessors for control of bias, level. EQ, transport, and real-time counter. Features 3 heads, Dolby HX Pro, Dolby B \& C; 4 motors; digital storage of bias, level, EQ settings for 6 tape formulations; manual or auto record-level setting; die-cast transport chassis; azimuth-stable pivoting headblock; 2 programmable locate buttons; loop mode: auto start-of-record locate. Counter computes elapsed time on partially wound tapes. W\&F $0.1 \%$ wrms; FR ferric $30-18,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$, high bias and metal $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ (A-wid) ferric: 55 dB no NR, 64 dB Dolby B, 70 dB Dolby C, high bias: 57 dB no NR. 65 dB Dolby B, 72 dB Dolby C. metal: 58 dB no NR, 66 dB Dolby B, 72 JB Dolby C; line-input sens for $0-\mathrm{dB}$ reading 50 mV ; line output level with $0-$ dB indication $775 \mathrm{mV} ; 17.7 \times 6 \times 13 \mathrm{in} \ldots \$ 2,300$

## ROTEL

RD870 Dobly B/C/HX Pro Cassette Deck
Features Sendust rec/play head: precision transport mechanism; 2 heads; 2 motors; bias fine tuning; direct drive; led meters; soft-touch controls: mic inputs; headphone jack. W\&F $0.05 \%$; FR metal 30 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$.
$\$ 499$

## RD855 Dolby B \& C Cassetted Deck

Cassette deck with Full-logic controls features 2 motors: remote control

## CASSETTE DECKS

## RD835 Dolby B \& C Cassette Deck

Cassette deck with sendust rec/play head. ferrite core erase head. Features soft-touch controls; LeD meters; mic inputs: DC servo motors; headphone jack. W\&F $0.08 \%$ wrms: FR ferric $30-17.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$, high bias $30-17.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. metal $30-18,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ high bias: 55 dB no NR. 64 dB Dolby B. 72 dB Dolby $\mathrm{C} ; 17 \times 4.5 \times 10.62 \mathrm{in}: 9.1 \mathrm{lb}$
\$249

## SAE

C102 Two-Head Cassette Deck
Full-logic microprocessor cassette deck. Features tape transport encased in electronic sliding drawer; 2 heads; 2 motors; Dolby B; Dolby C: manual azimuth adjust; elapsed-time counter; remaining-time counter: music search: blank skip; memory stop/play; LED meters; rec mute; sendusi heads. w\&F $0.06 \%$ wrms; FR $20-20,000 \mathrm{~Hz}$ for all tape types; $\mathrm{S} / \mathrm{N}$ (high bias): 55 dB no NR. 65 dB Dolby B. 74 dB Dolby C : line-input sens for $0-\mathrm{dB}$ reading 70 mV ; line output level with $0-\mathrm{dB}$ indication $650 \mathrm{mV} .19 \times 3.5 \times 14 \mathrm{in}$ : 18 lb
$\$ 499$

## SANSUI

D-WII Double Cassette Deck
Auto-reverse high-speed dubbing cassette deck. Features 2 heads and 2 motors for each transport: Compu-Edit; 16-1rack RMPS; 15-track Automatic Music Program Search; auto fader; rec cancel; intro skip: timer record/play: manual and auto level controls; auto bias/EQ; Dolby B \& C NR; dual capstans: auto azimuth adjust; clapsed-time counter; music search; blank skip; memory stop/play; LED meters; mic inputs; headphone jack; rec mute; black or silver. W\&F $0.05 \%$ wrms; FR metal $30-17.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}$ (A-wtd) metal: 57 dB no NR, 66 dB Dolby B. 73 dB Dolby C. $16.94 \times 4.37 \times 12 \mathrm{in}: 13.4 \mathrm{lb} \$ 650$

## D-X701 Cassette Deck

3-head, 2-motor. dual capstan cassette deck with fulllogic controls. Features Dolby B and C noise reduction; individual record and playback $1 \times$ amplifiers;

record level; fine-bias adjustment; headphone jack with adjustable level; record/pause: auto-monitor: memory stop; 15-track automatic music program search; FL display. FR $30-20,000 \mathrm{~Hz}: ~$ L\&F $0.035 \%$
wrms; $\mathrm{s} / \mathrm{N} 60 \mathrm{~dB}$.
$\$ 650$

## D-X501 Cassette Deck

2-head, 2-motor cassette deck with full-logic controls. Features Dolby B and C noise reduction; record cancel; headphone jack with adjustable level; record/pause; auto-monitor; memory stop; 15 -track automatic music program search; Fi display. FR 30 $18,000 \mathrm{~Hz}$; W\&F $0.045 \%$ wrms; $\mathrm{s} / \mathrm{N} 58 \mathrm{~dB} \ldots .$. . $\$ 450$

## D-X301iR Cassette Deck

Cassette deck with full-logic controls and Computerized Dual-Function Control. Features Dolby B and C noise reduction; Dolby HX Pro; automatic bias adjustment: record/play timer: Sansui integrated system remote capability; record cancel; music scan; headphone jack with adjustable level; memory stop; 20 -track automatic music program search. FR $20-$ 19.000 Hz ; w\&F $0.5 \%$ wrms; $\mathrm{s} / \mathrm{N} 72 \mathrm{~dB}$ (Dolby C).
$\$ 380$

## D-3000WR Double Cassette Deck

High-speed dubbing autoreverse deck. Features LED meters for each channel: full logic. soft-touch con-
rols: Dolby B and C: AMPS (Automatic Music Program Search); rec mute. W\&F $0.09 \%$ wrms; FR metal $20-17.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}$ metal 72 dB Dolby C: 64 dB Dolby B. $16.94 \times 5 \times 8.97 \mathrm{in} ; 9.9 \mathrm{lb}$
$\$ 375$

## D-1000W Double Cassette Deck

Double cassette deck with high-speed dubbing. Features 2 full-logic. computer-controlled transports: Dolby B and C noise reduction; mantal level controls; level meters; automatic music program search. w\&F 0.09\% wrms; FR metal $20-17.000 \mathrm{~Hz}$ : S/N metal 74 dB
$\$ 300$

## D-550WR Double Cassette Deek

Double cassette deck with autoreverse on the playback deck. Features relay play: automatic level control; high-speed dubbing; Dolby $B$ noise reduction; tape type selector.
$\$ 230$

## SANYO

RIWS9 Double Cassette Deck
Features Dolby NR continuous playback; high-speed dubbing; synchronous dubbing: metal-tape capabilily; dual level meters; auto-stop; soft-touch transport controls; 3-digit tape counter: headphone jack. \$130

## RDW41 Double Cassette Deck

Features synchro dubbing; continuous playback: Dolby NRa: metal-tape capability; soft-eject doors;-5segment ted level meters; 3-digit tape counter: auto stop
$\$ 80$
RDS29 Cassette Deck
Features soft-touch controls; Dolby NR; permalloy heads; metal-tape capability; 5 -segment vt meters; headphone jack: input level controls; 3-digit tape counter
$\$ 60$

## SCOTT

D1)696 Double Cassette Deck
Double cassette deck with autoreverse and remote control. Features high-speed dubbing; Dolby B, Dolby C. dbx NR: full-logic transporis: auto program search; relay play; bias fine tuning; 3-way autoreverse selection; headphone jack with volume control. W\&F $0.08 \%$ wrms: $F R( \pm 3 \mathrm{~dB}) 30-14.000 \mathrm{~Hz}$ ferric. $30-$ $15,000 \mathrm{~Hz}$ high-bias, $30-16,000 \mathrm{~Hz}$ metal; A-wid $\mathrm{s} / \mathrm{N}$ : 62 dB with Dolby H. 70 dB with Dolby C. 90 dB with dbx
\$560
DD688 Double Cassette Deck
Dolby B and Dolby C NR; high-speed dubbing: music search; LED meters; soft-touch controls; headphone jack; continuous play. W\&F $0.15 \%$ wrms; FR ( $\pm 3 \mathrm{~dB}$ ) $40-13.000 \mathrm{~Hz}$ ferric. $40-14,000 \mathrm{~Hz}$ high-bias. $40-$ $15,000 \mathrm{~Hz}$ metal. A-wid s/N: 62 dB with Dolby B. 70 dB with Dolby C
$\$ 250$
DD656. As above without Dolby $C$ and music search . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 250$

## SHARP

RT-W800(BK) Double Cassette Deck
Autoreverse high-speed-dubbing cassette deck with Dolby B NR. Features soft-touch controls; auto program search; LED peak level meters; metal-tape capability; 2 heads 1 motor; music search; output level control: mic inputs; headphone jack. W\&F $0.08 \%$ wrms; record/playback FR ferric $40-13.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$. high bias $40-14.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; metal $40-$ $16.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; 17 \times 4.89 \times 9.89$ in
$\$ 230$

## RT-W500(BK) Double Cassette Deck

Cassette deck with high-speed synchronous dubbing and continuous playback capabiity. Features 2 heads. 1 motor: Dolby B; LED peak level meters; headphone jack: mic inputs: metal-tape capability: auto stop. W\&F 0.12\% wrms. record/playback FR ferric 50$11.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. high bias $50-12,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; metal $50-13.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; 17 \times 4.88 \times 8.56 \mathrm{in} ; 7.3$ lb.

## SHERWOOD

## DF-7000R 3-Head Cassette Deck

Features microprocessor supervised. full-logic control: 3-tape heads; Dolby B and C NR; bias control: digital readout: automatic tape selector; separate left/right record level adjustment; output level control; microphone and headphone jacks; 13 -segment rec level indicators: rec mute button; timer switch; 2line input jacks with record cross fader; FR 30-18.000 $\mathrm{Hz}: \mathrm{s} / \mathrm{N}$ ratio $75 \mathrm{~dB} ; 40 \mathrm{~dB}$ channel sepat 1 kHz ; w $\& F$ $0.05 \% .5 .0 \times 17.3 \times 11.0 \mathrm{in}$.
$\$ 659$

## DD-1230R Autoreverse Double Cassette Deck

Fealures microprocessor supervised, full-logic control: auto reverse recording: Dolby B \& C NR; digital tape counter; normal and high-speed dubbing: bidirectional automatic music search; automatic tape selector: uninterrupted dubbing: fully synchronized one-touch dubbing; relay play with alternate playback deck: rec mute button; separate rec level and balance cortrol; 13 -segment rec level indicators: timer-record and start: illuminated tape run direction indicators; alr-dampened soft eject cassette doors; FR $30-16.000 \mathrm{~Hz} ; \mathrm{s} / \mathrm{N}$ ratio $75 \mathrm{~dB} ; 40 \mathrm{~dB}$ channel sep at I kHz . $W \& \mathrm{~F} 0$ 12\%. $4.7 \times 17.3 \times 8.9 \mathrm{in}$.
$\$ 359$

## DS-1630R Single Autoreverse Cassette Deck

Features microprocessor supervised. full-logic control; auto reverse: Dolby B \& C NR; digital readout: automatic tape selector: 2 -line input jacks with record cross fader; auto music search system; three playback moces; microphone and headphone jacks; rec level and balance controls; output level control: 12 segment sec level indicators; rec mute button; airdamped soft eject cassette door: timer switch; FR 30$18,000 \mathrm{Hr} ; 5 / \mathrm{N}$ ratio $75 \mathrm{~dB} ; 40 \mathrm{~dB}$ channel sep at 1 kHz W\&F $009 \%$. $5.0 \times 17.3 \times 11.0 \mathrm{in}$.
. $\$ 329$

## S-289RDR Double Cassette Deck

Fealures autoreverse dubbing capability: 2 dubbing speeds; Dolby B \& C NR; compatible with Sherwood Digi-Link remote components: auto music search; aute tape select; LED peak level indicators: relay playback for continuous listening of both decks: timer/start; rec mute
\$300
DD-1130 Double Cassette Deck
Features Delby B and C NR; high-speed dubbing; synchronized dubbing; relay play; continuous play; Normal. Cr()2. and Metal tape settings; adjustable

rec level; 3-digit tape counter; LeD rec level indicators: air-damped soft eject cassette doors; FR $30-$ $16.000 \mathrm{~Hz} ; \mathrm{S} / \mathrm{N}$ ratio $73 \mathrm{~dB} ; 37 \mathrm{~dB}$ channel sep at I $\mathrm{kHz}, ~ प \& F 0.2 \% .4 .7 \times 17.3 \times 8.9 \mathrm{in}$.
$\$ 199$

## SONY

TC-WRIIES Double Cassette Deck
Double cassette deck with win /sequential recording. Features 4 -motor ( 2 per transport) design with Feather-Touch controls; autoreverse; high-speed dubbing: Dolby $B$ and $C$ noise reduction on both decks; relay play: auto pause; linear real-time counter; automatic music sensor; blank skip; automatic tape type selection; remote control: 210 kHz super bias. FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ \$800

## TC-K700ES Cassette Deck

Three-head cassette deck with a mid-ship drive system that separates the control circuitry from the audio circuits leaving the tape transport mechanism in the mid-ship portion of the chassis. Features twin
monaural DC amp design; LC-OFC laser amorphous heads: Dolby B and C: memory stop/play: auto playback-EQ selector; MPX filter switch; auto play: auto space rec mute: timer record and playback: linear counter: counter subtract function for remaining time indication: headphone jack with adjustable level. W\&F $0.025 \%$ wrms: $F R 20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ (no NR, Type-IV tape); $\mathrm{S} / \mathrm{N} 60 \mathrm{~dB}$ (no NR, Type-IV tape). $17 \times 5 \times 13.75 \mathrm{in}$.
$\$ 700$

## TC-WR900 Dnuble Cassette Deck

Double cassette deck with recording on both decks. Features 4 -motor ( 2 per deck) design; double autoreverse: Dolby B and C noise reduction on both decks: laser-amorphous heads on both decks; relay play: dubbing le vel control: automatic music sensor: blank skip: clectronic linear counter: direct-coupled electronics; dual-deck remote capability. FR $30-18,000$ Hz ; w\&F $0.05 \%, 4.63 \times 17 \times 12.13 \mathrm{in}$; $12.5 \mathrm{lb} . \$ 700$

## TC-RX80ES Cassette Deck

Cassette deck with laser-a morphous head. Features 2-motor transport with DC -servo motor for capstan and separate motor for reel hubs; autore verse: Dolby $B$ and $C$ noise reduction; Dolby HX PRO: 5-band spectrum analyzer; linear real-time counter; record level calibration with 10 -second test tone; variable bias; automatic tape type selection; automatic music sensor: blank skip; music scan; auto space record mute: timer record/play; remote control capability; FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; 160 \mathrm{kHz}$ Super Bias circuitry.
$\$ 600$

## TC-RX60ES Cassette Deck

Cassette deck with laser-amorphous head. Features 2-motor transport with DC-servo motor for capstan and separate motor for reel hubs: autore verse: Dolby $B$ and C noise reduction; Dolby HX PRO; linear realtime counter; automatic tape type selection; automatic music sensor; blank skip; music scan; auto space record mute: timer record/play; remote control capability: FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; 160 \mathrm{kHz}$ Super Bias circuitry
. $\$ 450$

## TC-WR9ES Double Cassette Deck

Double cassette deck with one record/play deck and one play only deck. Features 2 -motor (I per transport) design with Feather-Touch controls; autoreverse; high-speed dubbing: Dolby B and C noise reduction; relay play: auto pause; electronic digital counter: automatic music sensor: blank skip; automatic tape type selection on deck $\mathrm{A} ; 160 \mathrm{kHz}$ super bias. FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$.
. $\$ 400$

## TC-W7ES Double Cassette Deck

Double cassette deck with one record/play deck and one play only deck. Features 2 -motor (I per transport) design with Feather-Touch controls; high-speed dubbing: Dolby B and C noise reduction; relay play; electronic digital counter; automatic music sensor: FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$
\$360

## TC-WR800 Double Cassette Deck

Double cassette deck with recording on one deck. Features 2-motor (l per deck) design; double autoreverse; Dolby $B$ and $C$ noise reduction on both decks; high-density heads on both decks: relay play: automatic music sensor; blank skip; direct-coupled electronics; remote control capability. FR $30-15.000 \mathrm{~Hz}$ : $\mathrm{w} \& \mathrm{~F} 0.09 \% .4 .63 \times 17 \times 10 \mathrm{in}$; 10 lb .
$\$ 350$

## TC-W600 Double Cassette Deck

Double cassette deck with recording on one deck. Features 2 -motor ( 1 per deck) design; Dolby B and C noise reduction on both decks: high-density heads on both decks: relay play; automatic music sensor; blank skip; direct-coupled electronics; remote control capability. FR $30-15.000 \mathrm{~Hz}$; W\&F $0.09 \%, 4.63 \times 17 \times 10 \mathrm{in}$ : 10 lb
. $\$ 320$

## TC-RXsoES Cassette Deck

Cassette deck with laser-amorphous head. Features Feather-Touch transport: autoreverse: Dolby B and

C noise reduction; electronic digital tape counter; 3 position tape type selector; high-speed cue; auto space record mute: timer record/play; built-in mic inputs: remote control capability: FR $20-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB} ; 160 \mathrm{kHz}$ Super Bias circuitry . . . . . . . $\$ 300$

## TC-WR500 Double Cassette Deck

Double cassette deck with recording on one deck. Features 2-motor (l per deck) design: Dolby B and C noise reduction on both decks; high-speed dubbing: soft-touch controls: high-density heads on both decks; continuous play; direct-coupled electronics. FR $\mathbf{3 0 - 1 4 , 0 0 0 ~ H z}$ : W\&F $0.12 \% .4 .63 \times 17 \times 9.88 \mathrm{in} ; 8 \mathrm{lb}$. 302.
$\$ 280$

## TC-RX400 Cassette Deck

Autoreverse cassette deck with Dolby $B$ and $C$ noise reduction. Features remote control capability: feath-er-touch full-logic controls; direct coupled electronics; high-density heads; mic inputs; autoreverse, fulllogic switching. FR $30-15.000 \mathrm{~Hz}$; W\&F $0.09 \%$. 4.63 x $17 \times 10 \mathrm{in}: 8 \mathrm{lb}, 11 \mathrm{oz}$
$\$ 240$

## TC-W 300 Double Cassette Deck

Double cassette deck with recording on one deck. Features 2 -motor ( 1 per deck) design; Dolby B and C noise reduction on both decks: soft-eject: highdensity heads on both decks: direct-coupled electronics. FR $30-14.000 \mathrm{~Hz}$ : W\&F $0.12 \% .4 .63 \times 17 \times 9.98 \mathrm{in}$; $7 \mathrm{lb}, 11 \mathrm{oz}$.
$\$ 210$

TC-FX150 Cassette Deck
Cassette deck with Dolby B and C' noise reduction. Features soft-touch controls; soft eject; high-density heads: 5 -segment LED meter. FR $30-14,000 \mathrm{~Hz}$ : W\&F $0.12 \% .4 .63 \times 17 \times 9.88 \mathrm{in} ; 6 \mathrm{lb}, 7 \mathrm{oz}$
\$120

## TANDBERG

## TCD 3014A Cassette Deck

8-bit. 32-K. E-PROM microprocessor-controlled stereo cassette deck with 4 servo-controlled tapetransport motors. Features scan to play; scan to stop: auto rewind: auto replay: timer record/play: 3 heads; Dolby B and C; azimuth alignment; bias adjustment; record current adjustment utilizing built-in test system; linear motor to position heads and pinchrollers to tape: instant "flying start" record/play: Dyneq record equalization; Actilinear 11 headroomextension system; peak-reading meters; cue and review at half-speed; real time/real revolution counter; LEDD indication of all transport functions. Wireless infrared remote control with built-in receiver included. Rosewood side panels and rack mounts available.
$\$ 2.500$

## TEAC

R-616X Stereo Cassette Deck
Autoreverse cassette deck with bi-directional record/play: autoreverse; repeat; IC logic controls; Dolby Hx: dbx \& Dolby B-C NR: 15 program random memory play; block repeat; one touch recording; bias fine adjust: rec. mute with auto spacer; auto tape selector: MPX filter switch; timer/play standby function; tape direction indicators; independent record levels. W\&F . 05\% WRMS; FR $\mathbf{2 5 - 2 0 , 0 0 0 ~ H z ~ ( m e t a l ) : ~} \$ / \mathrm{N}$ 90 dB (dbx in over 1 kHz ): 11 lb . . . . . . . . . . . $\$ 500$

V-670 3 Head Cassette Deck
3 head cassette deck with Dolby HX PRO and Dolby B-C NR. Bias fine tuning: rec. mute with auto-spacer: auto-tape selector; electronic tape counter with index and tape-run time modes; master recording level control witj left and right channel preset: two-color left/right program level meters; multi-function fluorescent display. $4.81 \times 17.13 \times 10.38-\mathrm{in}$; $11.02 \mathrm{lb} \$ 450$ V-570. Similar to above but two head ....... $\$ 350$

W-450 Autoreverse Double Cassette Deck
Autoreverse double cassette deck with continuous playback and bi-directional recording in deck II. Features Dolby HX and Dolby B-C NR; sync reverse
capability: sync dubbing capability; one program skip function in deck II: auto-tape selector. W\&F.05\% WRMS: FR $30-17,000 \mathrm{~Hz}$ (metal); $\mathrm{S} / \mathrm{N} 70 \mathrm{~dB}$ Dolby C in; $4.81 \times 17.13 \times 10.75-\mathrm{in}$; 10.14 lb
\$290
R-455 CHI. Similar to above but not a double deck. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 220$
V-285-CHX. Similar to above but not autoreverse
$\$ 150$
V250/255 Cassette Deck
Dolby $\mathrm{B}_{\text {; }}$ direct function mechanism; auto stop mecanism: metal capability; 3 position tape selector: one-touch recording. W\&F.09\% WRMS; FR 30-18.000 Hz (metal); $\mathrm{S} / \mathrm{N} 65 \mathrm{~dB}$ Dolby B: $4.75 \times 17.13 \times 8.44-\mathrm{in}$ : 6.39 lb .
$\$ 120$

## TECHNICS

RS-T80R Double Cassette Deck
Features quick autoreverse, record, and play for both transports: 4 reverse modes; parallel and 3-hr series recording on both transports: series playback: synchro start; FL display; auto bias/EQ; feather-touch controls; remote-control capability with some Technics receivers: high-speed editing: 4 heads; 2 motors; Dolby B. Dolby C, dbx NR: elapsed-time counter: music select: headphone jack. W\&F $0.08 \%$ wrms: $\mathrm{s} / \mathrm{N}$ (A-wid) high bias 57 dB no NR. 67 dB Dolby B. 75 dB Dolby C. $92 \mathrm{~dB} \mathrm{dbx} .16 .94 \times 4.36 \times 10.91 \mathrm{in}: 11.7$ lb. .
$\$ 680$

## RS-B905 Cassette Deck

Features closed loop dual capstan transport: 3 heads with noise reduction circuitry for decoded monitoring during record: Dolby HX processing: Dolby B and C noise reduction; dbx : 2 -motor transport: FL display; bias control: record calibration tone generator: MPX filter: auto rec-mute; headphone jack with adjustable level.
\$660
RS-T5SR Double Cassette Deck
Features quick autoreverse for both transports: Dolby B. Dolby C, and dbx NR; high-speed dubbing: auto bias/EQ: synchro start, stop: rec mute: auto space; anti-resonant metallic feet: edit search on Transport A: soft-touch controls: 28 -part digital peak readout
. $\$ 460$

## RS-B605 Cassette Deck

Cassette deck with 3 heads with noise reduction circuitry for decoded monitoring during record. Features Dolby HX processing: Dolby B and C noise reduction; dbx; 2-motor transport: FL display: bias control: auto rec-mute
$\$ 390$
RS-T330R Double Cassette Deck
Dual-well cassette deck with quick autoreverse re-

cord/play in transport A. Features high-speed editing: Dolby B and C noise reduction: FL. display; series play; synchro-start: synchro-record-mute: synchrostop; electronic switching: LED indicators; cuc and review; headphone jack; automatic tape selection: timer capability
. \$330

## RS-T230 Double Cassette Deck

Dual-well cassette deck with high-speed editing. Features Dolby B and C noise reduction: series play; synchro-start: synchro-record-mute; synchro-stop: electronic switching: Led indicators: cue and review: headphone jack: automatic tape selection; timer capability

## RS-T1. 30 Double ( assette Deck

Dual-well casselte deck with high-speed editung. Features Dolby B noise reduction; series play; syn-chro-start editing: electronic switching: l.ED indicators; cue and review; headphone jack; automatic tape selection: timer capability
. $\$ 230$

## RS-B105 I)olby B Cassette Deck

Features direct-mode switching: 2 heads; 2 motors; 1touch recording; full auto stop; rec-level balance controls; timer rec/play: clapsed-time counter: 1/1) meters; soft-touch controls; mike inputs. W\&F 0.08\% wrms; S/N (A-wtd, with high-bias tape) 56 dB no NR, 66 dB Dolby B. $16.94 \times 4.53 \times 9.28 \mathrm{in}: 6.6 \mathrm{lb} . \$ 145$

## TOSHIBA

P-5858 Double Cassette Deck
Double cassette deck with high-speed dubbing. Features IC logic design; Dolby B and ( noise reduction: continuous play between decks: continuous record between decks; quick search selection; repeat function
$\$ 399$

## UHER

CR 1601 Portable Cassette Deck
Compact front-loading portable cassette recorder with monitor facility featuring 8 hours record time and built-in voice actuating system. Features 3 heads: 2 motors; dual capstans; bias fine tunıng; manual azimuth adjust: direct drive: clapsed-time counter: output level control; memory slop/play: 1 rin meters; soft-touch controls; mike inputs; headphone jatk; rec mute: 3 tape speeds: 1.88 ips . 94 ips and .16 ips with ALC. $\mathrm{W} \& \mathrm{~F}<2 \%$ wrms; FR ferric $20-19,000 \mathrm{H} / \pm 3 \mathrm{dH}$ : $9.3 \times 2.3 \times 7.3 \mathrm{in}, 5 \mathrm{tb}$
$\$ 1.799$
(R 1600 Portable (assette I)eck
Compact portable front-loading. fully electronic, remote control. auto-reverse. record/play back stereo cassette recorder with Dolby B. Features 8-hours record time with a built-in voce activation system; switchable tic with 2 -time constants; separate chan-

nel record level meters; 4-tracks; 17/8 adn 15/32 IPs; 3-heads: 2 -motors; soft-touch solenoid controls with built-in speaker; operates on dry cell. 12 V car battery. $110 / 220$ V AC. $w \& F \pm 1 \% ;$ FR $30-16,000 \mathrm{~Hz} ; \mathrm{A} / \mathrm{V}$ input capability; $9 \times 2.3 \times 7.3 \mathrm{in} ; 5.75 \mathrm{lb} \ldots \$ 1,799$
(R-160AV Portable Cassette Deck
Portable sterco cassette deck with Dolby B and ( Noise Reduction. Features 2 heads; I motor; manual azimuth adjust: mike inputs; headphone jack; ALC with two time constants: sep channel record level control: 3 built-in monitor speakers. Operates on dry cells, $12-\mathrm{V}$ car battery or 120 V AC. W\&F $0.2 \%$ IIIN; FR ferric $30-16.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. high bias $30-16.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}$ ferric: 64 dB no NR .55 dB Dolhy B ; high bias: 66 dB without noise reduction. 57 dB Dolby B ; line-input sens for $0-\mathrm{dB}$ reading 588 mV ; line output level with $0-\mathrm{dB}$ indication 775 mV : mike input sens 0.35 mV ; mike input overload $20 \mathrm{mV} .9 .3 \times 2.3 \times 7.3$ in.
$\$ 999$

## Accessories

## F-423 Diapilot

Self-contained unit for synchronized tape conirol operation of automatic slide projector for use with ther open-recl and cassette decks. DIN plug connector.

## Z-135 Power Supply/Charger

Power supply/charger unit for Uher cassette recorders
$\$ 107$

## VECTOR RESEARCH

## C(X-345 Double Cassette Deck

Double cassette deck with Dolby B and C NR Features 2 -speed dubbing: synchro-start dubbing: continuous play; power-assist transport controls; mic

inputs: manual dubbing/recording level: metal-tape capability; headphone jack. FR $40-17,000 \mathrm{~Hz}$ metal lape: S/N 73 dB (Dolby C), 65 dB (Dolby B); W\&F $0.06 \%$ wrms. $16.56 \times 4.31 \times 8.25 \mathrm{in} ; 8.5 \mathrm{lb} . \ldots \$ 250$

VCX- 325 Double Cassette Deck
[ Double cassette deck with Dolby B NR. Features 2speed dubbing: ssnchro-start dubbing: continuous play; power-assist transport controls; mic inputs; manual dubbing/recording level: metal-tape capability. FR 40 - $15,000 \mathrm{~Hz}$ metal tape; $\mathrm{S} / \mathrm{N} 63 \mathrm{~dB}$ (Dolby B); W\&F $0.08 \%$ wrms. $17.25 \times 4.5 \times 10 \mathrm{in} ; 8.5 \mathrm{lb} . \mathrm{S} \$ 50$

## YAMAHA

KX-1 2004 3-Head Cassette Deck
3 -head casselte deck with 28 -key wireless remote control. Features double dbx dynamic expansion; double Dolby B \& C noise reduction; ORBI I system with optical balance tuning indicator; closed-loop dual-capstan tape transport; Dolby HX Pro dynamic bias servo; high quality amorphous head; full-logic control; optimum recording level indicator; RS integrated system remote compatibility. Black; $22 \mathrm{lb} \$ 749$

KX-U 900(I Double Cassette Deck
Double cassette deck with autoreverse. Features amorphous recording and playback heads: play. record, and autoreverse on both decks; relay play and record: Dolby B and C and HX Pro; high speed dubbing: auto dubbing: skip dubbing; random program dubbing: manual dubbing: cross-Dolby dubbing; simultancous independent recording; 44-key wireless remote control; random program play on both decks; music search on both decks; intro scan; record return; auto record mute; blank skip; auto tape selection; 4-digit electronic linear tape counter; 13segment peak lever meters on both decks; remaining time indicator.
. $\$ 699$
K.N-R700U (assette Deck

Autoreverse cassette deck with autoreverse record and playback. Fealures full-logic. 3-motor tape transport; amorphous record/play head; dbx, Dolby B, IDolby C. and Dolby HX Pro; super bias; electronic record volume control; optimum record level indicauon; power eject and close; remaining tape time display; auto lade in/out; auto tape selector; rec return; bi-directional intro scan; 9 -selection random program play; music search; programmable timer/clock; 39-key wireless remote control; MPX filter; blank skip; 0-memory; auto rec mute; memory stop; integrated system remote compatibility . . . . . . $\$ 579$


## KX-800U Cassette Deck

3-head cassette deck with double dbx dynamic range expansion. Features Dolby B and $C$ noise reduction: ORBIT oplical balance tuning system: 3 motors; Dolby HX Pro; amorphous heads; master fader: MPX filter; linear time counter; 12-segment peak level meter: 28 -kcy wireless remote control; integrated system remote compatibility; optimum record level indicator: random program play; intro scan; music search; repeat; record return; automatic rec mute; automatic tape selector: memory stop; headphone jack with adjustable level. $\mathrm{S} / \mathrm{N}$ in Dolby B 69 dB , Dolby C 72 dB ; dbx $90 \mathrm{~dB} ;$ FR $20-22,000 \mathrm{~Hz} \pm 3$ dB
. $\$ 569$
KX-W302U Double Cassette Deck
Double cassette deck with autoreverse on both transports. Features play in both directions, record in one: full-logic operation: 12-layer amorphous laminate record play head provides high frequency response with very little noise and distortion; Dolby $B$ and $C$ roise reduction; one-louch dubbing at normal and high speed; relay play; auto tape selector; auto record mute; music search: MPX filter; 6 segment led peak level display; Dolby HX Pro; optional remote control; integrated remote compatibility
$\$ 449$

## K-640B Autnreverse Cassette Deck

Autoreverse cassette deck with RS integrated system remote compatibility. Features amorphous head: auto fade; remaining time; intro scan; car EQ; Dolby B, C. and HX Pro; dbx. Black: 16 lb .
. $\$ 449$

## KXs00U Cassette Deck

Cassette deck with Dolby B and C noise reduction. Features 3 motors; Dolby HX Pro; manual bias adjustment $\pm 20 \%$; master fader; MPX filter: 12segment peak level meter; 27 -key wireless remote control; integrated system remote compatibility: play trim; random program play; bi-directional introscan; music search; repeat; record return: automatic rec mute; automatic tape selector .
$\$ 399$
KX-W202C Double Cassette Deck
Double cassette deck with full one-way operation dual mechanism. Features hard permalloy recordplay head; Dolby B and C NR; one-touch dubbing at normal and high speed; relay play; music search; record return; auto record mute; MPX filter; auto tape selector; optional remote control; integrated system remote compatibility
. $\$ 349$

## KX-400U Autoreverse Cassette Deck

Features permalloy rotary head design; one-way auto reverse; Dolby B, C, and HX Pro; music search; auto tape selector: forward/reverse intro scan; blank skip; phrase repeat; auto fader; rec return; auto rec mute; timer rec/play: optional RS-KW5 wireless remote control; 2 -color 6 -segment LED peak level meters. Black; II lb.
\$329

## KX-300U Cassette Deck

Cassette derk with Dolby B and C noise reduction. Features 2 motors; Dolby HX Pro; manual bias adjustment $\pm 20 \%$; MPX filter; 7 -segment peak level meter: 10-hey wireless remote control; integrated system remote compatibility: play trim: bi-directional intro scan; music search; repeat; record return; automatic rec mute; automatic tape selector . . $\$ 299$

## KX-200U Cassette Deck

Cassette deck with RS remote system compatibility. Features Dolby B \& C NR: permalloy head; full-logic operation; forward/reverse intro-scan; full repeat and phrase repeat; optional RS-KW5 wireless remote control; auto tape selector; rec return; auto rec mute; 2 -color 6-segment peak-level meters. Black; If lb.
$\$ 229$

## Accessories

RS-KW-5. Infrared remote control for all RS integrated system compatible cassette decks.
$\$ 50$ RMA-K20. Rack mount adaptor for KX-1200U $\$ 18$

## OPEN-REELTAPE DECKS

## FOSTEX

## F-22 Open-Reel Iech

3-channel stereo master recorder/repreducer openred tape deck. Features $/ 2$-track stereo on 1 -inch tape with a third. center channel for SMPTE time code or other cueing data; gapless punch-in/punch-out: spot erase: microprocessor-controlled transport: XI R balanced inputs/outputs and phono inputs/outputs
$\$ 3.945$

## E-2 ()pen-Reel Dech

3-channel stereo master recorder/reproducer openreel tape deck. Features standard 12-Irack stereo on ta-inch tape with a third. center channel for SMPTE time code or other cueing data; gapless punch-in/punch-out; spot crase; microprocessor-controlled transport: X1.R balanced inputs/outputs . . . $\$ 3.750$

## 1-20 Open-Reel Deck

2-track recorder/reproducer open-red dect. Features stardard iz-trach stereo format: $15 \mathrm{ips}: 1$ d-inch tap. $7-$ inch reels. FR 40-20.000 H/
$\$ 1.500)$

## REVOX

B77 NKII Stereo Tape Recorder
Stereo open-reel tape recorder with 3 motors features two speeds ( 3.75 jps and 7.5 jps ): $10.5^{\prime \prime}$ recl capacity: front-panel vari-speed control $\pm 10 \%$; integrated-drive-logic computer-ty pe push-pont function heys: built-in tape cutter; dual to meters with peak hevel indicators: separate lefi/right record and input level controls; tape monitor switch; provision for remote control of all functions and electric limer operation: connectors for remote control of tape transport functions. remote control of variable tape ipeed. and


High Fidelity Meets High Style


Music is an art that meets its match in
the JAMO ART © loudspeaker.
For hi-fi that makes its stotement in sight
as well as sound, hang it up: JAMO ART.

## Audio from Denmark.

slide projector or crossiade unit. W\&F less than $\pm 0.1 \%$ at 3.75 ips . less than $0.08 \%$ at 7.5 ips ; R $+2 /-3 \mathrm{~dB} 30-16,(0) 0$ (11/al $3.75 \mathrm{ips} .30-20,000 \mathrm{~Hz}$ at $7.5 \mathrm{ips} ; \mathrm{s} / \mathrm{N}<6+\mathrm{dB}$ at $3.75 \mathrm{ips},<67 \mathrm{~dB}$ at 7.5 ips ; mic input level/imp $0.15 \mathrm{mV} / 2.2$ kilohms (low position. $50-10-600$-ohm mikes), $2.8 \mathrm{mV} / 110 \mathrm{kilohms}$ (high. 20 kilohm mikes). Also available in high-speed. lowspeed, super-low-speed. two- and four-track versions. $16.3 \times 17.8 \times 8.14 \mathrm{in}: 37.5 \mathrm{lb}$
$\$ 2.450$

## TEAC

N-2000N Ibs Open-Reel Mastering Deck
2-track 3-head open-reel tape deck with dbx 1 ceatures pitch control: EE tape capability: full logic feather-touch controls: tape/source monitoring; fine bias adjustment: real-time counter: mic/line mixing: mic attenuator; separate L/R input-level controls: direct-drive motor: accepts $10.5^{\prime \prime}$ reels; rec mute: timer function. Remote control optional. Tape speeds $15 / 7.5 \mathrm{ips}$; wou and flutter $0.02 / 0.03$ wrms at 15/7.5 ips: $\mathrm{S} / \mathrm{N} 100 \mathrm{dbx}$ in. $46 \mathrm{Jb}: 17.9 \times 17 \times 10.5$ in.
$\$ 2.235$

## UHER

## 1200 Report Monitor Open-Reel Deck

Synchro full-track tape deck with neo pilot. Features 4 heads: stic on/off switch: switchable roll-off filter: built-in monitor speaker: optional beep generator: pilot freouency device for pieture-sync recording. Tape speed 7.5 ips ; FR $40-16,(00) \mathrm{Hz} \pm 3 \mathrm{~dB}$; w\&F $0.15 \%$ wrms: $\mathrm{s} / \mathrm{N} 62 \mathrm{~dB}$ : mike input sens $0.2-15 \mathrm{mV}$ : line input sens 40 mV ; output level 775 mV .3 .8 kg : $28.5 \times 10 \times 23.5 \mathrm{in}$
$\$ 5.049$

## 6(KN) Report LIniversal Tape Recorder

4 -speed (3.75. 1.88. 0.94. 0. 47 ips) tape recorder. Records up to 24 hours on 1 tape. Designed for monitoring. court reporting. surveillance. Features $5^{\prime \prime}$ red capacity; built-in IONR; switchable auto level control: elctronic tape tension control: 4 motors; switthable loudspeaker; tape counter; $A / v$ input jack. $11 \times 3.5 \times 9$ in; 8 lbs.
$\$ 1.729$
Report Monitor Series Tape Recorders
Reporl .l/omuor weries decks fedure 3 heads. Lid fionction indicutors. whegrated power supply. fully. clectronic amp swithhing, hattery or $\mathbb{1}^{*}$ operallom. fapestension regulators, dhecosl ahomtmum casings. All models can he used in portable or statomarl upphculions. Spereds 7.5, 3.75. I.NS. 0.94 ips.
440) Report Monitor, 4-track stereo. . . . . . . \$1.779

42(M) Report Monitor. 2-track stereo.
$\$ 1.779$


4000 Report Monitor AV. Half-track monaural $\$ 1.665$

## Accessories

F-423 Diapilot. Self-contained unit for synchronized tape control operation of automatic slide projector for use with Wher open-reel and casseltc decks. IDIN plug conncctor . . . . . . . . . . . . . . . . . . . . . . . $\$ 260$
F413 Acoustic Stop/Start Switch. Acoustic activated start/stop switch. Designed for use with ther tape decks.
$\$ 1.39$
7.-125. 1 Power Supply. Power supply and charger for Uher Monitor series decks.


## ACOUSTIC RESEARCH

## ES- 1 Manual Turntable

Manual belt-drive turntable with 24-pole synchronous motor. Features 33 and 45 rpm speeds. W\&I $0.04 \%$ urms; rumble -78 dB ; thective tonearm mass without cartridge 14.5 g : effective tonearm length 229 mm : max tracking error $2.6 \lambda .7 \times 18.19 \times 15.25$-in (dustcover down); 18 lb . Natural cherry. with toncarm . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$725 Natural cherry, without tonearm . . . . . . . . . . $\$ 550$

## F.B-101 Manual Turntable

Manual belt-drive pivoted-arm turntable with fully isolated 3-point suspension. Arm and platter on subchassis formed by pressed-steel T-bar springsuspended and damped at 3 points. 33.33 and 45 rpm . Features 12-pole synchronous motor ( 500 rpm at 50 H z. 600 rpm at 60 Hz ): 3.9-lt platter: detachable carbon-liber headshell with clamping screw on arm; base finished in ouled walnut vencer. W\&F $0.05 \%$ InN: rumble -72 dB tin: cffective tonearm mass without cartridge 12 g : cartridge weight range $3-9 \mathrm{~g}$ : effective tonearm length 229 mm ; overhang 16 mm ; vertical and horzontal friction $<100 \mathrm{mg}: 7 \times 18.19 \times 15.25$-in (dustcover down): 13.5 lb .
. $\$ 500$

## ADC

1:I 60) Automalic Turntable
Lincar-iracking belt-drive P-mount turntable. Features 33.33 and 45 rpm : soft-touch electronic controls; , slluminated electronic strobe with pitch control: anti-feedback suspension. $5.0 \times 16.5 \times 15.5 \mathrm{in}: 15.5$ lh.
$\$ 150$

## I.I 34 Automatic Turntable

Compact linear-tracking belt-drive P-mount turntabe. Features 33.33 and 45 rpm : 2 [x-servo-controlled motors; anti-feedback suspension. $3.5 \times 13.25$ x 13.75 m : 9.5 lb .
$\$ 120$

## RC1 Changer Turntahle

Belt-drive turntable stacks up to 4 records. Features 33.33 and 45 rpm : viscous-damped cucing: clectronically controlled ix-servo motor: ADC magnetic cartridge included.
$\$ 110$

$$
a / d / s /
$$

Atelier P\& Automatic Turntable
(an be conirolled by remote when used with $\mathrm{a} / \mathrm{d} / \mathrm{s} /$ R4 receiver or CC4 Iuner/preamp. With quarte-crystal-controlled direct drive: pivoted arm: ultra-low-mass toncarm; 33.33 and 45 rpm ; variable speed control with strote: holds platter and tonearm on a

subchassis that floats on 4 tuned mounts. W'\&F $\pm 0.025 \%$ wrms: rumble -75 dB IIN B. 53 dB IIN A : effective tonearm length 8.69": max tracking error $2.2^{\circ} ; 4.53 \times 17.5 \times 14.25$-in (dustcover down): 11 lh........... . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 700$

RC'1 I nified Remute Control
Infrared wireless remote controls P4, R4 recenver. CD3 3 D player. and other $\mathrm{a} / \mathrm{d} / \mathrm{s} /$ components $\$ 150$

## AKAI

## AP-A305(-B Belt-Drive Turntable

Semi-auto operation: Ix-servo motor: helt-drive system; T4P type plug-in cartidge; front panel operation control.
$\$ 99$

## BANG\&OLUFSEN

Beogram S500 Automatic I urntable
Automatic turntaje with short tangential tonearm features both standard playing speeds of 33.33 and 45 rpm: silver and black: remote controlled by B\&O Master Control Panel; repeats play up to 7 times; leafspring suspension. compatible with $\mathbf{B} \& \mathrm{O}$ mucro-cross cartridges: auto record-size sensing: auto interior light. W\&F $0.06 \%$ DIN. $0.03 \%$ wrms: IDIN-weighted rumble $-80 \mathrm{~dB}: 12.5 \times 3 \times 12.75 \mathrm{in}: 11.6 \mathrm{lb} \ldots \$ 499$

## Beogram 9000 t urntable

Tangential uracking toncarm features both standard playing speeds of 33.33 and 45 rpm ; Optimum Pivot Point tonearm suspension; 3-point leaf spring and

pendulum suspension system; integrated low-mass toncarm/cartridge combination; accepts all sume 1-5 cartridges; servo-controlled Ix motor; W\&\& less than $0.03 \%$ wrms. $16.5 \times 3 \times 12.75 \mathrm{in}: 11.7 \mathrm{lh} \ldots . \$ 450$

## Beogram 3300 Belt-Drive Turntable

Belt-drive tangential tonearm features standard playing speeds of 33.33 and 45 rpm : remote control with Terminal 3300 remote. Master Control Link. or Datalink systers: black plexiglass and brushed aluminm; can be wall mount-ed with optional shelves: repeat; interior iight; auto pause at end of tape. and cassette deck pauses at end of L.P; leaf-springsuspended subchassis; neoprene belt: electro-nic speed control; $16.5 \times 3 \times 12.75$ inches: 11.7 pounds
1.7

## Beogram IX-2 tutomatic Turntable

Tangential-tracking automatic turntable with beltdrive features both standard playings speeds of 33.33
and 45 rpm ; lixed headshell. Reconmended tracking force 1-1.5 s : Wow and flutter $0.03 \%$ DIN: rumble $-80 \mathrm{~dB} ; 165 \times 3 \times 12.75 \mathrm{in} ; 11.6 \mathrm{th} . \ldots . .$.
Beogram RX-2 Automatic Turntable
Belt-drive turntable with pendulum-suspended chas-

sis and straight pivoting tonearm: 33 and 45 rpm: fixed headshell. Recommended tracking force 1-1.5 g: W\&F 0.035\% DIN: rumble -75 dB : $16.5 \times 2.5 \times$ $17.9 \mathrm{in}: 13.2 \mathrm{lb}$
$\$ 249$

## DENON

Itl arm and auto functoons of Denon hurnahles are nencomacy. microprocessor comurolled.

DP-591. Direct-I)rive Turntable
Features massive wood base with isolation: $5.5-1 \mathrm{lb}$ platter with high-torque direct-drive Ar motor. Lift only.
DP-47F Lhirect-Drise Turntable
Features dynamic servo tracer: flat-twin direct drive: full auto plus locate function; thick wood base $\$ 450$ DP-35B Automatic Turntable
Features dynamic servo tracer: flat-twin direct drive: high-density compound base. Black . . . . . . . . \$325 DP-23F 1 urntable
Full-size automatic turnable with dynamic servo tracer. Black . . . . . . . . . . . . . . . . . . . . . . . . . . \$275 DP-7F Turntable
P-mount automatic turntable with dynamic servo tracer. Black
. $\$ 200$

## DUAL BY ORTOFON

## ( $\mathbf{S} 7000$ Semiautomatic Turntable

Belt-drive turntable with 24 k gold-plated finish. Features ') ptimum Pivot gyroscopic gimbal tonearm system; carbon liber headshell; fixed- and variableVTA tonearm: heavy metal feet: full-floating subchassis; resonance-damped die-cast aluminum platter: auto stop: three standard operating speeds at 33.33. 45 and 78 rpm . Wow and flutter less than $0.025 \%$ : signal-to-noise ratio $80 \mathrm{~dB} .17 .5 \times 5.25 \times$ 15.25 inches; 25 pounds.
$\$ 750$

## CS5000 Semiautomatic Turntable

Belt-drive turntable with hall-effect motor and 4 point fill-floating suspension system. Features quartz-monitored 3 -speed electronic conirol: opti-mum-pivot tonearm design; acoutic mat; 33.33, 45. and 78 rpm . W\&F $0.015 \%$

CS505-3 Semiatomatic Turntable
Belt-drive, heavy-mass platter and acoustic mat. Fcatures floating chassis design; variable-pitch; carben fiber headshell on IIM tonearm. Walnut or black wood base.
$\$ 350$

## C 5503 -1 Semiautomatic Turntable

Belt drive turntable features solid block shockabsorbing chassis with damping feet: heavily damped platter: 11 LM tonearm; carbon fiber headshell. 33/45 rpm. W\&F < $0.07 \% / 0.04 \%$; rumble, unwid. $17.3 \times 4.5$ $\times 14.3 \mathrm{in}$. Black base

CS2215KM Fully Automatic Turntable
Belt drive featuring die-cast aluminum platter with vario-pitch; shock absorber chassis: HL.M tonearm with detachable headshell. Black base $\$ 300$

## HEYBROOK BY D'ASCANIO AUDIO

1T-2 Series II Turntable
Hand-assembled belt-drive 33.33- and 45-rpm armless manual turntable with removable armboard. Features low-speed synchronous motor driving massive 2-piece platter: adjustable 3-point spring-suspension subchassis of cast aluminum; lamınated armboard: massive wood base. Finished in real walnut or gloss black. W\&F $<0.1 \%$ DIN peak wid; rumble -73 dB wid DIN-B. $6.25 \times 17.5 \times 14.25 \mathrm{in}$; $26 \mathrm{lb} . . \$ 650$

## HITACHI

IITMD46 Automatic Turntable
Linear tracking: belt drive: MM cartridge with diamond stylus: auto size/speed selector: photo sensor return; feather-touch $1 \mathbf{c}$-logic control: muting: frontpanel operation: die-cast aluminum-alloy platter: remote controlled through Hitachi HTASOAV or HPTI20AV. Wow and flutter $0.045 \%$ weighted root mean square; signal-to-noise ratio 70 dB DIN-B $\$ 180$

## JVC

Al.FQ555BK Direct-1)rive Turntable
Features coreless $1 \times$-servo direct-drive motor; fullyautomatic operation with automatic record size and speed selector; low-mass straight tonearm; highstablility cabinet support system; large insulators; arm cueing control; double-servo quartz control; illuminated strobe on platter perimeter; plug-in cartridge connector.
. . $\$ 240$
ALF353BK Automatic Turntable
Automatic turntable features automatic record size and speed selector: $1 \times$-servo motor: arm cueing control; plug-in cartridge connector system; lowmass straight tone-arm.
.$\$ 175$
Al.Al51BK Semiautomatic Turntable
Features automatic arm return; te-servo motor: arm cueing control; low-mass straight tonearm: plug-in cartridge connector.
$\$ 100$

## KENWOOD

## KD-67F Direct-Drive Turntable

Features fully automatic mechanism; $\mathrm{T}-4 \mathrm{P}$ cartridge compatible tonearm: system remote controllable: auto function; linear tracking; coreless and slotless Ft servo motor: 2 speeds: wow and flutter less than $0.025 \%$; fre-quency response $20-20,000 \mathrm{~Hz} .4 .31 \times$ $16.56 \times 14.13$ inches: 10.4 pounds $\qquad$

## KD-77FC Direct-Drive Turntable

Features linear tracking: 7 -song random access programming; auto-dise size \& speed selection; fully automatic mechanism; dual magnet type cartridge included; system remote controllable; auto function; coreless and slotess Fi; servo motor; 2 speeds; wow and flutter less than $0.025 \%$; frequency response 20 $20.000 \mathrm{~Hz} .4 .06 \times 16.56 \times 15.13$ inches; 12.6 pounds


KD-47F Belt-Drive Turntable
Belt-drive turntable with fully-automatic mechanism. Features system remote controllable ability: T 4 P cartridge compatible tonearm; If servo motor; 2 speeds: Wow and flutter $0.05 \%: 4.31 \times 16.56 \times 13.5$ inches; 7.5 pounds
$\$ 119$


KD-37R Belt-Drive Turntable
Betl-drive turntable with auto return mechanism. Features T-4P cartridge compatible tonearm: D servo motor: 2 different playing speeds; w\&t 0.05\%; frequency response $20-20,000 \mathrm{~Hz}, 3.94 \times 16.56 \times$ $13.06 \mathrm{in}: 8.2 \mathrm{lb}$
. $\$ 79$

## KYOCERA

## Pl.-910 Nlanual Turntable

Armless belt-drive turntable with ceramic platter and base. Features 33.33 and 45 rpm ; variable speed control with strobe: cutless-core power iransformer: dual suspension; heavy-duty DX'-servo brushless motor: 11-lb platter assembly. Wow and flutter $0.025 \%$ weighted root mean square; signal-10-noise ratio 78 dB DIN-B; accepis $9^{\prime \prime}-10^{\prime \prime}$ toncarms. $18 \times 7.5 \times 15.25$ inches; 44 pounds.
$\$ 2.060$

## LINN PRODUCIS

## I.P12 Nanual Single-Play Turntable

Belt-drive $33.33-\mathrm{rpm}$ turntable with manual tonearm; 24-pole synchronous motor; 12" zinc-aluminum alloy die-cast platter with felt mat: 1-point oilbath bearing; hardened tool-steel spindle; adjustable 3-point spring-suspension subchassis; heavy-gauge stainless-sted base plate; solid hardwood base; optional $45-\mathrm{rpm}$ adapter. rumble -60 dB unwtd: speed

accuraty $\pm 0.04 \% ; 5.5 \times 17.5 \times 14 \mathrm{in}$.
Avis Manual Iurntable
With (lass A amplifier: belt-drive: pivoted arm. Plays $33.33-\mathrm{rpm}$ I.I's and $45-\mathrm{rpm}$ singles. Speed

accuracy $0.1 \%$; W\&F 0.05\%; rumble -75 dB IDIN; effective tonearm length 284 mm ; $16 \mathrm{lhs} . . . . \$ \$ 740$

## IUXMAN

## P-102 Belt-Drive Turntable

Automatic linear-tracking turntable with strobe. variable spced control. floating toncarm/platter suspension, cueing lever, repeat play, manual play. Pmount compatible. Remote capable. W\&F $0.04 \%$ wrms; rumble 70 dB ; effective tonearm lengih 133 mm ; max traching error $0.1^{\circ} .16 .36 \times 4.5 \times 14.06$ in (dustcover down): 11.61 lb

## MARANTZ

'IT'-451 1 , inear-Traching Turntable
Automatic linear-tracking turntable. Features auto-speed/-si/c selector: $P$-mount compatible: 33.33 and 45 грп\%; w\&F $0.05 \%$ wrms; rumble $-70 \mathrm{~dB} .3 .75 \times$ $16.36 \times 13.56 ; 9.5 \mathrm{fb}$.

## TTV-185(IBL Belt-Drive Turntable

Belt drive turntable features semiautomatic $1 x$-servo motor; damped cueing; $P$-mount cartridge; straight low-mass tonearm: front panel controls. $3.87 \times 16.5 \times$ $13.5 \mathrm{in} ; 9.5 \mathrm{lb}$.

139
ITI-170("I'BI. Semiautomatic Turntable
Belt drive turntable features front panel cueing; $P$ mount cartridge: 33.33/45 rpm; W\&f $0.08 \%$ wrms; rumble $-55 \mathrm{~dB} .4 .63 \times 16.5 \times 13.25 \mathrm{in} ; 9.5 \mathrm{lb} . \mathrm{\$} 100$

## MICROSEIKI By ANALOG EXCELLENCE

SZ-IT Manual Iurntable
Massive rinc-alloy turntable system with vacuum hold-down: belt drive: $\mathbf{3 3 . 3 3}$ and 45 rpm ; variable speed control; strobe; outboard air-bearing motor with high-inertia flywheel spindle: 44-lb bronee platter. W $\& F 0.025 \%$ wrms; $\sin 90 \mathrm{~dB}$ A-wid. $12 \times 5 \times$ 18-in (dustcover down): 240 lbs . . . . . . . . . \$14.000 ST.-1TSS. Same as above with 48 -1b steel platter. 2 tonearms, and isolation base. $260 \mathrm{lbs} . .$. . . $\$ 20,000$

## SX-111FV Belt-Drive Turntable

Vacuum hold-down: air-bearing system; rosewood cabinet; 22-lh bronze platter; 33.33 and 45 rpm ; variable speed control. W\&F $0.0225 \%$ wrms: S/N 78 dB A-wid; $532 \mathrm{~cm} w \times 400 \mathrm{~d} \times 230 \mathrm{~h} \ldots .$. . $\$ 3,995$

## SX-555FVW Manual Turntable

Belt-drive turntable with patented quadraplex isolation feet and vacuum hold-down; rosewood cabinet; 17-1b air-bearing bronec and aluminum duplex platter; 33.33 and 45 rpm ; variable speed control. Wow and flutter $0.025 \%$ weighted root mean square: signal-to-noise ratio 78 dB A -wid. $7.5 \times 21.5 \times 17.5$-in (dustcover down); 47 lbs
$\$ 2.995$

## RX-1500VG Thread-Drive Turniable

20-1b bronze platter turntable with light-force vacuunl record hold-down; 33.33 and 45 rpm; variable speed conirol; nonresonant zinc alloy frame and outboard moior: 4-lb sealed oil-bath center spindle. W\&F $0.025 \%$ wrms: $\mathrm{S} / \mathrm{N} 85 \mathrm{~dB}$ A-wid. $26 \times 6.5 \times 16 \mathrm{in}$ : 100 lbs.
$\$ 2.995$
RX-1500FVG. Air-bearing wersion of above. 120 Ibs
$\$ 3.995$

## BI -99V Manual Jurntable

Belt-drive turntable with light-force vacuum holddown; walnut finished cabinet: 33.33 and 45 rpm : variable speed control; 7-lb aluminunn platter; 4-lb tonearm base drilled to individuals' specifications. w\&F 0.025\% urms; s/N 78 dB A-wtd. $7.5 \times 21.5 \lambda$ 17.5-in (dustcover down): 35 Ibs. . . . . . . . . . \$1.895 BI. 99 VW . As above but will SAEC WE-407 toncarm
$\$ 2.295$

## RX-1500 Basic I urntuble

Belt-drive nonresonant zinc-alloy turntable with ability to mount 2 tonearms simultaneously. Features 33.33 and 45 rpm : variable speed control: aluminum platter w\&f $0.025 \mathrm{wrms} ; \mathbf{s} / \mathrm{N} 78 \mathrm{~dB}$ Awid. $6 \times 19 \times 13-\mathrm{in} ; 40 \mathrm{lbs}$.
$\$ 1,495$

## NIKKO AUDIO

P-5 Semiautomatic Turntable
Direct-drive semiautomatic turntable with 20-pole. 30 -slot brushless ix 3 -phase motor. Fcatures die-cast aluminum platter; straight-line toncarm; $\pm 3 \%$ pitch control. W\&F $0.085 \%$ wrms: rumble 38 dB weightcd.
$\$ 220$

## P-3 Semiautomatic Turntable

Sc-miautomatic full-size bell-drive turntable with $P$ mount tonearm, repeat hey, and manual damped cucing. W\&F 0.045\%.
$\$ 110$

## ONKYO

CP-1057FB Integra Automatic I urntable
Computer-controlled quart/-PII direct-drive turntable. Features pivoted arm; strobe; 33.33 and 45 rpm ; triple-stage isolation: floating subchassis on 3-point suspension; gimbal-support tonearm bearings; com-puter-controlled tonearm functions: separate motor for tonearm; 2-speed scarch; straight low-mass toncarm; Polysorb vibration absorbing compound for record mat and cabinet feet: gold-lacquered platter: gold-anodized tonearm; opto-electronic record-end detector, black tinish. Remote control optional. Wow and flutter $0.023 \%$ weighted root mean square: rumble $<80 \mathrm{~dB}$; effective tonearm length 226 mm ; max tracking error $+3^{\circ},-1^{\circ} .17 .44 \times 6.25 \times 16.12 \mathrm{in}$; 20 lb
\$360

## CP-1046FB Automatic Turntable

Computer-controlled direct-drive pivoted-arm turntable. Features PLI: quartz-lock: 33.33 and $45 \mathrm{rpm} ; 2$ color quartz-lock indicator: triple-stage isolation system with floating subchassiss: 3 -point subchassis suspension; computer-controlled motor-assisted tonearm; opto-electronic record-end detector; straight low-mass tonearm; gimbal-precision toncarm bearings; 2-speed search; black finish. Remote control optional. W\&F 0.025\% wrms; rumble $<75 \mathrm{~dB}$; effiective tonearm Iength 224 mm : max tracking error $+3^{\circ},-1.5^{\circ} .16 .5 \times 5.06 \times 14.75$ in (dustcover down): 13 b \$240

## CP-1036A Semiautomatic Turntable

Direct-drive pivoted-arm turntable. Features Pll: quartz-lock 33.33 and 45 rpm ; triple-stage isolation with floating subchassis; front-panel controls: straight-line low-mass tonearm: gimbal-support precision tonearm bearings; black finish with smoked dustcover. U\&F $0.025 \%$ wrms; rumble $<70 \mathrm{~dB}$; effective toncarm length 224 mm ; max iracking error $+3^{\circ},-1.5^{\circ} .16 .5 \times 5.06 \times 14.75$ in (dustcover down); 12 lb

CP-116F Semiautamatic Turntable
Beit-drive truntable with auto-return and -reset controls. Features front-panel controls: straight-line low-mass tonearm: damped cueing. W\&F 0.045\% wrms: rumble $<70 \mathrm{~dB}$ : effective toncarm length 210 mm ; max tracking error $+4.5^{\circ},-1^{\circ} .16 .5 \times 5.0 \mathrm{~N} \times$ 14.75 in (dustcover down).
$\$ 120$

## ORACLEAUDIO

## Premiere Mark IHI Manual Turntable

Belt-drive turntable without tonearm. Remote control power drive modulc, 33.33 and 45 KPM : variablespeed control; strobe: hi-torque IXC motor; adjustable spring-suspension system: record-coupling system: tonearm cartridge protracior, strobe disc included. 20 $\times 6.5 \times 15 \mathrm{in} ; 42 \mathrm{lb}$
$\$ 2.350$
Gold Plated. Premiere Mark III aluminum and 24 k gold plating
$\$ 2,950$

## Delphi Mh Ill Manual Turntable

Belt-drive turntable without tonearm. Features 33.33 and 45 rpm ; hi-torque DC motor: adjustable springsuspension system: record-coupling system: tonearm/cartridge protractor and strobe disc included. $19 \times 6 \times 14 \mathrm{in} ; 35 \mathrm{lb}$
$\$ 1,395$
Dephi Aluminam. Aluminum/24k gold plating . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.995$
Delphi Black. 24k gold plating $\$ 2.295$

## Alexandria Marh III Manual Turntable

Belt-drive turntable without tonearm. Features 33.33 and 45 rpm ; hi-torque IC motor; adjustable springsuspension system; record-coupling system. $20 \times 6 \times$ IS in; depending on finish.
$\$ 850$ to 1,050

## PARASOUND

T/FS-880 Semiautomatic Turntable
Belt-drive: floatıng suspension (motor separate from subchassis); P-mount compatible: die-cast platter: decoupled counterweight. W\&F $0.025 \%$; rumble -72 dB ; effective toncarm length $222 \mathrm{~mm} ; 17 \times 4 \times 14.25$ in.
$\$ 200$
TrIb-720 Semisutomatic Jurntable
Belt-drive: front-mounted controls; P-mount compatible, 33.33 and 45 rpm ; variable speed control; strobe; pivoted straight arm; $D$ (-servo motor: damped spring suspension isolated from bottom of base. W\&F 0.05\% wrms; rumble -65 dB ; effective tonearm mass without cartridge 14 g : effective tonearm length 215 mm : max tracking error $1.6^{\circ}$. 16 x $3.75 \times 12.75$ in (dustcover down): $10 \mathrm{lb} . . .$.

## PIONEER

Flite Pl-90 Al.tomatic Turntable
Direct-drive turntable with coreless, quartz-PLL ix servo motor with stable hanging rotor. Features straight tonearm made out of alumina-ceramics; $331 / 3$ and 45 rpm play speeds: $143 / 16$-inch platter. w\&t $0.018 \% .8 .5 \times 23.5 \times 17 \mathrm{in}$
. $\$ 950$

## PL-910 Automatic Turntable

Belt-drive turntable with De servo-motor. Features statically balanced linear tracking tonearm with DRA: $331 / 3$ and 45 rpm play speeds; integrated IM type cartridge .6 mm diamond siylus. w\&F . $06 \%$. $16.5 \times 4.1 \times 14 \mathrm{in} ; 6 \mathrm{lb}, 3 \mathrm{oz}$
$\$ 400$
PL-670(BK) Automatic Turntable
Direct-drive turntable with Stable Hanging Rotor. Features dynamic resonance absorber; T4P P-mount cartridge adaptor: Polymer Graphite straight tonearm; auto disc size selector. u \&F $0.025 \% .4 .6 \times 16.6$ $x \mid 4.4$ in
$\$ 175$

## PI-590 Automatic Turntable

Belt-drive turntable with DC servo-motor. Features statically balanced straight tonearm: 3313 and 45 rpm play speeds; MM type cartridge: .6 mm diamond stylus. W\&F . $6 \% \% .16 .5 \times 3.75 \times 14 \mathrm{in} ; 6 \mathrm{lb}, 3 \mathrm{oz} \$ 135$

## RCA

MTr230 I inear Tracking Turntable
Dimensia turntable with remote-control operation and on-sersen stalus indication when used with Dimensia monitor. Features belt-drive design; p-

mount cartridge: programmable track sclection; system record-protection logic: auto size and speed selection; cue muting. $\mathrm{s} / \mathrm{N} 65 \mathrm{~dB}$; W\&F less than $0.06 \% .14 .63 \times 3.5 \times 14.25 \mathrm{in}$.
\$249

## REALISTIC

## LAB-2200 Direct-Drive Turntable

Automatic linear-tracking turntable with Realisti-c/Audio-Technica dual-magnet P-mount cartridge, repeat bution, straight tonearm, strobe, variable speed conirol, 33.33 and 45 rpm . W\&F $0.065 \% \mathrm{wrms}$ : rumble 62 dB IIN: effective tonearm length 132 mm.
. $\$ 150$

## LAB 450 Semiautomatic Turntable

With Realistic/Shure mM cartridge; direct drive; neon strobe: straight tonearm: damped cueing; frontpanel controls: $\mathbf{3 3 . 3 3}$ and 45 rpm ; adjustable antiskating; rubber mat; 45 adaptor. Rumble -65 dB ; W\&F <0.05\%.
$\$ 130$
I.AB-330 Turntable with Phono Preamp

Semiautomatic turntable with switchable stereo preamplifier for compatibility with MM inputs, ceramic phono inputs, or high-level tape or aux inputs. With Realistic/Audio-Technica carridge; belt drive: neon strobe, pitch control; damped cueing; rubber mat; 45 adaptor: straight tonearm; electronically controlled IC motor; 33.33 and 45 rpm . Kumble - 55 dB ; W\&F $<0.1 \%$.
LAB-89. Similar to above except auto changer that stacks 4 iecords
$\$ 90$

## REVOL.VER By MUSIC HALI.

## Revolver Bell-D)rive Turntable

Split-plinth turntable with plinth and platter of medium density fibreboard and self-damping material. AC synchronous motor with 2 -speed stepped pulley: et hylene proylene drive belt; 3 molded nonadjustable feet. Includes Precision Instant Cirip clamp. starmat. lubricating oil. With Revolver tonearm. Redwood high-gloss finish. . . . . . . . . . . . . . . . \$575 Black-ash vencer
$\$ 525$

## Revolver Rebel Turntable

Turntable including tonearm and cartridge. Gray metallic finish.
\$379

## REVOX

B291 Linear-Truching Turntable
Quartz-controlled direct-drive turntable with patented Revox Linatrack system. Features ultra-shon linear-tracking tonearm; pitch control regulation of $\pm 9.9 \%$ in precise $0.1 \%$ steps, with u.ED display showing the variation; P-mount cartridge adaptor; channel balance: auto start: front-panel-mounted controls; $\mathbf{W} \& \mathrm{~F}<0.05 \%, 17.7 \times 5.6 \times 15.6 \mathrm{in} ; 20$ lb.
$\$ 1.500$

## SANSU1

## P- 1000 Auto-Return Turntable

Automatic turntable features low-mass straight tonearm: auto-return operation: precision IX motor: cue operation; remote capability. Signal-to-noise ratio 72 dB ; Cartridge frequency response $20-20,000 ; 0.6$ milli-meter diamond stylus; $1.5 \times 16.5 \times 13.5$ inches: 7.7 pounds

## P-900E Semi-Automatic Turntable

Features belt-drive; low-mass straight tonearm; automatic return and power on/stop; cue; cut: pitch control and stroboscope. No cartridge. Wow and flutter less than $0.1 \%$ weighted root mean square: signal-to-noise ratio greater than $72 \mathrm{~dB} .3 .6 \times 16.5 \times$ 1.3 inches: 8.8 pounds. $\$ 90$

## SCOTT

PS4004 Automatic Turntable
Belt drive; 33.33 and 45 rpm ; soft-touch controls: integrated low-mass magnetic carridge: pitch control with electronic strobe; frequency-governed $1 x$ servo motor: insulating feet; LED speed indicators: goldplated output plugs. W\&F $0.06 \%$ wrms; rumble $<62$ dB DIN B: $16.8 \times 5 \times 14.6$ in (dustcover down) $\$ 200$

## PS70B Semi-Automatic Turntable

Features low-mass P-mount tonearm; fully-damped cueing: auto return and shutoff; pitch control with strobe: frequency-governed $1 \times$ motor; hinged, adjustable dustcover. $4.4 \times 16.5 \times 13.25$ in (dustcover down)
. $\$ 120$

## PS59C Semi-Automatic Turntable

Semi-automatic belt-drive turntable. Features 33.33 and 45 rpm play speeds: $P$-mount arm and cartridge; pitch control with electronic strobe: frequency-governed IX servo motor: H. \&F $0.1 \%$ wrms; rumble < 55 dB DIN B; $16.8 \times 4 \times 13.3$ in (dustcover down) $\$ 110$

## SHERWOOD

ST-887 Fully Automatic Direct-Drive Turntable Digi-Link remote compatibility with other Sherwood products. P-mount cartridges; direct read-out stylus pressure indicator: DC servo motor: front-panel access to controls: $33.3 / 45 \mathrm{rpm}$ variable pitch: illuminated strobe hinged tinted dust cover. . . $\$ 180$

## PF-II7OR Fully Automatic Turntable

DC-servo motor direct drive; front-panel operating controls: fully automatic start, stop, return: repeat feature: pitch control with Strobe; maximum tracking error $+2.6^{\circ},-1^{\circ}$ : die-cast alloy platter: 45 rpm center adaptor: 2 -speeds; U\&F $0.06 \% ; 4.6 \times 17.3 \times 15.0$ in. .
$\$ 179$

## PM1-1270 Turntable

Belt-drive turntable with MTD straight-line tonearm system. Features auto stop; die-cast alloy platter: pitch control with Strobe: cueing control: straightline tubular static halanced tonearm; maximum tracking error $+2.6^{\circ},-1^{\circ}: 2$-speeds: W\&F 0.08\%: $3.0 \times$ $13.0 \times 9.0 \mathrm{in}$
$\$ 169$

## ST-875 Semiautomatic Turntable

Belt-drive turntable features push-button cueing: auto reject; auto return; IX-servo motor; pivoted arm: P-mount compatible: 33.33 and 45 rpm . W\&F $0.08 \%$ wrms; max tracking error $+2.6^{\circ},-1^{\circ}, 4.88 \times$ $17.36 \times 14.25 ; 11 \mathrm{lh}$
$\$ 100$

## SONOGRAPHE BY CONRAD-JOHNSON

## S(;-3 Manual Turntable

Belt-drive turntable without tonearm. Tuned suspension, resonance-free polymer platier, W\&F $<0.02 \%$ wrms; rumble $-65 \mathrm{~dB} ; 6.75 \times 18.25 \times 14.5-\mathrm{in}$. (dustcover down): 23 lbs
$\$ 449$

## SONY

## PS-FI.7II Automatic Turntable

Front-loading linear-tracking automatic turntable. Features direct drive. PII. quartz-lock. P-mount compatible: 33.33 and 45 rpm ; remote control capability. $17 \times 3.88 \times 15.12 \mathrm{in}: 16 \mathrm{lb} \ldots . . \mathrm{c} . \$ 350$

PS-I.N520 Automatic Turntable
Fully automatic linear-tracking turntable. Features
direct drive, PIL, quarte-lock, P-mount compatible. 33.33 and 45 rpm ; gel-filled feet; remote control capable. w\&F $0.035 \%$ : $\mathrm{s} / \mathrm{N} 75 \mathrm{~dB}$ : effective tonearm length 3 inches; max tracking error $\pm 0.1 \times 17 \times 3.62 \times$ 14.36 in: II lb.
$\$ 270$

## PS-LX430 Automatic Turntable

Belt-drive P-mount turntable with pivoted arm. Features 33.33 and 45 rpm . cueing lever. antiresonance base, dise size selector, remote control capability. W\&F $0.046 \%$; rumble $70 \mathrm{~dB} .17 \times 4.5 \times 14$ in (dustcover down): 9 lh.
$\$ 180$

## SOTA INDUSTRIES

## Cosmos Turniable System

Belt-drive turntable. Features inverted Sapphire bearing: massive 12 lb platter on 22 lb subassembly: 4 point corner weights and matching 4 spring design; regulated $I X$-drive, fully damped, fully isolated motor: vacuum hold-down; vinyl-format VinylMimic: rigid arm support: one-piece-design platter block; motor hard-mounted to subassembly. Comes with vacuum, reflex clamp, electronic flywheel, and deluxe tone arm board. W\&F 0.03 wrms: rumble -88.2 dB ; speed accuracy $\pm .02 \%$; speed adjustment $5 \% .20 .25 \times 16.5 \times 7.5 \mathrm{in}$. Grey corian with wood nlay .............................. $\$ 3500$
High-gloss black. $\$ 4,000$

## Star Sapphire Turntable

Manual 2-speed belt-drive turntable with variable speed control and strobe. Features vacuum holddown; heavyweight ( 22 lb ) sub-assembly for maximum isolation: exclusive inverted bearing with sapphire disc: single piece ( 11 lb ) platter, rim drive: vacuum hold-down system: low-level pressure, continuous through play, adjustable vacuum. Includes acrylic vacuum supermat. All-wood top and speed control panel; heavy-duty dust cover, oak finish u\&t 0.03 wrms: rumble -88.2 dB ; speed accuracy $\pm .02 \%$ : speed adjustment 5\%, $20.25 \times 16.5 \times 7.5 \mathrm{in}$; 44 lb ; oak finish. $\$ 1.600$ African rosewood, Koa, Walnut $\qquad$ $\$ 1.750$ Ebony. Brazilian rosewood, Cocobola rosewood . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.900$ Black satin finish . . . . . . . . . . . . . . . . . . . . . . $\$ 2,000$

## Deluse Sapphire I'Turntable

Features inverted Sapphire bearing: massive 12 lb platter on 22 lb subassembly: 4 point corner weights and matching 4 spring design; regulated $\mathscr{x}$-drive. fully damped. fully isolated motor, w\&t 0.03 wrms. rumble -88.2 dB ; speed accuracy $\pm .02 \%$; speed adjustment $5 \% .20 .25 \times 16.5 \times 7.5 \mathrm{in}$. Oak finish $\$ 1.195$
African rosewood.
$\$ 1,295$

## Options

Vacuum Conversion Kit. For Sapphire model: same vacuum system. same features as on Star available as an upgrade for any Sapphire made. May be installed at factory on new Sapphire $\$ 695$ Flectronic Flywheel. A/C line conditioner for the Sapphire and Star turntables only. Isolates and regulates motor/drive from all outside interference (voltage shifts. EMI, RFI. hash) . . . . . . . . . . . $\$ 300$
Vacuum Acrylic Supermat. For Stars or vacuum Sapphires. Designed for optimal coupling, matched impedance, extreme damping . . . . . . . . . . . . . $\$ 150$ Reflex Clamp. Couples record to platter (in conjunction with Supermat) with reflex action. One pan grabs spindle while the second motion presses record against mat. Simple level action; aluminum casting: decoupled from record with foam.
$\$ 95$
Aluminum Arm Board. For SME. ET-2. I,inn. The Arm, Premier FT-3, MMT, and MMT-VTA turntables.
. $\$ 75$

## TECHNICS

SL.-M3 Automatic Direct-Drive Turntable
Features 33.33- and $45-\mathrm{rpm}$; quartz lock PLL: P.
mount: variable speed; strobe. U\&F $0.008 \%$ wrms: rumble -82 dB ; effective tonearm length 238 mm max tracking error within $\pm 0.05 \%: 20.09 \times 8.06 \times$ 16.09 in (dustcover down); 33.1 lb . $\$ 685$

SL-I 200 MKII Direct-IDrive Disco Turntable
Quartz-controlled 33.33- and 45-rpm manual turntable. Features $\pm 8 \%$ quartz-locked pitch control: quick start and stop; pop-up stylus light; gimbal-suspended tonearm with height adjustment: brushless DC motor: aluminum die-cast cabinet; anti-resonant viscoclastic main base. W\&F $0.025 \%$
$\$ 570$

## SL--M2 Manual Direct-Drive I urntable

Quartz-locked P-mount turntable: 33.3.3 and 45 rpm. variable speed control with optical sensor for end-ofrecord pickup. 4 \& $0.008 \%$ wrms: rumble -82 dB ; effective tonearm length 230 mm ; max tracking error $\pm 2.32 \mathrm{x}: 17.8 \times 6.7 \times 16.2 \mathrm{:} 26.5 \mathrm{lb}$
. $\$ 520$

## SL-MAI Automatic Direct-Drive Turntable

Features PIL quartz lock: P-mount: 33.33 and 45 rpm. U \&F $0.012 \%$ wrms: rumble -80 dB ; effective tonearm length 230 mm ; max tracking error $+0 \times 32$ at inner groove and +2 x 32 at outer groove: 17.22 x $6.69 \times 16.06$ (dustcover down): $19.8 \mathrm{lb} . . . . . \$ 460$

## SI,-J 33 Programmable PI.I. Turntable

Direct-drive automatic P-mount turntable allows up to 8 tracks to be played in any order. Indicates number of tracks on album side and which track is playing. Kemote controlied through some Technics receivers. Features linear tracking: quartz lock: 33.33 and 45 rpm ; front-panel feather-touch controls cueing: auto stylus muting. W\&F $0.012 \%$; rumble -78 dB : effective tonearm length 105 mm ; max tracking error $\pm 0.1 \mathrm{x} .12 .25 \times 4 \times 12.25$ in (dustcover down): 9 lb
$\$ 270$
SL-I. 20 Automatic Linear-I'racking Turntable
Belt-drive P-mount turntable can be operated by remote control through some Technics receivers. Front-panel soft-touch controls: cueing; 2-speed search: auto disc-size/speed detection to prevent tonearm from lowering on empty mat: 33.33 and 45 rpm. W:\&F $0.045 \%$ wrms: rumble -70 dB : effective tonearm length 105 mm ; max tracking error $\pm 0.1 \mathrm{x}$. $17 \times 3.74 \times 13.75 \mathrm{in} ; 8 \mathrm{lh}$
$\$ 205$

## SI.-QD33 Automatic Direct-Drive Turntable

Can be operated by remote control through some Technies receivers. P-mount; 2 motors to avoid mechanical linkages between tonearm and platterdrive motor: end-of-disc detection; electronic feath-er-touch front-panel controls; ultra-low-speed brushless WC motor for platter drive: 33.33 and 45 rpm ; pivoting arm: quartz lock: strobe. H\&F $0.012 \% \mathrm{wrms}$ rumble -78 dB ; effective tonearm mass 7.5 g . length 230 mm ; max track ing error $\pm 2 \mathrm{\lambda} .17 \times 4.5 \mathrm{w} 14.75 \mathrm{in}$ (dustcover down); 10 lh .

## Sl.-QD22 Semi-Automatic P-Mount 'Turntable

Direct-drive turntable with 2 motors to avoid mechanical linkages between tonearm and platter-drive motor: end-of-disc detection: ultra-low-speed ix. brushless motor: pivoting arm; PIL quartz lock: strobe: 33.33 and 45 rpm ; front-panel electronic feather-touch controls. W\&F $0.012 \%$ wrms: rumble -78 dB : effective tonearm mass 7.5 g . length 230 mm: max tracking error $\pm 2 \mathrm{x} .17 \times 4.5 \times 14.75 \mathrm{in}$ (dustcover down): 10 lb .
$\$ 195$

## SL-HI)22 Semi-Automatic P-Mount Turntable

Belt-drive turntable with aluminum die-cast fullgimbal pivot with highly rigid lightweight aluminum tonearm. Features front-pancl cueing control: TNRC vibration-isolation base: pivoted arm; 33.33 and 45 rpm. w\& $0.45 \%$ wrms: rumble -70 dB DIN B: 17 x $4.5 \times 14.75$ in (dustcover down): 8 lb
$\$ 135$
SI.-BDI Manual P-Mount Turntable
Belt-drive turntable with variable speed control: strobe: 33.33 and 45 rpm . W\&t $0.045 \%$ wrms: rumble

## TURNTABLES

-70 dB : effective tonearm mass without cartridge 7.5 g . length 230 mm : max tracking error $+0 \times 32^{\circ}$ at inner groove and $+2 \mathrm{x} 32^{\circ}$ al outer groove; $16.94 \times$ $3.94 \times 14.75 \mathrm{in} ; 7.1 \mathrm{lb}$. $\$ 130$

SH-100 Plug-In Iteadshell
Aluminum die-cast universal plug-in headshell with calibrated overhang cursor and gold-plated contacts for Technics tonearms . \$16

## Turmables Hithout Tonearms

SP-10NK3 33/45/78-rpm Turntable
Quartz-synthesizer direct-drive turntable with high torque for full speed in 30x of rotation; electronic. mechanical braking for speed change in 0.3 sec: highprecision integral rotor-platter quartz motor: quartzlocked pitch control ( $0.1 \%$ steps to $\pm 9.9 \%$ all speeds). Separate power supply in remote-control unit with numeric 1.EI) speed. pitch displays; soft-touch switches (start/stop duplicated on turntable). W\&F $0.015 \%$ wrms $\pm 0.001 \% ; 14.22 \times 14.22 \times 4.44$ in; turntable weight 40 lb : power supply/control unit $13.2 \mathrm{lb} \$ 2.840$ SII-1085. Optional turntable base . . . . . . . \$1.230

SP-10MK2A 33/45/78-rpm Turntable Quartz-synthesizer direct-drive turntable with high torque for full speed in 25 x of rotation: electronic mechanical braking for speed change in 0.3 sec; separate power supply. remote-control unit. W\&F $0.025 \%$ wrms $\pm 0.035 \%$ : rumble -70 dB DIN-B; speed drift within $\pm 0.002 \%: 14.49 \times 14.49 \times 4.02$ in; 20.9 lb .
$\$ 1.550$
SH-10B3. Optional base $\$ 950$

SP-15 33/45/78-rpm Turntable
Quartz-synthesized direct-drive turntable reaches full speed in $0.4 \sec$ ( 40 x of rotation); stops in 0.4 sec ( 40 X of rotation) at $33.33 \mathrm{rpm}: \pm 9.9 \%$ quartz-locked pitch control. W\&F $0.025 \%$ wrms; rumble 56 dB DINA. 78 dB DIN-B.
. $\$ 980$
SP-25. Similar to SP-15 except no 78 -rpm speed. $\pm 6 \%$ pitch control . . . . . . . . . . . . . . . . . . . . . $\$ 600$ SH-15B2. Heavy acoustic rubber base with simulated woond for SP-25 and SP-IS . . . . . . . . . . . . . $\$ 540$ SH-15B3. Similar to SH-15B2 except heavy acoustic rubber base only $\$ 540$

## THORENS By EPI

All Thorens turmables are bell-driven. single-play umts having stratght tuhular tonearms for maximum rigidu!: gimbal suspension: amiskate control: 9.12" effectme tonearm length: tracking error $<0.18 \% \mathrm{~cm}$ (<0.46\%/in.).

TD 520 Semiautomatic Single-Play T'urntable Belt drive with automatic tonearm lift. motor shutoff. 33.33, 45, 78 rpm ; electronic speed selection: $\pm 6 \%$ pitch control; stroboscope; velocity-sensing auto shut-off trigger: frictionless magnetic antiskating: twin solid-core chassis and 3 -point leaf-spring suspension, W\&F 0.0.35\%; rumble -72 dB unwid .................................... $\$ 1.100$ T'I) 521 . Same as above without tonearm . . $\$ 1.000$

TI) 320 Semiautomatic Single-Play Turntable Belt-drive 33.33 and $45-\mathrm{rpm}$ turntable with solid core chassis; 16-pole synchronous motor; 1win solid-core chassis and 3 -point leaf-spring suspension: frictionfree velocity sensing auto shut-off triggering. $4 \& F$ $0.35 \%$, rumble -52 dB unwid. -72 dB wid: $6.75 \times 17.36$ $\times 13.88$-in $\$ 600$
TI) 321. Armless version of TD-320 ........ . . \$500
IID 318 Semiautomatic Single-Play Turntable Belt-drive 33.33 and 45 rpm turntable with 16 -pole synchronous motor: twin solid-core chassis; 3 -point leaf-spring suspension; frictionless velocity-sensing auto shut-off trigger. W\&F $0.04 \%$; rumble -50 dB unwid, -70 dB unwid: $6 \times 17 \times 14$-in $\$ 450$ TID 316. Manual turntable similar to TD 318 without auto lift and shut off

ID) 280 Semiantomatic Single Play Turntable Bell-drive $33.33 / 45 \mathrm{rpm}$ with 24 -pole synchronous motor. 1-piece solid-core chassis and spring damping elements in feet: frictionless velocity-sensing auto shut-off trigger. u\&F $0.045 \%$; rumble -48 dB unwid. 70 dB wid: $5.3 \times 17 \times 14$-in
$\$ 275$

## TOSHIBA

SR-56.38 Autornatic Turntable
Automatic. beit-drive features front panel cueing: start: stop; power select: speed select: magnetic cartridge play:. 45 and 33.33 rpm $\$ 129$

## YAMAHA

PF-800B Semiautomatic Turntable
Belt-drive piwoted-arm semiautomatic turntable
with dynanac balance twin-pipe tonearm Features two-section inc plus aluminum platter; operates at both 33.33 and 45 rpm speeds: variable speed control $\pm 6$ percent. Wow and flutter $0 .(\$ 23$ percent weighted root mean square: rumble 80 dB ; effective tonearm length $8.75^{\circ}: 18.62 \times 6.12 \times 14.7 \mathrm{~s}$ in (dustcover down); 35 lb .
$\$ 599$
IT-500L Automatic Turnable
Direet-drive turntable with RS integrated remote system compatibility. Features straight tonearm design: resonance absorbing turntable mat; disc clamper. Black: 15 lb
$\$ 269$
TTI-300C' Semiautomatic 'Turntable
He t-drive semiautomatic turntable with straight tonearm dssign. Features resonance absorbing turntable mat: Ep adaptor. Black: $10 \mathrm{lb} . .$. . . . . . . . \$159


Your CDs sound their best when dust and fingerprints don't force error corrections. Now you can thoroughly clean your CDs with the Signet SK315 Wet/Dry CD Cleaner...and it's fully automatic. Simply add four drops of Signet fluid, insert the CD, and press the power button.

First, the fluid dissolves fingerprints and lifts dirt, then the dry pad automatically buffs the CD to perfection. Only Signet has this two-stage wet and dry action.

Clean up your sound today with the SK315 CD Cleaner...only from your Signet dealer.


4701 Hudson Drive, Stow, OH 44224


## ADCOM <br> SXC-van den Hul MC Phono Cartridge

High-output MC cartridge with tubular sapphire cantilever and van den Hul stylus. Features 3.5 . micron contact radius; vertical groove extended to 85 microns; alıminum cantilever: crosscoil armature Output 2.3 mV at $5 \mathrm{~cm} / \mathrm{s} ;$ FR $20-20,000 \mathrm{~Hz}+3,-0 \mathrm{~dB}$; tracking force 1.8 g ; square-wave rise time 7 ms ; ch sep $20 \mathrm{~dB} 200-20,000 \mathrm{~Hz}: 4.7 \mathrm{~g}$
$\$ 500$

## XC-MRII Moving-Coil Phono Cartridge

High-output Mr cartridge with nude-mounted square-shank stylus. Features thin-walled aluminum cantilever; crosscoil armature. Output 2.3 mV at 5 $\mathrm{cm} / \mathrm{s}$; FR $20-20,000 \mathrm{~Hz} \pm \mathrm{I} \mathrm{dB}$; ch sep 28 dB at 1 kHz ; tracking force 1.8 g ; effective tip mass $0.35 \mathrm{mg} ; 0.15$ $\mathrm{mil} \times 3.0 \mathrm{mil}$ scanning radius: weight $4.7 \mathrm{~g} \ldots \$ 360$

## XC-I.Tll Moving-Coil Phono Cartridge

High-output Mr cartridge with Line-Trace stylus, thin-wall aluminum cantilever, crosscoil armature. Output 2.3 mV at $5 \mathrm{~cm} / \mathrm{sec}$; $\mathrm{FR} 20-20,000 \mathrm{~Hz} \pm \mathrm{IdB}$ : ch sep 28 dB at 1 kllz ; tracking force 1.8 g , effective tip mass 0.35 mg ; weight 4.7 g
$\$ 290$

## HC-vdll Il Moving-Coil Phono Cartridge

High-output MC cartridge with van den Hul stylus. Features thin-wall aluminum cantilever: crosscoil armature. Output 2.3 mV at $5 \mathrm{~cm} / \mathrm{s} ; \mathrm{i} \cdot \mathrm{R} 20-15,000 \mathrm{~Hz}$ $+1.5 /-1 \mathrm{~dB}, 20-20,000 \mathrm{~Hz}+2.5 /-1 \mathrm{~dB}$; ch balance within 1.5 dB ; tracking force 2 g ; effective tip mass
 HC-E H. Similar to HC-VDH II except with elliptical stylus.
$\$ 160$

## AKG ACOUSTICS

## Ploole: Phono Cartridge

Hand-made cartridge using the patented TransverseSuspension. Tapered Beryllium Cantilever. Featurts analog-6 stylus: adjustable vertical tracking angle; 5 year warranty; limited edition. Moving-iron cartridge. $\$ 1,000$ P1001.E-vdII. Same as PIOOLE except stylus is a van den Hull II type
$\$ 1,0(0)$

## Super Nova P8FSS Phono Cartridge

Moving-iron cartridge with patented transversal suspension system with the new van den Hul II replaceable diamond. Features FR/crosstalk curve; carbon-fiber stylus brush; screwdriver. Output 2.8 mV at $3.54 \mathrm{~cm} / \mathrm{sec}$; FR $10-28.000 \mathrm{Hf} \pm 1 \mathrm{~dB}$; sep 30 dB at $1,000 \mathrm{~Hz}$; tracking force range $1-1.5 \mathrm{~g}$; cartridge weight 3.5 g .
$\$ 450$

## P-25S Phono Cartridge

Variable-reluctance induced-magnet cartridge with patented diamond-technology transverse-suspension system, cylindrical/magnet design. Features FR/crosstalk curve; carbon-fiber stylus brush; screwdriver: antiresonance compound. Outpui 2.7 mV at 3.54 $\mathrm{cm} / \mathrm{sec}$ rms; FR $10-28,000 \mathrm{~Hz}$; sep $\pm 1 \mathrm{~dB}$; trackingforce range $0.75-1.25 \mathrm{~g}$ : diamond "Analog-Six" stylus mass $0.015 \mathrm{mg} ; 3.5 \mathrm{~g}$
$\$ 250$

## P-15S Phono Cartridge

Variable-reluctance induced-magnet cartridge with patented diamond-technology transverse-suspension system, cylindrical magnet. Features FR/crosstalk
curve: carbon-fiber stylus brush; screwdriver, antiresonance compound. Dutput 3.4 mV rms at 3.54 $\mathrm{cm} / \mathrm{sec}$; FR $\mathrm{I}(1-23.0 \mathrm{MO}) \mathrm{H} z$, sep $\pm 1.5 \mathrm{~dB}$; tracking force $1.0-1.5 \mathrm{~g}$ : elliptical diamond stylus; stylus mass 0.018 mg: 3.5 g .
$\$ 175$
P10 Studio Phono ('artridge
Designed for broadcast and disco: built-in stylus guard prevents damage during use Output 5.8 mV at $3.54 \mathrm{~cm} / \mathrm{sec}$; FR $20-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sep 25 dB at $1,000 \mathrm{~Hz}$; tracking force range $2.5-4.5 \mathrm{~g}$; cartridge weight 3.5 g
$\$ 130$

## 1'-10S Phono Cartridge

Variable-reluetance induced-magnet cartridge with patented transverse suspension, cylindrical magnet. Features carbon-fiber stylus brush: screwdriver, antiresonance compound. Output 5.8 mV rms at 3.54 $\mathrm{cm} / \mathrm{sec}$; fr $20-20.000 \mathrm{~Hz}$, sep $\pm 2 \mathrm{~dB}$ : tracking force $1.25-2.0 \mathrm{~g}$; elliptical diamond stylus; stylus mass 0.25 mg: 3.5 g
$\$ 125$

## P-5E1) Phono Cartridge

Variable-reluctance induced-magnet cartridge with patented transverse suspension, cylindrical magnet. Features compatibility with autonatic turntables, record changers; elliptical diamond stylus. Output 5.8 mV rms at $3.54 \mathrm{~cm} / \mathrm{sec} ;$ FR $20-20,000 \mathrm{~Hz}$; sep $\pm 2$ dB ; tracking force $1.5-2.0 \mathrm{~g}$.
\$80
P4 Phono Cartridge
Standard .5"-mount cartridge designed for heavy/medium heavy tonearms. FR $20-20,000 \mathrm{~Hz}$; sep 20 dB at 1.000 Hz ; tracking force 1.5 g ; cartridge weight 3.5 g .
\$50
P4DP. As above except standard TP4 mount . . $\$ 50$

## ANDANTE BY SUMIKO

## S Phone Cartridge

Micro-mass cartridge with aluminum-alloy tubular cantilever; $0.5-\mathrm{mil}$ polished bonded-diamond spherical stylus: hand-wound coils. Output $5.0 \mathrm{mV}, \mathrm{FR} 18$ 27.000 Hz ; $\operatorname{sep} 28 \mathrm{~dB}$ at $1 \mathrm{kH} /$ compliance $18 \times 10^{\infty}$ $\mathrm{cm} /$ dyme; tracking force $1-2.5 \mathrm{~g}$; input imp 47 k ohms; 6 g .
$\$ 49$
H. Similar to S except output $10 \mathrm{mV} ; \mathrm{FR}$ I8-23.000 $\mathrm{H}_{z} ; \operatorname{sep} 27 \mathrm{~dB}$ at 1 kH 7 ; contpliance $15 \times 10^{\circ}$ cm/dyne
$\$ 29$

## HSP MM Phono Cartridge

Outpul 6 mV at $3.54 \mathrm{~cm} / \mathrm{sec} ;$ FR $18-25.000 \mathrm{~Hz}:$ sep 28
dB at $1,000 \mathrm{~Hz}$; cartridge weiglt 6 g
$\$ 39$

## P-76 MM1 Phono ('artridge

Hand-wound coils: square-shank nude-mount with tapered line-contact diamond stylus. Dutput 2.5 mV at $3.54 \mathrm{~cm} / \mathrm{sec} ;$ FR $8-45,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; $\operatorname{sep} 30 \mathrm{dH}$ at 1.000 Hz : cartridge weight 5.9 g
\$70

## P-38 Min Phono (Gurtridge

Aluminum cantilever and ellpptical diamond stylus $\$ 60$

## AUDIOBYVANALSTINE

## Ionghorn Phono Cartridge

Internally damped and externally stabilized phono cartridge. Features th $10-60,000 \mathrm{~Hz}$ sep 30 dB ; output 4 mV ; traching force 1.5 g .

## AUDIOQUEST

## AQ MIC-5 Phono Curtridge

High output $2.5 \mu \mathrm{~V}$ moving coil cartridge with line contact stylus: non-resonant polymer body: FR 20 $20,000 \mathrm{Hr}$; aluminum cantilever.
$\$ 295$

## AQ MIC-4 Phono Cartridge

High output $2.5 \mu \mathrm{~V}$ moving coil cartridge with direct phono input features elliptical stylus; compliance 10; non-resonant polymer body: FR $20-20,000 \mathrm{~Hz}$; aluminum cantilever
$\$ 245$

## AQ MC-3 Phone C Cartridge

Dynamic high outpul $3 \mu \mathrm{~V}$ moving coil cartridge features non-resonant polymer body: compliance 8 ; tracks 2 grams; FR $20-20,000 \mathrm{~Hz}$; aluminum cantilever: elliptical stylus
$\$ 150$

## AQ M-1 Phono ('artridge

Induced magnetic cartridge teatures elliptical stylus; compliance 25; FR $20-20,000 \mathrm{~Hz}$; tracks 1.5 grams $\$ 95$

The followng cartridges are available in two output levels. either $1.6 \mu \mathrm{l}$ 'or $0.5 \mu \mathrm{l}$ '.
AQ B-200 Phono Cartridge
High output moving coil cartridge features machined aluminum sandwich body: hollow boron cantilever; micro ridge
$\$ 795$

## AQ 40-4i Phono (artridge

High output moving coil cartridge utilizes 15 micron wire for coils. Fealures aluminum boday; nonresonant cast metal; hollow-boron cantilever; line contact
$\$ 495$

## AZDEN

## GM-P5L. Phono Cartridge

P-mount Mc cartridge with Nude line-contact stylus and boron cantilever. Output 0.2 mV at $5 \mathrm{~cm} / \mathrm{sec}$; sep 30 dB at $1,000 / 112$ : tracking force range $1-1.5 \mathrm{~g}$ : cartridge weight 5.9 g .
$\$ 250$

## VM-PsoVI. Moving-Magnet Phono Cartridge

Mm cartridge with Vital Nude line-contact styius and tapered aluminum cantilever. Output 4 mV at 5 $\mathrm{cm} / \mathrm{sec}$; sep 30 dB at $1,000 \mathrm{H} /$; tracking force range $I$ 1.5 g ; cartridge weight 5.9 g .
$\$ 150$

## \M-P50F Moving-Magnet Cartridge

Universal mount cartridge with aluminum tube cantilever and $0.3 \times 0.7$ mil elliptical stylus. tracking force $1.25+$ : cartridge weight 5.9 g .
$\$ 90$
VM-P20F Moving Magnet Phono Cartridge
Universal mount cartridge with $0.3 \times 0.7 \mathrm{mil}$ stylus. sep 24 dB : cartridge weight $5.9 \mathrm{~g} . . . . . .$. . . . . . $\$ 70$

## VM-PSOC Moving-Nagnet Phono Cartridge

MM cartridge with 0.65 mil conical stylus. Output 4 mV at $5 \mathrm{~cm} / \mathrm{sec}$; sep 24 dB at $1,000 \mathrm{~Hz}$; cartridge weight 5.9 g : ch bal 1.5 dB at $1.000 \mathrm{~Hz} \ldots .$. . $\$ 60$

## BANG \& OLUFSEN

## MMC Series Phono Cartridges

H/ AMAC cartridges feature armature mounted perpendicularly to the cantilever: crystal sapphere cantilever; multi-radual diamond; four high-ouput, low-imp

## CARTRIDGES \& TONEARMS

coils wound on cores of very' low permeahilut aligned in perfect symmetry with the magnet.
MMC-1. Diamond contact line $0.1 \times 0.1 \mathrm{~mm}$ sqr.: stylus bonding nude; cantilever sapphire tube; recommended tracking force $10 \mathrm{mN} / 1$ gram: FR $20-$ $20.000 \mathrm{~Hz} \pm 1 \mathrm{~dB}: 1.6 \mathrm{~g}$.
$\$ 490$ MM(-2. Diamond contact line $0.12 \times 0.12 \mathrm{~mm}$ sqr.: stylus bonding nude; cantilever sapphire tube: recommended tracking force $10 \mathrm{mN} / 1 \mathrm{~g}$; \&R 20-20.000 $\mathrm{Hz} \pm 1.5 \mathrm{~dB}: 1.6 \mathrm{~g}$ \$325 MMC-3. Diamond elliptical $0.15 \times 0.15 \mathrm{~mm}$ sqr.: stylus bonding nude: cantilever tapered aluminum tube: recommended tracking force $10 \mathrm{mN} / 1 \mathrm{~g}$; FR 20$20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB} ; 1.6 \mathrm{~g}$.
$\$ 215$ MMC-4. Diamond elliptical 0.20 mm round; stylus bonding titanium: cantilever tapered aluminur tube: recommended tracking force $12 \mathrm{mN} / 1.2 \mathrm{~g}$ : frequency response $20-20.000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}: 1.6$ grams.
$\$ 125$
MMC-5. Diamond elliptical 0.25 mm round; stylus bonding titanium: cantilever tapered aluminum tube: recommended tracking force $15 \mathrm{mN} / 1.5 \mathrm{~g}$ : FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: 1.6 \mathrm{~g}$ $\$ 70$

## CELLO

Chorale MC Cartridge
Aluminum-alloy cantilever: elliptical stylus; weight


13 g
$\$ 850$

## CLEAR AUDIO

## Phono Cartridges

## Goldmund Equipment

Clearaudio Goldmund Gold. Ms; standard mounting: individual response curve supplied: hyper elliptical stylus type: frequency response $10-50.000 \mathrm{~Hz}$; sep 35 dB ; tracking force $2.0-2.2 \mathrm{~g}$ : $5.4 \mathrm{~g} \ldots . . .$. Clearaudio Goldmund. Mc: standard mounting: individual response curve supplied: hyper elliptical stylus type: FR $10-50.000 \mathrm{~Hz}$; sep 35 dH ; tracking force $2.0-$ $2.2 \mathrm{~g}: 4.4 \mathrm{~g}$. $\$ 995$

## VPI Equipment

PMC-2. MC; spherical stylus type; individual response curve supplied: FR $10-50.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ : sep 40 dB ; output 0.6 mV ; tracking force $1.6-2.2 \mathrm{~g}: 10$ g.
$\$ 1.100$
PMC-1. MC; spherical stylus type: individual response curve supplied; frequency response 20-50.000 $\mathrm{Hz} \pm 1.5 \mathrm{~dB}$; sep 35 dB ; output 0.6 g ; tracking force $1.8-2.2 \mathrm{~g}: 6 \mathrm{~g}$
$\$ 740$

## Tonearms

## Souther Equipment

Triquartz Top I. Linear, changeable wand. cueing tonearm with adjustable vertical tracking angle: $2.0^{*}$ pivot-stylus distance: $10^{\prime \prime}$ overall length; 0.5-3.0 tracking force: $1-20 \mathrm{~g}$ cartridge weight range: $2-.25^{\prime \prime}$ mounting holes.
$\$ 850$

## DENNESEN ELECTROSTATICS

## ABI:T-1 Tonearm

Air-bearing lateral-tracking tonearm includes air pump. Entire armtube removable: any range desired.

Stylus overhang 0 milimeters: overall length and effective length vary (user adjustable); tracking error $0^{\circ}: 1.5 \mathrm{lb}$
$\$ 2.000$

## DENON

## DL-1000 MC Phono Cartridge

Output 0.12 mV at $50 \mathrm{~mm} / \mathrm{sec}$ : FR $20-110.000 \mathrm{~Hz}$ : sep 30 dB at 1.000 Hz ; tracking-force range $0.8-0.1 \mathrm{~g}$ : cartridge weıght 60 g
$\$ 859$

## I)L- 305 MC Phono Cartridge

Features iwin radius: baron cantilever. Output 0.2 mV at 50 millimeters/sec; FR $20-75.000 \mathrm{~Hz} ; \operatorname{sep} 28 \mathrm{~dB}$ at 1.000 Hz : tracking-force range 1.2-0.2 g : cartridge weight 5.8 grams.
\$559
DI-- 304 MC Phono Cartridge
Moving-coil phono cartridge features baron cantilever; high compleance
$\$ 395$

## DI.-302 M1C Phono (artridge

Features high output: detail. charm and depth; baron cantilever. Output 0.25 mV at $50 \mathrm{~mm} / \mathrm{sec}$ : FR 28 70.000 Hz : separation 28 dB at 1.000 Hz : trackingforce range 1.t-0.2 grams: cartridge weight 6.0 grams.
$\$ 260$
Dl.-301 MC' Phono C'artridge

Output 0.3 mV at $50 \mathrm{~mm} / \mathrm{sec}$; FR $20-60,000 \mathrm{~Hz}$; sep 28 dB at $1.000 \mathrm{~Hz}:$ tracking-force range $1.4-0.2 \mathrm{~g}$ : cartridge weight 4.7 g .
$\$ 160$

## Dl.-160 MC Phono Cartridge

Output 1.6 mV at $50 \mathrm{~mm} / \mathrm{sec}$; FR $20-50.000 \mathrm{~Hz}$ : sep 28 dB at $1.00\left(1 \mathrm{H}_{2}\right.$ : tracking-force range $1.6-0.3 \mathrm{~g}$ : cartridge weight 4.8 g .
$\$ 115$

## Dl:-110 MC' Phono ('artridge

Output 1.6 mV at 50 millimeters per second: FR $20-$ 45.000 Hz ; separation 25 dB at 1.000 Hz ; trackingforce range $1.81-0.30 \mathrm{grams} ; 4.8 \mathrm{~g}$.
$\$ 85$

## DIGITRAC By ORTOFON

## MOSF: Phono Cartridge

Variable Magnetic Shunt cartridge with aluminum cantilever and nude fine-line diamond stylus. Output 4 mV at $5 \mathrm{~cm} / \mathrm{sec}$ : FR $20-30.000 \mathrm{~Hz}$ : sep 24 dB at 1.000 Hz ; high compliance $35 \mu / \mathrm{mn}$; tracking force range $1-1.5 \mathrm{~g}$ : eartridge weight 6 g .
$\$ 200$

## 200NF: Phono Cartridge

Variable Magnetic Shunt cartridge with aluminum cantilever and elliptical nude diamond stylus. Output 4 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $20-25.000 \mathrm{~Hz}$; sep 22 dB at 1.000 Hz : high compliance $30 \mu \mathrm{~m} / \mathrm{mN}$; tracking force range $1.25-1.75 \mathrm{~g}$ : cartridge weight 6 g
$\$ 140$

## 100F Phono (artridge

Variable Magnetic Shunt cartridge with aluminum cantilever and elliptical diamond stylus Features dedicated P -Mount with universal application. Output 4 mV at $1.0005 \mathrm{~cm} / \mathrm{sec}$ : FR $20-20.000 \mathrm{~Hz}$; sep 20 dB at $1,000 \mathrm{~Hz}$ : high compliance $24 \mu \mathrm{~m} / \mathrm{mN}$ : tracking foree range $1.35-1.75 \mathrm{~g}$ : cartridge weight $6 \mathrm{~g} . . \$ 100$

190S Moving-Magnet Cartridge
Variable Magnetic Shunt cartridge with elliptical stylus and universal mount. output 3.5 mV at 5 $\mathrm{cm} / \mathrm{sec}$; FR $2 \mathrm{C}-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sep 20 dH at 1.000 Hz : tracking-force range $1.25-1.75 \mathrm{~g}$; cartridge weight 6 g .
$\$ 60$

## EMINENT TECHNOLOGY

## Model 2 Straight Tonearm

Air-bearing tonearm features straight line-tracking tonearm with adjustable VTA/SRA over an arc while playing record. Airpump included. Adjustable height: interchangable arm tube with preset geometry: decoupled counterweight in horizontal plane: interchangable preset counterweights. Headshell and tonearm manufactured as one piece. Effective mass 5-20

## ENTRE $B$ :

## ANALOG EXCELLENCE

## MC-9 Sapphire MC Phono Cartridge

Løw-mass samarium-cobalt magnet: sapphire cantilever: $0.3-x-0.8$ mil stylus. Output 0.25 mV at 5 $\mathrm{cm} / \mathrm{sec}$ : $\mathrm{FK} 20-30.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sep $>26 \mathrm{~dB}$ at 1.000 Hz ; tracking force $1.6-1.9 \mathrm{~g}$ : imp 3 ohms: cartridge weight 5.4 g .
. $\$ 395$
MC-5 Boron MC Phono Cartridge
Boron camtilever: high-flux-density samarium-cobalt magnet. Output 0.25 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR 20-30.000 $\mathrm{Hz} \pm 3$; sep 26 dB at 1.000 Hz : tracking force $1.6-1.9$ g- imp 3 ohms.
. $\$ 295$

## MC'-1 Basic \$(C' Phono Cartridge

Double-wound coils; vital nude diamond stylus. Output 05 mV at $5 \mathrm{~cm} / \mathrm{sec}$ : FR $20-30.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sep 22 dB at 1.000 Hz : tracking force $1.8-2 \mathrm{~g}$ : cartridge weight 5.9 g : imp 3 ohms .
$\$ 195$

## EPOCH

Epoch II Series Model IIZ.9S Cartridge
MM cartridge has output of 0.8 mV . FR $10-25,000 \mathrm{~Hz}$. individually calibrated to $20,000 \mathrm{~Hz}: \operatorname{sep} 35 \mathrm{~dB}$ at $1.000 \mathrm{~Hz}, 22 \mathrm{~dB}$ at 10.000 Hz ; tracking-force $.75-1.5$ $\mathrm{g}:$ cartridge weight 4 g . With Stereohedron 11 styIus
$\$ 250$
1.79S Low Impedance Phon Cartridge

Includes Stereohedron II stylus. Output 0.04 mV : FR $10-50.000 \mathrm{~Hz}$. individually calibrated to 20.000 Hz : $\operatorname{sep} 35 \mathrm{~dB}$ at $1.000 \mathrm{~Hz}, 22 \mathrm{~dB}$ at $10,000 \mathrm{~Hz}$; tracking force $0.75-1.5 ; 3.8 \mathrm{~g}$
$\$ 250$

## HZ8S PRono Cartridge

Includes Stereohedron II stylus. Output 0.8 mV : FR $10-20,000 \mathrm{~Hz}: \operatorname{sep} 35 \mathrm{~dB}$ at $1.000 \mathrm{~Hz}, 22 \mathrm{~dB}$ at 10,000 Hz ; tracking force .75-1.5; 4 g . . . . . . . . . . . . . $\$ 190$
I.J8S L.jw Impedance Phono Cartridge

Includes Stereohedron II stylus. Output 0.04 mV ; FR $10-20.060 \mathrm{~Hz}$; $\operatorname{sep} 35 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}, 22 \mathrm{~dB}$ at 10.000 Hz: tracking force $.75-1.5 ; 3.8 \mathrm{~g}$.
. $\$ 190$

## HZ7S Fhono Cartridge

Includes Stereohedron 11 stylus. Output 0.8 mV : FR $10-20.010 \mathrm{~Hz}: \operatorname{sep} 30 \mathrm{~dB}$ at $1.000 \mathrm{~Hz}, 15 \mathrm{~dB}$ at 10,000 Hz: tracking .75-1.25: 4 g .
$\$ 120$

## H/6FF, Phono Cartridge

Includes elliptical stylus. Output 0.8 mV : FR 10 $20.000 \mathrm{~Hz}: \operatorname{sep} 30 \mathrm{~dB}$ at $1.000 \mathrm{~Hz}, 15 \mathrm{dH}$ at 10.000 Hz : tracking; force 0.75-1.25: 4 g .

## GRACE by SUMIKO

## Carridges

## F-9F: Ruby Cartridge

Fixed coil cartridge extended range super body with ruby cantilever and Ogura Vital diamond stylus $\$ 395$

## F-9F Classic (artridge

Advanced design fixed coil cartridge with laminated pole pieces and L(\%/OFC coils. Features aluminum/magnesium alloy cantilever: Ogura Vital stylus\$250

## F-91. Cartridge

Fixed coil cartridge with higher output body: aluminum/magnesium cantilever: trace diamond stylus
$\$ 225$

## F-81, Cartridge

Fixed coil cartridge with high output body: aluminum cantilever: luminal trace stylus.
$\$ 200$

## Tonearms

G-747 Tonearm
Low mass with removable headshell

## CARTRIDGES \& TONEARMS

## GRADO <br> Joseph Grado Signature Series <br> TLZ Cartridge <br> $\$ 500$ <br> MCZ Cartridge <br> Hybrid design with 4 separate magnetic gaps around cantilever; compatible with light- to medium-mass tonearms and standard 47,000 -ohm MM inputs; user-replaceable stylus. Output 1.5 mV : resonance 8 12 Hz ; torsional resonance approximately $25,000 \mathrm{~Hz}$; resistance 70 ohms; inductance 9 Mh . <br> $\$ 300$

## 8MZ. Cartridge

User-replaceable stylus; compatible with standard 47,000-ohm MM inputs; output 3.5 mV ; electrical resistance 475 ohms: inductance $\mathbf{4 5} \mathrm{mH}$. .... $\$ 200$

Specifications for all models below: 0.5" mounting centers (or optional P-mount for some); input load 47.000 ohms: induclance 45 millihenries: $D C$ resistance 475 ohms: pickup weight 5 g .

## Professional Series

Designed for high oupur and stability under severe use, for broadcast, in changers. or arms that will not track at 1 g: recommended tracking force $2-3 \mathrm{~g}$. Output 4 mv at $3.54 \mathrm{~cm} / \mathrm{sec}(45 \mathrm{x})$; sep 20 dB to. 20.000 Hz .

ZCE + . Specially selected units from Z production; elliptical diamond stylus
$\$ 45$
ZTE + . Elliptical diamond stylus.
$\$ 30$

## Super Flux-Bridger Series

With 0.5" or P-mount. Recommended tracking force $0.75-2 \mathrm{~g}$. Outpur 4 ml 'at $3.54 \mathrm{~cm} / \mathrm{sec}(45 \mathrm{y})$ : sep 25 dB 10-30.000 IIz.
Z2 + . True Ellipsoid stylus . . . . . . . . . . . . . . . . \$265
Z1 + . True Ellipsoid stylus . . . . . . . . . . . . . . . . \$180
Z + . Grado diamond stylus. . . . . . . . . . . . . . . . \$130
ZF1 + . Grado diamond stylus . . . . . . . . . . . . . \$110
ZF2 + . Elliptical diamond stylus . . . . . . . . . . . . . $\$ 86$
ZF3E + . Elliptical diamond stylus . . . . . . . . . . . \$69

## Flux-Bridger Series

0.5 " or P-mount; elliptical diamond stilus: Recommended tracking force $1-2 \mathrm{~g}$. Output 4 mV at 3.54 $\mathrm{cm} / \mathrm{sec}(45 x)$ : $\operatorname{sep} 20 \mathrm{~dB} \quad 10-30,000 \mathrm{~Hz}$.
ZCE +1 .
$\$ 55$
ZTE + 1. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$25

## Replacement Styli

For standard 0.5 and $P$-mount cartridges: spherical styli for 78 -rpm records $\$ 4.00$ additional.
$\mathbf{Z 2 +} / \mathbf{S} .2$ gold dots. $\$ 110$
$\mathbf{Z 1 + / S . 2}$ yellow dots . . . . . . . . . . . . . . . . . . . . $\$ 75$
Z+/S. Brown plate . . . . . . . . . . . . . . . . . . . . . . . $\$ 55$
ZF1 + /S. 2 blue dots . . . . . . . . . . . . . . . . . . . . . . . $\$ 45$
ZF2 + /S. 2 white dots . . . . . . . . . . . . . . . . . . . . . $\$ 36$
ZF3E + /S. Tan plate . . . . . . . . . . . . . . . . . . . . . $\$ 33$
ZCE + 1/S. 2 silver dots . . . . . . . . . . . . . . . . . . . $\$ 30$
ZCE + /S. 2 red dots . . . . . . . . . . . . . . . . . . . . . . $\$ 28$
ZTE + /S. 2 red dots . . . . . . . . . . . . . . . . . . . . . $\$ 17$
ZTE + 1/S. 2 silver dots . . . . . . . . . . . . . . . . . . . \$21

## HEYBROOK BY D'ASCANIO AUDIO

The Heybrook Tonearm
Pivoted-tracking magnesium-tube straight tonearm with adjustable vertical tracking angle and fixed headshell. Statically balanced with fixed headshell and locking counterweight. Tracking-force range 0-3 g: overall length $11.62^{\prime \prime}$
\$549

## HIGHPHONIC BY ANALOG EXCELLENCE

MC-D15 Signature MC Phono Cartridge
High-compliance diamond cantilever: gold-finish alloy body; ultra-line-contact stylus. Output 0.11 mV at $5 \mathrm{~cm} / \mathrm{sec}$ : $\mathrm{FR} 10-120,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; $\operatorname{sep} 35 \mathrm{~dB}$ at
, 000 Hz ; tracking-force range $0.6-0.9 \mathrm{~g}$; cartridge weight 6.5 g : left/right chs balanced within 0.001 mV output.
$\$ 1,995$
MC-D12 MC Phono Cartridge
Diamond cantilever. Output 2.5 mV ...... . \$1,250

## MC-D10 MC Phono Cartridge

Diamond cantilever. Output $0.13 \mathrm{mV}(1,000 \mathrm{~Hz}, 5$ cm/sec); FR $10-80,000 \mathrm{~Hz} ; 6.6 \mathrm{~g}$. . . . . . . . . . \$ $\$ 1,100$

## MC-A6 Signature MC Phono Cartridge

Titanium/aluminum alloy cantilever with siliconcarbide whiskers: $0.1 \times 1.2 \mathrm{mil}$ ultra-line-contact stylus. Output 0.12 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $10-85,000 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB}$; sep 34 dB at $1,000 \mathrm{~Hz}$; tracking force $0.8-1.2$ g ; cartridge weight 6.5 g : left/right ch balanced within 0.001 mV output
\$795

## MC-R5 MC Phono Cartridge

Ruby cantilever; ultra-line-contact stylus; nonresonant body. Output 0.12 mV at $5 \mathrm{~cm} / \mathrm{sec}$ : FR 10.75 Hz $\pm 2 \mathrm{~dB}$; sep 30 dB at $1,000 \mathrm{~Hz}$; tracking force $0.9-1$. 1 g : cartridge weight 6.5 g : left/right ch balanced within 0.002 mV output
$\$ 545$
MC-A3 MC Phono Cartridge
Ultra-line-contact stylus; aluminum alloy body. Output 0.12 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $10-70,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sep 28 dB at 1.000 Hz ; tracking force $1-1.2 \mathrm{~g}$ : cart ridge weight 6.5 g .
. $\$ 350$
MC-A2F. Same as MC-A3 with elliptical stylus; FR $20-50,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} . .$. . . . . . . . . . . . . . . . . . $\$ 250$

## KISEKI by SUMIKO

## Iapis Lazuli MC Cartridge

Made from lapis lazuli, blue stone with small gold particles; diamond cantilever; stylus, armature, magnet as in Agaat cartridges (see below); tested for about 50 hours with music: made on special order, requiring 2-3 months.
\$5,600

## Agaat Ruby 4.5 Cartridge

SaCo magnet 3 times as large as ordinary magnets for 35\% higher output than Purpleheart or Blue Silverspot cartridges; $0.3-\mathrm{mm}$ diameter, $4.5-\mathrm{mm}$ long ruby cantilever; line-contact PF stylus $0.14 \times 0.6 \mathrm{mil}$; bottom plate of aluminum/magnesium alloy bonded to body; color varies between white, black, red, green, blue; optimum performance after 15 hours playing $22 \times \mathrm{C}$, humidity $65 \%$. Output around 0.4 mV : ch balance $\pm 0.25 \mathrm{~dB}$; sep $\pm 30 \mathrm{~dB}$; FR $20-50,000 \mathrm{~Hz}$ : VTA 20x: imp 42 ohms: tracking force $1.6-2.2 \mathrm{~g}$ ( 2 g optimum); weight 11.2 g
\$1,250

## Purpleheart Sapphire MC Cartridge

Housing of purpleheart wood; $4.5-\mathrm{mm}$-long sapphire cantilever with $0.3-\mathrm{mm}$ diameter; same pole pieces and stylus as in Agaat Ruby 4.5 (above); Sendusi armature; SaCo magnet. Output $0.4 \mathrm{mV}(1,000 \mathrm{~Hz}, 5$ $\mathrm{cm} / \mathrm{sec}$ ) ; ch balance $\pm 0.25 \mathrm{~dB}$; sep $\pm 30 \mathrm{~dB}$; FR $20-$ $50,000 \mathrm{~Hz}$; imp 42 ohms, $120 \mu$ henry: tracking force 2 g optimum; weight 7.5 g
$\$ 975$

## Blue-Gold Cartridge

Aluminum body with aluminum alloy and boron overlay cantilever adn elliptical stylus . . . . . . . $\$ 600$

## LINN PRODUCTS

Troika Low-Output MC Cartridge
Elliptical stylus; body milled from solid aluminum; 3 mounting screws; fying-lead cartridge tags eliminate 1 connector. $\mathrm{FR} 20-20,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; sep $>30 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; tracking force $1.5-1.7 \mathrm{~g}$; ch bal at $1,000 \mathrm{~Hz}$ within I dB; recommended load 470 ohms; tracking angle $20^{\circ} \ldots .$. . . . . . . . . . . . . . . . . . . . . . . $\$ 1.575$ Replacement stylus . . . . . . . . . . . . . . . . . . . . . $\$ 1,050$

## Karma Low-Output MC Cartridge

Elliptical stylus; body milled from solid aluminum. FR $20-20,000 \mathrm{~Hz} \pm \mathrm{I} \mathrm{dB}$; $\operatorname{sep} 30 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$;
tracking force 1.5-1.7 grams: cartridge weight 5.7 grams; ch bal within IdB at $1,000 \mathrm{~Hz}$; tracking angle $20^{\circ}$.
\$1,125
Replacement stylus
$\$ 750$

## Asaka Moving-Coil Cartridge

Elliptical stylus; body milled from solid aluminum. Output 0.2 mV ; FR $10-50.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \operatorname{sep} 27 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; tracking force $1.5-1.9$ grams; cartidge weight 5.7 grams: vertical tracking angle $20^{\circ}$. $\$ 725$ Replacement stylus
$\$ 483$

## K-9 Moving-Magnet Cartridge

Elliptical stylus; aluminum cantilever. FR 20-20,000 $\mathrm{Hz} \pm 2 \mathrm{~dB} ; \operatorname{sep} 25 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$ : tracking force 1.5 1.9 grams; vertical tracking angle $20^{\circ} \ldots . .$. . . $\$ 275$

Replacement stylus
\$165

## K-5 Moving-Magnet Cartridge

Eliptical stylus $\operatorname{FR} 20-20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; tracking force 1.7 g .
$\$ 150$
Replacement stylus
$\$ 90$
Basik Moving-Magnet Cartridge
Spherical stylus. FR $20-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; ch sep 25 dB at 1.000 Hz ; tracking force 1.8 g : cartridge weight 6 grams.
. $\$ 75$

## Tonearms

thok L.V-II Tonearm
Tonearm with $11.5^{\prime \prime}$ overall length. $9^{\prime \prime}$ stylus-pivot distance, damped cueing mechanism. Features radial ball bearings. Effective mass 12 g : total cable capacitance 100 pF ; cartridge weight rante $3-12 \mathrm{~g} \ldots$. $\$ 965$

Basik Plus Tonearm
Straight statically balanced tonearm with fixed aluminum headshell and decoupled counterweight. Tracking-force range $0-3$ grams calibrated to 0.1 gram; effective mass 11 grams; stylus overhang 18
 Includes Basik cartridge.
\$295

## MADRIGAL

Carnegie Two Moving Coil Reference Cartridge
Open circuit output voltage 0.35 mV at $1,000 \mathrm{~Hz}$ at 5 $\mathrm{cm} / \mathrm{sec}$ features imp 20 ohms ; FR range $10-50.000 \mathrm{~Hz}$; perpendicular tracking angle $22 \pm 2$ degrees; cantilever ultra low mass, 0.28 mm diam. solid boron rod; stylus micro min , oriented, square nude diamond $0.12 \times 0.12$ millimeters; micro-edge line contact $4 \times$ 80 microns; channel balance $>1.0 \mathrm{~dB}$; channel separation $>35 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; machined aluminum alloy

## MICROSEIKI B

## ANALOG EXCELLENCE

## C-2 High-Output MC Cartridge

Beryllium pipe cantilever; line-contact stylus. Output 2.5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $10-30,000 \mathrm{~Hz}$; tracking force $1.8 \mathrm{~g} \pm \mathrm{g}$ : cartridge weight 9.5 g ; internal imp 120 ohms; compliance $8 \times 10 \mathrm{~cm} /$ dyne

## MISSION ELECTRONICS

## The Rose Cartridge

MC cartridge made from solid rosewood wired internally with ultra-fine linear crystal. Line-contact stylus; annealed boron cantilever; output 0.2 mV at 5 $\mathrm{cm} / \mathrm{sec} ;$ FR $20-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; $\operatorname{sep} 25 \mathrm{~dB}$ at 1,000 Hz ; max tracking force 2 g ; cartridge weight $6.2 \mathrm{~g} \$ 599$

Solitaire MM Phone Cartridge
Output 3 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $20-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sep 28 dB at $1,000 \mathrm{~Hz}$; tracking force $1.8-2 \mathrm{~g}$; cart ridge weight 5.7 g .
. $\$ 99$

## 773MM MM Phono Cartridge

Cart ridge with $0.3 \times 0.8 \mathrm{mil}$ synthetic diamond stylus. output 4 mV at $1.000 \mathrm{~Hz}, 3 \mathrm{mV} 50 \mathrm{~mm} / \mathrm{sec}$ at 1,000 Hz ; sep 28 dB at $1,000 \mathrm{~Hz}$; tracking force $1.5-2.5 \mathrm{~g} \$ 79$

## CARTRIDGES \& TONEARMS

## Tonearm

## The Mechanic Tonearm

Tonearm cut from single billet of aluminum with minimum number of separate pieces: direct-coupled rigid two-plane symmetric and concentric bearings in ceramic cups: fixed $23 \times 45^{\circ}$ offset angle (adjustable): effective length 228 mm : pivot-spindle 210 mm : overhang 18 mm ; effective mass $16 \mathrm{~g} \ldots . . \$ 2,000$

## MONSTERCABLE

Alpha Genesis 1000 MC Cartridge
Low output: diamond-sputtered cantilever; phase-

corrected coils. . . . . . . . . . . . . . . . . . . . . . . . . $\$ 800$
500.

## MUSIC HALL

Bullet Cartridge
Highly modified Audio-Technica cartridge with elliptical stylus.
$\$ 125$

## NAGAOKA

## MP 50s Phono Cartridge

MM phono cartridge with impact aluminum frame. Nude super elliptical stylus. sapphire pipe cantilever. FR $20-28,000 \mathrm{~Hz}$ : output voltage 2.5 mV ( $5 \mathrm{~cm} / \mathrm{sec}$ ) (a) 1.000 Hz ; ch sep $>27 \mathrm{~dB} @ 1.000 \mathrm{~Hz}$ : stylus pressure $1.1-1.5 \mathrm{~g}$ : cartridge weight 9 g $\$ 330$
N50 MP. Replacement styli
\$200

## MP 30 Phono Cartridge

MM phono cartridge with impact aluminum frame. $0.4 \times 0.7$ mil elliptical stylus: Boron cantilever. FR $20-$ $25,000 \mathrm{~Hz}$; output voltage $3 \mathrm{mV}(5 \mathrm{~cm} / \mathrm{sec})$ (a) 1.000 Hz : ch sep $>25 \mathrm{~dB}$ (o) 1.000 Hz : stylus pressure $1.3-$
1.8 g : cartridge weight 9 g
$\$ 220$
N. 30 MP. Replacement styli
$\$ 125$

## MP 11 Boron Phono Cartridge

Magnetodynamic phono cartridge with UT58 Boron taper pipe cantilever. $0.4 \times 0.7$ mil elliptical block diamond stylus. FR $20-23,000 \mathrm{~Hz}$ : output voltage 4.0 $\mathrm{mV}(5 \mathrm{~cm} / \mathrm{sec})$ (a) 1.000 Hz ; ch sep $>25 \mathrm{~dB}$ @ 1,000 Hz : stylus pressure $1.8-2.3 \mathrm{~g}$ : cartridge weight 6.8 g. $\$ 150$
N11 MP Boron. Replacement syli $\$ 85$

MP 11 Gold. Similar to above with A 5052 duralmin. tin ion plated cantilever. Stylus pressure $1.7-2.3 \mathrm{~g}$ : cartridge weight 7.9 g .
$\$ 110$
N11MP Gold. Replacement styli
. $\$ 65$

## MP II Phono Cartridge

Phono cartridge with samarium cobalt magnet. $0.3 \times$ 0.7 mil elliptical diamond stylus. FR $20-20.000 \mathrm{~Hz}$ : output voltage 5 mV ( $5 \mathrm{~cm} / \mathrm{sec}$ ) (@ $1,000 \mathrm{~Hz}$; ch sep $>23 \mathrm{~dB}$ (a) $1,000 \mathrm{~Hz}$ : stylus pressure $1.8-2.3 \mathrm{~g}$ : cartridge weight 6.8 g .
$\$ 80$
Nil MP. Replacement styli
\$55

MP 10 Phono Cartridge
Mm phono cartridge with A5052 duralmin cantilever. 0.5 mil conical diamond stylus; FR $20-20.000 \mathrm{~Hz}$ : oulput voltage $5 \mathrm{mV}(5 \mathrm{~cm} / \mathrm{sec})$ (o) 1.000 Hz : ch sep $>22 \mathrm{~dB}$; stylus pressure $2.0-2.5 \mathrm{~g}$ : cartridge weight 6.8 g . N10 MP. Replacement styli $\$ 60$ \$35

MP03. "Bulk Budget" cartridge. eliptical stylus. $\$ 40$ NNC-P. Same as above P-mount
$\$ 40$

## ORTOFON

## Ortophase Moving-Coil Phono Carrridges

MC 300. Mc car:ridge with ultra low mass ( 0.25 mg ) moving system. Features propricty Ortofon Fg Replicant 100 stylus mounted on a rigid aluminum conical cantilever: carbon fiber armature wound with pure silver coils and a neodymium permanent magnet. Aluminum oxide, ceramic cartrige housing with Moh scale hardness factor of 9 . Output voltage at $1,000 \mathrm{~Hz}$ $5 \mathrm{~cm} / \mathrm{sec} 0.1 \mathrm{mV}$ : ch. sep. at $1,000 \mathrm{~Hz}>25 \mathrm{~dB}$; FR 5 $90,000 \mathrm{~Hz}+4-1 \mathrm{~dB}$ : tracking ability at 315 Hz at recommended tracking force $>80 \mu \mathrm{~m}$ : weight 9.5 g.
$\$ 1,000$
MC30 Super. MC cartridge with extruded aluminum body, and carbon fiber support system, and silver coil windings. Stylus Fg type I with stylus tip radius $\mathrm{r} / \mathrm{R}$ $4.5 / 80 \mu \mathrm{~m}$. Output 0.25 mV at $1000 \mathrm{~cm} / \mathrm{sec}$; FR $15-$ $45,000 \mathrm{~Hz}$ : $\operatorname{sep}>25 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$ : tracking ability at recommended tracking force $90 \mu \mathrm{~m}$ : weight 9 g. . $\$ 450$
MC20 Super. Mc cartridge with extruded aluminum body. Features Van den Hul stylus: carbon-fiber support system. Output 0.25 mV at $1.000 \mathrm{~cm} / \mathrm{sec}$ : FR $15-40,000 \mathrm{~Hz}$; sep $>25 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$ : tracking-force range $1.5-1.9 \mathrm{~g}$ : cartridge weight 9 g ......... . $\$ 300$ MC10 Super. Me stereo phono cartridge with elliptical nude stylus. Vertical tracking angle 20x. output 0.25 mV al $\mathrm{IkHz} .5 \mathrm{~cm} / \mathrm{sec}$ : FR $20-20.000 \mathrm{~Hz} \pm \mathrm{I} \mathrm{dB}$; tracking force 1.5 g : FIM distortion $<1 \% ; 7 \mathrm{~g}$. . $\$ 150$

## High-Output Moving-Coil Cartridges

X5MC. High output Mc cartridge for direct connection to MM phono input. Features Fg type 2 nude diamond stylus. High output/low moving mass achieved through focused magnetic field and only 230 coil windings per pole piece. Output 2 mV at 5 $\mathrm{cm} / \mathrm{sec}$. FR $15-40 \mathrm{KHz}+4-1.5 \mathrm{~dB}$; sep $>25 \mathrm{~dB}$ at 1.000 Hz . weight 4.1 g
$\$ 300$ X3-MC. High-ouput MC cartridge connects directly to mm-phono input. Features focused magnetic field for high output with low-moving mass ( 230 coil windings per pol piece) and nude fine-line diamond. Output 2 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $20-40,000 \mathrm{~Hz}+4,-1.5$ dB : sep $>25 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; tracking-force range 1.8 2.2 g: cartridge weight 4.1 g : verical tracking angle 23x
$\$ 200$
X3-MCP. P-mount version of X3-MC. .
$\$ 200$
X1-MC. High oupul MC cartidge with low-moving mass, aluminum cantilever, and elliptical diamond. Output 2 mV at $5 \mathrm{~cm} / \mathrm{sec}$ : $F R 20-30.000 \mathrm{~Hz}+4$, -1.5 dB ; sep $>22 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$ : tracking-force range $1.75-2.2 \mathrm{~g}$ : carridge weight 4.1 g : vertical tracking angle 23 x
$\$ 100$
XI-MCP. P-mount version of XI-MC . . . . . . \$ $\$ 100$

## Diamond Collection 500 Series

540. mm cartridge utilizing proprictary slotted pole pin consiruction for improved high frequency response. Patented locking stylus guard to secure sylus to cartridge hody avoiding unwanted resonances. Square-shank nude diamond $\mathrm{Fg}_{g}$ type 1. Output at 3 mV al I kHz. FR $20-28 \mathrm{kHz}+4,-\mathrm{I} \mathrm{dB} \ldots . .300$ 530. Similar to 540 except uses square-shank nude fine-line diamond. FR $\mathbf{2 0 - 2 5 , 0 0 0} \mathbf{~ H z}$. . . . . . . $\mathbf{\$ 2 2 5}$ 520. Similar to 530 except uses a square-shank nude elliptical diamond. sep 23dB; FR $20-23,000 \mathrm{~Hz} \$ 150$

## Optimum-Mess Cartridges

OM-40 Gold. Variable-magnet-shunt cartridge with
individually calibrated Van den Hul stylus. Outpu 3.5 mV at $1.000 \mathrm{~cm} / \mathrm{sec}$ : fR $20-30.000 \mathrm{~Hz}$ : $\operatorname{sep} 25-$ $1,000 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$ : tracking-force range $1-1.5 \mathrm{~g}$ : cartridge weight 5 or 2.5 g .
$\$ 300$
OM-30. Low-mass variable-magnetic-shunt phono cartridge. Features cartridge body of neryl plastic for rigidity and low weight: copper coils: mu-metal container for electrical system; nude fine-line diamond stylus: tracking force 1.25 g : FR $20-27,000 \mathrm{~Hz}$ : output voliage at $1,000 \mathrm{~Hz}(5 \mathrm{~cm} / \mathrm{sec}) 3.5 \mathrm{mV}$ : wt 2.5 grams: ch sep at $1,000 \mathrm{~Hz}>25 \mathrm{~dB} . \ldots$. . . . . . $\$ 225$ OMP-30. P-Mount version of OM-30 cartridge: 6 gms
$\$ 225$
OM-20. Similar to OM-30 except for a more rectangular nude elliptical diamond stylus; designed for medium-weight tonearms: FR $\mathbf{2 0 - 2 2 . 0 0 0 ~ H z}$ : output voltage at $1.000 \mathrm{~Hz}(5 \mathrm{~cm} / \mathrm{sec}) 4 \mathrm{mV}$. ....... $\$ 175$ OMP-20. P-Mount version of OM-20 cartridge: 6 gm
$\$ 175$
OM-10. Similar to OM-20 except for a heavier stylus tip; designed for use with heavier tonearms: tracking force 1.5 gram: FR $20-20,000 \mathrm{~Hz}$; output voltage at $1.000 \mathrm{~Hz}(5 \mathrm{~cm} / \mathrm{sec}) 4 \mathrm{mV}$ : ch sep at 1.000 Hz 22 dB
OMP-10. P-Mount version of OM-10 cartridge; 6 gm
$\$ 95$
OM-5E. Similar to OM-10 except for heavier stylus tip; for use with heavier tonearms. Tracking force l-5 g: FR $20-20.000 \mathrm{~Hz}$.
OMP-5E. P-Mount version of OM-5E. . . . . . . S65

## Pro Series

Concorde Pro Kit. mm cartridge kit with one Concorde integrated pro body and two spherical pro styli. FR $20-20.000 \mathrm{~Hz}$; output 5 mV at $1,000 \mathrm{~Hz} 5 \mathrm{~cm} / \mathrm{sec}$ : sep/balance at $1 \mathrm{kHz} 20 / 2 \mathrm{~dB}$ : weight $16 \mathrm{~g} \ldots . . \$ 110$ OM Pro-Kit. MM-cartridge kit with one OM Pro body and 2 prestyli. Features spherical stylus and aluminum camtilever. Output 5 mV at $5 \mathrm{~cm} / \mathrm{sec}$ : FR $20-$ $18.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sep 20 dB at $1,000 \mathrm{~Hz}$; trackingforce range $3-5 \mathrm{~g}$ : cartridge weight 5 g .
$\$ 95$ Stylus Pro. Replacement stylus for OM Pro Kit $\$ 30$

## 300 Series

320U. Universal P-mount with $0.5^{\prime \prime}$ mount adaptor, moving magnet generating principal. Square shank nude elidtical diamond. FR $20-22.000 \mathrm{~Hz}$; output 5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; sep 24 dB
$\$ 129$ 310U. Similar to 320 U except has highly-polished elliptical diamond stylus. FR $20-20,000 \mathrm{~Hz}$. . . . $\$ 89$ 305E. Similar to 310 U except has an elliptical diamond stylus. $\operatorname{sep} 23 \mathrm{~dB}$.
$\$ 60$

## Universal Series

TM20L. Variable-magnetic-shunt cartridge with square shank nude eliptical diamond and universal mount. Output 4 mV at $1 \mathrm{kHz}, 5 \mathrm{~cm} / \mathrm{sec}$; FR $20-$ 25.000 Hz : bal/sep. $1.5 / 25 \mathrm{~dB}$; weight 6 g . . . . $\$ 129$ TM14L. Stereo cartridge with elliptical diamond stylus and unversal mount. FR $20-20,000 \mathrm{~Hz}$; output 4.5 mV , equivalent stylus tip mass 0.5 mg : recommended load 47 k ohms/200 pF : tracking force 1.25 g.
$\$ 89$
TM7U. Cartridge with elliptical diamond stylus and universal mount. FR $20-20,000 \mathrm{~Hz}$ : output 5 mV at I $\mathrm{kHz} .5 \mathrm{~cm} / \mathrm{sec}$.
$\$ 60$
FF15XE MkII. Variable Magnetic Shunt cartridge with $8-\mu \mathrm{m}$ elliptical diamond stylus tip. Output 3.2 mV at i kHz. $1 \mathrm{~cm} / \mathrm{sec}$; $\mathrm{FR} 20-20,000 \mathrm{~Hz}$; compliance $20 \mu \mathrm{~m} / \mathrm{mN}$ horizontal, vertical): tracking-force range $1.5-3 \mathrm{~g}: 5$ grams
$\$ 50$

## PARASOUND

## PCe77 P-Mount Phono Cartridge

Induced-magnet cartridge with aligned elliptical stylus. Output 4 mV at $3.54 \mathrm{~cm} / \mathrm{sec}$; FR $20-26,000 \mathrm{~Hz}$ $\pm 0.8 \mathrm{~dB}$
\$80

## PCs55 Phono Cartridge

Standard $0.5^{\prime \prime}$-mount induced-magnet cartridge with low mass, medium compliance, and hinged stylus

## CARTRIDGES \& TONEARMS

guard. Thin-walled aluminum cantilever, $0.6-\mathrm{mil}$ uniradial stylus. Output 5 mV at $3.54 \mathrm{~cm} / \mathrm{sec}$; FR $20-$ $20,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; sep 28 dB at $1,000 \mathrm{~Hz}$; tracking force range $1.5-2 \mathrm{~g}$; cartridge weight $3.7 \mathrm{~g} . . .$. . $\$ 60$

## IM1700 P-Mount Phono Cartridge

Induced-magnet cartridge with spherical stylus and aluminum cantilever. Output 5 mV at $3.54 \mathrm{~cm} / \mathrm{s}$; FR $20-20.000 \mathrm{~Hz} \pm \mathrm{I} \mathrm{dB}$; cartridge weight $5 \mathrm{~g} \ldots . . \$ 60$

## PICKERING

XLZ/7500S Phono Cartridge
Cartridge with nude Stereohedron diamond stylus tip. Sens $0.06 \mathrm{mV} / \mathrm{cm} / \mathrm{sec} \pm 2 \mathrm{~dB}$; FR $10-50,000 \mathrm{~Hz}$; sep 35 dB ; tracking force $0.5-1.5 \mathrm{~g}$; includes Dustamatic brush; replacement stylus D7500. $\qquad$

## XSV/5000 Phono Cartridge

Cartridge with nude Sterehedron diamond stylus tip. Output 3.8 mV ; FR $10-50,000 \mathrm{~Hz}$; tracking force 0.5 1.5 g; sep 35 dB ; includes Dustamatic brush. Replacement stylus D5000 . . . . . . . . . . . . . . . . . . . . . . $\$ 275$
XSV/4000. Similar to XSV/5000 except FR 10 $36,000 \mathrm{~Hz}$; tracking force $.75-1.5 \mathrm{~g}$; replacement stylus D5000.
$\$ 200$

## XV-15/1200 Phono Cartridge

Output 4.4 mV at $5.5 \mathrm{~cm} / \mathrm{sec}$; FR $10-30,000 \mathrm{~Hz} ; 0.2 \times$ 0.7 -mil elliptical stylus; tracking force $0.75-1.25 \mathrm{~g}$; sep 35 dB ; features Dustamatic brush; replacement stylus DI 200 .
\$170

## XV-15/757S Cartridge

Stercohedron stylus, output 4.4 mV ; tracking force $.75-1.5 \mathrm{~g}$; FR $10-25,000 \mathrm{~Hz}$; replacement stylus D757S . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 140$

## XSV/3000 Phono Cartridge

Output 5 mV at $5.5 \mathrm{~cm} / \mathrm{sec}$; FR $10-30,000 \mathrm{~Hz}$; Sterocohedron stylus tip; tracking force $0.75-1.5 \mathrm{~g}$; sep 35 dB ; features Dustamatic brush; replacement stylus D3000.
$\$ 130$

## XV-15/625E Phono Cartridge

Output 4.4 mV at $5.5 \mathrm{~cm} / \mathrm{sec}$ : FR $10-25.000 \mathrm{~Hz} ; 0.3 \times$ 0.7 -mil elliptical stylus; tracking force $0.75-1.5 \mathrm{~g}$; sep 35 dB ; features Dustamatic brush; replacemant stylus.
$\$ 110$

## XV-15/625DJ Phono Cartridge

Designed for disco use. Output $0.8 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$, sep 30 dB : tracking force $1-4 \mathrm{~g}: 0.3 \times 0.7$-mil elliptical stylus.
. \$82

## XV-15/400E Phono Cartridge

Output 5.5 mV at $5.5 \mathrm{~cm} / \mathrm{sec} ;$ FR $10-25,000 \mathrm{~Hz} ; 0.4 \mathrm{x}$ $0.7-\mathrm{mil}$ elliptical sylus; tracking force $.75-1.25 \mathrm{~g}$; scp 35 dB ; features Dustamatic brush; replacement stylus D400
. $\$ 95$

## P-Mount Cartridges

TLZ/7500S. High-performance low-imp cartridge with 4 -coil, high-energy samarium cobalt magnet. Nude stereohedron stylus; output $0.06 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; tracking force . $75-1.5 \mathrm{~g}$; FR $10-50.000 \mathrm{~Hz} \ldots . . \$ 275$ XSP/4004. Features nude stereohedron stylus with output 3.8 mV ; tracking .75-1.5 g; FR $10-36,000$ Hz . \$200 XSP/3003. Stereohedron series $p$-Mount cartridge with output 3.3 mV . FR $10-30,000 \mathrm{~Hz}$; tracking force $.75-1.5 \mathrm{~g}, \pm .25 \mathrm{~g}$.
TL-4S. 4-coil incuced magnet. Stereohedron stylus output $4 . \ddagger \mathrm{mV}$, FR $10-25,000 \mathrm{~Hz} \ldots . .$. . . . $\$ 170$ TL-3S. Stereohedron stylus. Output 4.4 mV : tracking $.75-1.5 \mathrm{~g}$; FR $10-25,000 \mathrm{~Hz}$.
. $\$ 140$
TL-2S. Stereohedron stylus. Output 4.4 mV ; tracking $.75-1.5 \mathrm{~g}$; FR $10-22,000 \mathrm{~Hz}$. .$\$ 110$ TL-2E. Elliptical stylus. Output 4.4 mV ; tracking. 75 I.5 g: FR $10-22.000 \mathrm{~Hz} . . . . . . . . . . . . . . . . . . .$. . $\$ 95$
TL-1. Std P-Mount. 2 -coil moving magnet. Tracking TL-1. Std P-Mount. 2-coil moving magnet. Tracking . $75-1.5 \mathrm{~g}$. Elliptical stylus, FR $10-20,000 \mathrm{~Hz}$, output 4.4 mV

T1625DJ. P-Mount cartridge. FR $20-20.000 \mathrm{~Hz}$, output 4.4 mV , tracking force $3.5-4 \mathrm{~g}$. Replacement stylus DJL.
TLE Type 2. ter tracking force . $75-1.5 \mathrm{~g}$ : FR $10-22,000 \mathrm{~Hz} \ldots .$. . $\$ 60$ TLE. Elliptical stylus. Output 4.4 mV ; tracking force


V-15/Series II-S. Stereohedron stylus, FR 10-25,000 Hz , output 3.5 mV . Replacement stylus DSR-S $\$ 88$ V-15/Series II-E.E. Elliptical stylus, FR $10-20,000 \mathrm{~Hz}$, output 3.5 mV . Replacement stylus DSR-EE. . . $\$ 55$ V-15/Series II-E. Elliptical stylus, FR $10-18.000 \mathrm{~Hz}$. output 3.5 mV . Replacement stylus DSR-E. . . $\$ 50$ V15-DJ Cartridge
Spherical Cartridge (standard $.5^{\circ}$ mount) Nominal Output 4.4 mV : Tracking force $2-5 \mathrm{~g}$ : weight $5.5 \mathrm{~g} \$ 43$

## PIONEER

## PC-295T Induced-Magnet Cartridge

T4P P-mount cartridge. FR $10-33.00 \mathrm{~Hz}$; output voltage 2.5 mV ; tracking force $1.25 \mathrm{~g} . \ldots$. . . . . . $\$ 80$ PN-295T. Replacement stylus for PC-295T. . . . \$35

## PC-300T Induced-Magnet Cartridge

T4P P-mount cartridge. FR $10-33,000 \mathrm{~Hz}$ : output voltage 2.5 mV ; tracking force $1.25 \mathrm{~g} \ldots .$. . . . . $\$ 80$ PN-300T. Replacement stylus for PC-300T. . . . \$30

PC-290T Induced-Magnet Cartridge
T4P P-mount cartridge. FR $10-33,000 \mathrm{~Hz}$; output voltage 2.5 mV ; tracking force 1.25 g . . . . . . . . . $\$ 70$ PN-290T. Replacement stylus for PC-290T. . . . \$30

PC-5MC Moving-Coil Cartridge
High-output MC cartridge. FR $10-32,000 \mathrm{~Hz}$; output voltage 2 mV : tracking force $1.7-2.3 \mathrm{~g}$. . . . . . . . $\$ 54$ PN-5MC. Replacement stylus for PC-5MC. . . . \$32

PC-250T Moving-Magnet Cartridge
T4P P-mount cartridge. FR $10-30,000 \mathrm{~Hz}$; output voltage 2.5 mV ; tracking force $1-1.5 \mathrm{~g} \ldots . .$. . . $\$ 50$ PN-250T. Replacement stylus for PC-250T . . . \$20

## PREMIER BY SUMIKO

## FT-3 Straight Tonearm

Statically balanced tonearm with anti-resonance foam-stuffed tube. Features decoupled counterweight; cone and ball race bearings; LC-OFC litz wiring; VTA adjustable during play; termination box with LC-OFC flexible link and gold-plated RCA jacks. Fixed-azimuth adjustable magnesium headshell. Tracking force $0-3 \mathrm{~g}$ calibrated to 0.1 g ; effective mass 10 g : offsct angle 23 X : stylus overhang 17.3 mm : overall length 305 mm ; effective length 239 mm ; tracking error $0.123 \mathrm{x} / \mathrm{cm} ; 20 \mathrm{oz}$
$\$ 475$
FT-3K
\$395

## MMT Tonearm

Highly rigid medium-mass toncarm with double gimbal bearings; bearing design allows free movement without bearing play or chatter. Features decoupled counterweight: optional damping: removable headshell with azimuth adjustability and LCOFC cartridge leads.
$\$ 290$

## REALISTIC

V15 Realistic/Shure V15 Type RS
$5-30,000 \mathrm{~Hz}$ frequency response; precision tracking at $1.25-1.75 \mathrm{~g}$ : dynamic stabilizer; viscous damping for precise tracking of warped record . . . . . . . . . . . . $\$ 80$

## RXT6 Realistic/Shure Cartridge

Cartridge with telescope stylus features dynamic stabilizer; tracking force $1.25-1.75 \mathrm{~g}$; P-mount adaptor and installation kit.
\$50

## RXP3 Realistic/Shure Cartridge

P-mount; elliptical diamond stylus; tracking force 1.25 g .

R47XT Realistic/Shure Cartridge
Elliptical diamond stylus ( $10 \times 18$ microns); tracking force $1.75-2.25 \mathrm{~g} ; \operatorname{sep} 20 \mathrm{~dB}$.
\$27

## RS500DJ Realistic/Stanton Cartridge

Pro Series cartridge for radio stations and dance clubs (back-cues and scratch mixes); tracking force $2.5 \mathrm{~g} \$ 30$ R5001)J. Replacement stylus
\$20
RX1500 Dual-Magnet Plug-In Cartridge
Dual-magnet plut-in cartridge features diamond elliptical stylus; tracking force $1-1.5 \mathrm{~g}$.
\$30

## R25XT Realistic/Shure Cartridge

Elliptical diamond stylus ( $10 \times 18$ microns); tracking force $2.5-3.5 \mathrm{~g}$
$\$ 20$

## Styli

RS3P. Diamond stylus for RXP3 and Shure M92E. M99E, M104E
\$28
R8X. Diamond stylus for R1000, Shure M90, M75.
T-2 series
$\$ 25$
R5X. Diamond stylus for R47, Shure M70 and M75 series . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 20$
RS50E. Diamond elliptical stylus for ADC, QLM34
MK III, P32, K5E cartridges .
\$22
RT1500. Diamond elliptical stylus for RX1500, Audio-Technica AT-102P, 102, 112, 122EP cartridges; tracking force $1-1.5 \mathrm{~g}$. $\$ 20$
R3X. Diamond stylus for R25. Shure M71 and M75ECS series.
$\$ 15$
42-2772. Diamond conical stylus . . . . . . . . . . . . \$15 DAT-2. Diamond conical stylus for Pickering V15/AT-1/2. KLH. similar cartridges. . . . . . . . . \$12 ATN-771E. Diamond elliptical stylus for AudioTechnica AT-70/71/71E
............ \$11 RSK8C. Diamond conical stylus for QLM30 and ADC K series cartridges . . . . . . . . . . . . . . . . . . . \$11 PS-203. Diamond stylus for Clarinette 14/15/16 and 13-1117/1118

## REVOLVER BY MUSIC HALL

## Revolver Super Tonearm

Similar geometry to Revolver Straight Tonearm but incorporates larger zero free-play bearings, alloy arm tube.
$\$ 450$

## Revolver Straight Tonearm

Statically balanced pivoted direct-coupled tonearm with zero free-play-adjusted precision ball races; decoupled counterweight; fixed aluminum headshell. Tracking force $2-10 \mathrm{~g}$ calibrated to 0.1 g : effective mass 7 g ; offset angle 23.5 x ; stylus overhang 18 mm ; overall length 285 mm ; effective length $228 \mathrm{~mm} ; 393$ g. .
$\$ 200$

## SAEC By ANALOG EXCELLENCE

## C-1 MC Phono Cartridge

Medium output; beryllium cantilever: line-contact stylus; nonresonant metal-alloy body. Output 0.4 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $10-50,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sep 30 dB at 1.000 Hz ; tracking force $1.4-1.6 \mathrm{~g}$; cartridge weight 9 gi internal imp 40 ohms.
$\$ 695$

## C-2 High-Output MC Cartridge

Beryllium pipe cantilver: line-contact stylus. Output 2.5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $10-30.000 \mathrm{~Hz}$; tracking force $1.8 \mathrm{~g} \pm 0.25 \mathrm{~g}$ : cartridge weight 9.5 g .
\$395

## C-102 MC Phono Cartridge

Medium-output; aluminum cantilever: nude diamond stylus. Output 0.6 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR 20 $30,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sep 25 dB at $1,000 \mathrm{~Hz}$; tracking force $1.6-1.8 \mathrm{~g}$ : cartridge weight 7 g ; internal imp 40 ohms.
$\$ 250$

## Tonearms

## WE-8000S/T Straight Tonearm

Statically balanced tonearm with offset angle built into ceramic headshell. Features titanium/aluminum

## CARTRIDGES \& TONEARMS

alloy pipe with $10^{\circ}$ taper: lateral balance control: double-knife edge bearings: decoupled counterweight: For medium to high compliance cartridges. Ceramic headshell, berylium connector: tracking force $0-3 \mathrm{~g}$ calibrated to 0.1 g : offset angle $18^{\circ}$; stylus overhang 13 mm ; overall length 400 mm ; effective length 293 mm ; tracking error $<1^{\circ} \ldots$. . . . . $\$ 1.500$

## WE-506/30 J-Shaped Tonearm

J-shaped tonearm features special alloy pipe. Statically balanced: decoupled counterweight: universal design: ceramic headshell; tracking force $0-4.0 \mathrm{~g}$ calibrated to 0.1 g ; offset angle to $16^{\circ}$ : stylus overhang 9 mm : overall length 392 mm ; effective length 286 mm : tracking crror < $1.5^{\circ}$. . . . . . . . . . . . $\$ 1.500$ WE-407/23 J-Shaped Tonearm
Statically balanced tonearm with patented forged steel double-knife-edge bearing. Each arm individually balanced in all 3 planes (horizontal, vertical. front/back). Headshell sintered and multi-crystaled aluminum oxide, ceramic; tracking force 0-4 8 calibrated to 0.1 g : offset angle $18^{\circ}$; stylus overhang 12 mm ; overall length 311 mm ; effective length 221 mm
. \$795

## WE-317S J-Shaped Tonearm

Statically balanced tonearm with double-edge bearings. Headshell of aluminum/titanium: tracking force $0-3 \mathrm{~g}$ calibrated to 0.1 g : offset angle $2^{\circ}$ : stylus overhang 13 mm ; overall length 331.5 mm ; effective length 235 mm ; tracking error $<1.5^{\circ}$. $\qquad$ .$\$ 595$

## WE-308/N J-Shaped Tonearm

Statically balanced toncarm with double-knife-edge bearings and stainless steel pipe. Universal aluminum/titanium alloy headshell; tracking force $0-3 \mathrm{~g}$ calibrated to 0.1 g ; offset angle $12.5^{\circ}$; stylus overhang 5 mm ; overall length 329 mm ; effective length 235 mm ; tracking error $<1.5^{\circ}$
\$350

## SHURE

ULTRA 500. All of V15 type V-MR (see below) plus other features. Total eff mass 0.165 mg : dynamic verical stylus compliance at $10 \mathrm{~Hz} 20 \mu \mathrm{~cm} /$ dyne: output at $1.000 \mathrm{~Hz} ; 5 \mathrm{~cm} / \mathrm{sec}$ peak velocity; 3.2 mV $\$ 400$
ULTRA 400 . Total eff mass 0.190 mg ; dynamic vertical stylus compliance at $10 \mathrm{~Hz} 14 \mu \mathrm{~cm} /$ dyne; output at $1,000 \mathrm{~Hz} ; 5 \mathrm{~cm} / \mathrm{sec}$ peak velocity; 4.0 mV
. $\$ 250$ ULTRA 300. Total eff mass 0.165 mg; dynamic vertical stylus compliance at $10 \mathrm{~Hz} 11 \mu \mathrm{~cm} /$ dyne; output at $1,000 \mathrm{~Hz} ; 5 \mathrm{~cm} / \mathrm{sec}$ peak velocity; 3.2 mV
$\$ 160$

## V15 Type V-MR Phono Cartridge

MM cartridge with improved low-distortion MicroRidge stylus tip and Microwall beryllium stylus shank for increased trackability. Features viscousdamped Dynamic Stabilizer and Side-Guard stylus protection system; includes Duo-Point Alignment Gauge and computer performance printout. Output 3.2 mV at $1.000 \mathrm{~Hz}(5 \mathrm{~cm} / \mathrm{sec}$ peak velocity): $\mathrm{FR} 10-$ 28.000 Hz ; sep 25 dB or greater at $1,000 \mathrm{~Hz}$ : tracking force 1.0 g ; replacement stylus VNSMR..... . $\$ 297$

## V15 Type V-B Phono Cartridge

MM cartridge with exclusive Hyperelliptical tip. Microwall beryllium stylus shank. Dynamic Stabilizer and Side-Guard stylus protection system. Includes individual computer performance printout. Output 3.2 mV at 1 kHz ( $5 \mathrm{~cm} / \mathrm{sec}$ peak velocity): $\mathrm{FR} 10-$ 28.000 Hz : sep 25 dB or greater at 1.000 Hz ; tracking force 1.0 g : replacement stylus VN5HE: VN5MR upgrade.
\$237

## V15 Type V-P Phono Cartridge

Specifically designed for ultimate performance in PMount tonearms. Features Hyperelliptical tip; Microwall beryllium stylus shank; computer performance printout. Same specs as V15 type V-B. Replacement stylus VN5P.

ML140HE Phono Cartridge
Slim-line high-efficiency cartridge body provides an extremely flat frequency response from $20-22.000$ Hz . Superb trackability with Microwall beryllium shank and accurate tracing with Hyperelliptical tip. Slim Dynamic Stabilizer combats record uasp problems while destaticizing and cleaning the record, and Side-Guard helps protect stylus from accidental damage. Includes overhang gauge. Replacement stylus N140HE
\$205

## VST V Phono Cartridge

MM cartridge. Features Microwall/Be beryllium stylus shank; hyperelliptical stylus tip; telescoped stylus shank: dynamic stabilizer; side-guard stylus protection system. FR $10-35,000 \mathrm{~Hz}$; trackability at 10,000 $\mathrm{Hz} 72 \mathrm{~cm} / \mathrm{sec}$ : ch $\operatorname{sep}$ at $1.000 \mathrm{~Hz} 25 \mathrm{~dB} \ldots$. . $\$ 170$

## MLi20HE Phono Cartridge

Slim-line high-efficiency cartridge body provides flat FR from $20-22,000 \mathrm{~Hz}$. Low-mass, high-stiffress

telescoped styles shank. Hyperelliptical tip, slim Dynamic Stabilizer and Side-Guard stylus protecton system. Output 4.0 mV at 1 kHz ( $5 \mathrm{~cm} / \mathrm{sec}$ peak velocity): sep 25 dB or greater at 1 kHz ; tracking force 1.0 g . Replacement stylus N120HE. $\qquad$ $\$ 167$

## M111HE Phono Cartridge

Features telescoped stylus shank. Hyperelliptical tip. Dynamic Stabilizer. Side-Guard stylus protection system; rigid. low-mass con verter allows mounting to either conventional $0.5^{\prime \prime}$-mount tonearms or most P Mount tonearms; output 5.0 mV at $\mid \mathrm{kHz}(5 \mathrm{~cm} / \mathrm{sec}$ peak velocity); FR $20-20,000 \mathrm{~Hz}$; sep 25 dB at 1 kHz : tracking force 1.25 g. Replacement stylus N11HE $\qquad$

## M110HE Phono Cartridge

Features telescoped stylus shank. Hyperelliptical tip. and Side-Guard stylus protection system; rigid, lowmass converter allows mounting to either conventional 0.5 "-mount tonearms or all P-Mount tonearms; same specs as MIIIHE. Replacement stylus NIIOHE
. $\$ 119$

## M105E Phono Cartridge

Features $0.2 \times 0.7$ mil elliptical tip and thin-walled, reinforced aluminum shank. Features Destaticizer Brush to clean dust from record grooves and remove static electricity from record surface. Side-Guard stylus protection system helps prevent accidental stylus damage. Fits most P-Mount tonearms and includes rigid $0.5 "$-mount converter. Output 5.0 mV at 1 kHz ( $5 \mathrm{~cm} /$ sec peak velocity); FR $20-20,000 \mathrm{~Hz}$; $\operatorname{sep} 25 \mathrm{~dB}$ at I kHz; tracking force 1.25 g . Replacement stylus NIOSE.
$\$ 108$

## DC60 Phono Cartridge

Features internal cue guard to stabilize stylus shank: wraparound stylus grip; comes with 2 replacement styli: elliptical stylus. $1 / 2$-inch mount . . . . . . . . . \$106 DC50. As above, P-mount. $\$ 106$

## VST III Phono Cartridge

MM cartridge. Features Microwall/Be beryllium stylus shank; hyperelliptical stylus tip; telescoped stylus shank: dynamic stabilizer; side-guard stylus protec-
tion system. FR $10-20,000 \mathrm{~Hz}$ : trackability at 10,000 $\mathrm{Hz} 56 \mathrm{~cm} / \mathrm{sec}$; ch sep at $1,000 \mathrm{~Hz} 25 \mathrm{~dB} \ldots$. . $\$ 100$ VST III-P. As above, P-mount.
. $\$ 90$

## M104E Phono Cartridge

Cartridge with accurate-tracing $0.2 \times 0.7$ mil elliptical stylus tip features tubular heat-treated aluminum stylus shank. P-Mount compatible and includes rigid $0.5^{\prime \prime}$-mount converter. Output 5.0 mV at 1 kHz ( 5 $\mathrm{cm} / \mathrm{sec}$ peak velocity): FR $20-20.000 \mathrm{~Hz}$; sep 25 dB at 1 kHz : tracking force 1.25 g . Replacement stylus N104E.
$\$ 76$

## DC40 Phono Cartridge

Features ir ternal cue guard to stabilize stylus shank; wraparound stylus grip; comes with 2 replacement styli; elliptical stylus. $1 / 2$-inch mount. Tracking force 2.5-3.5 grams; FR 20-20,000 Hz; output voltage 5 mV : ch sep 20 JB at 1.000 Hz . $\qquad$

## SC39FJ Phono Cartridge

Features biradial stylus; side-guard stylus protection system; output voltage 4 mV ; FR $20-20,000 \mathrm{~Hz}$; ch bal within 2 dB ; ch sep 20 dB at 1.000 Hz : tracking force $1.5-3 \mathrm{~dB}$; beige stylus grip \$76
SC39B. As above, spherical stylus: green stylus grip
\$68
M55E Phono Cartridge
MM cartridge. Output 6.2 mV at $5 \mathrm{~cm} / \mathrm{sec}$ peak velocity ( 1 kHz ): FR $20-20.000 \mathrm{~Hz}$; tracking force $0.75-2 \mathrm{~g}$; sep $20 \mathrm{~dB}(1 \mathrm{kHz}): 0.2 \times 0.7$-mil biradial (elliptical) stylus. replacement stylus N55E
\$71
M44E Phono Cartridge
MM cartridge. Output 9.5 mV at $5 \mathrm{~cm} / \mathrm{sec}$ peak velocity (I kHz): FR $\mathbf{2 0 - 2 0 , 0 0 0 ~} \mathrm{Hz}$ : tracking force $1.75-4 \mathrm{~g}$ : scp $20 \mathrm{~dB}(1 \mathrm{kHz}): 0.4 \times 0.7-\mathrm{mil}$ biradial (elliptical) stylus; replacement stylus N 44 E . . \$62

## M44G Phono Cartridge

Features flip-down stylus-guard: 15-micron spherical stylus tip Tracking force $3 / 4-1 / 4 / 4$ grams; FR 20-20,000 Hz ; ch bal within 2 dB ; ch sep at $1,000 \mathrm{~Hz} 20 \mathrm{~dB}$; output 6.2 mV
. $\$ 57$

## M44C Phono Cartridge

Features Ilip-down stylus-guard; 15-micron spherical stylus tip. Tracking force $3-5$ grams; FR $20-20.000 \mathrm{~Hz}$; ch bal within 2 dB ; ch sep at $1,000 \mathrm{~Hz} 20 \mathrm{~dB}$; output 6.2 mV
$\$ 55$

## M447 Phono Cartridge

Features flip-down stylus-guard; 15-micron spherical stylus tip. Tracking force $1 / 2-3$ grams; FR 20-20,000 Hz ; ch tal within 2 dB ; ch $\operatorname{sep}$ at $1,000 \mathrm{~Hz} 20 \mathrm{~dB}$; output 6.2 mV

## M99E Phono Cartridge

Heat-treated tubular aluminum stylus shank and 0.2 $\times 0.7 \mathrm{mil}$ elliptical stylus tip. P-Mount compatible and fits conventional $0.5^{\prime \prime}$-mount tonearms with rigid converter. Output 5.0 mV at 1 kHz ( $5 \mathrm{~cm} / \mathrm{sec}$ peak velocity); $\mathrm{FR} 20-20,000 \mathrm{~Hz}$; $\operatorname{sep} 20 \mathrm{~dB}$ at 1 kHz : tracking force 1.25 g . Replacement stylus N99E $\$ 54$

SC35C Phono Cartridge
Features spherical stylus; light blue stylus grip: output voltage 5 mV : FR $20-20,000 \mathrm{~Hz}$; ch bal within 2 dB ; ch $\operatorname{sep} 20 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$; tracking force $4-5$ grams $\$ 49$

## M92E Phono Cartridge

Phono cartridge with heat-treated tubular aluminum stylus shank and $0.4 \times 0.7 \mathrm{mil}$ elliptical stylus tip features $\mathbf{P}$-Mount compatible and fits conventional 0.5 "-mount tonearms with rigid converter. Output 5.0 mV at 1 kHz ( $5 \mathrm{~cm} / \mathrm{sec}$ peak velocity): FR $20-$ 18.000 Hz .

## SIGNET

MK440ML MC Cartridge
Dual moving MicroCoil design; separation 18 dB

## CARTRIDGES \& TONEARMS

at $10,000 \mathrm{~Hz}$; tracking-force range 1-1.6 g: cartridge weight 7 g
$\$ 600$
TK10ml Series II MM Cartridge
MM cartridge features full toroidal coil wound with LC-OFC wire for generating system; Microline nude stylus mounted on boron cantilever. Reduced compliance on stylus assembly for compatibility with wide range of tonearms. Output 2 mV at $5 \mathrm{~cm} / \mathrm{s}$; FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sep 35 dB at 1.000 Hz ; trackingforce range $1-1.5 \mathrm{~g}$; cartridge weight 7.5 g ; scanning radius 2.5 micrometers; vertical tracking angle 20 degrees . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 450$ TKN10ml Series 11. Replacement stylus for TK 10 ml Series 11 cartridge
. $\$ 250$

## MK220E MC Cartridge

Dual moving MicroCoil design with non-user replaceable stylus. Features $0.2 \times 0.7$ mil nude squareshank miniature elliptical diamond. Output 0.4 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $5-50,000 \mathrm{~Hz}$; $\operatorname{sep} 25 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}, 18$ dB at $10,000 \mathrm{~Hz}$; cartridge weight $4.8 \mathrm{~g} \ldots . . \$ 400$

## MR5.0ml MM Cartridge

MM cartridge features unicore-coil generating system with LC-OFC wire and microline stylus on goldplated beryllium cantilever. Output 5 mV at 5 $\mathrm{cm} / \mathrm{sec}$; FR $5-37,000 \mathrm{~Hz}$; $\operatorname{sep} 33 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}, 25 \mathrm{~dB}$ tracking-force range $0.8-1.8 \mathrm{~g}$ : cartridge weight 6 g.

## MR5.0lc MM Cartridge

Unicore-coil generating system with LC-OFC wire and square-shank nude stylus on beryllium cantilever. Output 50 mV ; FR $5-35,000 \mathrm{~Hz}$; sep 33 dB at $1,000 \mathrm{~Hz}, 23 \mathrm{~dB}$ at $10,000 \mathrm{~Hz}$; tracking-force range $0.8-1.6 \mathrm{~g}$; cartridge weight 6 g
. $\$ 275$
MR5.0me MM Cartridge
Unicore-coil generating system with LC-OFC wire and $0.2 \times 0.7$ mil square-shank nude stylus. Output 5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $5-30,000 \mathrm{~Hz}$; sep 30 dB at 1,000 $\mathrm{Hz}, 20 \mathrm{~dB}$ at $10,000 \mathrm{~Hz}$; tracking-force range $0.8-1.6$ g : cartridge weight 68
. $\$ 225$

## MK120He MC Cartridge

High-output design features user-replaceable stylus with $0.2 \times 0.7 \mathrm{mil}$ nude square-shank diamond. Output 2 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $15-30.000 \mathrm{~Hz}$; sep 29 dB at $1,000 \mathrm{~Hz}, 20 \mathrm{~dB}$ at $10,000 \mathrm{~Hz}$; tracking-force range 1.2-1.8 g: cartridge weight 5 g
. \$200

## MR5.0e MM Cartridge

Unicore-coil generating system with LC-OFC wire and $0.3 \times 0.7$ mil nude stylus. Output 5 mV at 5 cm/sec: fr $10-30,000 \mathrm{~Hz}$; sep 29 dB at $1,000 \mathrm{~Hz}, 19$ dB at $10,000 \mathrm{~Hz}$; tracking-force range $0.9-1.9 \mathrm{~g}$; cartidge weight 6 g
\$195

## MK55e MC Cartridge

Low mass; dual moving MicroCoil design; userreplaceable stylus with $0.3 \times 0.7 \mathrm{mil}$ nude mounted diamond. Output 0.5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR 20-28,000 Hz ; sep 28 dB at $1,000 \mathrm{~Hz}, 18 \mathrm{~dB}$ at 10.000 Hz ; tracking-force range 1.2-1.8 g; cartridge weight 4.2 g. .
. \$150

## TK6Ep MM P-mount Cartridge

Universal design with $0.2 \times 0.7$ mil square-shank nude diamond. Output 5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $10-$ $30,000 \mathrm{~Hz}$; $\operatorname{sep} 29 \mathrm{~dB}$ at $1.000 \mathrm{~Hz}, 20 \mathrm{~dB}$ at $10,000 \mathrm{~Hz}$ : tracking-force range $1-1.5 \mathrm{~g}$; cartridge weight $6 \mathrm{~g} \$ 150$

## Signet Standard 107 Cartridge

Universal mount, linear contact stylus. Output 3.0 mV at $1,000 \mathrm{~Hz}$; sep 31 dB at $1,00 \mathrm{~Hz}$; tracking force 1.6 g .
. $\$ 150$

## MR5.0 Basic MM Cartridge

Unicore-coil generating system with LC-OFC wire and $0.4 \times 0.7 \mathrm{mil}$ bonded elliptical stylus. Output 5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $15-25,000 \mathrm{~Hz}$; sep 27 dB at 1,000 $\mathrm{Hz}, 17 \mathrm{~dB}$ at $10,000 \mathrm{~Hz}$; tracking-force range $1.3-2.3$
g: cartridge weight 6 g
\$125
Signet Standard 105 Cartridge
Universal mount, $0.3 \times 0.7 \mathrm{mil}$ elliptical stylus; output 5.0 mV at 1.000 Hz at $5 \mathrm{~cm} / \mathrm{sec}$; FR $15-27,000$ Hz ; sep 29 dB at $1,000 \mathrm{~Hz}$; tracking force $1.6 \mathrm{~g} \$ 125$

TK4Ep MM P-mount Cartridge
Universal design with $0.3 \times 0.7 \mathrm{mil}$ nude stylus. Output 5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $15-20,000 \mathrm{~Hz}$; sep 28 dB at $1,000 \mathrm{~Hz}, 19 \mathrm{~dB}$ at 10.000 Hz ; tracking-force range
$1-1.5 \mathrm{~g}$; cartridge weight 6 g .
Signet Standard 103 Cartridge
Universal mount, $0.4 \times 0.7 \mathrm{mil}$ elliptical stylus; output 5.0 mV at $1,000 \mathrm{~Hz}$ at $5 \mathrm{~cm} / \mathrm{sec}$; FR $15-25,000$ Hz ; $\operatorname{sep} 29 \mathrm{~dB}$ at $1,000 \mathrm{~Hz}$ : tracking force $1.6 \mathrm{~g} . \$ 90$

## TK2Ep MM P-mount Cartridge

Universal design with $0.4 \times 0.7$ mil elliptical stylus. Output 5 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $15-25.000 \mathrm{~Hz}$; sep 26 dB at $1,000 \mathrm{~Hz}, 17 \mathrm{~dB}$ at $10,000 \mathrm{~Hz}$; tracking-force range $1-1.5 \mathrm{~g}$; cartridge weight 6 g .
$\$ 65$

## Signet Standard 101 Cartridge

Universal mount; 0.6 mil stylus; output 5.0 mV at $1,000 \mathrm{~Hz}$ at $5 \mathrm{~cm} / \mathrm{sec}$; FR $20-20,000 \mathrm{~Hz}$; sep 24 dB at 1.000 Hz ; tracking force 1.6 g .
. $\$ 60$

## Signet Standard 100 Cartridge

$.5^{\prime \prime}$ mount: $0.4 \times 0.7$ mil elliptical stylus; output 4.2 mV at $1,000 \mathrm{~Hz}$ at $5 \mathrm{~cm} / \mathrm{sec}$; FR $20-22,000 \mathrm{~Hz}$; sep 22 dB at 1.000 Hz : tracking force range $1.5-2.5 \mathrm{~g}$. $\$ 60$

## Tonearms

## XK-35 Tonearm

Tonearm with Signetrace damped planar tracking, nonremovable tube features tracking error $\pm I^{\circ}$; cable capacitance 75 pF ; effective length (stylus tip to pivot) 240 mm ; tracking force range $0-2 \mathrm{~g}$; acceptable cartridge weight $2-9 \mathrm{~g}$; anti-skating adjustment permanent thread and weight with detents . . . . . . \$325

## SME by SUMIKO

## SME Series V Straight Tonearm

Dynamically balanced tonearm with ultra-rigid 1piece magnesium casting from headshell to rear of counterweight rails. Features captive ball-race bearings; VTA adjustable during play; internally tapered arm tube for reduced mass and better control of standing waves; silver wiring-throughout. Tracking force 0-3 grams calibrated to 0.1 ; effective mass 11 g ; offset angle $23 \times 38$; Satin black; tonearm weight 720 g. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$ \$1,995


Series IV. Similar to Series V except abec 3 bearings: static balanced vertical tracking; manually adjusted arm height.
$\$ 1.200$

## SOUTHER ENGINEERING

## Verliss Integrated Phono Cartridge

MC; integrated shell mounting; individual response curve supplied; hyper elliptical stylus type; FR $10-$ $50,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} ; \operatorname{sep} 35 \mathrm{~dB} ; 0.6 \mathrm{mV}$; tracking force 2.0-2.4 g: 17 g .

Varltas Standard Phono Cartridge
MC; spherical stylus type; individual response curve supplied; FR $10-50,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; sens $35 \mathrm{~dB} ; 0.6$ mV : output 0.6 mV ; tracking force $2.0-2.4 \mathrm{~g}$; 4.4
. $\$ 800$
Delta Phono Cartridge
MC; spherical stylus type: individual response curve supplied; fR $10-50,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; sep 30 dB ; output 0.6 mV ; tracking force $2.0-2.4 \mathrm{~g}$; 4.4 g . . \$650

## Gamma Phono Cartridge

MC; spherical stylus type; individual response curve supplied; FR $10-50,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$; $\operatorname{sep} 25 \mathrm{~dB}$; output 0.6 mV ; tracking force $2.0-2.4 \mathrm{~g}: 4.4 \mathrm{~g} \cdot \$ 450$

## STANTON

## Calibration Series

981LZ Mk lls Phono Cartridge
Low-imp cartridge, fully calibrated for exact precision with nude Stereohedron diamond stylus. Includes mounted "longhair" brush. Output 0.06 $\mathrm{mV} / \mathrm{cm} / \mathrm{sec} 22 \mathrm{~dB}$; tracking force $1 \mathrm{~g} \pm .25 \mathrm{~g}$; FR $10-$ $50,000 \mathrm{~Hz} ; \operatorname{sep} 35 \mathrm{~dB}$; weight 5.5 g .
........... $\$ 250$
981HZ Mk IIs Phono Cartridge
High-imp stereo cartridge with nude Stereohedron diamond stylus, fully calibrated. Includes mounted "longhair" brush. Output $0.7 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; tracking force $1 \mathrm{~g} \pm .25$; FR $10-50.000 \mathrm{~Hz}$; sep 35 dB at 1 kHz ; weight 5.5 g .
\$250 881S Mk Ils Phono Cartridge
Output $0.9 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $10-25,000 \mathrm{~Hz}$ (individually calibrated to $20,000 \mathrm{~Hz}$ ); balance/sep (1 kHz) $\pm 1$ $\mathrm{dB} / 35 \mathrm{~dB}$; load imp 47 kilohms; load capacitance 275 pF ; tracking force $0.75-1.25 \mathrm{~g}$; nude Stereohedron stylus; 5.7 g with self-supporting ( 1 g ) brush: white with silver handle, white brush; replacement stylus D81S, D810 for mono LPs, D827 for 78s . . . \$180

## $681 E E E$ MK II-S Phono Cartridge

Induced-magnet carlridge with Stereohedron 11 stylus shape; dynamically improved cantilever assembly. Output $0.7 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $10-22,000 \mathrm{~Hz}$; sep 35 dB at 1.000 Hz ; tracking force $1 \mathrm{~g} \pm .25$; cartridge weight 6.3 g .
$\$ 120$

## High-Performance P-Mounts

## L-847S P-Mount Cartridge

Top-of-the-line P-Mount cartridge. Features Stereohedron stylus; tracking .75-1.5 gs: output 0.7 $\mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $10-36,000 \mathrm{~Hz}$; ch balance $<2 \mathrm{~dB}$; sep $35 \mathrm{~dB}, 5.9 \mathrm{~g}$; replacement stylus D84S . $\qquad$ $\$ 198$

## L-837S P-Mount Cartridge

Features Stereohedron stylus; tracks at 0.75-1.5 g; ch balance $\pm 2 \mathrm{~dB}$ : sep $35 \mathrm{~dB} ; 5.9 \mathrm{~g}$ : replacement stylus D83S.
$\$ 140$
Stereo Standard P-Moumt Series
L.747S Plug-In Cartridge

Features Stereohedron stylus. FR $10-25,000 \mathrm{~Hz}$; tracking force $0.75-1.5 \mathrm{~g}$; output $0.9 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; sep $35 \mathrm{~dB} ; 5.7 \mathrm{~g}$. Replacement stylus D747S .... . \$138

## L.737S Phono Cartridge

Plug-in cartridge features Stereohedron stylus. Tracking force $0.75-1.5 \mathrm{~g}$; output $0.9 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $10-$ $22,000 \mathrm{~Hz}$; ch balance 2 dB ; ch sep 35 dB . Replacement stylus D73S; weight 5.7 g .
$\$ 110$

## L.737E Plug-In Cartridge

Elliptical stylus, $0.3 \times 0.7 \mathrm{mil}$; output $0.9 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $10-22,000 \mathrm{~Hz}$; tracking $.75-1.5 \mathrm{~g}$; ch balance 2 dB ; sep 35 dB ; weight 5.7 g . Replacement stylus D73E $\$ 93$

## L-727E P-Mount Phono Cartridge

Plug-in cartridge with $0.4 \times 0.7$-mil elliptical stylus. FR $10-25,000 \mathrm{~Hz}$; tracking force $.75-1.5 \mathrm{~g}$; output 0.8
$\mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; sep 32 dB ; replacement stylus D727E

## I.725E P-Mount Cartridge

Cartridge with elliptical stylus: tracking force 0.75-1.5 g: output $0.8 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$ : FR $10-22.000 \mathrm{~Hz}$ : ch balance $<2 \mathrm{~dB}$; sep 28 dB ; replacement stylus D71. 2 E ; weight 5.7 g
$\$ 60$

## L720FF P-Mount ('artridge

Elliptical stylus $0.3 \times 0.7 \mathrm{mil}$; output $0.8 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$ : FR $10-20.000 \mathrm{~Hz}$; tracking . $75-1.5 \mathrm{~g}$ : ch balance 2 dB : ch sep 28 dB ; replacement stylus I)7IEE. Weight 5.7 g. .

Professional Cartridges-Disco Series
680SI. Disco Cartridge
Outpui $1.1 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $20-20,000 \mathrm{~Hz}$ : balance$/$ sep $2 / 30 \mathrm{~dB}$ : load resistance 47 kilohms; load capacitance 275 pF ; nude Stereohedron stylus tip: tracking force 3.6 g with brush: 5.5 g
$\$ 109$

## 1680EL Disco Cartridge

For P-Mount tonearms: automatically compensates for higher tracking forces. Includes fluorescentcoated stylus. Output $1.1 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$, FR $20-18.000$ Hz : sep 30 dB at 1.000 Hz : tracking force 3.5 .4 g : weight 8.4 g . Replacement stylus D6800EL . . $\$ 106$

680FI. Disco Cartridge
Output $0.82 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$ : $\mathrm{FR} 20-18.000 \mathrm{~Hz}$ : balance$/$ sep $\pm 2 / 30 \mathrm{~dB}$ ( $1 \mathrm{kH} /$ ): load imp 47 kilohms: load capacitance 275 pF : tracking force $2-5 \mathrm{~g}: 0.4 \times 0.7-\mathrm{mil}$ elliptical diamond stylus; 5.5 g : replacement stylus D6800EL. Comes with extra stylus.
$\$ 106$

## 681SE Phono Cartridge (Calibrated)

Output $1 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $10-10.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$ : 10.000 Hz to 20.000 Hz . individually calibrated; balance/sep $\pm 2 \mathrm{~dB} / 35 \mathrm{~dB}(1 \mathrm{kHz})$ : load imp 47 kilohms; load capacitance 275 pF ; tracking force 2-4 $\mathrm{g}: 0.4 \times 0.7$-mil ellipical stylus: weight 5.5 g with selfsupporting ( 1 g ) brush; replacement stylus D6800SE. D6810 for LPs. I 6827 for 785
$\$ 110$

## 680AI. Disco Cartridge

Outpul $1.1 \mathrm{mV} / \mathrm{cm} / \mathrm{sec} ;$ FR $20-18.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$ : $\mathrm{bal} / \mathrm{sep} \pm 2 / 30 \mathrm{~dB}(1 \mathrm{kHz})$ : load resistance 47.000 ohms: load capacitance 275 pF ; tracking force 2-5 g: 0.7 -mil spherical stylus tip. comes with extra stylus. Weight 5.5 g : replacement stylus D6800AL . ... $\$ 90$

## L500AL Disco Cartridge

P-Mount MM cartridge automatically compensates for higher tracking forces required for disco use. Comes with fluorescent-coated stylus. Output 1.0 $\mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $20-17.000 \mathrm{~Hz}$; sep 28 dB at 1.000 Hz : tracking force $3.5-4 \mathrm{~g}$; cartridge weight 8.5 g : replacement stylus D57PAL
. $\$ 53$
minar to above except output FR 20-18.000 Hz : sep 30 dB at 1.000 Hz : tracking force 2.5 g : cartridge weight 5 g ; replacement stylus D5100EL $\$ 58$

## 500AL Disco Cartridge

Output $1.0 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$; FR $20-17.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$ : $\mathrm{bal} / \mathrm{sep} \pm 2 / 28 \mathrm{~dB}(1 \mathrm{kHz})$ : load resistance 47.000 ohms: load capacitance 275 pF : tracking force 3.7 g : 0.7 mil spherical stylus. Weight 5 g : replacement stylus D5107AL
$\$ 53$

## Stereo Standard Series (with "Longhair" Brush)

## 680EE Phono Carridge

Output $0.82 \mathrm{mV} / \mathrm{cm} / \mathrm{sec}$ : FR $20-20,000 \mathrm{~Hz}$ : balance/sep $\pm 2 \mathrm{~dB} / 35 \mathrm{~dB}$ ( 1 kHz ): load imp 47 kilohms: load capacitance 275 pF : tracking force $0.75-1.5 \mathrm{~g}$ : $0.3 \times$ 0.7 -mil elliptical diamond stylus D680.
\$83

## Broadcast Series--Mark /I

500FE Mk II. Output $1 \mathrm{mV} / \mathrm{cm} / \mathrm{sec} \pm 2 \mathrm{~dB}$; FR $10-$ 20.000 Hz ; balance/sep $\pm 2 / 35 \mathrm{~dB}$ ( 1 kHz ): 1racking
force $.75-1.5 \mathrm{~g}: 0.3 \times 0.7-\mathrm{mil}$ elliptical diamond stylus: replacement stylus D50EE Mk 11
$\$ 55$
500E Mk II. Qutput $1 \mathrm{mV} / \mathrm{cm} / \mathrm{sec} \pm 2 \mathrm{~dB}$; FR 10 20.000 Hz ; balance/sep $\pm 2 / 35 \mathrm{~dB}(\mathrm{I} \mathrm{kHz}): 0.3 \times 0.7-$ mil elliptical diamond stylus. . . . . . . . . . . . . . $\$ 50$ 500 A Mk. II. Output $1 \mathrm{mV} / \mathrm{cm} / \mathrm{sec} \pm 2 \mathrm{~dB}$ : FR 10 20.000 Hz : balance/sep $\pm 2 / 35 \mathrm{~dB}$ ( 1 kHz ): tracking force $.75-1.5 \mathrm{~g}: 0.3 \times 0.7-\mathrm{mil}$ elliptical diamond stylus: replacement stylus D50A Mk II
\$38

## SUPEX BY SUMIKO

SD-901 Mark IV T.Q.A. Phono Cartridge
High-output MC cartridge with improvements over SD-901E in high-frequency linearity. tracking, and dynamics. Features output 1.7 mV at $3.54 \mathrm{~cm} / \mathrm{sec}$ : FR $10-42.000 \mathrm{H} 7 \pm 2 \mathrm{~dB}$ : $\operatorname{sep} 27 \mathrm{~dB}$ at 1.000 Hz : tracking force $1.8-2.2 \mathrm{~g}$ : cartridge weight 9.1 g . . . . . . . . $\$ 380$

SD-900 Mark IV T.Q.A. Phono Cartridge
Image specificity. tracking. and dynamic contrast improved over SE-99E: nude-mount elliptical Vital solid diamond stylus. Each cartridge hand-selected by David W. Fletcher. Output 0.2 mV at $3.54 \mathrm{~cm} / \mathrm{sec}$ FR $10-50.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sep 27 dB at 1.000 Hz tracking force $1.8-2.2 \mathrm{~g}$ : cartridge weight $8.3 \mathrm{~g} . \$ 360$ SD-900F+ Super
$\$ 295$

## D-3.30 Boron Phono Cartridge

MC cartridge with miniaturized body of nonresonant material and Vital diamond grain-oriented stylus: hand-wound coils, samarium-cobalt magnets; boron tube cantilever. Dutput 0.15 mV at $3.54 \mathrm{~cm} / \mathrm{sec}$ : FR $20-30.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \operatorname{sep} 30 \mathrm{~dB}$ at 1.000 Hz ; tracking force $1.5-1.9 \mathrm{~g}$ : cartridge weight 3 g .
$\$ 850$

## TALISMAN BY SUMIKO

## Virtuoso DIi Phono Cartridge

MC cartridge with diamond titanium-lube cantilever and anti-resonance foam insert: mass-reduced van den Hul Type I stylus. Output 1.8 mV at $5 \mathrm{~cm} / \mathrm{sec}$; FR $15-35.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sep 30 dB at 1.000 Hz : tracking force $1.75-2.25 \mathrm{~g}$; cartridge weight 7.5 g .... $\$ 1.200$ Virtuoso Boron $\$ 850$

## Talisman B vdfe M1C Cartridge

Mc cartridge with Direct Field Focus design to reduce magnetic losses and fringing effects by eliminating magnetic yokes and all but I pole piece. Features energy from samarium cobalt ring magnet pulled across coils by front-mounted pole piece: solid zinc body:boron rod cantilever with reduced mass van den Hul Type 1 stylus: long-line-contact diamond.
$\$ 325$
Ialisman $\mathbb{S}$ vdH. Identical to Talisman B except sapphire-tube cantilever. . . . . . . . . . . . . . . . . $\$ 395$ Talisman AT. Identical to Talisman Sexecptaluminum/magnesium alloy cantilever with nude-mounted elliptical diamond stylus
$\$ 225$

## Alchemist Ills vdH Phono Cartridge

Phono cartrridge with "Intensified Focus" design for high output without slow transients, poor tracking ability, straining at high modulations. Features in tense magnetic focus at coils concentrates energy to prevent virtually all losses and fringing effects. Sapphire rod cantilever with reduced mass stylus. FR $10-60.000 \mathrm{~Hz}$ : sep 30 dB at 1.000 Hz : tracking force $1.5-2.5 \mathrm{~g}$ : cartndge weight 6.7 g . $\$ 495$ Alchemist IIB vdII Phono Cartridge
Similar to Alchemist Ills except boron-rod cantilever
with reducrd mass van den Hul Type 1 stylus. $\$ 475$ Alchemist IA. Similar to Alchemist llls except aluminum/magnesium cantilever with nude-mount elliptical stylus
\$323

## TECHNICS

## E.PC-205CT1K4 MM P-Mount Cartridge

MM cartridge with ultra-low-mass-cantilever $P$. Mount cartridge features elliptical nude diamond: effective mass 0.019 mg : neodymium magnet . $\$ 250$ FPC-205C MK4. Regular mounting . . . . . . . . . \$280

## EPC-P310 N1CMK2 MC Cartridge

MC cartridge with ultra-low-mass cantilever features output 1.2 mV at $5 \mathrm{~cm} / \mathrm{sec}$ : sep 25 dB at 1.000 : tracking force $1.25 \mathrm{~g} \pm 0.25 \mathrm{~g}$ : cartridge weight 6 g. .
$\$ 200$

## EPC'P550 MM Cartridge

With ultra-low-mass cantilever. Output 2.5 mV at 5 $\mathrm{cm} / \mathrm{sec}$ : sep 25 dB at 1.000 Hz ; tracking force range $2.5 \mathrm{~g} \pm 0.25 \mathrm{~g}$ : cartridge weight $6 \mathrm{~g}: 0.3 \times 0.7 \mathrm{mil}$ elliptical diamond
$\$ 130$

## EPC-P540 MM Cartridge

Output $25 \mathrm{mV} \mathrm{cm} / \mathrm{sec}$ : sep 25 dB at 1.000 Hz : tracking force $1.25 \pm 0.25$ grams; cartridge weight 6 g.

## EPC-P530 MM Cartridge

Output 2.5 mV at $5 \mathrm{~cm} / \mathrm{sec}$ : $\operatorname{sep} 25 \mathrm{~dB}$ at 1.000 Hz : cartridge weight 6 g

## Tonearm

## F:PA 250 S-Shaped Tonearm

Dynamically balanced tonearm with decoupled counterweight. Effective length 250 mm ; tracking error $+1 \times 6^{\circ}$ at inner groove and $+2 \times 6^{\circ}$ at outer groove
$\$ 790$

## YAMAHA

## M1C-100 Moving-Coil Phono Cartridge

Features cross-matrix air-core moving-coil system: pure-beryllium tapered tubular cantilever: distinctive metal housing for high magnetic flux density: 9.5 g.

MC-505 Moving-Coil Phono Cartridge
Features cross-matrix moving-coil system; pure-beryllium-tapered tubular cantilever: Low Temperature Deprendency (LTI)) equalizing damper; sendust core: 1-point suspension: resonance-free one-piece housing. 3.4 g
\$200
MC-501 Moving-Coil Phono Cartridge
Features cross-matrix moving-coil system: alumi-num-tapered tubular cantilever: Low Temperature Dependency (LTD) equalizing damper: sendust core: esonance-free one-piece housing. $3.4 \mathrm{~g} \ldots . . \$ 150$

MC-10 Lo/High Output MC Phono Cartridge
Features cross-matrix moving-coil system; alumi-num-tapered tubular cantilever: original equalizing damper: metal housing assembly . . . . . . . . . . \$120

## MC-21 N1C/M1M Phono Cartridge

Feature: MM/MC phono input compatibility: crossmatrix moving-coil system; aluminum tapered tubular cantilever.
$\$ 70$

## Prices Listed

are manufacturers' suggested retail prices
(also referred to as list prices);
actual selling prices are set by individual dealers.
All prices are subject to change without notice.

## SPEAKERS



## ACOUSTIC INTERFACE

## Sound Prism Speaker

Vented-horn speaker with $24^{\circ} \times 52^{\prime \prime}$ compression woofer, $13^{\prime \prime} \times 22^{\prime \prime}$ horn midrange. $7.25^{\prime \prime} \times 3^{\prime \prime}$ horn Iweeter, built-in triamplification (1,500 W/woofer. $300 \mathrm{~W} /$ midrange, $100 \mathrm{~W} /$ tweeter). Features midrange. tweeter level controls; oiled walnut or oak cabinet. $\mathrm{FR} 10-10,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$ : sens 105 dB SPI. W/m: crossovers 550 and $5,000 \mathrm{~Hz}$ : imp 8 ohms: $80 \times 27 \times 36 \mathrm{in}: 500 \mathrm{lb}$
$\$ 30.000 / \mathrm{pr}$

## Sound Portal Speaker

Vented-horn speaker with $24^{\prime \prime} \times 32^{\prime \prime}$ compression woofer, 19" x 7" horn midrange. 5" x 5" horn tweeter. Features midrange, tweeter level controls: oiled walnut or oak cabinet. FR $15-20.000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$ : crossovers 800 and $5,000 \mathrm{~Hz}$; sens 101 dB sPL/W/m; imp 8 ohms: $60 \times 251 / 2 \times 24 \mathrm{in} . \ldots . .$.

Studio Reference Speaker
Vented speaker with $12^{* *}$ woofer. $15^{\prime \prime} \times 4^{\prime \prime}$ horn midrange: $51 / 4 \times 2$ " horn tweeter. Features midrange. tweeter level controls; oiled walnut or oak cabinet: black cloth grille. FR $22-20.000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$; crossovers 880 and 5.000 Hz ; sens $98 \mathrm{~dB} \mathrm{sPl} / \mathrm{W} / \mathrm{m}: \mathrm{mim}$ power 15 W : imp 8 ohms: $48 \times 181 / 2 \times 16 \mathrm{in} ; 102$ lb.
. $\$ 3.180 / \mathrm{pr}$

## Professional Series II Speaker

Vented speaker with 12" woofer: $2^{\prime \prime}$ dome midrange: I" dome iweeter. Features midrange and tweeter controls; oiled walnut or oak cabinet; black cloth grille. FR $29-20.000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$; crossovers 800 and 6.600 Hz : sens 95 dB spl/ $\mathrm{W} / \mathrm{m}$ : min power 15 W : imp 8 ohms; $36 \times 181 / 2 \times 16 \mathrm{in} ; 80 \mathrm{lb}$
\$1.780/pr

## Transcendent Speaker

Vented speaker with $12^{\prime \prime}$ woofer. $1 / 4^{* \prime}$ dome midrange/tweeter. Features midrange, iweeter level controls: oiled walnut or oak cabinet; black cloth grille. FR 38$20.000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$ : crossover $1,900 \mathrm{~Hz}$; sens 94 dB $\mathrm{sPI} / \mathrm{W} / \mathrm{m}$; min power 15 W ; imp 8 ohms: $24 \times 16 \times$ $141 / 2 \mathrm{in}: 51 \mathrm{lb}$.
\$980/pr

## Intimate Speaker

Acoustic-suspension speaker with $10^{*}$ woofer. I" dome tweeter. Features tweeter level control: oiled walnut or oak cabinet; black cloth grille. FR 49-20.000 $\mathrm{Hz} \pm 2.5 \mathrm{~dB}$; crossover 5.000 Hz : sens 93 dB $\mathrm{sPL} / \mathrm{W} / \mathrm{m}$; min power 15 W ; $\mathrm{imp} 8 \mathrm{ohms} ; 19 \times 12 \times 12$ in: 29 lb .
\$580/pr

## Shadou Speaker

Acoustic-suspension speaker with $8^{\prime \prime}$ woofer. $1^{\prime \prime}$ dome Iweeter. Features cylindrical cabinet covered with black cloth grille. FR $69-20.000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$; crossover 5.000 Hz : sens 91 dB spl/W/m; min power 15 W: imp 8 ohms: $241 / 2 \times 81 / 4 \mathrm{in}$
\$380/pr

## Angstrom Speaker

Acoustic-suspension speaker with $61 / 2^{\prime \prime}$ woofer. 1" dome tweeter. Features charcoal enamel cabinet: black cloth grille, fr $78-20,000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$; sens 90 $\mathrm{dB} \mathrm{spl} / \mathrm{W} / \mathrm{m}$ : min power 15 W ; imp 8 ohms . $127 / \mathrm{x} \mathrm{x}$ $71 / 2 \times 61 / 2 \mathrm{in}$; 9 lb ; walnut or oak finish ... $\$ 350 / \mathrm{pr}$ Charcoal-enamel finish
\$250/pr
Tremor Subwoofer
Vented subwoofer with 2 woofers in separate suben-
closures. Features oiled walnut or oak cabinet: black cloth grille. $\mathrm{FR} \quad 29-200 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$ : sens 96 dB SPL/W/m: min power 15 W : imp 8 ohms: $27 \times 63 \mathrm{v}_{\mathrm{s}} \mathrm{x}$ $16 \mathrm{in}: 150 \mathrm{lb}$ $\$ 1.090 \mathrm{ca}$ With $800 \mathrm{~W} / \mathrm{ch} \times 2$ internal amplification $\$ 1,790$ ea

## ACOUSTIC RESEARCH

## STC 666 Subwoofer/ Satellite System

New STC (Series Tuned Cavity) system. The STC subwoofer is small enough to be hidden leaving only the satellites visible. AR's propriety enclosure uses two tuned cavities in a series configuration. Uses a newly developed set of enclosure parameters to eliminate unwanted high frequencies that would allow the ear to pinpoint the position of the subwoofer. The first cavity works to increase efficiency of the loudspeaker in the bass frequencies and minimizes distortion by limiting woofer excursion near resonance. The second cavity acts as a high frequency outpul from the two $6^{\prime \prime}$ woofers. The satellites feature a black cabinet with a choice of oak or walnut wood trim. Sattelites have shielded drivers for use in video systems . . . . . . . . . . . \$649/system

## TSU'Series

All TSII-series speakers feature drivers in a vertical array with Acoustic Blanket for precise stereo imaging. and polypropylene woofer and midrange drivers.

## TSW-910 4-Way Speaker

Floor-standing columnar acoustic-suspension speaker with Tetra-Helix tweeter mounting plate. Features two 12" woofers (one front-liring, one rear-firing): $8^{\prime \prime}$ lower-midrange driver: two $6.5^{\prime \prime}$ midranges: I" titani- $^{\prime}$ um-dome liquid-cooled tweeter with acoustic lens: split crossover network. Power range $35-400 \mathrm{~W}$ : imp 4 ohms: FR - $\mathbf{3} \mathrm{dB}$ (half-power) points at 28 Hz and 32.000 Hz : sens 90 dB with 2.83 V rms input at 1 meter on axis. Solid walnut or oak top and bottom with cloth-covered and black-vinyl-vencer cabinet and black cloth grille. $52.81 \times 15.75 \times 18.5-\mathrm{in}: 140$ lb.
$\$ 2.200 / \mathrm{pr}$

## TSW-810 3-Way Speaker

Floor-standing columnar acoustic-suspension speaker with Tetra-Helix tweeter mounting plate. Features two $10^{\prime \prime}$ woofers (one front-liring. one rear-firingl: two $6.5^{\prime \prime}$ midranges: $1^{\prime \prime}$ titanium-dome liquid-cooled tweeter with acoustic lens; split crossover network. Power range $25-250 \mathrm{~W}$ : imp 4 ohms; $\mathrm{FR}-3 \mathrm{~dB}$ (halfpower) points at 33 Hz and $32,000 \mathrm{~Hz}$ : sens 90 dB with 2.83 V rms input at I meter on axis. Solid walnut or oak top and bottom with cloth-covered and black-vinyl-veneer cabinet and black cloth grille, 42.56 a $15.75 \times 18.5-\mathrm{in}: 95 \mathrm{lb}$
$\$ 1,900 / \mathrm{pr}$

## TSW-710 3-Way Speaker

Floor standing columnar acoustic-suspension speaker with Tetra-Helix tweeter mounting plate. Features two $8^{\prime \prime}$ filled polypropylene cone long throw woofers: $6.5^{\prime \prime}$ filled polypropylene cone midrange in its own subenclosure: $.75^{\prime \prime}$ titanium dome liquid cooled tweeter. Power range $15-175 \mathrm{~W}$ : imp 4 ohms ; $\mathrm{s} / \mathrm{N}-3$ dB (half-power) points at 40 Hz and $40,000 \mathrm{~Hz}$ : sens 90 dB SPL with a 2.83 VRMS drive level input at 1 meter on axis. Solid American hardwood top and bottom (walnut or oak) with black vinyl vencer cabinet and black cloth space frame grille: $38.5 \times 14.1$ x 13.4-in: 46 lb

## TSW-610 3-Way Speaher

Floor-standing acoustic-suspension speaker with Tetra-Helix tweeter mounting plate. Features 12" woofer: $6.5^{\prime \prime}$ midrange: $0.75^{\prime \prime}$ titanium-dome liquidcooled tweeter with acoustic lens. Power range is175 W : imp 4 ohms: $\mathrm{FR}-3 \mathrm{~dB}$ (half-power) points at 40 Hz and $40,000 \mathrm{~Hz}$; sens 90 dB with 2.83 V rms input at I meter on axis. Solid walnut or oak top and bottom with black-vinyl-veneer cabinet and black cloth grille. $32.88 \times 14.06 \times 13.31-\mathrm{in}$; $57 \mathrm{lb} \$ 1,000 / \mathrm{pr}$

## TSW-510 3-Way Speaker

Floor-standing acoustic-suspension speaker with Tetra-Helix tweeter mounting plate. Features $10^{\circ}$ woofer: $6.5^{\prime \prime}$ midrange: $0.75^{\prime \prime}$ titanium-dome liquidcooled tweeter with acoustic lens. Power range 15 150 W : imp 4 ohms: $\mathrm{FR}-3 \mathrm{~dB}$ (half-power) points at 44 Hz and $40,000 \mathrm{~Hz}$ : sens 90 dB with 2.83 V rms input at I meter on axis. Solid walnut or oak top and bottom with black-vinyl-veneer cabinet and black cloth grille. $30.13 \times 14.06 \times 13.31-\mathrm{in}$ : $49 \mathrm{lb} . \$ 800 / \mathrm{pr}$

## TSW-410 3-Way Speaker

Bookshelf acoustic-suspension speaker with TetraHelix tweeter mounting plate. Features $8^{\prime \prime}$ woofer: $6.5^{\prime \prime}$ midrange: $0.75^{\prime \prime}$ titanium-dome liquid-cooled tweeter with acoustic lens. Power range $10-100 \mathrm{~W}$ : imp 4 ohms: FR -3 dB (half-power) points at 46 Hz and $40,000 \mathrm{~Hz}$; sens 89 dB with 2.83 V rms inpul at I meter on axis. Solid walnut or oak top and bottom with black-vinyl-veneer cabinet and black cloth grille. $24.5 \times 12.31 \times 11.72-\mathrm{in}$; $30.5 \mathrm{lb} \ldots .$.

TSW-315 3-Way Speaker
Bookshelf acoustic-suspension speaker with TetraHelix tweeter mounting plate. Features $6.5^{\prime \prime}$ woofer: 6.5" woofer/midrange: .75" titanium dome liquid cooled tweeter with Tetra-Helix mounting plate. Power range $10-100 \mathrm{~W}$ : imp 4 ohms; FR- 3 dB points at 48 Hz and 40.000 Hz ; sens 89 dB with 2.83 V rms input at I meter on axis. Solid walnut or oak top and boltom with black-vinyl-veneer cabinet and black cloth grille. $22.5 \times 12.31 \times 11.72-\mathrm{in} ; 30.5 \mathrm{bb} . \$ 550 / \mathrm{pr}$

## TSW-310 2-Way Speaker

Floor-standing acoustic-suspension speaker with Tetra-Helix tweeter mounting plate. Features $10^{*}$ woofer: $0.75^{\prime \prime}$ titanium-dome liquid-cooled iweeter with acoustic lens. Power range $10-100 \mathrm{~W}$ : imp 6 ohms: FR -3 dB (half-power) points at 45 Hr and 40.000 Hz ; sens 90 dB with 2.83 V rms input at 1 meter on axis. Solid walnut or oak top and bottom with black-vinyl-veneer cabinet and black cloth grille. $27.75 \times 12.31 \times 11.72-\mathrm{in}: 35.5 \mathrm{lb} \ldots \$ 540 / \mathrm{pr}$

TSW $115 P$ Ponered Speakers
Fully self contained powered speakers with shielded drive units for video system capability. Drivers are in a vertical array with an Acoustic Blanket. Features 4" filled polypropylene cone acoustic suspension woofer with electronic bass extension equalization. . $75^{\prime \prime}$ titanium dome liquid-cooled shielded tweeter with Tetra-Helix mounting plate. Power LEID: volume control: input/output panel with 2 IIN plug for audio output to accessory speaker. and stereo receptacle for audio input. Solid walnut or oak top and bottom, black-vinyl-veneer cabinet.
. \$400/pr
TSW-210 2-Way Speaker
Bookshelf acoustic-suspension speaker with Tetra-

Helix tweeter mounting plate. Features $8^{*}$ woofer; $0.75^{\prime \prime}$ titanium-dome liquid-cooled tweeter with acoustic lens. Power range $10-100 \mathrm{~W}$; imp 8 ohms; FR -3 dB (half-power) points at 54 Hz and $40,000 \mathrm{~Hz}$ : sens 87 dB with 2.83 V rms input at 1 meter on axis. Solid walnut or oak top and bottom with black-vinylveneer cabinet and black cloth grille. $17.56 \times 9.81 \times$ $8.4-\mathrm{in} ; 15.3 \mathrm{lb}$
$\$ 380 / \mathrm{pr}$

## TSW-110 2-Way Speaker

Bookshelf acoustic-suspension speaker with TetraHelix tweeter mounting plate. Features $6.5^{\prime \prime}$ woofer; $0.75^{\prime \prime}$ titanium-dome liquid-cooled tweeter with acoustic lens. Power range $10-75 \mathrm{~W}$ : imp 8 ohms: FR 3 dB (half-power) points at 68 Hz and $40,000 \mathrm{~Hz}$; sens 88 dB with 2.83 V rms input at 1 meter on axis. Solid walnut or oak top and bottom with black-vinylveneer cabinet and black cloth grille. $14.94 \times 9.81 \times$ 8.4-in: 14 lb .
\$280/pr

## Parnners Series

## Party Partner

Bookshelf/floor standing acoustic suspension 2 way speaker system. Features $10^{\prime \prime}$ long throw woofer. $1.14^{\prime \prime}$ liquid cooled dome tweeter. Sens 89 dB SPL with a 2.83 vrms drive level input at 1 meter on axis. Power range $20-100 \mathrm{~W}$; FR- 3 dB points at 48 Hz and 22.000 Hz with an effective cof 1.15 at resonance: $\operatorname{imp} 8 \mathrm{ohm}$. Triangular cabinet $14 \times 23.63 \times 15.38$-in; 30 lb
$\$ 450 / \mathrm{pr}$

## Powered Partner Speaker

Acoustic-suspension booskshelf 2-way speaker with shielded drivers for use with TV and personal stereo systems. Features built-in equalized amp; on/off switch; volume and tone controls; AC/DC inputs; $4^{\text {" }}$ long-throw woofer: I" liquid-cooled tweeter. Can be placed on top or near TV, hung on a pole, mounted on wall, or clamped to a shelf with optional clamps. FR $50-25.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : imp 10 kilohms. Black aluminum finish. Triangular shape $6 \times 10.5 \times 7.62$-in d; 7 lb ea.
$\$ 400 / \mathrm{pr}$

## Rock Partner 2-Way Speaker

Acoustic-suspension floor-standing or bookshelf speaker with $8^{\prime \prime}$ long-throw woofer and $1.25^{\circ}$ liquidcooled cone tweeter. Triangular shaped with versatile mounting placements and options. FR $65-22,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; max power 100 W rms; sens $88 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms. Black vinyl vencer. $14.75 \times 9.5 \times 8.75$-in; 15 lb ea
$\$ 300 / \mathrm{pr}$

## Finvironmental Partner 2-Way Speaker

Weather-resistant acoustic-suspension speaker with triangular shape for versatile mounting options. Features $4^{\prime \prime}$ long-throw polypropylene woofer: 1" liquid-cooled polymer cone tweeter. Power range 7 75 W ; imp 6 ohms; FR $95-25.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 88 dB SPL/W/m. Die-cast aluminum case and endcap. 6 $\times 10.5 \times 7.63-\mathrm{in} ; 6 \mathrm{lb}$ ea
$\$ 300 / \mathrm{pr}$

## Active Partners

Self contained powered 2-way speaker system with shielded drive units and versatile mounting system. Features 4" long throw woofer and liquid cooled 2" tweeter. Amp power 24 W . Comes with AC/DC power supply
\$270/pr

## AR1MS Miniature Speaker

Acoustic-suspension speaker with rigid deep-drawn aluminum cabinet. Threaded inserts on rear allow multiple mounting options. 4" cone woofer: 1" dome tweeter. FR $95-25.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $7-75$ W: sens 95 dB SPL/W/m; imp 4 ohms; satin black finish: $7.62 \times 4.75 \times 4.8-\mathrm{in}: 4.5 \mathrm{lb}$
\$280/pr

$$
a / d / s /
$$

## Monitor Series

ה15 Floor-Standing 3-Way Speaker
Vertically aligned "unison" drivers (2 $10^{*}$ woofers
and $5.25^{\prime \prime}$ midrange in separate subenclosure, 1 " dome (weeter); woofers near floor, midrange at top. to control boundary effects: copolymer diaphragms; 4th-order ( 24 dB per octave) Linkwitz-Riley crossovers at 200 and $2,000 \mathrm{~Hz}$, stainless-steel voice-coil former: magnetic cooling fluid in midrange and tweeter for high power handling and dynamic linearity; frameless perforated-steel grilles; walnut veneer or black. FR $30-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 89 dB SPL/W/m; imp 8 ohms. $47.3 \times 11.5 \times 15.8$-in: 105 Ib \$3,000/pr
M12. Similar to MIS except $8^{\prime \prime}$ woofers; FR 36-22.000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; sens $88 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}: 43.3 \times 10.5 \times 14.2-\mathrm{in}$ 85 lb
$\$ 1,900 / \mathrm{pr}$
19. Similar to M12 except $110^{\circ}$ woofer: $33.7 \times 11.5 \times$ 13-in: 80 lb
$\$ 1.400 / \mathrm{pr}$

## Compact Moniror Series

## CM7 3-Way "Unison" Speaker

$7^{\prime \prime}$ woofer, $1.5^{\prime \prime}$ dome midrange. $1^{\prime \prime}$ dome tweeter; copolymer diaphragms; 4th-order Linkwitz-Riley crossovers at 700 and $2,000 \mathrm{~Hz}$; voice-coil formers of stainless steel for woofer and Kapton for midrange and tweeter: magnetic cooling fluid in midrange and tweeter for high power handling and dynamic linearity: enclosure molded from polymer resin filled with metallic mineral for high density and inertness; frameless perforated steel grille. Black or white. FR $40-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 87 dB SPL/W/m; imp 4 ohms; $16.4 \times 8.8 \times 10.9 \mathrm{in} ; 45 \mathrm{lb}$.
$\$ 1,400 / \mathrm{pr}$ CM6. Similar to CM7 except 2-way, with 6 " woofer and 1" tweeter; $2,000-\mathrm{Hz}$ crossover; FR $50-22,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}: 12.7 \times 7.3 \times 8.9-\mathrm{in} ; 33 \mathrm{lb} . \ldots . .$. CM5. Similar to CM6 except $5.25^{\circ}$ woofer; FR 65$22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens $86 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m} ; 9.7 \times 5.7 \times$ $6.9-\mathrm{in} ; 22 \mathrm{lb}$.
\$650/pr

## B8 Two W'ay Speaker

Bookshelf 2 wav speaker with $1^{\prime \prime}$ dome tweeter and 8.5" Stifllite woofer. Power handling 15-125 W; FR44$22,000 \mathrm{~Hz}$; imp 4 ohms; crossover freq. 2.000 Hz ; $19.7 \times 11.4 \times 10.3 \mathrm{in} ; 25 \mathrm{lb}$; black
$\$ 500 / \mathrm{pr}$

## B7 Two Way Speaker

Bookshelf 2 way speaker with 1" dome tweeter and $7.7^{\prime \prime}$ Stifflite woofer. Power handling $15-100 \mathrm{~W}$; FR 46 22.000 Hz ; imp 4 ohms; crossover freq $2.400 \mathrm{~Hz} ; 17.1$ $\times 10 \times 9.1 \mathrm{in}$; 19 lb ; black.
$\$ 420 / \mathrm{pr}$

## Miniature Speakers

## 300'C 2-W ay Acoustic-Suspension Speaker

$5.25^{\prime \prime}$ high-compliance long-excursion Stiflite woofer, 1" soft-dome tweeter. Features aluminum enclosure (black textured urethane with convex-steel grille). A vailable on special order in 6 custom colors with matching grilles and brackets (black. light grey, dark grey, beige, mocha, white). FR $65-20,000 \mathrm{~Hz} \pm 3$ dB; crossover 2.000 Hz with $12 \mathrm{~dB} /$ octave slope; sens 89 dB SPL $/ \mathrm{W} / \mathrm{m}$ : rated input 50 W continuous. 75 W peak program: imp 4 ohms.
$\$ 430 / \mathrm{pr}$

## 200CC 2-Way Acoustic-Suspension Speaker

$4^{\prime \prime}$ high-compliance ultra-long-excursion woofer. $1^{*}$ soft-dome tweeter; brushed-aluminum enclosure (textured urethane with convex-steel grille). Available on special order in 6 custom colors with matching grilles and brackets (black, light grey, dark grey, beige. mocha, white). FR $85-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ crossover $2,000 \mathrm{~Hz}$ with $12 \mathrm{~dB} /$ octave slope; sens 88 $\mathrm{dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; rated input 30 W continuous; min input 5 W ; imp 4 ohms. $6.88 \times 4.25 \times 4.75-\mathrm{in} \$ 330 / \mathrm{pr}$

## ADVENT

The Advent Maestro
Acoustic-suspension floor-standing speaker with sol-id-pecan top and base with beveled edges, antidiffraction baflle cover, and grille with rounded side edges. Features $10^{\circ}$ black cone and surtound woofer; 2" mica-filled black polypropylene-dome midrange in subenclosure: $1^{\prime \prime}$ ferrofluid-filled soft-dome tweet
er. FR $40-23.000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$; min power 150 W rms : max power 750 W peak; sens $90 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 6 ohms. $50 \mathrm{lb}: 33.25 \times 16 \mathrm{w} \times 9.75$-in
$\$ 700 / \mathrm{pr}$

## The Advent I egacy

Acoustic-suspension floor-standing liquid-cooled speaker with solid-pecan top and base with wraparound grille. Features $10^{\prime \prime}$ high-excursion cone woofer with aluminum-coil form; 1" ferrofluid-filled soft-dome iweeter. FR $42-23,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{min}$ power 100 W rms; max power 500 W peak; sens 88 dB $\mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms. Black texture vinyl finish over dense fiberboard. $46.5 \mathrm{lb}: 28.25 \times 16 \times 9.75-$ in.
\$399/pr
Mini-Advent Subwoofer System
Complete compact size subwoofer system which includes the Mini Advent (below) two 5.25" high excursion woofers, two $5.25^{\circ}$ high excursion midranges. and two .5 " polycarbonate ferrofluid-filled tweeters, FR $60-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 6 ohms. Power hardling 55 W rms, 165 W peak. $7 \times 12 \times 6.5$ in: 11 lb .
\$180/ca
Total Subwoofer System with Mini Advent . . . \$380
Advent Prodigy Touer
2 way floor standing speaker with . $75^{\prime \prime}$ polyamide fertofluid-filled tweeter and $8^{\prime \prime}$ high excursion woofer. 300 W peak 75 W rms. Finished in an oiled solid

pecan wood top and base. $28.5 \times 10.03 \times 8.78$-in 25.25 lb
\$350/pr
Advent Baby II
2 way bookshelf speaker with $6.5^{\prime \prime}$ woofer and .5 " polycarbonate ferrofluid-filled hard dome tweeter. 50 $W \mathrm{rms}$, I 50 W peak' FR $60-21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 6 ohms. Oiled solid wood top with black texture vinyl over dense fiberboard. $16.5 \times 11 \times 6.19-\mathrm{in}$; 13 b .
$\$ 250 / \mathrm{pr}$
Mini Advent
Compact size speaker with $5.25^{*}$ high excursion woofer and .5: polycarbonate ferrofluid-filled iweeter. FR $110-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$. imp 6 ohms; maximum power handling 40 W continuous. 120 W peak. Cabinet features solid pecan wood top panel with black foamed polystyrene speaker surrounds. $11 \times 6.5$ x 5.13 -in; 10 lb
$\$ 200 / \mathrm{pr}$.

## ALLISON ACOUSTICS

Prices may be slightly higher in some areas

## IC-20 1 mage-Control Speaker

Triangular acoustic-suspension tower speaker with I side facing wall, 1 side facing in, 1 facing out: each side facing away from wall has $10^{\circ}$ woofer, $23.5^{\prime \prime}$ convex midranges. $21^{\prime \prime}$ convex tweeters: relative balance of mids and tweeters on each panel may be adjusted by remote control or with switch on rear to direct more sound in (for precise imaging with more direct and less reflected sound), out (for open and spacious ambience with more reflected and less direct
sound), left. right, or centered (for equal amplitude at off-center listening positions); level of each panel has 3 possible settings; LED's on center of speaker display selting: drivers positioned 10 minimize room interaction; inside woofer pointed into cabinet, outside woofer pointing out; separate inputs for woofers and for mids and tweeters for easy biamping: autoresetling resistors in each crossover; cabinet panels $0.75^{\prime \prime}-1.25^{\prime \prime}$ thick, braced front-to-back and between panels; interior damped with glass fiber; passive parallel half-section crossovers at 350 and 3.750 Hz ; oak, walnut, or black. $\mathrm{FR}-3 \mathrm{~dB}$ at $28.5 \mathrm{~Hz},-8 \mathrm{~dB}$ at 21 Hz ; imp 6 ohms nominal. 8 a verage, 5 min ; power range $30-400 \mathrm{~W} / \mathrm{ch}$; sens $87 \mathrm{~dB} \mathrm{sPL} / 2.83 \mathrm{~V} / \mathrm{m}$; $48 \times 2 \mathrm{l}$ $\times 12 \mathrm{in} ; 100 \mathrm{lb}$.
$\$ 4,900 / \mathrm{pr}$
CI)9 3-Way Floor-Standing Speaker

Stabilized-radiation-loading speaker with $10^{\prime \prime}$ woof-
er. 3.5 " convex-diaphragm midrange. $1^{*}$ convexdiaphragm tweeter, designed for placement against single wall. LC half-section crossover network; switches to select system acoustic power response (flat to concert-hall balance slope): walnut or oakveneer cabinet with hand-rubbed lacquer finish; steel base. FR down 3 dB at 35.5 Hz , crossovers 350 and $3,750 \mathrm{~Hz}$; imp 4 olims; efficiency $0.7 \%$ at floor/wall intersection; power range $30-200 \mathrm{~W} ; 37.5 \times 12.5 \times$ 10.75-in.
$\$ 1,300 / \mathrm{pr}$
CD8 3-Way Floor-Standing Speaker
Stabilized-radiation-loading speaker with $8^{\prime \prime}$ woofer, $3.5^{\prime \prime}$ convex-diaphragm midrange, $1^{\prime \prime}$ convex-diaphragm tweeter. LC half-section crossover network with switches to select system acoustic power response from flat to concert-hall slope. Walnut- or oak-veneer cabinet with hand-rubbed lacquer finish.


From Ortofon of Denmark, a new generation of moving coil cartridges designed to match perfectly any standard phono input, without the need for an expensive step-up device.

These products incorporate such advanced technology and provide such clarity, depth and musical detail that to adequately describe them here is impossible.

So instead, we want to describe the only features of these great phono cartridges that you really care about, THEY SOUND BETTERI We're so confident that any of these new cartridges will make your records sound better than the one you're listening to now, we guarantee* itl

Purchase any cartridge from a participating authorized Ortofon Dealer. They're affordably priced. Compare the sound from your records. Even compare it to compact discs. If you're not $100 \%$ convinced that a new Ortofon X-Series High Output Moving Coll Cartridge sounds better than your old phono cartridge, return it to your dealer for a prompt refund*.
*Your participating authorized Ortofon Dealer has all the details on this Better Sound Guarantee. CIACLE NO. 81 ON READER SERVICE CARD
CIRCLE NO. 81 ON READER SERvicE CARD
Ortofon Inc., 122 Dupont St., Plainview, NY 11803 OrlOIOी

Crossover frequencies 450 and 3.750 Hz : efficiency $0.7 \%$; power range $30-200 \mathrm{~W}$; response -3 dB al 39 $\mathrm{Hz} ; 28.62 \times 10.5 \times 10.5-\mathrm{in}$.
\$950/pr
CD7 2-Way Flowr-Standing Speaher
Stabilized-radiation-loading speaker with $8^{\prime \prime}$ woofer. $1^{\text {" }}$ convex-diaphragm tweeter, designed for placement against single wall. LC crossover network with premium chokes, computer-grade capacitors; wal-nut-or oak-veneer cabinet with hand-rubbed lacquer finish. Crossover 2.000 Hz ; response -3 dB at 41 Hz ; imp 4 ohms; power range $15-150 \mathrm{~W}: 26.5 \times 9.62 \times$ 9.62 -in
$\$ 600 / \mathrm{pr}$
CD6. Same as CD7 except for wall or shelf mounting: response -3 dB at $46.5 \mathrm{~Hz}: 11.25 \times 11.25 \times 11.25$ in.
$\$ 460 / \mathrm{pr}$

## Series LC 100 Speakers

2-way stabilized-radiation-loading speakers which perform optimally standing on floor away from walls. All have walnut-grain vinvl cahinet and Allison convex-diaphram l" iweeter: LC crossover network with 2 chokes and premium capaciors. Crossover at 2.000 Hz ; sens 90 dB SPL/2.83 $\mathrm{V} / \mathrm{m}$; power range 15 150 い

LC $145.8^{\prime \prime}$ woofer: response -3 dB at 35.5 Hz .25 x $15.63 \times 7.5-$ in
\$420/pr
LC $120.8^{\prime \prime}$ woofer; response -3 dB al $4 \mid \mathrm{Hz} .21 .75 \mathrm{x}$ $13.75 \times 7.5-\mathrm{in}$
\$350/pr
LC $110.8^{\prime \prime}$ woofer: response -3 dB at $46.5 \mathrm{~Hz} .18 \times$ $11.5 \times 7.5$-in: available in oak and black vinyl finishes
$\$ 290 / \mathrm{pr}$
Mini Speakers

## Mini 21' Powered Speaker

Mini speaker with $4^{*}$ long throw woofer and $1^{\prime \prime}$ dome tweeter. LC' type crossover operating at $2,000 \mathrm{~Hz}$. Sens 90 dB sPL, $2.83 \mathrm{v} / \mathrm{M}$. Power range $5-50 \mathrm{~W}$; imp 6 ohms. $7.3 \times 4.6 \times 4.4-\mathrm{in}$ :
$\$ 359$ set
Mini 2
Similar to above except not powered. Power handling S-50 W/ch: imp 6 ohms
\$198/pr

## Mini 2 SIW Subwoofer

Less than I cubic foot compact subwoofer with $8^{*}$ woofer and two complete crossover networks operating at 150 Hz . Sens 90 dB SPL $2.83 \mathrm{v} / \mathrm{M}$; power handling $10-100 \mathrm{~W}$ : imp 4 ohms. $11.25 \times 11.25 \times$ 11.25-in.
\$289/ea
Mini $2 \mathbb{\&}$ Mini 2 SW 3 Piece System.
$\$ 459 / \mathrm{sct}$
Wall Brachets for Mini 2 and 2P
\$50/pr

## altec lansing

## Bias 550 Pentamplified Speaker System

Six speaker system with two $10^{\prime \prime}$ carbon fiber subwoofers, $8^{\prime \prime}$ carbon fiber woofer. $6^{\circ}$ carbon fiber upper midrange coupler, diamond-coaled polyimide 2" upper midrange, and 1" iweeter. Amplification (five way powered system), subwoofer 250 W 4 ohms. woofer 125 W 8 ohms, midrange 125 W 8 ohms. upper midrange 125 W 8 ohms, iweeter $75 \mathrm{~W}, 8$ ohms. FR $20-22,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$.
$\$ 12.000$

## 510 3-Way Tower Speaker

Acoustic suspension speaker with bi-amp capability and adjustable crossover with two $10^{\prime \prime}$ carbon fiber woofers, $2^{*}$ midrange, $1^{\circ}$ dome tweeter, each with polyimide vacuuns deposited titanium. Power range 150 W nom.- 300 W max: sens $93 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; inp 4 ohm; $46 \times 12 \times 13.5-\mathrm{in}$.
$\$ 1,500 / \mathrm{pr}$

## 508 3-way Tower Speaker

Acoustic suspension with two $8^{\prime \prime}$ woven carbon fiber cones, $2^{*}$ midrange, $1^{\prime \prime}$ tweeter, each with polyimide vacuum-deposited titanium housed in walnut vencer high density pressed-wood cabinel. FR $40-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB} ;$ sen 90.5 dB SPL $\mathrm{W} / \mathrm{m}$; power liandling 125 W-250 W max: $40 \times 10.5 \times 11$ in
$\$ 1.000 / \mathrm{pr}$


Epicure Products Incorporated understands that creating loudspeakers of the highest fidelity and refinement requires a balance of inspired engineering and unconventional artistry. Only then can we reinvent form and function to bring you realistic sound from speakers of real beauty. Write for our brochure. Epicure Products Incorporated, 25 Hale St., Newburyport, MA 01950. M A Harman International Company

0
D

## SPEAKERS

305 3-Way Acoustic Suspension Speaker
Acoustic suspension with $10^{\prime \prime}$ carbon fiber woofer: $2^{*}$ midrange; I" tweeter. Power range 125 W nom-250 W max; sens 93 dB W/m; imp 8 ohm; $27 \times 14.5 \times 12$ in.
\$750/pr
205 3-Way Speaker
Acoustic-suspension speaker with $8^{\prime \prime}$ carbon fiber woofer, $2^{*}$ midrange and $1^{\prime \prime}$ polyimide/titanium tweeter. Power handling 75 W nom - 150 W max; sens 91 dB W/m; imp 6 ohm $22 \times 12 \times 9-\mathrm{in} \ldots \$ 550 / \mathrm{pr}$

## 105 Bookshelf Speaker

2-way acoustic suspension speaker with $6^{\circ}$ carbon fiber woofer and I" polyimide/titanium tweeter. FR $50-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range 50 W nom- 100 W max; sens $91 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; $\operatorname{imp} 6$ ohm; $17 \times 9.5 \times 8.5$ in..
\$350/pr

## 95 3-Way Speaker

Acoustic suspension speaker with $8^{*}$ carbon-filled polypropylene woofer; $4^{*}$ midrange; 20 mm polyimide dome tweeter. FR $35-22,000 \mathrm{~Hz}$; power handling 75 W nom-1 50 W max; sens 92 dB SPL/W/m; $22 \times 12$ $\times 9$ - in .
\$300/pr

## 85 2-Way Bookshelf Speaker

Acoustic suspension speaker with $6.5^{\prime \prime}$ carbon-filled polypropylene woofer; 20 mm polyimide dome tweeter. FR $35-22.000 \mathrm{~Hz}$; power handling 50 W nom- 100 W max; sens 92 dB SPL; $17 \times 9.5 \times 8.5$-in $. . \$ 200 / \mathrm{pr}$

## 55 Weatherproof Speaker

Compact indoor/outdoor speaker. 2-way acoustic suspension with $4^{\prime \prime}$ carbon fiber cloth woofer reinforced with epoxy and a 20 mm polyimide dome tweeter. FR $85-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ power range 40 W nom-80 W max; nominal impedance $4 \mathrm{ohm} ; 9.38 \times 7$ $\times 5.31$ in
\$250/pr
PSW-10 Active Subwoofer
Powered subwoofer with a built-in 100 W amplifier. Features $10^{\prime \prime}$ carbon fiber woofer. $\mathrm{FR} 26-150 \mathrm{~Hz} \pm 3$ dB . Input imp line amp 7,000 ohms; $17.5 \times 17.5 \times$ 17.5-in.
\$800/ea

## AMBRIA BY PARASOUND

## S-2000 5-Piece System

Subwoofer obelisk with 6 drivers; 4 satellite 2-way speakers (for pole, wall, ceiling mount with Ambria fixtures); black or white; subwoofer hand-rubbed piano-grade lacquer. FR 28-22,000 $\pm 3 \mathrm{~dB}$; sens 92 dB ; imp >4 ohms with up to 10 satellites; subwoofer $12 \times 12 \times 46$ in $\qquad$ $\$ 1.750 /$ system S-1000. Similar to S-2000 except 3 pieces; subwoofer obelisk has 4 drivers; 2 satellite speakers. FR 35 $22,000 \pm 3 \mathrm{~dB} ; \mathrm{imp}>4$ ohms with up to 6 satellites. Subwoofer $9 \times 9 \times 35$ in. $\qquad$ \$900/system S-100. Extra satellite speakers for S-1000 and S-2000 systems. Black or white . . . . . . . . . . . . . . . . $\$ 335 / \mathrm{pr}$

## S-150 2-Way Link Speaker

Molded enclosure; volume control; black or white. FR $70-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens $92 \mathrm{~dB} \ldots . . .$. . $\$ 495 / \mathrm{pr}$

## AMERICAN ACOUSTICS

PSW- 200 Powered Subwooler
Fifth order crossover network with parametric EQ. LED display and individual gain, frequency and boost conirols. $15^{\prime \prime}$ vented: $15^{\prime \prime}$ polymer coated; $2^{\prime \prime}$ voice coil; FR $28-80 \mathrm{~Hz}$; user adjustable sens; power handling $400 \mathrm{~W} / \mathrm{rms}: 19.5 \times 22.5 \times 18.75 \mathrm{in} \$ 699$ ca

## D9550 5-Way Tower Speaker

$12^{\prime \prime}$ S-way speaker. Features $12^{\prime \prime}$ polymer foam surround woofer; 2-5" sealed back with ferrofluid midrange; 1 soft-dome polymer tweeter: $13^{\circ}$ cone tweeter; crossover frequency 600 Hz ; FR $32-22.000$ Hz : sens $99.5 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; imp 8 ohm ; peak power handling 410 W ; warm oak or black ash finish; 40.88 $\times 15.94 \times 14.56 \mathrm{in}$.
$\$ 400 \mathrm{ca}$

D8550 3 Way Speaker
Vented speaker with $15^{\circ}$ polymer coated woofer; $5^{\prime \prime}$ sealed back ferrofluid damped midrange; soft dome polymer ferrofluid tweeter. FR $37-22,000 \mathrm{~Hz}$; sens $98.5 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; imp $4 / 8 \mathrm{ohm}$; crossover frequency 700 $\mathrm{Hz}, 5,000 \mathrm{~Hz}$; power handling $205 \mathrm{~W} / \mathrm{rms}, 410$ W/peak: $30.38 \times 18.5 \times 14.5$ in
$\$ 350$ ea

## D5550 4 Way Speaker

Vented design with $15^{\circ}$ polymer coated woofer. $5^{\prime \prime}$ sealed back ferrofluid midrange; soft dome polymer ferrofluid tweter, $3^{\prime \prime}$ come ferrofluid tweeter. FR 43$22,000 \mathrm{~Hz}$; sens $96.5 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; imp $4 / 8$ ohm; crossover frequency $1.700 \mathrm{~Hz}, 6,000 \mathrm{~Hz}$; power handling $120 \mathrm{~W} / \mathrm{rms}, 240 \mathrm{~W} /$ peak; $27 \times 15.5 \times 10.25$ in.......................................... . . $\$ 230$ ea

## D4550 3 Way Speaker

Vented design with $10^{\prime \prime}$ polymer woofer: $5^{*}$ sealed back ferrolluid midrange; soft dome ferrofluid tweeter. FR $45-22.000 \mathrm{~Hz}$; sens 95.5 dB W/m; imp $4 / 8$ ohm; power handling $80 \mathrm{~W} / \mathrm{rms}, 160 \mathrm{~W} /$ peak; $24 \times 15 \times 10$ in..
$\$ 170$ ea

## D3550 Bookshelf Speaker

2 way vented design with $8^{\prime \prime}$ polymer woofer; soft dome polymer ferrofluid damped and cooled tweeter. FR $60-22,000 \mathrm{~Hz}$; sens $94.5 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; imp 4/8/ ohm; power handling $45 \mathrm{~W} / \mathrm{rms}, 90 \mathrm{~W} /$ peak; $18.5 \times 11.25 \mathrm{x}$ 8 in. \$120 ea

## D2550 Bookshelf Speaker

2-way vented bookshelf speaker with $6.5^{\circ}$ polymer woofer; soft dome polymer ferrofluid tweeter. FR 65$22,000 \mathrm{~Hz}$; sens $91.5 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; imp $4 / 8$ ohm; power handling 40 watts continuous, 80 watts peak; $12.75 \times$ $9.38 \times 7 . \ldots . .$. . . . . . . . . . . . . . . . . . . . . . . $\$ 100$ ea

## ANGSTROM ASSOCIATES

## Reflexion 3-Way Speaker

Floor standing 3-way tuned port speaker with 25 mm polyamide dome iweeter, twin 205 mm polymere loaded polypropylene low/mid frequency drivers with butyl suspension. FR $35-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; dynamic power range 7.200 W at $10 \%$ clipping; crossover 250 Hz difference filter $2,000 \mathrm{~Hz}$ acoustic Butterworth; sens 95 dB SPL/2.83 vrms at im;nominal imp 6 ohms; $31.5 \times 10.5 \times 12.5$-in 97 lb/pr . . . . . . . . . . . . . . . . . . . . . . . . \$995/pr/w/stands

## Reference 2-Way Speaker

Floor standing 2-way tuned port speaker with 25 mm ferrofluid cooled cloth dome tweeter; 205 mm polymere loaded polypropylene woofer with butyl suspension. FR $37-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; dynamic power range $10-150 \mathrm{~W}$ at $10 \%$ clipping; crossover $2,500 \mathrm{~Hz}$ acoustic Butterworth; sens 90 dB sPL/2.83 vrms at IM; nominal imp 8 ohms; $24.25 \times 10.5 \times 12.5$-in; 72.5 lb/pr
\$795/pr/w/stands

## New Image 2-Way Speaker

2-way tuned-port design with 25 mm ferrofluid cooled cloth dome tweeter, 200 mm polymere loaded polypropylene woofer with neoprene suspension. FR $37-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; dynamic power range $12-100$ W at $10 \%$ clipping; crossover $2,500 \mathrm{~Hz}$ asymetrical 2nd order: sens 89 dB SPL/2.83 vrms at Im ; imp 8 ohms; $12.5 \times 10.5 \times 12.5-\mathrm{in} ; 70 \mathrm{lb} / \mathrm{pr} . . . .5 \$ 550 / \mathrm{pr}$

## Radix Series

## Radix 500 Floor Standing Speaker

3-way, tuned port speaker with twin low/mid drivers of 200 mm polymer loaded polypropylene with butyl suspension. 25 mm hi-temp voice coil, with aluminum former. 25 mm polyamide ferrofluid cooled dome tweeter. FR $40-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 94 dB SPL 2.83 vrms at 1 m ; power range $7-150 \mathrm{~W}$; imp 6 ohms . $43.5 \times 9.5 \times 9.375-\mathrm{in}: 55 \mathrm{lb}$
\$800/pr

## Radix 400 Floor Standing Speaker

3-way, tuned-port spe aker with twin low/mid drivers
of 165 mm polymer loaded polypropylene with butyl suspension, 25 mm hi-temp voice coil, with aluminum former. 25 mm polyamide ferrofluid cooled dome tweeter. FR $40-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 93 dB sPL 2.83 vrms at 1 m ; minimum power 10 W : max power handling 100 W ; imp 6 ohms. $37.5 \times 8.5 \times 9.375-\mathrm{in}$; 37.5 lb
\$650/pr

## Radix 300 Bookshelf Speaker

2-way, tuned-port speaker with low/mid driver of 200 mm polymer loaded polypropylene with butyl suspension, 25 mm hi-temp voice coil with aluminum former. 25 mm fabric fabric dome tweeter. FR $45-20 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 91 dB SPL 2.83 vrms at 1 M ; power range $12-85 \mathrm{~W}$ : imp 8 ohms. $24.5 \times 9.5 \times 9.375$ in; 27.5 lb
\$475/pr

## Radix 200 Bookshelf Speaker

2-way, tuned-port speaker with low/mid driver of 200 mm polymer loaded polypropylene with butyl suspension, 25 mm hi-temp voice coil with aluminum former. 19 mm polyamide dome tweeter. FR $50-$ $20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 89 dB SPL 2.83 vrms at 1 M ; power range $15-70 \mathrm{~W}$ : imp 8 ohms. $18.8 \times 8.5 \times 9.375-$ in; 18 lb .
\$350/pr

## APOGEE ACOUSTICS

## Diva 3-Way Ribbon Speaker

Full-range ribbon speaker with adjustable seamless crossover. Features trapezoidal woofer ribbon; separate midrange and tweeter ribbons. SPL 115 dB ; imp 4 ohms. $73 \times 31 \times 3$-in; 150 lb ea
\$7,500/pr

## Scintilla Full-Range Ribbon Speaker

Full-range ribbon speaker with internal seamless crossover. Features trapezoidal woofer ribbon; integrated, coalescent midrange/tweeter ribbon that utilizes filed magnetic and electromagnetic constraints. SPL 110 dB ; imp 4 or 1 ohms. $57 \times 30 \times 3.5-\mathrm{in}$; 140 lb ca. .
\$3,995/pr

## Duetta 2-Way Ribbon Speaker

Mid-size 2-way full-range ribbon speaker. Utilizes ribbon transducers for both midrange/tweeter and woofer. Features trapezoidal woofer ribbon; combination midrange/tweeter ribbon; internal seamless crossovers. SPL 100 dB ; imp 4 ohms. $58 \times 26 \times 3$-in; 115 lb ea .
\$3.495/pr
Dedicated Active Crossover. For Diva and Duetta Speakers. For use with with balanced amps or single ended amps. LED display indicates levels of woofers and midrange/tweeter
$\$ 3,250$

## Caliper 2-Way Ribbon Speaker

Mid-size 2-way full-range ribbon speaker. Features trapezoidal woofer ribbon; narrow-canted combination midrange/tweeter ribbon; seamless crossover circuitry. SPL 105 dB ; imp 3 ohms. Taupe or grey finish. $48 \times 24 \times 2-\mathrm{in}$; 70 lb ea.
\$2,395/pr

## ARCAM

Arcam One + Speaker
Solid-construction, reflex-loaded cabinets with ultrarigid medite front baffles. Features genuine wood veneers; polymer coned bass-midrange match proprietary dome tweeters via 8 -element crossovers; FR 3520.000 Hz ; 100 W power handling: imp 8 ohms; optional walnut or black finish. $10.15 \times 12.48 \times 20.20$ in. .
$\$ 799 / \mathrm{pr}$

## Arcam Two + Speaker

Solid-construction, reflex-loaded cabinets with ultrarigid medite front baffles. Features genuine wood veneers; polymer coned bass-midrange match proprietary dome tweeters via 8 -element crossovers, which may be biwired using separate cable runs from the amplifier to the bass/midrange and treble sections; FR $42-20,000 \mathrm{~Hz} ; 70 \mathrm{~W}$ power handling: imp 8 ohms : optional walnut or black finish. $8.77 \times 1 \mathrm{l} \times 14.88$ in.


# FROM THE PEOPLE WHO GIVE YOU ACCURATE SOUND, NOW COMES MOREROOMTO ENJOYIT. 

## INTRODUCING THREE SPACE-SAVING LOUDSPEAKERS

FROM ADVENT. Now you can enjoy the accurate sound of Advent ${ }^{\star}$ in more places than ever. Our three new speakers give you the clean, clear sound you expect from Advent, yet take up less space to do it.

THE MINI-ADVENT AND MINI-ADVENT SUBWOOFER
SYSTEM. Mini-Advents are the perfect size for bookshelves. Desks. Even walls and ceilings, using our optional mounting brackets. They're small, but get big sound with $51 / 4 / 1$ high excursion woofers, polycarbonate tweeters, 120 watts peak power and a tuned bass port. Or, add our subwoofer. It gives Mini-Advents the bass of a much larger system and creates exceptional stereo imaging for audio/video or surround sound systems.

THE PRODIGY TOWER. Taller and thinner than our still-famous Advent Prodigy, the Prodigy Tower gets maximum sound using minimum floorspace. How? With 300 watts
peak power, a more efficient 8 " woofer and a polycarbonate dome tweeter for improved dispersion.

THE BABY II. Last, but not littlest, is the improved Baby Advent. Just as compact as the original Baby, but with a couple of changes that show it's maturing quite nicely. Like a ferrofluid-filled polycarbonate dome tweeter and readjustable logo for horizontal and vertical speaker placement.

All three new-Advents have natural wood tops and bases. Even i: you never hooked them up, they'd make grea looking furniture.

Come in to your nearest Advent dealer and listen to the new Mini-Advent, Prodigy Tower and Baby Advent. And don't - worry about the crowds. With these speakers, there's always plenty of room.

Rogita



## Ohm GLS Drivers Make Your Speakers Disappear




Ohm speakers give a stereo image that is solid from font to back, up and down as well as side to side.

Conventional speakers usually produce at best a narrow flat image extending from speaker to speaker.

## Stereo Review $1-88$

"The sound of the Ohm Sound Cylinders was smooth, balanced and thoroughly enjoyable, well beyond what anyone would expect from such a small, light speaker. Its dispersion was subjectively complete, and we were never aware of the speakers as distinct sound sources, no matter how much we moved around the room...these speakers certainly offer impressive value for their price and size. ${ }^{3}{ }^{3}$

## Stereophile 8.88

"...The Walsh 5 is a full-range speaker that is quite clean and images well...a Great American Speaker...one of the few dynamic speakers that my jaded electrostatic taste buds could live with...a clear Class B choice"'-the highest rating any speaker has yet received. ${ }^{1}$

## Audio 6.88

"The Walsh 5 is one of the cleanest speakers available...I perceived remarkable depth and spaciousness to music well recorded in a concert hall. This spaciousness did not result in a vague mass of sound: image location is sharply defined and accurately placed...They are a masterpiece of the speaker designer's art." ${ }^{2}$

## New York Times 3 -88

"...the various frequencies emerge in their natural phase re-lationship--more than in conventional designs. To what extent this accounts for the speakers fine sound may be debatable, yet there is no question that the Ohm Sound Cylinders represent an excellent bargain, with a clarity and richness of sound rarely found in a speaker of this size and price." ${ }^{4}$

## Audiophile File 1.88

"'This speaker is sonicly invisible at most times, and only a rare few times was I able to distinguish the output of a speaker as opposed to the music field as a whole." ...This speaker is the most group friendly speaker I have ever auditioned, bar none...the sound stage presentation remains constant over a large area. I rate the Ohm 4XO a 'must buy' "'s


With Ohm speakers the stereo image spreads all across the sound stage even when you move away from the center of the room

With conventional speakers the entire performance seems to only come from the speaker nearest you.


With Ohm speakers everyone in the listening area gets full spatial fidelity.

With conventional speakers only at a small centered sweet spot can a single listener hear a decent stereo image.

High Fidelity ${ }^{1-88}$
"Ohm's smallest Sound Cylinders are a reasonable value for your dollar. That value goes up if you need a speaker that can perform well in a variety of room placements. And if your interior decorator falls to pieces at the mere mention of floorstanding loudspeakers, head straight for your Ohm dealer." ${ }^{\text {" }}$

Find out about buying, directly from the factory by calling toll free 800-221-6984

CIRCLE NO. 79 ON READER SERVICE CARD

## PNN:CE:

Specialists in Compact Speakers

# ffAt lower levels the sound character of the PN5+ system was amazingly close to that of our reference speakers, which cost nearly twenty times as much!...Quite remarkable...! 9 

Stereo Review Magazine January 1988

Pinnacle's entire product focus is on quality compact speakers. We concentrate our efforts to make the best small speakers on the market. And we do. Pinnacle engineers have developed our exclusive patent pending Diaduct ${ }^{\text {tM }}$ port design. We strategically angle the port deep inside the cabinet to allow enough length for proper tuning. The result is surprisingly deep tight bass

Specialists in Compact Speakers
from a small enclosure. In fact, the sound character of Pinnacle compact speakers is often mistaken for that of much larger more costly speakers. You will enjoy a full bodied musical experience from speakers as small as one foot high. Pinnacle delivers full spectrum sound in a compact format. Priced from \$169/pair at audio dealers nationally.

## Arcam Ihree + Speaker

Solid-construction. reflex-loaded cabinets with ultrarigid medite front bafles. Features vinyl wrap: polymer coned bass-mid range match proprietary dome tweeters via 8 -clement crossovers, which may be biwired using separate cable runs from the amplifier to the bass/midrange and treble sections; FR $47-20,000 \mathrm{~Hz}$; 50 W power handling; imp 8 ohms: optional walnut or black finish. $7.13 \times 10.35 \times 13.43$ in.
\$349/pr

## ATC LOUDSPEAKER TECHNOLOGY

S(M1-400 Speaker
Four $12^{\prime \prime}$ cone woofers. $3^{\prime \prime}$ soft dome midrange. Sens $94 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$, seperate 3 -way $24 \mathrm{~dB} /$ oct active crossover with adjustable phase, gain. crossover frequencies, and employs momentary gain reducion . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$9.000/pr
SCM-500. Similar to above except two $15^{\prime \prime}$ cone woofers . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 8.000 / \mathrm{pr}$ SCM-200. Similar to above except two 12" cone woofers $\$ 7.000 / \mathrm{pr}$

## SCM-50 Speaker

Bass-reflex floor-standing near-field sludio control monitors with drivers employing soft domes. short voice coils in long magnetic gaps, high-flux density, dual suspensions. and cast frames for low distortion and high SPI. Features $9^{\prime \prime}$ cone woofer: $3^{\prime \prime}$ soft-dome midrange: $]^{\prime \prime}$ dome tweeter: min power 50 W rms; max power 500 W rms; sens $85 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms. Oak and black standard finishes. $28 \times 12 \times 16$ in; 85 lb ca
$\$ 6.000 / \mathrm{pr}$ SCM-50A. Similar to SCM 50 except contains 3-way moditied active crossover with phase correction driving $3 \mathrm{amps}(200-\mathrm{W}$ bass. $100-\mathrm{W}$ mid. $50-\mathrm{W}$ highs). Overload protection by active FET momentary gain reduction plus tweeter thermal protection by light distinguishing resistor (LDR). Well balanced continuous SPL of 112 dB with substantial transient headroom. $28 \times 12 \times 16 \mathrm{in} ; 95 \mathrm{lb} \mathrm{ca} . .$. . $\$ 9,000 / \mathrm{pr}$ SCM1-100. Similar to SCM50 except 12" cone woofer. Sens 88 dB sPL/W/m, max continuous SPL 115 dB plus transient headroom: FR $35-18.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ $60-12.00 \mathrm{~Hz} \pm 2 \mathrm{~dB} .16 \times 33 \times 19 \mathrm{in} ; 115 \mathrm{lb}$ ea. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 8.000 / \mathrm{pr}$ SCM-100A. Similar to SCMSOA except 12" cone woofer, max continuous SPt. 115 dB plus transient headroom. $16 \times 33 \times 19 \mathrm{in}$; 125 lb ea $\ldots \$ 11,000 / \mathrm{pr}$

## AUDIOCONCEPTS

All Audio Concepts'speakers are' in kit form. Fiull kils include everything needed to make a speaker. All speaker drivers are from a variety of manufacturers world-wide. Refer to the 1988 Audio Concepts cataloguc for more specific devails.

## Super Titan 3-Way Speaker

Floor standing speaker with $212^{\prime \prime}$ woofers. dome tweeter, and I midrange. Power range up to 300 W rms: FR $30-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens 92.5 dB W/m. 36.5 $\times 17 \times 16.5$-in
\$900/pr

## Sapphire 2-Way Speaker

Hybrid 7" woofer. Power range up to 125 W rms; FR $65-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens $90 \mathrm{~dB} \mathrm{~W} / \mathrm{m} .36 \times 13 \times 12.5$ in.
\$670/pr
G2 3-W ay Speaker
Aperiodic $10^{\circ}$ woofer. Power range up to 200 W rms: FR $36-20,000 \mathrm{~Hz}+3 \mathrm{~dB}$; sens $89 \mathrm{~dB} \mathrm{~W} / \mathrm{m} .28 \times 14 \mathrm{x}$ 13-1n
$\$ 430 / \mathrm{pr}$

## Pulse Subwoofer

Dual $10^{\circ}$ subwoofer. Power range up to 200 W rms: FR $34-400 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens $87 \mathrm{~dB} \mathrm{~W} / \mathrm{m} .18 \times 14.5 \times 17$ in.
$\$ 416 / \mathrm{ca}$
Compact Monitor
2-way with Aperiodic 7" woofer. Features maximum
power handling 125 W rms. FR $43-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sensitivity $87 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m} .16 \times 10 \times 8 \mathrm{in} . \$ 400 / \mathrm{pr}$

## I:aser

Sealed dual $8^{\prime \prime}$ woofers. 3-way speaker. Power range up to 150 W rms; FR $48-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sins 93 dB $\mathrm{W} / \mathrm{m} .35 \times 10 \times 12.5 \mathrm{in}$
$\$ 380 / \mathrm{pr}$

## C2

Scaled $8^{\circ}$ woofer 2-way speaker. Power range up to 100 W rms: $\mathrm{FR} 48-20.000 \mathrm{~Hz}+3 \mathrm{~dB}$; sens 90 dB $\mathrm{W} / \mathrm{m} .19 \times 12 \times 10.5-\mathrm{in}$
$\$ 240 / \mathrm{pr}$

## AUDIO PRO B $\backslash$ SONIC RESEARCH

A4-14 Biamplified Speaker System
Biamplified 3-way bass-reflex bookshelf speaker incorporates Ace-Bass subwoofer with two 5" downfiring rear-mounted woofers and own amp, flushmounted $4.5^{\prime \prime}$ cone midrange. $1^{\prime \prime}$ soft-dome iweeter with separate amp. Features room-matching bass control, tweeter control. sens control ( 100 mV -50 V range). $1 / \mathrm{R}$ signal pushbutton, bass-blend pushbutton control, power on/off signal-actuated in automode; walnut or black-ash finish; speaker stands included. FR $30-20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; crossovers 300 and 2.5 kHz ; distortion $2 \%$ at 96 dB spl/half-space $/ \mathrm{m}$ at $30 \mathrm{~Hz}, 20.5 \times 2.12 \times 10.5-\mathrm{in} \ldots . . \$ \$ 1.950 / \mathrm{system}$

## A2-2 Mini Powered Speaker

Mini speaker with Ace-Bass and Ace-Plus circuits in each channel. Includes volume control, three line inputs and tape output on amp carrying case. FR $50-$ $20,000 \mathrm{~Hz}$; sens $99 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$. Glossy lacquer finish available in white, black, red or grey. $8.25 \times 5.5$ $\times 4.13-\mathrm{in} ; 22 \mathrm{lb}$
$\$ 1.850 /$ system

## Ace-Plus Powered Mini-Speakers

Speaker system driven by a $50 \mathrm{~W} / \mathrm{ch}$ Audio Pro AcePlus amplifier. $4.25^{\prime \prime}$ woofer: .75" tweeter: FR50$20.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$; glossy lacquer finish, white, black, red. or grey. system price includes carrying case; $8.25 \times 5.5 \times 4.13$-in
$\$ 1.850 /$ system

## Amplified Subwoofors

B4-200. Super subwoofer features 4 long-throw $\mathbf{8 "}^{\text {" }}$ woofers: built-in $150-\mathrm{W}$ amp giving 110 dB sPL from $20-200 \mathrm{~Hz} 1.5 \mathrm{~dB}$ active variable crossover: sens control: soft-clipping circuit; $44.5 \times 21.5 \times 21.5-\mathrm{in}$; walnut finish.
$\$ 3.295$ ea
B2-70. Floor-standing subwoofer with two $8^{\prime \prime}$ cone woofers, built-in $\delta 0-W \mathrm{Wmp}$, and active variable crossover. FR $20-200 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; 103 dB sPL írom $20-$ $200 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$. Walnut. black ash, or white laquer finish. $24 \times 20 \times 17-\mathrm{in}$; 90 lb
$\$ 1.450 / \mathrm{ea}$ B-145. Floor-standing subwoofer with 10" cone woofer and builh-in $40-\mathrm{W}$ amp. FR $30-200 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; 102 dB SPL from $30-200 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$. Walnut finish. $20.25 \times 14.75 \times 14.75-\mathrm{in} ; 48 \mathrm{lb} . . . . . . . .$. Black, white lacquer finish . . . . . . . . . . . . . \$885/ea

## AUDIOSOURCE

## IS-Twelve Speaker

Floor standing/bookshelf 2-way speaker with 6.5" polypropylene woofer and 1 " soft dome ferrofluid cooled tweeter. FR $40-20.000 \mathrm{~Hz}$; sens 93 dB ; imp 8 ohms; power capacity 90 W : a vailable in oak veneer. black or white enamel over high density particle board with metal grille; $22.88 \times 8.63 \times 7.88$-in; 17.5 lb.
\$380/pr

## LS-Nine Speaker

Box speaker intended for bookshelf placement. Fealures L-C crossover at 3.5 kHz . Contains $8^{\prime \prime}$ polypropylene woofer: I" tweeter. FR $65-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max power 80 W : sens 88 dB ; imp 6 ohms: white oak with cloth grille; $11.36 \times 17.62 \times 8.31$-in $. . \$ 320 / \mathrm{pr}$

## LS-Eleven Speaker

Compact acoustic suspension speaker with two 4 polypropylene woofers and 1" ferrofluid cooled soft
dome iweeter. Video shielding for hi-fi video applications. FR $60-20,000 \mathrm{~Hz}$ : sens 89 dB ; imp 8 ohms power capacity 80 W : available in oak or walnut veneer, or hlack or white enamel over high density particle board with metal grille. $14.5 \times 5 \times 5.75$ in 8.75 lb .
$\$ 260 / \mathrm{pr}$

## S-One Speaker

Acoustic-suspension 2-way speaker with $4^{\prime \prime}$ polypropylene wooker, I' ferrofluid cooled soft dome tweeter. Video shiclding for hi-fi video applications. FR $100-$ 20.000 Hz ; power range $12-40 \mathrm{~W}$; imp 8 ohms; sens 87 dB SPL/W/m; crossover 2.5 kHz ; black casialuminum enclosure with metal grille. available in walnut or oak veneer, or black metal or weather tigh finishes: $8 \times 5 \times 4.69$-in
$\$ 220 / \mathrm{pr}$

## B\&W LOUDSPEAKERS

## 808 Ported Speaker

Floor-standing speaker with two $300-\mathrm{mm}$ thermoplastic cone woofers, two $100-\mathrm{mm}$ polyamide matrixcone midranges. $32-\mathrm{mm}$ polyamide dome tweeter. Features computer-optimized drivers and cabinet: Audio Powered Overload Circuit: 4th-order Butterworth crossnver; sep terminals for bi and triamping. FR $30-20.000 \mathrm{H} L \pm 2 \mathrm{~dB}$ : min power 100 W ; sens 91 dB SPL/w/m; imp 8 ohms; wainut, or black ash finish: $41.25 \times 25.75 \times 20 \mathrm{in} ; 80 \mathrm{lb}$ $\$ 8.000 / \mathrm{pr}$ Rosewood finish.
\$9.000/pr

## Matrix 801 Series 2 Speaker

Floor standing 6th order Butterworth vented sytem with vertically aligned drivers to minimize lime delays. APOC to prevent driver damage. FR $20-$ $20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; imp 8 ohms; power range $50-600$ W. $39.75 \times 17 \times 22-\mathrm{in}$; 110 lb ca . Available in walnut or black ash
$\$ 5.000 / \mathrm{pr}$
Rosewood finish.
$\$ 6.000 / \mathrm{pr}$

## CM2 Matrix Minj Tower

Floor standing 4th order Butterworth vented system consisting of CMI head unit crossing over at 150 Hz into sub-woofer section forming the stand. B\&W matrix enclosure is employed in both stand and head module. $A P O C$ system. Imp not less than 4 ohms: power range $50-200 / \mathrm{W} .39 .19 \times 6.38 \times 8.31-\mathrm{in}$; Base width $10 \times 9.5-$ in $d$. Finish column-black, white. nextel grey, walnut.
$\$ 1.750 / \mathrm{pr}$
Rosewood finish
$\$ 2.100 / \mathrm{pr}$.

## Matrix Series 2 Speakers

All Matrix speakers feature an electronic sime delay overload protection, homopolymer polypropylene hass/mid drivers. and ferrofluid-cooled tweeters. :Iatrix enclosure comprised of a honelcomb structure of interlocking perforated cross members bomded to the outer walls and filled with acoustic foam for reso-nance-free environment for drivers.

## Matrin 3 Series 2

Floor-standing speaker with two $200-\mathrm{mm}$ cone woofers (one for lower bass and other for bass/mid frequencies): $\mathbf{2 6 - m m}$ polyamide tweeter: heavy magnet assemblies in mid/bass drivers ( 5 lb ea). FR $70-$ $25.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; min power 25 W rms ; no upper power limit due to overload protection; sens 90 dB SPL/W/m; imp 4 ohms. Available in walnut and black ash finishes. $35.75 \times 10.25 \times 16 \mathrm{in}$; 64 lb. $\$ 2.500 / \mathrm{pr}$ Rosewood finish $\$ 2.900 / \mathrm{pr}$
Matrix 2 Series 2. Bookshelf speaker with $200-\mathrm{mm}$ cone woofer: $26-\mathrm{mm}$ polyamide dome tweeter. FR $80-$ $25.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; min power 25 W ; no upper power limit due to overload protection sens 87 dB SPI./W/m; imp 4 ohms. Available in walnut or black ash. $23.5 \times 1(4.25 \times 12.25 \mathrm{in}: 35 \mathrm{lb} . \ldots . . \$ 1.600 / \mathrm{pr}$ Rosewood finish
$\$ 1,900 / \mathrm{pr}$
Matrix 1 Series 2. Bookshelf speaker with $1500-\mathrm{mm}$ cone woofer $26-\mathrm{mm}$ polyamide dome tweeter. FR $80-25.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; min power 25 W ; no upper power limit due to overload protection; sens 85 dB SPL/W/m; imp 4 ohms. Available in
walnut or black ash. $16 \times 9 \times 12.25-\mathrm{in}: 35 \mathrm{lb} \$ 1.200 / \mathrm{pr}$ Rosewood finish.
$\$ 1.500 / \mathrm{pr}$

## Digital Monitor Series

## DM1800.

Features low density version of Matrix enclosure; finite analysis metal dome tweeter. Larger motor assembly and cabinet enclosure than DM1600. Power rating $30-200 / \mathrm{W} .19 .25 \times 9.25 \times 11.75-\mathrm{in} ; 26.5 \mathrm{lb}$; Black ash or walnut .

DM1600.
Features low density Matrix enclosure; finite analysis metal dome tweeter. Power range $30-200 / \mathrm{W}$. 25 x $9.25 \times 16$-in; 24.25 lb ; black ash or walnut . $\$ 980 / \mathrm{pr}$

## DM580

Two 200 mm bass/midrange with composite short fibre cone. 26 mm coil on hi-temp former. One 26 mm aluminum dome tweeter. FR 38-30,000-6 dB points. Sens 91 dB 2.83 volt. 1 m ; imp 8 ohm nom; simulated veneers of oak or black ash; $34.9 \times 9.3 \times 16$-in; 40.7 lb.
\$900/pr

## CM1 Matrix Mini Speaker

Bookshelf model. molded IDMC (fiberglass polyester composite) low density matrix enclosure with $5^{\prime \prime}$ Kevlar bass driver and new TA301 metal dome Iweeter. FR $90-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; imp 8 ohms; power range $50-200 \mathrm{~W} .9 .63 \times 6.38 \times 8.63-\mathrm{in}$; 11 lb ea. White black or nextel grey
\$750/pr

## DM570

One bass/midrange with composite short fibre cone, 26 mm coil on hi-temp former. One 26 mm aluminum dome tweeter. FR $45-30,000 \mathrm{~Hz}-6 \mathrm{~dB}$ points. Sens 91 dB 2.83 volis/m: imp 8 ohm nom; simulated veneers of oak or black ash; $25 \times 9.3 \times 11.9 ; 23.71 \mathrm{lb} \$ 650 / \mathrm{pr}$

## DM560

One bass/midrange with composite short fibre cone. 26 mm coil on hi-temp former. One 26 mm aluminum dome tweeter. FR $65-30.000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$;sens 90 dB 2.83 volts $/ \mathrm{m}$; jmp 8 ohm nom; simulated veneers of oak or black ash: $19.3 \times 9.3 \times 11.9-\mathrm{in} ; 18.7 \mathrm{lb} \$ 550 / \mathrm{pr}$

## L.M-1 Leisure Monitor Speaker

2-way mini speaker with colored nextel finishes and protection against overload. For home and car use. Switchable for 8 or 4 ohms. Available in brown. beige, charcoal, black, or red. Min power $10 \mathrm{~W} ; 4^{\prime \prime}$ woofer, 0.88 tweeter. . . . . . . . . . . . . . . . . . . $\$ 558 / \mathrm{pr}$ LM-1/PM. Panel-mount version . . . . . . . . \$500/pr LM-1/Mar. Marine version. protected against corrosion . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$658/pr LM-1/PM-Mar. Marine version of the LM-1, panel mount . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$600/pr

## DM550

One 160 mm bass/midrange with composite short fibre cone, 26 mm coil on hi-temp former, one 26 mm aluminum dome tweeter.FR $70-20,000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$; sens 87 dB 2.83 volts $/ \mathrm{m}$ : simulated vencers of oak or black ash; $13.8 \times 8.3 \times 9.6$; $12 \mathrm{lb} . \ldots . .$. . . $\$ 400 / \mathrm{pr}$

## BANG \& OLUFSEN

## Beolab Penta Floor-Standing Speaker

Powered S-sided bass-reflex speaker with I S0-W amp in each cabinet: 9 drivers in 3-way configuration (45" woofers, $43^{\prime \prime}$ mids, $11^{\prime \prime}$ dome tweeter vertically aligned): dynamic clipping attenuator for protection; 3 -position bass-le vel switch; auto turn on and off; when used with Beosystem 5500, digital display shows source, volume, recording status, overload; finished in brushed stainless steel with black grille. FR $40-20.000 \mathrm{~Hz}+4,-8 \mathrm{~dB} ; 65 \times 5 \times 5 \mathrm{in} ; 53$ lb.
. $3.295 / \mathrm{pr}$

## RL 140 Speaker

Floor-standing bass-reflex speaker with $26.5^{\prime \prime}$ woofers, $5^{\prime \prime}$ mid, $1^{\prime \prime}$ dome tweeter in gray plastic enclosure
with black grille. FR $40-20.000 \mathrm{~Hz}+4,-8 \mathrm{~dB}$; sens $93 \mathrm{~dB} \mathrm{spl} / \mathrm{W} / \mathrm{m}$; min power 10 W ; imp 8 ohms; $28 \times$ $20 \times 9$ in: $43 \mathrm{lb} . .$. . . . . . . . . . . . . . . . . . . . . \$990/pr


Bang \& Olufsen Beolah Penta

## Beovox S-80,2 Speaker

3-way speaker in infinite-baffle cabinet with $8^{\prime \prime}$ woofer. 3" dome phase-link midrange. ${ }^{\prime \prime}$ tweeter; bafle moldings designed for min diffraction; vertically aligned drivers; auto driver protection; rosewood veneer (other finishes available). Max power 80 W rms; dispersion 100x
\$770/pr

## RL 60.2 Speaker

Floor-standing speaker with 1" dome tweeter. 2 5" cone woofers, tuned port: charcoal black. FR 45 $20.000 \mathrm{~Hz}+4,-8 \mathrm{~dB}$; power range $10-90 \mathrm{~W}$ : sens 93 dB SPI./W/m; imp 8 ohms; $21.25 \times 16 \times 7 \mathrm{in} ; 19.6$ lb. \$550/pr

## RL. 35 2-Way Bookshelf Speaker

2-way bass-reflex bookshelf speaker. Features $5^{*}$ woofer; .75" tweeter: nom imp 8 ohms; FR 48-20,000 $\mathrm{Hz}+4 /-8 \mathrm{~dB}$; sens 92 dB ; crossover at $3,500 \mathrm{~Hz}$ : bitumen blocks on inside of curved backplate: thermoplastic cabinet. $15.75 \times 12.5 \times 5 \mathrm{in}$ : 7.8


Beovox CX100 Compact Speaker
Black, white. grey, or brushed aluminum bookshelf box speaker with $24^{\prime \prime}$ woofers, I" dome tweeter. $^{\text {B }}$ Power range $10-110 \mathrm{~W}$ : sens 89 dB sPL/W/m: imp 6 ohms; $4 \times 12 \times 8$ in; $13.5 \mathrm{lb} . . . .$. . . . . . . . . $\$ 380 / \mathrm{pr}$ Beovox CX50, Black finish; 8 lb . . . . . . . . . \$280/pr

## BIB

## Signature Series

SS-5001. 3-way speaker with $8^{\prime \prime}$ woofer, $4^{\prime \prime}$ midrange and I" soft-dome tweeter. Nom imp 8 ohms; max power handling 100 W ; sens 90 dB ; crossovers at 850 Hz and $3,500 \mathrm{~Hz}$; FR $45-20,000 \mathrm{~Hz}, \ldots$. . . $\$ 600 / \mathrm{pr}$

SS-3001. 2-way speaker with $8^{\prime \prime}$ woofer and $1^{\prime \prime}$ softdome tweeter. Nom imp 8 ohms; max power handling 80 W ; sens 91 dB ; crossover at $2,700 \mathrm{~Hz}$; FR $50-20,000 \mathrm{~Hz}$
$\$ 300 / \mathrm{pr}$
SS-2001. 2-way speaker with 5.25" woofer and 1"
soft-dome tweeter. Nom imp 8 ohms; max power handling 60 W ; sens 80 dB ; crossover at 3.500 Hz : $F R$ $70-20,000 \mathrm{~Hz}$
$\$ 200 / \mathrm{pr}$

## Point Micro Personal Speaker System

Credit-card sized speakers for personal stereos. Features small tote pouch; collapsible speaker stands: waterproof. A vailable in yellow, red, and black $\$ 15 / \mathrm{pr}$

## BOSE

## 01 Series

901 Series VI Speaker System
Direct/reflecting acoustic-matrix speaker with active equalizer and 8 rear-facing, I front-facing $4.55^{\prime \prime}$ fullrange drivers. Features pentagon-shaped cabinet with multi-cell injuection-molded core external panels of hardwood veneer and walnut finish; active equalizer with fixed EQ: midbass and midtreble shelf control; tape monitor switch. Power range 10 W to unlimited: imp 8 ohms; dynamic range 106 dB . Equalizer: 13 x $2.75 \times 4.88$ in. Speaker: $21 \times 12.63 \times 13 \mathrm{in}$. Price includes EQ.
\$1,500/pr

## 601 Series III Speaker System

Foor-standing Direct/Reflecting with all tweeters and one woofer mounted above main enclosure in Free Space Array configuration for lifelike stereo imaging. Features two 8" Digital Dynamic Range cone woofers; four $3^{\prime \prime}$ cone tweeters; subport enclosure system with slotted port. Crossover points at 1,500 and $2,500 \mathrm{~Hz}$. Min power 10 W ; max power 200 W; imp 8 ohms. Hardwood veneer with walnut finish. $12.31 \times 30 \times 12.5 \mathrm{in} ; 45 \mathrm{lb} . \ldots .$.

## 501 Series IV Speaker System

Foor-standing Direct/Reflecting speaker system with two $3^{\prime \prime}$ tweeters mounted in Free Space array and a $10^{\prime \prime}$ long-excursion woofer. Features teak-grain vinyl veneer finish; power range $20-125 \mathrm{~W}$ continuous; nom imp 8 ohms; $25 \times 16 \times 14 \mathrm{in}$. Sold only in stereo pairs.
$\$ 750 / \mathrm{pr}$

## 401 Speaker System

Foor-standing Direct/Reflecting speaker system with two $6.5^{\circ}$ woofers and a $2^{\prime \prime}$ magnetic liquid cooled tweeter. Features Stereo Space array design; columndesign enclosure: thermal-system protection circuit: max power handling 100 W : nominal impedance 4 ohms.
\$598/pr

## 301 Series II Speaker System

Direct/Reflecting ported bookshelf speaker system with $8^{\prime \prime}$ woofer. two $3^{\prime \prime}$ tweeters in Free Space Array. Features dual-frequency crosso ver to allow woofer and tweeter to operate simultaneously over nearly a full octave; tweeter protection circuit; particle-board cabinet with walnut-grain vinyl veneer finish. Crossover frequencies 3 kHz woofer. 1.2 kHz tweeter: power range $10-60 \mathrm{~W} / \mathrm{ch}$ continuous: impedance 8 ohms: $17 \times 10.5 \times 9.5 \mathrm{in}$. Sold only in stereo pairs
\$422/pr

## 201 Series II Speaker System

Direct/Reflecting bookshelf speaker with Free Field tweeter. Features dual-frequency crossover network: $6^{\prime \prime}$ woofer; 2" tweeter; auto tweeter protection. A vailable in rosewood vinyl-veneer finish. Crossover frequencies 1.5 and 2.5 kHz ; power range $5-60 \mathrm{~W}$ rms; imp 8 ohms; $14.5 \times 7.75 \times 9$ in; 9 lb. . \$278/pr

## 101 Music Monitor

Indoor/ouldoor ported speaker. Features high-impact polystrene cabinet for environmental applications; 4.5" full-range driver; optional multi-purpose mounting arms and brackets a vailable at extra cost. Power range $10-60 \mathrm{~W}$; Finished in black or white with white, blue, red, or green grilles; $10 \mathrm{lb} / \mathrm{pr} ; 9 \times 6 \times 5 \mathrm{in}$. Approx
\$239/pr

## . 2 Series

10.2 Speaker

Floor-standing ported speaker with an $8^{\prime \prime}$ midrange driver, two $2^{\prime \prime}$ tweeters and an $8^{\prime \prime}$ subwoofer. Feaures

W: sens $88 \mathrm{~dB}: i m p 8$ ohms: hardwood vencer. $39 \times 12$ $\times 12 ; 92 \mathrm{lb}$.
$\$ 1.299 / \mathrm{pr}$

### 6.2 Bass-Reflex Speaker

Bookshelf speaker with controlled-dispersion-pattern design for Stereo Everywhere. Features 8 woofer: two 3" tweeters; Stereo Targeting system: dual-chamber sub-ported bass venting system: interactive crossover network; hardwood veneer with teak finish. Min power 10 W rms; max power 100 W rms: imp 4 ohms. $20 \times 10 \times 9.62 \mathrm{in}: 19.5 \mathrm{lb} . .$. . $\$ 599 / \mathrm{pr}$

### 4.2 Bass-Reflex Speaker

Compact bookshelf speaker with Stereo Everywhere. Features $8^{\prime \prime}$ woofer; $2.5^{\prime \prime}$ axial-mounted iweeter: Stereo Targeting system; dual-chamber bass venting system with slot-port exit; auto tweeter protection circuit; vinyl vencer with teak finish. Min power 10 Wrms; max power 75 W rms; imp 8 ohms. $18 \times 9.5 \times$ 10 in ; 15 lb . Optional speaker stand (AS-1) available at extra cosi
\$419/pr

### 2.2 Stereo Speaker System

Compact bookshelf speaker with Stereo Everywhere Features 6 " long-excursion woofer: 2" magnetic-fluidcooled tweeter; slot-port bass tuning system; teak vinyl finish. Power range $10-75 \mathrm{~W}$ : max power handling 60 W continous; imp 8 ohms. $9.88 \times 14.75 \times$ $7.5 \mathrm{in}: 12 \mathrm{lb}$.
\$299

## AM-5 Acoustimass Speaker System

Compact modular system with Acoustimass bass module and Direct/Reflecting cube speaker arrays. Each array features 2 separate cube enclosures that can be adjusted for direct or reflecting configuration. The bass module has $26.5^{\prime \prime}$ drivers and a patented Acoustimass enclosure. Features positive temperature coefficient resistor to compress overloading input signals. Max input power 100 W . Cube speaker array: 3.5" per side plus grille. Bass module: $12 \times 20 \times$ 8 in
$\$ 699 /$ system

## Acoustimass SE-5 Stereo Everywhere System

Compact modular system with Acoustimass bass module and Stereo Targeting arrays. Each array includes two 2.5 " magnetically shielded wide range drivers in a black enclosure. Bass module has two $6^{\circ}$ subs that fire into 2 internal chambers. Features positive temperature coefficient protection circuit: high positive current coefficient resistor: 100 W max power handling. Array: $8.25 \times 4.88 \times 3.56 \mathrm{in}$. Bass module: $7.56 \times 12.63 \times 20.2 \mathrm{in} \ldots . . \$ 699 /$ system

## RoomMate II Portable Powered Speaker System

Pair of speakers with built-in sterco amp to accept output of pocket stereo and portable CD player through audio cable. AC/DC compatible. $4.5^{\prime \prime}$ fullrange driver whih helical voice coils in each speaker. Feaures 2-stage active equalization network: distortion limiting circuitry; dual-channel power amp. Power supply 25 W transformer: fiberglass reinforced injected styrene cabinet. Sens $102 \mathrm{~dB} .6 .25 \times 2.75 \times$ 4.25 in: 10.5 lb . Black finish
\$279/pr

## Power Pack.

$\$ 90$

## Video RoomMate Powered Speaker System

Bass-reflex bookshelf speaker for use with any VCR, TV, monitor, or LaserDisc player. Features $4.5^{\prime \prime}$ fully shielded full-range helical-voice-coil driver: fully shielded electronic amplification/active equalization system; dual-tuned ports; 6-ft RCA cable; volume control: mono 4-connector. Grey enclosures with black baffle and silver/grey grille. $6 \times 9 \times 6$ in $\$ 279 / \mathrm{pr}$ MM-2. Mounting arms . . . . . . . . . . . . . . . . . \$40/pr WB-10. Wall bracket
\$20/pr

## BOSTON ACOUSTICS

## $T$ Series Speakers

T1000 Series II 3-Way Speaker
Floor-standing acoustic-suspension speaker with 2 active $8^{\prime \prime}$ copolymer-cone woofers. $6.5^{\prime \prime}$ copolymer-
cone midrange in an internal subenclosure, and $1^{*}$ CFT5 ferrolluid-cooled tweeter. Features taperedgrille design to eliminate sonic diffraction; tall slender enclosure for minimum floor space. oak and walnut veneers, black ash vinyl. Power range 15-150 W rms; FR $38-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens 90 dB SPL/W/m; imp 4 ohms; crossover frequencies 250 and 2.500 Hz . $0.25 \times 42.5 \times 11.5 \mathrm{in}$. Wood veneer . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$1.200/pr Vinyl . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$1.000/pr

## T930 3-Way Speaker

Floor-standing acoustic suspension speaker with $10^{*}$ copolymer cone woofer. 6.5" copolymer cone midrange. and $1^{\prime \prime}$ CFTS dome tweeter. Features genuine walnut vencer. hand finished on 5 sides, and black ash vinyl. Power range $15-125 \mathrm{~W} / \mathrm{ch}$ rms; fr $42-$ $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens 90 dB spI $/ \mathrm{W} / \mathrm{m}$; imp 8 ohms: crossovers at 250 and $2.500 \mathrm{~Hz}_{2} 11 \times 37 \times 12 \mathrm{in}$. Wood vencer
\$800/pr
Vinyl
$\$ 700 / \mathrm{pr}$
T830 3-Way Speaker
Floor-standing acoustic-suspension speaker with $8^{\circ}$ copolymer-cone woofer. 3.5" copolymer-cone midrange, and 1 " Texlite-dome tweeter. Features woodgrain vinyl finish with charcoal grilles or black ebony vinyl with black grille. Power range $15-100 \mathrm{~W}$ rms; fR $45-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens $88 \mathrm{~dB} \mathrm{spl} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms; crossover frequencies 800 and 4.000 Hz .10 x $29 \times 10.5$ in
$\$ 500 / \mathrm{pr}$

## Designer Series Speakers

1/l Designer speakers are designed for /hush mounting in walls or ceilings and come packagea ready to install. Eiach speraker has a matte white finish that can be painted to match room decor and a water-resistamt design. Includes mounting hardware with optional brackets avalable for installation in new construction. Prices vary depending upom inc haded instatlation costs.

## 360 2-Way Speaker

Flush-mount speaker with $6.5^{\prime \prime}$ copolymer-cone woofer and 1" CFT4 ferrofluid-cooled soft-dome tweeter. Woofer is specially designed to provide full bass without needing a special enclosure. Power range $5-60 \mathrm{~W}$ rms; fR $48-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$ : imp 8 ohms: sens 90 dB sPL/W/m. $12.06 \times 8.63 \mathrm{in}$; mounting depth 3.25 in . ........... $\$ 350-\$ 450 / \mathrm{pr}$

## 350 2-Way Speaker

Flush-mount speaker with $5.25^{\prime \prime}$ copolymer woofer and I" CFT4 ferrofluid-cooled soft-dome tweeter. Power range $5-50 \mathrm{~W}$ rms; $\mathrm{FR} 58-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$ imp 4 ohms. $9.5 \times 6.75 \mathrm{in}$ : mounting depth 2.63 in.
$\$ 300-\$ 400 / \mathrm{pr}$

## A Series Speakers

## A 150 Series 111 3-Way Speaker

Acoustic-suspension speaker with $10^{*}$ copolymercone wooter. 3.5" copolymer-cone midrange, and 1 " CFT5 ferrofluid-cooled soft-dome tweeter. Features tapered-grille design to eliminate sonic diffraction. Power range $15-125 \mathrm{~W}$ rms: fr $39-20.000 \pm 3 \mathrm{~dB}$; imp 8 ohms; crossover frequencies 550 Hz and 3.500 Hz . Includes black pedestal base. $32.5 \times 16 \times 8.36 \mathrm{in}$. Oak or walnut veneers.
\$700/pr
Woodgrain vinyl finish
$\$ 500 / \mathrm{pr}$
A 100 Series III 2-Way Speaker
Acoustic-suspersion speaker with $10^{\circ \prime}$ copolymer cone woofer and I" CFTS ferrolluid-cooled softdome tweeter. Power range 15-75 W rms: FR 39 $20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossover at 2.000 Hz ; sens 90 dB spl/W/m. Woodgrain vinyl finish with tapered charcoal grille. Includes black pedestal base. 32.5 (including base) $\times 16 \times 8.36$ in
$\$ 420 / \mathrm{pr}$

## A70 Series II 2-Way Speaker

Acoustic-suspension bookshelf speaker with $8^{\circ}$ co-polymer-cone woofer and 1" CFTS ferrolluid-cooled
soft-dome tweeter. Power range 15.75 W rms; fR 45 $20,000 \mathrm{~Hz}=3 \mathrm{~dB}$; crossover at 2.500 Hz ; sens 90 db spl/ W/mi: imp 8 ohms. Woodgrain vinyl finish with charcoal grille. $23 \times 12.5 \times 8.88$ in
\$320/pr

## A60 Series 11 2-Way Speaker

Acoustic-suspension speaker with $8^{\prime \prime}$ copolymer-cone wooter and 1" Texlite soft-dome ferrolluid-cooled tweeter. Power range $15-75 \mathrm{~W}$ rms; FR $52-20.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$ : crossover at 3.000 Hz : sens 90 dB spl/W/m; imp 8 ohms. Woodgrain vinyl finish with charcoal grille or matte black vinyl finish with back grille. $18.25 \times 11.25 \times 7.75 \mathrm{in}$
\$230/pr

## A40V Series 11 Video Speaker

Acoustic-suspension 2-way hookshelf speaker with $6.5^{\prime \prime}$ copolymer-cone woofer and $0.75^{\circ}$ ferrolluidcooled twecter. Features Magnaliuard magnetic shielding to allow placement near a IV or video monitor. Power range $5-50 \mathrm{~W}$ rms: FR $68-20.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; crossover 3.500 Hz ; sens 90 dB spl. $/ \mathrm{W} / \mathrm{m}$ : $\operatorname{imp} 8$ ohms. Matte black linish with balck grille. 13.5 $\times 8.25 \times 7.25 \mathrm{in}$.
\$190/pr
A40 Series II 2-Way Speaker
Bookshelf acoustic-suspension speaker with 6.5" copolymer cone woofer and $0.75^{\prime \prime}$ ferrolluid-cooled tweeter. Power range $5-50 \mathrm{~W}$ rms: tr $65-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; sens 89 dB sPt./W/m; imp 8 ohms. Woodgrain vinyl finish with charcoal grille or matte black vinyl finish with black grille. $8.25 \times 13.5 \times 7.25$ in.
$\$ 170 / \mathrm{pr}$

## BOZAK BY NEAR

CS-310B Concert Grand Contemporary Speaker
Three-way speaker with 4 B-199B woofers. 2 B-2098 midranges and 8 tweeters in an array. Power range $60-350 \mathrm{~W}$ : imp 8 ohms. Matte walnut enclosure. $52 \times$
 CS-410CI . Same as CS-310B except Classic cabinet . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$4.999/pr CS-410NI. Same as CS-310B except Moorish styling
$\$ 4.999 / \mathrm{pr}$
Symphony No. 1 (S-4000A Modern Speaker
Infinite-batlle 3 -way floor-standing speaker with 2 woofers. a $6.5^{\circ}$ midrange. and $82^{\prime \prime}$ tweeters in array. Max power 250 W : crossovers 400 and 2.500 Hz al 6 dB /octave: imp 8 ohms. Walnut enclosure; $44.5 \times$ $26.25 \times 15.62$ in
\$2.599/pr
CS-4000 Cl. Same as CS-4000A with Classic styinng . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.899 / \mathrm{pr}$
(S-4000 11. Same as CS-4000A with Moorish styling $\$ 3.099 / \mathrm{pr}$

Concerto X CS-302N
Infinite-baffle 3-way floor-standing. Features 1-12" woofer: I-6" mid-range: 2-2" lweeter: max power 150 W: x-over pts 400 and $2.500 \mathrm{H}_{z} ; 8$ ohms; walnut finish: $28 \times 26 \times 15$ in
$\$ 1.600 / \mathrm{pr}$
CS-300N1
Same as CS-302M but 2-way with upgrade to (S302M available. Walnut finish
$\$ 1.100 / \mathrm{pr}$

## BSM BY LASER AUDIO

## Series 12 MkII 4-Way Speaker

Floor-standing passive-radiator speaker with 12" polypropylene-cone passive raditor: 12" polypropylene cone woofer: $4^{\prime \prime}$ cone midrange: $2^{\prime \prime}$ cone tweeter: circuit overload protecion. tr $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 15 W rms; max power 100 W rms; sens 94 dB SPL/W/m; imp $4 / 8$ ohms. Ebony wood-grain finish. $15 \times 41 \times 11$ in: 37 lb
\$320/pr

## Series 7 MKV 3-Way Speaker

Floor-standing acoustic-suspension speaker with 12* polypropylene cone woofer: $\mathbf{4 "}^{\prime \prime}$ cone midrange: $2^{\prime \prime}$ cone tweeter; circuit overload protecion. FR 30 $20.000 \mathrm{H}\lrcorner \pm 3 \mathrm{~dB}$ : min power 15 W rms; max power 100 W rms: sens $94 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp $4 / 8$ ohms.

## Ebony wood-grain finish. $15 \times 27 \times 11 \mathrm{in} ; 28.5$

 Ib. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 240 / \mathrm{pr}$
## Series 4 MKV 3-Way Speaker

Floor-standing acoustic-suspension speaker with $10^{*}$ polypropylene cone woofer: $3^{\prime \prime}$ cone midrange: I" $^{\prime \prime}$ cone tweeter; circuit overload protecion. FR 40$20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : min power 15 W rms; max power 65 W rms; sens $92 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp $4 / 8$ ohms. Ebony wood-grain finish. $14 \times 24 \times 10 \mathrm{in}$; 18.5 lb.
$\$ 190 / \mathrm{pr}$

## Series 3 MKV 3-Way Speaker

Floor-standing acoustic-suspension speaker with $8^{\prime \prime}$ polypropylene cone woofer; $3^{\prime \prime}$ cone midrange; 2" cone tweeter; circuit overload protecion. FR 48$20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 15 W rms; max power 50 W rms: sens $92 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp $4 / 8$ ohms. Ebony wood-grain finish. $11 \times 24 \times 8 \mathrm{in} ; 16 \mathrm{lb} \$ 170 / \mathrm{pr}$

## Series 1 Bass-Reflex Speaker

Floor-standing 2-way speaker with $8^{\prime \prime}$ polypropylene cone: $2^{\prime \prime}$ cone tweeter: circuit overload protection: FR $48-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 15 W rms; max power 50 W rms; sens $92 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp $4 / 8$ ohms. Ebony wood-grain finish. $11 \times 24 \times 8 \mathrm{in}$ : 15 lb..
$\$ 150 / \mathrm{pr}$

## CALRAD ELECTRONICS

## 20-316 Compact Bookshelf Speaker

Passive-radiator speaker with stand-alone mounts or universal mounting brackets. 4.5" low/mid driver with $1.5-\mathrm{lb}$ magnet assembly; $2.5^{\prime \prime}$ cone-edge-radiator tweeter: $0.36^{\prime \prime}$-thick wood-core cabinet. FR 53-18,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; min power 3 W rms; max power 40 W rms; crossover at 2.500 Hz : imp 8 ohms. $4.62 \times 7.75 \times$ $5.25 \mathrm{in} ; 11 \mathrm{lb}$.
$\$ 180 / \mathrm{pr}$

## CAMBRIDGESOUNDWORKS

## Ensemble by Kloss

Full speaker system consisting of 2 low-frequency units and 2 small satellite units. Each low-frequency unit features $18^{\prime \prime}$ long-throw acoustic suspension driver; cabinet is made of high-density particle board with internal bracing, and is finished in black high pressure laminate with metal grilles. Each satellite features $13.5^{\prime \prime}$ cone midrange ( 170 Hz to 2.300 Hz ), and one $1.75^{\prime \prime}$ direct radiator with an integral $.63^{\prime \prime}$ dome ( $2,300 \mathrm{~Hz}$ to $20,000 \mathrm{~Hz}$ ); both satellite drivers are ferrofluid cooled; cabinet is high-density particle board finished in dark gray Nextel; metal grilles. Nom imp 6 ohms; power range $25-100 \mathrm{~W}$. Low freq. unit size: $12 \times 21 \times 4.5 \mathrm{in}$. Upper freq. unit size: $5.5 \times 8$ x 4 in..
.$\$ 499$

## CANTON

CA 30 Active Speaker
Quad-amplified floor-standing speaker with a differential amp and motional feedback system for each driver section ( 120 W woofer, 100 W midrange. 100 W tweeter). Features four $260-\mathrm{mm}$ cone woofers; $190-\mathrm{mm}$ cone woofer; $38-\mathrm{mm}$ metal-dome midrange; $25-\mathrm{mm}$ titanium-dome tweeter; Darlingion output stage for amps: auto on/off stabilized dual mains supply; electronically controlled protection circuitry. FR $20-30,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; bandwidth $3-140,000 \mathrm{~Hz}$; distortion $<0.03 \% ; \mathrm{s} / \mathrm{N} 100 \mathrm{~dB} .15 \times 66.5 \times 16.5 \mathrm{in}$; 275 lb . Black ash or matte mahogany. . . $\$ 16.500 / \mathrm{pr}$ Custom finish.
. $18.000 / \mathrm{pr}$

## CA 20 Active Speaker

Quad-amplified floor-standing speaker with a differential amp and motional feedback system for each driver section ( 120 W woofer. 100 W midrange. 100 W tweeter). Features two $260-\mathrm{mm}$ cone woofers: $190-$ mm cone woofer: $38-\mathrm{mm}$ metal-dome midrange; 25 mm titanium-dome tweeter: Darlington output stage for amps; auto on/off stabilized dual mains supply; electronically controlled protection circuitry. FR 20$30,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; bandwidth $3-140,000 \mathrm{~Hz}$; distor
tion $<0.03 \% ; \mathrm{s} / \mathrm{N} 100 \mathrm{~dB}$. Black-ash or mattemahogany finish. $13.4 \times 48.4 \times 15.75 \mathrm{in}$ : 175 lb. ............. $\$ 10,000 / \mathrm{pr}$ Gloss black, white. mahogany, or custom $\$ 12.000 / \mathrm{pr}$

## CA 15 Active Speaker

Tri-amplified floor-standing speaker with electronic signal correction of all drivers. Features $260-\mathrm{mm}$ long-throw woofer; $120-\mathrm{mm}$ midrange: $25-\mathrm{mm}$ tita-nium-dome tweeter; crossover frequencies 350/3.500 $\mathrm{Hz}: 3$ separate 100 W amplifiers for bass. mid, and high frequencies; THD $<0.03 \%$. Black ash or matte mahogany
. $\$ 6.500 / \mathrm{pr}$
Gloss black or white. . . . . . . . . . . . . . . . . . . . $\$ 7.000$

## CT 120 Floor-Standing Speaker

4-way bass-reflex speaker features $12^{\prime \prime}$ woofer: $8^{\prime \prime}$ bass/midrange; 1.5" midrange; 1" litanium-dome tweeter. Power handling 200 W continuous/350 W peak; imp 4 ohms; crossover frequencies $250 / 1.100 / 4.600 \mathrm{~Hz} .14 .2 \times 47.25 \times 15.6 \mathrm{in}$. Available in black and white ash, matte mahogany, custom
$\$ 5,000 / \mathrm{pr}$

## CT 100 Floor-Standing Speaker

4-way bass-reflex speaker features $10^{\prime \prime}$ woofer; $6^{\prime \prime}$ bass/midrange: $1.5^{\prime \prime}$ midrange: $1^{*}$ titanium-dome tweeter. Power handing 180 W continuous/ 300 W peak; imp 4 ohms; crossover frequencies $250 / 1,100 / 4,600 \mathrm{~Hz} .12 .6 \times 41.3 \times 14.1 \mathrm{in}$. Available in oak, walnut, black and white ash, matte mahogany. custom
$\$ 3,500 / \mathrm{pr}$

## CT 90 Floor-Standing Speaker

3-way bass-reflex speaker features $10^{\prime \prime}$ woofer; $5^{\prime \prime}$ midrange; 1" titanium-dome tweeter. Power handling 150 W continuous/ 250 W peak: imp 4 ohms: crossover frequencies $450 / 4,000 \mathrm{~Hz} .12 .2 \times 35.5 \times$ 12.9 in . Available in oak, walnut, black and white ash, matte mahogany, custom.
$\$ 2.250 / \mathrm{pr}$

## CT 80 Floor-Standing Speaker

3-way bass-reflex speaker features $8.5^{\prime \prime}$ woofer; $5^{\prime \prime}$ midrange: 1" titanium-dome tweeter. Power handling 100 W continuous/ 150 W peak: imp 4 ohms; crossover frequencies $450 / 4.000 \mathrm{~Hz}$. $11 \times 31.5 \times 11.5$ in. Available in oak, walnut, mahogany, black or white ash, custom.
. $\$ 1.650 / \mathrm{pr}$

## Karat 60 Bookshelf Speaker

3 -way speaker features $260-\mathrm{mm}$ woofer: $120-\mathrm{mm}$ midrange; $25-\mathrm{mm}$ titanium-dome tweeter: power handling 100 W continuous/I50 W peak: imp 4 ohms. $12.4 \times 22.9 \times 12.5 \mathrm{in}$. Available in oak, walnut. mahogany, white, or black. . . . . . . . . . . . \$1,590/pr

## Karat 40 Bookshelf Speaker

3 -way speaker features $220-\mathrm{mm}$ woofer: $120-\mathrm{mm}$ midrange: $25-\mathrm{mm}$ titanium-dome tweeter; power handling 90 W continuous/ 130 W peak: imp 4 ohms . $10.9 \times 20.1 \times 10.9 \mathrm{in}$. Available in oak, walnut, mahogany, white, or black.
. $\$ 1.290 / \mathrm{pr}$

## Karat 30 Bookshelf Speaker

2-way speaker features $220-\mathrm{mm}$ woofer; $25-\mathrm{mm}$ titanium-dome tweeter: power handling 80 W continuous/ll0 W peak; imp 4 ohms. $10.8 \times 17 \times 10.9 \mathrm{in}$. Available in oak, walnut. mahogany, white, or black . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$890/pr

## Karat 20 Bookshelf Speaker

2-way speaker features $200-\mathrm{mm}$ woofer; $25-\mathrm{mm}$ titanium-dome tweeter; power handling 50 W continuous $/ 80 \mathrm{~W}$ peak: imp 4 ohms. $8.7 \times 13.5 \times 8.2 \mathrm{in}$. Available in oak, walnut, mahogany, white or black . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$690/pr

## GL 300 F Speaker

Low-profile 2-way speaker acoustically tuned for wall mounting. Features $25-\mathrm{mm}$ dome tweeter (fabric); long-throw $160-\mathrm{mm}$ cone woofer cone. Enclosure surfaces black or white: grille of perforated steel plate; color to match enclosure; permafix spring clamps: 5 -
meter connecting cable; removable grille. Nominal imp 4 ohms: nominal power handling $40 / 60 \mathrm{~W}$; FR $48-30.000 \mathrm{~Hz}$; crossover at $1.700 \mathrm{~Hz} ; 12.6 \times 8.66 \times$ 3.15 in .
$\$ 500 / \mathrm{pr}$
With walnut finish
\$550/pr

## GI. 260 Speaker

Weatherproof low-profile 2-way speaker with 160 mm woofer, $25-\mathrm{mm}$ dome tweeter. Features wallmounting suitability; white or black finish; perforated metal grille. $42-30,000 \mathrm{~Hz}$; crossover $1,700 \mathrm{~Hz}$; power range 60 W ; distortion < $1 \%$; imp 4 ohms; 10.5 $\times 7.12 \times 4.75 \mathrm{in}$.
\$490/pr

## HC 100 Speaker

Bookshelf speaker with $110-\mathrm{mm}$ conc woofer, $25-\mathrm{mm}$ dome tweeter. Features Permafix spring clamps; 5-m connecting cable; one-point mounting fixture: removable grille. FR $48-30,000 \mathrm{~Hz}$; max power 60 W : imp 4 ohms; black, white, or bronze finish: $5.12 \times 7.5$ x $5.75 \mathrm{in} ; 5 \mathrm{lb}$.
\$340/pr

## Plus S Speaker

2-way bookshelf minispeaker suitable as satellite in connection with Canton Plus Beta and Plus C subwoofers. Features $110-\mathrm{mm}$ cone woofer; $25-\mathrm{mm}$ dome tweeter: flush wall mount: removeable grill. FR $45-30,000 \mathrm{~Hz}$; minimum power 20 W ; max power 80 W: sens $87.2 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohms. $4.72 \times 8.07 \mathrm{x}$ 3.94: black, white, brown finishes.
\$340/pr Walnut finish
\$495/pr

## Subwoofers

## Plus Beta Active Subwoofer

Floor-standing bi-amplified woofer system containing amplification for satellites and subwoofer. Features $310-\mathrm{mm}$ cone woofer: signal-correction circuit; thermal overload; short-circuit protection; bass level control: adjustable crossover: adjustable input sens: auto on/off; terminals and switching for up to 4 satellite speakers. FR $20-70 / 90 / 120 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : amp output power 140 W ea; THD $<0.1 \%$. Black, white, or walnut. $13.5 \times 15 \times 15 \mathrm{in} ; 50 \mathrm{lb}$.
\$2,000 ca

## Plus C Subw ooter

Compact passive $310-\mathrm{mm}$ cone subwoofer for use in connection with satellites such as Canton Plus S. FR 22-120 Hz; min power $35(2 x) \mathrm{W}$; max power $75(2 \mathrm{x})$ W ; sens $89.9 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ : imp 4 ohms. $14.7 \times 13.4 \mathrm{x}$ $13.8 \mathrm{in} ; 10.5 \mathrm{Kg}$ : black, white. walnut finishes $\$ 575 \mathrm{ea}$

## CARTER-CRAFT

## 40-432 Stereo Speaker System

Full, dynamic range speakers with built-in amplifier. Features DC in 4.5 V (3-C batteries - ca.); hook-up cables with 3.5 mm phone plug; $4 \times 5 \times 4 \mathrm{in}$; black with silver trim.
. \$36

## 40-434 Mini-Tower Speaker System

Sterco speaker system features built-in amplifier 1.5 W; 4 speakers; AC adapter jack; DC-6 V (4-C batteries): hook-up cables with 3.5 mm phone plug: $2.5 \times 6.5 \times 3.13 \mathrm{in}$; black
. \$28

## 40-428 "Pick-Pocket" Speaker

Folding speakers for mini stereo systems. Folds up to fit in pocket or purse. Over $2^{\circ}$ of stereo cable. Includes suede-cloth carrying case. $4 \times 2.5$ in folded size: I 1b. .
$\$ 22$

## CELESTION

## System 6000 Subwoofer

Double dipole low frequency array. Uses $212^{\prime \prime}$ long throw units in each of the 2 systems. Electronic section contains crossover and EQ components, with variable gain and extension controls . . . $\$ 2.700 / \mathrm{pr}$

## SL. 700 Speaker

2 way sealed box design, using Aerolam cabinet of 12 liter volume. 120 W program power handling and
using an integral sland. Metal dome tweeter and 2 part roil surround on the woofer w/stands $\$ 3,000 /$ pr

## SL600 Si

Two way system using a one piece metal dome tweeter and a $6^{\prime \prime}$ plastic bass unit. Cabinet is made from Aerolam, an aluminum honeycomb construction
\$2,000/pr

## SLI2 Si

Two and a half way speaker system using a one piece metal dome tweeter and a $6^{\circ}$ bass/midrange unit. Cabinet uses a complete figure 8 bracing and bass units have seperate enclosures
$\$ 1,500 / \mathrm{pr}$

## SL6 Si

Two way system with one piece metal dome tweeter and $6^{\prime \prime}$ plastic bass unit. Figure 8 bass cabinet bracing and fully locked rear panel. Gold plated connectors
\$950/pr

## DL10 Series 2 - 3-Way Speaker

Bass-reflex speaker with separate midrange enclosure. $10^{\prime \prime}$ woofer, $6^{\prime \prime}$ midrange: $1.25^{\circ}$ aluminum dome tweeter, and a $6^{\prime \prime}$ bass unit with integral dust cover and roll surround
\$929/pr

## DL8 Series 2-2-Way Speaker

Sealed cabinet speaker with $8^{\prime \prime}$ celoprene cone woofer and I" metal tweeter. Designed for stand mounting. uses a figure 8 cabinet brace and is available in simulated American walnut or black finishes $\$ 540 / \mathrm{pr}$

## D16 Series 2-2-Way Speaker

Sealed box design. $8^{\prime \prime}$ woofer and $1^{\prime \prime}$ metal dome tweeter. Designed for use on stands. Available in simulated American walnut and black finishes . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$430/pr

DLA Series 2-2-Way Speaker
Compact, 2 way sealed box system, using a $6^{\circ}$ woofer and $1^{\prime \prime}$ metal dome tweeter. Designed for stands or bookstielf mounting.
\$330/pr

## CELLO

## Amati Speaker

Compact speaker for wall, shelf, or stand mounting: available in many finishes. $27 \times 20 \times 10$ in $\$ 3.500 / \mathrm{pr}$

## CERWIN-VEGA

## Digiral Series Speaker Sysrems

D-9 3-Way Speaker System
Three-way, four-driver, foor-standing speaker with $15^{\prime \prime}$ woofer, dual $6^{\prime \prime}$ midrange and $1^{\prime \prime}$ tweeter. Features Helmholz/Theile enclosure fabricated from high-density pressed board with woodgrain vinyl finish and acoustically transparent brown stretch grille. FR $29-20.000 \mathrm{~Hz}$; power range $5-350 \mathrm{~W}$; sens 101 dB ; imp 4 ohms; crossover frequencies 500 and $3.500 \mathrm{~Hz}: 18.0 \times 35.5 \times 17.75 \mathrm{in} ; 85 \mathrm{lb} \ldots \$ 1,050 / \mathrm{pr}$

## D-7 3-Way Speaker System

3-way tower speaker with $12^{\prime \prime}$ woofer. dual $6^{\prime \prime}$ cone distributed midrange driver in large chamber, ${ }^{\prime \prime}$ horn tweeter. Features circuit protection: midrange. iweeter level controls; FR $25-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossovers 500 and 3.5 kHz : sens $98 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ : max power 200 W ; imp 8 ohms . . . . . . . . \$870/pr

## D-5 Floor/Shelf Speaker System

Foor/shelf 3-way speaker with $12^{\prime \prime}$ woofer. $6^{\prime \prime}$ cone midrange, 1" horn tweeter. Features circuit protection: tweeter level controls: FR $32-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossovers 700 and 3.5 kHz : sens $96 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ max power 150 W : imp 8 ohms
\$660/pr

## D-3 3-Way Speaker System

3-way shelf-speaker with $10^{*}$ woofer, $6^{\prime \prime}$ cone midrange, ${ }^{\prime \prime}$ horn tweeter. Features circuit protection; midrange. Iweeter level controls; FR $30-20,000 \mathrm{~Hz}$
$\pm 3 \mathrm{~dB}$ : crossovers 700 and 3.5 k Hz ; sens 94 dB SPL./W/m; imp 8 ohms; finished in hickory woodgrain vinyl w/brown stretch cloth grille . . . \$580/pr

## D-2 2-Way Speaker System

2 -way speaker system with $10^{\circ}$ woofer in a cast aluminum frame and $1^{*}$ voice coil horn. Features high-frequency protection circuit breaker: directradiating vented enclosure: hickory woodgrain vinyt finish with brown stretch cloth grille: FR 30-20.000 Hz ; power handling min/max $5 / 125 \mathrm{~W}$; sens 94 dB ; imp 8 ohms; crossover frequency $3,000 \mathrm{~Hz} .23 .5 \times$ $14.0 \times 10.0 \mathrm{in}$ : 38 lb .
$\$ 440 / \mathrm{pr}$

## D-1 2-Way Speaker System

2-way system with an $8^{\circ}$ woofer and $1^{\prime \prime}$ voice-coil high frequency horn. Features resettable high-frequency protection circuit breaker: vented cabinet: hickory woodgrain vinyl with cloth grille: FR 30 20.000 Hz ; power $\min / \max 5 / 100 \mathrm{~W}$; sens 92 dB $\mathrm{W} / \mathrm{m}$; 8 ohms imp; crossover frequency $3,000 \mathrm{~Hz}$; $20.0 \times 11.0 \times 10.0 \mathrm{in}$; $49 \mathrm{lb} / \mathrm{pr} . . . . . . . . . .$.

## SW-12B Subwooter

Vented direct radiating subwoofer compatible with most $4 / 8$ ohm speakers. Features $12^{\prime \prime}$ fioor facing woofer buitt on a die cast aluminum frame with 7 lh magnet: power range $5-125 \mathrm{~W}$ : sens $92 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$ : woodgrain vinyl veneer finish. $13.25 \times 25.5 \times 16.25$ in: 48 lb .
$\$ 320 / \mathrm{ea}$

## AT Speaker Series

## AT-15 3-Way Speaker

3 way bass reflex speaker includes fuse protection. Features $15^{\circ}$ woofer; $25^{\circ}$ midranges; dome tweeter; power handling capacity $5-400 \mathrm{~W}$; sens $102 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$ : imp 4 ohms: $36.5 \times 19.0 \times 18.5 \mathrm{in}: 85 \mathrm{lb} . \$ 1.080 / \mathrm{pr}$

## AT-12 3-Way Speaker

Similar to above with $12^{\prime \prime}$ woofer; $5^{\prime \prime}$ midrange: power handling capacity $5-200 \mathrm{~W}$; sens $97 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; imp 6 ohms: $30.0 \times 16.0 \times 14.0 \mathrm{in}$ : 55 lb .
\$690/pr

## AT-10 3-Way Speaker

Similar to above with $10^{\prime \prime}$ woofer: internal selfresetting circuit breaker; power handling capacity 5 150 W : sens 95 dB : imp 6 ohms. $28.5 \times 14.0 \times 13.5 \mathrm{in}$ : 40 lb
\$620/pr

## AT-8 2-Way Speaker

2 -way version of above with $8^{\circ}$ woofer. dome tweeter. Features power handling capacity 5-100 W: sens 94 dB ; $\operatorname{imp} 6$ ohms. $21.0 \times 12.0 \times 10.0 \mathrm{in}: 26 \mathrm{lb} \$ 4 \mathrm{IO} / \mathrm{pr}$

## SE Speaker Series

## 380SE Floor-Standing Speaker

Floor-standing bass reflex speaker with $15^{\prime \prime}$ cone woofer. Features $27^{\prime \prime}$ polyolefin cone midranges: 1" VC elliptical tweeter: FR $29-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : min power 5 W rms: max power 405 W rms; sens 102 dB SPL./W/m; imp 4 ohms; black vinyl. $36.0 \times 17.5 \times 19.5$ in: 90 lb .
$\$ 1,080 / \mathrm{pr}$

## 300SE Floor-Standing Speaker

Floor-standing bass reflex speaker with $12^{*}$ cone woofer. Features $7^{*}$ polyolefin cone midrange: $1^{\prime \prime}$ VC horn loaded dome elliptical tweeter; FR $25-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$ : min power 5 W rms: max power 255 W rms: sens 98 dB sPL. $/ \mathrm{W} / \mathrm{m}$ : imp 6 ohms; black vinyl. $32.0 \times$ $14.5 \times 16.25 \mathrm{in} ; 65 \mathrm{lb}$.
\$900/pr

## 280SE Floor-Standing Speaker

Floor-standing bass reflex speaker with $12^{*}$ cone woofer. Features 6" cone midrange: 1" VC horn loaded dome, elliptical tweeter; FR $32-20,000 \mathrm{~Hz} \pm 3$ dB : min power 5 W rms; max power 155 W rms: sens 96 dB spL.W/m; imp 6 ohms: black vinyl. $25.5 \times 14.5 \times$ $11.5 \mathrm{in}: 45 \mathrm{fb}$.
\$690/pr

## 250SE Floor-Standing Speaker

Floor-standing bass reflex passive speaker with $10^{*}$
cone woofer. Features Hemholtz Thiele acoustically dense enclosure with sound absorbent baffle; circuit breaker protection; 6" cone midrange; I" VC horn loaded dome elliptical tweeter: FR $32-20,000 \mathrm{~Hz} \pm 3$ dB : min power 5 W rms: max power 125 W rms: sens 95 dB spl./W/m; imp 6 ohms; black vinyl. $28.0 \times 12.5$ $x 11.5 \mathrm{in}: 41 \mathrm{fb}$ $\qquad$ \$600/pr

## 240SE Bowkshelf Speaker

Bookshelf bass reflex speaker with $10^{*}$ cone woofer. Features !" VC horn loaded dome elliptical iweeter: FR $32-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 5 W rms; max power 125 W rms: imp 6 ohms. $25.0 \times 12.5 \times 11.5 \mathrm{in}$ : 36 lb
\$470/pr

## 200SE 2-Way Bookshelf Speaker

Features $8^{*}$ woofer; $1^{*}$ tweeter; vented tuned, direct radiating: $F R \quad 32-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power handling capacity 5.100 W ; imp 6 ohms. $22.0 \times 10.5 \times 12.25$ in: 32 lb
\$410/pr

## CHAPMANSOUND

## T9 4-Way Floor-Standing Speaker

Air-suspension speaker comes standard in bi-wired, bi-ampable configuration. 2-10" polylaminate cone woofers: $6.5^{\prime \prime}$ polylaminate cone midrange: 5 " polylaminate cone midrange: $\mathbf{1 "}^{\prime \prime}$ dome tweeter. FR 25 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 50 W rms; max power St) W rms; sens 88 dB SPL/W/m; imp 2 ohms. Oak finish. $22 \times 45 \times 14 \mathrm{in}$; 150 lbs ea
\$3.300/pr

## T7 3-Way Floor-Standing Speaker

Air-suspension speaker available bi-wired and biampable. $10^{*}$ polylaminate cone woofer. $5^{\prime \prime}$ polylaminate cone midrange, $\mathrm{I}^{*}$ dome tweeter. FR 30 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : min power 50 W rms: max power 200 W continuous. 500 W peak; sens 86 dB sPL/W/m; imp 4 ohms; oak finish with black grille: $14 \times 39 \times 11$ in: 75 lbs each.
\$1.495/pr

## T4 2-Wav Bookshelf Speaker

Air-suspension box speaker available bi-wired and bi-ampable. Features $8^{\prime \prime}$ polylaminate cone woofer: I' dome iweeter. FR $40-20.000 \mathrm{~Hz} 23 \mathrm{~dB}$; power range 25-100 W: sens 88 dB SPL./W/m; imp 4 ohms: oak with black grille: $11 \times 23 \times 8 \mathrm{in}$; 35 lbs each $\$ 760 / \mathrm{pr}$

## CLEMENTS AUDIO

## RT-7 Reference Speaker

Floorstanding speakers feature FR $28-25.000 \mathrm{~Hz} \pm 3$ dB : sens $87 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : imp 7 ohm : min. power requirement 20 W : compression line bass loading: 8 high power/high output copolymer polypropylene cone woofer: 7 " direct inductance planea-ribbon midrange: cross over frequency 3000 cps : first order bass slope; copper cable; driver leads are low inductanc, high purity, oxygen free cables. copper 16 guage 4 conductbr: $48 \times 10 \times 19$ in; rosewood. oak. zebrawood veneered.
$\$ 1.900 / \mathrm{pr}$

## RB-8.0 Speakers

Speakers feature $200 \mathrm{~W} / \mathrm{ch}$ : FR $32-40,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; max power raling 200 W : imp 6.5 ohm: compression line bass loading: $8^{\prime \prime}$ high power polypropylene cone woofer; 7" direct inductance planear-ribbon mid-range: crossover frequency 2000 cps; $26 \times 13.5 \times 15.5 \mathrm{in}$; high density fibre wood with oak veneer
$\$ 1.495 / \mathrm{pr}$

## RB-6.5 Speakers

Speakers feature FR $38-40.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 87 $\mathrm{dB} / \mathrm{W} / \mathrm{m}$; max power rating 150 W : imp 6.5 ohm: compre:sion line bass loading: $6.5^{\prime \prime}$ high power polypropylene cone woofer: 7" direct-inductance planar-ribbon mid-range; crossover frequency 2000 cps; $24.5 \times 13.5 \times 13.25 \mathrm{in}$; high density fibre wood with oak veneer
. \$1.095/pr

## Little d's Loudspeaker system

Multi-purpose, high efficiency, loudspeaker system features FR $42-25,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ :
imp 6 ohm; max power rating 100 W ; compression line bass loading: $5.25^{\prime \prime}$ high power/high output polypropylene cone woofer; 5" direct-inductance planar-ribbon midrange; third order woofer slope; 25 W high power rated wire wound resistors; cross-over frequency $2000 \mathrm{cps} ; 7 \times 16 \times 10 \mathrm{in}$; resin impregnated plastic mold $.38^{\prime \prime}$ thick with perforated A.B.S. plastic grille-cloth covered; splatter black, lacquer white. gray, red. or black. . . . . . . . . . . . . . . . . . . . . \$850/pr

## DAHLQUIST

DQ-20 Speaker
Three-way ve tical-phase-array speaker intended for floor placement. Speaker contains $250-\mathrm{mm}$ cone

 er. Min power 70 W rms; imp 4 ohms. Oak with black or white grille.
\$1.800/pr

## $M$ Series

M-909 Floor-Standing Speaker Genuine wood enclosure, spaced grill with solid wood trim, flocked anti-diffraction baffle. 3-way Quasi-Phased Array; dual cast-frame woofer; $5^{\prime \prime}$ midrange: $I^{\prime \prime}$ dome tweeter. Sens 92 dB ; power range 20-250 W; FR $30-24,000 \mathrm{~Hz} .39 .25 \times 13.5 \times 10.9$ in . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$1.400/pr

M-907 Acoustic Suspension
Real wood walnut enclosure, spaced grille with solid walnut trim. 3 way with $10^{\prime \prime}$ woofer. $5^{\prime \prime}$ midrange, $1^{\prime \prime}$ dome iweeter. damped enclosure. Sens 88 dB ; power range $40-150 \mathrm{~W}$; FR $30-24.000 \mathrm{H} 7.28 \times 14.5 \times 12.5$ in . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 940 / \mathrm{pr}$

## M-905 Tuned Port Speaker

Front-firing tuned-port speaker. Features real wood walnut or oak enclosure. spaced grille with solid walnut trim. 2-way system with cast frame $8^{\prime \prime}$ woofer and $1^{\prime \prime}$ dome tweeter. sens 91 dB ; power range 20 W $\min$ to 125 W max: $\operatorname{imp} 8 \mathrm{ohm}, 24 \times 13.5 \times 12$ in.
$\$ 590 / \mathrm{pr}$
M903 Tuned Port Speaker
Front-firing tuned-port 2-way speaker. Features nom
imp 8 ohms; power range $20-70 \mathrm{~W}: 6.5^{\prime \prime}$ cast-frame woofer; 1 " dome tweeter; fR $48-24,000 \mathrm{~Hz}$; sens 90 dB ; 5 -way binding posts; accepts banana plugs; 17 x $8.5 \times 10.38 \mathrm{in}$; 16 lb . Available in black or oak woodgrain laminate
\$450/pr

## Speaker Accessories

## ST-9 Speaker Stand

Non-resonant floor stand for Dahlquist $M$ series speakers; provides rigid mounting. $3.5^{\circ}$ upward tilt: matte black finish; capacity; 100 lb . $11.25 \times 14 \times 12 \mathrm{in}$; 7.5 lb ; oak or walnut veneer and matte black finishes
\$80/pr
ST-10 Stand, As above for other Dahlquist speakers . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$80/pr

## dB PLUS

All speakers have I" dome twecters, walnut vinyl finish, hlack knit grilles. and nominal impedances of 8 ohms with minimum of 4 ohms.

1212 Floor-Standing Bass-Reflex Speaker
2 12" viscous-damped cone woofers; 6.5" cone midrange. FR $23-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; minimum power 10 W . max power 200 W ; sens 103 dB sPI./W/m; 54 lb; $36,60 \times 12.24 \times 11.5-\mathrm{in}$.
\$1,100/pr

## 1010 Floor-Standing Bass-Reflex Speaker

$210^{\prime \prime}$ viscous-damped cone woofers. FR $25-22,000 \mathrm{~Hz}$
$\pm 3 \mathrm{~dB}$; minimum power 20 W , maximum power 150 W ; sens 100 dB sPL/W/m; $45 \mathrm{lb} ; 36.6 \times 12.24 \times 11.5$ in.
\$750/pr
990 Floor-Standing Passive-Radiator Speaker
$10^{\prime \prime}$ viscous-damped coné woofer. FR $30-22,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; minimum power 10 W , max power 100 W ; sens $98 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m} ; 37 \mathrm{lb} ; 32.60 \times 12.24 \mathrm{~h} \times 11.5$ in.
$\$ 600 / \mathrm{pr}$

## 880 Bass-Reflex Speaker

$10^{\prime \prime}$ viscous-damped cone woofer. FR $35-22,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$ : minimum power 10 W , max power 100 W ; sens $96 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m} ; 29 \mathrm{lb} ; 23.88 \times 11.88 \times 11.5-$ in.
\$450/pr
440 Bookshelf Bass-Reflex Speaker
$6.5^{\prime \prime}$ polypropylene cone woofer. FR $45-22.000 \mathrm{~Hz} \pm 3$ dB ; minimum power 10 W , max power 80 W ; sens 94 $\mathrm{dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}: 16 \mathrm{lb} ; 15.88 \times 9.5 \times 9.25-\mathrm{in} . \mathrm{W}$. $\$ 350 / \mathrm{pr}$

## dbx

Soundfield 50 Speaker
Two floor-standing vented enclosures each with $10^{\circ}$ woofer. $6.5^{\prime \prime}$ midrange. $4^{\prime \prime}$ upper midrange, and 3 ultra-wide-dispersion $0.5^{\prime \prime}$ tweeters. Phased arrangement produces both measurably flat response (34$20,000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$ ) and consistent "Listen Anywhere" stereo imaging throughout room. Sens 91 dB SPL/2.83 V/m; imp 4 ohms nominal. 2.5 ohms min: power range $40-400 \mathrm{~W}$; phased-arranged crossover $200 \mathrm{~Hz}, 800 \mathrm{~Hz}, 3,150 \mathrm{~Hz}$, main axis. Walnut or black base and top with matching grille wraps . $\$ 2.000 /$ pr

## Soundfield 150 Speaker

3-way floor-standing vented speaker. Features $10^{\prime \prime}$ woofer: 4.5" midrange; $2.5^{\prime \prime}$ tweeters: phased-arrangement; Listen Anywhere imaging; wrap-around speaker grilles. FR $39-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 91 dB ; nom imp 4 ohms; power range $30-250 \mathrm{~W} / \mathrm{ch}$; 20.5 \& $16 \times 39.5 \mathrm{in} ; 60 \mathrm{lb}$. Available in charcoal grey/black or beige/walnut.
$\$ 1.500$

## Soundfield 1500 Speaker

3-way floor-standing vented speaker. Features $8^{\circ}$ woofer; $4.5^{\prime \prime}$ midrange; $2.5^{\prime \prime}$ tweeters; phased-arrangement: Listen Anywhere imaging; wrap-around speaker grilles. FR $44-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 92 dB ; nom imp 4 ohms; power range $30-250 \mathrm{~W} / \mathrm{ch}$. $16 \times 14 \times$ $33 \mathrm{in} ; 35 \mathrm{lb}$. Available in charcoal grey/black or beige/walnut.

Soundfield 2500 Speaker
3-way floor-standing vented speaker. Features 6.5" woofer, 2.5" midrange; $2.5^{\prime \prime}$ tweeters; phased-arrangement: Listen Anywhere imaging; wrap-around speaker grilles. FR $49-20,000 \mathrm{~Hz}$; sens 90 dB ; nom imp 6 ohms; power range $25-150 \mathrm{~W} / \mathrm{ch}$ at 4 ohms . 12 $\times 8 \times 29 \mathrm{in}: 2 \mathrm{l}$ lb. Available in charcoal grey/black or beige/walnut.
\$580/pr

## DCM

Time Window 3 Speaker
Folded transmission-line 3-way speaker intended for floor placement. Features time-coherent point source for more accurate off-axis sound reproduction. Adjustable high- and middle-frequency energy output, narrow to wide image spatial control: also utilizes acoustic anti-diffraction lenses. $8^{\prime \prime}$ cone woofer; $6.5^{\prime \prime}$ cone midrange: $2.75^{\prime \prime}$ soft-plastic-dome tweeters. FR $24-20,000 \mathrm{~Hz}$; min power 10 W , max power 200 W : sens 90 dB ; imp 8 ohms; a vailable in dark oak with dark brown fabric; 45 lb ; $16.25 \times 39.25 \times 12.36$ in.
$\$ 1,399$ to \$1,499/pr
Time Frame TF1000 3 Way Speaker
Tapered transmission-line speaker. Mirrored image with $8^{\prime \prime}$ woofer. $75^{\prime \prime}$ soft plastic dome iwecter, acoustic anti-defraction lens. 4" mid-frequency driver, transmission line termination. Max power rating 50 W rms pink noise continuous/ 300 W peak program; 8 ohm imp; sens 91 dB W/m: 49 lb ; 49 x $19.5 \times 8 \mathrm{in}$.
$\$ 999$ to \$1,099
Time Window IA Speaker
Hybrid transmission-line speaker intended for floor placement. Improved version of original Time Window with wide-angle sound distribution, pinpoint imaging properties and high power-handling capability. Features cylindrical back and triangular-prism front. Optimized for min time-dispersion error. Contains two $6.5^{\prime \prime}$ cone woofers with acoustic lens; 2.75 " soft plastic dome tweeter with acoustic lens. Min power 10 W , max power 200 W ; sens 91 dB ; imp 8 ohms; dark oak with dark brown fabric; $32 \mathrm{lb} ; 15 \times$ $36 \times 11.75 \mathrm{in}$.
$\$ 899$ to \$949/pr

## Time Frame TF 700 Speaker

Floor-standing folded tapered transmission-line speaker with $8^{\prime \prime}$ cone woofer, $4^{\prime \prime}$ cone midrange, and .75 " dome tweeter. Accurate impulse response for digital sources. Fr $34-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 20 W rms: max power 250 W ; sens 90 dB sPt./W/m; imp 8 ohms. $45 \times 18 \times 7$ in
\$799 to \$849/pr

## Time Frame TF500 Speaker

Mirror-imaged floor-standing loudspeaker. Features $6.5^{\prime \prime}$ cone woofer: $75^{\prime \prime}$ soft-plastic-dome tweeter with acoustic lens; folded, tapered transmission-line bass loading: FR $34-20,000 \mathrm{~Hz}$; power range $10-100 \mathrm{~W}$ : sens $90 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms; dark oak finish; 17 $\times 41 \times 6.75 \mathrm{in} ; 42 \mathrm{lb} \ldots . . . . .$.

## Time Frame TF 350 Speaker

Floor-standing transmission-line speaker with acoustic anti-diffraction lens. Accurate impulse response for digital sources. Features a $6.5^{\prime \prime}$ magnetically shielded cone woofer and a $.75^{\prime \prime}$ dome tweeter. FR 42$20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 10 W rms; max power 100 W rms; sens $89 \mathrm{~dB} \mathrm{spl} / \mathrm{W} / \mathrm{m}$; imp 8 ohms. Available in dark oak/brown cloth finish. 31 lb .37 x $15 \times 7$ in
$\$ 449$ to $\$ 499 / \mathrm{pr}$

## Time Frame TF 250 Speaker

Floor-standing bass-reflex speaker with $6.5^{\prime \prime}$ cone woofer and .75" dome tweeter. FR $50-20,000 \mathrm{~Hz} \pm 3$ dB ; min power 10 W rms; max power 50 W rms; sens 89 dB SPL/W/m; imp 8 ohms. Dark oak with dark brown grilic. $34 \times 13 \times 6$ in ...... $\$ 299$ to $\$ 349 / \mathrm{pr}$

## DENNESEN ELECTROSTATICS

Dennesen Nine 3-Way Speaker
Floor-standing bass-reflex electrostatic speaker de-
signed for minimal edge refractions and reflections. Features electrostatic iweeter system: $8^{\prime \prime}$ bextrene woofer; $6.5^{\prime \prime}$ midrange: six $3^{\prime \prime}$ etectrostatic tweeters. Phase corrected and time aligned. Includes separate electronic crossover for bi-amping in stereo. FR 20$35.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : min power 50 W rms ; max power 200 W rms: sens 89 dB : imp 8 uhms ... $\$ 1.800 / \mathrm{pr}$

## DESIGN ACOUSTICS

## PS- $\mathbf{3 0}$ 3-Piece Speaker System

Consists of 2 PS-5 satellites. PS-LF bass module. Satellites are low-diffraction design with $5^{\prime \prime}$ midwoofer. I" soft-dome tweeter. Bass module has 12" dual voice coil, long-throw woofer: power satellites/ subwoofer $35 / 250 \mathrm{~W}$ : imp 8 ohms . . . . . . $\$ 750 /$ set

PS-I.F Bass Module
Down-firing dual voice coil, long-throu 12" noofer with twin crossover networks at $18 \mathrm{~dB} /$ octave. 140 Hz . Features input for use with PS-S satellites (below); biamp inputs for other satellites. FR to below 40 Hz : power range 15-250
\$375/ea
PS-5 Speaker
Acoustic-suspension 2-way miniature bookshelf speaker with 5 "woofer. 1" dome tweeter. Features midrange. tweeter level controls. FR $80-16,000 \mathrm{~Hz}$ $\pm 1.5 \mathrm{~dB}$ : crossover 2.5 kHz ; sens 85 dB : power range 15-50 W: imp 4 ohms
$\$ 350 / \mathrm{pr}$
IDA 360 All-Weather Speaker
Omnidirectional all-weather speaker. Features rustproof heavy-duty plastic enclosures: dual driver system, white finish

## Point Source Series

PS 103 Floor Standing Speaker
Acoustic-suspension speaker with down-firing $10^{*}$ woofer housed in a separate enclosure within the cabinet. $6^{\prime \prime}$ midwoufer and $.75^{\prime \prime}$ dome tweeter in the upper portion of the cabinet. Five-way binding posts will accept bare stranded cable up to 8 gauge. looped wirc. banana plugs. spade lugs. and terminal pins. Cabinet is mounted on casters. Sens 88 dB sPL $/ \mathrm{W} / \mathrm{m}$ : power range $30-250 \mathrm{~W} / \mathrm{rms}$; imp 8 ohms. . $\$ 950 / \mathrm{pr}$

PS-10 3-Way Boohshelf Speaker
Acoustic-suspension 3-way speaker with down-firing $10^{\circ}$ long-throw woofer. $5^{\prime \prime}$ midwoofer. $1^{\prime \prime}$ soft-dome tweeter. Features tweeter level control: mirror-image driver placement: acoustically treated bafle: FR 48$20,000 \mathrm{~Hz}$ : crossovers 190 and $2,000 \mathrm{~Hz}$; sens 90 dB ; power range $15-200 \mathrm{~W}$ : imp 8 ohms. . . . . . \$520/pr

PS-8b 2-Way Bonltshelf Speaker
Acoustic-suspension speaker. Features $8^{\prime \prime}$ woofer: 1" soft-dome tweeter: mirror-image drivers: acoustically treated bafle: crossover al 2.000 Hr : FR $50-20.000$ $\mathrm{H} r$ : sens 90 dB ; power range $15-200 \mathrm{~W} \ldots . \$ 370 / \mathrm{pr}$

PS-6V Shielded Brokshelf Speaker
Acoustic-suspensiun speaker. Features 6.5" longthrow woofer: . $75^{*}$ soft-dome tweeter: mirror-image driver placement: acoustically-treated baftle: magnetic shielding. IR $50-20.000 \mathrm{~Hz}$ : power range $10-100$ W: sens 88 dB : imp 8 ohms.
\$280/pr
PSi-6 Bookshelf Speaker
Two-way design features $6^{\prime \prime}$ woofer: $0.75^{\prime \prime}$ soft-dome

1wecter: If $50-20,000 \mathrm{~Hz}$ : sens 88 dB sPL/W/m: power range $15-100 \mathrm{~W}$.
$\$ 260 / \mathrm{pr}$

## DESKTOP LOUDSPEAKER SYSTEMS

IDLS-3x Intimate Speaker System
4-piece speaker system with satellites carved from solid wood. 2 DM- 2 x satellites house $3.25^{\prime \prime}$ cone woofer. $0.75^{\prime \prime}$ dome tweeter. $0.15^{\prime \prime}$ supertweeter: 2 subwoofers house 2 7" drivers and $28^{\prime \prime}$ passive radiators. FR $38-30.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range 20 200 W : sens 87.5 dB : imp 4 ohms. . . $\$ 1.999 /$ system
DI.S-2 Intimate Speaker System

4-piece speaker system with satellites carved from solid wood 2 DM-1 satellites house $3.25^{\prime \prime}$ cone woofer, $0.88^{\prime \prime}$ dome tweeter: 2 BMW-2 subwoofers house $6.5^{\prime \prime}$ cone driver and $26.5^{\prime \prime}$ passive radiators. FR $39-19,000 \mathrm{H} / \pm 3 \mathrm{~dB}$ : power range $20-250 \mathrm{~W}$ : sens 87 dB spl/W/m; imp 4.6 ohms. . . . . . $\$ 899 /$ system

DIS-1A Intimate Speaker System
3-piece speaker system with enclosures made of solid wond blocks carved out for crossover and drivers. 2 full-range [3M-1 satellites with $3.25^{\prime \prime}$ cone woofer. $0.88^{\prime \prime}$ dome twetter: 1 small BMW-I subwoofer with $6.5^{*}$ cone driver. th $54-18.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range $20-325 \mathrm{~W}$; sens 86 dB spl/ $\mathrm{W} / \mathrm{m}$; imp 4.6 ohms. tvailable in walnut, golden oak, or teak finishes. system weight 28 lh
\$649/system
BMW-2 Intimate Subwoofer
Floor-standing subwoofer with $6.5^{\prime \prime}$ cone driver. $28^{\prime \prime}$ passive radiators. FR $39-175 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range

## Five years ago, the PS:10 got great reviews. It still earns them today, in a store near you.

In 1983, Rolling Stone said, "...the PS•10 loudspeakers by Design Acoustics could be the last pair you'll ever buy." High Fidelity commented, "The overall sound is smooth, clean, and detailed." Ovation noted that the PS•10, "... provided a very open and transparent sound with excellent and stable stereo imaging."

"...the PS•10s deliverec a smooth, balanced sound.. (enabling :hem) to fit almost anywhere both aesthetically and acoustically.'

## A MODERN-DAY CLASSIC

The PS•10 continues to earn thousands of new friends with its un que Point Source" design. The PS•10 has the smallest possible front face, to eliminate diffraction and reflections that blur the stereo image from ordinary bookshelf speakers. Plus a down-"iring 10" woofer that is always exactly coupled to the nom, regardless of its location.

## MEETS THE DIGITAL CHALLENGE

Over the jears, the PS•10 has been constantly refined and improved. Today, it meets the challenge of digital recordings with impressive performance, yet easily fits the smallest room neally and unobtrusively. Write for dealer list and literature todav.

20-150 W: sens 86 dB SPL/W/m; imp 5 ohms; black finish: $9 \times 9 \times 9$ in; 10 lb
$\$ 525 / \mathrm{pr}$

## DM-1 Intimate Speaker System

Bookshelf speaker of solid blockwood carved out to house parts. $3.25^{\prime \prime}$ cone woofer, $.88^{\prime \prime}$ dome tweeter. FR $175-18,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $20-125 \mathrm{~W}$; sens 85 dB spl./W/m; imp 8 ohms; walnut. golden oak. or black; $7.5 \times 4.5 \times 3.5 \mathrm{in} ; 4.5 \mathrm{lb}$ $\qquad$ $\$ 300 / \mathrm{pr}$

## S-1 Speaker Stand

For use with wide-screen TV, stereo TV or audio system. Phase aligned: flat black finish: invisible wiring track. $8 \times 17 \times 8 \mathrm{in} ; 2.2 \mathrm{lb} \ldots \ldots . . \$ 70 / \mathrm{pr}$

## EMINENT TECHNOLOGY

## LFT-III Planar Doublet Speaker

Single-diaphragm Linear Field Transducer with diaphragm remaining within constant magnetic-flux field over entire displacement range: push-pull operation; soft-foil/mylar diaphragm with very thin traces and narrow gaps between each trace driven directly by amp; recommended placement at least 3 ft from rear wall; diaphragm area $580^{\circ}$ : peak-to-peak displacement $0.2^{\prime \prime}$. FR $35-40,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; power range $50-200 \mathrm{~W}$; sens $83 \mathrm{~dB} \mathrm{SPL} / 2.83 \mathrm{~V} / \mathrm{m}$; max SPL 106 dB at 1 m : imp 4 ohms: $54 \times 27 \times 1.3 \mathrm{~d}: 90 \mathrm{lb}$ ca $\$ 2.700$

## ENERGY

## Reference Connoisseur

2-way bass-reflex mirror-imaged speakers. matched 0.12 dB left and right. 6 different exotic matched wood veeners available. $7^{\circ}$ polypropylene cone woofer with PVC-stitched suspension; 1.5" dual hyperdome tweeter. FR $25-20.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ off axis; sens $89 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m} ; \operatorname{imp} 8 \mathrm{ohms}$; power range $20-200 \mathrm{~W}$; $35.36 \mathrm{~h} \times 1 / \times 14$-in.; 80 lb : priced according to finish from $\$ 1.600-\$ 3.300 / \mathrm{pr}$

## Reference

2-way bass-reflex front-pon monitors matched within 0.12 dB left and right. 7" polypropylene cone woofer with PVC-stitched suspension; 1.5" dual hyperdome tweeter; includes stands; black vinyl vencer finish. FR $34-20,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ offaxis; sens 89 dB sPL/W/m; imp 8 ohms; power range $20-200 \mathrm{~W}$ : $24.62 \times 10.5 \times 12$-in.; 34 lbs . $\$ 1.050 / \mathrm{pr}$ Reference Oak Designer Series. Similar to to Reference but finished in light oak and including integrated matching oak stands. FR $28-20.000 \mathrm{~Hz} \pm 1.5$ dB
$\$ 1.300 / \mathrm{pr}$

## Pro Mionitor

2-way bass-reflex mirtor-imaged speakers matched 0.5 dB left and right. With stands. $7^{\circ}$ polypropylene cone woofer with PVC-stitched suspension; 1.5" dual hyperdome tweeter. Walnut-grain vinyl with black sag-resistant fabric grilles. FR $28-20.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ off axis; sens 89 dB sPL/W/m; imp 8 ohm; power range $20-200 \mathrm{~W} ; 24.62 \times 10.5 \times 12$-in.; $34 \mathrm{lbs} \$ 870 / \mathrm{pr}$

## EPICURE PRODUCTS(EPI)

. 1/l EPI speakers have wood veneer cabinets with narrow front bafile's and non-parallel side walls to minimize defraction and imernal standing waves. The grills are covered with anthracite gray cloth. The tweeters have damped polycarbonate domes and Iinch voice coils. The hass and midrange drivers have cones made of mineral filled polypropylene which is formed with a non-concentric pattern to increase rigidity and reduce structural resonances.

Epicure Model 1 System 4-Way Speaker
System consists of Model I speakers and a Speaker Placement EQualizer (SPEQ). Floor standing speakers have an electronically teinforced $8^{\prime \prime}$ woofer in a vented cabinet, an $8^{\prime \prime}$ mid-woofer in an isolated chamber. Two 4" midranges and a 1 " iweeter are mounted in a seperate narrow baffle cabinet. The special air-mass-loaded cabinet vent is integrated

into the cabinet base. Internally wired with Monster Cable. FR $32-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossovers al 160.500 and 2.500 Hz ; recommended amplifier power $20-200$ W: imp 6 ohm; $42.75 \times 12 \times 13$-in $. \$ 1.400 /$ system

Epicure Model 2 Four-Way Speaker
Floor standing speaker with an $8^{\prime \prime}$ woofer in a vented cabinet. $8^{\prime \prime}$ mid-woofer in an isolated chamber. $4^{\prime \prime}$ midrange and 1 " tweeter. The air mass loaded cabinet is integrated into the cabinet base. Internally wired with Monster Cable. $1 \mathrm{R} 38-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : crossovers at 190.500 and $2,500 \mathrm{~Hz}$; power range 10 $175 \mathrm{~W} ; \mathrm{imp} 6 \mathrm{ohm} ; 35.25 \times 12 \times 13 \mathrm{in} . . . . \$ 900 / \mathrm{pr}$

Epicure Model 3 3-Way Speaker
Floor standing speaker with an $8^{\prime \prime}$ woofer in a vented cabinet. a 4" midrange and a I" tweeter. The air mass loaded cabinet is integrated into the cabinet base. FR $42-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossovers at $500.2 .500 \mathrm{H}_{z}$; recommended power $10-150 \mathrm{~W} ; \operatorname{imp} 6 \mathrm{ohm} ; 30 \times 12 \times$ 13 in
$\$ 700 / \mathrm{pr}$
Epicure Model 4 2-Way Speaker
Bookshelf speaker with an $8^{\prime \prime}$ woofer in a vented cabinet and a 1 " tweeter. The flared cabinet vent is integrated into the cabinet base. FR $48-20.000 \mathrm{Ht} \pm 3$ dB; crossover at $2,000 \mathrm{H}$; recommended power $10-$ 100 W ; imp $8 \mathrm{ohm} ; 20 \times 11.75 \times 12-\mathrm{in} . . . . \$ 450 / \mathrm{pr}$

## Epicure Model 5 2-Way Speaker

Bookshelf speaker with a $6{ }^{\prime \prime}$ woofer in a vented cabinet and a 1" Iweeter. The flared cabinet vent is integrated into the cabinet base. FR $55-20.000 \mathrm{~Hz} \pm 3$ dB: crosssover at 2.000 Hz ; recommended power $10-$ 75 W : imp 8 ohm; $16 \times 10 \times 10.5-\mathrm{in} . . . .$. . $\$ 350 / \mathrm{pr}$ Epicure Model 55 2-Way Speaker. Same as above but with vinyl veneered cabinet . . . . . . . . . \$300/pr

## EPOS by MUSIC HALL

## ES 14 Speaker

$8^{\prime \prime}$ custom-made woofer: custom-made aluminum tweeters; black ash or walnut veneer. $19.5 \times 8 \times 11.5$ in.
$\$ 1.100$;pr
Matching Stands. $\$ 200$

## ESM BY ENERGY

FSM-1s Bass-Reflex Speaker
Mirror-imaged pair with $8^{\prime \prime}$ woofer; 1" ferrofluid
dome tweeter: phase-corrected crossover at $2,000 \mathrm{~Hz}$ walnut or black ash vinyl; black grilles. FR 30-22,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; sens 86 dB spt./W/m; power range 1.5-120 W; nominal imp 8 ohms. $\min 4$; $24 \times 10.5 \times 11$ in.: 35 lb each.
\$500/pr
ESNI-2s Bass Reflen Speaker. Similar to above except FR $40-22,000 \mathrm{~Hz}$ and recommended power range from $12-100 \mathrm{~W}: 23 \times 11 \times 11: 24 \mathrm{lb}$ ea $\$ 400 / \mathrm{pr}$ F.SM-3. Similar to ESM-2 except FR $45-22,000 \mathrm{~Hz}$; power range $10-80 \mathrm{~W}: 20 \times 10 \times 9-\mathrm{in}$.: 20 lb each.
$\$ 300 / \mathrm{pr}$
ESM-4. Similar to ESM- 3 but with $6.5^{\prime \prime}$ woofer: $0.75^{\prime \prime}$ dome tweeter. FR $60-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ power range $10-80 \mathrm{~W}$; $14 \times 10 \times 10$-in_; II lbea.
$\$ 230 / \mathrm{pr}$

## ESS

## AMT Series

## AMIT-Monitor Speaker

Floor-standing passive radiator speaker with $21.5^{\prime \prime} \times$ 21.5" Heil air motion transformer with mylar articulated diaphragm. Features $12^{\prime \prime}$ cone passive rad; $12^{\prime \prime}$ cone woofer. FR $35-23,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; minimum power 35 W rms, max power 400 W rms; sens 91 dB spl/W/m; imp 6 ohms; oiled walnut finish: 82 lb ; $18.5 \times 41 \times 12$
\$1.140/pr

## AMT ID Speaker

Floor-standing passive-radiator 2-way speaker with $12^{\prime \prime}$ polypropylene woofer. $12^{\prime \prime}$ passive radiator. Features $21.5^{\prime \prime} \times 21.5^{\prime \prime}$ Heil air motion transformer with mylar articulated diaphragm; midrange presence. brilliance controls: oiled-walnut finish; blackbrown grille. FR $35-23.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossover 800 Hz : max power 400 W : imp 6 ohms; horizontal/vertical dispersion $120^{\circ} / 30^{\circ}$ sens 91 dB sPL/W/m; $35.25 \times$ $16.25 \times 16.25 \mathrm{in} ; 85 \mathrm{lb}$
\$1.040/pr

## Mini Monitor 620 Speaker

Two-way mini Bookshelf speaker. Features dynamic $5.25^{\prime \prime}$ long excursion woofer; $1.25^{\prime \prime}$ dome shape tweeter: 5 " passive radiator. FR $60-20,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; power range $10-60 \mathrm{~W}$; sens $87 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms; oiled walnut vencer finish; $7 \times 12 \times 7.5 \mathrm{in} ; 16.5$ lb/pr
\$160/pr

## Performance Series

## PS-1220 Speaker

Floor standing passive radiator speaker system with $12^{\prime \prime}$ woofer. Heil air-motion transformer tweeter with $10.4^{\prime \prime} \times 10.4^{\prime \prime}$ radiating area. dynamic $4^{\prime \prime}$ midrange with hi-temp voice coil. FR $28-23,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$ at midband: sens $93 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohm ; power range $10-200 \mathrm{~W}$; solid walnut finish ...... $\$ 488 / \mathrm{pr}$

PS-1020 Floor Standing Speaker
Floor standing passive radiator speaker system with $12^{\prime \prime}$ woofer. Heil air-motion transformer tweetermidrange. $10.4^{\prime \prime} \times 10.4^{\prime \prime}$ radiating area; 1 R 28-23,000 $\mathrm{H}_{\mathrm{z}} \pm 1 \mathrm{~dB}$ at midband: sens 93 dB sPL. W/m; imp 4 ohm; power range $10-150 \mathrm{~W}$; solid walnut finish
$\$ 418 / \mathrm{pr}$

## PS-920 Bookshelf Speaker

Passive radiator speaker system with $8^{\prime \prime}$ woofer. Heil air-motion transformer tweeter-midrange with $10.4^{\prime \prime}$ $\times 10.4^{\prime \prime}$ radiating area. $\mathrm{FR} 38-23.000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$ at midband; sens $91 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohm; power range 5-100 W ; solid walnut finish.
\$368/pr
PS-820 Bookshelf Speaker
Passive radiator speaker with $6^{\prime \prime}$ woofer. Heil airmotion transformer tweeter-midrange with $10.4^{\prime \prime}$ x $10.4^{\prime \prime}$ radiating area. FR $42-23.000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; sens 89 dB sPL./W/m; imp 4 ohm ; power range $5-125 \mathrm{~W}$; solid walnut finish. $\qquad$ \$304/pr

## FISHER

STV-440N1 3-Way Speaker System
Features 15" woofer: $5^{\prime \prime}$ ferrofluid midrange: $3^{\prime \prime}$ ferrofluid tweeter: magnetic field compensated; 150 W rms max. $17.8 \times 38.6 \times 12.8 \mathrm{in}$. $\$ 600 / \mathrm{pr}$

## SPEAKERS

STV-43M 3-Hay Speaker System
Features $15^{\circ}$ woofer; $4^{*}$ ferrotluid midrange. $3^{*}$ ferrolluid tweeter: magnelic field compensated; 100 W rms max. $17.8 \times 36 \times 12.8 \mathrm{in}$; oak vinyl vencer finish.
$\$ 400 / \mathrm{pr}$

## STV-420M1 3-Way Speaker System

Features $12^{\prime \prime}$ woofer: $4^{* *}$ ferrofluid midrange: $3^{*}$ ferrofluid tweeter; magnetic field compensated: 100 W rms max. $14.3 \times 29.7 \times 12.9$ in; oak vinyl veneer finish.
$\$ 320 / \mathrm{pr}$

## STV-410M1 3-Way Speaker System

Features $10^{\circ}$ woofer; $4^{* \prime}$ midrange; $3^{* \prime}$ tuecter; magnetic field compensaled; 60 W rms max. $12.3 \times 25.7 \times$ 10.9 in; oak vinyl vencer finish.
\$200/pr

## TV/Audio Speakers

SIV8626. 3-way hass-reflex speaher. Fealures 8" woofer; $4^{\prime \prime}$ midrange: $3^{\prime \prime}$ iweeter: magnetic lield compensation for placement near a iv or video monitor. 50 W rms max power handling; baldwin oak vinyl veneer cabinet. $23.8 \times 10.2 \times 11 \mathrm{in}: 15.5$ lb. \$200/pr STV228. 2-way bass-reflex speaker. Features 8 woofer; 3" iweeter; magnetic field compensation for placement near a TV or video montor. 50 W ims max power handling: baldwin oak vinyl veneer cabinet. I8 $\times 10.2 \times 11 \mathrm{in} ; 15.5 \mathrm{lb}$
$\$ 160 / \mathrm{pr}$

## FOCUSSPEAKERSYSTEMS

## High-Detinition II ower Speaker

2-way staggered-transmission-line speaker with 3 phase-aligned drivers: $1.25^{\prime \prime}$ inverted Kevlar dome tweeter with 3-1b magnet: $28^{\prime \prime}$ woofers; lead-lined cabinet: cabinet made of 14 -layer epoxy-pulp sleeve: internal bracing: rounded batlle: subenclosure for tweeter; solid oak bases. tops. side rails; Ist-order crossover at $1,000 \mathrm{~Hz}$ : crossover eomponents matched to better than 1\% tolerances: adjustable and removeable spiking system. Fk $35-20,000 \pm 2 \mathrm{~dB}$ group delay better than $\pm 0.2$ mesec: nominal imp 4 ohms, min imp 3.2 ohms; sens $92 \mathrm{~dB} \mathrm{sPI} / \mathrm{W} / \mathrm{mi}$ power range $30-200 \mathrm{~W} / \mathrm{ch}$ : $14 \times 64 \times 16.5 \mathrm{in}$; 115 ib.
$\$ 2.950 / \mathrm{pr}$

## High Iefinition Monitors

Two-way, floor standing speakers. (abinets constructed from 14-layer Pox-Pulp sleeve braced insude. wrapped with $1 / 4^{*}$ foam on outside and capped with solid oak end pieces. Features phasc aligned drivers in separate sub-enclosures to improve imaging; $18^{\circ}$ woofer. I $1.25^{\prime \prime}$ Iwecter; FR 32-20,000 H/ $\pm 2 \mathrm{dA}$; sens 89 dB sound-preasure level at 1 meter with I W input: imp 8 ohms; amp power $30-2(N) W /$ ch: adjustable and removable spiking system direetly couples speakers to any type floor; $47 \times 12 \times 12$ in.
\$1,450/pr

## . 7 High-IDefinition Monitor Spraker

2-way computer-matched time-aligned speaher with Pox Pulp internally braced cabinet; $8^{\prime \prime}$ woofer: $1^{*}$ dome tweeter: contoured port; hardwired crossovers. FR $37-19,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; nominal impedance 8 ohms. minimum impedance 4.8 ohms: maximum power handling $150 \mathrm{~W} / \mathrm{ch}$; sensitivity $90 \mathrm{dHspl} / \mathrm{W} / \mathrm{m}$; 12 x $28 \times 12 \mathrm{in} ; 37 \mathrm{lb}$ \$495/pr
Matching Stands.
\$195/pr

## . 5 High-I Definition Monitor Speaker

Bookshelf speaker with Pox Pulp cabinet; $8^{\prime \prime}$ woofer; I" dome tweeter. tk $45-20,(000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; nominal imp 8 ohms, min imp 4.8 ohms; power range $30-150$ W/ch; sens 90 dB sPI./W/m; $12 \times 19 \times 12 \mathrm{in} ; 27$ lb.
\$750/pr

## FOSTEX

11-3 2-U ay Speaker
Bookshelf speaker system. Features patented RIP tweeter which operates in piston motion: $28^{\circ}$ woofers. $30 \times 11 \times 10 \mathrm{in}$. \$499/pr

## H-2 2-Way Speaker

Hookshelf speaker system. Features patented RP weeter which operates in piston motion; $8^{\circ}$ woofer $21.5 \times 9.5 \times 9$ in \$399/pr

## 11-1 2-Way Speaker

Hookshelf speaker system. Features patented RP iwecter which operates in piston motion; $6^{\circ}$ woofer $16.5 \times 8 \times 7$ in. . . . . . . . . . . . . . . . . . . . . . $\$ 299 / \mathrm{pr}$

## FRIED PRODUCTS

## C;/3 3-Way Speaker

Floor-standing transmission-line speaker with series crossover networks and duocone drivers. Features full-frec-flow transmission-line loading of midrange and aperiodic-design principles for linearity and dynamic range. 10" polypropylene duocone woofer $6.5^{*}$ midrange; $0.75^{\circ}$ dome tweeter. FR $23-22.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; power range $10-200 \mathrm{~W}$ rms; sens 91 dB spl / W/mi: imp 8 ohms. Walnut and oak finishes. 16 x $44 \times 18 \mathrm{in}: 100 \mathrm{lh}$
$\$ 2,320 / \mathrm{pr}$
Studio IV 3-Way Speaker
"Flow-resistance" Hoor-standing speaker with duocone drivers and series networks. Features $8^{\prime \prime}$ duocone woofer; $2^{2 \prime}$ duocone midrange; $1.75^{\circ \prime}$ dome tweeter. fr $26-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range 10 l,(MOO W'; sens 91 dB SPI/W/m; imp 8 ohms. Walnut finish. $12 \times 39 \times 18 \mathrm{in}: 75 \mathrm{lb}$
. $\$ 1.350 / \mathrm{pr}$

## (•/3-1. 2-Way Speaker

Full-transmission-line-loaded speaker for use alone or as a satellite. Features $6.5^{\prime \prime}$ duocone woofer; $0.75^{\circ}$ dome tweeter: series networks: pyramid shape. FR $60-$ $22.000 \mathrm{~Hz} \pm 3 \mathrm{dH}$ power range $10-250 \mathrm{~W}$ rms: sens $91 \mathrm{~dB} \mathrm{SPl} / \mathrm{W} / \mathrm{m}$; imp 8 ohms. $10.5 \times 13.5 \times 15.5 \mathrm{in}$ : 20 Ib.
. $\$ 1,400 / \mathrm{pr}$ assembled C/3-1. hit. As above except as a kit to put together.............. . . . . . . . . . . . . . . . . . . . . . \$430/pr

## K/4 3-W ay Speaker

Column loudspeater with built-in tilt back pedestal with line loading for midrange and line-tunne loading for bass. Features $10^{\circ}$ polypropylene woofer with vented pole piece: $5.25^{\circ}$ polypropylene mid driver cone with vented pole piece; $1^{\circ}$ dome tweeter with ferrofluid damping: $\mathrm{FR} 32-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ power range $25-100 \mathrm{~W} / \mathrm{ch}$; sens 90 dB ; imp 8 ohms. $32 \times 12 \times 10.5 \mathrm{in}: 35 \mathrm{lb} \mathrm{ca}$
\$950/pr

## Model ()/3 Subwoofer Ki

Mirror-image dual-channel subwoofer kit with trans-mission-line design and $10^{\prime \prime}$ woofer. Normal input for use with Fried satellite speakers, biamp inpat for use with other satellites. Response within 3 dB at 20 Hz ; power range $25-200 \mathrm{~W}$; fuse protected. $31 \times 24.5 \times$ 13.5 in . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 700 / \mathrm{pr}$ Model SM1/3. Similar to Model O12 except 12" woofer and max power $400 \mathrm{~W} .38 \times 29.5 \times 15 \mathrm{in}$. KıI.
$\$ 800 / \mathrm{pr}$

## 4/3 2-Way Speaher

Fiatures $8^{\prime \prime}$ polypropylene woofer; $1^{\prime \prime}$ soft-dome Iweeter: edge-on free-flow filters; line tunnel. FR 45$20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $25-100 \mathrm{~W}$; imp 8 ohms: crossover frequency 2.000 Hz ; sens 89 dB $\mathrm{sPI} / \mathrm{W} / \mathrm{mI} .23 \times 13 \times 10.5 \mathrm{in}$;
$\$ 650 / \mathrm{pr}$

## Q/3 2-W'ay Speaker

Features $8^{\circ}$ polypropylene woofer; dome tweeter: edge-on free-flow filters; circuit-breaker protection -R 45-20.000 Hr; minimum power 20 W ; maximum power handing 100 W . Walnut or black-ash finish. 20 $\times 13 \times 10.5$ in:.
$\$ 440 / \mathrm{pr}$

## Beta Full-Range Speaker

Full-range speaker of mini-monitor proportions with polypropylene cones and linear crossovers. Features 6.5" polypropylene woofer: composite tweeter with $2^{\prime \prime}$ cone and $0.62^{\prime \prime}$ dome; series filter crossover; distributed bass-loading frec-flow filter system. Walnut or black-ash finish. $13.5 \times 8 \times 8 \mathrm{in}$; . . . $\$ 325 / \mathrm{pr}$

## Duo Subwoofer

"Flow-resistance" floor-standing subwoofer with dual-voice-coil polypropylene driver. Features $10^{\prime \prime}$ cone woofer. FR $30-100 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $20-$ 200 W ; sens 90 dB sPI/ $\mathrm{W} / \mathrm{m}$; imp 8 ohms. Walnut or hlack-ash finish.
$\$ 330$ ea

## GOLDSOUND

All fold Sound speakers are kits comprised of speaker components and crossovers, grill material, damping. and 18 pages of plans and instructions.

## Kit \# 6

Brown sealed-enclosure speaker system features two $8^{\prime \prime}$ woofers; two $5.25^{\prime \prime}$ cone midranges; two $1.5^{\prime \prime}$ dome twecters: FR $32-30.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 93 dB SPL; min power 5 W ; crossover frequencies 60,200 at $3,060 \mathrm{~Hz} ; \operatorname{imp} 4$ ohms; optional oiled walnut. $37 \times 14$ $\times 11$ in.
\$799/pr

## Kit \#9

Brown vented-enclosure speaker system features two 15" woofers. 7" cone midrange; horn tweeter; separate midrange control; FR $26-30,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 98 dB sPL:; min power 5 W ; crossover frequencies 60,250 at $4,000 \mathrm{~Hz}$. imp 4 ohms; optional oiled walnut. 46 x $29 \times 19$ in
\$798/pr

## Kit \#10

Brown vented-enclosure speaker system features $15^{\circ}$ woofer; $7^{\prime \prime}$ cone midrange; $1^{*}$ tweeter; separate midrange and tweeter controls; FR $28-21,000 \mathrm{~Hz} \pm 3$ dB ; sens 93 dB ; min power 5 W ; crossover frequencies 300 at $5,000 \mathrm{~Hz}$; imp 8 ohms; optional oiled walnut. $44 \times 18 \times 17 \mathrm{in}$

S1.288/pr

## 2018

Brown vented-enclosure speaker system features $18^{*}$ woofer: $8^{\prime \prime}$ cone midrange; separate midrange and tweeter controls; FR $28-21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 95 dB ; min power 5 W ; crossover frequencies $400,1,400$ at $5,000 \mathrm{~Hz}$; imp 8 ohms: optional oiled walnut. $46 \times 29$ $\times 19$ in.
$\$ 1,495 / \mathrm{pr}$

## Kit \#14

Brown vented-enclosure speaker system features $18^{*}$ woofer; $8^{\prime \prime}$ cone midrange; separate midrange and tweeter controls: FR $28-21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 95 dB ; min power 5 W ; crossover frequencies $200,1,200$ at $5.000 \mathrm{~Hz} .46 \times 29 \times 19 \mathrm{in}$.

## REUBEN GUSS ENTERPRISES

## Custom Monitor

Custom speaker system with 204 drivers in 8 enclosures. Features 24 15" woofers; $485^{\prime \prime}$ midranges; $321^{\prime \prime}$ dome Iweeters; 100 custom piezos. Power range $100-900 \mathrm{~W}$ rms. 4 cabinets $30 \times 72 \times 20 \mathrm{in}$; 4 cabinets $22 \times 72 \times 16 \mathrm{in}$
. $\$ 100,000 /$ system

## System 1-Guss Monitor Speaker

Foor-standing speaker system with 102 drivers in 4 enclosures. Features $1215^{\prime \prime}$ cone woofers: $245^{\prime \prime}$ dome dual-diaphragm midranges; $161^{\prime \prime}$ dome tweeters; 50 custom Piezo-electric supertweeters. Controls include midrange; tweeter; rear-ambience; satellite. FR $25-25,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $30-600 \mathrm{~W}$; sens 92 dB sPL/W/m; imp 6 ohms; walnut oak; $36 \times 73 \times 21$ in: 375 lb .60 lb
$\$ 50,000 /$ system

## System 2-Symphony Speaker System

Floor-standing speaker system with 26 drivers in 4 enclosures and 3-D Focus control. Features 4 15* cone woofers; $65^{\prime \prime}$ dome dual-diaphragm midranges: 4 1" dome tweeters; 12 custom Piezo-electric supertweeters Controls include midrange: tweeter: rear-ambience; satellite. FR $28-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $30-300 \mathrm{~W}$; sens 92 dB SPL/W/m; imp 4 ohms. Walmut and oak finishes. 2 cabinets $22 \times 54 \times$ 20 in and $28 \times 25 \times 8 \mathrm{in} ; 165 \mathrm{lb}, 12 \mathrm{lb} \$ 15,000 /$ system

System 3-Concerto Speaker System
Floor-standing speaker system with 22 drivers in 4

## SPEAKERS

enclosures. Features 4-12" cone woofers: 6-5" dome dual-diaphragm midranges: 4-1" dome iweeters; 8 custom Piezo-electric supertweeters. Controls include midrange; tweeter: rear-ambience; and satellite. FR $30-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $30-300 \mathrm{~W}$; sens 92 dB SPL/W/m; imp 4 ohms. Walnut and oak finishes. 2 cabinets $22 \times 54 \times 20$ and $28 \times 25 \times 8 \mathrm{in}$ : 150 $\mathrm{lb}, 12 \mathrm{lb}$.
$\$ 9.000 /$ system

## System 4-Sonata Speaker

Floor-standing speaker system with 12 drivers in 4 enclosures. Features 2-12" woofers; 2-5" dome dualdiaphragm midranges: 6 custom Piczo-electric supertweeters. Controls for midrange: tweeter: satellite. FR $32-22.000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; power range $30-200 \mathrm{~W}$; sens $90 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$ : imp 4 ohms: walnut and oak: $17 \times 28$ $\times 15 \mathrm{in}: 70 \mathrm{lb}, 4 \mathrm{lb}$
$\$ 4,000 /$ system

## HARTLEY PRODUCTS

## The Reference

Floor-standing 4 -way speaker system with $24^{\prime \prime}$ superwoofer, 10" midrange, two 7" tweeters. Crossovers $125,3,000,8,000 \mathrm{~Hz}$; FR $16-25,000 \mathrm{~Hz}$; power range 25.300 W : imp 5.8 ohms; wood cabinet with removable knit grille; $50.25 \times 36 \times 24 \mathrm{in} . . . . . . \$ 5,195 / \mathrm{pr}$

## The Concertmaster

Floor-standing 4-way speaker system with $18^{\prime \prime}$ woofer, $10^{\circ \prime}$ midrange, two $7^{\circ}$ tweeters. Crossovers at 125 . $3,000,8,000 \mathrm{~Hz}$; FR $16-25,000 \mathrm{~Hz}$; power range 25 300 W : imp 5-8 ohms; wood cabinet with removable black grille; $41.5 \times 29 \times 18$ in.
$\$ 3.995 / \mathrm{pr}$

## SPL-I System

Includes 2 SW-10 bass modules. ST-4 phasor arrays. tilt stands for SW - 10 , aluminum adjustable stands for ST-4. mounting screws, sterco crossover. Allien key. All parts have hand-rubbed walnut veneers; black knit grilles. FR $25-25.000 \mathrm{H}_{2} \pm 3 \mathrm{~dB}$.
SW-10. Aligned air-column subwoofer with $10^{*}$ woofer with $l^{\prime \prime}$ high-temperature dual voice coil, polymer cone. magnetic suspension, EFM magnet: 3" polymer cone midrange, magnetic suspension. with two $3^{\prime \prime}$ air columns; imp 6 ohms; power range $15-100$ W rms.
ST-4. Polar-aligned phasor with phasor-array supertweeter: imp 8 ohms; power range $15-150 \mathrm{~W}$ rms; $12 \times 5 \times 5$ in . . . . . . . . . . . . . . . . . . $\$ 1,700 /$ system

## The Reference Mini-Tower

Floor standing 2-way speaker with two 6.5" thermoplastic woofers with high temperature voice coils and heat sinks. Features $1^{\prime \prime}$ hybrid dome tweeter; crossover 3.100 Hz ; power range $5-150 \mathrm{~W}$; imp 4 ohms: FR $32-25,000 \mathrm{~Hz}$; oak veneered cabinet with removable knit grille: $32.5 \times 11.5 \times 12 \mathrm{in}$
$\$ 600 / \mathrm{pr}$

## HECO OF AMERICA

## SAT 6000 Bookshelf Speaker

Acoustic-suspension speaker with low-loss crossover for amplitude and phase-response correction. Fealures $4.12^{\prime \prime}$ cone woofer: $1^{\prime \prime}$ metal-dome tweeter. FR $80-32,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max power 50 W rms; sens 87 dB SPL/W/m; imp 4 ohms; crossover point at 2.200 Hz with $12 \mathrm{~dB} /$ octave slope. Black metalllic finish. $5.75 \times 8.25 \times 5.12 \mathrm{in}: 5.5 \mathrm{th} . \ldots . . . . . .$.

## D6300 2-Way Speaker

Bookshelf acoustic-suspension speaker with 4.12" cone woofer and 1" metal-dome tweeter. FR 80-3,200 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; max power 50 W rms; sens 87 dB $\mathrm{SPL} / \mathrm{W} / \mathrm{m}$; crossover point at $2,000 \mathrm{~Hz}$ with 12 $\mathrm{dB} /$ octave slope. Black metallic finish. $8.12 \times 4.5 \times$ $4.75 \mathrm{in} ; 7.25 \mathrm{lb} . . .$.

## Subwoofers

## Sub 6000 Compact Subw oofer

Floor-standing subwoofer with auto or manual turn on/off. Driven by $90-\mathrm{W}$ amp and includes two $60-\mathrm{W}$ amps to drive satellite speakers. Features $10^{\prime \prime}$ cone
woofer: adjustable input sens and hass level. FR 25 $120 \mathrm{H} 7 \pm 3 \mathrm{~dB}$ : max power 90 W rms; sens 90 dB SPL/W/m; crossover slopes $24 \mathrm{~dB} /$ octave for subwoofer. 12 dB /octave for mids and highs fixed at 120 Hz . Available in black metallic finish. $11 \times 11 \times 12$ inches; 22 pounds.
$\$ 665 \mathrm{ea}$

## HEYBROOK BY D'ASCANIO AUDIO

## HB-3 3-Way Speaker

Hand-assembled acoustic-suspension speaker with $10^{* \prime}$ doped-cone woofer: $4.5^{\prime \prime}$ doped-cone midrange and $0.75^{\circ}$ soft-dome tweeter; removable rear panel for bi- and tri-amping. FR $35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range 15.200 W . Real walnut, or gloss-black finish. $25 \times 13.36 \times 11.36 \mathrm{in}$ : $46 \mathrm{lb} \ldots . . \$ 1,498 / \mathrm{pr}$

## HB-200 2-Way Speaker

Dual-reflex-tuned speaker with $6.5^{\prime \prime}$ woofer and metal-dome tweeter. Features FR $34-22,000 \mathrm{~Hz}$; sens 88 dB ; nom imp 8 ohms; power range $15-100 \mathrm{~W}$ : 18 x $11 \times 9$. Black ash or walnut . . . . . . . . . . . . . \$999/pr

## HB-150 2-W'ay Speaker

Dual-rellex-tuned speaker with $6.5^{\prime \prime}$ woofer and metal-dome tweeter. Features fr $40-22,000 \mathrm{~Hz}$; sens 88 dB ; nom imp 6 ohms; power range $15-100 \mathrm{~W} .16 \mathrm{x}$ $9 \times 9$ in. Black ash or walnut finish
...... \$799/pr

## HB-ION 2-Way Speaker

Infinite-bafle speaker with $8^{\prime \prime}$ woofer and metaldome tweeter. Features fr $50-20,000 \mathrm{~Hz}$; sens 89 dB ; nom imp 8 ohms: power range $15-100 \mathrm{~W}: 19 \times 11 \times 10$ in. Black or woodgrain linish
$\$ 599$

## HB-1 2-Way Speaker

Hand-assembled acoustic-suspension bookshelf speaker with $8^{\prime \prime}$ doped-cone woofer: $1^{\prime \prime}$ dome tweeter. Features removable rear panel for biamping. FR 42$20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 8 ohms; power range $10-75 \mathrm{~W}$; sens $89 \mathrm{~dB} \mathrm{sPI} / \mathrm{W} / \mathrm{m}$. Walnut vinyl or gloss-black finish. $18.75 \times 11.5 \times 9.25 \mathrm{in} ; 19 \mathrm{lb}$.
\$399/pr

## POINI SEVEN 2-Way Speaker

Infinite-baffle speaker with $6.5^{\prime \prime}$ woofer and metaldome twecter. Features FR $45-24.000 \mathrm{~Hz}$; sens 87 dB ; nom imp 6 ohms; power range $15-75 \mathrm{~W}$ : $16 \times 9 \times 9 \mathrm{in}$. Black finish.
\$399/pr

## POINT FIVE 2-Way Speaker

Hand-assembled infinite-bafle bookshelf speaker with $6.5^{\prime \prime}$ doped-cone woofer: $.75^{\prime \prime}$ dome tweeter: structurally-rigid cabinet. FR $50-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range 15-75 W: sens 87 dB ; nom imp 6 ohms. $14 \times 9 \times 9$ in. Black finish............ . $\$ 299 / \mathrm{pr}$

## HITACHI

HSA4040 3-Way Tower Speaker
12" woofer: 3" midrange: 2" tweeter; 12" passive radiator in rear: max power 120 W : wood cabinet: detachable grille cloth . . . . . . . . . . . . . . . . $\$ 300 / \mathrm{pr}$

HSA3050 3-Way Tower Speaker
$10^{\prime \prime}$ woofer: $3^{3 \prime}$ midrange: $2^{\prime \prime}$ tweeter: max power 60 W: detachable grille cloth
\$250/pr

## IISA2028 2-Way Tower Speaker

Bass reflex: $8^{\prime \prime}$ woofer: $2^{\prime \prime}$ tweeter: max power 30 W : wood cabinet
$\$ 150 / \mathrm{pr}$

## IMAGE

All speakers have nominal impedances of 6 ofms, with minimum impedance of 4 ohms, and black grilles.

## Concept 200 Ported Speaker

$26.5^{\prime \prime}$ woofers; $0.75^{\prime \prime}$ damped hyperbolic cotton dome tweeter: crossover at 2.100 Hz ; Italian black walut vinyl. FR $30-23,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 87 dB ; power range $35-200 \mathrm{~W}: 43 \times 10 \times 15 \mathrm{in} \ldots \$ 1.000 / \mathrm{pr}$

## Concept 100 Ported Speaker

$6.5^{\prime \prime}$ woofer: $0.75^{\prime \prime}$ damped hyperbolic cotton dome iweeter: crossover at $2,100 \mathrm{~Hz}$; Italian black walut vinyl. FR $45-23,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens $87 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ : power range $35-100 \mathrm{~W}: 16 \times 9 \times 11: 23 \mathrm{lb}$ each $\$ 600 / \mathrm{pr}$

## Reference Two Ported Speaker

$8^{\prime \prime}$ polypropylene damped woofer: 1" polyester softdome tweeter: crossover at $2,100 \mathrm{~Hz}$ : lagos hickory vinyl. FR $35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens $88 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ : power range $20-100 \mathrm{~W}: 24 \times 11 \times 12: 31 \mathrm{lb}$ each.
\$450/pr

## Reference One Ported Speaker

$8^{\prime \prime}$ polypropylene damped woofer; $0.75^{\prime \prime}$ polyester soft-dome tweeter: crossover at 2.500 Hz : lagos hickory vinyl. FR $40-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 89 dB $\mathrm{SPL} / \mathrm{W} / \mathrm{m}$; power range $20-100 \mathrm{~W}$ : $19 \times 10 \times 9 ; 20 \mathrm{lb}$ each
$\$ 350 / \mathrm{pr}$

## Reference . 5 Ported Speaker

6.5" polypropylene damped woofer: $0.75^{\prime \prime}$ polyester soft-dome tweeter: crossover at 2.500 Hz : lagos hickory vinyl. FR $45-20,000 \mathrm{~Hz} \pm 3.5 \mathrm{~dB}$; sens 87 dB $\mathrm{sPL} / \mathrm{W} / \mathrm{m}$; power range $20-75 \mathrm{~W}$ : $16 \times 10 \times 9: 15 \mathrm{lb}$ each.
$\$ 250 / \mathrm{pr}$

## INFINITY

## IRS Series V' Reference Speaker

Modular 4-piece 3-way floor-standing speaker. Features 2 woofer modules with six 12" woofers in feedback loop of servo amp (2 $1.800-\mathrm{W}$ woofer amps): 2 midrange/tweeter modules with 12 -dipole midrange drivers; 36 tweeters in dipole line-source array ( 24 front/ 12 rear-facing); bass variable low-pass fillers; low-pass variable damping; woofer level controls; selectable input imp midrange/tweeter amp control: woofer phase switch; servo bass on/off circuit: Monster Cable wiring for midrange and woofer. FR $16-40,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; crossovers 70 Hz nominal. $60-120 \mathrm{~Hz}$ at main control unit woofer/midrange, 5.000 Hz midrange/tweeter; midrange/tweeter amp input range $100-500 \mathrm{~W} / \mathrm{ch}$; oiled and "Grand Piano" indian rosewood finish; $100-\mathrm{ft}$ cable for hookup of midrange/tweeter to midrange/tweeter amp. Woofer modules: $76^{\prime \prime} \mathrm{h} \times 18^{\circ}$ square: midrange /tweeter modules $76^{\prime \prime} \mathrm{h} \times 40^{\prime \prime} \mathrm{w}$ (with hollow and sand-filled curved wing sections) . . $\$ 50,000 /$ system

## IRS Series

## IKS Beta Speaker

Includes (per side) four $12^{*}$ woofers with servocontrolled polylpropylene/graphite fiber injection molded cones; 2 upper bass/midrange ( $70 \mathrm{~Hz}-60$ kHz ) planar push-pull drivers which act as a dipole: low-mass EMIT with neodymium magnets for upper midrange; low mass/neodymium EMIT's from IRS V (in a dipole configuration) for the lower treble; SEMIT (a smaller aperture EMIT) which extends response beyond 44 kHz . The system operates in a bi-amp mode and includes the IRS $V$ servo control unit . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 10.500$ IRS Gamma. Similar to Beta with 2 woofers and 1 upper-bass midrange $\qquad$ o Gamm servo system. $\$ 5.500$

## Kappa Series

## 9 Kappa Reference Standard Speaker

5 -way design features $212^{\prime \prime}$ cast frame L/C tuned woofers; SEMIT $k$ supertweeter: rear-firing EMIT K tweeter: $3^{\prime \prime}$ polydome rear radiator: polygraph K composite polypropylene/graphite $5^{\prime \prime}$ mid-bass dome; $3^{\prime \prime}$ edgewound polydome K midrange: internal crossovers; bi-ampable; oak solids and vencer with high-density particle board with a furniture-grade lacquer finish. FR $29-45,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossover frequencies 80,800 , and 4.500 Hz ; power rating 60 $340 \mathrm{~W} / \mathrm{rms}$; sens 89 dB ; imp $4-6$ ohms. $59.5 \times 21.5 \times 8$ in.
. \$2,898/pr

## 8 Kappa Speaker

4-way design similar to 9 Kappa without supertweeter, rear-firing tweeter and radiator, and 1 woofer. FR $33-45,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power rating $50-250$ $\mathrm{W} / \mathrm{rms}$; sens 89 dB sPL/W/m: imp $4-6$ ohms. 47.5 x $20.5 \times 8 \mathrm{in}$.
$\$ 1.998 / \mathrm{pr}$

## 7 Kappa Speaker

3-way design similar to 8 Kappa with $12^{\prime \prime}$ woofer, $3^{*}$ polydome K midrange, and EMIT $K$ tweeter. Power rating $40-200 \mathrm{~W} / \mathrm{rms}$; FR $37 \mathrm{~Hz}-45,000 \mathrm{~Hz} .37 \times 17 \times$ 12 in
\$1,398/pr

## 6 Kappa Speaker

3-way design similar to 7 Kappa except the woofer is 10". Power rating $30-150 \mathrm{w} / \mathrm{rms}$; FR $39 \mathrm{~Hz}-45,000 \mathrm{~Hz}$. $25 \times 15 \times 10.5 \mathrm{in}$.
\$998/pr

## SM Speaker Series

## SM 1.50 3-Way Speaker

floor-standing bass-reflex speaker with $15^{\prime \prime}$ cone woofer. 2-4.5" midranges. and $1^{\prime \prime}$ polycell dome tweeter. FR $29-27.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; minpower 10 $\mathrm{W} / \mathrm{rms}$, max power $300 \mathrm{~W} / \mathrm{rms}$; sens 101 dB $\mathrm{sPl} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms; rosewood vinyl: $19 \times 39.5 \times$ 12.5 in.
$\$ 1,118 / \mathrm{pr}$

## SN1 120 3-Way Speaker

Floor-standing bass-reflex speaker with front-mounted high- and mid-level controls. Features contains $12^{\circ}$ cone woofer: $4.5^{\circ}$ cone midrange; $1^{\prime \prime}$ polycelldome tweeter. Min power $10 \mathrm{~W} / \mathrm{rms}$, max power 200 W/rms: sens $98 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms: rosewood viny: $15.75 \times 33.25 \times 12.5$ in
\$798/pr

## SM1 100 2-Way Speaker

Foor-standing bass-reflex speaker with $10^{\circ}$ cone woofer and I" polycell-dome tweeter. Min power 10 $\mathrm{W} / \mathrm{rms}$. max power $150 \mathrm{~W} / \mathrm{rms}$; sens $98 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms: rosewood vinyl: $14 \times 29.5 \times 12.5$ in.
\$558/pr

## RS Speaker Series

## RS 6000A 3-Way Speaker

Features 210 " cone woofers. 2"dome midrange. EMIT planar tweeter. FR $41-44,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 89 dB $\mathrm{SPL} / \mathrm{W} / \mathrm{m}$; min power 35 W rms; max power 200 W rms. $15 \times 37 \times 10 \mathrm{in}$.
\$938/pr

## RS 5000A 3-Way Speaker

Acoustic-suspension speaker with $10^{*}$ cone woofer. $3.5^{\prime \prime}$ cone midrange. and EMIT planar tweeter. FR 42 $32.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 20 W rms. max power 135 W rms: sens 89 dB sPL/W/m: imp 6 ohms; oak vinyl; $15 \times 24 \times 10.25$ in
\$638/pr

## RS 4000A 3-Way Speaker

Bookshelf acoustic-suspension speaker with $8^{\prime \prime}$ cone woofer, $3.5^{\prime \prime}$ cone midrange, and EMIT planar tweeter. FR $44-32.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 20 W rms. max power 125 W rms: sens 89 dB sPL/W/m: imp 6 ohms; oak vinyl; $12.5 \times 22.5 \times 10.25 \mathrm{in} \ldots . . . . \$ 498 / \mathrm{pr}$

## RS 3000 2- Way Speaker

Bookshelf acoustic-suspension speaker with $8^{\prime \prime}$ cone woofer and I" polycell dome tweeter. FR 45-22,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; min power 20 W rms; max power 100 W rms; sens 89 dB sPL/W/m; imp 6 ohms; oak vinyl: 12 $\times 20.75 \times 10.25 \mathrm{in}$.
\$358/pr

## RS 2000 2-Way Speaker

Bookshelf acoustic-suspension speaker with 6.5* cone woofer and 35 mm polycell dome tweeter. FR $57-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 15 W rms; max power 75 W rms; sens 89 dB SPL/W/m; imp 6 ohms: oak vinyl; $8.8 \times 14.25 \times 7.75 \mathrm{in}$.
\$230/pr

## RS 1000 2-Way Speaker

Bookshelf acoustic-suspension speaker $4.5^{\prime \prime}$ cone woofer and 35 mm polycell dome twecter. FR 72 $22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 8 W rms; max power 50

W rms; sens 89 dB SPI. W/m: imp 6 ohms: oak vinyl: $7.5 \times 12.75 \times 6.75 \mathrm{in} . . . . . . . . . . . . . . .$.

## INTERNATIONAL COMPONENTS

## BHP-1062 2-Way Mini-Speaker System

Heavyweight 2 -way mini speaker system features $5.25^{\prime \prime}$ long-throw aluminum voice coil worfers with 30 oz magnet structure: I" true audiophile soft-dome tweeters with 15 oz magnet structure: electronic L/C crossover networks; imp 8 ohm; recessed, quick connect speaker terminals: FR $50-21,000 \mathrm{~Hz}$ : fully shielded; circuit breaker protected; black. snap-on open weave grilles; simulated walnut wood enclosures.
$\$ 139$

## MS-500AV Mini Amplified Stereo Speakers

Pocket-sized acoustic suspension speaker system with power booster for mini-stereo cassette players and recorders. L'ses 4 penlite batteries or D( 6 V power supply, not included
\$32

## JAMO

Concert V Fioorstanding Loudspeaker System
3-way bass reflex speaker. Fealures $6.5^{\circ}$ woofer; $I^{\prime \prime}$ dome tweeter: continuous power 110 W : peak power 160 W : sens $93 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : FR $30-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ cross-over frequencies $150 / 3500 \mathrm{~Hz}$ imp 6 ohms overload protection: 24 K gold-plated binding posts $31.5 \times 14 \times 11 \mathrm{in}$; 42 lb ; mahogany or stained black ash. \$1,396

## Concert II Bookshelf Ioudspeaker System

2-way bass reflex speaker. Features $6.5^{\prime \prime}$ woofer: $1^{\prime \prime}$ dome tweeter: continuous power 80 W ; peak power 120 W : sens $91 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; FR $40-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ cross-over frequency 2000 Hz : imp 8 ohms; overload protection: 24 K gold-plated binding posts: $16 \times 9.5 \times$ $10 \mathrm{in} ; 20 \mathrm{lb}$; mahogany or stained black ash . . $\$ 798$

## Digital Monitor Series

All Jamo Digital Monitor speakers feature Jamo's Center Bass Reflex technology for increased sound pressure at low frequencies and decreused sound coloration. phased-aligned drivers, anthracite finish, and detachable grilles.
Digital 200. 3-way speaker with $10^{\prime \prime}$ woofer. 3" midrange. and $\mathrm{I}^{*}$ dome tweeter. Features treble and midrange sound pressure control: treble overload diode. Peak power 300 W ; continuous power 200 W sens 92 dB sPL/W/m; FR $20-24,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : crossover frequencies 540 and $3,800 \mathrm{~Hz}$; imp 8 ohms. $32.25 \times 15.75 \times 13.75 \mathrm{in} ; 53 \mathrm{lb}$ $\qquad$ . \$1.198/pr Digital 130. 3-way speaker with $8^{\prime \prime}$ woofer. $4^{\prime \prime}$ midrange. and $l^{\prime \prime}$ dome tweeter. Features treble sound pressure control; treble overload diode. Peak power 180 W : continuous power 120 W : sens 91.2 dB SPL/W/m; FR $30-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossover frequencies 890 and 4.900 Hz : imp 8 ohms. $27.5 \times 13.75$ $\mathbf{x} 11.75 \mathrm{in}: 37.5 \mathrm{lb}$.
\$798/pr
Digital 100. 3-way speaker with $6.5^{\prime \prime}$ woofer. $4^{\prime \prime}$ midrange, and $1^{\prime \prime}$ dome tweeter. Features treble sound pressure control: treble overload diode. Peak power 130 W ; continuous power 90 W ; sens 90 dB SPL/W/m: FR $35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossover frequencies 960 and $5.000 \mathrm{~Hz}:$ imp 8 ohms. $23.5 \times 11.75$ $\times 9.75 ; 24$ b
\$598/pr

## Professional Series

All Jamo Professional Series 3-way speakers are hass reflex and incorporate Jamo's proprietary Comirolled Dispersion trehle array of multiple horn-mounted tweeters. All Professional Series speakers feature vi.R connection sockets and screwed terminals for large cables; removahle wire-mesh grilles; black finish; reinforced corners, and a self-locking ficture for easy stacking.
Professional 400. Features $15^{\prime \prime}$ woofer: $5^{\prime \prime}$ horn midrange; 5-1" horn tweeters. Peak power 560 W : continuous power 400 W : sens 95 dB SPL./W/m; FR $25-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossover frequencies 900 and
$4,000 \mathrm{~Hz}$ : imp 8 ohms; max sound pressure 121 dB . $35.5 \times 20.5 \times 16.75: 92.6 \mathrm{lb}$
$\$ 1.800 / \mathrm{pr}$ Professional 100. Features $12^{\prime \prime}$ woofer; $5^{\circ}$ horn midrange: 3-1" horn tweeters. Peak power 420 W: continuous power 300 W ; sens 94 dB SPL/W/m; FR $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossover frequencies 1,000 and 5.000 Hz ; imp 8 ohms: max sound pressure 118 dB. $29.5 \times 17.33 \times 13.33 ; 57.3 \mathrm{lb}$ $\$ 1,200 / \mathrm{pr}$ Professional 200. Features $10^{* *}$ woofer: $5^{\prime \prime}$ horn midrange; I" horn tweeter. Peak power 280 W : continuous power 200 W ; sens 93 dB SPL/W/m; FR $35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : crossover frequencies 1,200 and $6,000 \mathrm{~Hz}$; imp 8 ohms; max sound pressure 116 dB. $25.6 \times 14.75 \times 11.5: 42 \mathrm{lb}$
$\$ 800 / \mathrm{pr}$

## SW-50/Minitor One Subwoofer/Satellite Package.

 Consists of the SW-50 (below) Subwoofer and Monitor One Satellite System. Monitor One features 5" midrange/woofer: 1 " dome tweeter; sens $87 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : FR $42-20.000 \mathrm{~Hz}$; crossover points 3.5 kHz ; imp 8 ohms: subwoofer dimensions $15.5 \times 13 \times 13 \mathrm{in}$; satellite dimensions $10.25 \times 6.66 \times 8.5 \mathrm{in}$; 11 lb . SH50 Active Subwoofer Subwoofer/satelit age features $10^{\prime \prime}$ woofer: 80 W peak power: 55 W continuous power: FR $50-150 \mathrm{~Hz}$ : cross-over points $65-150 \mathrm{~Hz}$ (continuously variable): imp 47 K ohms: overload I.EI): 26.5 lb .$\$ 499.95$

## Art Wall Loudspeaker System

2-Way, flat panel, wall-hanging loudspeaker which works as full-range or satellite unit. Features 5" woofer: I" dome tweeter; peak power 90 W: continuous power 60 W ; sens $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; FR $40-20.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; cross-over frequencies $3,000 \mathrm{~Hz}$ : imp 8 ohms ; overload protection; $13.8 \times 15.7 \times 3.5 \mathrm{in}$; 10.6 lb ; neutral-black and white lacquer finishes . . \$400/pr

## Magic Series

Magic 14 3-Way Speakers
3.way bass reflex system. Features $10^{\prime \prime}$ woofer: 3.5" midrange: $1^{*}$ dome tweeter: max power 200 W ; FR 40$20,000 \mathrm{~Hz}$; cross-over frequencies $1200 / 1400 \mathrm{~Hz}$; imp 8 ohms: $20.8 \times 12 \times 8.6$ in
\$499/pr
Magic 10 3-Way Speakers
3 -way bass reflex system. Features $8^{\prime \prime}$ woofer: 3.25" midrange. 1 " dome tweeter: max power 140 W : FR 4320.000 Hz ; crossover frequencies $1500 / 4000 \mathrm{~Hz}$; imp 8 ohms: $18.8 \times 11 \times 8.64 \mathrm{in}$.
\$399/pr

## Magic 8 3-Way Speakers

3-way bass reflex system. Features $6.5^{\prime \prime}$ woofer: $2^{n}$ midrange: $l^{\prime \prime}$ dome tweeter: max power 120 W: FR 47 $20,000 \mathrm{~Hz}$; crossover frequencies $1500 / 5000 \mathrm{~Hz}$ : imp 8 ohms: $16.6 \times 9.6 \times 8.6$ in
$\$ 299 / \mathrm{pr}$

## Magic 6 3-Way Speakers

3-way bass reflex system. Features $5^{\prime \prime}$ woofer: $2^{\prime \prime}$ midrange; . $75^{\circ}$ tweeter: max power 90 W : FR 55 20.000 Hz ; crossover frequencies $4000 / 8000 \mathrm{~Hz}$; imp 8 ohms; $12 \times 7.52 \times 8.4$ in
\$199/pr

## Compact Line Series

C120. Bookshelf 3 -way bass-reflex speaker with $8^{*}$ dual-magnet woofer. $5^{*}$ midrange, and $1 "$ dome tweeter. FR $38-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; peak power 140 W continuous power 120 W : sens 92 dB sPL/W/m: crossover frequencies 1,200 and $5,000 \mathrm{~Hz}$ : imp 8 ohms. Black or white finish. $16.5 \times 10.25 \times 8.75$ : 14.3 lb.
\$338/pr
C90. Bookshelf 3 -way bass-reflex speaker with $8^{\circ}$ cone woofer, 3.25" cone midrange, and $1^{\prime \prime}$ dome tweeter. FR $40-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; peak power 120 W continuous power 90 W : sens $91.6 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$ : crossover frequencies 1.200 and $4,000 \mathrm{~Hz}$; imp 8 ohms. Hlack or white finish. $14.5 \times 9 \times 8.75 \mathrm{in}$; 11 lb.
\$278/pr
C70. Bookshelf 2 -way bass-reflex speaker with $6.5^{*}$ woofer and I" dome tweeter. FR $45-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; peak power 90 W ; continuous power 70 W ; sens 90 dB SPL/W/m; crossover frequency $2,500 \mathrm{~Hz}$; imp 8
ohms. Black or white finish. $12 \times 7.5 \times 8.25 ; 8.4$ Ib ....................................... \$198/pr (60. Bookshelf 2-way bass-reflex speaker with 4" cone woofer and $2^{\prime \prime}$ conc tweeter. FR $70-20,000 \mathrm{~Hz}$. $\pm 3 \mathrm{~dB}$ : peak power 60 W : continuous power 50 W : sens 89 dB spl./W/m; crossover frequency $2,600 \mathrm{~Hz}$ : imp 4 ohms. Black finish: $6.5 \times 4 \times 6.75 \mathrm{in}: 2.9$ lb.
\$159/pr
SWI Subwoufer/Latellite I oudspeaker System
Features $2-8^{\prime \prime}$ bass drivers; push-pull/passive subwoofer: $4^{\prime \prime}$ midrange and $2^{\prime \prime}$ |weeter satellite drivers: peak power 140 W : continuous power 80 W : sens 90 $\mathrm{dB} / \mathrm{W} / \mathrm{m}$; FR $35-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; crossover frequencies $200 \mathrm{H} / 4.5 \mathrm{kHz}$ : imp 8 ohms: overtoad protection: subwoofer $19 \times 13.3 \times 8$ in; satellite $6.5 \times 4$ $\times 6.66 \mathrm{in}$ : system 28.6 lb
$\$ 449$

## JBL

Fiverest 1D1)550M0 3-Way Speaher
Features constant-dircetivity design: $15^{\prime \prime}$ wooler in a vented enclosure: defined-coverage horn-loading $\mathrm{m}_{1}$ drange: bi-radial constant-coverage horns: ultra-highfrequency slot-loaded ring radiator: mylar capacitors: aircone inductors; polystyrene and polypropylene bypass capacitors; 3 position switches to vary output levels of compression driver and ring radiator: midbass altenuator: high-density compressed wood: Rosewood veneer. Power range $40-250 \mathrm{~W}$; imp 8 ohms: sens 100 dB sPI/W/m: crossovers 850 and 7.500 Hz . Mirror-image pairs. $55.13 \times 36 \times 20$ in.
$\$ 9.900 / \mathrm{pr}$
Cascade
Floor-standing speaker with $14^{\prime \prime}$ aquaplas-laminate woofer. four 3" edge-driven utanium dome mid-

ranges. one 1 " titanium dome iweeter. all in a vertical array. Features shallow-profile wood enclosure with beveled edges; foam-covered bafle; offiset
bathe. Max power handling 40) W/ch: imp 6 ohms crossovers 400 Hz and $3,000 \mathrm{~Hz}$ sens 89 dB ; FR 24 $24.000 \mathrm{H} / \pm 3 \mathrm{~dB} .58 \times 21.5 \times 12 \mathrm{in} . . . .$.

## LT Series

1.100T 3-Way Speaker

Floor-standing speaker with 12" aquaplas-laminate woofer. S" high-polymer-laminate midranger, and I* pure-titanium-diaphragm tweeter. Max power 200 W continuous, 800 W peak; crossovers 800 and 4.500 Hz ; sens 91 dB sil $/ \mathrm{W} / \mathrm{m}$. Siled hardwood vencer.


## 180T 3-Way Speaker

Floor-standing speaker with $10^{\circ}$ aquaplas-lammate woofer: $5^{n}$ polymer-laminate midrange: $1^{*}$ purc-titanium-diaphragin tweeter. Power handling: 1501 W contunuous, 600 W peak; crossovers 800 and 4.500 Hz; sens 90 dB spL/W/m. Oiled hardwood veneer. $33.5 \times 14 \times 11.75 \mathrm{in} ; 53 \mathrm{lb}$.
$\$ 465$ ca

### 1.60I 2-Way Sptaker

Floor-standing speaker with $8^{*}$ high-polyner-lanonate woofer and 1" pure-titanum tweeter. Power handling: 120 W continuous, 400 W peak: crossover $2.500 \mathrm{H} /$ sens $89 \mathrm{dH} \mathrm{spl} / \mathrm{W} / \mathrm{m}$. (Viled hardwood vencer: $30.5 \times 12 \times 10 \mathrm{in}: 38 \mathrm{lb}$. $\qquad$ $\$ 345$ ca

### 1.2012-Way Speaker

Bookshelf speaher with $65^{\circ}$ filled-polypropylene woolers and $\mathrm{I}^{\prime}$ pure-titanium-diaphragm tweeter. Power handing: 100 W contintous: 400 W prak: crossover 3.000 Hz sens 8 dB dBL/W/m. (iled hardwood veneer. $9.36 \times 14.75 \times 8.5 \mathrm{nn}: 36 \mathrm{lb} \$ 2.35 \mathrm{ca}$

## JBL series

Features ophonal Santa Rera Oah fimsh
JBI. 830 3-Way Speaher
Floor-standing bass-reflex speaker with $28^{\prime \prime}$ high-polymer-laminate cone woolers, and 1 " titamumlaminate dome tweeter. $\mathrm{Fk} 40-25,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ minimum puwer 10 W rms, max poner 200 W rms sens 94 dB sPL/W/m; imp 4 ohms: rosewood vinyl finish: $53 \mathrm{lb}: 39.75 \times 16.75 \times 8.75 \mathrm{in} . \ldots . . \$ 325 \mathrm{ca}$

JBI. 630 3-Way Spaher
Floor-standing bass-reflex spazaker with $26.5^{\prime \prime}$ highpolymer cone woofers and $1^{1}$ titanum-laminate dome tweeter. fr 42-25,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$ : min power 10 $W$ rmss, max power 150 ) W rms; s.ns 93 dB sil /W/m: imp 4 ohms: roscwoud vinyl finish. 40 lb ; $15 \times 35.75 \times$ 8.25 in.
$\$ 245 \mathrm{ca}$

## JBI. 82 2-W'ay Speaher

Floor-standing bass-reflex speaher with $8^{n}$ polymerlaminate cone woofer and $1^{\prime \prime}$ titanium-laminate dome tweeter. FR $45-25,000 \mathrm{H} / \pm 3 \mathrm{~dB}$ : min power 10 Wrms: max power 125 W rms: sens 90 dB spl. $/ \mathrm{W} / \mathrm{m}$ : imp 8 ohms, rosewood vinyl finish. $30 \mathrm{lb} ; 14 \times 22 \times 8$ in.
$\$ 175$ ca

## JBI. 62 2-Way Speaker

Bookshelf bass-reflex speaker with 6.5" high-poly-mer-laminate cone wofer and I" dome tweeter. FR $55-25,(000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 10 W rms, max power 100 W rms; sens 89 dB sPL/W/m; 1 mp 8 ohms rosewoud vinyl finish. $16 \mathrm{lb}: 10 \times 16 \times 7$ in $\$ 125 \mathrm{ca}$

## JBI. 52 I'QX 2-Way Speaker

Bookshelf speaker with $5^{\prime \prime}$ high-polvmer-laminate cone woofer and $1^{\prime \prime}$ dome twecter. FR85-20,000 Hz: min power 10 W rms. max power 80 W rms; sens 80 dB: imp 8 ohms: crossover at $4.000 \mathrm{~Hz} .11 .5 \times 6.75 \times$ 7.5 in : 10 lb .
$\$ 89$ ca

## Ti Series

250 Tif-Wiay Speaher
Floor-standing speaker with 14" wooler. 8" lower midrange. $5^{\prime \prime}$ polypropylene midrange. and 1 " litani-um-dıaphragm tweeter. Mirrored-image sfi magnetic structure. Max power 400 W ; nominal mp 8 ohms;

Crossovers $4(10), 1,400$ and $5,200 \mathrm{~Hz}$ sens 90 dB spt/w/m. Hand-oiled Burmese teak finish. $52 \times 22.5$ $\times 14.25 \mathrm{~m}: 126 \mathrm{Jb}$
$\$ 2.195 \mathrm{ea}$

## 241 Ti 3-Way Speraker

Floor-standing speaker with 14* wooler, polypropelene midrange, and iltra-low-mass pure-titaniumdiaphragm tweeter. Features sra magnetic structure Max power $300 \mathrm{~W} / \mathrm{ch}$; nominal imp 8 ohms: crossover $900 \mathrm{~Hz}, 4,000 \mathrm{~Hz}$; sens 89 dB sPL/W/m. Handoiled Burmese teah; $36.62 \times 18 \times 12 \mathrm{in}: 85 \mathrm{lb} \$ 995$ ea

## 120 Ji 3 - W ay Spraker

Features 12" woufer: polypropelene midrange: ultra-kow-nass pure-titanjum-diaphragm twecter: Sf; magnetic structure. Max power 250 W ; nominal imp 8 ohms: crossovers $9(6)$ and $4,000 \mathrm{H} /$ : sens 89 dB Sill $/ \mathrm{W} / \mathrm{m}$. Hand-oiled Burmese teak: $24.5 \times 14.5 \times 11$ in: 54 lb .
$\$ 645 \mathrm{ca}$

## 18 'Ii 2-W'ay Speaher

Features $6.5^{\circ}$ polypropylene nooler: ultra-low-mass pure-titanium-diaphragm tweeter: SFG; magnetic structure. Max power 200 W : nominal imp 8 ohms: crossover $3,000 \mathrm{H} \mathrm{H} r$; sens 88 dB spl./W $/ \mathrm{m}$. Hand-oiled Burmese teak; $14.75 \times 9.36 \times 7.19 \mathrm{in}$ : $17.5 \mathrm{lb} \$ 345 \mathrm{ea}$

## Signature Series

S-2 2-Way Speaher
Pedestal speaher with $\gamma^{*}$ high-polymer-laminate woofer and $4.75^{\circ}$ titanium-laminate tweeter. Features omnidirectonal enclosure: woofer fires upward, ported enclosure; hidden terninals. Imp 8 whms: sens 88 dB : I'R 40-20.000 Hz: 100 W max power. $40 \times 10 \times 10 \mathrm{in}$; 40 lb .
$\$ 550$ ca
IPro V'Ill 2-Way Speaker
Wall-mount speaher with $1^{\prime \prime}$ titanium-dome tweeter. $6.5^{\prime \prime}$ high-polymer-laminate woofer; spatial identification dividing network: optional wall and ceilingmounting harduare: magnetically shielded. Sens 90 dB: tR $55-27,000 \mathrm{~Hz}: 120 \mathrm{~W}$ max power: imp 6 ohms: crossover $3 .(100 \mathrm{~Hz} .15 \times 9.5 \times 9 \mathrm{in}: 26 \mathrm{lb} . \$ 225 / \mathrm{pr}$ MIC-51. Wall-mounting system for Pro VIII
N1T(-52. Ceilang-mounting system for Pro VIII.
for Pro

## S-4 2-Way Speaker

Wall-mount speaker with I" titanium dome tweeter and 6.5" high-pmlymer-laminate nooler. Features tlush-mounting capability: can be used with S-I subwoofer. Imp 8 ohms; sens 88 di3; ITk 125-22,000 $\mathrm{H}_{2}: 100 \mathrm{~W}$ max power. $12 \times 8.75 \times 3.6 \mathrm{in}: 16$ lb.
\$295/pr
Prolll 2-Way Speaher
Audio/video montor with 1" totanium-dome tweeter, $5^{\circ}$ high-polymer mid/low driver, and high-spatialidentification dividing network. Features magnetic shielding: die-cast enclosure material; polypropylene structural foam surround. Sensitivity 87 dB SPI/W/m; maximum power handling 100 W rms. 9.5 $\times 6.25 \times 5.63 \mathrm{in}$.
\$285/pr
N'IC-1 Adaptor. Clamp-on unit that allows Prollt to the mounted on ploto tripods, mic stands and other wall or clamp-mount systems.
\$45/pr
MI ( -2 Wall/Ceiling Mount System. Allows Pro III to be nounted on any rigid surface while permitting the speaker to be aimed in almost any direction. includes MTC-I
$\$ 65 \mathrm{ca}$
MrC- 1 ('lamp Mount System. Allows Pro Ill to be clamped to a variety of objects such as shelves, poles or table tops while permitting a range of adjustments. Includes MT(-2
$\$ 95$ ea

## S-3 2-Way Spexker

Wall-mount speaher with I" titanium dome weeter and $5.25^{\prime \prime}$ polymer-lamınate woofer. Features llushmounting capability:can be used with S-1 subwoofer. Imp 8 ohms; sens 86 dH : FR $125-22,000 \mathrm{~Hz}$ : 100 W max power. $10.5 \times 7.25 \times 3.6 \mathrm{in}$; $14 \mathrm{lb} \ldots .245 / \mathrm{pr}$

## Subwoofers

## B460 Subwoofer

Bass system consists of JHL. Model 2245H $18^{\prime \prime}$ driver mounted in vented enclosure of 8 cubic feet. The combination is third-order quasi-Buttervorth. Features die-cast aluminum frame; integrally stiffened cone with foam surround; edge-wound voice coil with $4^{*}$ diameter and nearly $\mathrm{I}^{\prime \prime}$ long; individually machined magnetic pole piece and back plate: cone coated with aquaplas damping formulation for optimum mass and density: large high-flux symmetrical-field-geometry magnetic structure in drivers to reduce second-harmonic distortion: densitycompressed wood enclosure: $1^{*}$ thick and heavily braced. Min recommended power 200 W ; imp 8 ohms; crossovers 63 Hz (external crossover); sens 94 dB : magnetic assembly weight $20 \mathrm{lb} ; 24.8 \mathrm{I} \times 38.31 \times$ 24.25 in; shipping weight 125.5 lb . . . . . . \$1.795 ea

## B-380 Subwoofer

Hass system with $15^{\circ}$ bass driver and $4^{\circ}$ ribbon-wire voice coil in a vented alignment. Features handcrafted oiled American black walnut veneer cabinet: biamp option with BX63A; max recommended power 600 W ; crossover frecquency 63 Hz ; sens 90 dB ; $27.5 \times 20.75 \times 17 \mathrm{in}$
$\$ 795$ ca

## S-I Pedestal Ioudspeaker

Pedestal subwoofer for use with JBL signature series wall-mount speakers. Features $8^{\prime \prime}$ downward-firing high-polymer-laminate woofer; dual voice coil; external passive crossover network; ported enclosure: 4 pairs of speaker terminals. 1 mp 8 ohms ; sens 88 dB : tR $40-200 \mathrm{~Hz}: 100 \mathrm{~W}$ max power. $33.5 \times 10 \times 10 \mathrm{in}$; 38 Ib. Available in walnut veneer, black lacquer, white lacquer, and rosewood vinyl.
$\$ 300-500$

## BX63: Dividing-Summing Networh

Electronic dividing-summing network designed to match characteristics of JBL B 380 and B460 subwoofers. Features active low-pass filter with crossover frequency continually adjustable from 63 to 125 Hz. Passive high-pass will bridge stereo amp to provide single-ch drive. Provides proper voltage drive for JBL. B380 or B460 subwoofers, adjustable imp compensation for different amps. $5 / \mathrm{N} 95 \mathrm{~dB}$; Thi) $0.01 \%$; max outputs 18 dBV ( 10,000 ohm output Ioad); IMO SMPTE $0.01 \% ; 2 \mathrm{lb} ; 1.88 \times 5.5 \times 7.5$ in..
$\$ 375$

## JENSEN

Model 3150 ( oncert Series
3 way speaker with $15^{\prime \prime}$ woofer, $5^{\prime \prime}$ midrange, and $3^{*}$ dynamic cone tweeter. FR $33-21,000 \mathrm{~Hz}$; imp 8 ohms. $32 \times 18.5 \times 11.5$
\$350/pr
Model 3120 3-Way Speaker
Features $12^{\prime \prime}$ cone woofer; $5^{\circ}$ midrange; $3^{\prime \prime}$ tweeter. FR $48-21,000 \mathrm{~Hz}$ : max power 150 W peak; imp 8 ohms. $29 \times 15.5 \times 10.5$ in
\$280/pr

## Model 3100 3-Way Speaker

Features $10^{* \prime}$ cone woufer: $5^{\prime \prime}$ midrange: $3^{\prime \prime}$ tweeter. FR $43 \mathrm{~Hz}-21 \mathrm{kHz}$; max power 125 W peak; imp 8 ohms. $20 \times 13 \times 10.5 \mathrm{in}$.
\$220/pr

## JOHN MAROVSKIS AUDIO

Janis W1 Subwoofer
Subwoofer system with slot loaded design. Features crossover at 18 dB per ocatave at $100 \mathrm{~Hz} ; 60 \mathrm{~W} / \mathrm{ch}$ into 8 ohm ; variable bass level +15 dB above unity gain; comparator switch allows user to by-pass the crossover amplifier circuitry fo the interphase unit: 90 lb furniture-finished enclosure; brazilian monarch, rosewood, or coca bola. $\$ 895$ American walnut. White oak, black ........... . . $\$ 795$ Utility particle core with walnut edging and base $\$ 720$

Janis W3 Subwoofer
Similar to the Janis WI subwoofer but smaller, can be
used with a 2-way speaker system. Fealures 12" woofer: extra heavy polypropylene cone and massive magnetic sturcture: max power output 103 dB at 30 H7; FR $30-100 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; max amp power $100-150$ W: imp 5 ohm: Brazilian Monarch Rosewood or Coca Bola
$\$ 650$ American walnut, White oak, or black . . . . . . . \$550

## JPW LOUDSPEAKERS

## AP3 Infinite-Baffle Speaker

Features wiring for bi-amp capabilities; $200-\mathrm{mm}$ doped-paper-cont woofer: $19-\mathrm{mm}$ soft-plastic dome tweeter with Ferrofluid damping. IR $55-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$ : min power 10 W rms : max power 100 W rms ; sens 100 dH sirl/ $\mathrm{W} / \mathrm{m}$; imp 8 ohms Arailable in walnut. black ash. blonde ash or teak finishes. 53.36 $\mathrm{lb} / \mathrm{pr} ; 10.25 \times 20.5 \times 11.5$ in
\$549/pr

## AP2 Infinite-Bafle Speaker

Features wiring for bi-amp capabilities, $200-\mathrm{mm}$ doped-paper-cone woofer: $19-\mathrm{mm}$ soft-plastic dome Iweeter with Ferrofluid damping. IR $60-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$ : min power 10 W rms; max power $80 \mathrm{~W} \mathrm{rms;}$ sens 80 dB sPL $/ \mathrm{W} / \mathrm{m}$; imp 8 ohms. Available in walnut. black. blonde ash and teak finishes. 42.32 $\mathrm{lb} / \mathrm{pr}$ : $10.25 \times 17.25 \times 10.25 \mathrm{in}$ $\qquad$

## P1 Infinite-Bafle Speaker

Floor-standing speaker features $200-\mathrm{mm}$ doped-pa-per-cone woofer. $19-\mathrm{mm}$ soft-plastic dome tweeter with Ferrofluid damping. fR $65-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 10 W rms; max power 70 W rms; sens 90 dB spl./W/m; imp 8 ohms. Available in walnut and black finishes. $33.5 \mathrm{lb} / \mathrm{pr} ; 10.25 \times 17.25 \times 10.25$ in.
\$349/pr

## JRM

Transparency Satellite Tower
Triamped sealed satelliate features cight $6^{\circ}$ woofer: horn midrange; $1.87^{\prime \prime}$ horn tweeter; FR $20-20.000 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB} ; 98 \mathrm{spl} / \mathrm{W} / \mathrm{m}$; min amp power 200 W : nominal impedance 8 ohms; optional finish; optional grille color and material. $8 \times 16 \times 66$ in $. ~ \$ 1.700 / \mathrm{pr}$

## Monitor

Powered speaker with $6^{\prime \prime}$ woofer: $3^{\prime \prime}$ cone midrange; horn tweeter: separate level controls for woofer. midrange, tweeter and supertweeter; fr $20-20,000 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB}$. Optional oiled walnut finish .... \$1,200/pr

## Transparency Subwoofer SI8B

QB3 vented subwoofer features $18^{\circ}$ woofer; FR 27 $250.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB} ; 94 \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; min amp power 200 W ; nominal impedance 8 ohms; optional tinish; optional grille color and material. $36 \times 25 \times 24 \mathrm{in}$ : 175 lb.
$\$ 700 / \mathrm{pr}$

## Transparency Subucofer S18B-6

B6 vented subwoofer features $18^{\circ}$ woofer; FR 20 $250,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB} ; 94 \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; min amp power 200 W ; nomınal impedance 8 ohms ; optional finish; optional grille color and material. $36 \times 25 \times 24$ in: 175 lb. .
\$700/pr

## Transparency Subwoofer S15A

QB3 vented subwoofer features $15^{\prime \prime}$ uosofer: FR 27. $300,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB} ; 91 \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; min amp power 200 W : nominal impedance 8 ohms: optional finish: optional grille color and material. $36 \times 23 \times 16 \mathrm{in}$; 130 lb.
\$550/pr

## Transparency Subwoofer S15A-6

86 vented subwoofer features $15^{\circ}$ woofer: fr 20 $300.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB} ; 91 \mathrm{sPt} / \mathrm{W} / \mathrm{m}$ : min amp power 200 W ; nominal impedance 8 ohms ; optional linish: optional grille color and material. $36 \times 23 \times 16 \mathrm{in}$; 130 lb. .
\$550/pr

## Transparency Subwoofer D15A

C4 vented subwoofer features two 15" woofer; FR 18 $300,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}: 89 \mathrm{sPL} / \mathrm{W} / \mathrm{m}: \mathrm{min}$ amp power
20) W: norainal impedance 8 ohms: optional finish: optional grille color and material. $48 \times 34 \times 24 \mathrm{in}$; 200 lb.
\$550/pr

## Transparency Subwoofer Si8A

B4 vented subwoofer features $18^{\prime \prime}$ woofer; FR 25$250.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB} ; 95 \mathrm{spi} / \mathrm{W} / \mathrm{m}$; min amp power 200 W ; nominal impedance 8 ohms ; optional finish: optional grille color and material. $36 \times 30 \times 24 \mathrm{in}$ : 175 lb.
\$500/pr

## Transparemcy Subwoofer D12A

QH3 vented subwoofer features two 12 " wooler: +R $27-450,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}: 88 \mathrm{sPL} / \mathrm{W} / \mathrm{m}$ : min amp power 200 W ; nominal impedance 8 ohms; optional finish; optisnal grille color and material. $36 \times 23 \times 18$ in; 150 lb .
\$450/pr
Transparency Subwoofer D12A-6
B6 vented subwoofer features two 12" woofer: FR 18 $450,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB} ; 88 \mathrm{spt} / \mathrm{W} / \mathrm{m}$; min amp power 200 W : nominal impedance 8 ohms ; optional finish; optional grille color and material. $36 \times 23 \times 18 \mathrm{in}$; 150 lb.
\$450/pr

## J.S. ENGINEERING

## Model 4

Reference quality floor standing system, incorporating compiex rounded traperoidal shape. patented phase shifi bass loading and Infinite Slope crossover. Fealures ?-10" cone woofers; 1-7" cone midrange; 1$2^{\prime \prime}$ dome upper midrange; $1-21 \mathrm{~mm}$ dome tweeter: front and side of speakers angled 8 degrees; uniform horizontal output to 90 degrees off axis; imp 8 ohms: $48.5 \times 19 \times 2 ?$ (bottom) in; $16 \times 6.5(t o p) \mathrm{in} ; 150 \mathrm{lb}$; walnut, oak. black oak
$\$ 4.500 / \mathrm{pr}$

## Infinite Nope Mlodel 1.8A Speaher

Infinite stope phase shift bass loading speaker with patented phase shift. Contains $8^{\prime \prime}$ and $10^{\circ}$ cone woofers, $6^{\circ}$ cone midrange, and 28 mm dome tweeter. FR $35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; minimum power 20 W rms, max power 300 W rms; sens $90 \mathrm{~dB} \mathrm{spl} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms; oak, walnut, black gloss; 100 lb ; $16 \times 38$ x 16 in
$\$ 1.795 / \mathrm{pr}$

## Infinite Slope Model 1 Ioudspeaker

Sealed flosor-standing speaker featuring intinite slope crossover and patented Phase Shift Bass Loading. Front of speaker angled 15 degrees. Two cone woofers $7^{\prime \prime}, 8^{\circ}, 28 \mathrm{~mm}$ dome tweeter. A vailable in oak, walnut, black gloss. FR $40-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; power range 10.150 W : imp 8 ohms: sens 90 dB SPL/W/m; $55 \mathrm{lb} ; 13 \times 29 \times 14.5 \mathrm{in} . . . . . . \$ 1.095 / \mathrm{pr}$

Intinite Stope Model 2A Loudspeaker
Similar to above except has cone woofers of $12^{\prime \prime}$ and $10^{\circ}$, wills $6.5^{\prime \prime}$ cone and $2^{\circ \prime}$ dome midranges. 21 mm dome tweeter. Front of speaker angled 8 degrees. FR $25-24,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; power range $50-350 \mathrm{~W}$; sens 90 $\mathrm{dB} \mathrm{spL} / \mathrm{V} / \mathrm{m}: \mathrm{imp} 8$ ohms; $47 \times 18 \times 16 \mathrm{in}$. at bottom, $47 \times 18 \times 11 \mathrm{in}$. at top in; 150 lb .
$\$ 2.495 / \mathrm{pr}$

## Intinite Slope Model . 8 Speaker

Floor standing speaker with patented phase shift hass loading and Infinite Slope crossover. Features 2-8* cone wooler, $1^{\text {" }}$ dome tweeter: impedance 8 ohms; available in walnut. oak, or black lacquer finish: 12 x $29 \times 14.5 ; 50 \mathrm{lb}$
\$899/pr

## Infinite Slope Medel . 6 Speaker

Floor-standing ported speaker with infinite slope crossover 100 dB octave. Features $8^{\prime \prime}$ cone woofer: $1^{\prime \prime}$ dome twecter. \&R $40-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range S-150 W: sens $91 \mathrm{~dB} \mathrm{sPI} / \mathrm{W} / \mathrm{m}$; impedance 8 ohms: available in walnut. oak, or black lacquer finish; II x $23 \times 13 \mathrm{in} ; 35 \mathrm{lb}$.
\$599/pr
Sub
Features I 12" driver with 2 voice coils; FR $30-60 \mathrm{~Hz}$; sens 90 dB . $18 \times 18 \times 16 \mathrm{in} ; 50 \mathrm{lb}$. A vailable in oak and walnut
$\$ 495$ ca

## JVC

## SX911WD 3-Way Speaker

Floor-standing 3-way speaker with 3-part crossover network. Features $12^{\prime \prime}$ cross carbon woofer: $4.5^{\circ}$ cross carbon midrange: $1.2^{\prime \prime}$ amorphous-diamond coated tweeter; low-resonanace/-vibration die-cast aluminum speaker frames: high-density conifer-based par-ticle-board enclosure; round-cornered front bafle: computer optimized speaker layout; 300 W max power handling.
\$720/pr

## SX-A6 4-Way Speaker

Floor-standing 4-way 5 -speaker system with 1 wo $3^{-}$ ambience enhancement drivers in rear, self-restoring protection for more twecter power handling, led overload indicator. Features $9.25^{\prime \prime} \times 13.75^{\circ}$ passive radiator: $8^{\prime \prime}$ cone woofer: $1.25^{\prime \prime}$ soft-dome midrange: I" soft-dome tweeter. FR $25-23,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power handling capacity $150 \mathrm{~W} / 240 \mathrm{~W}$ (music); sens 89 dB sPL/W/m; imp 6 ohms. Wood finish. $15.36 \times 31.88 \times$ 10.23; 38.6 lb
\$500/pr

## SX-A3 2-Way Speaker

Bookshelf passive-radiator speaker with self-restoring protection for more tweeter power handling, LED overload indicator. Magnetically shielded for both audio and video use. Features $8^{\circ} \times 12^{\circ}$ passive radiator: $8^{\prime \prime}$ cone woofer: $1^{\prime \prime}$ soft-dome tweeter. FR 35 $23,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power handling capacity 130 $\mathrm{W} / 200 \mathrm{~W}$ (music): sens 88 dB SPL/W/m: imp 6 ohms. Wood finish. $13.5 \times 24.5 \times 11.31 \mathrm{in}$ : 31 lb.
$\$ 400 / \mathrm{pr}$

## SPKSWI) F'loor-Standing Speaker

Floor-standing speaker with one full-range 5" driver. Features furniture-like columnar design. . . \$180/pr

## KEF

## Reference Series

## Model 107 3-Way Speaker

Floor-standing coupled-cavity bass-loading speaker uses 2 woofers operating into a resonant chamber vented at top of enclosure to combine sensitivity of bass reflex with accuracy and bass-extension of acoustic suspension. Features $210^{\circ}$ cone woofers; $4^{\prime \prime}$ polypropylene-cone midrange: 1" ferrofluid-cooled soft-dome tweeter; pivoting midrange/tweeter head assembly with individual contoured enclosures for minimum diffraction, reduced off-axis coloration, and optimum stereo imaging: hybrid crossover network with built-in passive crossover and outboard KUBE active bass EQ with controls for contour. damping, and extension. Conjugate load-matched passive crossover presents amp with uniform imp at all frequencies. FR $20-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; min power 50 W rms: max power 300 W rms: sens 90 dB sPL/W/m; imp 4 ohms. Walnut, black ash, rosewood. $13 \times 46 \times 17.75 \mathrm{in} ; 99 \mathrm{lb}$
$\$ 4.500 / \mathrm{pr}$

## 104/2 3-Way Speaker

Floor-standing speaker with cone woofers vertically aligned, coupled-cavity bass loading technique, chas-sis-less drivers, conjugate load matching. Two 8* cone woofers, two $4.5^{\prime \prime}$ cone midranges and $1^{*}$ ferrofluid-cooled dome tweeter. FR $55-20,000 \mathrm{~Hz} \pm 2$ dB ; power range $25-200 \mathrm{~W}$; sens 92 dB SPL/W $/ \mathrm{m}$; imp 4 ohms ; $11 \times 35.5 \times 16.36$; 70.5 lb ; walnut, rosewood or black ash finish . . . . . . . . . . . . . . . . . $\$ 2,000 / \mathrm{pr}$
104/2 KUBE. Active bass EO with controls for contour and extension $\qquad$

## 103/3 3-W'ay Speaker

Bookshelf coupled-cavity bass-loading speaker with woofer operating into a resonant chamber vented at bottom of enclosure to combine sensitivity of bass reflex with accuracy and bass-extension of acoustic suspension. Features $8^{\prime \prime}$ cone woofer; $6^{\prime \prime}$ polypropyl-ene-cone midrange: $1^{\prime \prime}$ ferrofluid-cooled soft-dome tweeter; hybrid crossover network with built-in passive crossover and outboard KUBE active bass EO
with controls for contour and extension. Conjugate load-matched passive crossover presents amp with uniform imp at all frequencies. FR $50-20,000 \mathrm{~Hz} \pm 2$ dB : min power 50 W rms: max power 200 W rms: sens 92 dB spL/W/m; imp 4 ohms. Walnut. black ash. rosewood. Includes feet for shelf mounting. $10.5 \times$ $22.75 \times 12.5 \mathrm{in} ; 38 \mathrm{lb}$.
\$1.390/pr
kS103/3. Optional floor stands for free-standing placement.
\$109/pr

## Model 102 2-W'ay Speaker

Bookshelf closed-box speaker with $6^{\circ}$ polypropylenecone woofer and 1" ferrofluid-cooled soft-dome iweeter. Features hybrid crossover network with built-in passive crossover and outboard KUBE active bass EO with controls for contour and extension. Conjugate load-matched passive crossover presents amp with uniform imp at all frequencies. FR os$20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; min power 50 W rms; max power 200 W rms; sens $92 \mathrm{~dB} \mathrm{sPl} / \mathrm{W} / \mathrm{m}$; imp 4 ohms. Walnut, black ash, rosewood. $8.25 \times 13 \times 10.5 \mathrm{in}$ : 15 lb.
ULS20. Optional floor stands. . . . . . . . . . \$125/pr

## C Series

All C-series speakers feature polymer woofer diaphragms: fluid cosling on fweeters; all input terminals are gold-plated; terminals accept heary-guage wire. 4 mm banana plugs. and dual banana plugs on .75* centers.

## C95 3-Way Speaker

Floor standing speaker features KEF Uni-Q2-way driver: $8^{\prime \prime}$ woofer and iweeter: coupled cavity bass loading: $8^{\prime \prime}$ unit mounted vertically inside cabinet is loaded at the front by a tuned cavity: conjugate load matching: separate connecting terminals allow one to bi-amplify driving the bass unit separately: +R 5)$20,000 \mathrm{~Hz}$; sens 90 dB ; imp 4 ohms resistive; $34.3 \times$ $9.7 \times 12.4 \mathrm{in} ; 41.6 \mathrm{lb}$ : grain-matched real walnut. black ash
$\$ 1.290 / \mathrm{pr}$

## C75 3-Way Speaker

Floor standing loudspeaker just over half a square foot; uses the same KEF Uni-Q driver as C95; second 200 mm bass unit on matching die-cast chassis; FR 57 20.000 Hz : sens 91 dB : imp 4 ohms; closed box enclosure: $28.4 \times 9.7 \times 10.1 \mathrm{in}$; 28.4 lb ; simulated walnut and simulated black ash
\$750/pr

## C55 3-Way Speaker

Small enough for bookshelf or free standing. Features KEF Uni-Q driver with polymer cone $8^{\prime \prime}$ passive radiator which extends bass to $48 \mathrm{~Hz}-6 \mathrm{~dB}$; clip-on injection-molded grille made to minimize 'tunnel' effects; fR $60-20.000 \mathrm{~Hz}$; sens 90 dB ; imp 4 ohms: passive radiator enclosure; $18.9 \times 9.7 \times 10.1 \mathrm{in}$; simulated walnut or simulated black ash. . $\$ 550 / \mathrm{pr}$

## C35 2-Way Speaker

Bookshelf speaker. Features KEF Uni-Q driver: improved stereo imaging. enhanced phase integrity. reduced diffraction; can be placed upright or on its side with no effect on horizontal dispersion: .75" oiktner dome tweeter: $8^{\prime \prime}$ polymer cone woofer: sens 90 dB : fR $64-20,000 \mathrm{~Hz}$; imp 4 ohms: closed box enclosure: $14.8 \times 9.7 \times 8.1 \mathrm{in}: 10.6 \mathrm{lb}$ : simulated walnut or simulated black ash. . . . . . . . . . $\$ 440 / \mathrm{pr}$

## C25 2-Way Speaker

Bookshelf speaker. Features B160, a $6.5^{\prime \prime}$ cone dirver with lightweight polymer diaphragm; $.75^{\circ}$ dome tweeter: FR $65-20.000 \mathrm{~Hz}$ : sens 87 dB ; imp 4 ohms: closed box enclosure; $13.4 \times 8.1 \times 6.9 \mathrm{in} ; 9 \mathrm{lb}$; simulated walnut or simulated black ash. . $\$ 330 / \mathrm{pr}$

## C15 2-Way Speaker

Bookshelf speaker. Features $5^{\circ}$ polymer cone bass unit with die-cast chassis; $.75^{\prime \prime}$ metal dome tweeter: recessed, gold-plated terminals; tweeter's fluid cooling and bass unit's high-temperature voice coil handle up to 60 W and produce $>100 \mathrm{~dB}$; FR 68 $20,000 \mathrm{~Hz}$; sens 85 dB ; imp 4 ohms; closed box
enclosure: $10.4 \times 7.1 \times 5.9 \mathrm{in} ; 7 \mathrm{lb}$; simulated walnu or simulated black ash
$\$ 240 / \mathrm{pr}$

## Custom Series

Models are designed for seamless integration into any listening environmem. Speakers are fruished in white' and can be painted to match any decor or can be replaced with cloth.

## CR200F 2-Way Full-Range Speaker

In-wall unit features $8^{\prime \prime}$ bass driver mounted to $1^{\prime \prime}$ soft-dome tweeter with fluid cooling: self-restoring tweeter protection circuit: FR $55-22.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; outside dimensions $12.88 \times 10 \times 3.5$ in $\$ 550 / \mathrm{pr}$ not incl. installation

## CR200F + CR200SW 3-Way Speaker

In-wall system consists of (R200F and matching $10^{*}$ ('R250SW subwoofer. Response is $32-150 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; full range audio input is fed to the CR200SW crossover network providing output terminals for ('R200F satellites; crossover point 150 Hz : FR 32$22.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens $90 \mathrm{dH} ; \operatorname{imp} 4$ ohms; satellite $13 \times 10 \times 3.5 \mathrm{in}$ : subwoofer $13 \times 13 \times 3.75 \mathrm{in}$ : black baf. fle with white bezel finish. Installed . . . . \$1.100/pr

## KENWOOD

## IS-P9100 4-Way Speaker

Basic series floor-standing speaker with $17^{\prime \prime}$ passive radiator. Features $10.5^{\prime \prime}$ polypropylene woofer: $4^{\prime \prime}$ polypropylene midrange; flat-leaf supertweeter plus 2 cone tweeters in wide-dispersion Ton-Saule vertical array: high-grade simulated rosewood finish; crossover network; auto-resetting overload protector: high rigidity enclosure; max input power 250 W : sens 91 $\mathrm{dB} / \mathrm{W} / \mathrm{m}$; crossover fr $900,5,500,10.000 \mathrm{~Hz}$ : imp 8 ohms. $44.5 \times 17.31 \times 13.25 \mathrm{in} ; 62 \mathrm{ib}$.
\$720/pr

## LS-P5100 4-Way Speaker

Basic series floor-standing speaker with $13^{\circ}$ passive radiator. Features $8.5^{\circ}$ polypropylene woofer: $4^{*}$ polypropylene midrange; flat-leaf supertweeter plus 2 " cone tweeter in wide dispersion Ton-Saule vertical array: high-grade crossover network: auto-resetting overload protector; high rigidity enclosure; simulated rosewood finish: max input power 150 W : sens 90 $\mathrm{dB} / \mathrm{W} / \mathrm{m}$; crossover fr $800.5 .000,10.000 \mathrm{~Hz}$ : imp 8 ohms. $35.44 \times 14.56 \times 10.69 \mathrm{in}$; 40 lb
\$480/pr

## 1.Sk-702W 3-Way Speaker

Features acoustic-suspension enclosure; 12" woofer: $4.5^{\prime \prime}$ midrange: $2^{\prime \prime}$ cone tweeter; max input power 160 W: sens $91 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms: simulated woodgrain finish. $26.0 \times 14.8 \mathrm{I} \times 10.56 \mathrm{in} ; 26.5 \mathrm{lb} \$ 285 / \mathrm{pr}$

ISK-502W 3-Way Speaker
Features acoustic-suspension enclosure; $10^{\prime \prime}$ woofer: $4.5^{\prime \prime}$ midrange: $2^{\prime \prime}$ cone tweeter; max input power 130 W: sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms ; simulated woodgrain finish. $24.19 \times 14.0 \times 10.56 \mathrm{in} ; 23 \mathrm{lb} . \$ 220 / \mathrm{pr}$

## LSK-302W 2-Way Speaker

Features bass-reflex enclosure; 12" woofer: 4.5" midrange: 2" cone tweeter: max input power 160 W : sens $91 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; imp 8 ohms; simulated woodgrain finish. $22.31 \times 12.81 \times 8.56 \mathrm{in}: 16.5 \mathrm{lb} \ldots \$ 145 / \mathrm{pr}$

## ISK-05S Surround Speaker

Full-range speaker for rear-channel sound. Features $4^{*} \times 6^{\prime \prime}$ dual-cone driver: acoustic suspension wedgeshape enclosure designed for horizontal or vertical placement: sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms; Simulated woodgrain finish. $10.88 \times 7.69 \times 5.69 \mathrm{in}: 3.1 \mathrm{lb} \$ 89 / \mathrm{pr}$

## LSK-01S Surround Speaker

Full-range speaker for rear-channel sound. Features $4^{*}$ driver: acoustic suspension enclosure: sens 90 $\mathrm{dB} / \mathrm{W} / \mathrm{m}$; imp 8 ohms ; Simulated woodgrain finish: $10.88 \times 7.69 \times 5.69 \mathrm{in}: 3.1 \mathrm{lb}$.
\$49/pr
ISK-703 3-Way Speaker System
Features acoustic suspension bookshelf design; max
input power 160 W: 12" wooter: 4.31" midrange: 2" Iweeter; FR $40-20,000 \mathrm{~Hz}$; sens $91 / \mathrm{dB} / \mathrm{m}$; simulated teak grain finish; imp 8 ohms; $26.75 \times 14.81 \times 10.31$ in: 25.4 lb
\$285/pr

## LSK-503 3-Way 3-Speaker System

Features acoustic suspension bookshelf design; 10" woofer: 4.31 " midrange: $2^{\prime \prime}$ tweeter; FR $45-20,000 \mathrm{~Hz}$ max input power 130 W ; sens $90 / \mathrm{dB} / \mathrm{m}$; simulated teak grain finish; imp 8 ohms; $24.19 \times 14.0 \times 10.5 \mathrm{in}$ 22 lb
$\$ 220 / \mathrm{pr}$
LSK-303 2-Way 2-Speaker System
Features acoustic suspension bookshelf design: $8^{\prime \prime}$ woofer: $2^{2 "}$ iweeter: fr $50-20,000 \mathrm{~Hz}$; sens $90 / \mathrm{dB} / \mathrm{m}$; simulated teak grain finish; max input power 100 W ; imp 8 ohms: $22.31 \times 12.87 \times 8.0 \mathrm{in}$ : $15.4 \mathrm{lb} \$ 145 / \mathrm{pr}$

## ISK-05S Rear Surround Speakers

Full range I-way I-speaker system. Features acoustic suspension enclosure: max input power 30 W : enclosure designed for horizontal or vertical, corner or bookshelf installation: $4^{\prime \prime} \times 6^{\prime \prime}$ dual cone elliptical mounted driver: sens $90 \mathrm{~dB} / \mathrm{m}$; FR $80-20.000 \mathrm{~Hz}$; imp 8 ohms. $10.87 \times 7.68 \times 5.68 \mathrm{in}$ : $3.1 \mathrm{lb} . . . .$.

## ISk-01S Rear Surround Speakers

Full range I-way I-speaker system. Features acoustic suspension enclosure: max input power 20 W ; sens 91 $\mathrm{dB} / \mathrm{m}$; FR $100-20,000 \mathrm{~Hz}$ : imp 8 ohms. $7.5 \times 5.5 \times 4.81$ in; 2.6 lb
$\$ 49 \mathrm{ca}$

## KINDEL AUDIO

PIS-A 2-Way Speaker
Floor-standing line-source speaker with vertical array of $66.5^{\prime \prime}$ woofers and $161^{\prime \prime}$ dome tweeters. FR 35 $22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $5-500 \mathrm{~W}$ rms; sens 94 dB SPL/W/m: imp 8 or 2 ohms. Available in oak or walnut finish. $22 \times 67 \times 9 \mathrm{in}$; 1.30 lb ca. $. ~ \$ 2.495 / \mathrm{pr}$

## PIS-B 2-Way Speaker

Floor-standing line-source speaker with $66.5^{\prime \prime}$ woofers: 12 l" $^{\prime \prime}$ tweeters; bi-amp. bi-wire terminals; does not require separate crossover: imp 4 ohms: minimum power 50 W : $120 \mathrm{lb} ; 74 \times 11 \times 10 \mathrm{in}$; stand standard
$\$ 1,900 / \mathrm{pr}$

## P-105 Speaker

Features 8" polypropylene woofer; double voice coil: I" soft dome tweeer: crossover at 250 Hz which rolls off one woofer voice coil winding; conventional crossover at 2.5 K (first order) to tweeter: sealed box for bass: $\mathrm{FR} 40-20,000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$; imp 4 ohms; minimum power 20 W : $20 \times 10 \times 9 \mathrm{in} \ldots . \$ 475 / \mathrm{pr}$

## P-55 Speaker

Features $6^{\prime \prime}$ polypropylene woofer; 1 " dome tweeter: sealed box bass: FR $55-20,000 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$ : crossover at $3,000 \mathrm{~Hz}$; imp 8 ohms; minimum power 20 W : 14 x $8 \times 8 \mathrm{in}$; black gloss finish . . . . . . . . . . . . $\$ 289 / \mathrm{pr}$

## The Purist Series

Purist L.T 2-Way Speaker
Floor-standong speaker using a 2 pi/4 pi configuration. Features 2-6.5" polypropylene cone woofers; 1" dome tweeter; bass loading via an $8^{\prime \prime}$ passive radiator in a loaded-line configuration. FR $35-20,000 \mathrm{~Hz} \pm 2$ dB : imp 4 ohms. $13 \times 43 \times 6.5 \mathrm{in}$ : $60 \mathrm{lb} \ldots \$ 850 / \mathrm{pr}$

## KINERGETICS

## SW-100 Subwoofer

Stereo speaker system which can extend the low frequency response of most speaker systems. Constructed of high density fiberboard and veneered with oak or walnut. FR $17 \mathrm{~Hz}-3 \mathrm{~dB} ; 10^{*}$ woofer: efficiency 95 dB ; II $\times 24 \times 15.25 \mathrm{in}: 40 \mathrm{lb}$; Oak. Walnut, Black.
\$395

## SW-100.5 Subwoofer

Subwoofer constructed of high density fiberboard
and vencered with oak or walnut. $10^{*}$ woofer: efficiency $92 \mathrm{~dB}:$ FR $17 \mathrm{~Hz}-3 \mathrm{~dB}: 10^{*}$ woofer: 11 x $12.5 \times 15 \mathrm{in}$; 20 lb : oak, walnut and black ... $\$ 199$

## KINETIC AUDIO

Titan 6-W'ay Spesker
Floor-standing ported speaker. 12" polypropylene cone subwoofer: 12" polypropylene cone woofer; 6.5" polypropylene cone mid/woofer; 2" textile-dome midtweeter: $1.12^{\prime \prime}$ synthetic-dome tweeter: $0.75^{* \prime}$ syn-thetic-dome supertweeter. Crossover points 60,90. $500, \mathrm{~Hz}$; linear-phased driver arrangement in mirrorimage pairs; frons-mounted fuse and noninductive level controls. Interconnecting harness of colorcoded high-performance speaker cables; 5-way heavy-duty binding posts. Mirror-matched highgrade walnut veneer. Black grille with nonresonant frame. FR $12-22.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ : min power 35 W . max power 250 W ; sens $90 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 4 or 8 ohms: 245 lb : $18 \times 60 \times 22 \mathrm{in}$. Grilles, stands. and casters included
$\$ 5,000 / \mathrm{pr}$

## Trapezium 5-Way Speaker

Floor-standing ported speaker. $12^{\prime \prime}$ polypropylenecone woofer: 6.5 " polypropylene-cone midrange: 2" textile-dome midtweeter; 1.12* synthetic-dome tweeter: $0.75^{\prime \prime}$ synthetic-dome supertweeter (tweeters have magnetic-fluid cooling/damping). Crossover points at $90,500,3,000,7,000 \mathrm{~Hz}$ : linear-phased driver arrangement in mirror-image pairs: frontmounted fuse and noninductive level controls. Interconnecting harness of color-coded high-performance speaker cables; 5 -way heavy-duty binding posts. Mirror-matched high-grade walnut veneer. Black grille with nonresonant frame. FR $12-22.000 \mathrm{~Hz}$ $\pm 1.0 \mathrm{~dB}$ : min power 45 W , max 200 W ; sens 90 dB SPL/W/m: imp 6 ohms; 205 lb : $16 \times 60 \times 20 \mathrm{in}$. Includes grilles, stands, and casters. . . . . \$4,000/pr

## Labyrinth 4-Way Speaker

Floor-standing ported speaker. 12" polypropylenecone woofer: $6.5^{\prime \prime}$ polypropylene-cone midrange: $2^{\prime \prime}$ textile-dome midtweeter; 1.12" synthetic-dome tweeter (both iweeters have magnetic-liquid cooling/ damping). (rossover points $90,500,3,000 \mathrm{~Hz}$ : linearphased driver arrangement in mirror-image pairs: front-mounted luse and noninductive level controls. Interconnecting harness of color-coded high-performance speaker cables; 5-way heavy-duty binding posts. Mirror-matched high-grade walnut veneer. Black grille with nonresonant frame. FR $16-22,000 \mathrm{~Hz}$ $\pm 1.5 \mathrm{~dB}$ : min power 35 W , max 200 W ; sens 91 dB SPL/W/m; imp 6 ohms; $185 \mathrm{lb} ; 16 \times 48 \times 18$. Includes grilles. stands. and casters
$\$ 3,000 / \mathrm{pr}$

## Trapezoid 4-Way Speaker

Floor-standing ported speaker. $12^{\prime \prime}$ polypropylenecone woofer: 6.5" polypropylene-cone midrange; 1.12" synthetic dome tweeter with magnetic-liquid cooling/damping; 0.75 " synthetic-dome supertweeter with magnetic-liquid cooling/damping. Crossover points $90,2.000,7.000 \mathrm{~Hz}$; linear-phased driver arrangement in mirror-image pairs; front-mounted fuse and noninductive level controls. Interconnecting harness of color-coded high-performance speaker cables: S-way heavy-duty binding posts. Mirrormatched high-grade walnut veneer. Black grille with nonresonant frame. FR $18-22,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ : min power $20 \mathrm{~W}, \max 200 \mathrm{~W}$; sens 92 dB sPL $/ \mathrm{W} / \mathrm{m} ; i \mathrm{imp} 8$ ohms: 115 lb : $16 \times 40 \times 14 \mathrm{in}$
$\$ 2.000 / \mathrm{pr}$

## STAT Monitor

Floor-standing or large-shelf 3 -way ported speaker. Features $12^{\prime \prime}$ polypropylene-cone woofer: $6.5^{\prime \prime}$ poly-propylene-cone midrange; $1.12^{* \prime}$ synthetic-dome tweeter with magnetic-liquid cooling/damping. Crossover points $90,2,000 \mathrm{~Hz}$; linear-phased driver arrangement in mirror-image pairs: front-mounted fuse and noninductive level controls. Interconnecting harness of color-coded high-performance speaker cables: 5 -way heavy-duty binding posts. Mirrormatched high-grade walnut vencer. Black grille with
norresonant frame. FR $18-22.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$; min power 15 U . $\max 200 \mathrm{~W}$ : sens 93 dB SPl/W/m; imp 8 ohms: 95 lb ; $14.5 \times 26 \times 14 \mathrm{in}$
$\$ 1.000 / \mathrm{pr}$

## Stat Miniature Monitor

2-way ported speaker. Features 6.5" polypropylenecone woofer: 1.12" synthetic-dome tweeter with magnetic-liquid cooling/damping: crossover point $2,000 \mathrm{~Hz}$; linear-phased driver arrangement in mir-ror-image pairs; front-mounted fuse and noninductive level controls. Interconnecting harness of colorcoded high-performance speaker cables. 5-way heavy-duty binding posts. Mirror-matched highgrade walnut veneer. Black grille with nonresonant frame. FR $38-22,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; min power 5 W , max 150 W : sens $93 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms: $30 \mathrm{lb} ; 9 \mathrm{x}$ $15 \times 9$ in.
\$700/pr

## Subwoofers

## Trapezoid Subwoofer

Floor-standing subwoofer with $12^{\prime \prime}$ polypropylenecone driver, built-in $180-\mathrm{Hz}$ passive crossover, and separate direct-to-woofer terminals. May be used with electronic crossover or optional low-loss 4-point passive crossover/low-pass filter, in mirror-image pairs. Features interconnecting harness of colorcoded high-performance speaker cables; 5-way heavy-dutv binding posts. Mirror-matched highgrade walnut veneer. Black grille with nonresonant frame. FR $16-2,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$ : min power 25 W , $\max 350 \mathrm{~W}$ : sens 92 dB spl./W/m; imp 8 ohms; 95 lb ; $16 \times 40 \times 14$ in
\$600/pr

## Stat Suhwoofer

Ported subwoofer with 12" polypropylene cone driver. built-in $180-\mathrm{Hz}$ crossover, and separate direct-towoofer terminals. Features interconnecting harness of color-coded high-performance speaker cables; 5 way heavy-duty binding posts; mirror-matched highgrade walnut veneer; black grille with nonresonant frame. FR $18-2,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; min power 15 W , $\max$ 350 W : sens 93 dB sPI/ $/ \mathrm{W} / \mathrm{m}$; imp 8 ohms; 80 lb ; 14.5 $\times 26 \times 14$ in.
\$450/pr

## KIRKSAETER

## Monitor Tower 260 4-Way Speaker

Floor-standing acoustic-suspension speaker with 2 $10^{\prime \prime}$ long-excursion woofers. $4.5^{\prime \prime}$ coated-cone lower midrange. $2^{\prime \prime}$ soft-metal midrange with 2.3 - 1 b magnet: 0.75 "titanium-dome supertweeter with Ferrofluid; 8 wood or 4 glossy lacquer finishes. Power range $10-250$ W: sens 93 dB sPt./W/m: imp 4-8 ohms. . \$1.995/pr

## Monitor 141 3-Way Speaker

Floor-standing or bookshelf infinite-baffle speaker. Features 12" long-excursion woofer; $2^{\prime \prime}$ soft-metal dome midrange: $0.75^{\prime \prime}$ titanium-dome tweeter. FR 20$32,000 \mathrm{H}=5 \mathrm{~dB}$; imp 4-8 ohms; walnut, mahogany, teak, cherry. black/white/antique/dark/unfinished oak finishes: $13.75 \times 22.88 \times 10.62 \mathrm{in} . . . \$ 1,245 / \mathrm{pr}$

## Amadeus 120 Tower 3-Way Speaker

3-way floor-standing speaker with $8.5^{\prime \prime}$ long-excursion polypropylene woofer and $4^{\prime \prime}$ polyproylene midrange. Features ferrofluid-cooled titanium-dome .75 " tweeter; sealed cabinet: power range $85-120 \mathrm{~W}$ : sens 90 dB SPL/W/m; FR $28-30,000 \mathrm{~Hz}$; banana-plug compatible. $10.25 \times 10.25 \times 33 \mathrm{in}$ : $28 \mathrm{lb} . . . \$ 995 / \mathrm{pr}$

## Concept 120 3-Way Bookshelf Speaker

3-way bookshelf speaker with ported enclosure. Features 8.5" long-excursion woofer: 4" polypropylene midrange: 1 " textile-covered tweeter: $120 \mathrm{~W} / \mathrm{ch}$ max power handling: sens 90 dB SPL/W/m: FR 38 $22,000 \mathrm{~Hz}$; crossovers at $1,000 \mathrm{~Hz}$ and $5,000 \mathrm{~Hz}$; imp 8 ohms. $10.25 \times 10.75 \times 21.3 \mathrm{in}: 24 \mathrm{lb} \ldots .5950 / \mathrm{pr}$

## Concept 100 2-Way Bookshelf Speaker

2-way bookshelf speaker with ported enclosure. Features $7^{* *}$ long-excursion woofer; I" textile-covered tweeter: $100 \mathrm{~W} / \mathrm{ch}$ max power handling: sens 89 dB

SPI/W/m; ik 39-22.000) Hz; crossover at 2,000 Hz: imp 4-8 ohms. $8.66 \times 10.25 \times 17.66 \mathrm{in}$; $19 \mathrm{lb} \$ 750 / \mathrm{pr}$

## Satellite 2-Way Vented Speaker

Bookshelf speaker with 4.25" longexcursion woofer and 1 "titanium-dome tweeter with twin magnets. ik $68-32,000 \mathrm{H} / \pm 5 \mathrm{~dB}$; power range $15-50 \mathrm{~W}$; sens 89 $\mathrm{dBSPI} / \mathrm{W} / \mathrm{m}$; imp 4-8 ohms: walnut. mahogany, teak. cherry, black/white/antique/dark/unfinished oak finishes: $5.5 \times 9.9 \times 7.1$ in
$\$ 595 / \mathrm{pr}$
Subwoofer 501 Active
12" long-excursion woofer: subsonic filler; standard feedback: room-matching control; double-T filer: R(A/D)IN inputs for preamp, (I) player, etc.; I-way crossover al 80,120 , or 160 Hz ; choice of finishes. Impulse power 500 W ; $16.6 \times 15.8 \times 16.2 \mathrm{in} ; 46$ Ib. .
$\$ 1,295$

## KLIPSCH

Klipschorn 3-Way Speaher
Fully horn-loaded speaker requiring corner placement. Sens 104 dB SPL $/ \mathrm{W} / \mathrm{m}$; power handling $\mathrm{I}(00 \mathrm{~W}$ : FR $35-17,000 \mathrm{~Hz} \pm 5 \mathrm{~dB} .52 \times 31.25 \times 28.5 \mathrm{in}$. Priced depending on finish from approx . . . . . . \$3,198/pr

## Belle Klipsch 3-Way Speaher

Horn-loaded floor-standing speaker using Klipschorn drive components. Sens 104 dB SPI./W/m; power handling 100 W ; FR $45-17,000 \mathrm{~Hz} \pm 5 \mathrm{~dB}$. $35.62 \times 30.12 \times 18.75 \mathrm{in}$. Available in exotic woods. Priced depending on finish; appros . . . . $\$ 2,598 / \mathrm{pr}$ Ia Scala. Fully horn-loaded 3-way speaher similar to Belle Klipsch but available only in natural birch. stained birch, or black finishes. Spees same as Belle Klipsch. $35.5 \times 23.75 \times 24.5 \mathrm{in}$. Priced depending on finish from approx.
$\$ 1,706 / \mathrm{pr}$
Cornwall II 3-Way Speaker
Features 15" woofer in ported enclosure: horn-loaded compression tweeter and midrange. Sens 100 dB SPL/W/m; power handling 100 W ; tr $38-20.000 \mathrm{H}$ / $\pm 3 \mathrm{~dB} .35 .75 \times 25.5 \times 15.5 \mathrm{in}$. Available in exotic woods. Priced depending on finish from approx. $\$ 1.638 / \mathrm{pr}$

## Chorus 3-Way Speaker

$15^{\prime \prime}$ professional heavy-duty woofer in ported enclosure: horn-loaded compression drivers for tweeter and midrange; sens $101 \mathrm{~dB} \mathrm{sPI} / \mathrm{W} / \mathrm{m}$; power handling $100 \mathrm{~W}: \mathrm{FR} 45-20.000 \mathrm{H} \mathrm{lz} \pm 3 \mathrm{~dB}(-10 \mathrm{~dB}$ (a) 36 Hz ); $39 \times 18.5 \times 15.5 \mathrm{in} ; 89 \mathrm{lb}$; walnut, oak or exotic woods. Priced atcording to finish, from approx.

## Forte 3-Way Speaher

Features horn-loaded compression drivers for tweeter and midrange: $12^{*}$ woofir; $12^{*}$ passive radiator mounted on rear of cabinet. if $32-20,000 \pm 3 \mathrm{~dB}$; sens 98 dB SII. $/ \mathrm{W} / \mathrm{m}$; power handling 100 W .35 .38 x $16.5 \times 12 \mathrm{in}$. Available in exolic wouds. Priced according to finish from approx . . . . . . . $\$ 1,180 / \mathrm{pr}$

## Heresy II 3-Way Speaher

Features horn-loaded compression tweeter and midrange; $12^{\prime \prime}$ woofer in sealed enclosure. tR $50-20,000$ $\mathrm{Hz} \pm 3 \mathrm{~dB}$ : nax handling power 100 W : sens 96 dB $\mathrm{sPl} / \mathrm{W} / \mathrm{m} .21 .36 \times 15.5 \times 13.5 \mathrm{in}$. Available in exotic woods. Priced depending on finish from approx.
\$882/pr

## K ${ }^{*}$ 2-Way Speaker

Foor-standing spraker with 12" rear-mounted passive radiator, $2-8^{*}$ polymer-cone woofers, and hurnloaded tweeter. FR $38-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max power 100 W ; sens 94 dB sPL/W/m. $24.25 \times 15.75 \times 10.75 \mathrm{in}$. A vailable in oak and walnut finishes. From approximately
\$598/pr

## Kg ${ }^{2}$ 2-W'ay Speaher

Features rear-mounted passive radiator. C'rossover frequency $1,800 \mathrm{~Hz}$ :FR $35-20,000 \mathrm{H} / \pm 3 \mathrm{~dB}$; sens 90
dB sil./W/m: power handling $65 \mathrm{~W} .18 .88 \times 11.5 \times$ 13.25 in . Irom approx. . . . . . . . . . . . . . . . . \$42 ${ }^{1 / 1) / \mathrm{pr}}$

## KOSS

JCK/SMW) Wireless Sptaker System
Infrared wireless speahers with tone/volume controls oneach cabinet: on/otl power switch; battery recharger (batteries not included): 2" tweeter; $6.5^{\prime \prime}$ woofer. FR 40 Hz -20,00 Hz. I $5 \times 9 \times 5$ in . . . . . . . . . . . $\$ 35(1 / \mathrm{pr}$

## M/I(N) Plus Powered Speaker

Built-in 20-watt amp allows amplificaton from the headphone jack of I V. portable tape, or (D player. FK $50 \mathrm{H} / \mathrm{z}-30,000 \mathrm{H} /$; $\mathrm{s} / \mathrm{N} 80 \mathrm{~dB}$; CHI) $<5 \%$ (a) I hHz: 4 ohmimp $27 \mathrm{lb} / \mathrm{pr}$
\$260/pr

## M/\%0 Plus Double Woofer Speater

Features $24.5^{\prime \prime}$ uooters:and $\mathbf{1 " ~}^{\text {d }}$ dome tuceter. Fr $50-$ $30,000 \mathrm{~Hz}$;sens 88 dB spl./W/mi; $4-6 \mathrm{ohm}$ imp; max power 20 W continuous, 100 W prak. $12.88 \times 5.25 \times$ $5.5 \mathrm{in} ; 30 \mathrm{lb} / \mathrm{pr}$
\$220/pr

## 1)yramite M/80 Plus Speaker

Acoustic-suspension bookshelf speaker with automatic circuit breaket to guard against speaker damage. Features dual-active $4.5^{\prime \prime}$ woofers, 1 " dome Iwecter. FR $50-30,000 \mathrm{H}, \pm 3 \mathrm{~dB}$ : min power 10 W/rms; man power 100 music; inp 6 ohms. 8 lb .5 .25 $\times 12 \times 5.25$ in.
\$180;pr
M/60 Plus 2-Way Speaher
Fealures 1" dome iweeter; 4.5" noofer. FR $100-$ 30,000H\&; sens 84 spl./W/mi: imp 8 ohms nom, 6 ohme min; power range $15-75 \mathrm{~W}$ music. $8.5 \times 4.75 \mathrm{x}$ 5.5 in.
\$135/pr

## I ASER SPEAKERS

I aser Signature Reference 1201 Speaher
Floor-standing 2 -way speaker including bottomfiring subwoofer: 12" sub bass: done tweeter: $\mathbf{x "}^{\prime \prime}$ midbass; circuit-overload protection: tre 22-20,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$ : min power 25 W rms: max power 200 W ims; sens 97 dB . High-lusire black finish with solid oak burled top and bottom. $34.75 \times 15.25 \times 155$ in. .
$\$ 750$ ea

## 1 aser Signature Reference IOHO Speaker

Floor-standing 2-way speaker including bottontfiring subwoofier; 10" sub bass: dome tweeter; 6.5" midbass; circuit-overload protection; FR 25-20,000 $11 / \pm 3 \mathrm{~dB}$; min power 25 W rms; max power 150 W rms; sens 97 dB . High-lustre black finish with solid oak burled top and botlom. $35.75 \times 13.25 \times 15.5$ in.
$\$ 600$ ca

## FXI-8 MKVII 2-Way Speaher

2-way bookshelf bass-reflea speaker; $8^{\prime \prime}$ bass; dome twecter, circuit-overload protection: tR $35-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{dl}$; min power 35 W rms; max power 125 W rms ; sens 92 dB. High-lustre black finish. $19 \times 10 \times 11$ in.
$\$ 225 \mathrm{ea}$

## FNI -6 2-Way Speaher

2-way bookshelf bass-reflex speaker; 6.5" bass; dome I weeter, circuit-overload protection; ITR $40-20,0 \mathrm{MM}) \mathrm{Hz}^{2}$ $\pm 3 \mathrm{~dB}$; min power 35 W rms; nax power 100 W rms. sens 91 dB. Black finish. $15 \times 8 \times 10 \mathrm{in} \ldots \$ 175$ ea

## IAZER-TECHSPEAKERS

### 1.112 Tawer Monitor Spaker

Features 12" poly woofer: 4.5" eatended-range driver: 1" soft-dome tweeter; separate isolation chambers for bass and midrange drivers; extensive internal bracing: 18x sloped-front sound plane; twin rear-firing tuned ports: 3-way computer-matched crossover network. Rosewood or teak finish with removable blach grilles. $\operatorname{lmp} 8$ ohm; FR 32-25,000) Hz; sens 93 dB SPI./W/mi: crossover $700 \& 4,000 \mathrm{~Hz}$; min power 10 W; max power $250 \mathrm{~W} .46 .25 \times 14 \times(6 \times 12.5) \mathrm{in} ; 90 \mathrm{lb}$ ca. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1,395 / \mathrm{pr}$
1.110. Has the same design and features as LT I2 but uses $10^{\prime \prime}$ polypropylene bass driver; $40 \times 12.5 \times(6 \times$ II.5) in; 68 lb .
\$1.195/pr

## I.P8 3-Way Speaher

46" tall i win ported 3-way panel system fealuring 2-8" translucent cone bass drivers with 30 oz magnet; same drivers and tweeters as I.T12 with additiona! tweeter, separate midrange, bass and tweeter isolation chambers: 3-way computer designed crossover network; fuse protection circuil; black removable grills: input connections for cable; sens 93 dB ; FR $30-$ $25,000 \mathrm{~Hz} ; \mathrm{mp} 8$ ohmi; $28 \times 19.5 \times 5.5 \mathrm{in}$; 55 lb ; oak, teak, rosewood, walnut, white rosewood or black formica finish.
$\$ 1,250$
1.P8A, A short, wide version of the 1.P8. Has no rear mount horn but rather 2-1" soft dome tweeters on front sound panel; slightly sloped stand: all other features are same as L.P8; $28 \times 19.5 \times 5.5 \mathrm{in} ; 55$ th.
\$1,195

## LENOXX

SP-200 Mini Personal Stereo Speaters
Passive speaker system. Features metal mesh grill; Alnico drivers; $3.5 \times 2.5 \times 1.75 \mathrm{in}$.

## LINN PRODUCTS

## 1)MS Isobarik Floor-Standing Speaker

Isobarik-loading 3-way speaker with $12^{\prime \prime}, 9^{\prime \prime}$ woofers, $5^{\circ}$ midrange, iwo $0.75^{\prime \prime}$ dome tweeters. Can be triamped. FK $25-20,000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$; crossovers at 375 and $3 \mathrm{kH} /$; instantancous dynamic range 54 dB ; imp 4 ohms; power range $50-500 \mathrm{~W} ; 30 \times 15 \times 16.5-$ in.
$\$ 3.995 / \mathrm{pr}$

## S.A.R.A. Isobarih Bookshelf Spewher

Isobarik-loading 2 -way speaker with two 8 " woofers, $0.75^{\circ}$ dome tweeter. Cast structural foam housing. FR $36-20,000 \mathrm{H} / \pm 2 \mathrm{~dB} ; \operatorname{imp} 4 \mathrm{ohms} ; 17 \times 13 \times 10-$ in . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$1,695/pr
K.A.N. Acoustic-Suspension Speaker

2-way bookshelf speaker with $5^{\prime \prime}$ woofer, $0.75^{\circ}$ dome I weeter. FR $70-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 8 ohms; 12 x $7.5 \times 6.5-\mathrm{in}$.
\$695/pr
Inder Acoustic-Suspensiun Speaker
Floor or bookshelf placement: $8^{\prime \prime}$ KEF B200 cone woofer; $1^{\prime \prime}$ dome tweeter; cabinet of full $0.75^{\prime \prime}$ highdensity particle board: 50 strand 20 amp cable. FR 60 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $15-50 \mathrm{~W}$; sens 87 dB $\mathrm{spl} . / \mathrm{W} / \mathrm{m}$; imp 8 ohms. $17 \times 11 \times 8$-in; 17 lb ; black woodgrain.
\$525/pr

## MAGNASPHERE by MAGNAT

Deha ll. Gamma, and Beta speakers have suff-metal domes: ribhon-wire vonce coils of oxygen-free copper wound on aluminum core for better heat dissupation and power handling; pherucal. batlle-froe midrange and tweeter spheres for omnidirectional disperston: black perforated steel grilles.

## 1helta II Fleor-Standing Speaher

6 -sided acoustic-suspension speaker with 65.250 long-throw woofers; gray or black enamel. FR 32$29.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $30-150 \mathrm{~W}$ : imp + ohnms; sens 88.5 dB sPl $/ \mathrm{W} / \mathrm{mm} ; 13.8 \times 44 \times 13.8 \mathrm{in} ; 65$ lb.
$\$ 3.290 / \mathrm{pr}$

## Gamma Flowr-Standing Speaker

4 -sided pyramid-shaped speaker with $2-8^{\prime \prime}$ woofers, 2-5.25" midwoofers (I front. | back); European mahogany or black-oak vencer. fR $32-29,000 \mathrm{~Hz} \pm 3$ dB ; power range 30 -I 50 W ; imp 4 ohms; sens 88 dB $\mathrm{sPL} / \mathrm{W} / \mathrm{m} ; 14 \times 50 \times 14 \mathrm{in} ; 67 \mathrm{lb}$.
$\$ 2,490 / \mathrm{pr}$

## Sigma 10MO Floor-Standing Speaher

Foor-standing column speaker employing heavy duly cast aluminum drivers. Driver frames are buffed on industrial-grade diamond polishing machines.

European grade A walnut or black oak veneers. Top plate is 8 layer thick hand-finished lacquer. 3-way vented system using two long throw $8^{-8}$ woofers.: $2.75^{\prime \prime}$ midrange adn patented 1 " soft-metal dome tweeter: FR $32-27,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $25-200$ W/ch; imp 4 ohm; sens $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m} ; 11.5 \times 42 \times 11$ in. $\$ 2.190 / \mathrm{pr}$

## Beta Floor-Standing Speaker

4 -sided pyramid-shaped speaker with $8^{\prime \prime}$ woofer. $5.25^{\prime \prime}$ midwoofer. European mahogany or black-oak vencer. FR $37-29.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $30-120$ W ; imp 4 ohms; sens 87 dB SPL/W/m: $13 \times 43 \times 13$ in.
$\$ 1,990 / \mathrm{pr}$

## Magnastar System

3-piece satellite/subwoofer system featuring passive subwoofer using $2-8^{" \prime}$ woofers operating in compound principle, mated to 2 MSP 10 minispeakers: FR 36$27.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range $25-150 \mathrm{~W} / \mathrm{ch}$ : imp 4 ohm; sens $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; magnastar subwoofer $12 \times 10$ $\times 20$ in: $5.7 \times 8.9 \times 6.9$ in.
$\$ 795$

## MSP Series Speakers

tcoustic-suspension and bass reflex spocaker system with ribhon-wire voice coils; sofi-metal dome tweeters; hatlles electrostatically coated with flocking to reduce high frequency ripples; iweeters and midranges cooled with ferrofluid: cabinets of extra-heavy-duty high-density multi-laver wood with internal bracing.
MSP 300. Floor-standing speaker with $2-8^{\prime \prime}$ long-fiber-pulp woofers. $3^{\prime \prime}$ cone/dome midrange, $1^{\prime \prime}$ tweeter: European walnut or black-oak veneer, top plate 8 -layer hand-finished black lacquer. FR 32$29,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $25-150 \mathrm{~W}$; imp 4 ohms: sens 88 dB sPL/W/m: $11.5 \times 42.3 \times 11 \mathrm{in}: 60$ lb.
$\$ 1.690 / \mathrm{pr}$
MSP 110. Floor-standing speaker with $8^{\prime \prime}$ long-fiberpulp woofer, $3^{\circ}$ cone/dome midrange. $1^{\circ}$ tweeter: European walnut or black-oak veneer. top plate 8 layer hand-finished black lacquer. FR $39-29,000 \mathrm{~Hz}$ : power range 25-120 W ; imp 4 ohms: sens 88 dB SPL/W/m: $11.5 \times 31 \times 11 \mathrm{in}: 42 \mathrm{lb} ., \ldots . . \$ 1.090 / \mathrm{pr}$ MSP 70. Bookshelf speaker with $10^{\circ}$ woofer, 2.75* midrange, I" tweeter; black woodgrain vinyl. IR 39$29.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range 25 - 100 W : imp 4 ohms; sens 90 dB spl./W/m: $12.6 \times 22.9 \times 11.5 \mathrm{in}: 33$ lb.
\$790/pr
MSP 60. Bookshelf speaker with $8^{\circ}$ woofer. 2.75" midrange. 1" tweeter: black woodgrain vinyl. FR 41$29,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range $25-90 \mathrm{~W}$ : imp 4 ohms: sens $89 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m} ; 11.5 \times 20.1 \times 10.5 \mathrm{in} ; 28.6$ lb.
\$750/pr
MSP 50. Bookshelf speaker with $8^{\prime \prime}$ woofer. $1^{-}$ (weeter; black woodgrain vinyl. FR $45-29.000 \mathrm{~Hz} \pm 3$ dB; power range 25-80 W ; imp 4 ohms; sens 88 dB SPL/W/m: $10.7 \times 17.4 \times 9.5 \mathrm{in}: 22 \mathrm{lb}$.
\$550/pr

## Monitor Series Speakers

Bookshelf acoustic-suspension 3-way' speakers with low-resonance. high-rigidity diaphragms designed for low coloration. ('rossover networks use low-disstination capacitors designed for improved imaging and texture. Magnat Ribhon-W'ire voice coils used in tweeter for 40\% increased winding denstry and improved transient response. All woofers are cone shaped; all midranges are 4 -inch cones; all iweeters are dome shaped. All monitor sertes sperakers feature cabinets finished in black wood-grained vinyl with hlack metal grilles.
C. $8^{\prime \prime}$ long-throw woofer; 4" midrange; I" soft-metal tweeter. FR $46-29.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range $10-90$ W rms; sens 90 dB sPL/W/m; imp 4-8 ohms. $14.62 \times$ $22.5 \times 13.75 \mathrm{in}: 22 \mathrm{lb}$
\$470/pr B. $8^{* \prime}$ long-throw woofer: $4^{\prime \prime}$ midrange: $1^{\prime \prime}$ soft-metal tweeter. FR $54-29,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $10-80$ W rms; sens 90 dB sPL/W/m: imp $4-8 \mathrm{ohms}$. $14.12 \times$ $20.5 \times 14.12 \mathrm{in}: 20 \mathrm{lb}$
$\$ 390 / \mathrm{pr}$ A. $8^{*}$ long-throw woofer: $4^{\text {" }}$ midrange: $0.75^{\circ}$ Supronyl tweeter. FR $54-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $10-60$ W rms; sens 90 dB sPL/W/m: imp 8 ohms. 14.12 x $19.36 \times 14.12 \mathrm{in} ; 17.5 \mathrm{lb}$.
$\$ 300 / \mathrm{pr}$ <br> \title{
MAGNEPAN
} <br> \title{
MAGNEPAN
}

Magneplanar Tympani-IVa
Planar-magnetic speaker with reduced-mass midrange driver, . $00025^{\prime \prime}$. Features 5 -ft-long. $2.5-\mathrm{mi}-$ crons-thick foil tweeter. 3 panels per side: $71 \times 18 \times 1$ in
$\$ 3.800 / \mathrm{pr}$

## Magneplanar MG-IIIa Speaker

Floor-standing full-range bipolar panel speaker with planar-magnetic and ribbon-driver design. Can be biamplified. Drivers are 1 planar-magnetic woofer ( $620^{*}$ sq.): 1 planar-magnetic midrange ( $170^{*}$ sq.): 1 line-source $5^{\prime}$ bipolar ribbon tweeter ( $14.25^{\prime \prime}$ sq.). 1 mp 4 ohms: off-white cloth. oak frame; 55 lb ea $\$ 1.995 / \mathrm{pr}$

## Magneplaner MK; 2.5/R Speaker

Floor standing full range bipolar panel speaker with planar/magnetic woofer and 42" long ribbon tweeter. 2 way design. optional grille fabrics, oak side rails.
$\$ 1.550 / \mathrm{pr}$

## Magneplanar MG-IC Speaker

Floor-standing 2 -way speaker with Magneplanar woofer and iweeter. Features oak side rails: off-white fabric grille, FR 45 - $18.000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; crossover 1.6 kHz : sens $82-\mathrm{dP}$ sPI./W/3 ft .; power range $40-200 \mathrm{~W}$ rms: imp 5 ohms purely resistive: $60 \times 22 \times 2$ in.
\$880/pr

## Magneplanar SMGa Speaker

Full-range 2 -way speaker with 0.5 -mil diaphragm driven by Magneplanar magnetic field. Features oak side rails: optional grille fabric. FR $50-16.000 \mathrm{~Hz} \pm 4$ dB: power range $20-100 \mathrm{~W}$ rms: imp 4 ohms purely resistive: crossover $2.4 \mathrm{kHz} ; 48.56^{\circ} \mathrm{h} \times 24.25^{\prime \prime} \mathrm{wx}$ $1.75^{\prime \prime}$ d: 70 lb
\$495/pr

## MARANTZ

## SP 1515 Ported Speaker

Floor-standing speaker with 15" woofer: 5" ferrolluid cone midrange; $3^{\prime \prime}$ ferrofluid cone tweeter; sculptured furniture-style cabinet. Max power 165 W ; sens 92 dB SPI /W/m; imp 8 ohms; Bartonwood vinyl finish: $18 \times$ $32.5 \times 16.5$ in: 47 lb
$\$ 400 / \mathrm{pr}$

## SP124 Tower Speaker

3-way speaker with 12" woofer; 12" passive radiator: $4^{\prime \prime}$ midrange with ferrofluid: $3^{\prime \prime}$ tweeter w/ferrofluid. Max power 17() W; sens $91 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; inp 8 ohms. Oak vinyl finish: $37.75 \times 14.75 \times 13.5 \mathrm{in} ; 33.7$ lb.
$\$ 400 / \mathrm{pr}$

## SP104 Tower Speaker

3 -way speaker with $10^{*}$ woofer: $10^{*}$ passive radiator: 4" midrange with ferrolluid; $3^{*}$ iweeter w/ierrolluid. Max power 135 W : sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; imp 8 ohms . Oak vinyl tinish: $37.75 \times 13 \times 11 \mathrm{in}: 30 \mathrm{lb} . \$ 340 / \mathrm{pr}$ SP103. Same as above without passive radiator
$\$ 300 / \mathrm{pr}$

## SP 1200) Ported Speaker

Floor-standing speaker with $12^{*}$ woofer: $4^{\prime \prime}$ ferrofluid cone midrange: $3^{* *}$ ferrofluid cone tweeter. Max power range 165 W : sens $90 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms. $15 \times 29.5 \times 11.5 \mathrm{in}: 32 \mathrm{lb}$
\$300/pr

## SP 1000 Ported Speaker

Features $10^{\prime \prime}$ woofer: $4^{\prime \prime}$ ferrofluid cone nidrange: $3^{\prime \prime}$ ferrofluid cone iweeter. Max power range 130 W ; sens 89 dB spl/W/m; imp 8 ohms. Bartonwood vinyl finish; $13 \times 27 \times 11 \mathrm{in} ; 25 \mathrm{lb}$
$\$ 240 / \mathrm{pr}$

## SP 800 Ported Speaker

Features $8^{\prime \prime}$ woofer; $4^{\prime \prime}$ ferrofluid cone nidrange: $2^{\prime \prime}$ ferrofluid cone tweeter. Max power range 60 W : sens 89 dB sPL/W/m: imp 8 ohms. Bartonwood vinyl finish; $13 \times 26 \times 8.5 \mathrm{in}: 15 \mathrm{lb}$
$\$ 150 / \mathrm{pr}$

## SP208 Ported Speaker

2-way speaker system with 8 " woofer and 2 " iweeter. Max power 50 W ; sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; imp 8 ohms.

Available in oak vinyl finish: $18.75 \times 10.63 \times 8.38$ inches: 105 lb
\$120/pr

## MARTIN-LOGAN

Statement Electrostatic Speaker System
Floor-standing system consisting of 2 visually-transparent curvilinear electrostatic panels used in conjunction with two woofer towers and blended by an electronic crossover. Each electrostatic element measures $3 \times 6$-inches and is curved and housed in a massive fame; each woofer tower houses four 12* woofers mounted in individually sealed anti-resonant chantubers: dual-mono crossover consists of four separate chassis; 2 chassis contain power supplies: 2 chassis contain crossover using a proprietary discrete classs-A differential FET buffer topology and purecurrent scurce voltage regulation system; can play at volumes up to 120 dB . $\mathrm{FR} 16-25.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB}$; power range $50-1.000 \mathrm{~W}$ : sens 93 dB SPL $/ \mathrm{W} / \mathrm{m}$; imp 6 ohms. Electrostatic section: $39.5 \times 84 \times 6 \mathrm{in}$. Woofer towers: $15 \times 84 \times 30 \mathrm{in}$. Available in a variety of finishes. System weighs $1 / 2$-ton.
$\$ 40,000$

## Monolith Filectrostatic Speaker

Floor-standing curvilinear electrostatic panel speaker mounted atop a tuned subwoofer box. Designed for wide dispersion without the use of delay lines of lenses. Constant voltage crossover provides phase coherenc*. Features $2 \times 4$ eletrostatic cell for 100 $24,000 \mathrm{~Hz}$ and a $12^{*}$ polypropylene-cone subwoofer with 2" voice coil that is down 3 dB at 16 Hz . FR 28 $24,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$ : power range $30-500 \mathrm{~W}$; sens 90 dB sPL/W/m; imp 8 ohms. Avaialble in a variety of finishes. $35 \times 75 \times 13.5 \mathrm{in}$ : $165 \mathrm{lb} \mathrm{ea} . . . . \$ \$ 5.000 / \mathrm{pr}$

## requel Flectrostatic Speaker

Floor-standing electrostatic/subwoofer system. Features visually transparent electrostatic transducer that operates from $200-24.000 \mathrm{~Hz}: 30$ degrees seam

less horizontal disperson in a vertical line-source format: $1^{\prime} \times 4^{\prime}$ electrostatic cell: super-low-mass $10^{\circ}$ subwoofer in a tuned chamber with a matirx voice coil to create linear filed in large excursion modes. FR
$26-24,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range $30-300 \mathrm{~W}$ : sens 89 dB SPL/W/m: imp 6 ohms. Oak and black finish. 14.5 $\times 74 \times 13.5 \mathrm{in}$ : 110 lb ea.
. \$2,250/pr

## The CLS Electrostatic Speaker

Floor-standing curved electrostatic speaker. Features wide-dispersion format for full-range reproduction; $2^{\circ} \times 4^{\prime}$ electrostatic cell to reproduce all frequencies from $50-22,000 \mathrm{~Hz} ; 30$ degrees seamless horizontal dispersion; 4' line-source vertical: arc-free diaphragm; see-through appearance. FR $50-22,000 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB}$ : power range $20-150 \mathrm{~W}$ : sens $85 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$ : imp 6 ohms. A vailable in a variety of finishes. $26 \times 48$ $\times 2 \mathrm{in} ; 50 \mathrm{lb}$.
$\$ 2,490 / \mathrm{pr}$

## MB QUART

MB 980S 3-Way Speakers
Floor-standing, 3-Way acoustic suspension column speakers. Features 1 " titanium dome with ferrolluid tweeter: $2^{\prime \prime}$ aluminum dome midrange: $2-8^{* \prime}$ butyl suspension, long throw woofers; crossover frequency 350 Hz : min. power 40 W : imp 4 ohms; FR 34-32,000 Hz ; sens $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : II $\times 39.5 \times 1 \mathrm{I} \mathrm{in}$ : 57 lb 3 oz : genuine walnut or oak, white or grey laquer, (special finishes at extra cost).
\$2.399

## MB 610 S Column Styled Loudspeakers

3-way acoustic suspension column loudspeakers. Feature 1" multi-layered, compressed wood: ceramic magnets; fluid cooled tweeter: computer optimized bass response: $1^{\prime \prime}$ titanium dome tweeer; $2^{\prime \prime}$ supronyl dome midrange: $8^{\prime \prime}$ butyl suspension, long throw woofer: crossover frequencies $400 \mathrm{~Hz} / 2900 \mathrm{~Hz}$ : min. power $45 \mathrm{~W} / \mathrm{ch}$; imp 4 ohm; FR $39-32,000 \mathrm{~Hz}$; sens 86 $\mathrm{dB} / \mathrm{W} / \mathrm{m}: 10.4 \times 33.9 \times 10.2 \mathrm{in}: 38 \mathrm{lb} 10 \mathrm{oz}$ : genuine walnut or oak, white, black or grey laquer . . $\$ 1,499$

## MB 480 Convex Speakers

3-way acoustic suspension floor standing loudspeaker. Features front baffle curved convexly; dispersion $>180$ degrees radiating surface; $1^{\text {" }}$ titanium dome tweeter: $2^{\prime \prime}$ aluminum dome midrange: $10^{\prime \prime}$ butyl suspension, long throw woofer; crossover frequencies $500 \mathrm{~Hz} / 2500 \mathrm{~Hz}$ : min. power $35 \mathrm{~W} / \mathrm{ch}$ : imp 4 ohm; FR $32-32,000 \mathrm{~Hz}$; sens $87 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : $12.6 \times 22 \times 14 \mathrm{in}$; 37 lb 6 oz ; genuine walnut or oak, whit or black laquer finishes
$\$ 1,199$

## MB 350S Loudspeakers

Bass reflex speakers feature 8* woofer; 1" titanium dome tweeter; FR $38-32,000 \mathrm{~Hz}$; sens 89 dB ; min amp power 20 W : crossover frequency 1500 Hz : imp 4 ohm: $10.2 \times 32 \times 11 \mathrm{in}: 40 \mathrm{lb}$ : comes in black, white, oak, walnut, cherry, rosewood, mahagony, pine finishes.
$\$ 999$

## MB 310 Subwoofer

Subwoofer features $12^{\prime \prime}$ woofer; FR $25-100 \mathrm{~Hz}$; sens 87 dB ; min. amp power 50 W ; crossover frequency 100 Hz ; $16 \times 19 \times 15 \mathrm{in} ; 40 \mathrm{lb}$; walnut, oak, matte laquer black or white finishes.
$\$ 849$

## MB 390 3-Way Speakers

3-way acoustic suspension bookshelf speaker. Features $1^{\prime \prime}$ titanium dome tweeter: $4^{\prime \prime}$ butyl suspension midrange : $10^{\prime \prime}$ butyl suspension, long throw woofer: crossover frequencies $400 \mathrm{~Hz} / 1800 \mathrm{~Hz}$; min. power $35 \mathrm{~W} / \mathrm{ch}$; imp 4 ohm; fR $40-32,000 \mathrm{~Hz}$ : sens 88 $\mathrm{dB} / \mathrm{W} / \mathrm{m} ; 12 \times 20.5 \times 12 \mathrm{in} ; 28 \mathrm{lb} 10 \mathrm{oz}$; comes in genuine walnut or oak, matte laquer white or black finishes
$\$ 849$

## MB 280 2-Way Speakers

2-way acoustic suspension bookshelf speaker. Features 1 "titanium dome twecter: $8^{\prime \prime}$ butyl suspension. long throw woofer: crossover frequency 1500 Hz ; min. power $20 \mathrm{~W} / \mathrm{ch}$; imp 4 ohm ; fR $50-32,000 \mathrm{~Hz}$ : sens $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m} ; 10.5 \times 17.25 \times 10.25 \mathrm{in} ; 22 \mathrm{lb}$; walnut, oak, white. or black finishes. . . . . . . . . $\$ 549$

MB 220 2-Way Speakers
2-way acoustic suspension bookshelf speaker. Fea-
tures 1 " titanium dome tweeter: $6.5^{\prime \prime}$ butyl suspension, long throw woofer: crossover frequency 1500 Hz ; min. power $20 \mathrm{~W} / \mathrm{ch}$; imp 4 ohm; FR $60-32,000$ Hz : sens $87 \mathrm{~dB} / \mathrm{W} / \mathrm{m}: 9 \times 12 \times 8 \mathrm{in}$ : 11 lb ; comes in genuine walnut or oak, matte lacquer black or white finishes.
\$449

## McINTOSH

## XRT-22 Speaker System

2-piece speaker consisting of a bass cabinet containing $212^{\circ}$ woofers and an $8^{\circ}$ midrange, and a tweeter column containing 23 I" tweeters. Bass cabinet: 40.75 $\times 25.75 \times 12.75 \mathrm{in}$ : tweeter column: $79.5 \times 10.5 \times 1.63$ in: oak finish.
$\$ 4,000$ ea
Walnut finish . . . . . . . . . . . . . . . . . . . . . . . . \$4,250

## XRT18 Speaker System

2-piece speaker consisting of a bass cabinet containing a $12^{\circ}$ woofer and $6^{\circ}$ midrange and a highfrequency column frame containing sixteen $1^{\prime \prime}$ dome tweeters. Features 3 -ampere fast acting fuse for woofer and midrange and a 1.25 -ampere fuse for tweeters. Cabinet constructed of 48 -pound density fiber board with walnut veneer exteriors. Sens 86 dB SPL/W/m: max power 150 W continuous program power, 500 W peak; min power 30 W : imp 8 ohms: crossover frequencies 350 and $1,500 \mathrm{~Hz}$. Bass cabinet $27.22 \times 17.5 \times 11.75 \mathrm{in}$, tweeter column $57.31 \times 10.5 \times$ 1.63 in : total weight 92 lb . . . . . . . . . . . . . $\$ 2,250$ ea

## XR 1052 4-Way Speaker

4-way speaker. Features $10^{* *}$ woofer with copper voice coil: $5^{\prime \prime}$ midrange isolated from woofer: $1^{\prime \prime}$ dome tweeter with copper-wire voice coil centered and suspended with custom surround: 15" passive radiator with accurately adjusted moving mass; built-in crossover with points at 55,450 , and $1,300 \mathrm{~Hz}$ : cabinet made of high density particle board; imp 8 ohms. FR $20-20,000 \mathrm{~Hz}$
$\$ 1,252$ ea

## XD 717 3-Way Speaker

Floor-standing speaker with $12^{\prime \prime}$ woofer, $6.5^{\prime \prime} \mathrm{mi}$ drange, and $1^{\circ}$ dome tweeter. Sens 87 dB SPI./W/m: recommended power handling $30-100 \mathrm{~W}$ : imp 8 ohms; crossover frequencies 350 and 1.000 Hz . Cabinet constructed of $0.75^{\circ}$ high-density particle board with internal bracing and airtight assembly. Walnut veneer protected by oil-like multi-coat handrubbed laquer finish. $37.75 \times 17.5 \times 11.88$ in $\$ 799$ ea

## XD 715 3-W'ay Speaker

Floor-standing speaker with $10^{\prime \prime}$ woofer, $5^{\prime \prime}$ midrange. and I" dome tweeter, Sens 87 dB SPL/W/m; max power 100 W program noise: min power 30 W : imp 8 ohms; crossover frequencies 350 and $1,000 \mathrm{~Hz}$. Cabinet constructed of $0.75^{\prime \prime}$ high-density particle board with internal bracing and airight assembly with walnut veneer. $30 \times 14.75 \times 10.06$ in.$\$ 599$ ea

## XL1 2-Way Compact Speaker

Bookshelf speaker with $6^{\circ}$ woofer, $1^{*}$ dome tweeter, and 1.000 Hz crossover network. Features $0.6-$ ampere fast-acting fuse. Max power 80 W program noise, 200 W peak: min power 30 W ; imp 8 ohms; sens $85 \mathrm{~dB} \mathrm{spL} / \mathrm{W} / \mathrm{m}$. Cabinet constructed of $0.75^{\prime \prime}$ high-density particle board with internal bracing and airtight assembly
\$525/pr

## XL 1 W Subwoofer

Dual-voice-coil subwoofer designed to compliment and extend performance of McIntosh XL I speaker. Features $12^{\prime \prime}$ woofer; two 1.5 -ampere fast-acting fuses; walnut veneer cabinet protected by an oil-like multi-coat hand-rubbed lacquer finish. Sens 85 dB SPL/W/m: max power 100 W program noise, 250 W peak: min power 30 W ; crossover frequency 90 Hz $32.22 \times 17.5 \times 11.75$ in. . . . . . . . . . . . . . . . . $\$ 549$ ea

## MERIDIAN by MADRIGAL

M100 3-Way Powered Speaker
Inter-Active speaker with 4 power amps (3-70 W/ch.

1-35 W/ch) driving 2-5" woofers, 2-5" midranges, 1 $2^{\prime \prime}$ dome tweeter. $0.75^{\prime \prime}$ birch cabinet of low resonance with rear-loaded passive radiator. $39 \times 16 \times 18$ in: 70 lb ea: walnut . \$7,400/pr
Rosewood finish.
\$8,000/pr

## M20 2-Way Powered Speaker

Ported speaker with two 5 " woofers. $2^{*}$ tweeter, power supply, 2 power amps in low-resonance cabinet: $0.75^{\prime \prime}$ A-quality birch plywood cabinet: allmetal stand with resonance damping available. FR $38-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max output $105 \mathrm{~dB}: 20 \times 15 \times 7$ in. Walnut or teak finish; with amps .... $\$ 2,750 / \mathrm{pr}$ Rosewood finish: with amps.
\$3,000/pr

## M30 2-Way Powered Speaker

Compact Inter-Active speaker with $5^{\prime \prime}$ woofer, $1.25^{\circ}$ tweeter; time-delay correction: power supply; power amps. FR $38-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max output 100 dB free-standing, up to 103 dB on shelf: $14.5 \times 12 \times 7 \mathrm{in}$. Walnut, teak, or black ash finish: with amps . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$1,950/pr

## MIRAGE ACOUSTICS

All speakers are ported; nominal imp 6 ohms ( $\min 4$ ): black knit grilles: dome tweeters with crossover point of $2,200 \mathrm{~Hz}$.

## M1 Fleor-Standing Speaker

$28^{\prime \prime}$ polypropylene woofers ( 1 front 1 rear) with $38-\mathrm{oz}$ magnets crossing over to $24^{*}$ cone midranges (1 front. I rear at $300 \mathrm{~Hz} ; 20.75^{\prime \prime}$ soft dome tweeters (1 front, I rear); black lacquer. FR $20-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : min power 100 W : max power 400 W ; sens 86 dB sPL/W/m; imp 6 ohms: 120 lbs : $60 \times 19.5 \times 9$. in. .
$\$ 4,000 / \mathrm{pr}$

## M2 Floor Standing Speaker

$10^{\prime \prime}$ polypropylene filled woofer crossing over at 500 Hz to $2 \mathbf{4}^{*}$ polypropylene cone midranges (1 front 1 rear) at 2200 Hz crossing over to $2-.75$ " soft dome tweeters ( 1 front 1 rear): black high-gloss polyester finish. FR26-2.200 Hz $\pm 2 \mathrm{~dB}$ : min power 75 W : $\max$ 200 W ; sens 87 dB SPL./W/m; imp 6 ohms; $52.5 \times 18 \times$ $80-\mathrm{in}: 160 \mathrm{lb}$
$\$ 3,000 / \mathrm{pr}$

## 760 2-Way Bass Reflex Speakers

$2-8^{\circ}$ carbon filled polypropylene mid/bass units with butyl surround crossing over at $2,200 \mathrm{~Hz}$ to a $1^{\prime \prime}$ ferrofluid cooled soft dome tweeter. FR $30-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~d}$; sens $89 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; power range $30-200 \mathrm{~W}$ : imp. 6 ohms: $37 \times 11 \times 14$ in; 62 lbs ea. $\$ 900 / \mathrm{pr}$

## 460 2-Way Speaker

$8^{\prime \prime}$ woofer: $1^{\prime \prime}$ dome iweeter; black vinyl. FR 35-20,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; sens 88 dB SPL/W/m; power range $15-120$ $\mathrm{W}: 25 \times 10 \times 11-\mathrm{in} ; 32 \mathrm{lb} \mathrm{ca}$. $\qquad$ \$500/pr

## 360 2-Way Speaker

$8^{\prime \prime}$ woofer: 0.75 tweeter; black vinyl. FR $45-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; sens 88 dB SPL/W/m; power range $15-100 \mathrm{~W}$ : $20 \times 10 \times 9$-in; 20 lb each.
\$375/pr

## 260 2-Way Speaker

$6.5^{\prime \prime}$ woofer; $0.75^{\prime \prime}$ tweeter; black vinyl. FR 50-20,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; sens $88 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; power range $15-70$ W: $15 \times 9 \times 9-\mathrm{in} ; 14 \mathrm{lb}$ ea.
\$250/pr

## MISSION ELECTRONICS

Argonaut Floor-Standing Speaker
2-way speaker with time-aligned drivers and trans-verse-folded cabinet. Optimum placement near rear wall; 2 reinforced homopolymer $8^{\prime \prime}$ cone woofers; $1^{\prime \prime}$ super-elipse cavity-loaded tweeter; spikes. FR 35$20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range $50-200 \mathrm{~W}$ : sens 94.5 dB SPL/W/m; imp 4 ohms; walnut, gray, black; 50 lbs: $11 \times 38 \times 12 \mathrm{in}$.
\$1.799/pr

## Freedom 2-Way Speaker

Time-aligned drivers; integral locking stand; trans-verse-folded cabinet with visco-elastic dampings:
optimum placement near rear wall: $8^{\circ}$ reinforced homopolymer cone woofer; I" super-ellipse cavityloaded iweeter. FR $40-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 20 W : max power 150 W ; sens $92 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms; black, grey. walnut: 28 pounds: $11 \times 24.5 \times 12$ inches
\$1.199/pr

## Renaissance Two-Way Speaker

Integral locking stands; transverse-folded cabinet with visco-elastically dampened walls; $8^{\prime \prime}$ polypropylene cone woofer: $0.75^{\prime \prime}$ polymer-dome tweeter with ferrofluid; crossover frequency $2,400 \mathrm{~Hz}$. FR $40-$ $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; nominal imp 8 ohms; power range $20-125 \mathrm{~W} / \mathrm{ch}$; sens 90 dB SPL/W/m; $10 \times 21.6 \times 11 \mathrm{in}$; $23 \mathrm{lbs} / \mathrm{ea}$ : black/walnut
\$699/pr

## 707 Bass-Reflex Speraker

2-way speaker with limestone/polypropylene front baffle board; steel-reinforced $8^{\prime \prime}$ paper woofer: $0.75^{\prime \prime}$ ferrofluid dome tweeter. FR $50-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 20 W , max power 100 W : sens 92 dB SPL/W/m; imp 8 ohms; black and walnut: 17.7 lb ; 10 $\times 19 \times 11$ in.
\$499/pr
700 Leading Fidge Acoustic-Suspension Speaker $7^{\prime \prime}$ high rigidity plastiflex cone woofer and $0.75^{\prime \prime}$ ferrofluid cooled dome tweeter: injection-molded polypropylene and limestone baffle board. FR $50-$ $20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 15 W rms; max power 100 W rms; sens 90 dB SPL/W/m; imp 6 ohms; black. walnut.
\$349/pr

## MITSUBISHI

M-S5100 Home Theater Speaker System
$12^{\prime \prime}$ three-way floorstanding speaker features $12^{\prime \prime}$ high-polymer laminate woofer; $5^{\prime \prime}$ high-polymer laminate midrange; I" pure titanium dome tweeter; fR $35-27,000 \mathrm{~Hz} \pm 6 \mathrm{~dB}$; 150 W continuous 600 W peak power handling.
\$1.100/pr

## M\&K

## MX-1000 Pedestal Subwoofer

Magnetic shunt powered pedestal subwoofer. Internally amplified acoustic-suspension subwoofer: 2-12" high-performance drivers; magnetic design and pedestal shape allow use as stand for large monitor televisions; $26 \times 28 \times 22 \mathrm{in}$; 115 lb
$\$ 1.395$

## Satellite IB 2-Way Speaker

Acoustic-suspension speajer with 2-5" polypropylene woofers and $2-1^{\prime \prime}$ soft-dome tweeters. Features 36 tonal balances through midrange; tweeter character switches. Walnut or oak finish with black grille. FR $70-22,000 \mathrm{~Hz}+3 \mathrm{~dB}$; power range $7.5-400 \mathrm{~W}$; imp 4 ohms. $21 \times 7.75 \times 7.62 \mathrm{in} ; 19 \mathrm{lb}$
\$725/pr

## Satellite 2B 2-Way Speaker

Acoustic-suspension speaker with $6.5^{\prime \prime}$ polypropylene woofer and $l^{\prime \prime}$ soft-dome tweeter. Features selector for 36 tonal balances; midrange, treble character switches. Walnut or oak finish with black grille. FR $65-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $15-100$ W. $10.5 \times 6.5 \times 7 \mathrm{in}: 9 \mathrm{lb}$.
$\$ 550 / \mathrm{pr}$

## SX-4 2-Way Satellite Speaker

Acoustic-suspension speaker with 2-5" woofers and 2-1" soft-dome tweeters. Features selector for 4 tonal balances via multiple inputs. Black vinyl finish. FR $70-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$
\$495/pr

## Satellite 3B 2-W ay Speaker

Acoustic-suspension speaker with $5^{\prime \prime}$ polypropylene woofer and I" soft-dome tweeter. Features selector for 4 tonal balances via multiple inputs. Black finish with black grilles. FR $100-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $15-100 \mathrm{~W}$. $10.5 \times 7 \times 6.5 \mathrm{in} ; 9 \mathrm{lb} \ldots . . \$ 395 / \mathrm{pr}$ Walnut veneer with balck grilies........ . $\$ 450 /$ pr

SX-7 2-Way Satellite Speaker
Bookshelf acoustic-suspension speaker with circuitbreaker protection. Features cast-aluminum box with
perforated metal grille: $4^{\prime \prime}$ paper-cone midrange: $0.75^{\prime \prime}$ sofi-dome iweeter. FR $100-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $5-100 \mathrm{~W}$; sens $87 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohms. Black finish. $4.5 \times 7.36 \times 4.5 \mathrm{in} ; 6 \mathrm{lb} \$ 240 / \mathrm{pr}$

## Subwoofers

## ViB Subwoofer

Internally amplified subwoofer with $12^{\prime \prime}$ polypropylene driver. Features preamp, power amp inputs: active filtering at 24 dB /octave with adjustable rolloff point. Walnut or oak finish with black grille. FR $18-125 \mathrm{~Hz} \pm 3$ decibels. $18.75 \times 17.75 \times 15.75$ inches; 50 pounds. $\$ 850$ ea
V2B. Similar to model VIB except less powerful. 43 pounds
$\$ 695$ ea
V3B. Similar to V2B except less powerful and black painted enclosure. $17.5 \times 17.5 \times 14.5 \mathrm{in} ; 43 \mathrm{lb} \$ 595$ ea

## VX-4 Subwoofer

Internally amplified subwoofer with $12^{\prime \prime}$ driver and $50-\mathrm{W}$ continuous power output. Features adjustable low-pass filter. Black vinyl finish. FR $40-125 \pm 3$ dB $\$ 440$ ea

## VX-7 Subwoofer

Acoustic-suspention subwoofer with specially designed $50-\mathrm{W}$ amp and $8^{\prime \prime}$ paper-cone woofer. FR $50-80$ $\mathrm{Hz} \pm 3 \mathrm{~dB}$; max power 50 W internally amplified. Black finish. $10 \times 11.75 \times 9.5 \mathrm{in} ; 25 \mathrm{lb} \ldots . \$ 360 \mathrm{ea}$

## Accessories

## I.P-IS Passive Electronic High-Pass Filter

Line-level electronic high-pass filter for biamping with M\&K subwoofers. Available in $8.5^{\prime \prime}$ front panel or $19^{\prime \prime}$ rack mount. 100 Hz crossover point at 18 dB/octave. With bypass switch . . . . . . . . . . . . . $\$ 325$ Without bypass switch.
$\$ 300$

## RC-1 Satellite/Subwoofer Remote Control

Allows adjustment of all available tonal characteristics remotely. Features midrange. treble character switches: $100-\mathrm{Hz}$ filter or full-range satellite operation; satellite/subwoofer phase correction; subwoofer level conirol. $8.75 \times 7.88 \times 2.75 \mathrm{in} ; 3 \mathrm{lb}$
$\$ 185$

## Satellite Speaker Stand

Stand for M\&K satellite speakers. Allows for permanent attachment of satellite to stand. Walnut/oak veneers, black finishes.
\$9 $5 / \mathrm{pr}$

## $\checkmark$ Filter

Plug-in high-pass filter for biamping with M\&K subwoofers. 100 Hz crossover at 6 dB /octave. 3 versions to match amplifier input impedance $\$ 50 / \mathrm{pr}$

## MONITOR AUDIO BY KEVRO

## R952/MD Reference Monitor

Floor-standing, sealed enclosure speakers. Feature I" aluminum-dome tweeter: $2-6^{\prime \prime}$ polypropylene woofers; FR $45-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 8 ohm; sens 89 $\mathrm{dB} / \mathrm{W} / \mathrm{m}$; amp pcwer 15-180 W; crossover $6 \mathrm{~dB} / \mathrm{oc}$ tave slope; foam lined cabinets; $13.5 \times 9 \times 12.5 \mathrm{in} ; 88$ lb: kenya black, oak, walnut, or black ash finish
\$1.549/pr

## R852/MD Speaker

Closed box speakers feature 1" aluminum dome tweeter: $8^{\prime \prime}$ polypropylene woofer: FR $50-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; imp 8 ohm; sens $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; amp power 15 120 W ; foam lined cabinets; $17.75 \times 10 \times 1 \mathrm{lin} ; 44 \mathrm{lb}$; kenya black, oak, walnut or black ash finish\$1,149/pr

## R452/MD Loudspeaker

Tuned port speakers feature $\mathrm{I}^{\prime \prime}$ aluminum dome tweeter: $8^{\prime \prime}$ doped paper woofer: FR $50-20,000 \mathrm{~Hz} \pm 3$ dB : imp 8 ohm ; sens $91 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : amp power $15-150$ W: heavy cabinets with 18 mm thick panel construction; inside of cabinets is veneered; $25.25 \times 10 \times 12.5$ inches; 66 pounds; available in walnut, black ash, or oak finish
\$1.099/pr


Monitor Audio R952/MD

## R652/MD Loudspeaker

Reflex speakers feature I" aluminium dome tweeter: $6^{\prime \prime}$ polypropylene woofer: FR $50-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; $\operatorname{imp} 8 \mathrm{ohm}$; sens $89 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; amp power $20-120 \mathrm{~W}$; $20.25 \times 7.75 \times 10.5 \mathrm{in} ; 44 \mathrm{lb}$; walnut, oak, black ash finish.
\$989/pr

## R352/MD Loudspeaker

Reflex speakers feature $.75^{\prime \prime}$ metal-dome tweeter; $8^{\prime \prime}$ woofer: FR $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 8 ohm; sens 91 $\mathrm{dB} / \mathrm{W} / \mathrm{m}$; amp power $15-120 \mathrm{~W}$; foam lined cabinet: $25.25 \times 10 \times 12.5 \mathrm{in}$ : 57 lb ; walnut, oak, black ash finish.
\$899/pr

## R700/MD zoudspeaker

Reflex speakers feature 1" aluminum dome tweeter: $6^{\prime \prime}$ polypropylene woofer; FR $55-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 8 ohm sens $89 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : amp power $20-100 \mathrm{~W}$ : $13.75 \times 8.5 \times 10 \mathrm{in}$; 42 lb ; walnut, oak or black ash finish.
\$689/pr

## R300/MD Ioudspeaker

Sealed box speakers feature $75^{* \prime}$ metal-dome tweeter: $8^{\prime \prime}$ doped woofer: FR $50-20.000 \mathrm{~Hz} \pm 3 . \mathrm{dB}$; imp 8 ohm; sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; amp power $15-100 \mathrm{~W}$; cabinets vencered inside/outside; $18.5 \times 10.12 .5 \mathrm{in}$; 44 lb ; walnut, black ash, or oak finish .... \$669/pr

## R252 Speaker

Sealed enclosure speakers feature 1 " soft-dome tweeter: $8^{\prime \prime}$ wooker: FR $55-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 8 ohm; sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; amp power $15-80 \mathrm{~W}$; $18.5 \times 10 \times 9.5$ in; 31 lb ; black ash or walnut finish ...... \$429/pr

## R100 Speaker

Sealed enclosure speakers feature 1 " soft-dome tweeter; $8^{8}$ wooter; FR $60-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 8 ohm: sens $89 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; amp power $15-60 \mathrm{~W} ; 15.75 \times 10 \times 7$ $\mathrm{in} ; 25 \mathrm{lb}, 5 \mathrm{oz}$. Available in black ash or walnut finish.
\$319/pr

## Speaker Stands

MA-30. Fits R100, R252, R300/MD. R700/MD. R852/MD speakers. In black ash, walnut, oak, or Kenya black
\$189/pr
In Rosewood, mahogany, or teak . . . . . . . . \$269/pr
MA-40. Fits R352/MD and R452/MD In black ash. walnut, oak, or Kenya black.

S189/pr
In Rosewood, mahogany, or teak . . . . . . . . \$269/pr
MA-50. Firs the R652/MD. In black ash, walnut, oak, or Kenya black . . . . . . . . . . . . . . . . . . . . . . \$189/pr In Rosewood, mahogany, or teak . . . . . . . \$269/pr

## SPEAKERS

## MOREL ACOUSTICS

## Duet 2 Way Double Magnet Speaker

New MDT-33 iweeter, 28 mm soft dome design with double-magnet structure, Hexatech technique winding (aluminum wire, wound hexagonally) and ferrofluid cooled. MW-164 6" double magnet woofer also using the Hexatech voic coil. FR $40-22,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; power handling 150 W rms; $8 \times 15 \times 12 \mathrm{in} ; 20$ lb.
\$995/pr

## MLP-403-II 3-Way Speaker

Ported floor-standing speaker with "Variovent." 9" free-edge paper-cone woofer: $3^{\prime \prime}$ dome midrange: 1.1 " dome tweeter. FR $38-25,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 10 W , max power 125 W rms; sens 88 dB SPI/W/m; imp $4-8$ ohms: finished in walnut. teak. or black: $21 \times 12 \times$ 10 in; 26 lb . . . . . . . . . . . . . . . . . . . . . . . . . . \$750/pr

## MPL.-203 2-Way Speaker

2-way linear-phase speaker with sealed cabinet. FR $45-28.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power handling $150 \mathrm{~W}: 6^{\prime \prime} \mathrm{MW}$ 164, double magnet, $3^{\prime \prime}$ voice coil woofer; 1.1" ferrofluid-cooled soft-dome MDT- 30 tweeter; $8 \times 16$ x $9.5 \mathrm{in} ; 18 \mathrm{lb}$ : walnut, red walnut, teak, or black finish.
$\$ 695$

## MPL-307 2-Way Speaker

2-way speaker with Variovent Two 9" woofers: 1.1" dome tweeter; power handling 200 W ; FR 33-25,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}: 13 \times 23 \times 12 \mathrm{in} ; 32 \mathrm{lb}$; walnut vencer finish.
$\$ 540$

## MLP-202 II Bookshelf Speaker

Acoustic-suspension linear-phase speaker. FR $60-$ $28.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : min power 10 W . max power 150 W rms; sens 89 dB sPL/W/m; imp $4-6$ ohms; in walnut. teak. or black: $8 \times 13 \times 10 \mathrm{in} \ldots . . \$ 445 / \mathrm{pr}$

## CR-7 2-Way Speaker

Acoustic-suspension bookshelf speaker with an asymmetrical cabinet design to eliminate internal standing waves and improve dispersion and flatness of frequency response. Features $6^{\prime \prime}$ treated paper-cone woofer with metal grille; $1^{*}$ soft-dome tweeter with metal grille. Available in mirtored pairs. Black finish. FR $70-25.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 20 W rms; $\max$ power 200 W rms; sens $90 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp $4-8$ ohms. $11 \times 7.5 \times 4.75 \times 7 \mathrm{in}$ : $10 \mathrm{lb} \mathrm{ca} \ldots . . \$ 395 / \mathrm{pr}$

## MLP-201 2-Way Speaker

Acoustic-suspension bookshelf speaker with $9^{*}$ frecedge paper-cone woofer, L.I" dome tweeter. FR 48$20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $10-100 \mathrm{~W}$ rms: sens 89 dB SPL/W/m; imp 8 ohms; walnut finish; $10 \times 16 \times$ 10 in . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$285/pr

## Speaker Accessories

SDT-2 Floor Stands
$20^{*}$ black metal stand, can be filled with sand or lead shot.

B-7 Mounting Bracket
Mounting bracket for CR-7 . . . . . . . . . . . . . . . . $\$ 40$
ST-2 Floor Stands
4* black wooden stands

## MTX by MITEK

## ZSE-380 Loudspeaker

Loudspeaker features enclosureless bass transducer module: diffractionless treble transducer module: synchronous time and coincident axial alignment: laterally symmetric transducer mounting; high compression input connectors; discrete module cabling: with ZSE Controller which provides active signal processing for the system: FR $35-25.000 \mathrm{~Hz}: 250 \mathrm{~W}$ pulse power handling: imp 8 ohms; sens $91 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; 380 mm Woofer: 35 mm tweeter, dark brown polyester grille with solid hardwood inserts; $34 \times 17.5$ $\times 27.5 \mathrm{in} ; 45 \mathrm{lb}$

Pro 215 Floor-Standing Speaker
Bass-reflex speaker with computer-aided Thicle/ Small-aligned cabinet. Features 2-15" cone woofers; 2-5" PL-5 cone midranges: 3" horn-loaded tweeter. FR $50-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $5-400 \mathrm{~W}$ rms: sens $102.2 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohms; heavy-duty aviation carpet: 125 lb : $18.5 \times 46.5 \times 16$ in $\$ 800$ ea

## Pro 115 Floor-Standing Speaker

Bass-reflex speaker with computer-aided Thicle/ Small-aligned cabinet. Features $15^{\prime \prime}$ cone woofer. 2-5" PL- 5 cone midranges; $3^{\prime \prime}$ horn-loaded tweeter. FR 60 $21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $5-200 \mathrm{~W}$ rms; sens $99.6 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}: \mathrm{imp} 4$ ohms; heavy-duty aviation carpet; $77 \mathrm{lb} ; 21.25 \times 29.75 \times 16 \mathrm{in} \ldots . . . . \$ 700$ ea

## Pro 210 Floor-Standing Speaker

Bass-reflex speaker with computer-aided Thiele/ Small aligned cabinet. Features 2-10" cone woofers: 2-5" PL-5 cone midranges: 3" horn-loaded tweeter. FR $70-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $5-300 \mathrm{~W}$ rms; sens 101.6 dB SPL/W/m: imp 4 ohms: heavy-duty aviation carpet; 67 lb ; $23.5 \times 18.25 \times 12.5$ in $\$ 500$ ea

Pro 110 Bass-Reflex Monitor Speaker
Thiele/Small alignment; $10^{\circ}$ cone woofer; $4.5^{\circ}$ cone midrange; 1" horn-loaded dome tweeter: covered with heavy-duty aviation carpet. FR $75-21,000 \mathrm{~Hz}$ : power range 5.100 W rms; sens $94.8 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; $\mathrm{imp} 4 / 8$ ohms; $14 \times 18.5 \times 12.75 \mathrm{in} ; 42 \mathrm{lb} . \$ 400 \mathrm{ea}$

## TA-2 I oudspeaker

Dual iweeter array system. Features FR 5,000-17,000 Hz : sens $98 \mathrm{~dB} / \mathrm{W} / \mathrm{m}: 7 \times 12 \times 7 \mathrm{in} ; 27 \mathrm{lb} . \$ 300 \mathrm{ca}$

## MUSIC ANDSOUNDIMPORTS

## Mas 925 III 3-Way Speaker

Floor-standing speaker with $10^{\prime \prime}$ polypropylene-cone passive radiator: $8^{\prime \prime}$ poly-cone woofer: $1.75^{\prime \prime}$ textiledome tweeter: $0.75^{\circ}$ textile-dome tweeter. FR 30$18.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $25-150 \mathrm{~W}$ : sens 91 dB spl/W/m; imp 8 ohms; natural oak, dark oak veneer finishes; $39 \mathrm{lb} ; 23.5 \times 11.88 \times 11.88 \mathrm{in} . . . . \$ 699 / \mathrm{pr}$

## NAD

300A 3-Way Speaker
Internally braced acoustic-suspension tower speaker with $10^{\prime \prime}$ long-throw woofer with butyl surround, 1.5* midrange. I" soft-dome iweeter. Large magnets for powerful bass and no overhang. Power range $10-150$ W/ch; nominal imp 4 ohms; crossovers at 900 and $3,000 \mathrm{~Hz}$ : resonance 45 Hz ; sens 90 dB spl/W/m. $10.75 \times 11.5 \times 31.5 \mathrm{in} ; 57 \mathrm{lb} \ldots . . . . .$. 200A. Similar to above except no midrange driver and $8^{\circ}$ woofer. Crossover at 1,700 . Power range $10-$ $120 \mathrm{~W} / \mathrm{ch} .39 \mathrm{lb} . .$. . . . . . . . . . . . . . . . . . . . $\$ 500 / \mathrm{pr}$

## NADYSYSTEMS

WTS-1 Speaker
Portable self-powered speaker with 15 W cordless amplifier. Features 2 channel FMi receiver: mierophone: miniature body pack stereo transmitter. Speaker houses $6.5^{\prime \prime}$ woofer; $1.5^{\prime \prime}$ cone tweeter. $8.5 \times$ $12.75 \times 7.31 \mathrm{in}$
$\$ 200 / \mathrm{sys}$

## NEC

RS-1000 3-Way Speaker
Floor-standing 3-way speaker. Features FR 40-20,000 Hz at +4 dB ; sens $92 \mathrm{~dB} ; 130 \mathrm{~W}$ max power handling: nominal impedance 8 ohms; one $\psi_{4}$-inch dome tweeter: one 5-inch polypropylenc midrange: two 10 inch polypropylene woofers. $37 \times 12.25 \times 13.5 \mathrm{in} ; 46$ lb.
\$800/pr

## SW-400 Powered Subwoofer/Full-Range System

Magnetically-shielded peaker system with powered subwoofer and full-range speaker system. Features bass-reflex, $12^{\prime \prime}$ subwoofer with built-in 60-W power amp; low-pass filter: $4^{\prime \prime}$ full-range speaker: 3-level
turnover switch; fronl-channel variable output control.
$\$ 599$ ca

## RS-500 3-Way Speaker

Floor-standing acoustic-suspension magneticallyshielded speaker with mirror-image design. Features 12" cone woofer: $5^{\prime \prime}$ polyvinyl acetate-cone midrange: I" soft-dome tweeter. FR $40-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $15-130 \mathrm{~W}$ rms; sens $92 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ : imp 8 ohms. Teton oak finish. $14 \times 27 \times 10.75$ in $\$ 499 / \mathrm{pr}$

## SW-300BU Subwoofer

Magnetically-shielded bass-reflex subwoofer with 12* cone woofer. built-in 60 W amplifier. and 3 selectable turnover frequencies $(70,100,150 \mathrm{~Hz}$ ). FR $20-150 \mathrm{~Hz}$ $20-100 \mathrm{~Hz}$. or $20-70 \mathrm{~Hz}$ depending on selected turnover frequency. $18 \times 20.7 \times 15.3 \mathrm{in}$ : $32 \mathrm{lb} \$ 299 \mathrm{ca}$

AVS-300E 2-Way Surround Sound Speaker
Compact acoustic-suspension speaker designed for rear-channel reproduction of surround sound. Features $5.5^{\prime \prime}$ cone woofer: $1^{\prime \prime}$ polymer-dome tweeter. Power range $5-60 \mathrm{~W}$; nominal imp 8 ohms; sens 89 dB SPL/W/m; FR $60-20,000 \mathrm{~Hz} .9 .75 \times 6.5 \times 5.6$ in. .
\$199/pr

## NOVAK LOUDSPEAKER

## Model 2 Viented 2-Way Speaker

$6.5^{\prime \prime}$ plastic cone woofer vertically aligned with ferrofluid-damped dome tweeter: 4th-order Butterworth woofer loading: I st-order crossover with mylar capacitors; min-diffraction baffle; nonallergenic antistatic black foam grille; external fuses. FR 44-24.000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; sens 91 dB sPL/W/m; power range $5-60$ W: $11.25 \times 20.4 \times 10.9$ : shipping weight 26 lb . Black formica
$\$ 330 / \mathrm{pr}$
Walnut or oak
\$300/pr

## OHM ACOUSTICS

Walsh 5 Vented Speaker
Features Walsh driver; 3 controls for lows, perspective (midrange), and highs, each with 3 positions: gold-plated 5 -way binding posts; gold internal connectors; Monster Cable internal wiring; veneered top edge of cabinet. FR $\mathbf{2 5 - 2 5 . 0 0 0 ~ H z ~} \pm 4 \mathrm{~dB}$ : min power 50 W rms; max power 500 W rms; imp 4 ohms; 1,000W headroom rating for CDs. A vailable in walnut, oak and rosewood finishes or teak/white/black lacquer $95 \mathrm{lbs}: 17.5^{\prime \prime} \times 17.5^{\prime \prime}$ at bottom tapering to $1^{\prime \prime} \times 15^{\prime \prime}$ at top; $43^{\prime \prime}$ tall. Limited edition run of only 500 sets worldwide, each signed and numbered. . . $\$ 5.800 / \mathrm{pr}$

## 4XO Floor-Standing Speaker

Bass-reflex speaker features inverted conical surface driver; gold-plated 5 -way binding posts; gold internal connectors: lead-lined cabinet; Monster Cable internal wiring; casters; tufflex transmission block: ferrofluid cooled: protection circuits: acoustical attenuator for controlled dispersion; sonically transparent circular metal grill. Standard finish walnut and oak available in Scandinavian rosewood, black, or white lacquer. FR $32-23,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; sens 91 dB $\mathrm{SPL} / \mathrm{m} / 2.83 \mathrm{~V}$ : power range $30-500 \mathrm{~W}$ : peak handling 700 W : imp $8 \mathrm{ohms} .40^{\circ} \mathrm{h} \times 15.5^{\prime \prime} \times 15.5^{\circ}$ at base tapering to $11.75^{\prime \prime} \times 11.75^{\prime \prime}$ at top; $63 \mathrm{lb} . . \$ 2,000 / \mathrm{pr}$

## 3XO Floor-Standing Speaker

Bass-reflex speaker features inverted conical surface driver: press-connector inputs accept banana plugs or up to 12 gauge wire; lead-lined eabinet; casters; tufflex transmission block: ferrofluid cooled: protection circuits; acoustical attenuator; circular metal grill. Standard finish walnut and oak. available in Scandinavian rosewood, black, or white lacquer. FR 36$22.000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$ : sens $90.6 \mathrm{~dB} \mathbf{~ S P L} / \mathrm{m} / 2.83 \mathrm{~V}$ : power range $18-200 \mathrm{~W}$ : peak handling 300 W : imp 8 ohms. $36 \times 13.5 \times 13.5 \mathrm{in}$. at base tapering to $10.5 \times 10.5 \mathrm{in}$. at top; 43 lb .
$\$ 1,500 / \mathrm{pr}$

## 2XO Floor-Standing Speaker

Bass-reflex speaker features inverted conical surface
driver; press-connector inputs accept banana plugs or up to 12 gauge wire: sub-bass activator: tuflex transmission block; ferrofluid cooled; protection circuits; acoustical attenuator; circular metal grill. Standard finish walnut and oak, available in Scandinavian rosewood, black, or white lacquer. fr 44$21.000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$ : sens 90.2 dB SPL/m/2.83 V: power range $15-120 \mathrm{~W}$; peak handling 200 W ; imp 8 ohms. $32.5 \times 11.5 \times 11.5 \mathrm{in}$. at base tapering to $9.25 \times 9.25 \mathrm{in}$. at top: 29 lb
. $\$ 1.000 / \mathrm{pr}$

## IXO Floor-Standing Speake

Bass-reflex speaker features inverted conical surface driver: press-connector inputs accept banana plugs or up to 12 gauge wire: tufflex transmission block: ferrolluid cooled; protection circuits; acoustical attenuator: circular metal grill. Walnut finish. FR 48 $20,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; sens $90 \mathrm{~dB} \mathrm{sll} / \mathrm{m} / 2.83 \mathrm{~V}$; power range $10-90 \mathrm{~W}$ : peak handling 150 W ; imp 8 ohms. $32.5 \times 11.5 \times 11.5 \mathrm{in}$. al base tapering to $9.25 \times 9.25 \mathrm{in}$. al top; 24 lb
\$750/pr

## CAM 42 Speaker

Two-way bookshelf speaker. Features egg shaped. $75^{\circ}$ polycarbonate dome tweeter system; $8^{\prime \prime}$ polypropylene woofer; ferroluid-cooled iweeter with 50 mm magnet: 12" passive radiator and patented Sub Bass Activator: IR $39-20,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; power range is125 W : sens 90 dB ; imp 8 ohms: enclusure volume 42 I: $14.75 \times 11 \times 26.5 \mathrm{in}$; available in brushed bronze vinyl finish
$\$ 500 / \mathrm{pr}$

## CAM 32 Speaker

Two-way bookshelf speaker. Features egg shaped $.75^{\prime \prime}$ polycarbonate dome tweeter system; polyswitch circuit breakers: protection circuits: $6.5^{\circ}$ woofer; $10^{\circ}$ passive radiator; fR $39-20,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; power range $15-125 \mathrm{~W}$ : sens 90 dB ; imp 8 ohms; enclosure volume $32 \mathrm{I}: 12.75 \times 11 \times 22.25 \mathrm{in}$; brushed bronze vinyl finish
$\$ 400 / \mathrm{pr}$

## CAM 16 Speaker

Two-way vented speaker. Features egg shaped twecter system mounted on top of cabinet and adustable: bevelled cabinet: frameless grills; $6.5^{\prime \prime}$ woofer: fr 46 $20,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; power range $15-85 \mathrm{~W}$; sens 89 dB ; imp 8 ohms; enclosure volume $161 ; 9 \times 11 \times 17.25 \mathrm{in}$; brushed bronze vinyl finish.
\$300/pr

## PRO 250 Sound C'ylinder loudspeaker

Cylindrical speakers with black matador standard finish with optional real wood vencers of teak, oak. rosewood and walnut. Features lead lining; monster cable; FR $35-20,000 \mathrm{~Hz}$; power rating $10-250 \mathrm{~W}$; sens $91 \mathrm{~dB} ; \operatorname{imp} 8$ ohm; $45.5^{\circ} \mathrm{h} \times 11.5^{\prime \prime}$ diameter\$1,200/pr PRO 200. Similar to PRO 250 but FR $\mathbf{3 9 - 2 0 . 0 0 0 ~ H z ; ~}$ Power rating $10-750 \mathrm{~W}$; sens 91 dB : imp $8 \mathrm{ohm} ; 39^{\prime \prime} \mathrm{h}$ x $11.5^{\prime \prime}$ diameter.
\$950/pr
PRO 150. Similar to PRO 250 but FR $42-20,000 \mathrm{~Hz}$ : power rating $10-125 \mathrm{~W}$ : sens 91 dB ; imp 8 ohm; 34.5" $h \times 11.5^{\prime \prime}$ diameter
\$750/pr SC Tall, Similar to above sound cylinders. Power range 25-150 W: FR $40-20,000 \mathrm{~Hz} . . . . .$. . $\$ 750 / \mathrm{pr}$ SC Short. Similar to above sound cylinders. Power range 22-100 W: FR $44-20,000 \mathrm{~Hz} . . . .$. . . . \$600/pr

## ONKYO

S-70 4-Way Speaker
Bass-reflex speaker with $12^{\prime \prime}$ polypropylene-cone woofer with high-power voice coil. $5^{\prime \prime}$ PVA-treated ferrofluid-cooled midrange. 1" polycarbonate-dome ferrolluid-cooled tweeter, and 0.5" polycarbonatedome ferrolluid-cooled supertweeter. Features selfresetting auto overload protection. fR $55-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; power range $10-150 \mathrm{~W}$ rms; sens 93 dB sPL./W/m;imp 8 ohms. Nalural-oak-vencer finish. 16 $\times 40.75 \times 10.25 \mathrm{in}: 49 \mathrm{lb}$
$\$ 600 / \mathrm{pr}$

## S-60 4-Way Speaker

Floor-standing bass-reflex speaker with self-resetting overload protection. Features $15^{\prime \prime}$ subwoofer: 12" polypropylene-cone woofer: 5" pVa-treated ferro-
fluid-cooled cone midrange: I* polycarbonate-dome ferrofluid-cooled tweeter. I 50 W max power handling: FR $32-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 93 dB spL/W/m; imp 8 ohms. Oak vinyl finish. $16.5 \times 40 \times 10 \mathrm{in}$; 45 lb..
$\$ 400 / \mathrm{pr}$

## S-40 3-Way Speaker

Floor-standing bass-reflex speaker with self-resetting overload protection. Features 12" polypropylenecone woofer: PVi-treated ferrofluid-cooled cone midrange; 1" polycarbonate ferrofluid-cooled dome tweeter. FR $36-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $10-120$ W rms: sens 91 dB spl/W/m; imp 8 ohms. Oak vinyl finish. $14.5^{\circ} \mathrm{w} \times 36.75 \times 8.5 \mathrm{in} ; 37 \mathrm{lb} \ldots . . \$ 300 / \mathrm{pr}$

## HS-15 2-Way Speaker

Compact speaker with high-strength mesh grille. $6.25^{\prime \prime}$ cone woofer. $22.75^{\prime \prime}$ cone tweeters. Dark grey finish: mirror-image pairs; FR $55-20,000 \mathrm{~Hz}$; max power 45 W : imp 8 ohms. $8.12 \times 13.87 \times 9.62 \mathrm{in} ; 10$ lb.
\$250/pr

## OWI

## 2300-FX Weatherized Speakers

Wall-mount 2 -way weatherized flat-wave system. Imp 4 ohm: power capacity $30-60 \mathrm{~W}$; woofer approx 5 $x 5$ in. flat wave: strontium magnet; tweeter approx 1.5" Dyna-ribbon. Available in ivory or black; $9 \times 9 \mathrm{x}$ $1.5 \mathrm{in}: 2.6 \mathrm{lb} / \mathrm{ca}$.
$\$ 320 / \mathrm{pr}$
OWI-503 3-way Weatherized Ioudspeakers
High-fidelity loudspeakers. Feature 5.25" woofer: 2" I weeter: I" Iweeter; 10 oz magnet: $60-22.000 \mathrm{~Hz}$ : Imp 8 ohm; sens: $93 \mathrm{~dB} / \mathrm{W} / \mathrm{m} ; 6.75 \times 10 \times 6 \mathrm{in} ; 7.0 \mathrm{lb}$ each: aluminum diecast; black or cream
\$275/pr

## Thindy II Modet 2301 Ioudspeakers

Wall/ceiling. flush mount loudspeaker. Features 5.5" Honeycomb-Ring speaker; 8.5 oz strontium magnet: $65-20,000 \mathrm{~Hz}$; sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; imp 6 ohm: $9 \times 9 \times$ $1.75 \mathrm{in} ; 2.4 \mathrm{lb}$; black or ivory
\$250/pr

## DX. 9 Compact Powered Speaker

10-W/ch speakers with 4 surround sound selections (stereo, music/movie. delay) enclosed in die cast aluminum: THD (a. $10.5 \mathrm{~W} 1 \% ; 3 \mathrm{amp}$ fuse protection. Speaker section $4^{* \prime}$ full range: SPL $88 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : imp 3 ohm.
\$200/pr

## OWI-203 3-Way Weatherized Ioudspeakers

Mini-loudspeakers featuring 4" polypropylene woofer: 2" mylar tweeter: . $5^{\prime \prime}$ mylar tweeter; 10 oz strontium magnet: FR $90-22.000 \mathrm{~Hz}$; imp 8 ohm; sens $92 \mathrm{~dB} / \mathrm{W} / \mathrm{m} ; 7 \times 4.5 \times 4 \mathrm{in} ; 5.51 \mathrm{lb}$ : aluminum die-cast frame: finished in autumn grey, black or cream . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$159pr

OWI-202 2-Way Weatherized Loudspeakers
Mini-loudspeakers featuring 4" polypropylene woofer: $2^{\prime \prime}$ mylar tweeter: 10 oz strontium magnet: FR $90-$ $20.000 \mathrm{~Hz} ; \mathrm{imp} 8 \mathrm{ohm}$; sens $92 \mathrm{~dB} / \mathrm{W} / \mathrm{m}: 7 \times 4.5 \times 4$ in; 4.41 lb : aluminum diecast: autumn grey, black or cream
\$139/pr

## PARASOUND

Sub/Sat One System
System combines BPI-480 and the CPI440bi each finished in simulated black oak grain. Features wide response, high sens: fR $35-20,000 \mathrm{~Hz}=3 \mathrm{~dB}$ : imp 4 ohm: power range $10-100 \mathrm{~W}$; sens $89 \mathrm{~dB} / \mathrm{W} / \mathrm{m}: 2-8^{*}$ subwoofers: $2.4^{\prime \prime}$ mid/bass: $2-1^{\prime \prime}$ dome tweeters with acoustic blankets; subwoofer $18 \times 14.75 \times 11.5 \mathrm{in}$; satellites $6 \times 9 \times 6.5$ in
. $\$ 465$

## Sub/Sat Two System

System combines Sub-450 and the Sat-350 to form a compact system. Features wide response; high sens: FR $40-19,500 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 4 ohm; power range $10-$ 75 W: 2-5.25" subwoofers; 2-4" mid/bass; 2-1.5" tweeters: subwoofer $13.25 \times 8 \times 7.25$ in: satellite $4.88 \times$ $8 \times 4.5 \mathrm{in}$.
$\$ 335$

AMW-380 Ill Weather Monitor
Diecast enchosure system with weatherproofed parts. Fealures carbon fiber reinforced PP woofer cones: 12 dB/oct. crossover: ferrofluid damped dome tweeter mounting brackets; fr $48-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 4 ohm: power range $15-80 \mathrm{~W}$ : sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}: 6.5 \times 9$ $\times 6.5$ in
\$325/pr

## AW-S. 390 All-Weather Speaker

Diecast enclosure system. Features carbon fiber reinforced PP woofer cones; $12 \mathrm{~dB} /$ oct. crossover ferrofluid damped dome tweeters; mounting brackets: fR $44-130.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : imp 4 ohm ; power range $15-100 \mathrm{~W}$; sens $90 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; 2-5.25 subwoofers: $6.5 \times 9 \times 6.5 \mathrm{in}$.
\$325/pr

## AWs 280 All-Weather Speaker

Ported bookshelf speaker designed to function outdoors yeat-round. $6^{\prime \prime}$ polypropylene cone woofer. labyrinth hass loading. I. $5^{\prime \prime}$ poly cone iweeter. Highdensity particle-board beige enclosure with molded outer shell and mounting hooks. $\operatorname{PR} 65-20,000 \mathrm{~Hz} \pm 4$ dB ; power range $10-60 \mathrm{~W}$ : sens 88 dB sPL/W/m; imp 8 ohms. $10 \times 14.5 \times 9.5 \mathrm{in} ; 11 \mathrm{lb}$.
\$255/pr

## CPI-440bi Compact Perfect Image Speaker

2-way speaker with $4^{\prime \prime}$ high-compliance carbon-fiberreinforced polypropylene cone woofer and 1" ferro-fluid-damped soft-dome tweeter with acoustic blankct. Nondiffraction cabinet: Ist-order network with polypropylene capacitor; 4th-order vented design. Simulated black oak finish. FR $70-22,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$ THD at $92 \mathrm{~dB}-1 \%$; imp 4 ohms; sens 88 dB SP1./W/m: sustained power handling 55 W rms; max power $15 t \mathrm{~W}$ rms; time aligned within $0.05 \mu \mathrm{~s} .9 \times$ $5.88 \times 6.5 \mathrm{in}$
\$210/pr

## PHASE TECHNOLOGY

## Phase Coherent Series

## PC-1000 4-Way Speaker

Floor-standing phase-coherent passive-radiator spcaker. Features met-polypropylene bypass capacitors; $10^{\text {" }}$ solid-piston RPF radiator; $8^{\prime \prime}$ solid-piston RPF woofer: $5.2^{\circ}$ solid-piston RPF midrange: $1^{\circ}$ soft-dome tweeter: accepts banana plugs. FR 25 $20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range $25-200$ wrms: sens 91 dB SPL/W'm: imp 4 ohms: walnut and dark oak: 15.5 $\times 38.25 \times 8.5 \mathrm{in}: 70 \mathrm{lb}$
. $\$ 1.300 / \mathrm{pr}$

## PC-800Ho 3-Way Speaker

Floor-standing acoustic-suspension phase-coherent speaker with met-polypropylene bypass capacitors, $10^{\circ}$ flat solid-piston RPF woofer, $5.25^{\prime \prime}$ flat solidpiston RPF midrange. I" soft-dome tweeter. Features removable min-diffraction grille; genuine wood veneer: speaker protection. Accepts banana plugs. FR $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 20 W rms; $\max$ power $1: 0 \mathrm{~W}$ rms; sens 91 dB sPL/W/m; imp 4 ohms. Walnut or dark -oak veneer finishes. $14.5 \times 36.25 \times 8.5$ in; 57 lb .
\$990/pr

## PC-600Ho 2-Way Speaker

Floor-standing acoustic-suspension phase-coherent speaker with met-polypropylene bypass capacitors, $8^{\prime \prime}$ solid-piston RPF wooter. I" soft-dome iweeter. Features removable min-diffraction grille; genuine wood veneer: speaker protection. Accepts banana plugs. FR $35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 20 W rms : max power 125 W rms; sens $91 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohms. Walnut or dark-oak veneer finishes. $12 \times 31.25$ $\times 8 \mathrm{in} ; 42 \mathrm{lb}$.
\$620/pr

## PC-60 D-Way Speaker

Bookshelf phase-coherent acoustic-suspension speaker with met-polypropylene bypass capacitors;accepts banana plugs; solid hardwood and veneers: removable min-diffraction grille; speaker protection. $6^{6}$ solid-piston RPF woofer: $1^{\prime \prime}$ soft-dome tweeter. FR $55-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $15-100 \mathrm{~W}$; sens 87 dB SPL/W/m: imp 4 ohms; walnut, or oak finishes; $8 \times$ $13.5 \times 3$ in. . . . . . . . . . . . . . . . . . . . . . . . . $\$ 480 / \mathrm{pr}$

## PC-40 2-Way Speaker

Bookshelf phase-coherent acoustic-suspension speaker with met-polypropylene bypass capacitors: accepts banana plugs; genuine wood veneer, removable min-diffraction grille; speaker protection. $5.25^{\prime \prime}$ solid-piston RPF woofer; 1" soft-dome tweeter. FR $70-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $15-80 \mathrm{~W}$; sens 89 dB spl/W/m; imp 4 ohms; walnut, stained-oak, lightoak finish; $6.5 \times 9.75 \times 5.25 \mathrm{in} ; 10 \mathrm{lb} \ldots . . \$ 380 / \mathrm{pr}$

## Euro Series

## 745 ES 3-Way Speaker

Floor-standing acoustic-suspension speaker with angled projected front bafle for minimum diffraction. Features $8^{\prime \prime}$ cone woofer; $6.5^{\circ}$ cone midrange; $1^{\prime \prime}$ softdome tweeter; removable min-diffraction grille; rubber surround on woofer and midrange. Accepts banana plugs. $\mathrm{FR} 35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 15 W rms; max power 120 W rms; sensitivity 93 dB $\mathrm{SPL} / \mathrm{W} / \mathrm{m}$; impedance 4 ohms. $10 \times 35.25 \times 11.75$ inches; 42 pounds.
\$550/pr

## 535 ES 3-Way Speaker

Floor-standing acoustic-suspension speaker with angled projected front bafle for minimum diffraction. Features $6.5^{\prime \prime}$ cone woofer; $6.5^{\circ}$ cone midrange; $1^{\prime \prime}$ soft-dome tweeter; removable min-diffraction grille; rubber surround on woofer and midrange. Accepts banana plugs. FR $40-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 15 W rms; max power 100 W rms ; sens 92 dB spl/W/m: imp 4 ohms. Walnut or black-ash vinyl finish. $8.5 \times$ $33.12 \times 10.25 \mathrm{in} ; 32 \mathrm{lb}$
\$450/pr

## 325 ES 2-Way Speaker

Bookshelf acoustic-suspension speaker with angled projected front baffle for minimum diffraction. Features 6.5" cone woofer; $0.5^{\prime \prime}$ dome tweeter; removable min-diffraction grille; rubber surround on woofer. Accepts banana plugs. FR $55-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 15 W rms; max power 80 W rms; sens 92 dB sPL/W/m; imp 4 ohms . Walnut or black-ash vinyl finish. $8 \times 17.25 \times 8.75 \mathrm{in} ; 17 \mathrm{lb}$
\$240/pr

## Subwoofer/Satellite Systems

## PC-60/50 Subwoofer/Satellite Set

3-piece acoustic-suspension subwoofer system with down-firing floor-loaded woofer and 2 -way compact phase-coherent satellites. Features met-polypropylene bypass capacitors; feet extenders for heavy carpet; iweeter level control; accepts banana plugs; solid hardwood and veneers; removable minimumdiffraction grille; speaker protection. $10^{\prime \prime}$ solid-piston subwoofer, $6^{\circ}$ solid-piston midrange, $1^{\prime \prime}$ soft-dome tweeter. FR $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $25-200$ W; sens $87 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms ; walnut, stained oak, light oak finish; satellites $8 \times 13.5 \times 8 \mathrm{in}$; subwoofer $13 \times 14 \times 15 \mathrm{in} ; 60 \mathrm{lb}$.
$\$ 830 /$ set

## Subwoofers

## PC-50 Subwoofer

Down-firing floor-loaded acoustic-supension subwoofer with met-polypropylene bypass capacitors: internal passive crossover for use with satellite speakers; feet extenders for heavy carpeting: genuine wood veneer. $10^{\prime \prime}$ solid-piston RPF woofer. FR 30-1 50 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; power range $25-200 \mathrm{~W}$; sens 87 dB SPL/W/m; imp 8 ohms; walnut, light oak, stained oak finish; $13 \times 14 \times 15 \mathrm{in} ; 33 \mathrm{lb}$
\$350 ea

## PINNACLE

## Monitor 200 3-Way Speaker

Bookshelf acoustic-suspension speaker. Features 12" polypropylene woofer; $4.5^{\prime \prime}$ polypropylene midrange; $0.75^{\prime \prime}$ polycarbonate fluidome tweeter. Push-spring terminals and removable black-knit grilles. FR 38$21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power $10 \mathrm{~W} / \mathrm{rms}$; max power $100 \mathrm{~W} / \mathrm{rms}$; sens 92 dB SPL/W/m; imp 6 ohms. Woodgrain vinyl finish. $13.25 \times 23 \times 12 \mathrm{in} ; 35$ lb . \$449/pr

## PN8 Compact 3-Way Speaker

Acoustic-suspension speaker with $0.75^{\prime \prime}$ ferro-fluid polycarbonate tweeter, $4.5^{\circ}$ polypropylene-cone nidrange, and $8^{\prime \prime}$ polypropylenc-cone woofer. FR $60-$ $21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : min power 10 W rms ; max power 80 W rms; sens $90 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$ : imp 4 ohms: Hickory vinyl vencer; $9.75 \times 15.25 \times 8.88 \mathrm{in} ; 32$ lb/pr
\$279/pr

## The Diaduct 8

Features $18^{\prime \prime}$ polypropylene woofer with butyl rubber surround; $1.5^{\prime \prime}$ aluminum voice coil; $14^{\prime \prime}$ doped cone midrange with damped isolation chamber: $10.75^{\prime \prime}$ ferro-fluid filled soft dome tweeter. 6 ohms nominal impedance; $F R 42-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} .22 .75 \times 13.5 \times 10$ in; $44 \mathrm{lb} /$ each
\$750/each

## PN7 3-Way Speaker

Bookshelf bass-reflex speaker with $6.5^{\circ}$ polypropylene woofer; $1^{\prime \prime}$ convex fabric-dome tweeter: $0.75^{\prime \prime}$ polycarbonate 到idome supertweeter. Push-spring terminals and removable black-knit grilles. FR 55$21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power $10 \mathrm{~W} / \mathrm{rms}$; max power $70 \mathrm{~W} / \mathrm{rms}$; sens $90 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ : imp 4 ohms. Hickory vinyl finish. $9.25 \times 14.5 \times 8.5 \mathrm{in} ; 26$ lb/pr . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$249/pr

PN $6+2$-Way Speaker
Bookshelf speaker with front-mounted Diaduct-port design. Features $0.75^{\circ}$ ferrofluid dome iweeter: 6.5" polypropylenc woofer. FR $55-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens

$89 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; min power 10 W rms ; max power 60 W rms. Hickory vinyl vencer: $9.25 \times 14.5 \times 7.88$ in; 26 $\mathrm{lb} / \mathrm{pr}$
\$229/pr

## PN6 2-Way Speaker

Bookshelf acoustic-suspension speaker with 6.5" polypropylene woofer; $0.75^{\prime \prime}$ polycarbonate fluidome tweeter. Push-spring terminals and removable blackknit grilles. FR $55-21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 10 $\mathrm{W} / \mathrm{rms}$; max power $60 \mathrm{~W} / \mathrm{rms}$; sens $88 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohms. Hickory vinyl finish. $9.25 \times 14.5 \times 7.44$ in: 24 lb/pr
\$199/pr

## PN 5+ 2-Way Speaker

Bookshelf speaker with Diaduct-port design. Features $0.75^{\circ}$ polycarbonate ferro-fluid iweeter: 5.25" polypropylene-cone woofer. FR $65-21,000 \mathrm{~Hz}$ : sens 86 dB SPL: power range $10-50 \mathrm{~W}$; imp 6 ohms: $6.75 \times$ $11.25 \times 6.88 \mathrm{in}: 17 \mathrm{lb} / \mathrm{pr}$
\$169/pr

## PIONEER

DSS-9 3-Way Speaker
Bass-reflex speaker with $12^{\prime \prime}$ polymer-graphite-cone woofer, $2.62^{\prime \prime}$ boron-cone midrange; beryllium ribbon tweeter. Features mirtor-image driver alignment; Pioneer's LDMC (linear drive magnetic circuit), EBD (electronic bass drive), and DRS (dynamic response suspension). Nominal imp 6 ohms; sens 91 $\mathrm{dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; max power 240 W . Walnut-grain vinyl finish. Sold only in mirror-imaged pairs. $26.75 \times 15.4$ x 13.9 in
$\$ 1,100 / \mathrm{pr}$

## CS-V910 3-Way Speaker

Magnetically-shielded 3-way speaker. Features 12"
cone woofer; 434" titanium-dome midrange: $1^{\prime \prime}$ titani-um-dome tweeter; aluminum die-casi frame in woofer and midrange: round-cornered baffle. FR 25 $30,000 \mathrm{~Hz}$; imp 6 ohms; sens 90 dB sPL/W/m; 150 W max power handling. Dark oak veneer finish. 35.69 x $16.13 \times 15.31 \mathrm{in}$ : 75 lb
\$1,040/pr

## DSS-7 3-Way Speaker

Bass-reflex speaker with $12^{\prime \prime}$ polymer-graphite-cone woofer. $2.62^{\prime \prime}$ boron-cone midrange, and beryllium ribbon twecter. Features mirror-image driver alignment; Pioneer's LIDMC (linear drive magnetic circuit). ERD (electronic bass drive), and DRS (dynamic response suspension). Nominal imp 6 ohms; sens 91 dB SPL/W/m: max power 210 W . Walnut-grain vinyl finish. Sold only in mirror-imaged pairs. $25.6 \times 14.6 \times$ 13.6 in.
\$760/pr

## CS-707 4-Way Speaker

Bass-reflex speaker with $15.75^{\circ}$ dual-voice-coil woofer, $4.75^{\circ}$ midrange, horn tweeter with acoustic lens, and twin-piczo supertweeter. Features EAD (electronic bass drive); 3-position tone selector; LED power indicator. Imp 8 ohms: sens $98 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; $\max$ power 300 W . Walnut-grain vinyl finish. $28.6 \times 17.7 \times$ 10.6 in .
\$760/pr

## CS-607 4-Way Speaker

Bass-reflex speaker with 12" dual-voice-coil woofer, 4.75" midrange, horn tweeter with acoustic lens, and twin-piezo supertweeter. Features EBD (electronic bass drive): LEI) power indicator. Imp 8 ohms sens 96 $\mathrm{dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; max power 210 W . Walnut-grain vinyl finish. $25.6 \times 16.1 \times 11.25 \mathrm{in}$ $\qquad$ \$640/pr

## DSS-5 3-Way Speaker

Bass-reflex speaker with $10^{\prime \prime}$ cone woofer, $2.62^{\prime \prime}$ cone midrange, and $1^{\prime \prime}$ dome tweeter. Features mirrorimage driver alignment; Pioncer's LDMC (linear drive magnetic circuit), EBE) (electronic bass drive), and DRS (dynamic response suspension). Imp 8 ohms : sens 91 dB sPL/W/m; max power 120 W . Walnutgrain vinyl finish. Sold only in mirror-imaged pairs. $22.4 \times 12.8 \times 11.4 \mathrm{in}$.
\$520/pr

## Elite DSS-E6 3-Way Speaker

Features $7.88^{\prime \prime}$ polymer-grpahite-cone woofer: $2.88^{\prime \prime}$ boron-cone midrange: beryllium ribbon iweeter: mirror-image driver alignment; Pionecr's LDMC (linear drive magnetic circuit), ERD (electronic bass drive), and DRS (dynamic response suspension). Nominal imp 6 ohms; sens 91 dB SPL/W/m; max power 120 W . Sold only in mirror-imaged pairs. 18.5 $\times 10.6 \times 9.6$ in.
\$600/pr

## CS-407 3-Way Speaker

Bass-reflex speaker with $12^{\prime \prime}$ woofer, $4^{\prime \prime}$ midrange. and $2.5^{\circ}$ cone tweeter. Imp 8 ohms: sens 94 dB SPL/W/m: max power 150 W . Walnut-grain vinyl finish, $24.8 \times 15 \times 10.4$ in
\$380/pr

## CS-G401w 3-Way Speaker

3 -way bass-reflex speaker. Features $16^{\prime \prime}$ woofer; 4.75" midrange: $2.5^{\prime \prime}$ tweeter: imp 8 ohms: FR $30-20,000$ $\mathrm{Hz}: 150 \mathrm{~W}$ max power handling: sens 92 dB SPL/W/m; walnut grain vinyl finish. $29.13 \times 17.31 \times$ 11.63 in: $36 \mathrm{lb}, 6 \mathrm{oz}$
\$360/pr

## CS-VX110 2-Way Speaker

Magnetically-shielded speaker for $\mathbf{A} / \mathrm{V}$ use. Features $7^{\circ}$ woofer: $2.5^{\circ}$ tweeter; fR $50-20,000 \mathrm{~Hz}$; imp 8 ohms; sens $90 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m} ; 60 \mathrm{~W}$ max power handling; dark oak vencer finish, $13.75 \times 9.38 \times 7.31$ in; 23 lb .
$\$ 320 / \mathrm{pr}$

## CS-G301W'All 3-Way Speaker

Bass-reflex bookshelf speaker with $12^{\circ}$ woofer, $4.75^{\circ}$ midrange, and $2.62^{\prime \prime}$ tweeter. 1 mp 6 ohms; sens 91.5 dB SPL/W/m; max power 120 W . Walnut-grain vinyl finish. $26.5 \times 15 \times 13$ in.
\$280/pr

## CS-G201WAll 3-Way Speaker

Bass-reflex bookshelf speaker with $10^{\circ}$ woofer, $3^{\prime \prime}$

## SPEAKERS

midrange, and $2.62^{\prime \prime}$ tweeter. Imp 6 ohms; sens 90 dB SPI./W/m; max power 100 W . Walnut-grain vinyl finish. $24 \times 13.75 \times 11.8$ in
\$210/pr

## CS-G101WAII 2-Way Speaker

Sealed-box bookshelf speaker with $10^{\prime \prime}$ woofer and $2.62^{\prime \prime}$ iweeter. Imp 6 ohms; sens 90 dB SPL/W/m; max power 50 W . Walnut-grain vinyl finish. $22.4 \times 13 \times$ 7.8 in
\$150/pr

## S-X7 Full-Range Speaker

Compact bass-reflex speaker designed for surroundsound applications. Features $3.5^{\prime \prime}$ driver; sens selector switch: black vinyl finish. 1 mp 16 ohms: sens 90 dB ; max power $30 \mathrm{~W} .5 .4 \times 7.5 \times 4.5 \mathrm{in} \ldots \$ 130 / \mathrm{pr}$

## CS-X5 Surround-Sound Speaker

Speaker for surround-sound applications. Features 4* full-cone driver: imp 8 ohms; 30 W max power: sens $90 \mathrm{~dB} .7 .5 \times 5.5 \times 5 \mathrm{in} ; 7.3 \mathrm{lb}$
\$60/pr

## POLK AUDIO

SDA-SRS 1.2 Signature Reference Speaker
Floor-standing speaker that incorporates coherent Line-Source True Stereo (SDA) technology for 3dimensional imaging. Features $15^{*}$ planar passive radiator: $86.5^{\prime \prime}$ trilaminate polymer midranges; 4 I $^{\prime \prime}$ silver-coil soft-dome tweeters. FR $10-26,000 \mathrm{~Hz}$ : Recom. Assoc. Amplification: 10-1,000 W; 6 ohms nominal imp. Oiled oak, and walnut finish. 21 x $63.75 \times 13 \mathrm{in}$; 185 lb . \$1.495/each

## SDA-SRS2 Signature Reference Speaker

Floor-standing smaller-version SDA-SRS. Features Line Source Polk SDA True Stereo Technology for 3dimensional imaging: 15" planar sub-bass radiator; 6 6.5" trilaminate polymer bass/midrange drivers; 3 1" silver-coil polymer-dome tweeters. Recom. Assoc. Amplification $10-750 \mathrm{~W}$ /channel; 6 ohms nominal impedance. Oiled oak or walnut finish. $55 \times 20.62 \times$ 13.12 in ; 155 Jb .
$\$ 1,100 /$ each

## SDA-IC 3-Way Speaker

Floor-standng speaker. Features 4 Polk $6.5^{\prime \prime}$ trilaminate polymer bass midrange drivers; $21^{\prime \prime}$ silver coil polymer dome tweeters; I $12^{*}$ planar sub-bass radiator. Recom. Assoc. Amplification 10-500 W; FR 14 $26,000 \mathrm{~Hz} ; 6 \mathrm{ohms}$ nominal impedance. Oiled walnut or oak cabinet. Black studio version at lower cost. $43.5 \times 16.5 \times 12 \mathrm{in}$; 95 lb $\qquad$ \$850/each

## SDA-2B 3-Way Speaker

Similar to SDA-1B except $26.5^{\prime \prime}$ trilaminate polymer bass/midrange drivers; $11^{*}$ silver coil polymer dome tweeters: I 12" planar sub-bass radiator; FR 15-26.000 $\mathrm{Hz} ; 6$ ohms nominal impedance. Oiled walnut or oak cabinet. Black studio version at lower cost. 39.5 x $16.5 \times 12 \mathrm{in} ; 87 \mathrm{lb}$.
\$600/each
SDA-CRS + 3-Way Speaker
Bookshelf speaker with SDA technology for life-like three-dimensional imaging: features $26.5^{\prime \prime}$ trilaminate polymer bass/midrange drivers; 1 " polymer dome tweeter; $10^{*}$ passive cone radiator. FR $24-25,500 \mathrm{~Hz}$; Recom. Assoc. Amplification $10-250 \mathrm{~W} ; 6$ ohms nominal impedance. Black ash, walnut or oak vinyl finish. Genuine walnut or oak veneer finish available at extra cost. $20 \times 12.5 \times 12 \mathrm{in}: 36 \mathrm{lb} \ldots \$ 425 /$ each

RTA 11 t Monitor 3-Way Speaker
Real-Time-Array floor-standing speakers with $28^{\circ}$ low-resonance subwoofer, $26.5^{\prime \prime}$ trilaminate polymer bass/midrange drivers, and a 1 "polymer dome tweeter; FR $15-25,000 \mathrm{~Hz}$; Recom. Assoc. Amplification 10-500 W; 6 ohms nominal impedance. Black ash, walnut and oak vinyl finish. Genuine walnut and oak veneer finish available at extra cost. $39 \times 10.5 \times$ $14.5 \mathrm{in} ; 58 \mathrm{lb}$.
\$450/each

## RTA 81 Monitor 3-Way Speaker

Real-Time-Array floor-standing speaker with $26.5^{*}$ trilaminate polymer bass/midrange drivers; 1" silver-
coil polymer dome tweeter. FR $22-26,000 \mathrm{~Hz}$; Recom Assoc. Amplification $10-200 \mathrm{~W}$ : 6 ohms nominal impedance; Black ash, walnut and oak vinyl finish. Genuine walnut and oak veneer finish available at extra cost. $28^{\prime \prime} \mathrm{h} \times 16^{\circ \prime} \mathrm{w} \times 9.25^{\prime \prime} \mathrm{d}$; $48 \mathrm{lb} . . \$ 260 /$ each

## Monitor 10B 3-Way Speaker

Sub-bass radiator/sealed floor-standing speaker with $10^{\prime \prime}$ fluid-coupled subwoofer; $26.5^{\prime \prime}$ trilaminate polymer bass/midrange drivers; $1^{\prime \prime}$ polymer dome tweeter. FR $22-25,000 \mathrm{~Hz}$; Recom. Assoc. Amplifcation 10-250 W; 6 ohms nominal impedance. Black ash, walnut and oak vinyl finish. Genuine walnut and oak veneer finish available at extra cost. $28^{\prime \prime} \mathrm{h} \times 16^{\prime \prime} \mathrm{w}$ x 11.5 "d; 48 lb
\$330/each

## Monitor 7C 3-Way Speaker

Sub-bass radiator/sealed bookshelf speaker with $10^{*}$ fluid coupled subwoofer: $6.5^{\prime \prime}$ trilaminate polymer bass/midrange driver: I" polymer dome tweeter. FR $26-25.000 \mathrm{~Hz}$; power range $10-100 \mathrm{~W}: 6$ ohms nominal impedance; $24 \times 14 \times 9.25$ in: 34 lb
\$260/each
Monitor 5B. Similar to 7C: 1 " silver coil dome tweeter: 6.5" trilaminate polymer bass/midrange driver: $8^{\prime \prime}$ fluid coupled subwoofer: FR $31-25.000 \mathrm{~Hz}$ : power range $10-60 \mathrm{~W} ; 6$ ohms nominal impedance. $21.5 \times 10.5 \times 8.5 \mathrm{in}$; 26 lb . . . . . . . . . . . . \$200/each

## Monitor 5 Jr. + 3-Way Speaker

Bookshelf speaker with I" silver coil dome tweeter: $6.5^{\prime \prime}$ trilaminate polymer bass/midrange driver; 8 " fluid coupled subwoofer. FR $29-26.000 \mathrm{~Hz}$; power range $10-100 \mathrm{~W}$; 6 ohms nominal impedance. Blackash, walnut and oak vinyl finish. $17 \times 9 \times 8.87 \mathrm{in}$; 41
Ib . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$340/pair

## Monitor 4.5 2-Way Speaker

Bookshelf speaker with 6.5" trilaminate polymer bass/midrange driver: 1" ferro-fluid cooled dome tweeter; isophase crossover network; Terminated transmission duct that loads bass/midrange driver into deep-bass range. FR $30-25,000 \mathrm{~Hz}$ : power range 10-100 W: 6 ohms nominal impedance. $17 \times 9 \times 8.87$ in: 22 lb .
\$245/pair

## Monitor 4A 2-Way Speaker

Bookshelf speaker with trilaminate polymer bass/midrange driver: $1^{\prime \prime}$ ferro-fluid cooled dome tweeter; isophase crossover network; Terminated transmission duct that loads bass/midrange driver into deepbass range. FR $55-21,000 \mathrm{~Hz}$; power range $10-80 \mathrm{~W} ; 6$ ohms nominal impedance. $14.5 \times 8.5 \times 7.36 \mathrm{in}$; 16 lb.
\$200/pair

## PRECISE ACOUSTIC LABORATORIES

## Monitor 10 Speaker

3-way bass reflex speaker with tuned-port design. Features $10^{\circ}$ woofer; $6.5^{\prime \prime}$ midrange: $1^{*}$ soft-dome tweeter: FR $20-35,000 \mathrm{~Hz}: 250 \mathrm{~W}$ max power handling. Natural cak veneer finish . . . . . . . . . \$750 ea

## Monitor 9 Speaker

2-way floor-standing speaker with $8^{\prime \prime}$ woofer. I" $^{\prime \prime}$ iweeter, and $10^{\prime \prime}$ passive radiator. Features 150 W max power handling: imp 6 ohms: sens $91 \mathrm{~dB} \$ 330$ ca

## Monitor 7 Speaker

2-way bass-reflex speaker. Features $8^{*}$ woofer and 1 " tweeter: FR $28-35,000 \mathrm{~Hz} ; 100 \mathrm{~W}$ max power handling: imp 6 ohms; sens 91 dB
$\$ 230$ ca

## Monitor 5 Speaker

2-way passive radiator speaker with $8^{\prime \prime}$ woofer and $1^{\prime \prime}$ dome tweeter. Features 80 W max power handling: 9 element crossover; fr $32-35,000 \mathrm{~Hz}$
. $\$ 180$

## Monitor 3 Speaker

2-way bass-reflex speaker. Features $6.5^{\prime \prime}$ woofer and 1" iweeter $\$ 140$ ea

## PSB SPEAKERS

## Siratus Tower Speaker

$8^{\prime \prime}$ woofer with focused magnetic gap; cloth-dome tweeter: 2nd-order crossover at 1.800 Hz : light oak. dark oak, black wood finishes. FR $60-20,000 \pm 2 \mathrm{~dB}$; sens 88 dB : power range $15-150 \mathrm{~W} \ldots . . \$ 1,400 / \mathrm{pr}$

## 20 MKII Speaker

2-way speaker system with $1^{\prime \prime}$ polydome tweeter: $6^{\prime \prime}$ woofer; black or brown finish
\$200/pr

## 30 MKII Speaker

2-way speaker system with $3 / 4$ " textile dome iweeter; $8^{\prime \prime}$ polypropylene woofer; rated impedance 8 ohms: black or brown finish.
\$400/pr

## 40 MKII Speaker

2-way speaker system with $34^{4 \prime}$ textile dome tweeter: $8^{\prime \prime}$ polypropylene woofer; rated impedance 8 ohms; black or brown finish.
$\$ 400 / \mathrm{pr}$

## 50 MKII Speaker

2-way speaker system with $1^{\prime \prime}$ textile dome tweeter; $8^{\prime \prime}$ polypropyiene cast basket woofer: rated impedance 8 ohms; black or brown finish
\$500/pr

## Subwoofer 1

Optimized for 50R speakers; may be used with 30R or other speakers with sens $86-92 \mathrm{~dB}$ SPL/W/m: stereo crossover network at 100 Hz rolls off frequencies going to satellite speakers at $6 \mathrm{~dB} /$ octave; 28 extra-long-throw woofers with aluminum voice coils can be combined for mono: tuned port; brown or black finish; Barton hickory or black ash. Power range $30-200 \mathrm{~W}$ rms; system resonance 26 Hz ; sensitivity $88 \mathrm{~dB} \mathbf{~ s p L} / \mathrm{W} / \mathrm{m}: 22 \times 22 \times 22 \mathrm{in}: 90 \mathrm{lb} \$ 700$

## QUAD

## ESI.-63 LS Monitor

Full-range electrostatic doublet speaker with dipole source. Features 2 protection circuits. Power range $100-190 \mathrm{~W}$; sens $86 \mathrm{~dB}, 2.83 \mathrm{Vms}$; imp 8 ohms; axis band limits -6 dB at 35 Hz , third-order, -6 dB at 20 $\mathrm{kHz}: 92.5 \times 66 \times 27 \mathrm{~cm} ; 23 \mathrm{~kg}$; black ... . \$3.995/pr ESL-63 Pro. Professional version with carrying handles . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$4.400/pr

## QUASAR

## SW30A Full-Range Speaker

Bookshelf round-ball speaker designed for use as rear-channel speakers. Features $4^{*}$ cone midrange; stands. FR $150-20,000 \mathrm{~Hz} \pm 10 \mathrm{~dB} . . . . .$.

## RCA

SPK500 Dimensia 3-Way Speaker
Floor-standing bass-reflex speaker with Zero Magnetic Distortion for placement next to a video monitor. Features 11" cross-carbon woofer: 4" pure carbon midrange: 1 " titanium alloy dome tweeter. FR $28-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max input power 160 W rms; imp 8 ohms. $12.75 \times 36 \times 12.5$ in.
\$549/pr

## SPK400 Dimensia 3-Way Speaker

Floor-standing acoustic-suspension speaker with Zero Magnetic Distortion. Features 12" nylon-coated woofer: 4" resin-coated midrange; 1" soft dome tweeter. $\mathrm{FR} 35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max input power 120 W rns; imp 8 ohms
\$399/pr

## SPK250 Dimensia 2-Way Speaker

Acoustic-suspension speaker with Zero Magnetic Distortion. Features $8^{\prime \prime}$ polypropylene woofer; 1" soft dome tweeter. FR $45-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max input power 80 W rms; imp 8 ohms.
\$269/pr

## SPK050 Full-Range Surround Sound Speaker

Full-range speaker with Zero Magnetic Distortion. Features 4" polypropylene cone; color-coded input terminals; pivoting mounting brackets. FR $200-$
$15.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max input power 50 W rms. 7.13 x $7.38 \times 7$ in. . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 149$

## REALISTIC

Nominal imp of all Realistic speakers is 8 ohms.

## Mach Two 3-Way Speaker

Vented Ferrolluid-cooled speaker with $15^{\prime \prime}$ woofer. $5^{\circ}$ cone midrange, $4^{\prime \prime}$ dual-radial superhorn tweeter: level controls for midrange and iweeter: walnut vencer. Max power 160 W ; sens 94 dB sPI/W/m; $27.56 \times 17 / 75 \times 11.81 \mathrm{in}$
$\$ 512 / \mathrm{pr}$

## Nova 15 Speaker

Walnut-veneered vented speaker with $2.5^{\prime \prime}$ iweeter. Max power $60 \mathrm{~W}: 19 \times 16.75 \times 7.5 \mathrm{in} . \ldots . \$ 160 / \mathrm{pr}$

## MC-1800 Acoustic-Suspension Speaker

Bookshelf speaker with $8^{\prime \prime}$ high-compliance woofer and $2.5^{\circ}$ wide-dispersion iweeter. FR $70-20.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; max power 50 W rms; imp 8 ohms. Oiledwalnut finish. $10.9 \times 17.75 \times 6.9 \mathrm{in} \ldots . . . \$ 120 / \mathrm{pr}$

## MC-800 2-W'ay Bookshelf Speaker

$6.5^{\prime \prime}$ woofer: $2.5^{\prime \prime}$ cone tweeter: removable cloth grille: push-on speaker terminals. Max power $40 \mathrm{~W} .13 .5 \times$ $8.88 \times 5.31$ in
\$90/pr

## 40-165 Mini Speakers

$2.5^{\circ}$ square drivers; attached cable with mini plug for portable ('D) players and pocket stereos. Max power 1 W: $3.6 \times 2.9 \times 1.75 \mathrm{in}$.
\$20/pr

## 40-155 Stereo Mini Speaker

Single enclosure with 2-1.5" drivers; mini plug for portable CD players and pocket stereos. $3.12 \times 3.25 \times$ 1.25 in .
\$10

## Optimus Speakers

1000. Floor-standing bass-reflex tuned-port speaker with $15^{\prime \prime}$ high-compliance woofer, $5^{\prime \prime}$ midrange. $3^{\prime \prime}$ tweeter. FR $50-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max power 100 W rms; sens 92 dB sPI./W/m; imp 8 ohms. Oiled-walnut finish. $17.3 \times 31.8 \times 11.6 \mathrm{in} ; 44 \mathrm{lb} \ldots . .$. 900. Floor-standing bass-reflex tuned-port speaker with 12" high-compliance woofer, 4" midrange, $2.5^{*}$ Ferrofluid tweeter. FR $50-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max power 100 W rms; sens 90 dB SPL/W/m; imp 8 ohms. Oiled-walnut finish. $14 \times 29.75 \times 10.88 \mathrm{in} ; 33$ lb..................................... $\$ 310 / \mathrm{pr}$ 650. Bass-reflex speaker: $12^{\prime \prime}$ woofer: $4^{\prime \prime}$ midrange; 2.5: cone; 100 W ; sens 91 dB .
\$240/pr 600. Bass-reflex speaker: $8^{\prime \prime}$ woofer; $4^{\prime \prime}$ midrange; $2.5^{\prime \prime}$ cone tweeter; removable cloth grille; recessed colorcoded spring-loaded terminals. Max power 70 W : sens 90 dB sPL./W/m. Oiled walnut veneer $\$ 200 / \mathrm{pr}$

## Minimus Speakers

0.9. 2-way speaker with built-in 5 band equalizer: 5 W/ch; $5^{\prime \prime}$ woofer: $144^{\prime \prime}$ iweeter. . . . . . . . . . . $\$ 200 / \mathrm{pr}$ 7W. Walnut-veneer mini speaker with $4^{\prime \prime}$ woofer: $I^{\prime \prime}$ soft-dome iweeter: removable cloth grille; spring terminals. Maximum power handling $40 \mathrm{~W}: 8 \times 5 \times 4$ in. .
$\$ 120 / \mathrm{pr}$
7. Die-cast metal enclosure; long-excursion $4^{\prime \prime}$ wooter; l" soft-dome tweeter; deluxe crossover for smooth response without artificial peaks; hanger slots and recessed spring connectors for wall mounting. Max power 40 W ; $7.1 \times 4.4 \times 4.3 \mathrm{in}$ $\qquad$ \$100/pr 25. $5^{\prime \prime}$ long-throw woofer; $2.5^{\prime \prime}$ tweeter; walnut veneer. Max power $40 \mathrm{~W}: 11 \times 6.7 \times 4.3 \mathrm{in} . \$ 60 / \mathrm{pr}$ 0.6. Powered speakers with $2.5^{\prime \prime}$ drivers for use with portable CD players and pocket stereos; 8 C batteries needed; with case, strap, cable. $5.6^{\prime \prime} \mathrm{H}$. . . . $\$ 50 / \mathrm{pr}$ 18. $4^{*}$ driver: spring terminals; walnut vinyl finish. $9.4 \times 5.75 \times 4.75 \mathrm{in}$.
\$44/pr 3.5. Molded enclosure with steel grille; spring terminals. Max power $15 \mathrm{~W} ; 5.75 \times 3.6 \times 3.1 \mathrm{in}$. . $\$ 40 / \mathrm{pr}$ 2.5. 4" driver: walnut vinyl finish. Max power 10 W :
 3. 5" driver; walnut vinyl finish. Max power 7 W ; 10 x

0.3. Cube speaker with $3^{\prime \prime}$ driver; walnut veneer. Max power $7 \mathrm{~W}: 4 \times 4 \times 3.3$ in \$26/pr Mounting Brackets. For 7W and 7. . . . . \$14.95/pr Mounting Brackets. For 3.5 . . . . . . . . . . $\$ 9.95 / \mathrm{pr}$

## Supertweeters

Dynamic. Extends response to $40,000 \mathrm{~Hz}$; mounts in or outside speaker cabinet: max power 50 W; $4^{\prime \prime} \mathrm{H} \$ 22$ Piezo. Extends response to $27,000 \mathrm{~Hz}$. Max power 75 W; sens 96 dB sPL/W/m $\$ 13$

## RECOTON

## Wireless 100 Speaker System

System consisting of transmitter and 2 powered speakers enabling listening to stereo in any room in house. Transmitter plugs into any audio component or AC outlet, speakers plug into that room's AC outlet. Features $4.5^{\prime \prime}$ full-range driver; volume control; FR $60-15,000 \mathrm{~Hz}$ : sep $90 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 80 \mathrm{~dB} ; 12 \mathrm{~W} / \mathrm{ch} \mathrm{amp}$. Available in black and white.
$\$ 270$

## SS53-Amplified Speakers

Speakers for portables. $3.5 \times 2.6 \times 2.5 \mathrm{in} \ldots \mathbf{\$ 2 0 / p r}$

## REEL TO REAL DESIGNS

## Ingacy-Signature Tower Speaker

Five-driver biampable tower speaker with digital electronic crossover. Features ribbon supertweeter: titanium dome midrange; vented polycone midrange: slot-loaded subwoofer section with double magnet structure. Oiled oak or walnut. FR 22-30.000 $\mathrm{Hz} \pm 2 \mathrm{~dB}$; sens 92 dB ; min power 45 watts; imp 8 ohms; $44.0 \times 12.0 \times 13.0 \mathrm{in} ; 206 \mathrm{lb} /$ system $\$ 2.496 / \mathrm{pr}$

## Legacy-1 Tower Speaker

Biample tower speaker with hand-iuned crossover. Features ribbon supertweeter: dome midrange; 6* poly midrange and slot loaded subwoofer section with double magnet structure; dual gold binding posts; oiled oak or walnut; FR $26-30,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$ : sens 91 dB ; min power 45 watts; imp 8 ohms; $42.0^{\prime \prime} \mathrm{x}$ $12.0 \times 13.0 \mathrm{lb} / \mathrm{system}$.
\$1.696/pr

## Iegacy-2 Tower Speaker

Three-way tower speaker with gold binding posts; Features hand-rubbed walnul or oak: $10^{\prime \prime}$ poly woofer: $6^{\prime \prime}$ midrange; $1^{\prime \prime}$ ferrofluid tweeter; FR 32 $22,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 90 dB ; imp 8 ohms; 38.0 x $12.0 \times 13.0 \mathrm{in}$ : $160 \mathrm{lb} /$ system.
\$996/pr

## Legacy-3 Floor-Standing Speaker

Floor-standing double chambered speaker with 8" subwoofer; $6^{*}$ midbass and $1^{\prime \prime}$ ferrolluid dome. Features individually-tuned chambers; hard-rubbed walnut or oak veneer cabinets; gold binding posts; $F R$ $34-22,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 91 dB ; imp 4 ohms; 35.0 x $12.0 \times 10.0 \mathrm{in} ; 140 \mathrm{lb} /$ system.
\$796/pr

## 1egacy-Satellite Bookshelf Speaker

Bookshelf-sized speaker with $6^{\prime \prime}$ polypropylene woofer: 1" ferrolluid cooled dome; gold binding posts; FR $40-22,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 90 dB ; imp 8 ohms. 13.0 x $10.0 \times 10.0 \mathrm{in} ; 55 \mathrm{lb} /$ system.
\$548/pr

## Legacy-Subwoofer

Dual-channel subwoofer with independent $10^{\prime \prime}$ bass drivers; variable crossover frequency and slope; assisted fourth order; $\mathrm{FR} 22-100,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 91 dB ; imp 8 ohms: $24.0 \times 16.0 \times 16.0 \mathrm{in} ; 93$ lb/system.
\$548/each

## REVOX

## Agora B Amplified Speaker

Floor-standing triamplified active ported speaker incorporating three 100 -watt amps with active dividing net works in each enclosure. Designed to be driven from preamp or direct from high-level sources such as CD player. Features push-pull dual woofer design with one woofer facing into enclosure to eliminate even-order harmonic distortion. Two $8^{\prime \prime}$ cone wool
ers: $4.75^{\prime \prime}$ cone midrange: . $75^{\circ}$ titanium dome tweeter. Low-frequency amp utilizes feedback to compensate for back-EMF. Also fealures 4 -step bass and treble controls; bass blend switch; auto power on/off. FR $30-$ $21,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens $110 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; real walnut veneer finish with brown grille or polished ebony finish with black grille. $16.75 \times 29 \times 16.75 \mathrm{in} ; 68$ lb. Black lacquer finish
$\$ 5,000 / \mathrm{p}$

Symbol MK-Il 3-Way Speaker
Floor-standing speaker with $12.2^{\prime \prime}$ passive radiator. Features $12.2^{\prime \prime}$ woofer: $4.8^{\prime \prime}$ midrange; $1^{\prime \prime}$ tweeter; screw-lock connection terminals; fuse overload protection. Max power input 200 W continuous, 300 W peak: imp 4 ohms; sens 92 dB spl/W/m. Dark walnut veneer finish: $16.7 \times 39.8 \times 16.3 \mathrm{in} ; 112 \mathrm{lb} \$ 4,000 / \mathrm{pr}$

## Atrium MK-II 3-Way Speaker

Floor-standing bass-reflex speaker features 10.2* woofer; 4.8" midrange; $l^{\prime \prime}$ iweeter; screw-lock connection terminals; fuse overload protection. Max power input 140 W continuous. 180 W peak; imp 4 ohms; sens $91 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$. Dark walnut veneer finish: 13.5 $\times 33.6 \times 14.5 \mathrm{in} ; 84 \mathrm{lb}$
$\$ 2.900 / \mathrm{pr}$

## Plenum MK-II 3-Way Speaker

3-way bass-reflex bookshelf speaker. Features $10.2^{*}$ woofer: $4.5^{\prime \prime}$ midrange: 1 " tweeter; screw-lock connection terminals; fuse-overload protection. Max power input 130 W continuous, 170 W peak; imp 4 ohms: sens $89 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$. Dark walnut vencer finish; 13.7 $\times 22.8 \times 13.4 \mathrm{in} ; 55.2 \mathrm{lb}$.
$\$ 1,900 / \mathrm{pr}$

## Power Cube

Powered woofer incorporating 2 additional amplifiers to power any suitable pair of satellite speakers. Features $12.3^{\prime \prime}$ woofer, $F R 35-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: 150$ W amp for bass speakers: 2-100 W amps for use with satellites; sens 100 dB ; $15.5 \times 14.5 \times 16.25 \mathrm{in} ; 42 \mathrm{lb}$; black or white matte finish
$\$ 1,600$

## Forum MK-II 3-Way Speaker

3-way bass-reflex bookshelf speaker. Features 9.6" woofer: $3.9^{\prime \prime}$ midrange: $0.7^{\prime \prime}$ tweeter; screw-lock connection terminals; fuse overload protection. Max power input 110 W continuous, 150 W peak; imp 4 ohms: sens 88 dB sPL/W/m. Dark walnut veneer finish: $13 \times 17.5 \times 13.4 \mathrm{in} ; 36.8 \mathrm{lb}$.
$\$ 1,300 / \mathrm{pr}$

## Piccolo Miniature Speaker

Satellite speaker may be used with or without companion subwoofer. Satellites feature $4.1^{\circ}$ cone woofer; $0.75^{\prime \prime}$ dome tweeter. Subwoofer features $10.19^{\prime \prime}$ cone subwoofer. FR $48-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $20-70 \mathrm{~W}$; sens $86 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohms; black finish. Satellite $5.5 \times 8.75 \times 5.75 \mathrm{in}, 5.5 \mathrm{lb}$; subwoofer $15.36 \times 14.19 \times 14.62 \mathrm{in}, 32 \mathrm{lb}$. Satellites. $\$ 390 / \mathrm{pr}$ Subwoofer.
$\$ 450$ ca

## RICH ACOUSTIC LABS

## MT88 3-Way Speaker

Features $28^{\prime \prime}$ poly cone woofers; 1" soft-dome tweeter; FR 31-20,000 $\pm \mathbf{3} \mathrm{dB}$; crossovers at 60 and $2,700 \mathrm{~Hz}$; power range $10-250 \mathrm{~W}$; nom imp 4 ohms; oak or walnut finishes; sens 91 dB sPL/W/m. $32.63 \times$ $10.5 \times 11.25$ in
\$799/pr

## Model 8

Features $8^{\prime \prime}$ poly cone woofer: $11^{\prime \prime}$ soft-dome tweeter: FR $34-20,000 \pm 3 \mathrm{~dB}$; crossover at 2.500 Hz ; power range $10-200 \mathrm{~W}$; nom imp 8 ohms: oak or walnut finishes: $\operatorname{sens} 90 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m} .24 \times 10.5 \times 11.25$ in.
\$499/pr

## Model 6

Features $612^{\prime \prime}$ poly cone woofer; $34^{\prime \prime}$ soft-dome tweeter; FR $38-20,000 \pm 3 \mathrm{~dB}$; crossover at $2,700 \mathrm{~Hz}$; power range $10-150 \mathrm{~W}$; nom imp 8 ohms; oak or walnut finishes; sens 90 dB SPL/W/m. $20.5 \times 8.8 \times 9.25$ in

## ROCKUSTICS

tll Rockustic speakers are designed with an individwally handcrafted nutural-Look stone enclosure to blend into ourdoor landscaping. Rockustic speakers are completely waterproof and weatherproof for out door applications and feature positive, negative. and ground connection terminals.
Stonehenge. 3-way speaker with $8^{\prime \prime}$ woofer. 5.4" midrange, and $\mathrm{I}^{\prime \prime}$ dome Iweeter. FR $54-18,500 \mathrm{~Hz} \pm 3$ dB ; power handling 150 W : imp 4 ohms: sens 90 dB SPL/W/m. 85 lb .
\$1,300/pr
Hillside. 3 -way speaker with $8^{\prime \prime}$ woofer. $5.4^{\prime \prime}$ mi drange, and I" dome tweeter. FR $54-18.500 \mathrm{~Hz} \pm 3$ dB : power handling 150 W : imp 4 ohms: sens 90 dB SPI./W/m. 120 lb .
\$1.300/pr Rocky Jr. 2-Way speaker with $6.5^{\prime \prime}$ long-throw polypropylene-cone woofer, I" soft-dome ferrofluidcooled tweeter, and third-order crossover ( 3.000 Hz ). FR $58-18.500 \mathrm{~Hz} \pm 2.5 \mathrm{~dB}$; imp 5 ohms nominal, 3.7 ohms min: sens $90 \mathrm{~dB} \mathrm{SPl} / \mathrm{W} / \mathrm{m}$.
$\$ 325$ ca

## SANSUI

Vintage SP-100i
2-way magnetically-shielded bass reflex speaker. Features $8.25^{\prime \prime}$ filament carbon woofer with twin magnets; 1" titanium-diaphragm tweeter with diamond plating: inner-frame mounting with $1.5^{\prime \prime}$ rear bafle: front bafle: $1 / 3^{\prime \prime}$ die cast aluminum tweeter base; both speakers have cylindrical frames; tweeter's flange plate is attached to cork sheet: isolated crossover network; titanium black finish. FR 40 30.000 Hz : crossover at 1.500 Hz : sens 88 dB SPL/W/m: imp 6 ohms: 120 W max power. $17.69 \times 11$ $\times 13.44 \mathrm{in}: 41.9 \mathrm{lb}$
$\$ 1,800 / \mathrm{pr}$

## S-2000U 3-Way Speaker

3-way design with passive radiator. Features 12" cone woofer; $4^{\prime \prime}$ cone midrange: $3^{\prime \prime}$ cone tweeter; $12^{\prime \prime}$ cone passive radiator. Power 160 W ; sens $92 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; imp 8 ohms. $15.25 \times 41 \times 11$ in: 44 lb
\$526/pr

## SP-X3U 3-Way Speaker

Acoustic-suspension 3-way speaker. Features rounded cabinet bafles; oak cabinets; $10^{\text {" }}$ carbon-filled polypropylene woofer with butyl rubber surround: $5^{\prime \prime}$ carbon-filled polypropylene midrange cone; $\psi_{4}$ " ferrofluid cooled dome tweeter: silicone carbon-oxide core coil crossover network; gold-plated 5 -way binding posts: FR $35-23.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; 250 \mathrm{~W}$ max power: imp 8 ohms. $21.25 \times 14 \times 10.38 \mathrm{in}$; $17 \mathrm{lb} . . \$ 400 / \mathrm{pr}$

## S-1000U 3-Way Speaker

Features $12^{\prime \prime}$ cone woofer: $4^{\prime \prime}$ cone midrange; $3^{\prime \prime}$ cone tweeter. Built in self-restoring overload protector. FR $32-22.000 \mathrm{~Hz}$. max power 160 W : sens $91 \mathrm{~dB} \mathbf{W} / \mathrm{m}$ imp 8 ohms. $15.25 \times 37.5 \times 11 \mathrm{in}$; $39 \mathrm{lb} \ldots \$ 350 / \mathrm{pr}$

## SP-X21 2-Way Speaker

Acoustic suspension 2-way speaker. Features rounded cabinet baflles; oak cabinets: $8^{\prime \prime}$ carbon-filled polypropylene woofer with butyl rubber surround: $34^{4}$ ferrolluid cooled dome tweeter: silicone carbonoxide core coil crossover network; gold-plated 5 -way binding posts: FR $40-23,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: 200 \mathrm{~W}$ max power: imp 8 ohms. $21.25 \times 11.75 \times 10.38 \mathrm{in} ; 28$ lb.
\$300/pr

## SP-N1U 2-Way Speaker

Acoustic suspension 2-way speaker. Features rounded cabinet bafles; oak cabinets; $612^{\prime \prime}$ carbon-filled polypropylene woofer with butyl rubber surround: $1 / 2$ " ferrofluid cooled dome tweeter; silicone carbonoxide core coil crossover network: nickel-plated 5way binding posts: $\mathrm{FR} 50-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; 150 \mathrm{~W}$ max power: imp 8 ohms. $14.5 \times 9.5 \times 9.13 \mathrm{in}: 17$ lb.
\$220/pr

## S-71t/E 3-Way Speaker

3-way speaker with built-in auto-reset overload protector. Features $15^{\prime \prime}$ cone woofer: $4^{\prime \prime}$ cone midrange: $3^{\prime \prime}$ cone tweeter: 175 W max power: imp 8
ohms; sens $92 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : FR 29-22.000 Hz: walnut grain vinyl finish. $32 \times 17.5 \times 13 \mathrm{in}: 37 \mathrm{lb} . \$ 150 / \mathrm{pr}$

## S-6IUE 3-Way Speaker

3-way acoustic-suspension speaker. Features 12" cone woofer: $4^{\prime \prime}$ cone midrange: $3^{\prime \prime}$ cone tweeter: 175 W max power: imp 8 ohms: sens 91 dB W/m: FR 32$22,000 \mathrm{~Hz}$ c crossovers at 3.500 and $9,000 \mathrm{~Hz}$; walnut grain finish. $30 \times 14 \times 11 \mathrm{in}: 29.5 \mathrm{lb} \ldots .$. . $\$ 140 / \mathrm{pr}$

## SCOTT

thl Scoll speakers use acoustic-suspension enclosures with PI t-coated woofers and constant-impedance crossover networks.

## S12T6 Multidirectional Speaker

Floor-standing 3 -way 6 -driver speaker with $12^{*}$ woofer. $24.5^{\prime \prime}$ ferrofluid-cooled midranges (1 front. I top). $31.75^{\prime \prime}$ ferrofluid-cooled tweeters (I front, 2 top): oak vinyl finish. FR $42-20,000 \pm 4 \mathrm{~dB}$; power range $15-175 \mathrm{~W} \mathrm{rms}$; sens 92 dB spl/ $\mathrm{W} / \mathrm{m}$; $16.5 \times 31.2$ x 10.7 in . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 500 / \mathrm{pr}$ Siot5. Similar to SI2T6 except $10^{*}$ woofer, 5 drivers, max power 150 W . . . . . . . . . . . . $\$ 400 / \mathrm{pr}$

## S153 Floor-Standing 3-Way Speaker

$15^{*}$ woofer, $4.5^{\prime \prime}$ ferrofluid-cooled midrange. 1.75* ferrofluid-cooled tweeter. FR $40-20,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; power range $15-175 \mathrm{~W}$ rms: sens $91 \mathrm{~dB} \mathrm{spL} / \mathrm{W} / \mathrm{m}$; $18.75 \times 33 \times 11 \mathrm{in}$ : $45 \mathrm{lb} . . . . . . . . . . . .$. . . $\$ 400 / \mathrm{pr}$ S123. As above except $12^{\prime \prime}$ woofer and max power 150 W
$\$ 330 / \mathrm{pr}$

## Audiophile One 2-Way Speaker

Bookshelf speaker with 3-way binding posts; passive tweeter protection; air-core crossover coils: 6.5" woofer: 1" textile soft-dome tweeter. FR $55-22,000 \mathrm{~Hz}$ $\pm 4 \mathrm{~dB}$ : power range $15-150 \mathrm{~W}$ rms; sens 90 dB sPL/W/m: imp 4 ohms. Oak vinyl finish. $9.2 \times 14.75 \times$ 7.12 in.
$\$ 300 / \mathrm{pr}$

### 10.3 3-Way Bookshelf Speaker

$10^{\prime \prime}$ woofer: ferrofluid-cooled $4.5^{\prime \prime}$ midrange: $1.75^{\prime \prime}$ center-mounted ferrofluid-cooled tweeter: hickory vinyl finish. FR $45-20,000 \pm 4 \mathrm{~dB}$; power range $10-$ 100 W rms; sens $92 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m} ; \mathrm{imp} 8$ ohms; $12.5 \times$ $23.25 \times 9$ in
\$260/pr

### 8.2 2-Way Booksbelf Speake

$8^{\prime \prime}$ woofer: $1.75^{\prime \prime}$ ferrofluid-cooled tweeter: hickory vinyl finish. FR $55-20,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$ : power range 5 85 W rms; sens $92 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}: 10 \times 18 \times 7.5$ in. ....................................... . . \$160/pr 6.2. Similar to 8.2 except $6.5^{\prime \prime}$ woofer and max power


SP38 3-Way Speaker
Features $8^{\prime \prime}$ woofer: $2^{\prime \prime}$ midrange: $2^{\prime \prime}$ iweeter; FR $50-$ 19.000 Hz : 75 W max power handling. $11 \times 21.25 \times$ 8.5 in : 14 lb .
\$140/pr

## SP28 2-Way Speaker

Features 8" woofer: 3" tweeter: FR $50-19,00 \mathrm{~Hz}$; 40 W max power handling. $11 \times 18 \times 8.75 \mathrm{in}: 14.5 \mathrm{lb} \$ 120 / \mathrm{pr}$

## SDM BY SOUND DYNAMICS

All speakers are bass reflex, with $5^{\circ}$ cone midrange, $1^{*}$ horn iweeter. crossovers at 2.000 and 5.000 IIz. nominal impedance of 8 ohms, minimum impedunce of 4 ohms, in walnui or black rinll with black knit grilles.

## Monitor Three Speaker

$12^{\prime \prime}$ woofer. FR $25-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 98 dB SPL/W/m: power range $15-125 \mathrm{~W}: 26 \times 15 \times 12-\mathrm{in}$ : 33 lb each. . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$500/pr

## Monitor Two Speaker

$10^{\prime \prime}$ woofer. FR $30-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens 97 dB SPL/W/m; power range $10-112 \mathrm{~W}: 24 \times 14 \times 9-\mathrm{in}$ : 29 lb each. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$400/pr

Monitor One Speaker
$8^{\prime \prime}$ woofer. fr $35-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens 96 dB SPI./W/m: power range $10-100 \mathrm{~W}: 23 \times 12 \times 9-\mathrm{in}: 29 \mathrm{lb}$ ca. .
\$330/pr

## SEATTLESOUND

P.S. 1 Biamplified Speaker System

Biamplified satellite/subwoofer system in self-contained high-density fiberboard enclosure. Features 4subenclosure design; 4th-order Linkwitz-Reilly-type crossover at 150 Hz and $100-\mathrm{W}$ amplifier for satellites which include one $61 / 2^{\prime \prime}$ polypropylene cone woofer and une ${ }^{3} 4$ " ferrofluid-cooled polyamide softdome tweeter: 2 separated subwoofer enclosures. Frequency response $20-20.000 \mathrm{~Hz}$ : THD $<0.05 \% .39 \mathrm{x}$ $13.5 \times 16.5$ in
$\$ 1,250$ ea

## M Series

All $1 /$ series speakers incorporate narrow, timealigned front boards. propylene drivers, aluminum voice-coil hathins, ferrolluid-cooled polyamide-dome iwecters, high-density enclosures, 3rd-order crossovers, heary-duty 5-way hinding posts, and 4 th-order nuned-port enclosures. They are available with hlack oak vinyl, reve walnu veneer, and high-gloss finishes. All prices given are with black oak vinul tinishes.

M5
Features $8^{\prime \prime}$ subwoofer; 6 $6 / 2^{\prime \prime}$ woofer: $1^{\prime \prime}$ tweeter: nom imp 8 ohms, sens 93 dB ; FR $34-21,000 \mathrm{~Hz}$; crossovers at 180 and $2,500 \mathrm{~Hz}: 175 \mathrm{~W}$ max power handling. 31 x II x $13 \mathrm{in}: 47 \mathrm{jb}$
$\$ 359$ ea
M4
 sens 92 dB : FR $36-21.000 \mathrm{~Hz}$; crossover at 2.500 Hz : 100 W max power handling. $28.25 \times 10 \times 12 \mathrm{in}$; 39 lb.
\$359 ca
M3
Features 6.5" woofer: $34^{* *}$ tweeter; nom imp 8 ohms; sens 91 dB : FR $42-21,000 \mathrm{~Hz}$ : crossover at $2,500 \mathrm{~Hz}$; 100 W max power handling. $20.5 \times 8 \times 10 \mathrm{in}$; 23 lb. .
\$179 ca
M2
Features $5 \mathrm{~L}_{4}$ " woofer; ${ }^{3}{ }_{4}$ " iweeter: nom imp 8 ohms; sens 89 dB : frequency response $50-21.000 \mathrm{~Hz}$ : crossover at $2.500 \mathrm{~Hz} ; 75 \mathrm{~W}$ max power handling. $13 \times 7 \times$ 8.5 in : 13 lb .
$\$ 119$ ca

## C.I. Series

C.I. 4

Custom-installed, free-standing speaker. Features $8^{\prime \prime}$ woofer: $3 / 4^{\prime \prime}$ tweeter: nom imp 8 ohms; sens 92 dB : frequency response $36-21,000 \mathrm{~Hz}$ : crossover at 2,500 Hz : 3rd-order symmetrical crossover: 4th-order tuned-port enclosure: 100 W max power handling. 22 x $14 \times 9$ in.
$\$ 250 \mathrm{ca}$

## C.1.3

Custom-installed, free-standing speaker. Features 61/2" woofer: $3_{4}$ " Iweeter: nom imp 8 ohms; sens 91 dB : FR $42-21,000 \mathrm{~Hz}$; crossover at 2.500 Hz ; 3 rd-order symmetrical crossover: 4th-order tuned-port enclosure; 100 W max power handling. $22 \times 10.25 \times 7$ in . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 200$ ea

## C.I. 2

Custom-installed, free-standing speaker. Features 5 tan woofer: $\boldsymbol{y}_{4}$ " tweeter: nom imp 8 ohms; sens 89 dB ; frequency response $50-21,000 \mathrm{~Hz}$; crossover at 2,500 Hz ; 3rd-order symmetrical crossover; 4th-order tuned-port enclosure; 75 W max power handling. 15 x $14 \times 3.5$ in
$\$ 150$ ca

## SHAHINIAN ACOUSTICS

## Diapason Module Speaker

Assymetric prism with unequal rakes in each direction made of 13 -ply Finland birch. Features $4 \times 5.25$ in curved poly cone rubberedge drivers: 1 " alums.

## SPEAKERS

num voice coil; 20 oz ceramic magnet; tweeters $6 \times 10$ mm W-shaped titanium domes; FR $125-22,000 \mathrm{~Hz}$ -3 dB ; power handling est 250 W ave; 2 optional input filter choices or direct by-pass for bi-amp use filters: 2 optional roll off filters to facilitate exact matching or by-pass; teased lamb's wool damping: brown, black beige. bone, double knit polyester grill options; 40 lb
$\$ 4.000 / \mathrm{pr}$

## Obelisk 3-Way Speaker

Folded double-prism $50^{\circ}$ hybrid transmission line speaker with $8^{\prime \prime}$ asymmetrically placed high temperature voice coil poly woofer, $10^{\prime \prime}$ mass-loaded-membrane viscous damped polypropylene passive radiator, two $1.36^{\prime \prime}$ cambric ultra light exposed dome midranges, four 0.36 " "W" shaped polymid-dome tweeters. Imp 4 ohms nominal; min power 50 W max power 500 W . Walnut and oak standard finishes. Optional finishes available. $29 \times 14.5 \times 12.5 \mathrm{in}$; 55 lb.
$\$ 1.750 / \mathrm{pr}$

## ARC 3-Way Speaker

Verical transmission-line speaker with time-aligned phase-correct driver placement. $8^{\prime \prime}$ high temperature voice coil polylpropylene woofer; $10^{"}$ mass-loadedmembrane viscous damped passive radiator: $1.36^{\prime \prime}$ cambric ultra-light exposed dome tweeter; imp 4 ohms nominal: min power 30 W : max power 350 W : Natural, medium or dark oak finish on $0.75^{\prime \prime}$ fiberboard. $27.5 \times 14 \times 9.75 \mathrm{in}: 42 \mathrm{lb} \ldots . .$. . $\$ 1.050 / \mathrm{pr}$

## LYRE 3-Way Speaker

Lamb's wool filled plastic isolation chamber for 5.25* Poly/Hybrid curved cone midrange. 8" Poly/Hybrid curved textured cone woofer with $1.5^{\prime \prime} \mathrm{Hi}$-temp voice coil: 1 " Polyamide dome tweeter; $10^{\prime \prime}$ passive radiator. FR $30-18,00 \mathrm{~Hz}-3 \mathrm{~dB}$. Dark or light oak vencer: $23.50 \times 11.75 \times 11.75 \mathrm{in} ; 43 \mathrm{lb}$
\$850/pr

## ELF 2-Way Speaker

Forward firing small monitor with luned-damped vent enclosure. $5.25^{\prime \prime}$ polypropylene woofer with rubber edge: 1" polypropylene-dome tweeter. FR $55-$ $18,000 \mathrm{~Hz}-3 \mathrm{~dB}$; imp 6 ohms nominal; min power 25 W : max power 150 W . Natural medium or dark oak finish. $12.5 \times 6.62 \times 7.75 \mathrm{in}$; $26 \mathrm{lb} / \mathrm{pr}$. . $\$ 375 / \mathrm{pr}$

## Subwoofers

## Double Eagle Stereo Subwoofer

Stereo subwoofer in one enclosure with acoustically separated channels. Two $8^{\prime \prime}$ polypropylene rubberedged high-temperature voice coil woofers; two $10^{*}$ mass-loaded-membrane viscous damped polypropylene passive radiators. FR $26-1,0000 \mathrm{~Hz}-3 \mathrm{~dB}$; crossover 18 dB built in at 140 Hz ; imp 6 ohms nominal/ch; max power shor duration peaks 1.000 W. Walnut finish on Finland birch. Optional finishes available. $30 \times 23 \times 14 \mathrm{in}$; $105 \mathrm{lb} \ldots . . .{ }^{2}$.

## SIGNET

## SL-100 Definitive Image Speaker

Floor-standing bass-reflex speaker with Ferralipse. a wide-dispersion frequency invariant acoustic lens to provide dispersion greater than I 20 degrees al 20.000 Hz . Phase coherent for better imaging. Features $10^{\circ}$ long-throw cone woofer: $3^{\prime \prime}$ sofi-dome midrange: two I" soft-dome tweeters. FR $40-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathbf{m i n}$ power $25 \mathrm{~W} / \mathrm{rms}$; max power $200 \mathrm{~W} / \mathrm{rms}$; sens 90 dB $\mathrm{spl} / \mathrm{W} / \mathrm{m} ; \mathrm{imp} 8$ ohms. $12.68 \times 35.83 \times 15.81 \mathrm{in} ; 66$ lb.

## SNELLACOUSTICS

## Type A-III-Improved 4-Way Speaker

Floor-standing acoustic-suspension speaker with curved bafle to eliminate diffraction. mechanically isolated midrange enclosure, floor-loaded woofer, and rear-loaded supertweeter for accurate room response. Hand-adjustment of crossover values for specific drivers assures acoustic performance virtually identical to reference speaker. Features $12^{\prime \prime}$ high-
power long-excursion mass-loaded mechanically-isolated cone woofer; 5" mechanically-isolated cone midrange; I" individually adjusted controlled-dispersion dome iweeter; $0.75^{\prime \prime}$ low-mass ferrofluid-cooled dome supertweeter. Dual gold-plated inputs allow biwiring or biamping with or without electronic crossover. FR $24-26.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} .38-18,000 \mathrm{~Hz} \pm 1$ dB ; power range $80-400 \mathrm{~W}$ rms; imp 4 ohms. Handsanded, hand-rubbed matching oak or walnut veneers. $23.5 \times 50.75 \times 14 \mathrm{in}$; 148 lb . Oak . . $\$ 4.680 / \mathrm{pr}$ Walnut
$\$ 4,490 / \mathrm{pr}$
Type C-II 3-Way Speaker
Floor-standing bass reflex speaker system. Features 10" long-throw woofer; $5^{\prime \prime}$ midrange; $1^{\prime \prime}$ treated-cloth ferrofluid-cooled dome tweeter: .75" switchable rear iweeter; 4th order 24 dB /octave filters; bi-wirable or bi-ampable; hand-sanded, hand-rubbed matched veneers. FR $34-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $20-200$ W. $14.5 \times 11.75 \times 46 \mathrm{in} ; 90 \mathrm{lb}$
$\$ 1.890 / \mathrm{pr}$

## Type E/II 2-Way Speaker

Floor-standing bass-reflex speaker with $8^{\prime \prime}$ polymerreated woofer, $1^{\prime \prime}$ soft-dome tweeter, and ultra-lowmass $0.75^{\prime \prime}$ ferrofluid-cooled rear-loaded dome supertweeter designed for flat early-arrival of sound and accuracy of listening room response. Hand-adjusted crossover for specific drivers assures acoustic performance virtually identical to reference speaker. Dual gold-plated inputs allow biwiring or biamping. Features rear-loaded port for optimim low-frequency room loading. Hand-sanded, hand-rubbed matching oak or walnul vencers. FR $35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 8 ohms: sens 93 dB SPL/W/m: power range $15-150 \mathrm{~W}$ rms. $33 \times 14 \times 11 \mathrm{in}$. Oak
$\$ 990 / \mathrm{pr}$ Walnut
\$990/pr

## Type Q 2-Way Speaker

Bookshelf speaker designed for stand placement. Each speaker is individually adjusted to match a reference speaker within a fraction of a dB. Features $6.5^{\prime \prime}$ polypropylene cone woofer; $1^{\prime \prime}$ rear-firing textiledome tweeter and a $.75^{\prime \prime}$ rear-firing tweeter; flush grille to eliminate diffraction. Crossover frequency $2,200 \mathrm{~Hz}$. Cabinets are hand-sanded and rubbed in matched pairs with oak or walnut veneer finish. 10.5 $\times 15.5 \times 6.75$.
$\$ 780 / \mathrm{pr}$
Type Q Stand. Speaker stand designed for use with Type Q speakers. Bolts directly to type Q's. Can be mass loaded with sand or lead and incorporate spikes on the bottom. Each stand provides for the bolting of a Type Q speaker directly to the stand. Oak or walnut veneer. $32^{\prime \prime}$ high
$\$ 120 / \mathrm{pr}$

## Type J/II 2-Way Speaker

Bookshelf bass-reflex speaker designed to maximize accuracy of early arrival sound and listening room response. Hand-adjustment of crossover values for specific drivers assures acoustic performance virtually identical to reference speaker. Features $8^{\prime \prime}$ polymertreated curvalinear cone woofer; $1^{\prime \prime}$ soft-dome iweeter; dual gold-plated inputs for optional biwiring and biamping. Hand-sanded, hand-rubbed oak or walnut vencers. Sens 92 dB sPl./W/m; power range 15.150 W rms; FR $49-22,000 \mathrm{~Hz} \pm 2 \mathrm{~dB} ; \mathrm{imp} 8$ ohms. $23 \times 13 \mathrm{x}$ $10 \mathrm{in}: 38 \mathrm{lb}$. Oak
\$650/pr Walnut
\$680/pr
Type J Stand. Speaker stand designed for use with Type J speakers. Can be mass loaded with sand or lead and incorporate spikes on the bottom. Oak or walnut vencer . . . . . . . . . . . . . . . . . . . . . . . . . \$98/pr

## Type K-11 2-Way Speaker

Bookshelf acoustic-suspension speaker with $8^{\prime \prime}$ pelypropylene cone woofer and $0.75^{\prime \prime}$ ferrofluid-cooled soft-dome tweeter. Designed for accuracy of both early-arrival sound and listen-room power response. Hand-adjusted crossover values for specific drivers assures acoustic performance virtually identical to reference speaker. Dual inputs for optional biwiring or biamping. Oak, walnut, or black veneers. Imp 8 ohms; sens 90 dB SPI. $/ \mathrm{W} / \mathrm{m}$; power range $10-100 \mathrm{~W}$ rms. $18 \times 11 \times 9 \mathrm{in}$. Oak or walnut . . . . . . . $\$ 465 / \mathrm{pr}$

Type K Stand. Speaker stand designed for use with Type K speakers. Can be mass loaded with sand or lead and incorporates spikes on the bottom. Oak or walnut veneer.
\$98/pr

## SONOGRAPHE By CONRAD-JOHNSON

## SL $2 I$ Mini-Monitor Satellite Speaker

Vented; 6.5" polyproylene woofer; 1" dome iweeter: golden oak cabinet with brown grille. FR 52-20,000 $\mathrm{Hz} \pm 2 \mathrm{~dB}$; power range $10-80 \mathrm{~W}$; sens 90 dB $\mathrm{SPL} / \mathrm{W} / \mathrm{m}: \mathrm{imp} 8 \mathrm{ohms} ; 14.5 \times 10.5 \times 10.5-\mathrm{in} \$ 695 / \mathrm{pr}$

## SW 1000 Stereo Subwoofer

2 side-firing magnetically shielded $10^{\circ}$ woofers in golden oak cabinet. FR $25-110 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; power range $10-200 \mathrm{~W}$; sens 90 dB sPI/ $/ \mathrm{W} / \mathrm{m}$; imp 8 ohms; $19.5 \times 36 \times 18$-in.
\$849/ea
SW 500 . Same as $S W 1000$ except mono, with single $10^{\prime \prime}$ woofer: $19.5 \times 18 \times 18$-in.
\$595/ea

## SONY

## APM-66ES 3-Way Speaker

Bass-reflex speaker with APM (Accurate Pistonic Motion) driver technology that incorporates a light. rigid, flat-diaphragm design. Features 66 sq-in APM woofer: 7.4 sq -in APM midrange; $1.4 \mathrm{sq-in}$ APM tweeter; built-in circuit breaker for tweeter protection: heavy-duty cabinet construction with rounded edges. Includes speaker cord. FR $30-30.000 \mathrm{~Hz}$ : sens 89 dB spL/W/m; power capacity 100 W nominal, 200 W peak; nominal imp 6 ohms; crossover frequencies 600 and 4.500 Hz . $15 \times 26 \times 14.38 \mathrm{in} \ldots . . \$ 1.100 / \mathrm{pr}$

## APM-22ES 2-Way Speaker

Bass-reflex speaker with APM (Accurate Pistonic Motion) driver technology that incorporates a light, rigid, flat-diaphragm deisgn. Fealures 45 sq-in APM woofer: 1.4 sq-in 4PM tweeter; built-in circuil breaker for tweeter protection; heavy-duty cabinet construction with rounded edges. Includes speaker cord. FR $40-20.000 \mathrm{~Hz}$ : sens 88 dB SPL./W/m; power capacity 80 W nominal. 160 W peak; nominal imp 6 ohms: crossover frequency $2.000 \mathrm{~Hz} .11 .5 \times 20.38 \times 12.62$ in. .
$\$ 500 / \mathrm{pr}$

## SA-W30 Powered Subwoofer

Powered bass-reflex subwoofer with turn over frequency selector. Features built-in $60-\mathrm{W}$ amplifier; 12" woofer; selectable operating frequencies of 60.90 . and 140 Hz : level control; removable castors. Sens 88 dB ; FR $23-5,000 \mathrm{~Hz}$; damping factor $100.19 .5 \times 19 \times$ 15.63 in.
$\$ 450$

## SOTA INDUSTRIES

Panorama 2-Way Monitor
Time-Domain speaker with bass extension of 45 Hz $\pm 3 \mathrm{~dB}$. Features truncated pyramid enclosure; $7^{\prime \prime}$ woofer; 1" hard-dome tweeter: 1.25" walls; hard/soft structural damping on woofers; FR $45-22,000 \mathrm{~Hz} \pm 3$ dB ; max power handling $150 \mathrm{~W} / \mathrm{ch}$; nom imp 6 ohms; sens 90 dB ; crossover at $3,200 \mathrm{~Hz} ; 12 \times 18 \times 6 \mathrm{in} ; 35 \mathrm{lb}$. Oak or cherry . . . . . . . . . . . . . . . . . . . . . . . . . \$1,495 Brazilian rosewood, cbony . . . . . . . . . . . . . . \$1.795 Black. . $\$ 1,695$

## SOUND DYNAMICS

## 1500 Concert Monitor

Computer-luned 2-way bass-reflex, mirror-imaged pairs with matched parts. 1 " horn-loaded soft-dome tweeter with free-floating dome suspension; $15^{\circ}$ woofer with high-gauss linear forced motor and epoxy potting. FR $25-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 102 dB SPL/W/m; min power 20 W ; max power 250 W ; imp 8 ohms. $34.75 \times 18 \times 16-\mathrm{in} ; 90 \mathrm{lb}$ $\$ 1.000 / \mathrm{pr}$

## 700 Concert Monitor

Computer-tuned 2-way bass-reflex mirror-imaged pairs. 1" horn-loaded tweeter with free-floating
suspension; 12" woofer with high-gauss linear forced motor and epoxy potting. FR $30-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 101 dB spl/W/m; min power 15 W : max power 200 W : imp 8 ohms. $27.75 \times 14.36 \times 12$-in; 45 lb ea; black ash vinyl veneer.
\$750/pr

## 500 Concert Monitor

Computer-tuned 2-way bass-reflex mirror-imaged pairs with matched parts. I" horn-loaded soft-dome tweeter with free-floating suspension; $10^{\prime \prime}$ high-gauss plastic-coated woofer, FR $34-23,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens 98.5 dB SPI $/ \mathrm{W} / \mathrm{m}$; min power 10 W ; max power 200 W: imp 8 ohms. $23.36 \times 12.12 \times 11.88-\mathrm{in}: 38 \mathrm{lbs}$ each; black ash vinyl vencer:
$\$ 550 / \mathrm{pr}$

## 100S MK II BooksheIf Speaker

Bass reflex speaker with 6.5" polypropylene cone woofer and 1 " dome tweeter, $\mathrm{FR} 50-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $10-7$ - W rms; sens 93 dB sPL $/ \mathrm{w} / \mathrm{m}$; imp 8 ohms: black ash vinyl veneer: $15.9 \times 9.5 \times 9.5-\mathrm{in}$ : 20 lb.
\$260/pr

## SPEAKERLAB

## DAS Series Speakers

A/l D.AS speakers are availahle in ebony, walnut, light oak. or high-gloss lacquer finishes.

DAS-8. Floor-placement speaker with Inverse Axis Alignment (IAA): computer-designed rear vent, and rear-mounted subwoofer. Features one $10^{\circ}$ and one $12^{\prime \prime}$ woofer: $I^{\prime \prime}$ dome tweeter; one $6.5^{\prime \prime}$ cone and one $3^{\prime \prime}$ dome midrange. Crossover 150, 350, 1,500, 5,000 Hz: sens 94 dB sPL/W/m; imp 4 ohms: FR 23-21,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; power range $20-300 \mathrm{Wrms} / \mathrm{ch} .46 \times 16 \times$ 13 in
$\$ 1,998 / \mathrm{pr}$
DAS-7. Floor-placement speaker with IAA, comput-er-designed rear vent. and rear-mounted subwoofer. Features $10^{\prime \prime}$ and $12^{\prime \prime}$ woofers; $1^{\prime \prime}$ dome tweeter: $6.5^{\prime \prime}$ cone midrange. Crossover $180,350,3.000 \mathrm{~Hz}$ : sens 94 dB sPL/W/m; impedance 4 ohms; FR $25-21.000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; power range $20-275 \mathrm{~W} \mathrm{rms} / \mathrm{ch} .38 .5 \times 14 \times 16$ in: 86 lb .
\$1,198/pr
1)AS-6. Floor-placement speaker with IAA. comput-er-designed rear vent. and rear-mounted subwoofer. Features one $8^{\prime \prime}$ and one $10^{\prime \prime}$ woofer: $1^{\prime \prime}$ dome tweeter. Crossover 180.2 .500 Hz ; sens $94 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohms: FR $30-21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $20-275$ W rms/ch. $36 \times 12.5 \times 14 \mathrm{in}: 62 \mathrm{lb} . . . .$. . $\$ 958 / \mathrm{pr}$ DAS-5. Bookshelf or floor-placement speaker with IAA. computer-designed rear vent, and rear mounted subwoofer. Features one $8^{\prime \prime}$ and one $6.5^{\prime \prime}$ woofer: [" dome tweeter. Crossover $180,2.500 \mathrm{~Hz}$ : sens 93 dB sPL/W/m; imp 4 ohms: FR $34-21.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $20-175 \mathrm{~W}$ rms $/ \mathrm{ch} .31 \times 11 \times 13 \mathrm{in} ; 47$ lb.
\$718/pr
DAS-4. Bookshelf or floor-placement speaker with IAA and computer-designed rear vent. Features $8^{*}$ woofer: . $75^{\prime \prime}$ dome iweeter. Crossover 2.500 Hz : sens 92 dB sPI./W/m; imp 4 ohms; FR $36-21,000 \mathrm{~Hz} \pm 3$ dB : power range $20-100 \mathrm{~W} \mathrm{rms} / \mathrm{ch} .28 \times 10 \times 12 \mathrm{in}$; 39 lb .
\$478/pr
DAS-3. Bookshelf or floor-placement speaker with IAA and computer-designed rear vent. Features $8^{\circ}$ woofer: . $75^{\prime \prime}$ dome iweeter. Crossover 2.500 Hz ; sens $91 \mathrm{~dB} \mathrm{spl} / \mathrm{W} / \mathrm{m}$; imp 4 ohms: FR $42-21,000 \mathrm{~Hz} \pm 3$ dB: max power $100 \mathrm{~W} .21 \times 8 \times 10$ in
\$358/pr DAS-2. Bookshelf or floor-placement speaker with IAA and computer-designed rear vent. Features $5.25^{\circ}$ woofer: .75" dome iweeter. Crossover 2.500 Hz ; sens $91 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m} ; \mathrm{imp} 8$ ohms: FR $50-21,000 \mathrm{~Hz} \pm 3$ dB : max power $75 \mathrm{~W} .13 \times 7 \times 8.5$ in $\ldots . . \$ 238 / \mathrm{pr}$

## DAS-SW Subwoofer

Features computer-designed rear vent; $10^{\prime \prime}$ dual-voice-coil woofer. Crossover 150 Hz : sens 92 dH SPL/W/m; imp 8 ohms; FR $30-160 \mathrm{~Hz}+3 \mathrm{~dB}$; power range $20-150 \mathrm{~W} \mathrm{rms} / \mathrm{ch}$. $18 \times 18 \times 18 \mathrm{in}: 62 \mathrm{Jb} \$ 389$ ea

## SPECTRUM LOUDSPEAKERS

## Model 410 2-Way Speaker

Floor-standing Thiele-aligned bass-reflex speaker.

Features plastic-impregnated $10^{*}$ composite matrix cone woofer; 1" dome tweeter with acoustic imp Iransformer: FR $18-22.000 \mathrm{~Hz}$; min power 30 W rms: max power 250 W ; sens 89 dB SPL/W/m; natural oak or walnut. $38.5 \times 14.5 \times 11.75 \mathrm{in} . . . . . .$. . $\$ 799 / \mathrm{pr}$

## 208B Stand-Mount Speaker

Thiele-aligned bass-reflex speaker designed for floor placement on special stands. Features $8^{\prime \prime}$ cone woofer; I" fabric soft dome; finished in walnut vinyl: power range $20-150 \mathrm{~W}$ : FR $38-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; sens 91 dB SPL/W/m. $25.5 \times 14.5 \times 10.5 \mathrm{in}$ \$449/pr Black 208B. Black grain vinyl. . . . . . . . . . \$449/pr Oak 208B. Oak vencer . . . . . . . . . . . . . . . \$549/pr Black lacquered stands . . . . . . . . . . . . . . . . \$59/pr

## Nen 108A Bookshelf Speaker

Theile-optimized bass-reflex speaker. Features 8" cone woofer: $1.5^{\prime \prime}$ cone tweeter with aluminum dome: FR $55-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens 92 dB SPL/W/m: imp 8 ohms: furniture-grade walnut-vinyl finish. 14.5 x $11.5 \times 9.0 \mathrm{in}: 30 \mathrm{lb} / \mathrm{pr} . . . . . . . . . . .$. Black 108A. Black grain vinyl. . . . . . . . . . . \$269/pr Oak 108A. Oak vencer . . . . . . . . . . . . . . . . \$339/pr

## SPICA

## Angelus Floor Standing Speaker

Mirror imaged speaker system with $8^{\prime \prime}$ plastic cone bass/mid driver. I" soft dome tweeter, computer optimized crossover, built in adjustable spikes, $F$ R $45-17.500 \mathrm{~Hz} \pm 3 \mathrm{~dB}(90-15.000 \mathrm{~Hz} \pm 1.5 \mathrm{~dB})$ : crossover $3.400 \mathrm{~Hz}(-6 \mathrm{~dB})$; recommended power $50-200 \mathrm{~W}$ : imp 8 ohms: $21 \times 46 \times 10.25 \mathrm{in}$; 57 lb ; Walnut finish
\$1.095/pr
Oak finish
\$1.050/pr

## TC-50 Bookshelf Speaker

Acoustic-suspersion bookshelf speaker with triangular shape allowing system to be within 15 x of absolute phase from $350-5,000 \mathrm{~Hz}$. Features $6^{\prime \prime}$ cone woofer. I" dome tweeter. FR $60-16,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : power range $25-50 \mathrm{~W}, 100 \mathrm{~W}$ peak; sens 83 dB $\mathrm{sPL} / \mathrm{W} / \mathrm{m}$; imp 4 ohms; $13 \times 15.55 \times 1 \mathrm{I} .75 \mathrm{in} ; 2 \mathrm{llb} / \mathrm{ca}$. Oak or walnut veneer
$\$ 550 / \mathrm{pr}$

## SPL

All speakers have dome tweeters, nominal impedance of 8 ohms. with minimum impedance of 6 ohms. in black-ash vinyl wihh black knit grilles.

## 4000 Bass-Reflex Speaker

$2-10^{\text {" }}$ woofers; $1^{\prime \prime} 1$ weeter; crossover at 2.200 Hz . FR $25-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 98 dB spLL/W/m: power range $20-150 \mathrm{~W}: 43 \times 13 \times 15-\mathrm{in} ; 65 \mathrm{lb}$ ea $. \$ 900 / \mathrm{pr}$

## 3000 Bass-Reflex Speaker

$2-8$ " woofers: I" tweeter: crossover at $2,200 \mathrm{~Hz}$. FR 30 $22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens $96.6 \mathrm{~dB} \mathrm{spl} / \mathrm{W} / \mathrm{m}$; power range $15-125 \mathrm{~W}: 37 \times 12 \times 15: 52 \mathrm{lb}$ ca. . . $\$ 700 / \mathrm{pr}$

## 2000 Passive Radiator Speaker

$8^{\prime \prime}$ woofer: I" tweeter: crossover at $2,200 \mathrm{~Hz}$. FR 35$22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 95 dB spL/W/m; power range $10-100 \mathrm{~W}: 33 \times 12 \times 9-\mathrm{in} ; 33 \mathrm{lb}$ ea $. . . . .5 \$ 500 / \mathrm{pr}$

## 1000 Bass-Reflex Speaker

2-5.25" woofers; $0.75^{\prime \prime}$ tweeter; crossover at $3,000 \mathrm{~Hz}$. FR $40-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : sens 90 dB sPL/W/m: power range $10-100 \mathrm{~W}: 21 \times 10 \times 12-\mathrm{in} ; 21 \mathrm{lb}$ each $\$ 350 / \mathrm{pr}$

## SUMO

Samson Bass-Reflex Subucofer
Floor-standing subwoofer with $15^{\prime \prime}$ composite-cone woofer. 18.62-lb magnet assembly. $4^{* *}$ edgewound copper voice coil: symmetrical magnetic-field motor structure. Features built-in 1,000-W PWM digitalswitching amp. Solid I" butcher-block oak top. FR 20$120 \mathrm{~Hz} \pm \mathrm{IdB}$ : max power 1.000 W ; sens 91 dB SPL/W/m: imp 8 ohms. $27.5 \times 22 \times 18 \mathrm{in} . \$ 2.249 \mathrm{ea}$ Without built-in amp.

Opus Two 2-Way Speaker
Floor-standing acoustic-suspension speaker with 6.5" treated-cone woofer. I" composite-dome tweeter with copper-clad aluminum voice coil. Features symmetrical magnetic-filed woofer design with cop-per-clad pole piece for reduced 2nd-order harmonic distortion; imp-matching conjugate crossover network with extremely low group delay ( $\pm 0.2 \mathrm{~ms}$ from $100-20,006 \mathrm{~Hz}$ ); solid-oak end caps. FR $42-24,000 \mathrm{~Hz}$ $+0,-3 \mathrm{~dB}$ min power 35 W rms; max power 250 W rms; sens 85 dB sPL/W/m: imp 4 ohms. Oak or pianofinish black. $10.5 \times 39 \times 5 \mathrm{in}$; $20 \mathrm{lb} . . . . .$. . $\$ 699 / \mathrm{pr}$ Opus Thrre. Bookshelf version of Opus Two. 10.25 x $17.5 \times 9.75 \mathrm{in}: 16 \mathrm{lb}$
$\$ 649 / \mathrm{pr}$

## SYMDEX

Fipsilon Floor-Standing Speaker
Sealed-box speaker with modular phase-linear crossovers. Features time-aligned drivers: polpropylene capacitors in crossover; $10^{*}$ cone woofer: $6.5^{*}$ cone midrange: $1^{\prime \prime}$ soft-dome tweeter. Power range $50-250$ W; sens 85 dB sPL/W/m: imp 8 ohms; $13 \times 48.5 \times 13$ in: 110 lb ; black cloth with oak or black top plate; computer-matched pairs
$\$ 2,000 / \mathrm{pr}$

## Gamma 2 Way Floor-Standing Speaker

Acoustic suspension speaker with I" cambric soft dome tweeter, $6.5^{\prime \prime}$ bextrene sandwhich individually damped woofer, FR $60-20,000 \mathrm{~Hz}$ : crossover lst order, bi-wire capability: High Q air core coils; polypropylene capacitors: noninductive wire wound resistors: 45 lb ; $10 \times 6 \times 39 \mathrm{in}$; base plate measures 13 $\times 13 \mathrm{in}$; computer-matched pairs
$\$ 1.000 / \mathrm{pr}$

## E.I.S.A. 2-Way Speaker

Compaci 2-way acoustic suspension speaker. Features $6.5^{\prime \prime}$ midbass driver: $\mathrm{I}^{\prime \prime}$ dome tweeter: Ist order crossover with bi-wire capability. $10 \times 8 \times 16 \mathrm{in} ; 25 \mathrm{lb}$. Available in oak or black ash with black grilles: computer-matched pairs
$\$ 550 / \mathrm{pr}$

## SYNTHESIS BY CONRAD-JOHNSON

Reference Speaker System
5-piece system with 2 subwoofer columns (each with $210^{\prime \prime}$ woofers). 2 midrange/high-frequency units with $7{ }^{\prime \prime}$ midranges. 1" dome tweeters. leaf supertweeter: golden oak with radiused solid-hardwood edges; active electronic crossover supplied. FR $22-32,000 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB}$; power range $10-250 \mathrm{~W}$; sens 91 dB spl/ $/ \mathrm{W} / \mathrm{m}$; imp 8 chms: subwoofer columns $69 \times 14 \times 14$ in.: satellites $44 \times 10 \times 10$ in
$\$ 6,800 /$ system

## I.M 310 Floor-Standing 3-Way Speaker

$10^{\prime \prime}$ woofer: $7^{\prime \prime}$ midrange: $1^{\prime \prime}$ dome tweeter: oak cabinet with radiused solid hardwood edges. FR 25$20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$ : power range $10-200 \mathrm{~W}$; sens 91 dB SPI./W/m: $\operatorname{imp} 8$ ohms; $45.5 \times 13.75 \times 14.5-\mathrm{in}$.: 70 lb.

## LM 300 Floor-Standing 3-Way Speaker

$10^{*}$ woofer: $7^{\prime \prime}$ midrange: $1^{\prime \prime}$ dome tweeter: oak finish with cream. brown, or black grille. $F$ R $32-20,000 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB}$ : power range $10-100 \mathrm{~W}$; sens $91 \mathrm{~dB} \mathrm{sPL} / \mathrm{W} / \mathrm{m}$ : imp 8 chms; $44 \times 13.75 \times 14.5 \mathrm{in} ; 70 \mathrm{lb}$. . $\$ 2,450 / \mathrm{pr}$

## I.M1 260 Floor-Standing 2-Way Speaker

Ported: $8^{\text {" }}$ polypropylene woofer: ${ }^{\text {" }}$ dome tweeter: oak cabinet with radiused solid-hardwood edges. FR $41-20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; power range $10-100 \mathrm{~W}$; sens 91 dB ; imp 8 ohms; $39.5 \times 12 \times 11 \mathrm{in}$. . . $\$ 1.695 / \mathrm{pr}$

## M 250 Floor-Standing 2-Way Speaker

Ported speaker with $8^{\prime \prime}$ cone woofer and $1^{\prime \prime}$ dome tweeter; oak finish with cream, brown, or black grille. FR42-20.000 Hz $\pm 2 \mathrm{~dB}$ : power range $10-80 \mathrm{~W}$ : sens 91 dB sPL/W/m; imp 8 ohms. $33.75 \times 10.63 \times 11.12-$ in.: 45
$\$ 1.185 / \mathrm{pr}$

## I.M 210 Floor-Standing 2-Way Speaker

Ported speaker with $6.5^{\prime \prime}$ polypropylene woofer: 1 "
dome tweeter; oak cabinet with radiused solidhardwood edges. FR $46-20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; power range $10-80 \mathrm{~W}$; sens 90 dB sPI./W/m; imp 8 ohms: $33.5 \times 10.5 \times 10.5 \mathrm{in}$.
\$1,195/pr

## TANNOY

## Prestige Series

Westminster. Floor-standing dual-concentric speaker with Sync-Source Time Alignment: compound horn enclosure: $15^{\prime \prime}$ cone woofer; $2^{\prime \prime}$ compressionhorn tweeter. FR $18-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; max power 200 W : sens 96 dB SPL/W/m: imp 8 ohms. $43 \times 59 \mathrm{x}$ $28 \mathrm{in}: 253 \mathrm{lb}$ cach. Walnut finish
$\$ 9.495 / \mathrm{pr}$
RHR. Floor-standing dual concentric high-compliance speaker with Sync-Source Time Alignment. Features rear folded horn rectangular exponential section: direct radiating front section; 250 W max power handling; sens 92 dB ; nom imp 8 ohms; FR 35 $20,000 \mathrm{~Hz} \pm 4 \mathrm{~dB}$; hard-wired passive crossover at $1,000 \mathrm{~Hz} .48 .9 \times 27.6 \times 22.7 \mathrm{in} ; 165.3 \mathrm{lb} . \$ 8.995 / \mathrm{pr}$ Guy R. Fountain Memory. Floor-standing dualconcentric speaker with Sync- Source Time Alignment: quadruple-ducted-port enclosure; 15" cone woofer: 2" compression-horn tweeter. FR 29-20.000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; min power 10 W ; max power 200 W ; sens 95 dB SPL/W/m: $\operatorname{imp} 8$ ohms. $31 \times 43 \times 19 \mathrm{in} ; 136 \mathrm{lb}$ each. Walnut finish $\qquad$ . $\$ 5,995 / \mathrm{pr}$ F.dinburgh. Floor-standing dual-concentric speaker with Sync-Source Time alignment; distributed port reflex enclosure: $1^{\prime \prime}$ cone woofer: $2^{\prime \prime}$ compression horn tweeter. IR $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 10 W: max power 200 W ; sens $92 \mathrm{~dB} \mathrm{spl} / \mathrm{W} / \mathrm{m}$; imp 8 ohms. $25.5 \times 40 \times 16.5 \mathrm{in}: 97 \mathrm{lb}$ each; walnut finish.
\$4.995/pr
Stirling. Floor-standing dual-concentric speaker with Sync-Source Time Alignment; dual variable-distributed enclosure; $10^{* \prime}$ cone woofer; $2^{\prime \prime}$ compressionhorn tweeter. FR $35-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; min power 10 W; max power 150 W : sens 93 dB sPL/W/m; imp 8 ohms. $20.5 \times 33.5 \times 15 \mathrm{in} ; 48.5 \mathrm{lb}$ each. Walnut finish.
$\$ 3.995 / \mathrm{pr}$

## Planet Series

Jupiter S. Floor-standing speaker with 3 drivers. Features twin $8^{\prime \prime}$ woofers and one 1" iweeter; power range $10.125 \mathrm{~W} / \mathrm{ch}$ : nom imp 8 ohms; 91 dB sPt/W/m; FR $42-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} .10 .25 \times 10.7 \times$ $25.6 \mathrm{in}: 29.8 \mathrm{lb}$ $\qquad$ $\$ 899 / \mathrm{pr}$ Mercury Gold 11. Tuned-port bookshelf speaker: $8^{\prime \prime}$ woofer, dome lweeter. FR $52-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range $25-120 \mathrm{~W}$; sens 93 dB spl/W/m; imp 8 ohms: $9.75 \times 20 \times 9 \mathrm{in} ; 17 \mathrm{lb}$.
\$850/pr
Mercury S. 2-way speaker with ducted port. Features 10-100 W power range; nom imp 8 ohm; sens 89 dB sPI/W/m: crossover at $3.000 \mathrm{~Hz} .9 .8 \times 8.25 \times 19.6 \mathrm{in}$; 14.1 lb .
\$599/pr Eclipse. Tuned-port bookshelf speaker: $6.5^{\prime \prime}$ woofer. dome tweeter. FR $53-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; power range 25-100 W; sens 93 dB spl/W/m: imp 8 ohms: $8 \times 12 \times$ $8 \mathrm{in}: 9 \mathrm{lb}$
$\$ 350 / \mathrm{pr}$

## Comet Series

C-10. 2-Way speaker. Features $10^{\prime \prime}$ polycone woofer: 1" dome tweeter; high-density particle-board cabinet: nom imp 8 ohms: $125 \mathrm{~W} / \mathrm{ch}$ max power handling: sens $94 \mathrm{~dB} .24 \times 12 \times 11.5 \mathrm{in}$; $27 \mathrm{lb} \ldots .$. . $\$ 499 / \mathrm{pr}$ C-8. 2-Way speaker. Features $8^{\prime \prime}$ polycone woofer; 1" dome tweeter: high-density particle-board cabinet: nom imp 8 ohms; $100 \mathrm{~W} /$ ch max power handling: sens $93 \mathrm{~dB} .19 \times 10.25 \times 9 \mathrm{in}$; $17.5 \mathrm{lb} \ldots .$. . $\$ 399 / \mathrm{pr}$
'I'he list ings are based on data provided by the manufacturers. For more product information, contact an authorized dealer or the manufacturer directly. Manufacturers' addresses and phone numbers are listed in the directory beginning on page 217.

C-6. 2-Way speaker. Features $6^{1 / 2 "}$ polycone woofer $3_{4}$ " dome tweeter; high-density particle-board cabinet: nom imp 8 ohms; $100 \mathrm{~W} /$ ch max power handling: sens $90 \mathrm{~dB} .11 .9 \times 8 \times 8.5 \mathrm{in} ; 10 \mathrm{lb} \$ 299 / \mathrm{pr}$

## TDL

Reference Standard Transmission Line Speakers Floor-standing, dual transmission-line bass, 6 -sided speakers. Feature 2 mid-range units loaded by their own transmission-line; 2 woofers: 2-1weeters mounted symmetrically in-line around the central supertweeter; 2-sets of input terminals for bass and mid \& upper frequencies optional; 4-way crossover at 200 Hz ; FR $16-35,000 \mathrm{~Hz}$ : imp $4-8$ ohms: sens 87 $\mathrm{dB} / \mathrm{W} / \mathrm{m} ; 1180 \times 558 \times 496 \mathrm{~cm}$; black $\mathrm{w} /$ polished aluminum trim or brown w/ laminated wood top and solid brass trim.
. \$6,995/pr

## Monitor Transmission Line Speakers

Floor-standing, transmission-line speakers. Feature full transmission-line loading around bi-radial woofer; solid polystyrene diaphragm with glass-fibre reinforcing: midrange unit 15 cm doped polymer cone: magnesium alloy metal dome twecters: chemical dome ferro-fluid controlled super-tweeter: magnets have vented poles: 2 -pairs of input terminals for bass frequencies and for mid \& high frequencies; 4 way electrical crossover at 300 Hz ; FR $18-35.000 \mathrm{~Hz}$; imp $4-8$ ohms; sens $87 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; $1150 \times 300 \times 470 \mathrm{~cm}$ : Walnut with gold trim and brown grille, or black with silver trim and black grille. $\qquad$ \$4.595/pr

## Studio 3 Transmission Line Speakers

Transmission-line speakers. Feature 2 doped Cobex cone, vented pole woofers: magnesium alloy, suspended metal dome, ferro-fluid tweeter with separate rear chamber: 2-way electrical crossover; FR $24-$ 20.000 Hz ; imp 8 ohms; sens $87 \mathrm{~dB} / \mathrm{W} / \mathrm{m}: 950 \times 300 \times$ 416 cm ; walnut or black finish $\qquad$ \$1,995/pr Studio 2. Similar to Studio 3 except 1 Cobex cone woofer; FR $20-20,000 \mathrm{~Hz}: 850 \times 270 \times 376$ cm .
\$1.545/pr

## Super Compact Loudspeaker

Reflex system speakers. Feature 20.5 cm doped Cobex cone, vented pole woofer: 2.5 cm magnesium alloy metal dome tweeters with separate rear chamber; 2-way electrical crossover at 3.000 Hz ; FR 28 20.000 Hz ; imp 8 ohms; sens $87 \mathrm{~dB} / \mathrm{W} / \mathrm{m} ; 500 \times 270 \times$ 312 cm ; walnut or black finish $\qquad$ $\$ 1.095 / \mathrm{pr}$ Compact Ioudspeaker. Similar to Super compact loudspeakers except 16.5 cm doped Cobex cone woofers; FR $30-20,000 \mathrm{~Hz}$; sens $86 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; $440 \lambda$ $230 \times 287 \mathrm{~cm}$
\$935/pr

## TECHNICS

SB-RX50 Bass-Reflex Bookshelf Speaker
2-way speaker with 9.5" flat-diaphragm woofer and coaxial $1.12^{\prime \prime}$ flat-diaphragm tweeter. Can be placed upright or sideways without affecting sound quality. FR $30-48.000 \mathrm{~Hz}$ at 16 dB below average level; max power 160 W music; sens 87 dB SPL/W/m; imp 6 ohms. Wood finish. $11.89 \times 18.92 \times 11.09 \mathrm{in}$; 36.4 lb.
\$1,050/pr

## SB-RX30 2-H'ay Bookshelf Speaker

Bass-reflex speaker with magnetic shielding for placement near TV's. Features $9^{\prime \prime}$ flat-diaphragm woofer and $1.12^{*}$ flat-diaphragm coaxial tweeter. FR 4430.000 Hz at 16 dB below a verage level; max power 120 W music; sens $88 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$ : imp 6 ohms. Wood finish. $10.56 \times 14.97 \times 8.97 \mathrm{in}$; $16.5 \mathrm{lb} \$ 490 / \mathrm{pr}$

## SB-I. 96 3-Way Floor-Standing Speaker

Bass-reflex speaker with diffuser-equipped tweeter. Linear-phase design for waveform fidelity. Features $15^{\prime \prime}$ cone woofer; $4^{* *}$ cone midrange: 2.12" cone twecter: aluminum bobbins and heat-resistant voice coils for high power handling: non-resonant fabric dust caps. FR $32-22,000 \mathrm{~Hz}$ at 16 dB below average level; max power 200 W music; sens 93 dB

SPL/W/m; imp 8 ohms. Simulated woodgrain finish $17.75 \times 31.36 \times 12.92 \mathrm{in} ; 35.9 \mathrm{lb}$.
\$380/pr

## SB-C250 2-Way Compact Speaker

With 7" crystallized MICA PP-diaphragm conc woofer, I" dome tweeter. Max power 100 W music $9.19 \times 14.62 \times 8$ in
\$340/pr
SB-L. 76 3-W'ay Floor-Standing Speaker
Bass-reflex speaker with $12^{\circ}$ woofer; 4" midrange: 2.12" tweeter: aluminum bobbins and heat-resistant voice coils for high power handling: non-resonantfabric dust caps. FR $33-22,000 \mathrm{~Hz}$ at 16 dB below average level: max power 150 W music; sens 92 dB SPL/W/m: imp 8 ohms. Simulated woodgrain finish. $14.19 \times 27.16 \times 12.84 \mathrm{in} ; 23.8 \mathrm{lb}$
\$280/pr

## SB-L56 3-Way Floor-Standing Speaker

Bass-reflex speaker with $10^{\prime \prime}$ cone woofer, $4^{\prime \prime}$ cone midrange. 2.12" cone tweeter. FR $37-22.000 \mathrm{~Hz}$ at 16 dB below average level; max power 120 W music; sens 92 dB SPL/W/m: imp 8 ohms. Simulated woodgrain finish. $12.78 \times 25.59 \times 10.56 \mathrm{in}$ : 18.7 lb.
\$230/pr

## SB-L36 2-Way Floor-Standing Speaker

Bass-reflex speaker with 10" cone woofer. 2.12" cone tweeter. FR $42-22.000 \mathrm{~Hz}$ at 16 dB below average level; max power 100 W music; sens 92 dB SPL/W/m; imp 8 ohms. Simulated woodgrain finish. $12.78 \times 25.16 \times 8.97 \mathrm{in}: 16.3 \mathrm{lb}$

$$
\text { . . . . . . . . } \$ 160 / \mathrm{pr}
$$

## Micro Series

SB-F2MK2 Mini Honeycomb-Disc Speaker
Sealed-box speaker in die-cast metal enclosure. Internally shielded. Resettable thermal relay protection. Protective metal grilles. Switchable $4 / 8$-ohm imp: tripod mountable. Linear-phase design. Contains $5.5^{\prime \prime}$ honeycomb disc woofer: $1.12^{\prime \prime}$ honeycomb disc iwecter. FR $55-33.000 \mathrm{~Hz} \pm 5$; max power 100 W music, 50 W DIN: sens $88 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp $4 / 8$ ohms; metallic; $11 \mathrm{lb} ; 6.25 \times 10.06 \times 6.75 \mathrm{in} \$ 410 / \mathrm{pr}$

## SB-R100 Passive-Radiator Speaker

Ported speaker for wall mounting. Features 3 concentric coaxial honeycomb-disc drivers, outermost of which is a passive radiator, all in the same plane for phase linearity; resettable thermal relay protection; internally shiclded: includes wall-mounting kit and flat speaker cables. Contains $10^{\prime \prime}$ (outer diameter) honcycomb-disc passive radiator; honeycomb-disc woofer; I honeycomb-disc midrange; I honeycombdisc iweeter. FR $70-25,000 \mathrm{~Hz} \pm 5 \mathrm{~dB}$; max power 100 W music. 50 W DIN; sens 87 dB SPL/W/m; imp 8 ohms; available in black; 9.9 lb ; $12.36 \times 12.36 \times 2.5$ in.
$\$ 480 / \mathrm{pr}$

## SB-F1MK2 Minj Honeycomb-Dise Speaker

Sealed-box speaker in die-cast metal enclosure: Internal shielding: resettable thermal relay protection; protective metal grille; switchable $4 / 8$-ohm imp: tripod mountable: linear-phase design. $4.75^{\prime \prime}$ woofer; 1.12" tweeter. FR $65-33,000 \mathrm{~Hz} \pm 5 \mathrm{~dB}$; max power 80 W music. 40 W DIN; sens 86 dB SPL/W/m; 6.4 lb ; $5.25 \times 8.5 \times 5.36 \mathrm{in}$.
\$340/pr
SB-S20 2-way Speaker
2-way acoustic suspension bookshelf speaker. Features $4^{* *}$ woofer: $1.5^{\prime \prime}$ tweeter; imp 8 ohms. $\$ 100 / \mathrm{pr}$

## THIEL

## CS 3.5 Coherent Source Speaker

Floor-standing electronic-bass-equalized speaker with $10^{\circ}$ cone woofer. $4^{4}$ cone midrange, and I" dome tweeter. Features complete time coherence by sloping baffle; complete phase coherence by synthesized firstorder crossover system; 3-dimensional sculpted antidiffraction baffle: electronic bass system; magnetic distortion reducing drivers; cast magnesium driver chassis: polypropylene crossover capacitors; $30-\mathrm{mm}$ thick cabinet panels; real wood veneer. FR 23-20,000

## SPEAKERS

$\mathrm{Hz} \pm 2 \mathrm{~dB}$; Power range $50-250 \mathrm{~W}$ rms; sens 89 dB SPL/W/m; imp 4 ohms. Teak, oak, walnut. black, rosewood finishes. $13 \times 42 \times 13 \mathrm{in}$; $75 \mathrm{lb} . \$ 2,450 / \mathrm{pr}$

## CS 2 Coherent Source Speaker

Floor-standing ported speaker with $8^{\prime \prime}$ cone woofer. $3^{\prime \prime}$ cone midrange, and $I^{\prime \prime}$ dome tweeter. Completely time and phase coherent. Time coherence achieved with sloping baflle: phase coherence achieved with synthesized first-order crossover networks. Features anti-diffraction grille; cast magnesium driver baskets: polypropylene crossover capacitors. FR $38-20,000 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB}$; power range $50-250 \mathrm{~W}$; sens 87 dB spl/W/m: imp 6 ohms. Oak, walnut, black, rosewood, teak finishes. $12 \times 39 \times 12 \mathrm{in}: 62 \mathrm{lb}$.
. \$1.550/pr

## CSI 2 Coherent Source Loudspeaker

Floor-standing system with sloping baffle. Features metal dome tweeter; woofer features cast magnesium chassis; polypropylene diaphragm; sculpted grille; FR $52-18.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; phase response of $\mathrm{min} \pm 10$ : sens $87 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$; imp 8 ohm ; cabinet constructed with $1^{\prime \prime}$ MFID; heavy internal bracing; finished with Teak, Walnut, Oak, Rosewood, Black laminate: 26.5 $\times 26.5 \times 91.5 \mathrm{~cm} ; 47 \mathrm{lb}$.
$\$ 1.090$

## ULTRALINEAR BY ESS

## UL-1530 Speaker

Floor-standing 3-way acoustic-suspension speaker protective circuit and resetting circuit breaker. Features $15^{\prime \prime}$ cone woofer; $4.5^{\prime \prime}$ cone midrange; $2.5^{\prime \prime}$ cone iweeter. FR $40-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : minimum power 10 W rms, max power 125 W rms; sens 92.5 dB SPL/W/m; imp 4 ohms: walnut. grain vinyl finish: 54 $\mathrm{lb}, 17.75 \times 29.75 \times 14.5 \mathrm{in}$
\$318/pr

## UL.-1230 Speaker

Floor-standing acoustic-suspension speaker with 12" cone woofer, $4.5^{\prime \prime}$ cone midrange, and $2.5^{\prime \prime}$ cone tweeter. Features protective circuit with reselting circuit breaker. FR $45-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : minimum power 5 W rms, max power 100 W rms; sens 92.5 dB SPL/W/m; imp 4 ohms: walnut grain vinyl; 29 lb ; 14.5 $\times 26.5 \times 10.75$ in
\$260/pr

## UI.-1030 Speaker

Floor-standing acoustic-suspension speaker with protective circuit and reselting circuit breaker. Contains $10^{\circ}$ cone woofer: $4.5^{\prime \prime}$ cone midrange; $2.5^{\prime \prime}$ cone tweeter. FR $50-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; minimum power 5 $W$ rms, max power 100 W rms; sens 92.5 dB SPL/W/m; imp 4 ohms; walnut vinyl finish; 29 lb ; $14.5 \times 26.5 \times 10.75 \mathrm{in}$.
\$198/pr

## UL-208 Speaker

Bookshelf acoustic-suspension speaker $8^{\prime \prime}$ cone woofer and $2.5^{\prime \prime}$ cone tweeter. Features protective circuit with resetting circuit breaker. FR $60-22,000 \mathrm{~Hz} \pm 3$ dB ; minimum power 5 W rms, max power 100 W rms; sens 93 dB sPL/W/m; imp 4 ohms; walnut grain vinyl finish; 18 lb ; $10.75 \times 18 \times 8 \mathrm{in} \ldots . .$. . $\$ 158 / \mathrm{pr}$

## VANDERSTEEN AUDIO

Model 4 5-Way Speaker
Floor-standing dynamically aligned sealed. 5-way speaker in cast basket. Features two 12" cone subwoofers: $8^{\prime \prime}$ cone woofer; $4.5^{\prime \prime}$ cone midrange; $1.12^{\prime \prime}$ dome weeter; $0.75^{\prime \prime}$ dome supertweeter. FR 26 $30.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; power range $100-200 \mathrm{~W}$; sens 89 $\mathrm{dB} ; \operatorname{imp} 4$ ohms. $18 \times 52 \times 17 \mathrm{in} . \ldots . . .53 .850 / \mathrm{pr}$

## Model 2C 4-Way Speaker

Foor-standing 4-way bi-wired speaker. Features $10^{*}$ cone subwoofer: $8^{\prime \prime}$ cone woofer: $4.5^{\prime \prime}$ cone midrange: $1^{*}$ dome tweeter. FR $29-21,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; power range $40-150 \mathrm{~W}$; sens 89 dB spL/W/m: imp 8 ohms. $16 \times 36 \times 10 \mathrm{in} ; 60 \mathrm{lb}$. Oak or walnut . . . \$1,125/pr

## 2W Subwoofer

Floor-standing sealed speaker with three $8^{\prime \prime}$ cone woofers. Features 200-W internal amp; cast basket;
crossover. FR $26.80 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 82.94 dB sPL/W/m. $18 \times 18 \times 17 \mathrm{in} ; 80 \mathrm{lb}$. Oak or walnu1. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$ \$1,200/ea

## Model 1 B 2-Way Speaker

Floor-standing ported speaker. Features $8^{\circ}$ cone woofer, I" dome tweeter. FR $38-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ power range 20 W ; sens $100 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; imp 8 ohms. $12 \times 36 \times 10 \mathrm{in} ; 50 \mathrm{lb}$. Oak or walnut $\$ 650 / \mathrm{pr}$

## VECTOR RESEARCH

All Vector Research speakers feature anti-resonant one-piece woofer baskets: mid- and high-frequency drivers with ferrofluid damping; soff dome tweeters; hass-reflex design 8 ohm impedance; lightrak inish.

VSP-124. Features 12" woofer: 5" midrange: 1" Iweeter; 12" passive radiator. Power range $10-250 \mathrm{~W}$; sens 92 dB . $14.5 \times 39.25 \times 12.5 \mathrm{in} . . . . .$. . $\$ 250 \mathrm{ea}$ VSP-123. Features $12^{\prime \prime}$ woofer: $5^{\prime \prime}$ midrange; 1" tweeter. Power range $10-250 \mathrm{~W}$ : sens 92 dB . 14.13 x $27.5 \times 11.5$ in . . . . . . . . . . . . . . . . . . . . . . . $\$ 200$ ca VSP-102. Features 10" woofer; I" iweeter. Power range $10-120 \mathrm{~W}$ : sens $90 \mathrm{~dB} .13 \times 27 \times 11$ in $\$ 150 \mathrm{ca}$ VSP-82. Features $8^{\prime \prime}$ woofer; $2^{\prime \prime}$ tweeter. Power range $10-50 \mathrm{~W}$ : sensiti ity $89 \mathrm{~dB} \mathrm{SpL} / \mathrm{W} / \mathrm{m} .10 .63 \times 18.75 \times$ 8.38 in .
$\$ 80 \mathrm{ca}$

## VELODYNE ACOUSTICS

## ULD-18 Powered Subwoofer

Floor-standing subwoofer with servo-controlled long-throw $18^{\prime \prime}$ driver with $3^{\prime \prime}$ peak-to-peak linear travel: 400-W amplifier; electronic crossover set at 85 Hz : level control to match subwoofer output to satellite speaker output; walnut, oak, or black. FR IS$85 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max undistorted output of 32 Hz 114 dB; cabinet $23 \times 31 \times 22 \mathrm{in}$; amp $17 \times 3.5 \times 11$ in $\$ 2,595$ ULD-15. As ULD- 18 but with $15^{\circ}$ driver and $17 \times 22$ $x 18$ in cabinet. output capability 109 dB at 32 Hz . $\$ 1,795$

## ULD-12 Powered Subwoofer

$12^{\prime \prime}$ servo-controlled down-firing driver: $100-\mathrm{W}$ rms Class B amplifier; passive crossover set at 85 Hz ; lineor speaker-level connection; subsonic filter -3 dB at 15 Hz ; walnut, oak veneer, or black. FR $18.85 \mathrm{~Hz} \pm 3$ dB ; output capability 103 dB ; cabinet $16 \times 17 \times 21 \mathrm{in}$; controller $8 \times 1.5 \times 6 \mathrm{in} ; 32 \mathrm{lb} . . . . . . . . .$. . $\$ 1.195$

## Passive Crossover/Bypass

High-pass crossover with bypass capabilities for ULD-18 ULD-15. $7 \times 1.5 \times 6$ in

## WHARFEDALE

## Precision Series

### 512.2 4-Way Speaker

4-way speaker with tuned-port enclosure. Features two $8^{\prime \prime}$ cone woofers; $4^{\prime \prime}$ cone midrange; $34^{\prime \prime}$ metaldome tweeter; FR $30-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 90 dB ; crossovers at 1.000 and $5,000 \mathrm{~Hz}$; nom imp 8 ohms; red mahogany finish. $35 \times 11 \times 11 \mathrm{in} ; 53.9 \mathrm{lb} \$ 950 / \mathrm{pr}$

### 510.2 3-Way Speaker

3-way speaker with tuned-port enclosure. Features $8^{\circ}$ cone woofer; $4^{\prime \prime}$ cone midrange: $34^{\circ}$ metal-dome tweeter: FR $35-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 90 dB ; crossovers at 1,000 and $5,000 \mathrm{~Hz}$; nom imp 4 ohms: Avaitable with red mahogany finish. $24 \times 11 \times 11 \mathrm{in}$; 30.8 lb
\$700/pr
507.2 2-Way Speaker

2-way speaker with tuned-port enclosure. Features $8^{\prime \prime}$ cone woofer; $\mathbb{3}^{\prime \prime}$ metal-dome tweeter; FR 40-22.000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; sens 90 dB ; crossover at $5,000 \mathrm{~Hz}$; nom imp 8 ohms; red mahogany finish. $19 \times 9 \times 11$ in: 22.5 lb.
\$470/pr

### 504.2 2-Way Speaker

2-way speaker with tuned-port enclosure. Features $4^{\prime \prime}$ cone woofer; $\mathbf{3}^{\prime \prime}$ " metal-dome tweeter; FR 48-22,000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; sens 86 dB ; crossover at 3.500 Hz ; nom imp 8 ohms: red mahogany finish. $11 \times 7 \times 8$ in: 10 lb . \$330/pr

## Defta Series

Delta 90 3-Way Speaker
3-way speaker with tuned-port enclosure. Features $10^{*}$ woofer; $4^{\prime \prime}$ cone midrange; $34^{* *}$ polymide, softdome tweeter: FR $35-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 89 dB ; crossovers at 1.000 and 5.000 Hz ; nom imp 8 ohms. $27 \times 12 \times 4 \mathrm{in} ; 33 \mathrm{lb}$
\$700/pr

## Delta 70 2-Way Speaker

2-way speaker with tuned-port enclosure. Features $8^{\prime \prime}$ woofer: $3 / 4^{\prime \prime}$ polymide. soft-dome tweeter: FR 35 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 89 dB ; crossover at 3.500 Hz ; nom imp 8 ohms. $21 \times 11 \times 8 \mathrm{in}$; 16.5 lb. . $\$ 450 / \mathrm{pr}$

## Delfa 50 2-Way Speaker

2-way speaker with infinite-baffle design. Features $8^{*}$ woofer; $73^{\prime \prime}$ polymide, soft-dome tweeter; FR 45 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 89 dB ; crossover at 5.000 Hz ; nom imp 8 ohms. $18 \times 10 \times 8 \mathrm{in}$; $13.2 \mathrm{lb} . . \$ 350 / \mathrm{pr}$

## Delta 30 2-Way Speaker

2-way spraker with tuned-port enclosure. Features $61 / 2^{\prime \prime}$ woofer; $34^{\prime \prime}$ polymide, soft-dome tweeter: FR 45$20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 89 dB ; crossover at $5,000 \mathrm{~Hz}$; nom imp 8 ohms. $15 \times 8 \times 6 \mathrm{in} ; 8.8 \mathrm{lb} \ldots \$ 270 / \mathrm{pr}$

## Diamond Series

Ritz Diamond Speaker
Tuned-port design speaker with built-in 20-W amplifier. Features $6.5^{\prime \prime}$ woofer; $4_{4}{ }^{\prime \prime}$ polymide, soft-dome tweeter: FR $40-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens 90 dB ; crossover at $5,000 \mathrm{~Hz}$; imp 8 ohms; black finish. 14 x $9 \times 8 \mathrm{in}: 17.6 \mathrm{lb}$.
\$450/pr

## Active Diamond Plus Speaker

Built-in amp with 3rd-generation monolithic devices; on/ofl suitch; volume control; bass-reflex: $4.5^{\prime \prime}$ woofer, 0.75" tweeter; Sth-order crossover; choice of 6 finishes.
\$350/pr

## Diamond III Speaker

2 -way speaker with $4.5^{\circ}$ woofer. $0.75^{\prime \prime}$ iweeter, with 5 th-order crossover. in choice of 15 finishes. FR 5 20.000 Hz ; output 101 dBA DIN; imp 8 ohms; power range 15-100 watts program
$\$ 300 / \mathrm{pr}$

## WOLCOTT AUDIO

## MDF Omnisphere Speaker

Floor-standing bass-reflex speaker uses a single point source of sound with a spherical dispersing surface. A vertically aligned tweeter driving the space between opposing and closely spaced 6" radius sphere and semisphere forms a radial horn which along with 4 quadrant pyramid-mounted woofer/midrange drivers produces single-point-source omnidirectional dispersion. Features four 6.5" polypropylene-conc. bu-tyl-surround woofers; 28 mm soft-dome tweeter; auto

$$
\begin{gathered}
\text { PRICES LISTED } \\
\text { are manufacturers' suggested retail prices } \\
\text { (also referred to as } l i s t \text { prices); } \\
\text { actual selling prices are set by individual dealers. } \\
\text { All prices are subject to change without notice. }
\end{gathered}
$$

## Back By Popular Demand.

At one time peregrine fateons nested by the thousands throughout the United states. But with the widespread use of the insecticide DIDT in the $19+0$ s and 1950 s, the species suffered greaty In the castern US., the peregrine falcon disappeared entirely.

Now peregrine falcons have macle a comeback, thanks to effionts by conservationists.
Since 1975 when recovery programs were established. 752 peregrines have been released in the eastern US, and there has been a steady increase in the nesting population.

With wise conservation policies, other once rare species such as the Americun alligator and the hald cegge have also made comehacks

Help save our endangered species Join the National Wiklife Federation.
1412 10th street. NW,
IWorkniz for thi Aaturre oif Tomerrenv. Washington, DC: vational ivildlife federation 20030-2266.


## AKG ACOUSTICS

## K340 Stereo Headphones

Two-way electrostatic/dynamic headphones with fixed-charge electrostatic transducer/dynamic MC transducer and passive diaphragms in each earcup. Connects directly to headphone jack of receiver or amp or across speaker output terminals. FR 15-25,000 Hz ; SPL 117 dB at $0.1 \% \mathrm{THI}$; nominal imp 400 ohms; max continuous input $200 \mathrm{~mW} / \mathrm{ch}$ at 117 dB SPL ; includes 10 -ft 4 -conductor cables with 3 -conductor .25 " stereo phone plug; 13.5 oz .
.. \$235

## K280 Circumaural Head phones

Features parabolic-type, dual-transducer design in each earcup; low imp electrical circuit; matches 4-75 ohm outputs. Comes with 9.8 ft cable, standard stereophone plug. 8.8 oz
. . $\$ 195$

## K260 Open Air Headphones

Open air, circumaural stereo headphone with dynamic MC transducers. Matches $\mathbf{4 - 6 0 0}$ ohm outputs. 10 ft cable; standard stereo plug; 9.2 oz . . . . . \$ $\$ 170$

## K240 DF Studio Monitor Headphones

Designed with a flat frequency response based on European requirements for reference monitor headphones. FR $20-20.000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; max input II V ; Matches $4-600$ ohm outputs; max SPL 95 dB at $<0.3 \%$ THD; With 2.5 m cable and standard stereo phone plug: 8.5 oz . $\$ 150$

## K240M Free-Field Headphones

Frec-field stereo headphones; dynamic MC transducer and 6 passive radiators in each circumaural cup. FR $15-20,000 \mathrm{~Hz}$; imp 600 ohms; max SPL. 119 dB at $0.3 \%$ THD; supplied with $10-\mathrm{ft} 4$-conductor cable and $.25^{\prime \prime}$ phone plug: 7.9 oz .$\$ 150$

## K145S Electrostatic/Dynamic Headphones

Two-way electrostatic/dynamic semi-open headphones. FR $25-24,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 150 ohms; phone connector; 60 oz , cord 10 ft . long ...... \$110

## K-141M Monitor Headphones

Semi-open stereo dynamic pro monitoring headphones with MC transducers. FR $20-20,000 \mathrm{~Hz}$; max SPL 120 dB at $0.5 \%$ THD, imp matches $4-600$ ohms; 10 -ft 4 -conductor cable and standard 3 -conductor sterco phone plug: 6.9 oz . . . . . . . . . . . . . . . . . . $\$ 100$

## K135 Headphones

Semi-open dynamic headphones. FR $25-18,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$;imp 150 ohms; phone connector: 5.6 oz .; cord 10 ft . long . $\$ 80$

## K130 Stereo Head phones

Supra-aural stereo headphones with dynamic MC transducers. FR $20-20,000 \mathrm{~Hz}$; max SPL 119 dB ; imp 200 ohms at $0.7 \% \mathrm{THI}$; $10-\mathrm{ft} 4$-conductor cable with 3 -conductor stereo phone plug; $4 \mathrm{oz} . .$. . . . . . . . $\$ 70$

## K55 Supra-Aural Headphones

CAD/CAM designed supra-aural stereo headphone with wire headband construction. Matches 4-150 ohm ouputs. Comes with 9.8 ft cable; combination standard/mini stereo phone plugs. 3.2 02. . . . . $\$ 50$ K21TV. As above with cable-mounted control box for left/right level adjustment. stereo/mono switch. and dual channel mode for SAP broadcasts. . . $\$ 60$

## K45 Stereo Head phones

Ultra-lightweight supra-aural stereo headphones with dynamic MC transducers. FR $30-18,000 \mathrm{~Hz}$; max SPL 117 dB at $0.9 \%$ THD; matches $4-200$ ohm outputs; 10-ft 4-conductor cable; combination standard/mini stereo phone plug; 2.7 oz .
$\$ 60$

## K-2 Mini Headphones

2 MC dynamic transducers; adjustable earcups with washable cushions; matches 4-200 ohm outputs; 9 ft cable; standard/mini stereo phone plug . . . . . . \$45

## ALPHASONIK

## HP-1 Headphones

Walkman-style lightweight headphones with highefficiency samarium-cobalt magnets. . . . . . . . . . \$15

## AUDIO-TECHNICA

## Sownd Gward Series

SG750CD. Full-size, closed back headphones with full-range, 40 mm , mylar drivers; FR $20-20,000 \mathrm{~Hz}$; $.25^{\prime \prime}$ phone plug connector; $4.7 \mathrm{oz} . . . . .$. . . . . . $\$ 50$ SGS00CD. Superaural stereophones with oversize earpieces for improved isolation. FR $20-20,000 \mathrm{~Hz}$; mini-connector with $.25^{\circ}$ adaptor; $2.0 \mathrm{oz} . \ldots$. . $\$ 40$ SG450. Ultra-light weight "turbo" stereophones. Bass-vent design; fully adjustable headband; FR $20-$ $20,000 \mathrm{~Hz}$; mini connector with $.25^{\circ}$ adaptor; 5 oz. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 30$ SG430. Micro earbuds with full-range drivers; FR 3520.000 Hz : mini connector with . $25^{\prime \prime}$ adaptor and extra earpiece covers; 0.3 oz .
\$25
SG410. Ultra-light mini headphones with polymer dome drivers: FR $40-20,000 \mathrm{~Hz}$; mini connector with 25" adaptor; 1.0 oz . . . . . . . . . . . . . . . . . . . . . . . . $\$ 15$

## AP1400 Open-Back Headphones

Imp 4-16 ohms; FR $20-22,000 \mathrm{~Hz}$; sens 105 dB sPL/W/m; 0.25" phone plug; 10 ft cable; 5.5 oz . $\$ 60$

## AP1300 Closed-Back Headphones

Imp 4-16 ohms; FR $20-20.000 \mathrm{~Hz}$; sens 108 dB SPL/W/m; 0.25" phone plug; 10 ft cable; 5.4 oz . $\$ 50$

## AP1200 Open-Back Headphones

Imp 4-16 ohms; FR $20-20,000 \mathrm{~Hz}$ : sens 90 dB SPL/W/m; $0.25^{\circ}$ phone plug; 6 ft cable; 3.3 oz . $\$ 40$

## AZDEN

## DSR-DM90 Digital Monitor Headphones

Features over-sized drivers; samarium cobalt magnets; 16 -micron polymer and copper-clad aluminum wire; gold-plated mini plug: gold-plated adaptor plug for standard jacks. . . . . . . . . . . . . . . . . . . . . . . $\$ 100$

## DSR-50 Open-Air Headphones

Dynamic lightweight headphones with double-dome $40-\mathrm{mm}$ diaphragm made of 16 -micron-thick polymer. Features ultra-lightweight copper-clad alumi-num-wire voice coils; gold-plated mini plug; gold plated mini to phono plug adaptor; Digital ready. FR $16-25,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 300 ohms ; max power 200 mW ; sens 101 dB at $1 \mathrm{mV} / \mathrm{ch}$ at $1,000 \mathrm{~Hz} ; 195 \mathrm{~g} \$ 80$

## DSR-48 CD Compatible Headphone

Super lightweight version of DSR 50 . sens 97 dB SPL/W/m, .

## DSR-18 Headphones

Dynamic headphones. Features imp 60 ohm; sens $103 \mathrm{~dB} \mathrm{SPL} / \mathrm{W} / \mathrm{m}$; max input 200 mW ; FR $15-22,000$ Hz; 3-meter cord; gold-plated mini plug; gold-plated adaptor plug for standard jacks.
$\$ 70$

## DSR-12 Phone-Plug Headphones

Standard size headphones with extremely lightweight ear units. FR $20-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 200 ohms: sens 105 dB SPL with $1-\mathrm{mW}$ input of $1,000 \mathrm{~Hz}$; max power 100 mW ; phone connector. . $\$ 60$

## DSR-88 Micro-Dynamic Head phone

In ear design. Mini to $.25^{\circ}$ gold-plated adaptor. Sens $104 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; dynamic samarium cobalt speaker unit . $\$ 45$

## DSR-42 Headphones

Dynamic headphones. Features imp 50 ohms; sens 102 dB sPL/W/m; max input 100 mW ; FR 20-20,000 Hz; 2 meter cord; 3.5 mini-plug . . . . . . . . . . . . $\$ 40$

## BANG \& OLUFSEN

## Form 1 Headphones

Dynamic, semi-open headphones. Features lightweight self-adjusting earpads with tension relief pads to remove pressure from ear. FR $20-20,000 \mathrm{~Hz} \pm 3$ dB; imp 35 ohms; mini \& phone connector. . . \$120
Form 2 Headphones.
$\$ 60$

## BEYER DYNAMIC

## DT 48A Standard-Reference Headphones

Audiometric-calibration, standard-reference headphones for acoustic measurements. FR $16-20,000 \mathrm{~Hz}$; max power 200 mW ; imp 5 ohms.
. $\$ 320$

## DT 48 Headphones

Features removable/replaceable ear cushions and 10 ft coiled cable. FR $16-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; imp 200 ohms; sens 105 dB SPL with $1-\mathrm{mW}$ input at 1.000 Hz ; max power 96.8 mW ; phone plug; 14 oz without cord.
. $\$ 300$

## DT 109 Headphones with Microphone

Headphones with dynamic boom microphone for use in live and remote broadcasting. Features rugged modular construction, available with straight or coiled 10 -ft cord in numerous mic and headphone impedances, comfortable for extended wearing. FR $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 400 ohms; sens 94 dB SPL with I-mW input at $1,000 \mathrm{~Hz}$; max power 1.000 mW ; phone plug; 14.5 oz with cord.
\$214

## DT 880 Headphones

Semi-open, circumaural headphones with rare-earth magnets. FR $5-25,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 600 ohms; sens 94 dB SPL with $\mathrm{l}-\mathrm{mW}$ input of 1.000 Hz ; max power 100 mW ; phone plug; $10^{\circ}$ cord length; 7 oz with cord.
. $\$ 159$
DT 880 Studio. Studio version of the DT 880 where extremely wide frequency response and long wearing comfort is required. FR $5-35,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; all other specs same as DT 880
. \$219

## DT 990 Dynamic Headphones

Circumaural stereo headphones with very large, low-mass-diaphragm design. Frequency response equalized to diffuse soundfield method. FR $5-35,000 \mathrm{~Hz}$

## HEADPHONES

$\pm 3 \mathrm{~dB}$; imp 600 ohms; max power 100 mW 116 dB SPL; sens 96 dB at $1 \mathrm{mV} / \mathrm{ch}$ at $1,000 \mathrm{~Hz}$. Includes 0.251 connector. 8 oz $\$ 199$

## DT 108 Headphones with Microphone

Combination single-muff headphone with dynamic boom microphone for live and remote broadcasting. Features rugged modular construction, straight or coiled cord with numerous mic and headphone impedances, designed for extended wearing. FR $30-$ $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 400 ohms standard; sens 94 dB SPL with $1-\mathrm{mW}$ input of $1,000 \mathrm{~Hz}$; max power 1.000 mW ; phone plug; cord length $10^{+}$coiled or straight; 10.75 oz with cord
$\$ 182$

## DT 770 Dynamic Headphones

Circumaural stereo headphones with bass-reflex system to improve accuracy and detail of low frequencies. Closed design isolates ambient noise. Frequency response equalized to diffuse soundfield method. Features very large, low-mass-diaphragm design. FR $15-30,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 600 ohms ; max power 100 mW 116 dB SPL: sens 96 dB at $1 \mathrm{mV} / \mathrm{ch}$ at $1,000 \mathrm{~Hz}$. Includes $0.25^{\prime \prime}$ connector. 9 oz
. \$179

## DT 100 Montior Headphones

Recording-studio monitor headphones for production and post-production. Features detachable straight or coiled 10 cord; available in numerous impedances, modular construction. FR $30-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; imp 400 ohms; sens 94 dB SPL with $1-\mathrm{mW}$ input of $1,000 \mathrm{~Hz}$; max power 1.000 mW ; phone plug: 12.5 oz with cord
$\$ 165$

## DT 96A Multi-Purpose Headphones

Headphones used in interpreting installations at conferences and conventions, listening libraries and language labs. Can be used with or without circumaural ear cushions. Features detachable straight or coiled 10 -ft cord. Frequency response $30-17,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$; imp 400 ohms; sens 94 dB SPL with $1-\mathrm{mW}$ input of $1,000 \mathrm{~Hz}$; max power 360 mW ; phone plug; 4 oz without cord
. \$140

## DT 550 Lightweight Headphones

Headphones with semi-open, circumaural design. Lightweight. adjustable suspension, $10-\mathrm{ft}$ coiled cord. FR $10-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 600 ohms; sens 95 dB SPL with $1-\mathrm{mW}$ input at $1,000 \mathrm{~Hz}$; max power 100 mW ; phone plug; 7 oz without cord . . . . . . . . $\$ 139$

## DT 220 Headphones

Headphones with extremely lightweight. closed design; wide-band drivers; soft circumaural ear cushions. FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 400 ohms; sens 102 dB sPL with $1-\mathrm{mW}$ input at $1,000 \mathrm{~Hz}$ : max power 100 mW ; phone plug; 10 oz without cord . . . $\$ 129$

## DT 102 Single-Muff Headphones

Headphones for broadcast, recording and disco cueing. Features detachable straight or coiled $10-\mathrm{ft}$ cord: available in numerous impedances; modular construction. FR $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 400 ohms; sens 94 dB max power 1.000 mW ; phone plug; 9 oz without cord.
$\$ 115$

## DT 330 MK II Semi-Open Headphones

Circumaural headphone with rare-earth magnets. FR $15-18,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; jmp 40 ohms; sens 85 dB ; max power 100 mW ; phone plug: cord length $10 \mathrm{ft} ; 6.75$ ozs without cord
. \$89

## DT 320 MK II Lightweight Headphones

Headphones with semi-open, circumaural design. FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 40 ohms; sens 88 dB sPL with $1-\mathrm{mW}$ input of $1,000 \mathrm{~Hz}$; max power 100 mW ; mini-connector; $.25^{\circ}$ phone plug adapter: $10^{\circ}$ cord length; 3.75 oz without cord
. \$75

## DT 325

Designed as a portable tape or CD player headphone. FR $20-20,000 \mathrm{~Hz}$; imp 40 ohm ; mini-connector with $.25^{*}$ phone adaptor.

## CALRAD ELECTRONICS

## 15-115 Lightweight Dynamic Headphones

Transducers designed to eliminate breakup and reduce harmonic distortion and phase differences. ER $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 32 ohms; max power 300 mW ; sens 98 dB at $1 \mathrm{mV} / \mathrm{ch}$ at $1,000 \mathrm{~Hz}$. Includes stereo $0.25^{\prime \prime}$ connector and shielded cable .... \$10.5

## 15-139 Stereo Headphones

Super lightweight headphones. FR $30-20,000 \mathrm{~Hz}$; sens 100 dB : matching imp 4-32 ohms; . $25^{\circ} 3$-way stereo plug
. \$39

## 15-136 Stereo Headphones

General purposed dynamic headphones. Features .25 " stereo plug: FR $20-18.000 \mathrm{~Hz}$; imp 8 ohms; power $0.5 \mathrm{~W} / \mathrm{ch}$.
.$\$ 18$

## 15-147 Earbuds

Earbud-type headphones. 4-ft cable, .25" stereo plug. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 5$

## CARTER-CRAFT

## 40-416 Mini Headphones

Dynamic headphones features rare-earth magnets: adjustable headband; 7-ft ultra-light, tangle-resistant cord; super-soft ear pads. FR $20-30.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : imp 38 ohms. Includes mini and $0.25^{\circ}$ connectors. 1.25 oz .
\$36

## 40-414 Mini-Stereo Headphones

Mini-stereo headphones with rotary volume/balance controls: 32 ohms; 36 mm Samarium colbalt magnets an mylar cones; max power 100 mW ; adjustable foam earpieces; stereo plug with adapter; 2 oz; black . $\$ 27$

## 40-411 Mini Headphones

Features rare-earth magnets; adjustable headband; 5ft cord; super-soft carpads. FR $30-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 32 ohms. Includes mini and $0.25^{\prime \prime}$ connectors. 12 oz. $\$ 19$

## 40-421 Pick Pocket Headphones

Dynamic, open-air mini headphones with 5-ft cord and foam earpads. Folds up to store in cassette-sized case (included). Mini connector. 10 oz . . . . . . . . \$11

## 40-417 Mini Headphones

Dynamic, open-air headphones with 5 -ft cord and mini connector. FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 32 ohms. 1.5 oz .
. \$11

## 40-425 Stereo Earphones

In-ear-type headphones feature 6-ft cord and molded strain reliefs. lmp 8 ohms: max power 300 mW . Includes mini connector
. \$8

## Replacement Foam Earpads

Replacement earpads for Carter-Crafi headphones
40-405. For 40-399 headphones. 2-pair package $\$ 2.45$
40-407. For $40-417$ headphones . . . . . . . . \$1.65/pr
40-409. For 40-411, 40-416 headphones. . . \$2.15/pr

## DENON

## AH-IX6 Open-Air Headphones

Digital-ready headphones with foamed mica flat diaphragm, LC-OFC cables/wiring, and phone connector. FR $15-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 32 ohms; max power 200 mW ; sens $98 \mathrm{~dB} \ldots . . \ldots \ldots . .$. . . $\$ 100$
AH-D4. Same as AH-D6 except sens $96 \mathrm{~dB} \ldots \$ 80$

## AH-D3 Headphones

Features high-polymer diaphragm with double-dome construction for improved rigidity and well-damped sound reproduction; LC-OFC voice coil to eliminate distortion; high-energy samarium-cobalt magnet; 1 point cross-support design; OFC cable.
. $\$ 60$

## AH-D1 Headphones

Features high-polymer film diaphragm; copper-clad
aluminum wire in voice coil; high-energy samariumcobalt magnet: 1-point cross-support design; OFC cable

## FOSTEX

T20 Studio Headphones
Regular-phase system in planar polyester ribbon drivers (diaphragm suspended between opposingpole magnet assemblies); deposited spiral voice coil: oversize ear pads; adjustable headband; ansiotropic ferrite magnets; diaphragm 1.375"; all parts and assemblies secured by screws. Imp 50 ohms; sens 96 dB with I mW; max input 200 mW ; max output $\$ 19$ dB with 200 mW ; frequency response $20-30,000 \mathrm{~Hz}$; 10.6 oz .
$\$ 89$

## INTERNATIONAL COMPONENTS

SHP-600 Dynamic Stereo Headphones
For use with CD players and professional recording equipment. Features samarium cobalt magnets; mylar cone diaphragm
. $\$ 31$

## SHP-400V Professional Stereo Headphones

Ultra-slim professional stereo headphones feature individual left/right volume controls; FR 20-21,000 $\mathrm{Hz} ; 40 \mathrm{~mm}$ mylarcon drivers; max input power .5 W ; brushed black aluminum ear-cups; chrome trim: leather padded cushions; adjustable headband: 6 -foot coiled cord with .25 -inch stereo phone plug; 8 ounces. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 25$

## SHP-500 Slim Professional Stereo Headphones

Ultra-slim headphones feature FR $18-22,000 \mathrm{~Hz} ; 40$ mm mylarcon drivers; max input power $.5 \mathrm{~W} ; 6^{\circ}$ coiled cord with $.25^{\prime \prime}$ phone plug: 7 oz ; brushed black aluminum ear-cups with chrome trim: leather padded cushions and adjustable headband . ...... \$22

## SHP-300 Cobalt Professional Headphones

Folding professional featherlight mini headphones. Feature samarium cobalt drivers; sens $101 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ : at 1.000 Hz ; FR $20-19,900 \mathrm{~Hz}$; imp $4-32$ ohms; 3.5 mm stereo plug; $.25^{\prime \prime}$ stereo adapter $\qquad$

## SHP-65 Mini Stereo Headphones

Mini, superlight, headphones feature 13 mm mylar speakers; frequency response $20-20,000 \mathrm{~Hz}$; extra earpads . . \$8

SHP-55 Bandless Bud Stereophones
Open-air. lightweight, bud earphones feature response $20-20 \mathrm{~Hz}$; imp 32 ohm
. $\$ 6$
JVC
HAD990 Headphones
Features large-diameter driver units with samarium cobalt magnets
$\$ 150$

## HAD770 Headphones

Features high-sensitivity coils made from copperclad aluminum wire. . . . . . . . . . . . . . . . . . . . . \$120

## HASU7 Headphones

Surround-sound headphones. Features 2 separate drivers in each earcup; front/rear separation; 2 independent plugs; moving coil

HAD550 Headphones
Designed for flat frequency response. Features 24 karat gold-plated plug
\$45

## HACDS Headphones

Features open-air, super lightweight design; copperclad aluminum wire voice coils. . . . . . . . . . . . . . $\$ 40$

## HAD330 Headphones

Designed for flat frequency response. Features 24 -
karat gold-plated plug
.$\$ 35$
S35

## KENWOOD <br> KH-500 Stereo Headphones <br> Open-type dynamic headphones with fold-up headband <br> KH-D7 Stereo Head phones <br> Ultra-lightweight micro headphones with detachable headband

## KOSS

Pro/450 Stereophone
Studio and professional stereophone featuring unique dual element driver and neodymim magnet. FR $10-30,000 \mathrm{~Hz}$
$\$ 175$

## JCK/200-S Cordless Headphones



Dynamic circumaural cordless headphones equipped with transmitter and $41 \cdot$ adaptor. FR $20-20,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}$. . $\$ 160$

## JCK/100 Cordless Headphones

Infrared cordless design. THI) $<.25 \%$ at 100 dB SPI 3 oz. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 130$

## SST/10 Headphones

Designed for digital $\mathrm{a} / \mathrm{v}$ equipment. Sens 0.36 V rms at 100 dB sPI . $\$ 120$

## Pro/4AA Stereophone

For home and professional use. Features oversized 1 " voice coil. FR $10-22.000 \mathrm{~Hz}$. . $\$ 99$

## Pro/4X Plus Stereo Headphones

Dual-element design combines rare-earth magnet with piezo-electric element. FR $10-40,000 \mathrm{~Hz} \pm 3$ dB $\$ 90$

## Pro/4AAA Plus Stereo Headphones

Features extra-large voice coils; oversized diaphragm. FR $10-22.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} . . .$. . . . . . . $\$ 70$

## SST/7 Headph ones

Dynamic circumaural closed stereophone design. Features notch-type headband adjustment; multipivoting earcups; volume balance control on coiled cord. FR $15-30,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 60 ohms. . . $\$ 70$

## SST/6 Headphones

Dynamic open-air headphones with temporal-pad design and volume balance control on coiled cord. FR $15-20.000 \mathrm{~Hz} \pm 3 \mathrm{db}$
$\$ 60$

## PortaPro Headphones

Supra-aural folding headphones for high-end portable or home use. Features exclusive Comfort Zone multi-pivoting carcup adjustments. Mini plug and .25 " phone plug: cord length 5 ft .2 .5 oz w/cord $\$ 50$

## HV/1A Headphones

High-velocity headphones with low-mass Decilite drivers for $15-30,000 \mathrm{~Hz}$ frequency response $\pm 3 \mathrm{~dB}$. Distortion $0.5 \%$ at 100 dB spL: sens 0.9 V rms for 100 dB SPL. Acoustical-sponge ear cushions; extendable headband with self-adjusting pivoting yokes. soft padded vinyl cover: 10 -fi cord: 10.1 oz ........ $\$ 50$

Porta/Pro Jr. Headphones
THD $<.2 \%$ at 100 dB SPI. I kHz

K401.' Plus Headphones
Features dual balance controls; volume control Rated at 100 ohms and 104 dB SPL W/m inpul. $\$ 40$

## SST/5 Headphones

Dynamic headphones with closed circumaural design. Features adjustable leather headband and foam filled ear cushions. FR $20-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} \ldots \$ 40$

## KSP-II Headphones

Portable. collapsible headphones. Features reticulated foam ear custion; carrying bag: 2 plugs. . . . . $\$ 35$

## K6X Plus Dynarnic Headphones

Lightweight headphones. 100 dB SPI.: imp 100 ohms; 6.3 oz .
. $\$ 32$

## SST/4 Headphones

FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 35 ohms; sens 100 dB : 6.3 oz
\$32

## KSP Sound Partner Headphones

Featherweight phones for pocket sterco use. Folds into compact size to fit into denim tote bag (supplied): comes with accessory adaptors . . . . . . . \$25

## KPL/4 Headphones

Hear-through headphones for stereo, ver or TV Features self-adjusting slide bars; washable cushions; mini-mono adaptor: spare cushions. FR $\mathbf{1 8 - 2 0 , 0 0 0 ~ H z}$ $\pm \mathrm{dB}$ : imp 100 ohms; 8 - ft cord \$25

## KPL/3 Headphones

Portable headphones. Features volume and balance controls, screw-on adaptor: spare cushions. FR 20 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : imp 35 ohms. mini connector. phone connector.
. $\$ 20$

## KFF/300 Headphones

Blue/yellow lightweight stereophones with dual balance controls. includes headband cover. spare large cushions. and $.25^{\prime \prime}$ home adapter. Sens 100 dB : imp 35 ohms: 3 os \$20

## KMP/800 Headphones

Sidewinder earhud design with ultra-thin diaphragm. spare cushions. home adaptor: dist. <1\% . . . . \$18

## KFF/200 Headphones

Dynamic open-ear headphones with L-type plug: covered headhand; extra cushions; spare adaptor: FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; sens $100 \mathrm{~dB} ; 2.5 \mathrm{oz} \ldots . . \$ 16$

## KPL/2 Headphones

Features adjustable headband; pivotıng carcups: spare cushions. . 25 " adaptor. Imp 35 ohms: $2.502 \$ 15$

## KMP/600 Headphones

Detachable headband and sidewinder earbud design. Includes hone adapter. THI) $<1 \% ; 0.7502 \ldots$. . $\$ 15$

## KMP/400 Headphones

Protective carrying case. THI $<1 \%: 0.5 \mathrm{oz}$.
$\$ 12$

## KPL//1 Headphones

Pivoting carcups ultra lightweight. $25^{*}$ adapter. 2
$\qquad$

## KFF/100 Headphones

Red/blue/yellow lightweight stereophones. Includes $.25^{\prime \prime}$ adaptor. Sens 100 dB : imp 35 ohms: 2 oz. . $\$ 10$

## LASER BYSWIRE MAGNETICS

1270-9513 Lightweight Headphones
Replacement stereo headphones packed in clear plastic box
$\$ 5.99$

## LENOXX

## CD-700 Stereo CD Headphones

Feature dynamic Samarium cobalt speaker elements: FR $\mathbf{2 0 - 2 0 , 0 0 0 ~ H z ; ~ . 2 5 " ~ a d a p t e r : ~} 2$ oz

876 Dual-I se Foldable Headphones
Micro in-ear or over-ear headphones. Feature minimono plug for TV; . $25^{\prime \prime}$ plug; FR $100-15,000 \mathrm{~Hz}$; fully adjustable headband: Alnico alloy magnets . . . . \$10

## 884 Lightweight Stereo Headphones

Lightweight headphones feature mylar diaphragms: $.25^{\prime \prime}$ adapler: fully adjustable headband; FR $100-$ $15.000 \mathrm{~Hz} 4^{\circ}$ cord: .75 oz .

## 883 Stereo Bud Headphones

In-ear. lightweight headphones. Fit all personal portable stereos; dynamic mylar diaphragms, roll-up storage case: . 507.

## MEMOREX BYMEMTEK

## Sonic-Litr Headphones

## SL-88 Deluxe Stereo Farphones

Dynamic wear-in-ear-type headphones with samari-um-cobalt magnets. Features contoured shape: goldplated connectors: mini-connector and mini-to-0.25" adapter: tr $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 16 ohms: max power 30 mW : sens 106 dB at $1 \mathrm{mV} / \mathrm{ch}$ at 1.000 Hz .2 oz. .

## S.-90 Deluxe Stereo Headphones

Dynamic headphones with samarium-cobalt magnets. Features human-engineered curves and contours: godd-plated connectors: mini-connector and mini-to-0.25" adapter: FR $20-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 32 ohms max power 100 mW : sens 100 dB at 1 $\mathrm{mV} / \mathrm{ch}$ at 1.000 Hz .0 .5 oz .

## SL-60 Stereo Headphones

Dynamic lightweight headphones with adjustablc headband. Features Super-Soft ear cushions: 45* cord: mini plug: mini-to-0.25" adapter, FR 50-18.000 $\mathrm{Hz} \pm$ 3: imp 32 ohms: max power 100 mW : sens 92 dBat $1 \mathrm{mV} / \mathrm{ch}$ at 1.000 Hz .1 .75 oz $\qquad$ . \$10

## SL-40 Stereo Headphones

Dynamic lightweight headphones with adjustable headband. Features flexible pivot earpiece mounts; $45^{\prime \prime}$ cord: mini plug: mini-to-0.25" adapter; fR 50 $16.000 \mathrm{~Hz} \pm 3$ : imp 32 ohms: max power 50 mW : sens 80 dB at $1 \mathrm{mV} / \mathrm{ch}$ at $1.000 \mathrm{~Hz} .1 .502 \ldots .$. . $\$ 5$

## NADYSYSTEMS

## IRH-21 Stereo Headphones

Cordlese stereo headphone. Infrared transmission 35 ft range. Separate volume controls for each ear. FR 45$15.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$.
$\$ 100$

## NAKAMICHI

SP-7 Stereo Headphones
Lightweight stereo headphones provide broad. flat frequency response, extended dynamic range, and minimal distortion. Utilizes 25 -micron-thick polyester film with $40.5-\mathrm{mm}$ diameter and $18.3-\mathrm{mm}$ voice coil. FR $20-20.000 \mathrm{~Hz}$ : imp 45 ohms; max power 100 mW : $3-\mathrm{m}$ cable: standard $0.25^{\prime \prime}$ phone plug. . . $\$ 80$

## ONKYO

DP-I.2X Dynamic Headphones
Supra-aural headphones with 28 mm tangential-edge diaphragm for improved deep bass response. Special earpad adjusts to individual car contours. Mini connector and mini-to-0.25" adaptor included. FR IS$20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : imp 30 ohms ; max power 100 mW : sens 110 dB at $1 \mathrm{mV} / \mathrm{ch}$ at $1,000 \mathrm{~Hz} .2 \mathrm{oz}$. . . . . $\$ 44$

## DP-LIT Dynamic Headphones

Supra-sural lightweight folding headphones with volume control and stereo/mono selector. Mini connector and mini-to- $0.25^{\prime \prime}$ adaptor included. Frequency response $20-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : impedance 30 ohms; sensitivity 102 dB at $1 \mathrm{mV} / \mathrm{ch}$ at 1.000 Hz .2 oz.

## ORA ELECTRONICS

## Studio Spec Brand

## GHT100 Digital Turbo Earphones

Digital ready for use with portable and home CD players and DAT players. Features gold-plated stereo plug. . \$9

## GH16RP Rap Earphones

Lightweight in-ear earphones with case. Available in varicty of colors
\$5

## GH111G Stereo Headphones

Lightweight, compact headphones with gold-plated plug and $27-\mathrm{mm}$ ferrite drivers.
$\$ 3.60$

## PANASONIC

## EAH-X250 Digital Monitor Headphone

2-way dual-drive speakers; acoustically-loaded; 42 mm diameter woofer: neodymium magnet: 32 mm tweeter: double ear pad system; FR $2-30,000 \mathrm{~Hz}$; sens $106 \mathrm{~dB} / \mathrm{mW}$ $\$ 169.95$

## EAH-D8 Lightweight Stereo Headphones

Lightweight stereo headphones compatible with portable CD players. Features mini-jack connection with . $25^{\circ}$ stereo jack adaptor; FR $15-25,000 \mathrm{~Hz}$; digitalready
\$49.95

## EAH-Z70 Dual-Driver Earphones

With tweeter for highs and woofer for lows: goldplated plug and gold-plated adaptor for full-size phone jacks. Max input $50 \mathrm{mV}(123 \mathrm{~dB})$; imp 28 ohms; sens $106 \mathrm{~dB} \mathrm{SPL} / \mathrm{mW}$; FR $8-25,000 \mathrm{~Hz}$; 4 -ft straight cord $\$ 49.95$

## EAH-S35 1.3-Oz Headphones

In black, blue, or red, with adaptor for full-size phone jacks. Digital ready; soft cushion earpads; adjustable headband: frequency response $18-20,000 \mathrm{~Hz}$ : $4.9-\mathrm{ft}$ straight cord .
$\$ 24.95$

## EAH-Z31 0.15-Oz Earphones

In black, pink, red. gray, or white; with case. Compatible with portable CD players; FR 16-22,000 Hz : max input power 50 mW : imp 16 ohm; 4 - ft straight cord
$\$ 24.95$

## EAH-Z28 0.19-Oz Earphones

In black or pink, with case. Digital-ready: compatible with portable CD players; FR $16-20.000 \mathrm{~Hz}$ : Sound pressure level $106 \mathrm{~dB} / \mathrm{mW}$; 4-ft straight cord $\$ 15.95$

## EAH-Z9 Folding Headphones

Adjustable headband. Max input $40 \mathrm{mV}(117 \mathrm{~dB})$; imp 16 ohms; sens 102 dB SPL/mW: 3.6-ft straight cord: 0.7-0z. $\$ 14.95$

## EAH-76 Stereo Headphone

Inner-ear replacement stereo headphone with storage case. FR $30-20,000 \mathrm{~Hz}$; sens $102 \mathrm{~dB} / \mathrm{mW}$ at $1,000 \mathrm{~Hz}$ : L-shaped plug.
$\$ 12.95$

## EAH-S18 1.3-Oz Headphones

Adjustable headband: soft ear cushions: adaptor for full-size phone jacks. FR $\mathbf{3 0 - 2 0 , 0 0 0} \mathrm{Hz}$ : 4-ft straight cord.
. $\$ 10$

## EAH-Z17 0.16-Oz Earphones

In black, pink, or blue, with matching cassette-style case. Max input 50 mV ( 119 dB ); imp 26 ohms; sens $102 \mathrm{~dB} \mathrm{SPL} / \mathrm{mW}$ : 3.3-ft straight cord . . . . . . . . \$ $\$ 10$

## PICKERING

## CD-6 Stereo Headphones

Lightweight headphone with dynamic high velocity element with polyester film diaphram and Samarium cobalt magnets. FR $20-20,000 \mathrm{~Hz}$; sens $110 \mathrm{~dB} \mathrm{~W} / \mathrm{m}$; 7.5 ft single side entry cord with gold plated stereo plug and mini stereo adaptor

## CD-4 Headphones

For digital or analog playback, lightweight. FR $20-$ $20,000 \mathrm{~Hz}$ : sens $110 \mathrm{~dB} \mathrm{~W} / \mathrm{m} .7 .5 \mathrm{fi}$ cord with standard gold plated plug $\$ 66$

## PC2+2

In-ear headphone with dual Samaruim Cobalt Magnet drivers ( 2 per bud): $.25^{\prime \prime}$ gold-plated adaptor plug and roll-up storage-case. Imp 35 ohms at $1,000 \mathrm{~Hz}$ : sens 106 dB at 1 mW at $1,000 \mathrm{~Hz}$ SPL : FR $10-25,000$ Hz ; max input 50 mW : $4^{\text {' }}$ cord: weight 12 g ... $\$ 60$

## CD-2 Stereo Headphones

Headphone for digital or analog playback. Samarium Cobalt drivers, lightweight. FR $20-20,000 \mathrm{~Hz} ; 7.5 \mathrm{ft}$ cord with standard stereo plug: Y type 4-conductor cord.
. \$50

## Featherfone 108 Headphones

Fits directly in ears; volume control. FR 20-20,000 Hz : sens 105 dB ; SPL. 25 v at $1,000 \mathrm{~Hz}$ for each channel $\$ 45$

## CD-1 Elliptical Shaped Headphones

Intermediate size elliptical shaped headphone. FR $20-$ $20,000 \mathrm{~Hz}$; sens $105 \mathrm{~dB} ; 7 \mathrm{ft} Y$ cord with gold-plated mini stereo plug and standard stereo adaptor . . $\$ 35$

## OA-99P Featherfone Headphones

Ultralight intra-ear stereo headphones. FR 20-20.000 Hz ; sens 105 dB ; 5 ft cord with mini stereo plug and mini . $25^{\prime \prime}$ stereo adaptor
\$30

## Featherfone 104 Headphones

Designed for in ear wearing. FR $\mathbf{2 0 - 2 0 , 0 0 0 ~ H z}$; sens 98 dB
$\$ 30$
Featherfone 102. Similar to above except sens is 92 dB
$\$ 25$

## OA-88 Featherfone Headphones

Headphones with convertible Mini-Featherfone for headband or in-ear wear. High-velocity samariumcobalt drivers; ultra-lightweight adjustable headband with replaceable foam cushions. FR $20-20,000 \mathrm{~Hz}$ : distortion $<0.5 \%$ at 100 dB SPL ; imp 32 ohms at $1,000 \mathrm{~Hz}$; sens 98 dB SPL with 1 -mW input at 1,000 Hz : max power 0.05 mW : mini stereo plug: $4^{\prime}$ cord; . 5 oz without cord\$25

## PC 100

In-Ear Stereo Phone. Features extra pair of ear cushions: .25 " gold plated plug: roll-up storage case: imp 35 ohms at $1,000 \mathrm{~Hz}$; sens 100 dB with 1 mW at 1.000 Hz : FR response $\mathbf{2} 0-20,000 \mathrm{~Hz}$ : $\mathbf{4}^{\prime}$ cord; max input 50 mW
. $\$ 20$

## OA-66P Stereo Headphones

Open-air headphones with strontium-ferrite magnets. Features ultra-lightweight adjustable headband with replaceable polyurethane foam ear cushions. FR $20-20,000 \mathrm{~Hz}$ : distortion $<0.5 \%$; imp 32 ohms; sens 92 dB SPI with $\mathrm{I}-\mathrm{mW}$ input at $1,000 \mathrm{~Hz}$ : mini plug; .25 " adaptor plug: 1.1 oz without cord........ $\$ 15$

## PIONEER

## SE-M90 Headphones

Mid-size stereo headphones with 32 ohm nom impedance. Features ceramic titanium diaphragm;

$1,000 \mathrm{~mW}$ max power input per channel: FR 3-50,000
Hz : 16-ft, 5-inch connection cord: 9 oz
\$125

## SE-M70 Headphones

Stereo headphones with 32 ohm nom impedance. Features ceramic titanium diaphragm; $1,000 \mathrm{~mW}$ max power input per channel; FR $3-50,000 \mathrm{~Hz} ; 16-\mathrm{fi}$, 5 -inch connection cord: 9 oz
$\$ 100$

## SE-M50 Headphones

Stereo headphones with 32 ohm nom impedance. Features ceramic titanium diaphragm: $1,000 \mathrm{~mW}$ max power input per channel; FR $3-50,000 \mathrm{~Hz}$ : $16-\mathrm{ft}$. 5 -inch connection cord; 8 . I oz
. $\$ 70$

## SE-M50D Headphones

Slim-design stereo headphones with 32 ohm nom impedance. Features $1,000 \mathrm{~mW}$ max power input per channel: FR $3-50,000 \mathrm{~Hz} ; 8$-ft, 2-inch connection cord: 3.2 oz .
\$70

## SE-205 Headphone

Rounded-cup style stereo headphones with 10 ohm nom impedance. Features 500 mW max power input per channel; FR $20-20,000 \mathrm{~Hz}$; 8-ft. 2-inch connection cord: 1.0 oz .
$\$ 45$

## SE-30D Headphones

Slim-design stereo headphones with 40 ohm nom impedance. Features 100 mW max power input per channel: FR $10-25,000 \mathrm{~Hz}: 8$-ft. 2 -inch connection cord: 2.5 oz .
\$35

## QUASAR

SV406 Headphones
Deluxe headphones with adaptor plug for use with 0.25 " jacks.
\$50

## REALISTIC

PRO-60 Acoustic Resistance Headphones
Variable-density ear cushions, $10-\mathrm{ft}$ coiled cord with $0.25^{\prime \prime}$ phone plug. THD $<0.5 \%$; $<8 \mathrm{oz}$........ $\$ 50$

LV-10 High-Velocity Stereo Headphones
Vented-back headphones with $2^{\prime \prime}$ dynamic elements. THD $0.5 \%$ : imp 4-16 ohms: acoustic foam earpieces: soft vinyl-covered headband with self-adjusting yokes: I0-ft coiled cord, $0.25^{\prime \prime}$ plug.
$\$ 40$

## Nova-65 Adjustable Headphone

Side-mounted controls for volume and balance: vinyl drivers; foam-filled ear cushions; padded headband; 10 -ft cord with $0.25^{\prime \prime}$ plug
\$35

## Nova-55 Dynamic Headphones

Samarium-cobalt magnets: mini plug. FR 20-20.000 $\mathrm{Hz} \pm 3 \mathrm{~dB}$; imp 3.2-600 ohms; max power 5 V .3 O2. .\$30

## Nova-40 Adjustable Headphones

Stereo headphones with $3.5^{\prime \prime}$ dynamic drivers. Imp 416 ohms: soft cushion earcups; padded adjustable headband; 10-ft coiled cord, $0.25^{*}$ plug . . . . . . . $\$ 25$

## Nova-45 Lightweight Stereo Headphones

$0.25^{\prime \prime}$ plug adaptor and rare-carth magnets. Frequency response $20-20.000 \mathrm{~Hz} \pm 10 \mathrm{~dB}$; impedance 32 ohms: max power 40 mW : 6.5 -feet cord: 3.3 ounces with cord.
. $\$ 25$

## Nova-52 Folding Stereo Headphones

Rare-earth magnets, 6.5 - ft cord with $0.12^{\prime \prime}$ mini-plug. 3 oz .
\$20

## Micro-in-Ear Stereo Headphones

Stereo headphones designed to slip into outer ear. 0.6 oz. .
$\$ 16$

## Nova-37 Dynamic Headphones

Folding headband; samarium-cobalt magnets: mini plug.

Nova- 10 Stereo I leadphones
$2^{*}$ drivers; adjustable vinyl headband with cushioned carpads. $6.5-\mathrm{fi}$ cord, $0.25^{\prime \prime}$ plug $\$ 15$
Nova-16. Similar to Nova-10 except has separate Glide Path level controls.

## Nova-35 Stereo Headphones

Micro stereo headphones with foam earpads, adjustable headband. 5 - ft cord with $0.12^{*}$ plug. $<3$ oz $\$ 14$

Nova- 33 Lightweight Headphones
Portable headphones. 1.25 o7: foam ear cushions: $0.12^{\prime \prime}$ plug: 4 -ft cord
$\$ 10$

## Nova 36 l.ightweight lleadphones

Fold-up headphones with foam pads; flexible 4-ft. 2 of cord with 0.12" mini plug.

Nova- 34 Lightweight Headphones
Imp 32 ohms: FR $40-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : max power 100 mW : mini plug: 4 -ft cord: $\mathbf{3} \mathbf{~ o z}$ with cord . . . $\$ 6$

## RECOTON

## Stereo 108 Headphones

Lightweight, stereo earbuds. Features cassette-shell container. Available in orange, green, blue. pink. yellow, and red. $\$ 10$

## RHAPSODYBYALARON

## R1-251 ('D) Headphones

Samarium coball drivers: compact headphone buds: coil-up storage and carrying case: standard stereo jack and mini-plug adaptor. FR $12-24.000 \mathrm{~Hz}$; sens 108 $\mathrm{db} / \mathrm{m} / \mathrm{W}$; imp 18 ohms at 1 KHz ; cord lengih 4-fi\$Is

## R1-252 (D) IIeadphones

Samarium cobalt: adjustable and folding headband: standard stereo plug and mini-plug adaptor. Frequency response $16-22.000 \mathrm{~Hz}$
$\$ 15$

## R)-245 Stereo Headphones

Headphones for use with portable and home stereos includes $0.25^{\prime \prime}$ stereo adaptor plug: 3.5 mm mono adaptor plug: 2 extra sets of earpads.
$\$ 10$
R)-242. As above without accessories.
$\$ 5$

## ROSS MARKS

Caliber Series
RE-2660CD. 40 mm samarium cobalt drive unit: FR $15-30,000 \mathrm{~Hz}$ : sens $110 \mathrm{~dB} ; 6.5^{\circ}$ cord; 5.2 oz . . $\$ 130$ RE-2650CD. 40 mm samarium cobalt drive unit; FR $20-30.000 \mathrm{~Hz}$; sens $110 \mathrm{~dB}: 6.5^{\circ}$ cord; 5.2 oz . . $\$ 100$ RE- 26.30 CD . 30 mm samarium cobalt drive unit; FR $20-25.000 \mathrm{~Hz}$ : sens $105 \mathrm{~dB} ; 6.5^{\circ}$ cord; 5.2 oz .. $\$ 80$

## New Generation Series

RE-2580. Samarium cobalt drive units with Mylar diaphrams. Dual filter bass enhancer: dual axis carcup adjustment; 6.6 ft cord with . $25^{\prime \prime}$ adaptor; FR $15-22.000 \mathrm{~Hz}$ : sens 100 dB : comes with storage case $\$ 65$
RF- $\mathbf{2 5 6 0}$ (D). Similar to above except FR 20-22.000 Hz . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 60$ RE- 2540 . Same as 2580 except IR $20-20,000 \mathrm{~Hz}$ and sens 96 dB . \$50
Stylers. (lip on button type carphone with different color earcup color trims; comes with carrying case\$25

## Designer Series

RE-2395CD. Samarium cobalt drive units. FR 18 $22,000 \mathrm{~Hz}$; sens $110 \mathrm{~dB} ; 6.5 \mathrm{ft}$ cord with $.25^{\prime \prime}$ adaptor. $\$ 45$ RE-2390. Same as above with Mylar drive units $\$ 40$ RE- $\mathbf{2 3 6 0}$. Mylar dome drive units 6.5 ft cord; $F R$ 2020.000 Hz ; sens $100 \mathrm{~dB} ; 3.5 \mathrm{oz}$. $\$ 35$ RE-2330. Same as above except sens 90 dB and weight 4.407 .

## Micro-Plus Series

RE. 2460 (D. Bass enhancer: FR $20-30.00$ ) Hz : sens 110 dB ; adaplor included; $4^{\prime}$ cord; 1.4 oz . . . . . . $\$ 55$ RE-24.00CD. Bass enhancer; FR $20-25.000 \mathrm{~Hz}$; sens 104 dB ; adaptor included; $4^{\circ}$ cord; 1.4 oz . . . . . . $\$ 50$ RE-2420. Bass enhancer: FR $20-20,000 \mathrm{~Hz}$; sens 100 dB; adaptor included: $\mathbf{4}^{4}$ cord: $1.4 \mathbf{0 z} \ldots .$. . . . . $\$ 35$

## Spectrum Range Series

RE-2285. Designed for TV and video use with approx 16 ft . of cable. Supplied with stereo/mono jack,inline $1 / \mathrm{r}$ channel volume control; stereo/mono switch. FR $20-20.000 \mathrm{~Hz}$ : sens $90 \mathrm{~dB} ; 2.602 \ldots$. $\$ 30$ RE-2280. Same as above without mono/stereo switch and volume control
\$25
RE-2225. Same as RE-2285 with 6.5 ft . cord. . $\$ 25$ RE-2220. Same as 2280 with 6.5 ft . cord and available in red. yellow. or black. . . . . . . . . . . . $\$ 20$

## Micro Series

Micro series heudphones feature hall joint earcups. headhand adjusment, foam earpads, letter and Braille channel indication, 4 It. lead with 3.5 mm right angle jack phug.

RE-2170 CD. Samarium cobalt drive units with gold plated diaphrams. Open back: $.25^{\prime \prime}$ adaptor included: FR $15-25,000 \mathrm{~Hz}$; sens $104 \mathrm{~dB} ; 40 \mathrm{gm}$.
$\$ 30$
RE-2150. Samarium cobalt drive units. Open back 4-100 ohm impi sens. .25" adaptor included: FR 20 $20,000 \mathrm{~Hz}$; sens 106 dB ; 40 gm .
RE-2130. Mylar dome drive units. Open back: 4.100 ohm imp; sens. $25^{\prime \prime}$ adaptor included; FR 20-20,000 Hz : sens $106 \mathrm{~dB}: 40 \mathrm{gm}$
$\$ 20$
RE-2120. Red, yellow or blue
$\$ 10$

## SANSUI

SS-L. 55 Dynamic Stereo Ileadphones
Isolation-free dynamic stereo headphones with around-the-ear design and $1.56^{\prime \prime}$ drivers. Imp 100 ohms at $1,000 \mathrm{~Hz}$; FR $20-20,000 \mathrm{~Hz}$; max input power 500 mW ; sens $104 \mathrm{~dB} / \mathrm{mW}$ at 500 Hz : 2 -m cord: 4.8 oz withoul cord
$\$ 55$

## SS-I. 33 Dy namic Stereo Headphones

Isolation-frec. around-the-ear sterco headphones with $1.56^{\prime \prime}$ drivers. Imp 60 ohms; FR $20-20,000 \mathrm{~Hz}$; max input power 500 mW ; sens $104 \mathrm{~dB} / \mathrm{mW}$; 2-m cord; 4.4 oz without cord.
\$35

## MS-33 Dynamic Stereo Headphones

Lightweight on-the-ear mini dynamic stereo headphones fitted with mini stereo plug. with adaptor for use with home audio equipment. Imp 30 ohms; FR $35-20,000 \mathrm{~Hz}$; max input power 100 mW : sens 97 $\mathrm{dB} / \mathrm{mW}$ : $2.5-\mathrm{m}$ cord; 1.8 oz without cord. . . . . $\$ 25$

## SENNHEISER

## HD 250 Ileadphones

Closed cushion headphone with resonance free transmission. FR $10-25,000 \mathrm{~Hz}$

## HD 540 Reference Headphones

Open-air dynamic headphones with integral acoustical silk dampening diaphragm; Sens $94 \mathrm{~dB} .$. . $\$ 199$

HDI 2 Wireless Headphones
Stereo headphones with separate transmitter that plugs into headphone jack of any receiver or amp for wireless transmission. Features individual volume controls: rechargeable battery. 2.9 ozs . . . . . . . \$169
Si 2. Transmitter for wireless transmission
$\$ 169$

## HD 430 Headphones

Open-air headphones with circumaural ear cushions that rest around the car. Features replaceable $10-\mathrm{ft}$ stranded-steel cable with phone plug; adjustable headband. FR $16-20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$
$\$ 159$

## IID 480 Headphones

Open-air design headphones can be used with portables and home cquipment. Features neodymium iron magnets: digitally compatible: cushioned headband; $10^{*}$ steel-stranded cable: . $25^{\prime \prime}$ phone adapter; FR 18 22.000 Hz : imp 70 ohm; sens 94 dB ; distortion < $1 \%$ : all components are user replaceable: 4.8 oz . . . $\$ 99$

## HD 450 Ligitally Compatible Headphones

Headphone can be used for portable as well as home equipment. Features neodymium iron magnets: $10^{\circ}$ stranded-steel cable: . $25^{\prime \prime}$ adapter: FR $20-20,000 \mathrm{~Hz}$ : imp 70 ohm: sens 94 dB : distortion $<1 \%$; components are user replaceable; 4.8 oz

## HD 50 Minni Headphones

All user replaceable parts. FR $\mathbf{2 0}-20,000 \mathrm{~Hz}, 4 \mathrm{ft}$ cable w/mini to phone plug adaptor.
\$79

## PD 100 Nini Headphones

All user replaceable parts. FR $20-18,000 \mathrm{~Hz}$. 3-ft cable $\mathrm{w} / \mathrm{mini}$ to phone plug adaptor

HD 30 Mini Headphones
Digitally compatible headphones with user replaceable parts including car cushions and cable. Features .25 " stereo phone adapter: $4^{\circ}$ cable: FR $50-17.000 \mathrm{~Hz}$ : imp 32 ohm ; sens 96 dB ; distortion $1.3 \%$; 1.5 oz $\$ 39$

## SENTRY INDUSTRIES

## SENTW850 Digital Stereo Head phones

Features 7 ft . shielded cord with 3.5 mm right angle stereo plug; 6.3 mm heavy duty adaptor for home use: single cord design: 40 mm samarium cobalt speakers: FR $20-20.000 \mathrm{~Hz}$; sens $105 \mathrm{~dB} \pm 3 \mathrm{~dB}$; impedance 32 ohms.
$\$ 26$

## SENH0780 Dynamic Stereo Headphones

Features rotary volume/balance controls; 6 ft . shielded cord with 3.5 mm right angle stereo plug; 6.3 mm stereo adaptor screw type included for home use; 34 mm samarium cobalt magnet with mylar cone; FR $30-30.000 \mathrm{~Hz}$ : sens $97 \mathrm{~dB} \pm 3 \mathrm{~dB}$ : impedance 28 ohms
$\$ 19$

## SENH0680 Dynamic Stereo Headphones

Features 7 ft . shielded cord with 3.5 mm stereo plug; 6.3 mm heavy duty adaptor included for home use: single wire connection; 27 mm samarium cobalt drivers: FR18-20,000 Hz: sens $100 \mathrm{~dB} \pm 3 \mathrm{~dB}$; impedatice 32 ohms.

## SENIIO160 Mini-Stereo Headphones

Feature: 4 ft . shielded cord with 3.5 mm sterco plug: 6.3 mm adaptor included for home use; replacement carpads. 27 mm drivers: $\mathrm{FR} \mathbf{2 0 - 2 0 . 0 0 0 ~} \mathrm{Hz}: 92 \mathrm{~dB} ; \pm 3$ dB; impedance 16 ohms
$\$ 13$

## TK44 Circumaural Headphones

Electret-condenser headphones with adaptor box. FR $10-22.500 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp $4-16$ ohms; sens 100 dB at $1 \mathrm{~V} /$ ch at 1.000 Hz .
$\$ 300$

## EP700 Headphones

Open-arr, lightweight headphones. Features craw voice coils; cloth earpads: 3 m . OFC cord; FR $20-$ $23.000 \mathrm{~Hz} ; 210 \mathrm{~g}$ :
\$150

## EP500 Ileadphones

Closed-back headphones. Features (CAW voice coils; samarium cobalt magnets; leather-like earpads; 3 m . OFC cord FR20-22,000 Hz; 205 g .
$\$ 125$

## E.P400 Headphone

Bass response, extended high-frequency response. peak-free coverage of entire audible band headphones. Features high-compliance dome diaphragm: self-supporting voice coil of 40 micron silver/copper wire: mesh-covered foam earpads: 3.5 m . cord with $125^{\prime \prime}$ phone plug FR $20-22,000 \mathrm{~Hz} ; 160 \mathrm{~g}$.

## EP300 Ilead phones

Lightweight stercophone headphones. Featuring high-polymer film element with CCAW voice coils; samarium cobalt magnets; 3 m . cord; FR 20-20.000 $\mathrm{Hz} ; 170 \mathrm{~g}$.
\$75

## EP100 1 leadphones

Ultra-lightweight, open-back headphones. Features high-polymer film elements with cCaw voice coils: samarium cobalt magnets; 1.8 m . cord with miniplug and $.25^{\circ}$ phone plug adapter; FR $20-20,000 \mathrm{~Hz}: 48$ g . \$35

## SONY

MDR-CD6 Dynamic Headphones
Supra-aural headphones with sealed-ear design; 30 mm dome driver unit; spring-loaded soft-touch eliptical earpads; one-sided cord; independent left/right side click-sliders; stereo Unimatch plug; goldcoated double-layer high-molecule film diaphragm and copper-clad aluminum voice coil. imp 45 ohms at 1.000 Hz ; sens $110 \mathrm{~dB} / \mathrm{mW}$ : rated power 0.1 W ; power handling 0.5 W ; FR $2-25,000 \mathrm{~Hz}$; cord length $9.8 \mathrm{ft}: 3.9 \mathrm{oz}$.
$\$ 120$
MDR-M66. As above with less bass response. . $\$ 95$

## MIDR-V6 Dynamic Headphones

Closed-ear-type monitor headphones with foldingtype compact headband: 40 mm driver unit: oval earpads; stereo Unimatch plug: OFC litz cord. Imp 63 ohms: sens $106 \mathrm{~dB} / \mathrm{mW}$; rated power 0.3 W ; power handling 1 W ; frequency response $5-30.000 \mathrm{~Hz}$. Includes soft case.
$\$ 100$

## MDR-V4 Dynamic Headphones

Closed-ear-type monitor headphones with rugged folding headband; 30 mm driver unit; one-sided cord: sterco Unimatch plug: ofic litz cord. Imp 45 ohms: sens $104 \mathrm{~dB} / \mathrm{mW}$; rated power 0.1 W : power handling capacity 0.5 W ; frequency response $10-25,000 \mathrm{~Hz}$. lncludes case.
\$80
MDR-V'2. Similar in design to MDR-V4.... . . $\$ 50$
MDR-V1. Similar in design to MDR-V4. $\$ 30$

## MDR-S505 Dynamic Headphones

Large-size open-air-type headphones with volume and tone controls; large-size carpads: 30 mm dome drive units; one-sided cord; stereo Unimatch plug. 1 mp 45 ohms; sens $104 \mathrm{~dB} / \mathrm{mW}$; rated power 0.04 W ; power handling 0.1 W ; FR $15-24,000 \mathrm{~Hz}$; cord length $9 . \mathrm{ft} .10 \mathrm{in}: 2.1 \mathrm{oz}$
\$70
MDR-A60 Dynamic Headphones
Verical in-the-ear-type headphones with Sony's Acoustic Turbo-Circuit for power bass and smooth high frequencies; 16 mm sapphire driver units; natu-ral-form bio-tech curved headband design with 3point folding mechanism: OFC litz wire: stereo Unimatch plug. Imp 18 ohms at $1,000 \mathrm{~Hz}$; sens 108 $\mathrm{dB} / \mathrm{mW}$; rated power 0.03 W : power handling 0.05 W; frequency response $10-25,000 \mathrm{~Hz}$; cord length 47.2"; 0.7 oz
$\$ 70$

## MDR-M33A Dynamic Headphones

Features soft-touch elliptical earpads; one-sided cord; sterco Unimatch plug: 23 mm dome driver unit. Imp 25 ohms at 1.000 Hz ; sens $100 \mathrm{~dB} / \mathrm{mW}$; rated power 0.05 W ; power handling 0.1 W ; FR $15-14,000 \mathrm{~Hz}$; cord length $9.8 \mathrm{ft} ; 1.7 \mathrm{oz}$.
. $\$ 60$
MDR-S303 Dynamic Headphones
Large-size open-air-type headphones with large-size earpads: 30 mm dome drive units; one-sided cord: stereo Unimatch plug. Imp 45 ohms; sens 104 $\mathrm{dB} / \mathrm{mW}$ : rated power 0.04 W : power handling 0.1 W : FR $15-22,000 \mathrm{~Hz}$; cord length 9 ft , 10 in ; $1.9 \mathrm{oz}, \$ 50$

## MDR-E464 Dynamic Headphones

In-the-ear-type headphones with gold-plated Lshaped mini plug; Sony's Acoustic Turbo-Circuit. Imp 13.5 ohms at $1.000 \mathrm{~Hz}_{2}$ : sens $104 \mathrm{~dB} / \mathrm{mW}$; FR 18 22.000 Hz ; cord length $39.38^{*} ; 0.17 \mathrm{oz}$.

## MIDR-S101 Dynamic Headphones

Large-size open-air-type headphones with 23 mm dome driver units; large-size earpads; sterco Unimatch plug adaptor. Impedance 32 oh ms ; sensitivity $98 \mathrm{~dB} / \mathrm{mW}$; rated power 0.04 W : power handling 0.1 W: frequency response $20-20,000 \mathrm{~Hz}$; cord length 6.5 $\mathrm{ft}: 1.9 \mathrm{oz}$.
$\$ 30$

## STANTON

## SRS-265 Stereo Headphones

Audiophile/professional headphone with deluxe dynamic driver. Features patented independently suspended earcup design for wearer comfort. FR S$22,000 \mathrm{~Hz}$; sens 96 dB at I mW; imp 100 ohms: $\max$ input 100 mW ; distortion $<0.5 \%$ at $1,000 \mathrm{~Hz} ; 0.25^{\prime \prime}$ plug. 8.602 .
$\$ 135$

## SRS-245 Stereo Ileadphones

Semi-enclosed stereo headphone with deluxe dynamic driver. Features adjustable ratchet-type headband with specially engineered spring suspension: circumaural design. FR $10-22,000 \mathrm{~Hz}$; sens 94 dB at I mW: imp 100 ohms; max input 100 mW ; distortion $<0.5 \%$ at $1,000 \mathrm{~Hz} ; 10 \mathrm{ff}$ flat 4 -conductor cord with molded $0.25^{\prime \prime}$ plug. 8.6 oz
\$110
SRS-225 Stereo 1 lead phones
Semi-enclosed stereo headphone with high-velocity moving-coil driver. Features adjustable ratchet-lype headband with specially engineered spring suspension; circumaural design. $\mathrm{FR} 10-22,000 \mathrm{~Hz}$; sens 94 dB at I mW : imp 100 ohms; max input 100 mW ; distortion $<0.5 \%$ at 1.000 Hz ; 10 ft dual-conductor cord with $0.25^{\prime \prime}$ plug. 8.6 oz .
\$80

## SRS-215 Stereo Headphones

Semi-enclosed stereo headphone with high-velocity moving-coil driver. Features adjustable ratchet-type headband with specially engineered spring suspension; circumaural design. FR $20-22,000 \mathrm{~Hz}$; sens 98 dB at 1 mW : imp 50 ohms; max input 100 mW ; distortion $<0.5 \%$ at $1,000 \mathrm{~Hz}: 10 \mathrm{ft}$ dual-conductor cord with mini stereo plug and $0.25^{\prime \prime}$ screw on adaptor. 8.6 oz
. $\$ 60$

## ST-PRO Stereo Headphones

Features closed-cup design; high-velocity samariunı cobalt driver with mylar diaphragm; adjustable headband; soft vinyl isolation cushions. Sensitivity 100 dB with 0.3 V input: maximum power input 250 $\mathrm{mW} / \mathrm{ch}$; impedance 100 ohms at $1,000 \mathrm{~Hz}$. Includes 7 ft coil cord with molded strain relief and $0.25^{\prime \prime}$ stereo plug.
$\$ 55$

## 35M/HB Dynamic Headphone

Single-cup open-air headphone with headband intended for disco use. Features high-velocity driver: samarium cobalt magnet; $0.25^{\prime \prime}$ connector. FR 20 $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : imp 100 ohms ; max power 0.25 W ; sens 110 dB at $1 \mathrm{~mW} / \mathrm{ch}$ at $1,000 \mathrm{~Hz} .3 .8 \mathrm{oz}$. . . $\$ 55$

## 35M/SR Disco Headphone

Shoulder-rest single-cup headphone designed for DJ use. Features samarium coball magnet; soft foamfilled, leather-like ear cushion. FR $20-22.000 \mathrm{~Hz}$; imp 100 ohms; max input 0.25 W ; 3.8 oz
$\$ 50$

## ST-4 Open-Air Headphones

Features high-velocity samarium cobalt driver with mylar diaphragm; adjustable rachet style headband; soft vinyl isolation cushions. Sensitivity 96 dB with 0.25 V input; max power $250 \mathrm{~mW} / \mathrm{ch}$; impedance 60 ohms at 1.000 Hz . Includes 7 ft coil cord with molded strain relief and $0.25^{\prime \prime}$ sterco plug
. $\$ 50$

## ST-3 Open-Air Headphones

Dynamic full-range stereo headphones with fullisolation cushions. 2" high-velocity drivers, samarium cobalt magnets, mini to $0.25^{\prime \prime}$ adapter. CD ready. frequency response $20-20,000 \mathrm{~Hz}<3 \mathrm{~dB}$; impedance 32 ch ms : max power 100 mW ; sensitivity 112 dB at ! mW/ch at 1.000 Hz .5 oz. . . . . . . . . . . . . . . . . . . $\$ 40$

## ST-2 Lightweight Headphones

CD-ready full-range stereo headphones with $1.5^{*}$ high-velocity drivers, adjustable black plastic headband; 7.5-ft Y-type 4 -conductor cord, $0.25^{\prime \prime}$ to mini adapter. FR $20-20,000 \mathrm{~Hz}<3 \mathrm{~dB}$; imp 32 ohms ; max power 100 mW : sens 100 dB ; 5 oz . . . . . . . . . . . $\$ 30$

## SI-1 Compact Lightweight Headphones

(D)-ready home or portable stereo headphones with $1.36^{\prime \prime}$ high-velocity drivers: adjustable black headband: 7.5-fi Y-type 4 -conductor cord, $0.25^{\prime \prime}$ stereo plug; soft black-vinyl-covered foam ear cushions. FR $25-20.000 \mathrm{~Hz}<3 \mathrm{~dB}$; imp 32 ohms; max power 100 mW ; sens 110 dB at $!\mathrm{mW} / \mathrm{ch}$ at $1.000 \mathrm{~Hz} \ldots$. . . $\$ 25$

## STAX

SR-I ambda/SRM1-1 Mk2 Professional Ileadphones Panoramic-imaging professional carspeaker system with Class-A direct-drive amp. Connects to pre-out or record outputs. Frequency response Ix $-20,000 \mathrm{~Hz}$ $\pm 1 \mathrm{~dB}$; impedance 50.000 ohms; sensitivity 102 dB SPI. with $1-\mathrm{mW}$ input of $1,000 \mathrm{~Hz}$; minimum power 0.00005 mW ; special connector: cord length 7 ft ; 15.1 oz with cord
$\$ 1.200$
SRE. 16 Extension Cord. Five-meter cord for SRLambda.
$\$ 100$

## SR-Lambda/SRD-7 Professional

Panoramic-imaging professional electrostatic earspeaker system with energizing adaptor that conncets to amp outputs. Features circumaural design. Frequency response $8-20,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; impedance 8

ohms; sensitivity 102 dB sPt. with I W input of 1,000 Hz ; max power $10,000 \mathrm{~mW}$; cord lenght 7 ff ; 15.1 oz with cord.
. $\$ 750$

## SR-1 ambda Headphones

Panoramic-imaging electrostatic earspeaker system with energizing adapter. Frequency response 8$35,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; impedance 8 ohms; sensitivity 102 dB sPI . with $1-\mathrm{mW}$ input of 1.000 Hz : maximum power $10,000 \mathrm{~mW}$; special connector: cord length 7 ft ; 15.1 oz with cord .
. $\$ 500$

## SR-Gamma Headphones

Circumambient imaging electrostatic earspeakers system with energizing adapter. FR $10-35,000 \mathrm{~Hz}$ : max output 109 dB
$\$ 400$

## SR-5/NB Headphones

Electrostatic carspeaker system with energizing adapter. HR $25-25,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; imp 8 ohms; sens 97 dB SPI with $1-\mathrm{mW}$ input of 1.000 Hz ; max power $10,000 \mathrm{~mW}$; special connector: cord length $7 \mathrm{ft}: 13.9$ oz with cord .
$\$ 300$

## SR-84 Lambda Jr. Headphones

Electret earspeaker system with energizing adapter. FR $20-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$ : imp 8 ohms: sens 95 dB sPL with $1-\mathrm{mW}$ input of 1.000 Hz ; max power 10,000 mW : special connector: cord length $7 \mathrm{ft}: 7.5 \mathrm{oz}$ with cord.

SR-34 Headphones
Electret earspeaker headphone system with energizing adapter. Frequency responsi $25-20,000 \mathrm{H}_{7} \pm 2$ dB: impedance 8 ohms; sensitivity 95 dB spl with $1-$ mW input of 1.000 Hz : maximum prower $10,000 \mathrm{~mW}$ : spectal plug adaptor: coiled cord length $7 \mathrm{ft}: 8 \mathrm{oz}$ with cord.
$\$ 160$

## Accessories

SRD-P Adaptor for SI AX Pro-Headphones Portable adaptor for Professional Series Electrostis headphones. To be connected to preamp outputs or directly to output of portable compact dise player or tape player. Operates on batteries or AC power. variable gain control: frequency response 20-25,000 H/

RD-X Adaptor for Stav Headphones.
Portable adaptor that allows Stax electrostatic and electret earspeakers to be connected to a headphone jack. Operates on batteries or at power adaptor. Features variable gain control. Frequency response $25-25,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; max power 0.03 mW . . . $\$ 200$

SRE-15/N RVtension Cord
5 -meter catension cord for all Stax carspeakers. \$40

## TEAC

H1-402 Stereo Head phones
Deluxe lightweight stereo headphones with soft vinyl foam cushions. Imp 38 ohms; includes 0.25 " plug adaptor.

HP-302 Mini Stereo Headphones
Samarium-cobalt magnet. Impedance 32 ohms: includes $0.25^{\circ}$ plug adaptor and 2 exira carpads. . $\$ 26$

## HP-308 Stereo Headphones

Lightweight headphones with 0.25 " plug adaptor and 2 extra carpads. Imp 32 ohms. . . . . . . . . . . . . . . $\$ 25$

## HP-206 Stereo Headphones

Lightweight headphones with volume control: sa-marium-cobalt magnet; $0.25^{\circ}$ plug adaptor: 2 extra carpads. Imp 32 ohms.\$22

HP-202W Stereo Headphones
Lightweight headphones with $0.25^{\prime \prime}$ plug adaptor and 2 extra carpads. Imp 32 ohms. White. . . . . . . . . \$18
HP-202B. Blue . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 18$
HP-202R. Red . . . . . . . . . . . . . . . . . . . . . . .... . $\$ 18$
11P-102 Stereo Headphones
1 mp 32 ohms
$\$ 13$

## TECHNICS

EAll-X15 (compact Headphones
Features flat-dise diaphragm: copper-clad voice coils; samarium cobalt magnets; stereo mini-plug: standard stereo headphone adaptor . . . . . . . . . . . . . . . . $\$ 100$

EAll-T6 lightweight Headphones
Compact headphones with stereo mini plug and standard stereo headphone plug adapter. If $20-$ $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; imp 40 ohms at 1.000 Hz : max power 100 mW : 1.2507. . . . . . . . . . . . . . . . . . . $\$ 40$

## UHER

W765A Stereo Headphones

1) ynamic sereo headphones. FR $16-20,000 \mathrm{~Hz}$ : SPL 94 dB : imp 000 ohms; nominal loading capacily 200 mW : distortion $1.0 \%$; automatic strap adjustment: gimballed sarcups; 330 g

## W766A Iyynamic Headphones

Lighlweight (2.2 oz) mono/stereo headphones with 8 ft coiled cord. fR $20-20,000 \mathrm{~Hz}$; imp 200 ohms at 1.000 H ; lightweight adjustable headhand . . . . $\$ 92$

## YAMAHA

Y'H1)-1 l'uldable Headphones
Orthodynamic headphones. FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : imp 125 chms: max power 1.000 mW : $100 \mathrm{~dB} / \mathrm{mW}$ ( $109 \mathrm{~dB} / \mathrm{V}$ ): mini connector; phone connector. . $\$ 80$ YHD-2. Similar to YHD-I except with $99 \mathrm{~dB} / \mathrm{V} \$ 60$ Ifil)-3. Similar to YHD-1 except with $97-\mathrm{dB}$ output.

The listings are based ondata provided by the manufacturers. For more product information, contact an authorized dealer or the manufacturer directly. Manufacturers' adilresses and phone numbers are listed in the directory beginning on page 217.

## At Last!

## The funniest Rodrigues cartoons from Stereo Review have finally been collected in the audio/video book of the year!

This handsome, 128 -page book - with 118 classic cartoons, a foreword by William Livingstone, and an autobiographical sketch by Rodrigues himself is only $\$ 7.95$. Enjoy your favorites again, catch the gems you missed, and share the laughs with friends!

## Available only by mail.

TO ORDER: Send checx or money order for $\$ 7.95$ per copy, plus $\$ 1.50$ for postage \& handling to:

## Perfectbound Press <br> Suite 4118J <br> 1120 Avenue of the Americas <br> New York, NY 10036

Type or print mailing address with order. New York residents add 65 sales tax per copy. Outside U.S.: add $\$ 1.75$ postage \& handling for first copy and 50 c for each additional copy (U.S. bank funds only). Allow four to six weeks for delivery, longer outside the U.S.

## Makes a great gift!

Get two copies for the full stereo effect!


## ACCUPHASE by MADRIGAL

## G-18 33-Band Graphic Equalizer

Third-octave stereo graphic equalizer with separate power supply for each ch; fully balanced inputs and outputs; 66 individual filter amps, each with discrete components and operating with constant $Q$ throughout their range of 4.3; champagne-gold or blackanodized finish. $\mathrm{s} / \mathrm{N} 110 \mathrm{~dB}$
$\$ 3.850$

## F15L Electronic Crossover

For stereo bi- or triamplification; plug-in boards select crossover frequencies and slopes; 0.5-dB-perstep level controls from 0 dB to 20.5 dB for passbands. $\mathrm{S} / \mathrm{N} 100 \mathrm{~dB} ; 17.5 \times 4.4 \times 14.7 \mathrm{in} . \$ 3,500$

## ACE AUDIO

6000-6 Transient-Perfect Electronic Crossover
Designed for optimum transient performance al any crossover frequency; passes perfect square waves. With I frequency module (interchangeable), $6 \mathrm{~dB} / \mathrm{oc}$ tave slope, dual level controls. Distortion $0.002 \%$; noise -95 dB ; $2.25 \times 6 \times 4.36$ in
$\$ 186$

## 6500-DSB Electronic Crossover

Designed to operate with any pair of stereo subwoofers to provide extra bass below 100 Hz ; twin level controls: Bessel filters provide oplimum slope and improved group delay; any frequency available from $40-200 \mathrm{~Hz}$ : slope $12 \mathrm{~dB} /$ octave, distortion typically $0.002 \%$ at 2 V output; includes I plug-in frequency module.
\$167
6500-SF. Similar to model $6500-$ DSB but also contains a built-in subsonic filter ( 18 dB /octave below 15 Hz )
. $\$ 192$

## 6000 Electronic Crossover

Designed for bi- or tri- (with 26000 s) amplification. Features plug-in frequency module; built-in power supply; 15 crossover frequencies, $200-10,000 \mathrm{~Hz}$ at 12-dB/octave: 2 tweeter level controls. THD and IMD $0.002 \%$; input imp 220 kohms; output imp 100 ohms; hum and noise $<90 \mathrm{~dB} ; 6 \times 4.36 \times 2.25$ in $\ldots \$ 156$ 6000-SF. Similar to model 6000 but also contains a built-in subsonic filter ( $18 \mathrm{~dB} /$ octave below 15 Hz )
$\$ 181$

## ADC

Sound Shaper SS-525X Equalizer
Automatic computerized 12-band system/room EQ with channels separate or together. Features real-time spectrum analyzer; dbx technology; remote control; precision $2-\mathrm{dB}$ settings; switchable $18-\mathrm{dB}$ /octave infrasonic (subsonic) filter; microcomputer with 4 memories for storing user-created EQ curves; switchable Fl display; electronic rocker-switch frequency controls; left and right ch attenuation; 2 tape monitors; 2-way dubbing; EQ record: built-in pink-noise generator; $\pm 13 \mathrm{~dB}$ control range. Includes calibrated electret-condenser mike.
. \$600

## SS-325X Graphic Equalizer

12-band-per-ch equalizer/real-time analyzer with 5 memories for storing user-selected EQ curves. Features microphone; pink-noise generator; stepped EQ controls; narrow-band bass sliders; infrasonic filter; $E Q$ center frequencies at $25,40,63,100,160,500$,

## $1,000,2.000,4,000,8.000$ and $16,000 \mathrm{~Hz} . .$. . . $\$ 400$

## SS-300SI. Equalizer

Slim-line 10 -band equalizer/real-lime analyzer with microphone and pink-noise test signal for fine-tuning speakers and room response. Features $\pm 15-\mathrm{dB}$ control range: large FI display; lighted EO sliders; step infrasonic (subsonic) filters; 2 tape monitors: 2 -way dubbing: center frequencies at $32,63.125,250,500$. 1.000. 2.000, 4.000, 8.000, and $16.000 \mathrm{~Hz} \ldots . \$ 200$

## SS-100SL Fqualizer

Slim-line 10 -band $\mathrm{F} Q$ with $\pm 15 \mathrm{~dB}$ control range. Features FL. RTA display: $18-\mathrm{dB} /$ octave infrasonic (subsonic) filter; EQ record.
$\$ 140$

## APHEXSYSTEMS

103A Type C Aural Exciter
Used to enhance record albums, broadcasts, and sound systems. recreates and restores missing harmonics. bandwidth $10-100,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; noise $-96 \mathrm{dBv} ;$ THI) $<0.01 \%$; operating level -10 to +4 dBm ; max in/out level +21 dBm ; with racks (19* wide): $1.75 \times 17 \times 6 \mathrm{in} ; 4.5 \mathrm{lb}$
\$299

## ARCAM

Arcam Delta Black Box DA Converter
Digital audio interface features motors; servos; displays; microprocessors; shared power supplies; quadruple oversampling digital filter feed; 16-bit Iwin D/A converters; gold-plated phono sockets. . . . \$649

## AUDIO CONTROL

C-101 Series Two Equalizer/Analyzer
Stereo graphic equalizer features 101 -LED spectrum

analyzer display that operates on various levels: shows controllable peak-reading modes (fast/slow): horizontal LED's indicate SPL; switchable calibration levels from 2/dB/LED (analyzes pink noise and mike) to $4 \mathrm{~dB} / \mathrm{LED}$ (displays wider dynamic range). Center frequencies $32,60,120,480,960,1,920,3,840,7.680$. and 15.500 Hz ; boost/cut range $\max 15 \mathrm{~dB} ;-1 \mathrm{~dB}$ subsonic rolloff at $25 \mathrm{~Hz},-3 \mathrm{~dB}$ rolloff at $20 \mathrm{~Hz},-21$ dB rolloff at 10 Hz ; variable input level sens with calibration: auto mike/line input switching: pinknoise generator; stereo paired equalizer sliders: 18 dB/octave subsonic filter; phase correlation rumble reducer circuit. FR $3-100,000 \mathrm{~Hz} \pm 0.75 \mathrm{~dB}$; distortion $0.009 \%$; hum and noise $-116 \mathrm{~dB} ; 10,000 \mathrm{~Hz}$ bandwidth; input/output imp $100 \mathrm{k} / 150$ ohms; $6.5 \times$ $19 \times 3.5 \mathrm{in}$.
$\$ 429$

## Richter Scale Series III Equalizer/Analyzer

Designed to enhance bass response; perfect for integrating subwoofer and satellites, smoothing transition from bass to middle frequencies; combines sixband half-octave bass equalizer, warble tone analyzer, programmable Linkwitz-Riley $24-\mathrm{dB}$ /octave electronic crossover; measurement mike; center frequency slide controls at $22.5,31.5,45,63,90$ and 125
$\mathrm{Hz} . \pm 12 \mathrm{~dB}$; stereo warble tone source adjustable to each center band via rotary knob; -20 to +6 dB lighted meter registering mike input; 18 dB /octave infrasonic filter; source/tape monitoring; equalize program; low-frequency ( 12 dB /octave at 200 Hz ) summing circuit for rumble reduction; frequency point programmable ( $24 \mathrm{~dB} /$ octave) electronic crossover circuit for subwoofer and biamplification modes: mono and inverted mono outputs for bridging; gold jacks. FR $3-100,000 \mathrm{~Hz} \pm$ IdB: THD $0.005 \%$; inpul imp 100.000 ohms; output imp 150 ohms, $\mathrm{S} / \mathrm{N}$ 120 dB .
$\$ 349$

## Ten Plus Series Two Equalizer

Stereo 10-band equalizer with LED indicators in slide controls with warble tone analyzer. Features video sound input and switching; 18 dB /octave infrasonic filter; tape EQ with flashing LED warning indicator: calibrated mike with response curve; sound pressure meter with 0 dB IED. FR $3-100,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; THI) $0.07 \%$; S/N 120 dB
. \$329

## Phase Coupled Activator

Detects and digitally reconstructs fundamental musical frequencies attenuated in the recording processes. Proprietary intelligent circuitry discriminates between sound sources, passing some (like mosi voices) without adding spurious lows, while restoring missing musical fundamentals. Features in/out switch; subsonic filter $18 \mathrm{~dB} /$ oct; programmable electronic crossover; crossover output level; tape monitor; delection ratio sensitivity*adjustment; rack mount. FR $5-100,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}-118 \mathrm{~dB}$; THI) $0.005 \%$; IMD $0.01 \% .2 .75 \times 17 \times 8.5-\mathrm{in} ; 5 \mathrm{lbs}$ $\qquad$

## Octave Plus Equalizer

Unit combines 10 -band octave graphic equalizer, warble tone generator/analyzer, measurement mike. Features center frequencies $31.5,63,125,250.500$. $1 \mathrm{k}, 2 \mathrm{k}, 4 \mathrm{k}, 8 \mathrm{k}, 17 \mathrm{k} \mathrm{Hz}$; max 12 dB boost or cut; stereo warble tone source adjustable to each band center via rolary switch. 2-position range buttons; -20 to +3 dB lighted meter registering mike input: $18 \mathrm{~dB} /$ octave infrasonic filter, source/tape monitoring. FR 3$100,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$; THD $0.008 \%$; input imp 100,000 ohms: output imp 150 ohms; $\mathrm{s} / \mathrm{N} 116 \mathrm{~dB}$, charcoal faceplate
. \$239

## Ten Series Two Equalizer

Stereographic equalizer with video/sound input and switching. $18 \mathrm{~dB} /$ octave infrasonic filter. Features LED'S in slide controls; flashing LED to indicate when in tape EQ mode. Center frequencies $31.5,63,125$, $250,500,1 \mathrm{k}, 2 \mathrm{k}, 4 \mathrm{k}, 8 \mathrm{k}, 16 \mathrm{k} \mathrm{Hz}$; boost/cut range max 12 dB ; FR $3-100,000 \mathrm{~Hz} \pm \mathrm{I} \mathrm{dB} . . . . . . . . . .$. . . $\$ 229$

## Octave Equalizer

Features paired-octave slider controls, tape record EQ; 18 dB /octave subsonic filter. FR $3-100,000 \mathrm{~Hz} \pm 1$ $\mathrm{dB} ; \mathrm{S} / \mathrm{N} 118 \mathrm{~dB}$; THD $0.008 \%$.

[^2]
## AUDIO DESIGN ASSOCIATES

## EQ-5 Stereo Fqualizer

Two channel, 5 -band equalizer with $\pm 0 \mathrm{~dB}$ range and unity gain controls: Features bypass switch; power switch and indicator; external IX power supply; compact design; standard EIA rack-mountable. Frequencies $37 \mathrm{~Hz} / 109 \mathrm{~Hz} / 675 \mathrm{~Hz} / \mathrm{I}, 300 \mathrm{~Hz} / 15.900 \mathrm{~Hz}$ : FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 85 \mathrm{~dB}$ THD $0.05 \% \$ 695$

## SIGNAL PROCESSORS

## AUDIO RESEARCH <br> EC-21 Electronic Vacuum-Tube Crossover

Low-frequency, passive high-frequency electronic crossover; features individual low-ch level controls; 9-dB max gain; auto warm-up muting; fixed frequency capacitor kits available. Input imp l00k ohms; THD $0.003 \%$; outputs match Audio Research power amps

## AUDIOSOURCE

EQ-Ten Graphic Equalizer/Spectrum Analyzer
12 band per channelEQwith soft touch controls. 32 function wireless remote control; pink noise generator and calibrated electret condenser mic.Self-contained microcomputer programmed to calculate listening room acoustics and adjust the units equalization curve. 4 memory frequency response curves. 2 tape connections: dubbing $1-2$ and $2-1$ with or without EQ: LED display left and right channel's: 12 LED indicators for spectrum analyzer. FR 5-120,000 $\mathrm{Hz} \pm 1 \mathrm{~dB} ; \mathrm{THD} 0.008 \%$ at 1 V output; control center points $25,40,63,100,160,250,500 \mathrm{~Hz} / 1 \mathrm{k}, 2 \mathrm{k}, 4 \mathrm{k}, 8 \mathrm{k}$, $16 \mathrm{kHz} \pm 1 \mathrm{~dB}$ . $\$ 400$ EQ-Nine. Similar to above without remote control.
\$300

## SS-One/ll Surround Sound Processor

Dolby surround sound processor with variable sur-round-sound effects and built-in 30 W rear-ch amp. Features variable digital time delay: LED audio-level indicators; preamp outputs; synthesis and matrix stereo/surround for non-Dolby-encoded software: $100,10,000 \mathrm{~Hz}$ boost circuits. FR $20-20,000 \mathrm{~Hz} \pm 3$ $\mathrm{dB} ; \mathrm{S} / \mathrm{N} 85 \mathrm{~dB} .2 .06 \times 16.5 \times 9.13 \mathrm{in} ; 8 \mathrm{lb} \ldots . . \$ 250$ SS-Two. Similar to above without remote control.

## AV-Four A/V Selector/Surround Sound

Synthesized surround sound with built-in $15-\mathrm{W} / \mathrm{ch}$ amp, 7-band graphic EQ with spectrum analyzer, 5 video/stereo audio inputs, RF in and out. Features DNR: antenna switching. RF modulator. FR 20 $20.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{S} / \mathrm{N}>80 \mathrm{~dB}$.
. $\$ 200$

## AV-Three A/V Selector/Processor

Audio/video fader. enhancer, color and hue control for 5 video/stereo inputs and outputs. Features spectrum analyzer display: RF in and out: RF modulator: DNR: stereo synthesizer; antnna switching. FR $20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}>80 \mathrm{~dB}$; chroma phase 45\%; chroma level 200\%; video enhancer 0-9 dB. 2.25 $\times 16.5 \times 10 \mathrm{in}: 6.75 \mathrm{lb}$
$\$ 200$

## EQ-Eight Graphic Equalizer

10 -band equalizer with 90 -1ED spectrum display. Features led's on slide controls: control range $\pm 12$ dB ; audio inputs plus second set of inputs for video audio or other high-output source; EO rec switch: EQ defeat: tape monitor switch. FR $5-100,000 \mathrm{~Hz} \pm 1 \mathrm{~dB}$ : $\mathrm{S} / \mathrm{N}-80 \mathrm{~dB}$; THD $0.03 \% . ; 2.43 \times 16.5 \times 7.12$ in.$\$ 160$

## AZDEN

GX-500 Graphic Equalizer
33 point $1 / 3$ octave graphic eQ designed for studio or professional applications. Allows input attenuation from $0-20 \mathrm{~dB}$ : equalizing range $\pm 15 \mathrm{~dB}$ : FR $10-$ $100,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 106 \mathrm{~dB}$; THD $.005 \% ; 17 \times 3.5 \times$ $9 \mathrm{in} ; 3.5 \mathrm{~kg}$
$\$ 495$

## GX-50 Equalizer

Black 10 -band equalizer with real-time spectrum analyzer: pink-noise generator: mic. FR $10-35,000 \mathrm{~Hz}$ $\pm 3 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 90 \mathrm{~dB} ;$ THD $0.005 \% .17 \times 3.5 \times 9 \mathrm{in} ; 10$ lb. .
\$300

## GX-45 10-Band Graphic Equalizer

10 -band/ch EQ with graphic display, $\pm 15 \mathrm{~dB}$ boost/ cut. Designed to handle 2 tape decks for dubbing purposes. FR $10-35,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N} 90 \mathrm{~dB}$ : THD $0.005 \%$ : max output $6 \mathrm{~V} .17 \times 3.5 \times 9$ in $\ldots . . \$ 225$

## CAMBRIDGE AUDIO

## DAC 2 Digital to Analog Converter

Contains all demodulating circuitry, digital filtering and digital to analog conversion system for any compact disc player with a data output. Uses a version of the 16 bit. 16 times oversampling system developed by Cambridge. Inputs for two CD players and two DAT players can be selected by front panel switches. Digital polarity inversion is offered, along with a volume control and a discrete class $A$ headphone amplifier
$\$ 1.099$

## CARVER

## C-9 Sonic Hologram Generator

Designed to restore lifelike space and dimension to music. Sonic Hologram Generator precisely locates instruments and vocals in 3-dimensional space by using otherwise inaudible phase and time information to recreate the original vector sound field. Requires no special source material or additional speakers. Specs and performance identical to Sonic Holography section of C-4000 preamp. $19 \times 1.75 \times$ 4.62 in .
\$249

## CELLO

The Audio Palette
For changing tonal balance in 6 low-Q bands centered at $15,120,500,2 \mathrm{k}, 5 \mathrm{k}, 25 \mathrm{k} \mathrm{Hz}$ : max boost or cut 12 dB ; sep input controls for $L$ and $R$ : controls for absolute phase (right 180x, left 180x, 0x, 180x), EQ (out, in, blend), monitor/center ( +10 to $<-40 \mathrm{~dB}$ ), and output level ( +10 to $<-40 \mathrm{~dB}$ ): Class $A$ discrete circuitry.
\$8,900
Master Supply
120 V AC
$\$ 2,250$

## CERWIN-VEGA

## DB-10B Bass Turbocharger

One band bass equalizer with subsonic filter below 20 Hz . Features switchable $5 / 10 \mathrm{~dB}$ of bass boost in the range $30-45 \mathrm{~Hz}$ : tape monitor connections: effect indicator; THD $<0.025 \%$; rated output 2 V rms; 7 x $14.25 \times 2 \mathrm{in}: 27 \mathrm{oz}$. $\$ 59$

## CROWN INTERNATIONAL

## FFX-2 Electronic Crossover

3-way mono crossover features $18 \mathrm{~dB} /$ octave highpass and lowpass: 20-pin barrier block input/output connectors: LED power indicator: all-steel chassis: aluminum front panel; FR $20-20,000 \mathrm{~Hz} \pm 0.1 \mathrm{~dB}$; THD $<0.05 \%$; carbide black front panel: splatter-coat black chassis and top cover. $19 \times 6.5 \times 1.75 \mathrm{in} ; 4.3$ lb.
\$249

## DB SYSTEMS

## DB-3-36 In-Phase Crossover

In-phase crossover with power supply. Features high and low outputs always in phase; diode protected inputs; total harmonic distortion $<0.0008 \%$; input imp 90,000 ohms; output imp 1,400 ohms max: rated outpul 3 V into 10,000 ohms with 3 volts input. Available in 6, 12, 18, and 24 dB per octave slopes
. $\$ 550$

## DB-3 2-Way Active Crossover

Fixed frequency active crossovers 6 or 12 dB Gaussian. Features screwdriver adjustable level controls on outputs; separate power supply. FR 10 $100.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 100 \mathrm{~dB}$; THD $0.003 \% ; 2.5 \mathrm{lb}$; $8.5 \times 3.2 \times 7$ in $\$ 292$
Three-way 18 dB . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 539$
Two-way 18 dB . . . . . . . . . . . . . . . . . . . . . . . . $\$ 384$
Threc-way 12 dB or $6 \mathrm{~dB} . .$. . . . . . . . . . . . . . . $\$ 349$
Two-way $1001 \mathrm{~Hz}, 18 \mathrm{~dB}$. . . . . . . . . . . . . . . . . . $\$ 322$
DB-2A Power Supply.
$\$ 85$

DB-3-24 In-Phase Crossover
$24-\mathrm{dB}$ /octave crossover minimizes irregularity in radiation pattern through crossover region. High, low-pass outputs always in phase with each other, 6 dB down at crossover frequency. Requires DB-2A power supply or DBP-I cable. User specifies frequency. Available in 2-way only. . $\$ 490$
DB-3-24-100. Standard version of above, set at 100 Hz , with additional common bass . . . . . . . . . $\$ 405$

DB-5 Tone Control
Tone controls with 3 high and 3 low break frequencies; low-frequency boost switch and outputs for sum and difference signals. FR $10-100,000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ 96 dB ; THD $0.0008 \%$; ImD $0.001 \%$. Requires DB-2A power supply or DBP-I aux cable if used with existing DB Systems equipment. $8.5 \times 3.2 \times 7 \mathrm{in}: 2.8 \mathrm{lb} \$ 380$ DB-5AU. Similar to DB- 5 with oak cabinet and gold jacks
. $\$ 465$

## DB-7 Phase Inverter

Phase inverter and bridging adaptor with supersonic and subsonic filters ( 18 dB ). FR $10-1000,000 \mathrm{~Hz} \pm 3$ $\mathrm{dB} ; \mathrm{s} / \mathrm{N} 109 \mathrm{~dB}$; THD) 0.003\%: IMD 0.003\%. Requires DB-2A power supply or DBP-1 aux cable if used with DB Systems equipment. $6.2 \times 2.2 \times 4.5 \mathrm{in} . . . . \$ 195$

## DENNESEN ELECTROSTATICS

## Phase Restoration Device

Corrects for high-frequency phase delay caused by output fiters in digital recorders and CD players. Features process or bypass, phase plus, phase minus. FR $10-100,000 \mathrm{~Hz} \pm .1 \mathrm{~dB} ; \mathrm{s} / \mathrm{N} 90 \mathrm{~dB}$; THD $0.01 \% ; 5$ lb: 1.75 ェ $10 \times 8-\mathrm{in}$.
$\$ 300$

## DENON

## DE-70B Dynamic Equalizer

12-band stereo graphic equalizer. Can be used to control dynamic expander function for increased dynamic range at selected frequencies with adjustable rate level. Features separate rec out and input selectors. 3-positionmonitor switch. FR $10-200,000$ $\mathrm{Hz}+0,-2.5 \mathrm{~dB}$ : low distortion $-0.0003 \%$ at 1,000 Hz . ACA-36. Wood side panels for DE-70B . . . . . . \$30

## FISHER

## ASR-875 Surround Sound System

Surround system includes CAV-875 surround sound processor/amplifier with wireless remote control and WS-460 surround speakers. Processor features Dolby Surround processing: simulated, hall, and stadium surround effects, switchable $10,20,30,40$, or 50 ms delay; 4 sets stereo video inputs: 2 sets stereo video outputs; I aux input; 1 tape monitor: 24 -function remote control. Each speaker features a $6.5^{\prime \prime}$ woofer: $3^{\prime \prime}$ tweeter. Power output: $30 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $20-20,000 \mathrm{~Hz}$ with no more than $0.5 \%$ THD. . $\$ 399$

## FOSGATE/AUDIONICS

DSM 3610 Pro Plus Surround Processor
High-separation surround processor with proprietary ProPlus logic circuitry. Features remote control: subwoofer output; side-channel outputs; left front, center front, right front, and left/right surround channels: ultra-low noise variable time delay; bass EQ circuitry: operating modes for Dolby surround and high-separation enhancement of regular stereo music sources; $4 \mathrm{~A} / \mathrm{V}$ input; tape monitor. $\mathrm{FR} 2-300,000 \mathrm{~Hz}$ $\pm 1 \mathrm{~dB} .17 .25 \times 2.75 \times 12 \mathrm{in}: 12 \mathrm{lb} \ldots . . . . \$ 1,429$ DSM 3608. Similar to 3610 without side channel outputs and $A / V$ switching: includes $40 \mathrm{~W} / \mathrm{ch}$ surround amplifier
$\$ 999$
DSM 3604. Same performance characteristics as DSM 3610 less ProPlus circuitry . . . . . . . . . . $\$ 849$ DSM 3606. Similar to 3608, without variable time delay and infrared remote control. . . . . . . . . . . $\$ 629$ DSM 3603. Similar to 3606 without Pro Plus circuitry. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 549$

## SIGNAL PROCESSORS

## GOLD SOUND <br> 30 Spectrum A nalyzer

Rack mount to 30 -band/ch spectrum analyzer with pink-noise generator. Features calibrated microphone; 300 LED's; IFD range $27 \mathrm{~dB} ; 25-20,000 \mathrm{~Hz}$ bandwidth: $32-128 \mathrm{~dB}$ range
$\$ 2.185$

## 308 Spectrum Analyzer

Portable DC battery-operated 30 -band/ch spectrum analyzer with pink-noise generator. Features calibrated microphone: 300 LeD's; led range 23 dB : 25 $20,000 \mathrm{~Hz}$ bandwidth: $32-128 \mathrm{~dB}$ range . . . . . $\$ 599$

## GS424 EQ Active Crossover

Rack mount init with black anodized aluminum front panels and smoked plexiglass security covers. Features 4-ch biamp; fixed bass equalization; subsonis filter: stereo output: variable crossover frequency setting; 12 high-pass. low-pass, and midrange controls; : $\mathrm{S} / \mathrm{N} 102 \mathrm{~dB}$; THD $0.02 \%$; input 0.75 V ; LinkwitzReilly filters
\$484

## GS424 Active Crossover

Rack mount unit with black anodized aluminum front panels and smoked plexiglass security covers. Features 4 -ch biamp; sterco output: variable crossover frequency setting: 12 high-pass, low-pass, and midrange controls; $\mathrm{s} / \mathrm{N} 102 \mathrm{~dB}$; THD $0.02 \%$; input 0.75 V : Linkwitz-Reilly filters
\$424

## 108 Spectrum Analyzer

Portable DC 10 -band/ch spectrum analyzer with optional pink-noise generator. Features calibrated microphone; 100 led's; lel range 23 dB ; 32-16,000 Hz bandwidth; 30-123 dB range . . . . . . . . . . . $\$ 384$

## GS224 EQ Active Crossover

Rack mount unit with black anodized aluminum front panels and smoked plexiglass security covers. Features fixed bass equalization: subsonic filter; stereo outpul; variable crossover frequency setting: 6 high-pass and low-pass controls: $\mathrm{S} / \mathrm{N} 102 \mathrm{~dB}$ : TIII $0.002 \%$ : input level $0.75 \mathrm{~V}: 24 \mathrm{~dB}$ slope: LinkwitzReilly filters
\$384

## GS224 Active Crossover

Rack mount unit with black anodized aluminum front panels and smoked plexiglass security covers. Features stereo output; variable crossover frequency setting: 6 high-pass and low-pass controls; s/N 102 dB; THI $0.002 \%$ : input level 0.75 V : 24 dB slope; Linkwitz-Reilly filters
\$324

## M10 Spectrum Analyzer

Portable ix- 10-band/ch spectrum analyzer with pink-noise generator. Features calibrated microphone; 70 LED's: LED range $15 \mathrm{~dB} ; 32-16,000 \mathrm{~Hz}$ bandwidth; $65-110 \mathrm{~dB}$ range
\$269

## HARMAN KARDON

## EQ8 Graphic Equalizer

Stereo 10 -band graphic equalizer with infrasonic filter continuously variable from 5 to 30 Hz : L and R input controls with overload leds; tape monitor: tape EQ. Center frequencies 31.5.63, 125, 250. 500 . lk, 2k, 4k, 8k, 16k Hz; max boost or cui $12 \mathrm{~dB} \$ 319$

## INTERNATIONAL COMPONENTS

VSP3600 A/V Surround Processor/Decoder
Audio/video surround processor/decoder with builtin amplifier and onk. Features surround compatible matrix decoding circuitry with variable time delay: up to 40 dB front-to-rear separation; stereo synthesizer/expander simulates stereo signal from any mono source: separates mono signal into 5 overlapping frequency bands: built-in 10 W surround channel amplifier: surround output jack: master volume control: tape output jacks; input level indicators; gold-plated connectors.

SSP2400 Audio-Video Surround Processor/Decoder Hooks-up to main front channel amp and rear channel amp to provide surround processing. Features 10 msec time delay for front-to-rear separation up to 60 dB ; input level led indicators: gold-plated connectors.
\$112

## VSS1800 Audio-V'ideo Surround Simulator

Hooks-up to any solid-state amplifier, extracts simulated surround ambience from any stereo source, and requires only an additional pair of rear speakers and speaker wire. Features surround level control: noise climinator: $6 \times 2.5 \times 4.75$ in
\$34

## JRM

## 3PBP/X4 Crossover

Active crossover features 4 frequency bands/ch: 18 dB/octave crossover slopes: independent high-. lowpass frequency selection: plug-in modules frequency setting; stereo/mono/inverted subwoofer outputs: 8 level controls: $\mathrm{S} / \mathrm{N}$ ratio 110 dB ; THI) $0.01 \%$; output impedance 100 ohms
\$750/pr

## 3PBP/X2 Crossover

Active crossover features 2 frequency bands/ch: 18 dB/octave crossover slopes: independent high-. lowpass frequency selection; plug-in modules frequency setting: stereo/mono/inverted subwoofer outputs: 4 level controls; s/N ratio 110 dB ; THI $0.01 \%$; output impedance 100 ohms
\$450/pr

## Remote Unit Fqualizer

Equalizer with 2 channels features switchted tape EQ: 6 bands/ch; unity gain control; 7 rms V output: THI) $0.01 \%$; boost/cut range 8 dB ; subsonic filter; vides) inputs
$\$ 350$

## JVC

XPA1000BK Digital Acoustics Processor
Digital acoustics processor for accurate recreation of original spatiality. Features i.si for digital signal processing: digital processing using 16 -bit quantization and 48 kHz sampling; quadruple-oversampling D/A converter: 64 -times oversampling $4 / \mathrm{D}$ converter. 20 programmed sound field patterns; 20 user-programmable sound field patterns; compensation for ambience of listening room and source program direct digital inputs and outputs (optical and coaxial): 4/6-channel system configuration selectable; 6ganged motor-driven remote-controlled volume control: Fl display; remote control $\qquad$ . \$1.200

## SEAM7708K Graphic Equalizer

Electronic 7-band graphic equalizer with infrared wireless remote control. Features 7 frequency equalizer controls per channel; 6 user preset equalizations: 6 programmed preset equalizations: 1.(I) for S.E.A./ real-time spectrum analyzer: computer-controlled electronic equalization. Remote control functions include adjusting frequency response: recalling a preset equalization; memory of user-programmed EU curves; adjusting volume; fade-muting sound: initial ing preset scan; selecting transfer, reverse, or flat response
$\$ 400$
SUA400 A/V Surround Processor
A/V surround processor. Features wireless remote control with front and rear master volume controls: Dolby surround; hall; simulated surround; left-right calibration and delay-time controls: buitt-in power amp with $10 \mathrm{~W} / \mathrm{ch}$ driven into 8 ohms from 40 20.000 Hz with no more than 0.5 THID. Preamp-level output external amp; headphone jack. . . . . . . $\$ 305$

SUA30 A/N Surround Processor
Surround sound processor with three surround effects including Dolby Surround, hall surround, and simulated surround. Features built-in amplifier: left/right calibration and delay-time controls: volume control for rear speakers; preamp-level output for external power amplifier: heaphone jack for surround
sound headphones. Power output: $10 \mathrm{~W} / \mathrm{ch}$ into 8 ohms from $40-20,000 \mathrm{~Hz}$ with no more than $0.5 \%$ THD.
\$235

## SEA12BK Graphic Equalizer

7-band graphic equalizer features 7 frequency controls per channel with $\pm 10 \mathrm{~dB}$ control range; S.E.A. recording for equalized tape dubbing; -6 dB inpul attenuator to prevent overload distortion; transistor inductors for expanded dynamic range. IR 10-50.000 $\mathrm{H} / \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N} 110 \mathrm{~dB}$; THD $0.03 \%$ at 1.000 Hz .17 .19 $\times 2.44 \times 7.86 \mathrm{in} ; 4.2 \mathrm{lb}$.
$\$ 100$

## KENWOOD

GE-1100 12-Band Graphic Fqualizer
Basic series graphic equalizer with built-in reverb amp and 12-band spectrum analyzer display. Fealures independent $L / R$ channel EQ controls: $\pm 12 \mathrm{~dB}$ $\mathrm{I}: \mathrm{O}$ range: $\mathrm{L} / \mathrm{R}$ or $\mathrm{L}+\mathrm{R}$ display selector: LeI) illuminated slide controls; time-delay and depth controls: two tape monitors with bidirectional dubbing and monitoring: full-effect recording: EQ normal/reverse selector; - 6 dB attenuator; $\mathrm{rHD} 0.003 \% ; \mathrm{s} / \mathrm{N} 105 \mathrm{~dB}$. $6.44 \times 17.31 \times 13.75 \mathrm{in}: 13.6 \mathrm{lb}$

SS-97 A/V Surround Processor
Features Dolby/Theater/Stadium Surround; adjustable delay for Dolby and Theater: built-in $15-\mathrm{W} / \mathrm{ch}$ amplifier for rear speaker drive: full function wireless remote control with level and balance adjustment; 2way video dubbing with tape monitor switch: audio injection; remote-controllable through KA-127; FR $20-20.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}$ ratio greater than $80 \mathrm{~dB} .3 .44 \times$ $16.56 \times 10.81 \mathrm{in}: 9.9$
$\$ 359$

## SS-96 Surround Sound Processor

Audio/video surround processor with remote control. Features Dolby Surround processor; theater and stadium effects: time delay control: left/right channel calibration controls; two vcR inputs with dubbing and audio injection; VIDP input; tape monitor; video monitor: florescent display; $15 \mathrm{~W} / \mathrm{ch}$ amplifier: preout connection to external amplifier. $3.44 \times 16.56$ $\times 10.81 \mathrm{in}: 9.9 \mathrm{lb}$.
$\$ 350$
SS-75 Surround Sound Processor
Features Dolby Surround processor: theater and stadium effects: time delay control; left/right channel calibration controls: surround volume control: LED leve meter and power indicator: built-in $5.5 \mathrm{~W} / \mathrm{ch}$ amplifier: preout connection to external amplifier. $2.19 \times 16.56 \times 8.56 \mathrm{in} ; 6.8 \mathrm{lb}$
$\$ 250$

## SS-77 A/V Surround Processor

Features Dolby/Theater/Stadium Surround: adjustable delay for Dolby and Theater; built-in $10-\mathrm{W} / \mathrm{ch}$ amplifier; FR $20-20.000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}$ ratio greater than 80 dB. $2.19 \times 16.56 \times 8.56 \mathrm{in} ; 6.8 \mathrm{lb}$.
$\$ 249$

## GE-87 7-Band Graphic Equalizer

Features independent $L / R$ channel adjustment: $\pm 12$ dB EQ range: 7 -band spectrum analyzer with separate L/R channel fluorescent displays; reverse mode switch: equalizer recording switch; facilities for cassette deck and additional signal processor connection; total harmonic distortion less than $0.006 \%$; frequency response $10-100,000 \mathrm{~Hz}: \mathrm{s} / \mathrm{N}$ ratio 100 dB . $3.44 \times 16.56 \times 10.5 \mathrm{in} ; 8.5 \mathrm{lb}$.
\$249

## GF-76 9-Band Graphic Fqualizer

Features independent $\mathrm{L} / \mathrm{R}$ channel EQ controls: $\pm 12$ dB or $\pm 6 \mathrm{~dB}$ variable range; spectrum analyzer with separate left \& right channel displays; reverse mode switch: EO record switch: line. tape. adaptor input/outpuis. $3.5 \times 16.56 \times 10.38 \mathrm{in}$; $7.9 \mathrm{lb} . . . \$ 240$

## GE-57 12-Band Graphic Equalizer

Features independent L/R channel adjustment; $\pm 10$ dB EO range: l.t.D indicators on slide controls; line/tape input/output jacks: equalizer defeat switch; THID less than $0.01 \% ;$ FR $10-50,000 \mathrm{~Hz}$ : $\mathrm{S} / \mathrm{N}$ ratio 110 d8. $3.44 \times 16.56 \times 10.25 \mathrm{in} ; 6 \mathrm{lb}$.
$\$ 179$

GE-56 12-Band Graphic Equalizer
Features independent L/R channel EQ controls; $\pm 10$ dB EO range; $I E I$ display; output level control; line/tape input/output connector: EO On/Off switch.
$3.44 \times 16.56 \times 10.25 \mathrm{in} ; 6.0 \mathrm{lb}$
$\$ 160$

## GE-47 7-Band Graphic Equalizer

Features independent L/R channel adjustment: $\pm 10$ dB EO range; I.ED indicators on slide controls: line/tape input/output jacks; equalizer defeat switch: this less than $0.01 \%$; FR $10-35.000 \mathrm{~Hz}$ : $\mathrm{s} / \mathrm{N}$ ratio 96 dB. $3.44 \times 16.56 \times 8.87 \mathrm{in} ; 6.6 \mathrm{lb}$.
$\$ 109$

## GE-46 7-Band Graphic Equalizer

Features independent L/R channel eQ controls; $\pm 10$ dB EO range: LED display; line/tape input/output connectors: EQ on/off switch
$\$ 100$

## KINETIC AUDIO

## 3-Point Crossover/Level Control

Monophonic passive crossover/level control system that keeps low frequencies from entering miniature monitor, satellite speaker systems. Features crossover level control and mid-high-pass filter. Crossovers 65. 90. 180 Hz ; converts 4- to 8 -ohm load. Can be built into Kinetic subwoofers. Mono version\$150

## 4-Point Crossover/Law-Pass Filter

Monophonic passive crossover to be used with subwoofer for filtering out unwanted midrange and high frequencies. Crossover points are 60. 90, 180. and 350 Hz ; imp 6.8 ohms. Can be built into Kinetic subwoofers. Mono version; $15 \mathrm{lbs}: 4 \times 15 \times 10$ in $\$ 150$

## LTSOUND

CLX-2 Compressor/Limiter/Expander
Features stereo and independent compression or limiting; De-Ess circuit; noise gating; keyed expansion or gating; knee-type compression switchable in or out; external modulation jacks for tremolo and panning effects (requires external oscillator). FR 20 $40,000 \mathrm{~Hz} \pm .5 \mathrm{~dB}$; THI $<0.003 \% ; \mathrm{s} / \mathrm{N}>-90 \mathrm{~dB}$; dynamic range $>115 \mathrm{~dB}$; max input $+25 \mathrm{~dB} .19 \times 2 \times$ 7.25 in
$\$ 895$
RV-2 Stereo Reverberation Unit
Reverb unit compatible with any send/receive bus level. Features the sound of two different plates and an acoustic chamber simultaneously and in true stereo; microplate reverb with $\mathrm{FR}>18,000 \mathrm{~Hz}$; electronically adjustable decay: 90 dB reverb dynamic range. FR $2-40,000 \mathrm{~Hz} \pm .5 \mathrm{~dB}$, reverb $20-18,500 \mathrm{~Hz}$ $\pm 2 \mathrm{~dB}$; inpul imp 47 k unbalanced: $\mathrm{s} / \mathrm{N}>90 \mathrm{~dB} .19 \mathrm{x}$ $1.75 \times 7.25$ in
$\$ 895$

## Tape Noise Reduction Umits

All noise reduction units are compatible with the dher noise reduction system and any open-reel tape deck. have a user adjustahle level from - 10 to +4 dB . have sumultaneous encode/decode. are rack-mountahle. and are availahle in hardwired versions. $S / N>-90$ dBm. FR 20-20.000 $\mathrm{Hz} \pm .75 \mathrm{~dB}: T H D<0.15 \%$ al $1.0 \% 1 \mathrm{~Hz}$
NR-8. 8-channel version
$\$ 795$
NR-4. 4-channel version
$\$ 475$
NR-2. 2-channel version
$\$ 275$
PEQ-2 Dual 4-Band Parametric Equalizer
4-band parametric $E Q$ with 2 control frequencies at $25-3,000 \mathrm{~Hz}$. and one each at $85-13,000$ and $125-$ $20,000 \mathrm{~Hz}$. Features output capable of driving 600 ohm loads; phono or RCA jacks; optional peak-dip or shelving response on upper and lower bands. FR 20 $20,000 \mathrm{~Hz} \pm .5 \mathrm{~dB} .2 \cdot 2-100.000 \mathrm{~Hz} \pm 1 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}>90$ dB ; slew rate $13 \mathrm{~V} / \mu \mathrm{sec}$. $19 \times 3.5 \times 7.13 \mathrm{in} . . . . \$ 595$ PEQ-I. As above, single channel version, no low frequency rumble filter
\$349

## SL-2 Stereo Limiter

Features 2 channels of both compression and expander noise gate capability: compressor and expander
work simultaneously: De-Ess circuit; stereo or independent compression available. $\mathrm{s} / \mathrm{N}>90 \mathrm{~dB}$ : FR 20 $20,000 \mathrm{~Hz} \pm .5 \mathrm{~dB}$; THO $<0.03 \%$; slew rate $13 \mathrm{~V} / \mu \mathrm{sec}$. $19 \times 1.75 \times 7.25 \mathrm{in}$ $\$ 395$

## FCU-2 Electronic Crossover

Electronic crossover capable of stereo bi-amping and stereo tri-amping. Features phase inversion switches; high slew rate Bi-FET integrated circuits: switchable I. 5 Hz or 30 Hz ramble filter: low crossover point 75 1.100 Hz ; mid/high crossover point $75-1.100 \mathrm{~Hz}$ in Ix range, and $750-11,000 \mathrm{~Hz}$ in 10x range. $\mathrm{s} / \mathrm{N}>90$ dB : ТНІ) $<0.007 \%$; IмI) $<0.003 \%$; filter slope 12 dB/octave
\$295

## MARANTZ

CDA-94 Ourboard D/A Converter
Used with CD players and other digital components providing digital output. When used with Marantz CD94 climinates ground loops, contact rectification: accepts 2 wired digital inputs with additional input and outpul connectors for DAT tape deck; automatically selects correct sampling rate for DAT deck; fixed and variable line outputs. adjustable headphone level and balanced XLR-3 outputs for broadcast and professional applications.
$\$ 1,700$

## FQ 551 Graphic Equalizer

10-band graphic EQ with separate controls for left and right channels and equalized tape output. Calibrated mic included. FR $20-40.000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; THI) $0.005 \%$; $\mathrm{s} / \mathrm{N} 80 \mathrm{~dB}$
$\$ 250$

## E(Q-432 Graphic Equalizer

7-band graphic equalizer with two channels. Features adjustment range $\pm 10 \mathrm{~dB}$ : LEI) indicators . . . . $\$ 149$

## EQ 130 Graphic Equalizer

10-band graphic equalizer with separate controls for cach channcl. $2.62 \times 16.5 \times 8 \mathrm{in}$; 5.5 lb .
$\$ 130$

## MARK LEVINSON BY MADRIGAL

L.NC-2 Electronic Crossover

Modular system for frequency division of line-level signals; 4 active filters ( 2 high pass. 2 low pass); on/off switch for each high- and low-pass filter. internal stereo/mono switch and Camac connectors; handbrushed and black anodized finish: $18 \mathrm{~dB} /$ octave slopes. optional $6-\mathrm{dB}$ or $12-\mathrm{dB}$ slopes for 3 -way stereo operation; optional $6-\mathrm{dB} /$ octave slope OCS modules: output level of each FR controlled by 10 -turn locking potentiometer on front panel. THD $0.002 \%$ wideband noise <102 dBV unwtd: accuracy within $5 \%$ of specified crossover point: PLS-151 separate power supply load regulation $0.05 \%$; wideband noise output $18 \mu \mathrm{~V}$; LNC-2: $2.25 \times 19 \times 7.88 \mathrm{in}$ : $12 \mathrm{lb} .$. . $\$ 3.500$

## MEMOREXBYMEMTEK

DS-10 Surround Sound Decoder with Amplifier Reproduces Dolby surround sound. Features 15 W/ch through user's two rear speakers. or can be used as a stand alone audio amp providing $5 \mathrm{~W} / \mathrm{ch}$ to front and rear speakers; choice between Dolby surround or stereo mode for non-surround encoded stereo programs; input balance control; front/rear balance; flat black finish with gold lettering
$\$ 130$

## Infrared Cordless Headphone Adaptor

Infrared transmitter beams any audio source to a special receiver module that can accept all miniplugged headphones
\$70

## NEC

PI.D-910 Dolby Pro-Logic Surround Sound Decoder Features $L / R$ independent dual 16 -bit digital delay circuit ( $1.0 \mu \mathrm{sec}-94 \mu \mathrm{sec} / 0.1 \mathrm{~m}$ step); Doiby Pro-Logic Surround; Creation Surround; 41-key wireless remote control; quadruple-oversampling digital filter: FIP indicator; input/output terminals; noise se-
quencer: THD 0.005\%
$\$ 999$
PL.D-310. As above with fixed $20 \mu \mathrm{sec}$ delay to rear speakers; couble-oversampling digital filter... $\$ 449$

## Renaissance Series

## AVD-700E Surround-Sound Processor

Remote-controlled 16 -bit digital-delay surroundsound precessor with Dolby, hall, matrix, and creation sumround circuits. Features inputs for up to 10 video and 5 audio sources; mix-and-match of any video with any audio source; master level control; reset button to set all volume levels to -40 dB without affecting any presets; volume indicators that indicate display levels of front and surround sound channel by channel. FR $10-20,000 \mathrm{~Hz}+5,-1 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}$ $100 \mathrm{~dB} .17 \times 3.2 \times 13.4 \mathrm{in}: 16.1 \mathrm{lb}$
\$729

## AVX-910 Surround Sound Prologic Switcher

Audio/video switcher with surround sound. Features inputs for CD. tuner, two aux. tape. two A/V, two Svideo; outputs for tape and S-video, S-monitor, Srecord; digital noise reduction; digital memory $\$ 699$

## NIKKO AUDIO

EQ-30 32-Band Equalizer
32-band mono equalizer with 1/3 octave
$\$ 349$
EQ-950 Graphic Equalizer/Spectrum Analyzer
Features 10 bands/ch; spectrum display of separate or combined $L / R$ equalizer settings; pink noise generator, mic for EQ slope: EQ bypass; source selector; tape in/out. Center frequencies at 31.5. 63. 125.500. 1,000. 2.000, 4.000. 8.000, $16,000 \mathrm{~Hz} \$ 329$

EQ-25 10-Band Equalizer
Graphic equalizer with adjustable frequencies at octave intervals from $31.5-16,000 \mathrm{~Hz}$. Features 10 slider controls per ch
$\$ 299$

## EQ-540 4-Band Equalizer

Graphic equalizer with 9 bands/ch and built-in graphic indicator

## ONKYO

## Integra EQ-540 Graphic Equalizer

Dual 12 -band graphic equalizer. Features dual 12 band adjustments; warble and center frequency tone generator with fixed and stepped sweep modes:

supplied calibration microphone; high-density information display with frequency readout; EQ range adjustment; master attenuator

Integra EQ-35 Graphic Equalizer
12-band graphic equalizer with signal generator. Features individual controls for each channel; leD slide markers; signal generator for all center frequencies except 16 and $32,000 \mathrm{~Hz}$; step or sweep generator mode; level control, $\pm 12 \mathrm{~dB}$ or $\pm 6 \mathrm{~dB}$ adjustment range switch; operation mode display: delta power supply. Center frequencies at $16.32,64,125,500$ $1,000,2,000,4,000,8.000,16,000$, and 32.000 Hz . sound and noise reduction 100 dB ; THI) $0.01 \%$. Available in black
\$320

## EQ-240 Graphic Equalizer

7-band graphic equalizer includes a spectrum analyzer display with level control. Features Led indicator for each band; EQ bypass switch; monitor/tape-source switch. Center frequencies at $64,160,400,1,000$ $2,500,6,300$, and $16.000 \mathrm{~Hz} .5 / \mathrm{N} 100 \mathrm{~dB}$; тHD $0.01 \%$ at $20-20.000 \mathrm{~Hz}, 1.5 \mathrm{~V}$ output. $17.12 \times 2.81 \times 10.12 \mathrm{in}$ : 6.4 lb

## EO-140 Graphic Equalizer

Dual 7-band graphic equalizer. Features dual 7-band adjustments; EQ by pass switch; lape monitor switch: LeD indicators.
. $\$ 150$

## PHILIPS

## DAC $960 \mathrm{D} / \mathrm{A}$ Converter

D/A converter optically coupled to digital filters; 3 separate power supplies with 3 individual transformers; DAT ready: optical digital input with supplied fiber optic cable: phase inverter control; outputs with 2-stage muting; die-cast chassis; shock-absorbing feet: copper heat sinks; ceramic power capacitors; headphone amplifier with volume control. FR 2 $20,000 \mathrm{~Hz}$; amplitude linearity $\pm 0.01 \mathrm{~dB} ; 5 / \mathrm{N}>101$ dB ; dynamic range $>96 \mathrm{~dB}$; channel separation $>100 \mathrm{~dB}(1 \mathrm{kHz})$; тHI) $<0.0015 \%$ ( 1 kHz ); Iм।) -90 dB (at maximum output level); ultrasonic noise reduction $>60 \mathrm{~dB} .3 .44 \times 16.8 \times 13.28 \mathrm{in}$; $18.7 \mathrm{lb} \$ 949$

## PIONEER

VSP-555 Surround-Sound Processor
Digital surround-sound processor with built-in amplifier and remote control. Features Dolby, stadium, and simulated surround modes; digital delay: A/V switching and connections: $30 \mathrm{~W} / \mathrm{ch}$ amplifier at 8 ohms from $30-7,000 \mathrm{~Hz}$ with $<5 \%$ THID. . . . . $\$ 375$

## GR-777 10-Band Graphic Equalizer

10 -band graphic EO with boost/cut of $\pm 10 \mathrm{~dB}$ and remote control. Features center frequencies of 32.63. 125, 250, 500, 1,000, 2,000, 4,000, 8,000. and 16,000 Hz : 10-band spectrum analyzer: 5 programmable EO patterns; 5 resident EQ patterns. . . . . . . . . . . . $\$ 370$

SP-X707 Surround-Sound Processor
Features 4 surrond modes (simulated stereo, stadium, theater, and Dolby); dynamic expansion switch; super-bass switch; wireless remote control. 30 continuous average $\mathrm{W} / \mathrm{ch} .2 .94 \times 14.19 \times 13.06 \mathrm{in} . . . \$ 320$

## SG-60 Graphic Equalizer

Features 12 bands/ch; independent controls for left and right ch; 2 tape monitors; input level control: black finish. Center frequencies at 16, 32, 64. 125. 250. 500. 1.00. 2.000. 4.000, 8.00. 16.000 and 32.000 Hz ; control range $\pm 12 \mathrm{~dB} .5 .19 \times 16.56 \times 13.81$ in.
$\$ 300$

## EX-9000 Dynamic Processor

Features dynamic range expansion: noise-reduction effect: FI. level indicator; input level control; tape monitor switch; black finish. Center frequencies 50. $500,5.00 \mathrm{~Hz}$; attack time 4.7 ms ; release time 2.7 $\mathrm{ms} / 6.8 \mathrm{~ms}$ switchable. $2.38 \times 19.56 \times 3.38 \mathrm{in}$. . $\$ 260$

GR-555 7-Band Graphic Equalizer
7-band graphic EQ with boost/cut of $\pm 10 \mathrm{~dB}$. Features center frequencies of $60.150,400,1,000$. 2.400, 6.000 , and $15.000 \mathrm{~Hz} ; 7$-band spectrum analyzer: tape monitor.
$\$ 225$
SR-60 Reverberation Amplifier
Features solid-state HBst) circuit; reverb, echo, and duet effects: visual display: tape monitor; black finish. Reverb time $0-3$ seconds (reverb and echo): delay time 100 ms (duet). $3.88 \times 16.56 \times 13.38 \mathrm{in} \$ 210$

## GR-470 Graphic Equalizer

Features 7 bands/ch; slide controls with LeI indicators; black finish. (enter frequencies at $60.150,400$. 1.000. 2.400. 6.000 . and $15.000 \mathrm{~Hz} .2 .38 \times 16.56 \times$ 8.69

## RCA

MSP400 Dolby Surround Sound Processor
Dimensia surround sound processor with built-in amplifier and Dimensia remote operation. Features Dolby Surround: simulated surround; theater surround; stadium surround; front/rear channel volume
with mutc; loudness; bass boost: sound expansion; line-level center- and rear-channel outputs: tape monitor loop; AC convenience outlet. Power output $30 \mathrm{~W} /$ ch from $100-6.000 \mathrm{~Hz}$ with no more than $3.0 \%$ THi) $9 / \mathrm{N} 60 \mathrm{dBA}$ (surround speakers output). $14.5 \times 3$ x 13.13 in . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 349$

## MGE260 10-Band Graphic Equalizer

Features Dimensia system design; automatic poweron; lighted slide controls; fluorescent spectrum analyzer display; built-in muting: EQ-bypass switch: power-off bridging: Ac convenience outlet. EQ center frequencies: $31.5,63,125,250,500,1,000,2,000$, $4,000,8,000$, and $16,000 \mathrm{~Hz}$; adjustment range $\pm 10$ dB. FR $20-20,000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} ; \mathrm{s} / \mathrm{N}>100 \mathrm{dBA}$; THD $<0.005 \%$. $14.63 \times 3 \times 10.38$ in ............... . $\$ 219$

## REALISTIC

31-2020 10-Band Equalizer
10-band/ch EQ with spectrum analyzer: IMX spatial expander; tape 1 and 2 in/out. $\mathrm{S} / \mathrm{N} 95 \mathrm{~dB}$. $16.22 \times 2.62$ $\times 8.47 \mathrm{in} ; 6.1 \mathrm{lb}$.
\$1 30

31-2018 10-Band Equalizer
10-band/ch EQ with IMX spatial expander. $\mathrm{s} / \mathrm{N} 95$ dB. $350 \times 64 \times 146 \mathrm{~mm}$.
$\$ 60$

## SAE

## E-101 Parametric Equalizer

Computer direct-line parametric equalizer with digital display. Features 2 bands with 10 memories/band "pre" tape EQ feature. Bandwidth adjustable from 0.3-3.0 octaves; boost/cut range $\pm 16 \mathrm{~dB}$; rated output 2.5 V rms: THD $0.02 \%$; s/N $100 \mathrm{~dB}: 19 \times 12.5 \times$ 3.5 in .
. $\$ 650$

## SANSUI

## DA-607i Digital Processor

Filter unit containing two 8 -times-oversampling digital filters and 1 analog filter. Features digital inputs for coaxial connection of a DAT recorder or player, a CD player. and an optical source; digital output to feed a DAT recorder and optical output: 2 pairs of left and right outputs for an analog amplifier: 2-transformer power supply (1 for analog. I for digital); sampling frequency selector (automatic during playback): volume control; headphone jack; battery-operated remote control. frequency resoponse $4-22,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; dynamic range 100 dB total harmonic distortion (at I kHz) $0.002 \%$; sound and noise reduction 115 dB . Black finish: $5.75 \times 17.69$ $x 14.63$ in
$\$ 1,000$

## AV.99 Audio/Viden Processor

A/V proccessor accepts signals from any line-out format. Features digital "Video Art" special effects; video enhancer: A/V faders. Terminals for 2 VCR's I camera. I audio component, and 2 monitors: dubbing capabilities: audio insert; character generator terminals. Video input sens 1.0 Vp -p/75 ohms Audio in put sens $-6 \mathrm{~dB} / 47$ kilohms. $16.94 \times 4.06 \times$ 11.25 in : 9 lb .
$\$ 700$
V. X-99 Video Processor

Similar to AV-99 but without audio processing and video wipe features
. $\$ 600$

## DS-77 A/V Surround Sound Processor

Provides amplification for rear channel and center front for audio and video sound. Features super bass synthesizer: peak attacker; simulated stereo; built-in amp delay memories. Decodes specially encoded video tapes. $\mathrm{FR} 20-20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$; THD $0.09 \%$; delay time theater and hall $20 \mathrm{~m} / \mathrm{sec}$ : $10 \mathrm{~W} / \mathrm{ch}$ for rear speaker drive. $16.94 \times 2.94 \times 9.88 \mathrm{in} ; 8.6 \mathrm{lb} . . . \$ 400$

## RA- 1000 Electronic BBD Reverb Amplifier

Features 2 cassette inputs; bi-directional dubbing facilities: twin mike mixing facilities with separate volume controls for duet effect; color graphic dis play
of reverb effect. Reverb time: echo $0-4.5 \mathrm{sec}$, dual 30 $200 \mathrm{~m} / \mathrm{sec}$. THD $0.025 \% .16 .94 \times 4.44 \times 10.75 \mathrm{in} ; 3.7$ lb .
\$300

## SE- 3000 10-Band Graphic Equalizer

10-band graphic equalizer with real-time spectrum analyzer. Features center frequencies of $32-16,000 \mathrm{~Hz}$ spaced at I-octave intervals; line, tape, and CD/aux inputs. THD $0.008 \% ; \mathrm{S} / \mathrm{N} 110 \mathrm{~dB} ; E Q$ range $\pm 12 \mathrm{~dB}$. $4.44 \times 17 \times 8.81 \mathrm{in} ; 6.8 \mathrm{lb}$
\$290

## SE-1000 7-Band Graphic Equalizer

10 -band graphic equalizer. Features center frequencies of $60,150,400,1,000,2,400,6,000$, and 15,000 Hz . THD $0.03 \% ; \mathrm{S} / \mathrm{N} 75 \mathrm{~dB}$; EQ range $\pm 12 \mathrm{~dB} .3 .13 \times 17$ $x 8.31 \mathrm{in}: 4.9 \mathrm{lb}$.
$\$ 90$

## SANYO

SAV200 Surround-Sound Processor
Features Dolby surround-sound decoder; concerthall surround mode: variable time delay: stereomatrix mode: 2 -color dimensional surround indicator; surround calibration and balance controls: 20 W/ch power amp
$\$ 150$

## SOUND CONCEPTS

SSD550 Ambience Restoration and Surround System Surround sound and ambience restoration system. Matrix decoder derives accurate rear channel from surround sound films and video sources. Takes stereo inputs and provides two front and two rear channel outputs with stereo delay for music or surround decoding plus delay for video. Stereo audio delay system; continuous delay variation $5-100 \mathrm{msec}$; continuous reverb variation $0-100 \%$; high-frequency rolloff from -3 to +6 dB ; front mix level $0-100 \%$, rear level $0-100 \%$; 50 or $100-\mathrm{msec}$ delay range: rear output delay or quad direct; front output direct or delay mix: input front or quad rear: input imp 60k ohms min; output imp 300 ohms max; frequency response $20-10.000 \mathrm{~Hz}+1 .-3 \mathrm{~dB}$ with 5 msec delay. zero dB high-frequency rolloff; dynamic range 90 dB min , sound and noise reduction 85 dB min, 90 dB wid: 1\% max distortion at $1,000 \mathrm{~Hz}, 1 \mathrm{~V}$ rms. consisting almost entircly of 2nd harmonic; $3.5 \times 15.5$ x 9 -in.
$\$ 789$

## IR2100 Image Restoration System

System expands stereo image beyond confines of space between speakers to reproduce sonic image presented to recording microphones; speaker/listener angle continuously adjustable $20 \mathrm{x}-100 \mathrm{x}$; continuous adjustment of perimeter to central sound level balance: master volume control; connects in tape loop or between preamp and power amp; sound and noise reduction 80 dB ; distortion $0.1 \%$ max; handheld with 15 -ft remote cable; $6 \times 3 \times 1.5$ in ... $\$ 289$ IR2200. Nonremote version of IR2100 with perimeter to central sound level brilliance control: connects in tape loop; has provisions for tape recorder. capability to record expanded image. $\mathrm{S} / \mathrm{N} 80 \mathrm{~dB}$; distortion 0.1\% max; 7" w x 4" d x 2" h. Factory assembled.
$\$ 169$
Kit (KIR-1).
$\$ 95$

## VSP-1 Stereo Synthesizer

Provides interface to stereo system. creates spacious, realistic pseudostereo from mono sources; 10-band harmonically related frequency divisions. $\mathrm{S} / \mathrm{N} 80 \mathrm{~dB}$ : distortion $0.2 \%$ max; $2 \times 7 \times 4-\mathrm{in}$. Factory wired $\$ 159$ Kit (KVSP-1)
$\$ 90$

## SX-80 Peak Expander/CX Decoder

Adds 20 dB of dynamic range to CX -encoded records and videodiscs. 6-9 dB of upward expansion to nonencoded sources; connects into tape loop. provides recorder connections. Features tri-color led for 0 vu calibration with standard record supplied. $\mathrm{S} / \mathrm{N}$ 80 dB ; distortion $0.1 \%$ max; $2 \times 7 \times 4$-in. Factory assembled . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 119$ Kit (KSX-1) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 76$

## SCOTT

EQ400 10-Band Graphic Equalizer
10 bands per ch: spectrum analyzer; center frequencies at $31.5,63,125,250,500,1 \mathrm{k}, 2 \mathrm{k}, 4 \mathrm{k}, 8 \mathrm{k}, 16 \mathrm{k} \mathrm{Hz}$ : max boost or cut 10 dB ; delay circuit variable up to 20 msec: 2 tape-monitor circuits; EO rec switch. $17.4 \times$ $3.72 \times 7.6$ in
$\$ 280$

## SHURE

Shure HTS 5200 Generation 2
Dotby Surround audio processor. Acra-Vector Logic Decoder and variable digital time delay. Acoustic Space Generator: output IED monitor: 6 ch output: left. right. center. 2 rear surrounds. plus subwoofer; wireless remote; stereo and mono Surround Synthesis and bypass modes. FR $20-20.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB}$ (front $\mathrm{L} / \mathrm{R}$, center): $\mathrm{S} / \mathrm{N}-90 \mathrm{dBV}$ : TH ) (front $\mathrm{L} / \mathrm{R}$. center) $<0.1 \%$, (surround $\mathrm{t} . / \mathrm{R})<0.3 \% ; 16.81 \times 2.38 \times$ $15.03 \mathrm{in}: 11.10 \mathrm{lb}$.
$\$ 1.000$
Shure IITS 5000 Surround Sound Processor
Decodes Dolby stereo sound encoded in video discs. video tape, and broadcast TV. Produces simulated surround sound from mono and stereo sources. Provides up to six ch of audio output: left. right. center, two surround channels, and subwoofer. Features Acra-Vector decoder circuitry with variable digital delay: acoustic space generator: remote control: output LED monitor display. FR $20-20.000 \mathrm{~Hz}$ $\pm 0.5 \mathrm{~dB}: \mathrm{s} / \mathrm{N}$ (front left, front right, eenter) -90 dBV . -85 dBV (surround $\mathrm{I} . / \mathrm{R}$ ): $16.81 \times 2.38 \times 15.03 \mathrm{in}$ : 9.13 lb.
$\$ 749$

## Shure HTS 60RX Remote Extender

Separate infrared sensor eye package for use with HTS 5200 when decoder is installed in concealed location. $9 \times 2.4 \times 3.8 \mathrm{in}$. . $\$ 99$

## SONY

SDP-777ES Digital Surround Processor
Combines digital delay circuitry with Dolby HX ProLogic decoding. Features 16 -bit quantization digital processing: switch-selectable speaker configuration: built-in pink noise generator: matrix delay mode; hall delay mode: stereo simulator delay mode; built-in video switching capability; audio outputs; Remote Commander
. $\$ 850$

## SH: Q-333FS Graphic Equalizer

Remote-controlled 10-band graphic equalizer that automatically adjusts for room acoustics. Features real-time spectrum analyzer: precision test microphone: 3 inputs: 3 outputs: 8 acoustic memories with 4 pre-programmed curves; automatic or manual equalization; battery backup for programmed settings. Center frequencies $31.5 .63,125.250,500$. I.000. 2,000, 4,000, 8.000. $16,000 \mathrm{~Hz}$ : boost/cut range $12 \mathrm{~dB}(2-\mathrm{dB}$ increments). $17 \times 4.25 \times 10.88 \mathrm{in} . \$ 600$

## SOUNDCRAFTSMEN

AF 2000 Real-Time Analyzer/Equalizer
Stereo 10 -band graphic equalizer with Differential/ Comparator analyzer/equalizer circuitry, pink-noise generator. Features 100 -led) ( 10 -octave) real-time display with adjustable decay rate; mike preamp: input for analysis of 3-head tape deck, other signal processor; Auto-scan mode: brushed-aluminum front panel; hardwood side panels. Center frequencics $32,64,125,250,500,1 k, 2.000,4.000,8.000$. 16.000 Hz ; boost/eut range $\pm 15 \mathrm{~dB}$; display accuracy 0.1 dB : Auto-Scan sweep rate $0.1-10$ secs/ octave: THI) and IMD $<0.01 \%$ at 2 v ; $\mathrm{s} / \mathrm{N}$ ratio 114 dB at max output: mic preamp input imp 2.000 ohms: FR 20 $20.000 \mathrm{~Hz} \pm 0.1 \mathrm{dH}$.
$\$ 799$

## DC 4415 Third-Octave Equalizer

Third-octave stereo equalizer with 21 controls/channel. Center frequencies $40,50,63,80,100,125,160$, 200. 250, 315.400, 500.630. 800, 1.000. 1.600. 2.500.
$4,000,6.300,10,000,16,000 \mathrm{~Hz}$. Features FQ defeat: infrasonic filter; tape monitor and lape record; Differential/Comparator circuitry for unity gain setting to withon 0.1 ds accuracy for highest dynamic range capability. THI) and IMI$) 0.01 \%$ at $2 \mathrm{v} ; \mathrm{s} / \mathrm{N} 114$ dB at 10 v output; input imp 47,000 ohms. Front panel rack mount, brushed aluminum with charcoal finish.
$\$ 699$

## DC 2215 Differential/Comparator Equalizer

Stereo 10-band equalizer with Differential/'Comparator truc-unity-gain circuitry for input to output balancing accuracy to within 0.1 dB . Equalizer filter circuits use precision wire-wound passive-coil inductors for high gain. low noise and distortion. Frontpanel controls include tape monitor, Lel) defeat/EQ defeat and EQ tape record. Total harmonic distortion and intermodulation distortion $0.01 \%$ at $2 \mathrm{v}: \mathrm{s} / \mathrm{N}$ ratio 114 ds at 10 v : boost/eut range $\pm 15 \mathrm{~dB}$. Includes frequency spectrum analyzer test record. computone charts. cables. Front panel is rack mount. brushed aluminum with charcoal finish. . . . . \$449 DC 2214. Same as DC' 2215 except equalizer filter circuits have op-amp synthesized inductors. THD and IMD $<0.01 \%$ at $2 \mathrm{v}: \mathrm{S} / \mathrm{N}$ ratio 106 dB at 10 v : boost/cut range $\pm 12 \mathrm{ds}$.
\$299

## SUMO

Delilah 2-Way Electronic Crossover
Features front-panel user-selectable frequencies and slopes: 12-dB/octave high-pass slope; 12- or 18 dB/octave switchable low-pass filter with level control: stereo and mono low-pass outputs with built-in bridging circuitry: independent low-/high-pass frequency controls. FR $5-200,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : THD $0.008 \%$ max; input imp 50 kilohms; output imp $<100$ ohms; high- and low-pass frequencies 50.63 $80.100,120 \mathrm{~Hz}$ with bypass. $19 \times 1.75 \times 10 \mathrm{in} ; 8$ lb.... . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 549$

## SURROUNDSOUND

## Surround Sound System 4010

Dolby surround decoder with built in $45 \mathrm{~W} / \mathrm{ch}$ amplifier and remote control. Features dynamic logic: front to rear balance; volume control for entire A/V system; variable delay: three surround modes: muting; center channel and subwoofer outputs: four audio/video inputs; two video outputs; switchable rear/center channel amplification; auto Dolby B NR: THD front channels $.03 \%$. Dolby surround $.25 \%$; music surround $.355: \mathrm{FR}$ front channels $+.5 \mathrm{~dB}, 18$ $50.000 \mathrm{~Hz} ; 3.25 \times 17 \times 13 \mathrm{in} ; 13.2 \mathrm{lb}$
$\$ 600$
System 1000 Surround Sound. Similar to above with $20 \mathrm{~W} /$ ch amplifier and no remote control: $2.75 \times 17 \mathrm{x}$ $8.5-\mathrm{in}$.
$\$ 250$
Cinema 500 Surround Sound. Same as 1000 with two speakers included
$\$ 299$

## Surround System 360 II

45 W/ch surround Dolby decoder. Features continuously variable audio time delay: four way input switching: dubbing capability: balance control for two rear speakers; one touch calibration; auto Dolby B NR: center channel and subwoofer outputs: FR front channels $18-40,000 \mathrm{~Hz}$; THD front channels 05\%. surround channel .25\%
\$379

## TEAC

E.QA-30BI, 10-Band/ch Graphic Equalizer

Controls at $32,63,125,250,500,1 \mathrm{k}, 2 \mathrm{k}, 4 \mathrm{k}, 8 \mathrm{k}, 16 \mathrm{k}$ : Max boost or cut 15 dB ; led's in sliders: multi-color frequency analyzer with display hold and variable sens and levels: pink-noise generator: can equalize I source while monitoring another: dubs source while listening to another; subsonic filter; source/record switching; eq defeat; includes calibrated omnidirectional electret-condenser mike and 2 RCA cables; optional rack-mount kit. FR $9-120.000 \mathrm{~Hz}$; $\mathrm{s} / \mathrm{N} 104$ $\mathrm{dB} ; 12 \mathrm{lb}$.
$\$ 399$

## EQA-20 Graphic Equalizer

10-band/ch graphic EQ with specirum display. Features max $12-\mathrm{dB}$ cut/boost: rec EQ in/out: pre/post EQ switch; LeD's on slide controls: left and right attenuators: tape dubbing: dual-tape recording capability. FR $5-100.000 \mathrm{~Hz} \pm 3 \mathrm{~dB} ; \mathrm{S} / \mathrm{N}>80 \mathrm{~dB}$; THI) $0.03 \%$; input $\operatorname{imp} 47,000$ ohms; output $\operatorname{imp} 600$ ohms. $2.62 \times 16.56$ $\times 6.5-\mathrm{in} ; 66 \mathrm{lb}$. $\$ 249$
EQA-20BI.. As above in black . . . . . . . . . . . . . $\$ 249$ EQA-5. Similar to EQA-20 without spectrum display. Includes single attenuator and LED signal meters.
$\$ 149$

## EQA-10IIS Graphic Fiqualizer

Stereo 10-band graphic equalizer with source/tape irputs: 10-band frequency-spectrum display: EQ in/ out switch: pre/post EU switch: line $1 / 2$ input selector switch: silver.
$\$ 199$
EQA-1011. As above in black.
$\$ 199$

## TECHNICS

SH-8065 33-Band Graphic Equalizer
With variable-range indicators and selector: tapemonitor switch; parallel L, R sliders. Center frequencies $16,20,25,31.5,40,50,63,80.100 .125,160.200$. $250.315 .400,500,630,800,1 \mathrm{k}, 1.25 \mathrm{k}, 1.6 \mathrm{k}, 2 \mathrm{k}, 2.5 \mathrm{k}$, 3.15k, 4k. 5k. 6.3k. 8k. 10k. 12.5k. 16k. 20k. 25k Hz; boost/cut range $\pm 3 / \pm 12 \mathrm{~dB}$ : $\mathrm{S} / \mathrm{N} 110 \mathrm{~dB}$; gain 0 dB : $16.94 \times 13 \times 6.03 \mathrm{in}$; 13.2 lb
\$725

## SH-8066 Direct-Touch Graphic Equalizer

12-band/ch graphic equalizer sets EQ curves according to line traced on front panel by fingertip. Remembers 8 preset curves: EQ Plus function; auto equalizer compensates for system frequency response and roon acoustics. $\$ / \mathrm{N} 107 \mathrm{~dB}: 16.94 \times 4.69 \times 10.09$ in: 8.4 lb
$\$ 640$

## SH-8046 Direct-Touch Graphic Equalizer

7-band graphic EQ with curves set by tracing fingerlip across display. Max boost 12 dB , max cut 12 dB . Features FL display of EQ settings or music content by frequency band (spectrum analyzer); 4-preset EOcurve memory: switch to reverse EQ curve; EQ-curvelock switch; EQ rec switch; EQ on/off switch; tape monitor (source/tape) switches. Center frequencies at $63,160,400,1,000,2,500,6,300,16.000 \mathrm{~Hz} .16 .94 x$ $3.89 \times 941 \mathrm{om}: 6.6 \mathrm{lb}$
\$330
SH-Alid4 Powered Surround Sound Processor
Recreates or simulates ambience depending on sound scaurce. Features Dolby surround and Technies A/V surround system to extract reverberant sound information from and add phase shift to non-Dolby sources. Can be used with mono and stereo signals. Music. movie, and manual modes; 4 video inputs. sound and noise reduction $90 \mathrm{~dB} ; 25 \mathrm{w}$ into 8 ohms.
\$295
Slf-AV 40 Dolby Surround-Sound Processor $20 \mathrm{~W} / \mathrm{ch}$ surround-sound processor with both channels driven into 8 ohms from $40-20.000 \mathrm{~Hz}$ with less than $0.5 \%$ THD. Features fL display: 3 preset effects for $\mathrm{A} / \mathrm{t}$ surround including theater, hall, and stereoplex: 4 4/V inputs: master volume. . . . . . . . . . $\$ 250$

## SII-8058 Graphic Equalizer

7 -band/ch graphic EQ with 3 user-assignable preset memories. Features 3 factory-preset memories; one 7-band spectrum analyzer per channel: tape-output EQ; tape monitor. Center frequencies al $63 \mathrm{~Hz}, 160$ $\mathrm{Hz}, 400 \mathrm{~Hz}, 1 \mathrm{kHz}, 2.5 \mathrm{kHz}, 6.3 \mathrm{kHz}, 16 \mathrm{kHz}, \$ 245$

## Sll-4020K Programmable Timer

Programmable timer for audio/video applications. Features on/off timer: 2 hr sleep function; 24-hour clock display
. $\$ 140$

## SH-8038 Graphic Equalizer

7-band/ch graphic EQ with tape-output EQ. Features LED display on tip of each control; reverse curve switch. tape monitor

## MAGNEPLANARS:. <br> Because Music Doesn't Come In Boxes. t

## $\sqrt{1}$

## From the $\$ 495$ per pair SMGa

 to the $\$ 1995$ MG-IIla, Magneplanar ${ }^{\oplus}$ speäker technology eliminates the box for a more open, natural sound. And because Magneplanars are bipolar -radiating sonic energy to the rear as well as forward - the three dimensional space the artists occupied while recording is recreated precisèly in your home.
## SIGNAL PROCESSORS

## THRESHOLD

Model PCX Electronic Crossover
Dual-ch. dual-passband electronic crossover with 17 user-selectable crossover points between the range of 75 to $1.602 \mathrm{~Hz}(750$ to 16.020 Hz available on special order). Computer modeling and optimization of filter circuit design allows $18 \mathrm{~dB} /$ octave slopes that will sum flat within a few \% without plase inversion. Separate high- and low-pass filter outputs for each ch may be independenly level-adjusted with front panel controls. Bridged-mono operation possible with normal and inverted summed mono low-pass filter outputs. 2 PCX may be used in tandern for triamplification. Uses fully discrete, direct-coupled $s$. FED. MOSFET. and bipolar devices. Exiernal power supply in separate chassis. Military-grade. glassepoxy circuit boards with gold-over-nickel-overcopper plated paths. Gold-plated signal connectors with Tetlon insulation. I-R low-pass filter DC to cutoff slope initiation, high-pass filter cutoff slope entry 10 $100,000 \mathrm{~Hz}$ : total harmonic distortion no greater than $0.01 \%$ from $20-20.000 \mathrm{~Hz}$; input imp 20.000 ohms: output imp 1.500 ohms. nominal. $1.75 \times 19 \times 6.5$ in.
$\$ 1.500$

## VECTOR RESEARCH

VQ-125 Graphic Equalizer
10-band graphic EQ with specirum analyzer and pinknoise generator. Features independent left/right EQ controls, 2 tape monitors: dubbing direction selector:

rec EQ: 2 line inputs: peak-hold display: subsonic filter: input sens switch. Center frequencies: 32.64. 125. 250. 500. $1.000,2,000,4,000,8.000,16,000 \mathrm{~Hz}$ boost/cut range $\pm 12 \mathrm{~dB}: \mathrm{s} / \mathrm{N} 109 \mathrm{~dB}$ : TиD $0.009 \%$. $16.94 \times 4 \times 9.44 \mathrm{in}: 10.5 \mathrm{lb}$
$\$ 250$

## VQ-115 Graphic Equalizer

10-band graphic EQ with master level with peak LED indicator. Features independent left/right EQ controls: tape monitor: EQ-defeat switch. Center frequencies: 32.64. 125, 250. 500. 1.000. 2.000. 4.000. 8.000. 16.000 Hz ; boost/cut range $\pm 12 \mathrm{~dB}: \mathrm{S} / \mathrm{N} 109 \mathrm{~dB}:$ THD $0.009 \% .16 .94 \times 4 \times 9.44 \mathrm{in}: 10.5 \mathrm{lb} \ldots . . \mathrm{F} . \$ 130$

## YAMAHA

ISSP-3000 IDigital Sound Field I'rocessor
Features 20 presct acoustic surround modes. including Dolby surround: 35 variations, including many U.S. environments: 20 user-programmable memory modes; 5 variable parameter adjustments per mode or variation: up to 10 -channel output capability: hibit quadruple-oversampling 18 -bit digital filter: Iwin

hi-bit $\mathrm{D} / \mathrm{A}$ converters: direct digital inpul ( 32 kHz 44.1 kHz .48 kHz ) full-function remote control: master volume control: on-screen display: adjustable front to rear balance and effect signal level: built-in pink noise generator: effect mute: main mute; titanium finish
$\$ 1.899$
DSP-1 Digital Sound Field Processor
Features 16 preset acoustic surround modes including 6 -channel digital Dolby surround: 16 additional preset effect modes: 16 user-programmable memory modes: I 6 -character LCD, wireless infrared remote control: 5 variable parameter adjust ments per mode: digital sound field generator . . . . . . . . . . . . . . $\$ 999$ MVS-1. Master volume controller-selector for use with DSP'-1. Features input selector for three inputs and one tape monitor; fader for CD player .. \$149 SR-100 Pro Digital Sound Field Processor
Fealures Dolby surround pro-logic circuitry: DSP interface for Yamaha IDSP models: digital delay control of 20 or 30 msec input balance control: center mode swith: built-in pink noise generator: remote control: master volume control; tape monitor switch
$\$ 599$
EQ-1100U 10-Band Graphic Equalizer
Graphic equalizer with automatic room EQ. Features independent left and right channel controls: $\pm 12 \mathrm{~dB}$ EQ range per band: 3 FQ factory-presel memories: 4 EQ user-preset memories: 10 -band spectrum analyzer; pink noise generator; electret condenser microphone: EQ recording capability: 18 -key wireless remote control. Black; I I Ib . . . . . . . . . . . . . . . . . . . . $\$ 599$ RMA-G60. Rack mount adaptor for EQ-1100U \$18

EQ-500U 10-Band Graphic Equalizer
Fealures independent left and right channel controls: $\pm 12 \mathrm{~dB} \mathrm{EQ}$ range per band: fluorescent spectrumanalyzer display: meter level adjustment; pink-noise generator: electret condenser microphone: EQ recording capability. Black: 11 lb .
\$399

## EQ-32 10-Band Graphic Equalizer

Fcalures independent left and right channel controls; $\pm 12 \mathrm{~dB}$ EO range per band: fluorescent spectrumanalyzer display: meter level adjustment; EQ recording capability. Black: I। lb.
$\$ 299$
SR-50B Surround Processor/Amplifier
Features 5 surround modes including Dolby surround; adjustable time delay ( $5-30 \mathrm{mms}$ ): bass extension: A-B speaker switching. $25 \mathrm{~W} / \mathrm{ch}$ min rms into 8 ohms from $20-20.000 \mathrm{~Hz}$ with less than $0.01 \%$ THD.
$\$ 349$

## GE-3018 10-Band Graphic Fqualizer

IO-band independent L/R-channel EQ with side-byside controls. Features independent L/R output level control: subsonic filter: EQ on/defeat switch: tape monitor with EQ rec. Cul/boost $\pm 12 \mathrm{~dB}$; center frequencies al $30.60,120.240,480,1,000,2.000$ $4.000 .8 .000,16.000 \mathrm{~Hz}: \mathrm{S} / \mathrm{N} 105 \mathrm{~dB}:$ FR $10-35.000 \mathrm{~Hz}$ $\pm 0.5 \mathrm{~dB} .17 .12 \times 4 \times 9.12 \mathrm{in}: 6.3 \mathrm{lb}$
$\$ 169$
GE-20B 10-Band Graphic Equalizer
10-band independent L/R-channel EQ with side-byside controls. Features independent L/R output level control: EQ on/defeat switch: lape monitor with EQ rec. Cut/boost $\pm 12 \mathrm{~dB}$; center frequencies at 30.60 . 120. 240. 480. $1.000,2.000,4.000,8.000,16.000 \mathrm{~Hz}$ $\mathrm{s} / \mathrm{N} 105 \mathrm{~dB}: \mathrm{FR} 10-35.000 \mathrm{~Hz} \pm 0.5 \mathrm{~dB} \cdot 17.12 \times 4 \mathrm{x}$ $9.12 \mathrm{in}: 6.2 \mathrm{lb}$
$\$ 149$

## IIIMAGNEPAN

1645 9th Street White Bear Lake, MN 55110

## Prices Listed

are manufacturers' suggested retail prices (also referred to as list prices); actual selling prices are set by individual dealers. All prices are subject to change without notice.

## ACE AUDIO

4100-N-24b Infrasonic/Ulitasonic Filter
Active filter designed to eliminate infrasonic (turntable and record) noise and ultrasonic (RF, highfrequency noise, etc.) interference. Infrasonic rate 24 dB/octave below 20 Hz ; ultrasonic section rate 12 $\mathrm{dB} /$ octave above $20,000 \mathrm{~Hz}$. Distontion $0.002 \%$ at 2 V output.
$\$ 142$
4000-N-24 Super Infrasonic Filter
Combined active Bessel and passive filter sections provide low phase shift and an ultra-sharp cutoff (24 dB/octave); removes all infrasonic disturbances; individually hand-calibrated. Distortion 0.002\%; response $<3 \mathrm{~dB}$ at 20 Hz (24 dB/octave) ...... \$132

4100 Infrasonic/UItrasonic Filter
Active filter with infrasonic section rolloff $18 \mathrm{~dB} / \mathrm{oc}-$ tave below 20 Hz ; ulirasonic sction rolloff 12 dB/octave beyond 20.000 Hz ; (M1) $0.002 \%$ typical, $20-20,000 \mathrm{~Hz}$
\$108

## 4000 b Subsonic Filter

Low-frequency filter with 4 rear-panel connectors providing 18 dB /octave rolloff al 20 Hz or below, $<3$ dB. For use with direct-coupled receivers, amps, and/or subwoofers. ImD $0.01 \%$ al 1 V output; input imp 47 kilohms; output imp 150 ohms; min output load 10 kilohms; hum and noise $<86 \mathrm{~dB} ; 6 \times 4.75 \times$ 2.25 in .
$\$ 98$

## 3900 Ground Liminator

Designed to break up ground-loop faults in connecting cables, thus reducing hum: employs passive circuitry. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$2I Kit .
$\$ 16$

## ACOUSTIC RESEARCH

## AR SRC Stereo Remote Control

Remote control system compatible with all component audio systems features 8 -bit custom programmed microprocessor and I 5 -function hand-held remote module. Operating distance 40 feet nominal. Remote functions include system on/off, volume control, balance control, -20 dB mute, full audio mute, source switching via remote lape monitor, left/right speaker comparison, sleep timer, full memory of control settings with power off. Inputs for main, tape monitor, and EPL (external processor loop) return; outputs for main, tape record, and EPL. send; indicators for power on, balance centered, and EPt selected. Attenuation range $0-75 \mathrm{~dB}$ plus full-off ( $>85 \mathrm{~dB}$ ) in 1.5 dB steps; noise 95 dB below 1 V rms , A-wid; noise decreases with increasing attenuation; THD $<0.01 \%, 1 \mathrm{Vrms}, 20-20,000 \mathrm{~Hz}$; FR $6-60,000 \mathrm{~Hz}$ $\pm 0.25 \mathrm{~dB}$; phono cables, battery and instructions included
$\$ 189.95$

## ACOUSTIC SCIENCES

Tube Trap Acoustical Treatment System System for reducing room resonance. Corrects lowend phase distortion: damps standing wave room resonances; reduces room resonance $Q$ response: equalizes loweend RT-60 decay constants; each $3^{\prime \prime}$ tuhe contains 15 sahnes at 60 Hz : light weight.
Sets
$11 " \times 6$, trap set
$\$ 807$

| T $\times$ 6', trap set | \$705 |
| :---: | :---: |
| T $\times 5$ ', trap set | \$652 |
| $9^{\prime \prime} \times 6^{\prime}$, trap set | \$589 |
| $16^{\prime \prime} \times 5^{\prime}, 1 / 4$ sound set | \$388 |
| $11^{\prime \prime} \times 5,1 / 2$ round sel | \$353 |
| $9^{\prime \prime} \times 5^{\prime}, 1 / 2$ round set | \$271 |
| Components |  |
| $16^{\prime \prime} \times 3$, Supertrap | \$383 |
| $16^{\prime \prime} \times 3$ 3, trap. | \$300 |
| $16^{\prime \prime} \times 2$, trap. | \$269 |
| 11" x 3', trap. | \$186 |
| $11^{\prime \prime} \times 2$, trap. | \$159 |
| $9{ }^{\prime \prime} \times 3^{\prime}$, trap. | \$134 |
| 9" x 2'. trap. | \$110 |
| $16^{\prime \prime} \times 5$, $4 / 4$ round | \$197 |
| $16^{\prime \prime} \times 3$, $1 / 2$ round | \$195 |
| $11^{\prime \prime} \times 5{ }^{\prime}, 1 / 2$ round | \$164 |
| $9^{\prime \prime} \times 5^{\prime}, 1 / 2$ round | \$124 |

## ADCOM

GFS-3 Speakeı Selector
Handles up to 3 pairs of speakers with built-in load protection for low-imp loads; headphone output; Twist'n'Lock speaker connectors for heavy-gauge speaker wire. Can be used with amps rated up to 200 W/ch. $2.75 \times 7 \times 5.25$-in . . . . . . . . . . . . . . . $\$ 99.95$ GFS-6. Similat to above except handles up to 6 pairs of speakers. $\$ 159.95$ GFS-6W. As GFS-6 with white front panel \$209.95 GFS-6S. With silver front panel. . . . . . . . . $\$ 209.95$ RM-3. Optional rack-mount adaptors for GFS6. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$20/pr RM-3W. RM-3 in white . . . . . . . . . . . . . . . . \$25/pr RM-3S. RM-3 in silver . . . . . . . . . . . . . . . . \$25/pr

GFS-4. Gold plated. brass 5 way binding posts, glass fiber epoxy printed circuit board. Oxygen free copper internal jumpers made with \#12 Awgstranded cable Handles 4 pair of speakers; black
$\$ 150$
GFS-4. White
$\$ 200$

## SIC-505 Straight I.ine Controller

A/V switch bos with inputs for 2 VC 'R's (with dubbing capability),Al!x, tape. DAT, tuner, and CD. Level and balance switch; single master circuit board with copper plating on both sides; Ground screw:

## black

.$\$ 160$
SLC-505. White . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 290$

## ACE-515 Line Enhancer

7 AC inputs, 2 switched 3 prong 1500 W max, 1 unswitched 3 prong 300 W max, 4 unswitched 2 prong 300 W max. Protection reset circuitry ( 15 amp circuit breaker), led indicators for "delay on/off". Output amplifiers 10 amps. max per pole continuous, accessories 2.5 amps . max continuous; $3 \times 17 \times 5.94 ; 6$ lb; black. $\$ 180$
ACE-515. White.
\$230

## a/d/s/

B3 Sitorage Module
Stackable wooden cube divided into 3 sections by 2 vertical dividers. Tambour door in front slides up into top of unit. Each section holds about 33 LP's (about 99 total per unit). With optional 12 -slot trays each section holds 24 compact discs ( 72 total per unit) or 36 cassettes ( 108 total per unit). Single unit can
hold 33 LP's in I section. 24 CD's in second, and 36 cassettes in third. Length and width matches measurements of Atelier components. Black or white . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 249.00$ B4. Similar to B3 except open front with adjustable shelf. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 169.00$

## ALLSOP

7500 DA I Cleaning System. Wet/dry system, cleans heads and tape path, deluxe storage case . . . \$29.95

71200 Deluxe Cassette Deck Cleaner. Wet system, cleans heads, capstan. and pinch roller. Auto reverse, refill kit included; deluxe carrying pouch . . \$15.95

6500 Cancorder Cleaner. 8 mm camcorder cleaner with wet,'dry system. patented ribbon . . . . . \$14.95 6900. Same as above for VHS-C camcorders $\$ 14.95$

6100 VHIS Cleaner. Cleans heads, tape path, and tape drive: wet/dry system: patented ribbon .... \$14.95

50000 CD Cleaner. Radial cleaning, uses lint free cotton pads and special solution, gear driven disc rotation.
$\$ 9.95$
55000 Orbitrac Record Cleaning. System rotates from records center hole/spindle, uses lint free cotton pads and special solution.
$\$ 9.95$

60000 V1IS Cleaner. Cleans heads, tape path, and tape drive; wet/dry sytem patented ribbon . . $\$ 9.95$

71300 Cassette Deck Cleaner. Wet system. Cleans heads, capstan, and pinch roller; autoreverse; refillable
. $\$ 7.95$
70000 Cassette Deck Cleaner. Wet system. Cleans heads, capsian, and pinch roller: autoreverse. $\$ 5.95$

## ALDIO DESIGN ASSOCIATES

## System Basics

Switchang systems for multiroom applications. Includes remote controls and enables system use from several areas.
System 88. Covers 8 rooms. Features room on/off, system off, volume, balance, one-bution 8 -source selection, one function control per source, LED readout . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$7665 Systen 48. Covers 4 rooms. Features room on/off, volume up/down, bass, treble, 8-source selector, one function control per source, L.ED readout, direct source access. . . . . . . . . . . . . . . . . . . . . . . . . \$6.546 System 10. Covers 8 rooms. Features room on/off, system off, volume, balance. 2 -source selection, one function control per source, LED readout, expandable to another zone. . . . . . . . . . . . . . . . . . . . . . . . \$4.840 Systern 1. Covers 8 rooms. Features room on/off, systen: off, volume, balance, one-source selection, one source function control, LED readout, expandable to anather zone. . . . . . . . . . . . . . . . . . . . . . . . \$3,227

1SO-2 Line-Ievel Isolation Amplifier
Active, differential unity-gain amp with differential input with ground isolation between the RCA inputs and outputs. Can be used to climinate audible hum due to ground loops and it is capable of driving long line-level wire runs. $2 \times 3 \times 4 \mathrm{in}$.

## ACC-1 Low-Yoltage AC Controller

Power switching device for 4 (' sources. Provides lowvoltage control of AC power. Features 2 grounded receptacles: 2 control inputs. Capable of allowing separate systems to share a common component; provides switched AC power for remote applications; AC relay.
\$395

## CCS-2 Speaker Source Selector

Current-controlled speaker source selector. AC current sensing device that provides a switched outlet and allows a pair of speakers to be used with two amplifiers. $\$ 495$

## ACS-2 Speaker Source Selector

AC-controlled speaker source selector. Features switched outlet.
$\$ 395$

## LLS-2 Line-Level Audio Switcher

Audio switching device which features two stereo line-level inputs and one stereo output. Allows separate systems to share a component. can be used to switch input to an amplifier from a multi-room system to a local one. and can be used to add a seventh source to a six input preamp . . . . . . . \$395

## AUDIOQUEST <br> Profile Pro-Lift <br> Damped cueing device can be tripped to a tonearm and allows manual turntables to act as if it were

 semiautomatic. $\$ 45$

## AQ Sorbothane Big Feet

Set of four $2.5^{*}$ diameter, I" high sorbothane feet to absorb vibrations $\$ 40$

## AQ Sorbothane Record Mat

$0.12^{*}$ sorbothane record mat absorbs vibrations from the vinyl
$\$ 39$

## AQ Sorbothane CD Feet

Set of four $2^{* \prime}$ diameter. $3_{4}{ }^{* \prime}$ high sorbothane feet $\$ 25$

## AQ Record Brush

Over one million conductive carbon fibers small enough to enter the groove of the record . . . . . \$15

## AUDIO RESEARCH

MCP-2 Solid-State Pre-Preamplifier
Analog Module pre-preamp boosts output of MC cartridges for input to preamps. Features front-panel selectable loading for MM cartridges; front-panel selection of MC gain and imp; fully balanced and regulated circuitry. FR $D C=80,000 \mathrm{~Hz} \pm 0.25$; harmonic distortion $<0.005 \%$ at I V rms output from 20 $20,000 \mathrm{~Hz}$; MC noise $>100$ nanoV at 10 ohm input riAA equalized: $3.5 \times 19 \times 8.5 \mathrm{in} . . . . . . . .$. . $\$ 1.395$

EC-21 Electronic Crossover
Vacuum tube, 2-way electronic crossover (passive top) with auto-muting
$\$ 995$

## RMV-3 Rack-Mount Ventilator

Passive convection unit to allow proper air flow to dissipate heat. For all Audio Research units . . \$150

RFP-1 Rack-Mount Filler Panel
Available in $3.5^{\prime \prime}, 5.25^{\prime \prime} .7^{\prime \prime}$, or $10.5^{\prime \prime}$ heights . . . $\$ 79$
RFP. Rack filler panel - $1.75^{\prime \prime}$ (no handles) . . . \$49
218. EC-2I 18 dB capacitor kit (specify frequency $\$ 21$
216. EC-21 6 dB capacitor kit (specify frequency) $\$ 15$

Wire Products by Audio Rescarch range in sizes from $0.5 \cdot 9$ meters

## LituLink Interconnects

3.0 meter unshielded
$\$ 230$
shielded. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 275$
SGL Speaker Cables. 3.0 meter . . . . . . . . . . . . $\$ 219$
LitzLine Speaker Cable. 3.0 meter .

## AUDIOSOURCE

RTA-ONE Real-Time Analyzer
Hand-held real-time analyzer and SPC meter with built-in calibrated electret condenser microphone. Features 10 single-octave bands; 90 level t.ED's: t.EI)'s for power, low battery, overload. I lb without batteries; $6.69 \times 3.88 \times 2$-in
.$\$ 250$

## PNG-ONE Pink-Noise Generator

Battery-powered pink-noise generator $\$ 55$ AC adaptor
$\$ 15.95$
Carry bag .
$\$ 34.95$

## LLC-I (D) I aser Iens Cleaner

Digitally encoded CD with built-in. man-made. carbon fiber impregnated cleaning brush. . . \$29.95

## AUDIO-TECHNICA

## Al'605 Audio Insulator System

Vibration-damping feet for use under speakers or turntables to prevent acoustic feedback; individually adjustable height. Supplied in set of 4 , with bubble level.
$\$ 35.95$

## AT618 Dise Stabilizer

Solid brass disc with rubber coating designed to damp out sound-coloring resonances. Fits over turntable spindle. $\$ 29.95$

## AT6015 TechniClean

Audiophile record maintenance system cleans record surface and reduces static . . . . . . . . . . . . . . . $\$ 25.95$ AT6016. Deluxe stylus cleaning system with enclosed fluid container . . . . . . . . . . . . . . . . . . . . . . . $\$ 15.95$
AT613. TechniClear record cleaner replacement fluid. Removes dust, dirt, and oily finger prints without promoting static. $60 \mathrm{cc} . . . . . . .$. . . . . $\$ 4.50$ AT613/500. 500 ml refill.
$\$ 12.95$

## AT609 Ifeadshell Wire Set

Replaces original headshell wiring: set of 4 colorcoded connectors made of silver litz wire and gold plating.
$\$ 11.95$

## AT607 Stylus Cleaning Formula

Cleaning solution dissolves foreign material on stylus without harming known stylus adhesives; in bottle with stylus brush
. $\$ 4.95$

## AT608 Record Care Formula

Dissolves fingerprints, loosens stubborn particles, reduces static bond of micro-dust, airborne material. Nonalcoholic; use directly on fibers of conventional brushes; 2 oz.
$\$ 4.50$

## AC-TP4 Terminal Pins

Set of 4 gold-plated terminal pins with color-coded insulators
\$2.99

## AC-TP4 Spade Lugs

Set of 4 gold-plated spade lugs with color coded insulators $\$ 2.99$

## Viral Link Cable Series

AT620 Super Conductivity Cable Set
Litz wire construction with double shielding and gold-plated connectors; for low imp and max rejection of RF interference: sel of 2
$\$ 35.95$

## Full Audio Transfer Speaker Cable

Speaker cable made from oxygen-free copper. Avail. able in large diameter and exira-heavy diameter gauges.
AXD-30. 30 ft : extra heavy diameter: stereo pair: spooled.
$\$ 22.95$
AXD-50. As above, 50 ft . . . . . . . . . . . . . . . . . $\$ 33.95$
AXD-500. As above, 500 ft . . . . . . . . . . . . . . $\$ .60 / \mathrm{ft}$ ALD-30. 30 ft ; large diameter; stereo pair: spooled . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 9.95$
ALD-50. As above, 50 ft . . . . . . . . . . . . . . . . $\$ 13.95$
ALD-500. As above, 500 ft . . . . . . . . . . . . . . S. $22 / \mathrm{ft}$

## Full Audio Transfer Interconnects

Features oxygen-frec copper: polted terminations: gold-plating
AC122-A1. 2-in. 2-out. RCA. 1 meter ..... \$11.95
AC122-A2, As above. 2 meters.
$\$ 15.95$

## BASF

Ferro Extral Car Case
Cushioned. fully-lined vinyl case holds 10 cassettes:
Ferro Extra I is housed in a protective shell specifical ly designed for sound on the move, and can withstand temperature extremes from $-22^{\circ} \mathrm{F}$ to $185^{\circ} \mathrm{F}$. . $\$ 9.95$

## BIB

## A-616 CD Cleaner

CD cleaner features molded disc tray; chamoiscovered cleaning pad/wheel; cleaning fluid: CD eject lever; chamois cleaning brush
$\$ 14.95$

## A-631 Multi-Media Storage Module

Holds a combination of CD's, or CD doubles. 5.13 x $5.13 \times 1 \mathrm{in}$.
$\$ 4.95$

## A-611 CD Storage Module

Strong practical CD storage unit holds up to 10 CDs in their jewel boxes. Fingertip touch release system automatically ejects selected CD for easy removal. Interlocking modules can be expanded vertically or horizontally. Molded of strong ABS plastic. Wall or shelf mounting
$\$ 4.59$

## A-612 Disposable Iape llead Cleaner

Disposable audio head cleaner for all types of cassetie players. Nonabrasive cleaning fluid applied by pushbutton cleans entire tape path. Use twice (once each side) then dispose.
$\$ 1.79$

## BOULDER AMPLIFIERS

## Balanced Cables

Gold-plated 3-pin male to 3-pin female.
CB75. 75 ft
\$199/pr
CB35. $35 \mathrm{ft} . . . . . . . . . . . . . .$.
CB12, 12 ft
\$73/pr

## Audio Interconnect Cables

Gold-plated R('A-Iype phono: for general interconnertion
CA01.8-inch . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 49$
CA03. 3-foot
$\$ 57$
CA06. 6-foot . $\$ 69$

## Boulder Terminator

Speaker-cable termination network provides termination imp for frequencies where speaker cable must be treated as transmission line. Designed to eliminate reflections back down the speaker cable into amp for improved clarity
$\$ 39 / \mathrm{pr}$

## BRYSTON

.4B Switch Box
High-level switching with gain/balance control. Features 4 inputs (CD player. tuner, tape, aux); I tape loop. 9 lbs : $1.75 \times 19 \times 9$-in
. $\$ 550$

## Switch Boxes

No active components: desighed for high.currem applications.
3-Way. With headphone jack . . . . . . . . . . . . . \$199
2-Way. With headphone jack
$\$ 130$
TF-1 MC Cartridge Step-Up Transformer
Designed to provide sufficient voltage to any preamplifier from low-output MC cartridges. $2 \times 3 \times 4$ in.
$\$ 500$

## 10B Electronic Crossover

Front panel switching for control of filter settings. rolloff frequency, and slope. Low pass (and midrange) level settings are $\mid \mathrm{dB}$ increments over a $\pm 5$
dB range. All amplification buffer and filter stages are discrete. All passive filter components are $1 \%$ metalfilm resistors and polystyrene capacitors. Available fully balanced (in and out) or unbalanced . . $\$ 1,000$

## BUFFSTUFF

## CD Saver

Compact disc restorer eliminates audible pops and clicks caused by light scuffs and scratches on CD's and laser video discs. 30 miltiliter bottle of formula is harmless to plastic coating on CD's and is good for dozens of applications. $\$ 9.95$

## BUSH INDUSTRIES

## Jamestown Collection

Units feature golden brown oak finish. solid oak molding: raised panel doors and drawers, soff-shaped pilasters, and brass hardware.
AV786. A/V center. Features 2 storage drawers; 4 shelves; tempered-glass doors. $50.31 \times 53 \times 20.4$ in. $\$ 359.95$
AV773. A/V center. Features adjustable shelf; enclosed storage space; 2 drawers. $60 \times 50.5 \times 16.4$ n. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$299.95 AV763. A/V center. Features 4 -shelf component area; tempered-glass doors; enclosed storage area. $48.25 \times 53 \times 16.38$ in . . . . . . . . . . . . . . . . $\$ 269.95$ A666. Audio cabinet. Features one fixed, three adjustable component shelves; tempered-glass doors; casters. $47.56 \times 22.25 \times 16.38$ in
\$159.95

## Oak Elegants Line

Units have sofi-shaped 2.5"-wide solid oak frames, oak veneer on sides and tops, multi-step finish with double-lacquer topcoat, brass accents on oak frames. through-glass brass hardware. concealed fasteners, safety-tempered solar-bronze-linted glass doors etched with subte silk-screen pattern. radiused plinth base. Ready to assemble.
AV1675. Full-sized entertainment center holds $27^{\circ}$ TV: adjustable shelf: glass-enclosed storage with adjustable shelves. $49.25 \times 49.9 \times 20$ in $\ldots \$ 529.95$ A1665. Audio cabinet with adjustable shelves; 2 glass doors. $23 \times 45 \times 16$ in
$\$ 269.95$

## Furniture Systems Series

Hith rounded corners, sofi-shaped iops. fully radiused shelf fronts with decorative accent lines, Library Oak finish. full-length solid-oak door pulls, cord openings in rear. $72^{\prime \prime}$ tall.
L139WS. Wood and glass doors; middle doors open I80 for TV viewing; $30 \times 19.4$ in . . . . . . . . $\$ 269.95$ L132WS. Audio cabinet with wood and glass doors; $20 \times 19.4$ in $\$ 219.95$ L.134WS. Open shelving above wood doors; $30 \times 19.4$ in.
L124WS. Wood doors; 15.4 in
$\$ 199.95$

WS. Wood doors; 15.4 in . . . . . . . . . $\$ 149.95$
L123WS. Open shelving: 15.4 in ........ \$149.95
AV1375 Deluxe Home Entertainment Center
A/V center with $25^{\circ} \mathrm{h} \times 27^{\circ}$ w TV compartment; adjustable VCR shelf; glass-enclosed storage with adjustable shelf; $20.25^{\circ}$-W glass-enclosed audio area with 3 adjustable shelves; silk-screen pattern on glass doors with wood frames. Solid oak and oak laminates with multi-step laquered finish. Rounded edges; soft shapes. $49.5 \times 47.62 \times 19 \mathrm{in}$ : $180 \mathrm{lb} . . . .$. . $\$ 399.95$

## AV774 Room Divider/Entertainment Center

2 drawers below TV compartment; 4 adjustable bottom doors: wooden door handles; rounded edges on frame; shelving; drawers and doors. Library-oak finish. Cords run through center partition. $49 \times 69.5 \times$ 15.5 in ; 180 lb .
$\$ 259.95$

## AV760 Deluxe Audio/Video Center

TV compartment for $26^{\circ}$ or $19^{\circ}$ TV; safety-tempered glass door; 3 adjustable shelves; enclosed space for accessories; pedestal base; adjustable shelf above TV compartment. Library-oak finish. Soft-shaped tops
and rounded edges. $47.36 \times 47.25 \times 15.5 \mathrm{in}$; 145 lb . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 229.95$

## B929 Armoire Audio/Video Center

Designed for bedroom. Features rear-cord access; 2 sets of double doors; can also be used for clothing; Library Oak finish; wood handies with brass end caps. $55 \times 30 \times 19.5$
$\$ 199.95$

## A1 365 Audio Cabinet

$22^{\prime \prime}$-W interior glass-enclosed facade with silk-screen pattern and wood frames; 2 adjustable interior shelves; hand-stained and chiseled accent lines; rounded edges and soft-shaped design. Solid oak and oak lam inates with multi-step lacquered finish. 23.5 x $42.25 \times 16.5 \mathrm{in}: 78 \mathrm{lb}$.
$\$ 199.95$

## AV757 Audio/Video Center

A/V entertainment center. Features space for several audio components, a VCR and TV; tempered-glass doors; enclosed storage area; simplified assembly system. $43.75 \times 47.25 \times 15.38 \mathrm{in} . . . . . .$. . $\$ 179.95$

## A641 Audio Cabinet

Audio cabinet with safety-tempered glass door features 2 adjustable shelves; soft-shaped lift top; 2wheel casters. Library oak finish. $18.88 \times 38.62 \times 17.5$ in; 58 lb.
$\$ 119.95$

## CALRAD ELECTRONICS

## Gold-Plated RCA-to-RCA Cable

18 -kt gold-plated connecting cable. Features ultra-low loss shielding: gold-plated steel springs.
55-803. 10-ft. long
$\$ 13.20$
55-802. 6-ft. long . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 11.25$
55-800. 3-ft. long . . . . . . . . . . . . . . . . . . . . . . . $\$ 9.90$
55-860 4 RCA Plug Cable
4 RCA plugs on each end; 15 ft .
$\$ 10.65$

## RCA-to-RCA Cable

Dual shielded stereo audio cable; polarized.
55-1001. $240^{\circ}$ cable
$\$ 5.10$
55-1000. $120^{\circ}$ cable
$\$ 3.54$
55-998. 48" cable $\$ 2.61$
55-999. 72" cable . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.85$
55-923. $36^{\prime \prime}$ cable . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.40$
55-924. 12" caole . . . . . . . . . . . . . . . . . . . . . . . \$2.25
55-968 Speaker Cable
220 -foot speaker cables. Lug terminals . . . . . $\$ 3.60$

## CANTON

## Connect Series Switchboxes

Connect 50. Handies I-4 pairs of speakers: DIN and phono jack; headphone outputs. Features volume controls for adjusting channels 2 and 4; connection to output of amps, receivers; DIN speaker jacks . \$125 Connect 20. Switchbox for 1-3 tape decks or 2 decks and 1 high-level signal source. Features left/right regulators to reduce signal levels before recording; 5 pole DIN jacks.
Connect 10. Similar to Connect 20 except designed for $1-3$ pairs speaker switching. Features standard DIN speaker jacks . \$70

## Cantosweep

Record-care brush with antistatic carbon bristles. Removes static charges, dirt particles. . . . . . . . . \$30

## Camolink Speaker Cable

60. Premium-quality $60-\mathrm{mm}$ speaker cable $\$ 2.74 / \mathrm{ft}$
61. Premium-quality $40-\mathrm{mm}$ speaker cable $\$ 1.52 / \mathrm{ft}$ 25. Premium-quality $25-\mathrm{mm}$ speaker cable $\$ 1,07 / \mathrm{ft}$ 15. Premium-quality $15-\mathrm{mm}$ speaker cable $\$ 0.88 / \mathrm{ft}$

## CARRY DISC

BYMUSIC\&SOUNDIMPORTS
Carry Disc CD Holder
Holds 14 CD's in a quick open-and-close carrying
case with a protective inner lining of soft velour.
$\$ 15.95$
Carry Disc II. Same as above but designed for use with $3^{\circ}$ CD's. . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 15.95$

## CARTER-CRAFT

60-437 CD Carry-All
Holds 6 CDs without cases. Storage plates fan when case is opened with the slide button. Black, hinged case.
\$20.49
60-409 CD Cleaning Kit
Includes cleaning solution
$\$ 19.95$

## 60-355G Stereo to Stereo Dubbing Kit

Use for dubbing from stereo VCR to stereo VCR. Coded plugs for correct input/output; strain reliefs; 6 f. cable
$\$ 19.10$
60-357G Stereo to Mono Dubbing Kit
Use for dubbing from stereo VCR to mono VCR. Coded phugs for correct input/output; strain reliefs; 6 ft cables.
$\$ 18.39$

## 60-416 CD Storage Case

Auto eject and add-on unit holds 5 compact discs. Stackable modular design allows expansion of storage system.
$\$ 13.65$

## 60-436-3 3' CD Adaptor

$3^{\circ}$ CD adaptor permits playing of $3^{\prime \prime}$ CDs on regular CD equipment. Grooves permit secure fastening of the $3^{3}$. 3-Pack
$\$ 9.90$
Single.
$\$ 3.80$

## 60-435 CD Storage Case

Holds 20 CDs in cases; permits fast viewing of front, backside or spine of dise case
$\$ 5.50$
60-434-3 Lift Lock DeLuxe CD Storage Case
Pops up disc as case opens, center lock will unlock/ lock CDautomatically when case is opened/closed. 3-

Single.
$\$ 5.45$
$\$ 2.20$

## Soft-Touch Cassette Storage Cases

Storage cases eject tapes by touching drawer front.
40-218. Portable with carry handle stores 12 tapes . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 40.45$
40-217. Auto unit padded all around for safety, impact, heat resistant. Holds 6 cassettes. . . . \$35.65 40-216. Expandable unit holds 6 tapes and is expanded by purchasing additional units.
$\$ 21.35$

## 60-419 CD Converter

Converts automotive sound system to digital sound with cassette adaptor. Plugs into portable CD output/headphone jack and adaptor inserts into auto cassette player.
\$24.75

## 34-155 Deluxe AC Adaptor

U.L.-approved AC/DC adapter for 3. 4.5, 6, 7.5, 9. and 12-V battery-operated components. Features universal 5 -way plug. Includes built-in reversing feature. 1.5 lb . $\$ 12$ 34-157. As above with $300 / 100 \mathrm{~mA}$ conversion switch.
$\$ 10.95$

## 40-158 Tape Care Kit

Features chem ical cleaners and lubricants for heads. guides, and capstans. For use with auto and home tape decks. Includes 1 bottle each of cleaner and lubricant, a supply of swab-style Kleen Stix, and a specially treated cloth
$\$ 7.55$

## 40-130-C Cassette Head Cleaner/Demagnetizer

Cordiess cassette head cleaner and demagnetizer removes dirt and residual magnetism without use of any current. For home and auto cassette decks $\$ 4.90$

40-1 26 Cassette Head Cleaner
Includes cleaning fluid.
$\$ 4.10$


## CHICAGO SPEAKERSTAND

## Hercules Collection

Speaker stands with spiked feet and spiked metal plate.
25-910P. $25^{\prime \prime}$ high. $9^{\prime \prime} \times 10^{\prime \prime}$ metal plate . . $\$ 160 / \mathrm{pr}$ 25-69P. $25^{\prime \prime}$ high. $6^{\prime \prime} \times 9^{\prime \prime}$ metal plate . . 20-910P. $20^{\circ}$ high. $9^{\circ} \times 10^{\circ}$ metal plate 20-69P. $2^{\prime \prime}$ high. $6^{*} \times 9^{\prime \prime}$ metal plate. \$160/pr 15-910P. $15^{\prime \prime}$ high. $9^{\circ} \times 10^{\circ}$ metal plate \$155/pr 12-910P. $12^{*}$ high. $9^{\prime \prime} \times 10^{\prime \prime}$ metal plate ... $\$ 145 / \mathrm{pr}$

Chicago Collection Speaker Stands
XLX-3000. $30^{\circ}$ high with spikes $\$ 110 / \mathrm{pr}$ XL.X-2000. 20" high with spikes . . . . . . . . . $\$ 110 / \mathrm{pr}$ RJ-10. $10^{\prime \prime}$ high without spikes or casters . . $\$ 85 / \mathrm{pr}$ BB02. As above. $8^{\prime \prime}$ high . . . . . . . . . . . . . . . \$50/pr

## Black Vinyl Collection

Black viny/ speaker stands
BV-25. $25^{\prime \prime}$ high . . . . . . . . . . . . . . . . . . . . . . . \$60/pr
BV-20. $20^{\prime \prime}$ high . . . . . . . . . . . . . . . . . . . . . . \$55/pr
BV-15. 15" high . . . . . . . . . . . . . . . . . . . . . . \$45/pr
BV-25.9" high . . . . . . . . . . . . . . . . . . . . . . . \$45/pr
JSE Model 1
Speaker stand for JSE Model 1 speaker. With spikes and casters
\$1 10/pr

## TC-50 Spica Servo Woofer Stand

Speaker stand for TC-50 Spica Servo Woofer. With spikes and casters. . . . . . . . . . . . . . . . . . . . . . . . $\$ 80$

## Quad Stand

For Quad speakers. With spikes and casters $\$ 400 / \mathrm{pr}$

## COUNTERFEETBYSUMIKO

## Cone-Shaped Feet

To isolate components from mechanical disturhance. C-3. For components and speakers: with doublethread tapped screws
\$6/ca
C-4. Tall Counterfect for components and speakers: with double-threaded tapped screws. . . . . . . . \$8 ea

C-37. Replaces feet of Sota turntables ..... \$12 ea
C-35. Replaces feet of Oracle turntables. . . . \$15 ea
C-38. Replaces VPI turntable feet \$12

## COUNTERPARTS BY SUMIKO

## System Nat

Record platter mat made from lead/barium energy absorbing layer, anti-static treatment, polymethylmethacrylate base material, warp-reducing structural concavity. For use with record clamp only ... . \$95

## CD Interface Mats

Clear plastic mats permanently adhere to label side of disc; contained-layer damping said to reduce vibration: protects from scratches that can damage data. 10 mats per package
. $\$ 10$

## CROWN INTERNATIONAL

## Plug In Panel Accessories

Several optional modules are a vailable. The following list is not intended to be all inclusive but only representative.
PIP-FMIX
Plug-in panel with female to male XLR balanced bridging daisy chains (interconnects) the amplifier inpuls. Features one lowpass and one high-pass filter. $6.37 \times 1.87 \times 3.87 \mathrm{in} ; 8.5 \mathrm{oz}$
. \$25

## PIP-XOV

Mono crossover/filter features multiple formats such as bi-amping. tri-amping with 12 dB or 18 dB /octave high/low-pass filters. $6.37 \times 1.87 \times 3.87 \mathrm{in} ; 8.502 \$ 89$

## PIP-FXT

Balanced-to-balanced transformer isolated input from source to amplifier. Features plug-in panel with female XI.R's and 1:1 transformers; center taps of transformers oriented to accomodate jumpers; one low-pass and one high-pass filter. $6.37 \times 1.87 \times 3.87$ in; 8.5 oz .
\$59

## PIP-CI.P

Overload detector features two female XLR type connectors: compressor range 13 dB nominal; input imp 20 k ohms balanced: FR $20-20,000 \mathrm{~Hz} \pm 0.2$ dB.
. \$69

## CUSTOM WOODWORK \& DESIGN

4/l Wiodmore cabinets are handerafied of select hardwood solids and veneers. Available in natural ouk. dark oak, natural American walnut, and hlack oak, with matching shelves. Cabinets can be grouped or stacked to make complete entertainment cemters.

## Magic Lowboy Audio Cabinet

Concealed audio cabinet rises to user height by remote control. Fully enclosed. Max height 53" closed. measures $47.25 \times 34 \times 19 \mathrm{in}$. $\$ 2,100-\$ 2.400$

## Woodmore Record Cabinet

4 adjustable shelves; wood-veneer back; stacking accessory. $47.25 \times 42 \times 14 \mathrm{in} . . . . . . . .$. . $\$ 410-\$ 550$

## Woodmore Glass-Lid Audio Cabinet

2 adjustable shelves: feather-light hinged lid; casters. $24 \times 42 \times 19 \mathrm{in}$.
\$415-\$525

## Woodmore Lowboy Audio Cabine

4 adjustable shelves. $47.25 \times 30 \times 19 \mathrm{in} . \$ 415-\$ 515$

## Woodmore Audio Cabinet

3 adjustable shelves: casters. $24 \times 42 \times 19$ in $\$ 335-\$ 435$

## Woodmore Entertainment Table

Finished on all 4 sides; with wood base. $47.25 \times 16 \times$ 19 in
\$345-\$430

## Woodmore Smallboy Audio Cabinet

2 adjustable shelves. Comes with casters. $47.25 \times 21 \times$ 19 in .................. . . . . . . . . . . . . . $\$ 335-\$ 420$
$30^{\circ}$ Woodmore Audio Cabinet
2 adjustable shelves; casters. $24 \times 30 \times 19$ in $\$ 270-\$ 345$

## $21^{\circ}$ Woodmore Audio Cabinet

! adjustable shelf; casters. $24 \times 2!\times 19$ in $\$ 220-\$ 270$

## Hoodmore Doors

Wood Doors. 160x concealed European hinges and solid-wood pulls.
$\$ 90-\$ 230$
Rollwood. Vencered razor-sliced slats on wood track . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 160-\$ 180$ Glass Doors. With chrome, black, or gold hard ware. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$30-\$73
Drop Leaf. For 21" Woodmore or Woodmore Small-
boy . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$55-\$64

## Accessories

Outlet Strips and Boxes. Filtered and spike protected; 8 -outlet strip; isolated
$\$ 195$
2-outlet box with indicator lamps (always on). . $\$ 70$ Woodmore Speaker Stands. $9^{\prime \prime}$, 15", 30", with adjust able spiked levelers
$\$ 100-\$ 140$
CD Drawer. Holds 81 CD's; 7.5" h. . . . . \$90-\$110
Rack Mount. With wood rails. metal channels hardware to mount 5 units . . . . . . . . . . . . $\$ 87-\$ 100$
Cassette Drawer. Holds 72 cassettes; $4.5^{\prime \prime} \mathrm{h} \$ 80-\$ 90$ Slide-Out Shelf. 2.5": extends 10". . . . . . . . \$72-\$80 Wood Back. Custom slotted at additional cost \$32 \$55
Cabinet lights. With matching wood rail: $0.75^{\prime \prime} \mathrm{h}$ : includes cord swith.
\$40-\$47
Stacking Rails and Bases
Solid wood accessories for stacking units into wall systems: with leveler brackets and adjustable levelers: rails $0.75^{\prime \prime} \mathrm{h}$; bases $1.75^{\prime \prime} \mathrm{h}$.
\$22-\$130

## DBSYSTEMS

DB-4B MC Pre-Preamplifier
MC-cartridge pre-preamplifier with low-noise cascode amps. diode-protected inputs. Features internal low/ medium/high gain switch. THI) $0.0008 \%$ 20-20.000 Hz at I V : noise -86 dB at 1 mV ; $\mathrm{FR} 10-100.000 \mathrm{~Hz}$ $+0 /-0.1 \mathrm{~dB}$ : input/output imp 9 k ohms. 2.000 $\mathrm{pF} / 220$ ohms: max load 10 kilohms. 3.000 pF ; internally adjustable gain/sens/overload dB/40 $\pm \mathrm{V} / 45 \mathrm{mV}$ high. $\$ 205$
With DBP-4 coupler and DB-2A power supply $\$ 275$
DBP-11 Phono Capacitance Switch Box
Features front-panel-switchable $100-400-\mathrm{pF}$ loading for 2 mm phono cartridges. Open position is provided. Phono jacks. plugs are gold plated . . . . . \$79.95 DBP-11MC. Similar to DBP-11 but with resistive instead of capacitive values. Includes 5 -ohm load.
$\$ 79.95$

## DBP-2J/5 Passive Switch Box

Switching module with 10 input and 2 output jacks. Can be used for switching 5 turntables, tape recorders. amps, signal processors, ctc. Allows for selectable cartridge loading when used with DBP-6 or 6MC. AB comparisons possible with 2 Y -adaptors. Can be used for switching baseband video (not ch 3 or 4). . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$69.95 DHP-2JAU/5. Same as DBP-2J except jacks are gold plated . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 89.95$
Optional Alps volume control installed in switch box . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 40$

DRP-12X Audio Cable
10 -meter length of low-capacitance ( 400 pF ) stereo interconnect cable, terminated with premium DPB13PX gold plugs.
$\$ 95$
1 -meter length
\$49

## Gold-Plated Connectors

DBP-9All. Banana plugs. 8 gold-plated . . . . $\$ 24.50$ DBP-911. Banana handles. 4 red. 4 black. ... $\$ 3.50$ DBP-9P. Gold-plated dual banana plugs (2 pk)
DBP-9.J. Gold-plated dual banana jacks (2 pk)\$17.95

DBP-13J. . $25^{\text {" }}$ gold-plated phono jacks ( 8 pk )\$15.95 DBP-13JR. . $36^{*}$ gold-plated phono jacks (8 pk) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$29.95
DBP-13P. Gold-plated phono plugs ( 8 pk ) . \$17.95
DBP-13PM. Gold-plated phono plugs, 4 red, 4 black . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$29.95
DBP-13PX. Gold-plated phono plugs ( 2 pk ) $\$ 19.95$
DBP-14. Gold-plated spade lugs ( 8 pk ) ..... $\$ 5.95$
DBP-15. Gold-plated Y-adaptors (2 pk). . . \$12.95
DBP-16. Gold-plated 12 dB input attenuators $\$ 12.95$
DBP-17. Gold-plated phono coupler (2 pk). \$12.95

## DBP-6 Phono Equalization Kit

Permits adding $100-400 \mathrm{pF}$ of capacitance to phono input of any preamp or receiver. Consists of 2 Y adaptors. set of gold-plated phono plugs with polystyrene capacitors wired to give $100,150,200,300.400$ pF. Resistive load ( $1 \%$ ) included for experimenting with MC cartridges plus pair of empty plugs for making custom values.
$\$ 36.95$
DBP-6MC. Similar to DBP-6 except for use with moving coil cartridges. Loads are 1\%; metal-film resistors. Two empty plugs included. . . . . . . $\$ 36.95$

## DBP-10 Phono Alignment Protractor

Accurately measures lateral tracking error of mounted phono cartridges to within $0.25^{\circ}$. Instructions provided to optimize geometry, set correct overhang for minimum error and distorion, useful when checking vertical tracking angle. Comes with carrying case
$\$ 24.95$

## DBP-CK Cramolin Audio Kit

Contact cleaning system. Dissolves and prevents oxide formation. Reduces noise and distortion $\$ 19.95$

## DBP-VSP Voltage Spike Protector

Plug-in power line adaptor limits voltage surges that can damage solid-state components $\$ 14.95$

DBP-SC Souther Clever Clamp
Lightweight clear record clamp. 23 g .......... $\$ 10$

## dbx

Model 400XG Program Route Selector
Rack-mountable powered switching box has same capabilities as below except dubbing can be interrupted by sound processors and/or encode/decode side of NR unit. Lighted pushbuttons show program route
\$279

## Model 200XG Prokram Route Selector

Rack-mountable passive switching box has inpuls/ outputs for 3 sound processors. 1 NR unit, and 3 tape decks. Facilitates direct dubbing between any of the decks
$\$ 149$

## DENNESEN ELECTROSTATICS

## Pivotram

Locates proper spot on turntable chassis for drilling tonearm mounting hole. Made of aircraft aluminum. $1 \mathrm{lb}: 12 \times 3.3$-in $\$ 100$

## Sound Tractor

Phono cartridge alignment protractor gives proper distance and offset angle for any pivoted in one simple step. Made of aircraft aluminum. $1 \mathrm{lb} ; 12 \times 2 \times$ 3.

Same unit but made of plastic. . . . . . . . . . . . . . . $\$ 35$

## Polaris FM Antenna

Indoor FM antenna. Totally passive, yet has as much as 14 dB more signal gain than dipole antenna normally used. Includes coax cable and balance. I lb; $18 \times 2 \times 2$
$\$ 40$

## DENON

## RC-605 Programmable Remote Control

130 programmable keys shared by two programs. Also stores signals of other remote controls. . . \$120

## D.G.INDUSTRIES

## Compact Disc Storage

Stackable plexiglass CD tray. Features storage of 29
CD's; tilts discs for easy reading of titles . $\$ 29.95$ ca

## DISCRETE TECHNOLOGY

## Platimum Plus Spaker Cable

Uses 7 individuat cahles for each speaker: fealures spiral fwist; protective braided huhing; silver-plated oxygen-free copper conductors; assembled br hand: minimum of 30 amps DC current handling capahility: 6-ft. $\$ 650$ 8-ft. . . . . . . . . . ..................................... $\$ 755$
10-ft. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 875$

## Dreadnaught Speaker Cables

Made with pure stlver-plated, oxygen-free copper wire. Each cahle conststs of two catles with a total of 20 mu/ti-gauge individually-insulated solid conductors.
4-ft. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$225

6-11. ..... . . . . . .....................................
8-ft. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 395$
10-ft. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 460$

## Power Bridge AC Line Cable

Filters broud-hand RF from heing fed hack into the As lines and then into other components. 20 silver-plated oxygen-free conductors; Pl'C jacket; 2-prong mak plug.
Power Bridge II 8-ft
$\$ 200$
Power Bridge II 6-ft . . . . . . . . . . . . . . . . . . . . \$170
Power Bridge I 8-ft. . . . . . . . . . . . . . . . . . . . . . . $\$ 120$
Power Bridge I 6 -ft.
$\$ 100$

## Platinum Interconnect

Made with pure st/ver. multi-stranded, hraided shield and pure silver-plated oxygen-free copper inner conductors.

| . 5 -m | 35 |
| :---: | :---: |
| 1-m. | \$150 |
| $1.5-\mathrm{m}$. | \$165 |
| 2-m. | \$180 |
| 2.5-m. | \$195 |
| 3-m. | \$210 |
| 4-m. | \$240 |
| 6-m. | \$300 |
| 10-m. | \$420 |

## 312C'Speaker Cable

Phase-aligned multi-gauge speaker cable. Features silver-plated copper inner conductor: dietectric tellon insulation; spiral /wist.

| 4-ft | \$125 |
| :---: | :---: |
| 6-ft. | \$150 |
| 8-ft | \$175 |
| 10-ft. | \$200 |
| 12-ft. | \$225 |
| 15-ft. | \$260 |

## Balanced Line Silver Plus Interconnect

Phase-aligned mult-gauge interconnect. Features sil-ver-plated copper inner conductor; dichectric teflon insulation: spiral iwist; full-foil shield; heavy PIC outer jacket.

| . 5 -m | \$112.50 |
| :---: | :---: |
| $1-\mathrm{m}$ | \$125.50 |
| $1.5-\mathrm{m}$. | \$137.50 |
| 2-m | \$150.50 |
| 2.5-m. | \$162.50 |
| 3-m | \$175.50 |
| 4-m | \$200.50 |
| $5-\mathrm{m}$ | \$225.50 |
| 6-m | \$250.50 |
| 7-m | \$275.50 |
| 8-m | \$300.50 |
| 9-m | \$325.50 |
| 10-m | \$350.50 |

## Balanced Line Blue Interconnect

Phase-aligned multi-gauge interconnect. Fealures sil-ver-plated copper inner conductor; diefectric kynar
insulation: drain line: spiral Iwist; full-foil shield; heavy PIC' outer jacket.

| . 5 -m | \$83.50 |
| :---: | :---: |
| 1-m | \$89.50 |
| 1.5-m | \$95.50 |
| 2-m | \$101.50 |
| 2.5 -m | \$107.50 |
| 3-m | \$111.50 |
| 4-m | \$128.50 |
| 5-m | \$141.50 |
| 6-m | \$154.50 |
| 7-m | \$167.50 |
| 8-m | \$180.50 |
| 9-m | \$191.50 |
| 10-m | \$219.50 |

## Sound-Sorber Panels

Sound-absorbing panels made of acoustic molded foam. Feature total noise reduction factor of .90 ; absorbs dawn to 100 cycles; breaks standing waves when installed in corners; diffuse with used on rear wall: fire retardant: odorless. Available in 9 different colors.
\$7/sq. ft.

## The lug

High-performance lug for use with speaker cables. Features construction with oxygen-free long-molecular copper plate with conductivity-enhancing alloy: $35^{\circ}$ angle: color coding.
\$7

## DISCWASHER

## Disckit Record Care

Contains D4 + record-care system. Zerostat antistatic instrument, SC-2 stylus-care system housed in DiscOrganizer.
$\$ \$ 59.95$

## Discset

Provides essentials of record and stylus care; includes D4 + record-care system. SC-2 Stylus Care System in milled walnut base
\$24.95
Zerostat-3
Anti-static instrument neutralizes static charges on virtually any surface; works without coating by showering surface with millions of positive and negative ions.
$\$ 29.95$
Discwasher Compact Disc Cleaner
Includes a CD cleaning unit. CD-1 cleaning fluid. cleaning pad grooming brush and replacement cleaning pad. 14 oz
$\$ 19.95$
CD-1. 6-oz. fluid refill . . . . . . . . . . . . . . . . . . $\$ 10.95$
CD-1. I oz fluid refill. ... . . . . . . . . . . . . . . . $\$ 3.9$
CD Clea.aer Replacement pads.. . . . . . . . . . . . \$4.95
CD Storage System
Lightweight, durable unit stores up to 20 CD's in their jewel boxes. Designed to allow user to flip through CD's stored in unit. Can be wall mounted. 6 $\times 2 \times 14.75-\mathrm{in}$
$\$ 19.95$

## D4 + Record Care System

Safe record-cleaning system designed to remove contamiants without reducing record fidelity. Consists of [34 + fluid that lifts. suspends contaminants soft-fiber pad with hand-milled walnut handle to remove debris and dry record: DC-1 pad-cleaner brush
$\$ 16.50$
25 oz ieplacement fluid .......... \$250
6 oz replacement fluid . . . . . . . . . . . . . . . . . . . $\$ 9.95$
16 oz replacement fluid. . . . . . . . . . . . . . . . . . \$16.95

## D'Stat II Mat

Turntable mat reduces static charges on contact, provides cushion to reduce sonic, mechanical feedback between record and turntable platter... $\$ 8.50$

SC-2 Stylus Cleaner System
Includes scientifically safe cleaning fluid, precision nylon-fiber brush designed to safely remove stylus contamination. Brush has attached stylus-inspection magnifying mirror
$\$ 8.50$

## ACCESSORIES

## V.R.P. Record Sleeves

Scratch-free record liner sleeves that prevent stalic charge buildup during record storage and removal from sleeve. Super smooth surface will not ooze plastic additives onto record: package of 10. . $\$ 3.50$

## Cables

Gold-ens Audio/Video Cables
Perfectionist cables for audio, video: provide ultralow capacitance with heavy gold-plated connections with molded nylon insulating sleeves.
2-meter triple strand . . . . . . . . . . . . . . . . . . . \$23.95
1-meter triple strand . . . . . . . . . . . . . . . . . . . . $\$ 21.95$
5-meter double strand . . . . . . . . . . . . . . . . . . \$19.95
4-meter double strand . . . . . . . . . . . . . . . . . . . \$17.95
2-meter double strand . . . . . . . . . . . . . . . . . . . \$15.95
1 -meter double strand
$\$ 13.95$

## Tape Recording Accessories

D'Mag Cassette Deck Demagnetizer
Demagnetizes tape heads, capstans, and entire tape path. Requires no batteries or power cords. \$19.95

## Discwasher Tape Deck CareSet

Includes Perfect Path Cassette Head Cleaner and C.P.R. Capstan Pinch Roller Cleaner. . . . . . \$12.95
C.P.R. Capstan/Pinch-Roller Cleaner
"Positive Drive" cleaning system for cassette decks designed to safely scrub pinch rollers. capstans with advancable cleaning fabric and harmless fluid $\$ 8.95$ .34-oz. C.P.R. fluid refill
$\$ 1.95$

## System [1 Cassette Tape Care

Combination head, capstan, and pinch roller cleaner for cleaning and maintaining all home and car cassette players. Nonabrasive dry fiber matrix tape safely removes dust and oxide buildups on heads and along entire tape path. Capstan, pinch roller cleaner with an advancable fiber-grid surface and specially formulated fluid removes tackiness and contamination from capsian and pinch roller assembly to prevent jammed and eaten tapes. With carrying case.
 System II. As above without carrying case . \$11.95

## Perfect Path Cassette Head Cleaner

Nonabrasive dry system for audio cassette decks designed to remove oxides, and gummy residue along tape path and on tape heads
$\$ 5.95$
Cassette Storage Case (6-unit)
Constructed of rugged, water-resistant vinyl. Clear window lid and velcro-style clasp. . . . . . . . . . $\$ 7.95$ I2 Unit . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$14.95

## DNM BY MUSIC HALL

## Interconnect and Speaker Wire

Solid core: designed for enhanced clarity and depth. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$3/ft

## Pre-Made Interconnects



2 meter . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 100$

## ENTRE BYANALOG EXCELLENCE

## ET-100 MC Step-Up Transformer

Step-up transformer for mC cartridges. Can take 3 stereo connections at once with selection on front panel. 4 -way switch on front panel for imp matching to MM cartridges.
$\$ 400$

## ESS LABORATORY

## Dynaco VA-400 FM Antenna

Amplified fm antenna for home use. Features pyramid design for optimum reception

## FINELINE DISTRIBUTING

## Furniture Systems

Fincline Audio/Video cabinetry are finished inside and out with oak and oak vencers. All cabinets are modular and may he stacked for wall units. Veneered panels and shelves have a $1 / 4$ " hardwood composite core. Shelves are rated to hold up to 12.5 lh . All cabinets now available with Protec. Super Protectant on Oak or Satin Black Polurethane on Oak.

Audio + Video Cabinet. 1 fixed video shelf; 1 fixed, 2 adjustable audio shelves and dividers. $42 \times 49.75 \times 21$ in. .
$\$ 599$
Tall Video Cabinet. I fixed. 1 adjustable shelf. $42 \times$ $30 \times 21$
$\$ 399$
Super Monitor Cart
Holds direct-view TV's up to $39^{\prime \prime}$ wide: doubles as horizontal audio/video system cabinet; three adjustable shelves. two glass doors. five casters; $40.25 \times 21 \times$ 21 inches.
\$350
Tall Audio Cabinet. 1 fixed. 2 adjustable shelves and record dividers. $42 \times 20.5 \times 21$ in
\$339
Short Video Cabinet. I adjustable shelf . . . . . . \$209
Short Audio Cabinet. I shelf and record dividers\$220

## GENEVA GROUP

## PF-211 Professional Bulk Eraser

Erases reel-to-reel, cassette, 8-track cartridge tapes to noise level of virgin tapes. 2,300 gauss flux intensity. $2 \times 3.5 \times 5 \mathrm{in} ; 2 \mathrm{lb}, 4 \mathrm{oz}$.
. $\$ 65$
VCR-205 Audio/Video Demagnetizer
Removes residual magnetism from heads and tape path parts. 290-gauss field intensity; vinyl covered probe won't harm heads. 9.250 oz
\$43

## PF-412 Auto Stop CD Cleaner

Wet type CD cleaner featuring 20 sec . cleaning cycle, chamois type cleaning pad, straight-line cleaning pattern; and Discsafe Fluid Spray. Batteries in AC adaptor not included. Requires 4-AA batteries $\$ 39.95$

## PF-425 Disc Wipes

For cleaning CDs. Each package contains 70 premoistened, non-abrasive cleaning cloths containing Discsafe cleaning solution $\$ 5.99$

## Tape Splicing Blocks

Specially grooved to hold tape firm/y during splicing. Features 2 deep slits for siraight. diagonal cuts. Supplied with double-hacked adhesive for mounting without drilling: stainless-steel cutter. $5.75 \times 1 \times 0.31$ in.
PF-311. For 0.25" tapes.
$\$ 32.28$
PF-312. For cassette tapes
$\$ 32.28$

## PF-400 Compact Dise Storage Albums

LP-size storage unit for CD's. Each holds 4 CD's in clear plastic carrying case. 3-pack: holds 12 CD's total.
. \$14.95

## Storex CD Stroage File

Drawer storage device with brake to keep drawers from falling out: 90 degree lid holder: labels casily viewed; each unit can be fitted logether to form expanding storage system: matte black finish $\$ 8.50$ each

QM-505 Cellular Foam Swabs
Package of 25 swabs, for cleaning audio, video tape decks.
$\$ 9.40$

## PF-570 Deluxe Tape Deck Kit

Audio head cleaner with pinch roller cleaner/revitalizer. 100\% pure TF head cleaning solution. Safe for all decks. Can be used with QM-505

## PF-116 Tape \& Head Cleaner

Aerosol spray cleaner with extension tube to reach recessed parts. Safe for audio, video decks. 16-0z can. $\$ 9.09$

## PF-562 Audio Cassette Head Cleaner

Cleans heads and tape path components in 5 sec . Features gold-colored metal hubs; nonabrasive cleaning tape; IP alcohol cleaning solution; standard cassette housing. 3.25 oz
$\$ 7.99$
QM-108 Tape/Head Cleaner
Liquid tape and head cleaner in 8-oz can.
$\$ 6.10$

## QM-103 Tape/Head Cleaner

Aerosol tape and head cleaner blasts loose oxides.
dirt. Supplied with extension tube
.$\$ 6$

## PF-120 Audio/Video Splicing Kit

For editing and repairing audio cassettes, VHS and Beta videocassettes; splicing tape for 36 audio or 24 video splices; leader tape for audio cassette, VHS. Beta: with instructions.
$\$ 5.99$

## QM-102 Tape Head Cleaner

Liquid tape head cleaner in 2-0z bottle. Leaves no residue: can be used on capstans, pinch rollers $\$ 4.99$ QM-122. Same as QM-102 but in 1.7-oz spill-proof bottle.
$\$ 4.20$

## PF-105 Mini Super Blast

Removes dust and dirt from hard-to-reach areas. 1.5oz can
$\$ 3.35$

## PF-870 Double RCA Jack

Connects RCA cables together in series for extra length
$\$ 2.99$

## PF-860 Mini-to-RCA Adaptor Cable

For connecting pocket stereos (or anything with mini jack) to stereo system (or anything with RCA inputs).
$\$ 2.99$
PF-115 Electronic Cable Ties
20 reusable ties; each $5^{\prime \prime}$ : with pop locks; trimmable with scissors
$\$ 2.29$

## Reel Tabs

Precul adhesive-hacked Mylar or metal labs for tape splicing. editing. Designed for use with Geneva splicing equipment.
0.25* Mylar Reel Tabs

QM-531. 1,000/pkg
$\$ 111.39$
QM-526. 200/pkg.
$\$ 23.39$
QM-521. 50/pkg. . . . . . . . . . . . . . . . . . . . . . . . $\$ 7.56$
Cassette Mylar Reel Tabs
QM-522. 50/pkg. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 9.68$
QM-524. 50/pkg. . . . . . . . . . . . .

## GUSDORF

4570 Angela Oak Audio Cabinet
Features tempered safety glass; 2 adjustable interior shelves: hooded dual-wheel casters; removable record album dividers. $37.75 \times 17.5 \times 14.75 \mathrm{in} . . \$ 105$

3370 Black Audio Cabinet
Chrome trim: tempered safely glass doors with magnetic catches: lift-up top for turntable: concealed casters; 2 adjustable shelves; ready to assem ble with instructions and included tools. $39 \times 19 \times 18$ in $\$ 159$ 3375. Similar to 3370 except in oak

## 2645 Oak Audio Cabinet

Oak solids with weathered oak finish; lift-up top for turntable access; tempered safety glass doors with magnetic catches: 4 adjustable shelves: ready to assemble with instructions and tools provided. Interior $18.6^{\prime \prime}$ w: outside $21.25 \times 42.75 \times 17$ in $\$ 219.95$ 2745. Similar to 2645 except dark oak finish $\$ 219.95$

## 4445 Golden Oak Audio Cabinet

Bronce-tone trim strip and hardware; rounded corners and moldings; smoked tempered safely glass doors with magnetic catches; 3 adjustable shelves; record dividers; assembly instructions and tools provided. Interior $15.5^{\prime \prime} \mathrm{w}$; outside $20.4 \times 48.6 \times$ 19.
$\$ 149.95$
4447. Same as above except with ebony finish $\$ 149$

## 0145 Trendline Deluxe Speaker Supports

Black cushioned speaker stands; trimmed in chrome Overall $14.25 \times 13.75 \times 12.62 \mathrm{in} \ldots . . . \begin{gathered} \\ \text {. } \\ 55.95 / \mathrm{pr}\end{gathered}$ 0148. Similar to abovic except in oak. . . $\$ 55.95 / \mathrm{pr}$

## 5945 Audio Cabinet

Autumn oak finish resists moisture and scratches. Features lift-up top; 3 lower internal shel ves: push-toopen tempered safety glass doors. $43.5 \times 19 \times 15.37$ in.
$\$ 229.95$

## HEYBROOK BY D'ASCANIO AUDIO

## TPS Power Supply

Two-way electronic speed switcher with voltage line stabilizer and filter. For use with the Heybrook turntable or others using synchronous motors. $2 \times 4.5$ $\times 9$ in; 4 lb .
$\$ 249$

## HBS-3 Speaker Stand

Loudspeaker stand designed for stable, rigid support. 4 adjustable pointed spike feet top and bottom. 13,36 x $10 \times 11.36$ in; $18 \mathrm{lb} \ldots . . . . . . . . . . . .$. IIBS-1. Similar to HBS-3 except 18' tall . . \$179/pr HBS-PS. 20* speaker stand. \$129/pr

## HIGHPHONIC B ANALOG EXCELLENCE

## MC Step-Up Transformers

HP-T7H. For use with $15-40$ ohm MC cartridges. Distortion <0.01\%; $6 \times 3 \times 5$-in; $4.4 \mathrm{lb} . . . \$ 750.00$ HP-T7I. Same as above except for $1-10$ ohm cartridges.
$\$ 650$
HP-TS. For $10-40$ ohm MC cartridges. Gold finish: aluminum case. Distortion $<0.02 \% .6 \times 3 \times 4$-in; 3 lb.
$\$ 495$

## | 1 P-S5 Headshell

Gold finish: aluminum alloy with OFC copper lead wires; cartridge mounting screws go directly into fingerlift. 13 g
$\$ 99$

## HUNT by MUSIC HALL

EDA Carbon-Fiber Record Brush
Cleaning brush with carbon fibers supported by velvet pad to reduce effective length to 2 mm ; filiments designed to track record grooves; center pad statically charged to lift dust
\$25

## INNOVATIVE CONCEPTS

## Proview (1) File

CD multiple stack, side-by-side or vertically, fite system. Holds up to 18 CD's in a vertical library: touch-release mechanism; highly durable plastic with black satin gloss finish.
$\$ 9.95$

## INTERNATIONAL COMPONENTS

VS4000E Stereo Audio-Video Control Center
Electronic Stereo control center. Features 4 inputs; 4 outputs; direct line stereo audio/video connectors: full independent switching to different inputs/outputs at the same time; LED indicators; 0.4 dB giant linearity at each output: gold-plated connectors; brushed black aluminum faceplate and extra shielded metal cabinet
. $\$ 207.36$

## fudio-Video Cables

Low capacilance. douhle-shielded. douhle insulated
cables fealure EM/RF interference rejection, signal transfer, and llewibility: clear ple outer jacket. 24 Karat gold-plated connectors; and stranded center conductors.

A-VC1012G. RCA to RCA 12' cable . . . . . $\$ 25.42$
A-VC1006G. RCA to RCA 6' cable . . . . . . . \$17.24
A-VC1003G. RCA to RCA 3' cable . . . . . . . \$13.10
A-VC1112G. Quick "F" to Quick "F" 12' cable $\$ 25.42$
A-VC1106G. Quick "F' to Quick "F" 6' cable $\$ 17.24$
A-VC1103G. Quick "F" to Quick "F" 3' cable $\$ 13.10$

## Double RCA to RCA Patch Cables

Exira Ifeavy-duty gold end double RC.A 10 RC.A paich cables.

A-VC812G. 12' cable . . . . . . . . . . . . . . . . . . \$14.42
A-VC806G. 6 cable . . . . . . . . . . . . . . . . . . . $\$ 12.16$
A-VC803G. 3' cable . . . . . . . . . . . . . . . . . . . . \$10.16

## A-HEC25 Headphone Extension Cable

Black coiled cable; 25' extended, molded plug and jack with stress relief
\$5.84
A-VC806GE Double RCA to RCA Patch Cable
Economy gold-end double RCA to RCA $6^{\circ}$ patch cable separate video and audio cables . . . . . . \$5.84

## INTRACLEAN BY AMERICAN RECORDER TECHNOLOGIES

## D-501 Cassette Demagnetizer

In cassette shell for insertion into decks.... \$24.95
D-511 Wand Demagnetizer
Hand-held plug-in demagnetizer for heads, capstans. tape guides. other metal along tape path: auto shutoff when not in use
\$21.95
CD-101 Compact Disc Cleaner
Chamois-like brush; cleaning solution, disc holder
$\$ 16.95$
CD-102. Replacement cleaning pads ....... \$6.95
CD-103. CD cleaning fluid
$\$ 4.95$

## C-911 Autorevarsing Cassette Cleaner

In cassette shell; contains S-71I fluid to clean heads, capstan, pinch rollers; nonabrasive cleaning band: left pinch roller pad retracts for cleaning 3-head decks; automatically switches direction in autoreverse decks; replaceable pads .......
C-912. Replacement pad kit ............... \$3.95
S-711 Professional Head Cleaner
Halogenated hydrocarbons clean heads, capstans. pinch rollers: no alcohol
$\$ 7.95$

## C-S1 Audio Cotton Swabs

6 long highly polished maple sticks; tightly wound tip mounted with solven-resistant glue
$\$ 2.95$

## JVC

## CK-50 CD Cheane

Automatic CD cleaner features specially processed rotating cleaning pad; auto stop mechanism \$49.95

VX100 CATV Antenna Control Unit
Enables direct reception of FM stereo supplied by cable companies. Can be used with several JVC receivers. Presel stations and control switch for cable/FM selection
$\$ 40$

## CXM70 CD Magazine

Additional 6-disc magazines for JVC CD changers
\$20

## KENWOOD

SRC-4000 Audio Rack
Basic series component cabinet features tempered smoked-glass front door: casters; record-storage compartment. $45.81 \times 19.31 \times 16.63 \mathrm{in}$.
\$230

AT-56 Audio Timer
Features 24-hour clock-timer wtih 12 hour FL digital display; digital time adjust controls; sleep-timer setting from ! min to ! hour 59 min ; two AC outlets.
$\$ 109$

## RC-100 Programmable Remote Control

Built-in control keys for Kenwood audio components and TV monitors. Features 58 programmable keys; infrared system.
$\$ 99$

## KINETIC AUDIO

## Cabinets

Furniture-styled equipment/record/tape cabinets. Can be stacked: adjustable-height shelves or rack rails; walnu veneer over particle-bnard side panels.
EC-XL. $48 \times 21 \times 18 \mathrm{in}$. Deluxe unit with plexiglas door, black dual-wheel casters. . . . . . . . . . . $\$ 500.00$ EC-I.. $48 \times 21 \times 18$ in .................. . . $\$ 300.00$ FC-M. $38 \times 21 \times 14 \mathrm{in}$. . . . . . . . . . . . . . . . $\$ 200.00$ EC-S. $24 \times 21 \times 14 \mathrm{in} . . . . . . . . . . . . . . .$.

## Speaker Srands

Straight or tilted speaker stands with dual-angle up/down capahility and /lat black satin finish.
S-I. Large .
$\$ 200.00 / \mathrm{pr}$
S-M. Medium. . . . . . . . . . . . . . . . . . . . . . \$150.00/pr
S-S. Small.
$\$ 125.00 / \mathrm{pr}$
Stereo Amplifier/Line-l evel Control
For bi/multi-amping. other amp level adjustments. Features $10 k$-. $25 k$-. 50 k -ohm imp; phono jacks; connectors; mounting hardware
$\$ 150.00$

## Stereo Amplifier/Speaker Selector

Switches 2 stereo amps into single pair of speakers or 2 pairs of speakers from single stereo amp. $\$ 150.00$

## KLYNE AUDIO ARTS

## SK-2A Pre-preamplifier

Pre-preamplifier. for low output MC cartridges. Features ultra low distortion and high resolution design. Gain 24 dB ; Bandwidth $0.8-350 \mathrm{kHz}$; adjustable high frequency contour; output imp 600 ohms .... $\$ 750$

## KOSS

Portable Stereo Speakers
Mini speakers designed to plug into headphone jack of a portable stereo system.
KSC/8000. Dual-amplified speakers. 2-250 mW/ch: 8.9 oz (w/o battery) . . . . . . . . . . . . . . . . . . . \$25/pr KSC/5000. Mylar-covered diaphram driver and amplified power booster \$16/pr $\mathrm{KSC} / 5 \mathrm{~m}$. Features dual full-range transducers: 3.2 oz.
\$10/pr

## LASER BY SWIRE MAGNETICS

Tape Accessories
Audio Head Demagnetizer. . . . . . . . . . . . . . . \$19.99
Wet Head Cleaner . . . . . . . . . . . . . . . . . . . . . $\$ 5.99$
Dry Head Cleaner
$\$ 1.49$

## LASERLINE BY CREATIVE POINT

CD-4800W Compact Disc Storage unit
Holds up to 48 CD's. Securing Release Mechanism locks disc in slot and releases disc cartridge at a touch.Genuine oak finish cabinet . . . . . . . . $\$ 59.95$
CD-48:00B. Same as above in black finish . . $\$ 49.95$ AC-5400W. Same as above for storage of 54 cas settes $\$ 49.95$
AC-5400B. Same as 5400 W in black finish . $\$ 39.95$

## CD-2400 Compact Disc Storage Unit

Holds up to 24 CD's. Securing Release Mechanism locks disc in slot and releases dise cartridge at a touch. Made of impact-resistant. high-grade plastic. Modular design for adding additional units. $4.9 \times 18.66 \times$ $6.75-\mathrm{in}$; 3.59 lb

CD-1200. Same as CD-2400 except holds up to 12 CD's. $3.95 \times 12.6 \times 6.75-\mathrm{in} ; 2.15 \mathrm{lb} . . . . . .$. . $\$ 19.95$ CD-800. Same as CD-2400 except holds up to 8 CD's. $4.9 \times 6.4 \times 6.75-\mathrm{in} ; 1.07 \mathrm{lb}$
$\$ 9.95$

## AC-1800 Cassette Storage Unit

Holds 18 cassettes; impact-resistant, high-grade plastic; cassettes lock in place; stackable; nonskid feet; hinged door. $5.4 \times 16.75 \times 5.3-\mathrm{in} ; 2.42 \mathrm{lb} . . \mathrm{\$} 19.95$

## THE LAST FACTORY

## System Formula Series

## Formula 1 Record Cleaner

For first play and deep cleaning; removes all surface deposits: cleans 60 records: microfiber applicators: 2 oz. .
$\$ 13.95$

## Formula 2 Record Preservative

Stop record wear for two hundred or more plays; protects up to 60 records: 2 microfiber applicators: 2 oz. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$16.95

Formula 3 All-Purpose Record Cleaner
Cleans records without residue; lasts over five hundred cleanings: 2 microfiber applicators: 2 oz. $\$ 8.95$

Formula 4 Stylus Cleaner
Non-alcohol cleaner which removes all stylus deposits safely; several hundred cleanings; cleaning brush; applicator; 0.25 oz
$\$ 7.95$

## Formula 5 Stylast Stylus Treatment

Extends stylus life up to 10 times normal; to be used before playing each record side; thousands of treatments. Comes with cleaning brush and applicator: 0.25 oz .
$\$ 19.95$

## Formula 6 CD Protection System

Cleans discs safely and protects them from minor scratches: smudge protectant: approx. 200 treatments: applicator and base . . . . . . . . . . . . . \$14.95

## Formula 6 CD/Video Disc Cleaner-Treatment

Cleans discs gently and safely: protects read surface from minor scratches, abrasion, and fingerprints: approx 100 treatments; applicator handle, 4 cleaning pads; I fl oz
$\$ 12.95$

## Formula 7 Cassette Head Cleaner

Cleans tape heads and tape-path rollers; two cassette mechanisms; exclusive formula. Comes in 0.5 oz bottle. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$13.95

## Formula 8 Video Head Cleaner

Gentle, non-alcohol formula cleans surface, treats head, guides and drive components in VCR mechanism; wet/dry system using exclusive formula; available in BETA and VHS: approximately 50 cleanings. Comes in 0.5 oz bottle.
$\$ 19.95$

## Formula 9 Tape Head Treatment

Surface chemistry treatment for tape heads and guides; eliminates stick-slip and scrape-flutter: reduces distortion and noise; exclusive formula; over 100 treatments; 2 swabs; . 25 fl oz .
$\$ 19.95$

## Formula 10 Tape Preservative

Increases media life up to 8 times; improves tape performance; reduces oxide shedding, dropouts, and deterioration; treats 35-50 $1800^{\circ}$ reel to reel tapes; 4 swabs; 2 floz
$\$ 22.95$

## Combination Kits

See above for contents of each formula.
Formulas 1 and 2 . . . . . . . . . . . . . . . . . . . . $\$ 27.95$
Formulas 2 and 3 . . . . . . . . . . . . . . . . . . . . . . $\$ 22.95$
Formulas 4 and 5 . . . . . . . . . . . . . . . . . . . . . . \$24.95

## Trial-Size Kits

Formulas 1 and 3.0 .5 oz .
$\$ 7.95$

Formulas 2 and 3.0 .5 oz .
$\$ 9.95$
Formulas 1, 2, and 3. 0.5 oz $\$ 13.95$

## Microfiber Applicators

10 in each packet. White. gold or 5 of each . $\$ 12.50$

## LEBO

Voyager series nylon carry cases are water resistant and suitable for carrying a variety of personal accessories. Features include zippered openings; padded construction: adjustable straps. Various colors are available.

33260 Leather Tex Voyager. Two sided, soft carry case for 60 boxed or 96 unboxed cassettes; personal accessory pocket, detachable, adjustable shoulder strap and handle; removable inner tray; black imitation leather . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 35.95$ 25248 Jumbo Voyager. Nylon carry case for up to 48 CDs or personal accessories; can also store portable CD player and most camcorders: removable inner divider; two large zippered side pockets; detachable adjustable shoulder strap; red. black. victoria blue. gray
$\$ 33.95$
33230 Leather Tex Voyager. Soft carry case for 30 boxed or 48 unboxed cassettes; large accessory pocket; detachable, adjustable shoulder strap and handle; removable inner tray; black imitation leather..
$\$ 25.95$
20030 First Class Voyager. For 30 boxed or 48 unboxed cassettes, with large personal accessory pocket, removable tray, detachable, padded shoulder strap. handle, color coordinated hardware; red, black, silver grey, victorian blue . . . . . . . . . . . . . . . $\$ 22.75$ 21230 Custom Lite Voymger. For 30 boxed or 48 unboxed cassettes, with large personal accessory pocket, removable tray; red, black, silver gray, victorian blue .
$\$ 18.95$
21220. Same as above for 20 boxed or 32 unboxed cassettes . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 15.75$ 25212. For 12 regular or 6 i win box CD's with outside personal accessory pocket and detachable shoulder strap; interior velcro compartment divider . \$13.25 25006. For 6 regular or 3 t win boxed CD's, detachable shoulder strap and belt loop.
$\$ 9.50$
21010. For 10 cassettes or personal accessories.

detachable shoulder strap and belt loop; red black, silver gray, victorian blue . . . . . . . . . . . . . . . . $\$ 7.95$

## LESLIE DAME ENTERPRISES

## CD Storage Units

23096 CD Storage Rack. Oak grain finish CD rack holds up to 96 CDs. Stackable ............ $\$ 47.95$ 23860 CD Storage Unit. Solid cak unit with tambour door, holds 60 CDs
$\$ 45.95$ CD-232 CD Storage Unit. Deluxe solid oak handcrafted finish, stackable, lazy susan construction. Turns around. Holds 32 CDs . . . . . . . . . . . \$41. 95 CD- 236 CD Storage Unit. Deluxe handcrafted solid oak wood, stackable, holds 36 CDs. . . . . . . . $\$ 39.95$ CD-48 CD Storage Unit. Solid hardwood construction CD storage unit. Holds 48 CDs. Stained and lacquered finish .

23064 CD Storage Rack. Oak grain finish rack holds up to 64 single CDs or 32 twin box CDs. Stackable ds up to 23760 CD Storage Rack. Solid teak rack holds up to 60 CDs $\$ 33.95$
CD-20 Deluxe CD Case. CD carrying case holds 20 CDs. Leatherette cover with matching hardware and felt interior . .... ... . . ........... \$27.99 23836 CD Storage Unit. Solid teak unit with roll top; holds 36 CDs
$\$ 27.95$
CD-24 CD Storage Unit. CD storage unit of solid hardwood construction. Handcrafted, stained, and lacquer walnut finish. Holds 24 CDs
$\$ 24.95$ CD-60 CD Storage Unit. 3-drawer deluxe walnut woodgrain finished cabinet holds 60 CDs . . $\$ 24.95$ CD-48E Storage Unit. CD storage unit of plywood construction. Holds 48 CDs vertically ..... \$21.95 CD-40 CD Storage Unit. 2 -drawer, deluxe walnut woodgrain finished cabinet holds 40 CDs . . \$17.95 CD-24E CD Storage Unit. CD storage unit of plywood construction. Holds 24 CDs vertically . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 12.95$ CD-10 CD Storage Unit. CD storage unit holds 10 CDs; 4 sides interlocking design; wall/shelf mounting or free standing.
$\$ 3.95$
CD-12 CD Storage Unit. Dual CD storage unit holds 12 CD or 6 doubles; 4 sided interlocking plastic modular design; wall/shelf mounting or free standing.
$\$ 3.95$

## Casserte Storage Unirs

TA-248 Cassette Storage Rack. Solid oak wood storage rack holds 48 audio cassettes . . . . . . $\$ 39.95$ 82045 Cassette Storage Unit. Solid teak storage unit with roll top holds up to 48 audio cassettes. $\$ 35.95$ 82100 Cassette Storage Rack. Solid teak storage rack holds 100 cassettes. $\qquad$ $\$ 35.99$
TA-72 Cassette Wall Rack. Wood cassette wall rack with individual tape compartments holds 72 audio cassettes
TA-136 Attache Cassette Case. Attache-style cassett case of wood construction with black leatherette finish and key locks holds 36 cassettes..... $\$ 28.95$ TA-48 Cassette Wall Rack. Wood finish: individual tape compartment holds 48 audio cassettes. $\$ 24.95$ TA-660 Viynl Cassette Case. Padded vinyl cassette case holds 60 cassettes . . . . . . . . . . . . . . . . . . \$13.95 HI-30C Audio Storage Cabinet. Audio storage cabinet holds 30 audio cassette tapes . . . . . . . . . $\$ 20.95$ HI-42C Audio Storage Cabinet. Holds 42 audio cassette tapes . . . . . . . . . . . . . . . . . . . . . . . . \$ $\$ 12.95$ TA-630 Vinyl Cassette Case. Padded vinyl cassette case holds 30 cassettes . . . . . . . . . . . . . . . . . . $\$ 8.95$ TA-624 Vinyl Cassette Case. Padded vinyl cassette case holds 24 cassettes. . . . . . . . . . . . . . . . . . $\$ 7.95$ TA-612 Vinyl Cassette Case. Padded vinyl cassette case holds 12 cassettes . . . . . . . . . . . . . . . . . . $\$ 4.99$

MRC-2 Magnetic Record Cleaning Brush . . . \$1.99

## MAXELL

Demagnetizer
HE-44. Electronic Demagnetizer . . . . . . . . . \$29.99
Head Cleaners
R-CL. DAT Head Cleaner. . . . . . . . . . . . . . . \$12.99
11C-401. Wet Head Cleaner . . . . . . . . . . . . . . $\$ 5.99$
RCT. Dry Head Cleaner . . . . . . . . . . . . . . . . . \$3.59
P-Case. 3-Empty Cassette Boxes. . . . . . . . . . \$1.49
CD case. 26-empty CD boxes . . . . . . . . . . . . . $\$ 1.79$
MR-7. $7^{7}$ Metal Reel . . . . . . . . . . . . . . . . . . . . $\$ 7.99$

## McINTOSH

## CR 7 Infrared Remote Control System

Expandable remote system receiver designed to function with most McIntosh components. Features area-specific volume adjustment; AC power activa-

## ACCESSORIES

tion; source selection; tuner station select: full CD player operation; preamp select; mute. $8 \mathrm{lb} \ldots \$ 849$


CR 8. Remote Area Controller. Module for expanding remote capability to another location. . . . \$678 IIR 7. Hand-held remote transmitter for CR 7 and CR 8

## MEMOREX BYMEMTEK

## CP8 Universal Remote Control

Learns functions of 8 remote controls. Features sequencer operation that performs multiple remote commands with one touch; time-day of week clock: booster for more powerful signal: backlit LCD display for night use
$\$ 99$

## Electronic Cassette Demaganetizer

Battery-powered head demagnelizing system. Eliminates residual magnetism to keep recordings free of noise and distortion. Works in less than I sec on any deck.
\$24
Auto Lighter DC Power Adaptor
Power battery-operated radio, tape player, or personal portable through ear-lighter socket. Features 6 plug types; 5 voltages; 2 polarities.
$\$ 14$

## CD Cleaner

Cleans CD's; restores uniform disc reflectivity; cleaning solution; pad; bristle brush; storage case ... \$14

Double Pair Stereo Cable
Fealures 4 coaxial cables in one: stranded pure copper conductors: color-coded RCA phono-type plugs: gold-plated; maximum signal transfer: interfer-ence-free reception.
$\$ 11$

## Deluxe Speaker Cable

Premium speaker cable upgrades system. Features 16 gauge heavy-duty cable: 19 strand pure copper conductors; high conductivity; low signal loss. . \$11

## Safeguard Voltage Spike Protector

Guards against brief high-voltage spikes that may occur in AC power lines. Works in any standard 110 -$120-\mathrm{V}$ AC outlet
$\$ 7.99$

## CD Player Dustcover

Vinyl CD player dustcover with clear front panel A vailable in medium ( $14 \times 12.5 \times 3$ in) and large ( $18 \times$ $14 \times 3 \mathrm{in}$ ) sizes
$\$ 5.99$

## Graphite Filament Record Cleaner

Cleans and neutralizes static electricity. Features thorough cleaning through electrically conductive graphite microbristles that fully reach into the bottom of record grooves
$\$ 5.99$

## Audio Parch Cables

Features gold plating for maximum signal transfer: low capacilance. heavy shuelding: $95 \%$ braided copper shielding.
6 Foot length
$\$ 6.99$
4 Foot length
$\$ .99$

## CD Organizer

Storage unit with independent storage slots holds up to 12 CD's in vertical position; twin pack ... $\$ 4.99$

CD Storage Case
High-quality dust-proof replacement storage case for individual CD's: standard jewel-box design: twin pack.
$\$ 2.99$

## FM Dipole Anterna

Features folded dipole design length-tuned to optimum wavelength for FM radio band; no wire stripping necessary.
$\$ 1.99$
3-Pack Audio Albums
Design allows tape end in or out for hassle-free storage: cassette protection for home or car. . $\$ 0.99$

## Tape and Record Care Products

X-CD. Cassette Head Cleaner/Demagnetızer \$6.99
Record Care Kit ..............................
$\$ 6.99$
$\$ 5.99$
Cassette Cleaniag Kit ....... $\$ 29$
Record Cleaner.....
$\$ 2.99$
Record Cleaning Fluid ............... $\$ 269$
Cassette Head Cleaner
$\$ 1.89$

## Headphone Accessories

Infrared Cordless Headphone Adaptor, AC-powered transmitter and battery-powered receiver provides cordless reception for any pair of mini-plugged headphones.
$\$ 70$
Headphone Extension. 20-ft lightweight stereo headphone extension cable . . . . . . . . . . . . . . . . . $\$ 5.99$
Y-Adapter. Dual-headphone adapter ........ $\$ 2.99$ Mono Adapter. Mono adapter for stereo headphones. $\$ 1.99$

## MICROSEIKI BY ANALOG EXCELLENCE

## MT-1000L. Step-Up Transformer

For 3 -ohm MC cartridges. FR $15-60,000 \mathrm{~Hz}: 6.5 \times 13 \times$ $13-\mathrm{cm}: 12.6 \mathrm{lb}$
$\$ 995$
MT-1000H. Same as above but for 40 -ohm cartridges
$\$ 995$
MT-500 Step-Ip Transformer
For 3 - or 40 -ohm MC cartridges. FR $15-60,000 \mathrm{~Hz} ; 6.5$ $\times 13 \times 13-\mathrm{cm} ; 6,6 \mathrm{lb}$
$\$ 595$

## MITSUBISHI

M-W5100 Audio Cabinet
Home Theater Components audio cabinet features contemporary styling with dark gray vinyl finish: hide-away glass door; continuously adjustable shelves; hinged-top; design matches Mitsubishi's CS$3103 \mathrm{R} / \mathrm{MB}-103$ and CS-3504R/MB-504 television in both height and cosmetics. . . . . . . . . . . . . . . . $\$ 360$

## THE MODSQUAD

Tiptoes


Component platforms made of machined aluminum cones. L'sed to improve coupling between the component and the surface beneath it.
MacMod Tiptoes. for under components, . $5^{\circ}$ \$5 ea MacMod Rug Tiptoes. for under speakers on carpets, $1.5^{*}$
\$7ea

## CD Damper

Compact disc damper is lightweight, thin flexible plastic disc which is loaded atop the CD player to eliminate light leakage while suppressing edge flutter and internal vibrations without increasing servo tracking tunting.
$\$ 24.95$

## MOGAMI BY MARSHALL

## 2799 Cable

Features 4 high purity 60 strand copper conductors in quad conliguration; oxygen-free copper; non-migrating insulation; use in unbalanced systems using $0.25^{\circ}$ or RCA plugs
\$0.39/ft

## MONSTERCABLE

## CD SoundRings

CD vibration stabilizer mounts on outer edge of CD. High density material provides necessary weight and dampening needed to stabalize CD. Fits all players and comes with centering device.
50 Rings . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ \$ 14.95$
12 Rings . . . . . . . . . .
1 Ring Sampler.
$\$ 1.50$

## Speaker Cable

## MI Speaker Cable

".Wicrof"iber" dielectric insulation designed to pliminate "Inkentransient" noise, reduce transient interference. intended to preserve power and dynamics: primary and secondary grouped networks; carrying case. W'ith ,M-Spades

| 15-ft pr | \$325 |
| :---: | :---: |
| 25-ft pr | \$500 |
| 30-ft pr | \$600 |
| With X-Fer |  |
| 15-ft pr | \$400 |
| 25-ft pr | \$550 |
| 30-ft pr | \$650 |
| From Spool | \$9/ft |

## Monster Cable Connecting Cables

Improved version of original Monster Cable with new strand configuration designed for midrange clarity. faster transient response, and extended low and high FR. Precut, with universal gold pin ends with locknotch.

| 50 ft | \$95/pr |
| :---: | :---: |
| 30 ft | \$60/pr |
| 20 ft | \$45/pr |
| 15 ft | \$35/pr |
| From sponl, not pre-cut | \$1/ft |

## Superflex Speaker Wire

High-purity copper speaker wire with flexible Duraflex insulation: dividing web between the 2 conductors. Same stranding configuration as Monster Cable but fewer strands of wire $\$ 0.50 / \mathrm{ft}$ 25 ft. . ............................... . . . $\$ 40 / \mathrm{pr}$ 15 ft . . . . . . . . . . . . . . . . . . . . . . . . . . . \$25/pr
10 ft . \$20/pr

Powerline 2 Plus Speaker Cable
Bass control conductor for even distibution of magnetic fields; directly addresses magnetic behavior of audio signals: time aligned audio signal.
P2P 25 Ft .
$\$ 200 / \mathrm{pr}$
P2P 15 Ft.
\$150/pr
Powerline 2 Speaker Cable
"Time Coherent" winding designed to eliminate phase inaccuracies, align highs and lows for improved FR. Unterminated
\$3.25/ft Powerfine 3. Smaller version of Powerline 2\$1.75/ft

## ACCESSORIES

## Interconnects

M1000 Interconnect Cables
"Total Phase Aligned Bandwidth Balanced" design: dual conductors and 3 wire networks: "Wicroriber": M-Terminator comectors. Prectu.


## Interlink 500 Interconnect Cables

"Precision Bandwidth Balanced" constructom: dual conductors with ":IficroFiber": designer colors. Pre' cut.
20-ft pr . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$180
2-mpr...................................... $\$ 75$
1-mpr. \$50
From Spool.
\$4/ft

## Interlink Reference Connecting Cables

Connecting wire with 3 -wire mulliple-gauge network for each conductor. Thick core wire designed for frequencies below 300 II .4 medium conductors intended for midrange. hair-thin woven stranded wires made for $700+.11 z$


1-m pr. 30
$\$ 75$

## Interlink CD Cable

Interconnect cable for CD players designed ot increase performance and sound quality. . . . . . . . . . . . $\$ 3 / \mathrm{ft}$
20-ft pr . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 150$

2-m pr $\$ 150$

1-m pr $\$ 70$

## Interlink 301 Interconnect Cables

High-resolution, preciston-stranded. noise shielding. special winding configurations, protects agatnst moise interference. For use with car. truck. van. or R! vehicle sound system.
1-m pr .
$\$ 24.95$

## Interlink 300 Interconnecp Cables

Dual-halanced conductors: dual-shield braid and foil.
20-ft pr . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 50$
16-ft pr .................................... $\$ 40$

2-mpr . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$24.95
1-m pr . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 19.95$
From Spool.
\$0.75/f
Genesis Lightspeed Tonearm Interconnect
For connecting cartridge to preamp
$\$ 175$

## Interlink 400 Interconnect Cable

Same "Bandwidth Balanced" design as Interlink Reference: "Microfiber" rechnology: unterminated.

20 ft .
2.0 m
1.5 m
1.0 m .
0.5 m
$\$ 79.95 / \mathrm{pr}$
\$39.95/pr
\$34.95/pr
\$29.95/pr $\$ 24.95 / \mathrm{pr}$

## NADY

1R-103 Personal Infrared Stereo Receiser Infrared stereo transmitter model IRT-520 plugs into any stereo or tape deck's headphone jack. Infrared signal is transmitted to sensor on top of personal receiver. Any number of Nady infrared receivers can be used in a room. A "slave" transmitter, model IRT-$520-\mathrm{S}$ is available to extend range and coverage to outdoor areas
$\$ 100$
1RH-210. Integral headphone/receiver. . . . . . . . $\$ 60$

## NAGAOKA

Prolift Tonearm Iifter
Tonearm lifting device for use with manual turntables. Silicone damped mecahanism lifts when toncarm hits a fine trigger wire. Double-sided adhesive pad, adjustable base for height
$\$ 40$

## NAKAMICHI

MX-100 Microphone Mixer
Features $30.25^{\prime \prime}$ mic inputs.

## PS-100 Power Supply

Produces 10 volts IC for MX-100, other Nakamichi blackbox series components; can power up to 6 components
$\$ 128$
DM-10 Head Demagnetizer
Tape head demagnetizer
$\mathbf{S F}$-10 Subsonic Filters
Compact passive filters operate at line level to remove turntable rumble and other infrasonics caused by record warps and tonearm/cartridge resonances. Provides 6 dB /octave filter, down 10 dB at 10 Hz. May be used at tape output or amp tape-input jacks. $2.6^{\prime \prime} 1 \times 0.51^{\prime \prime}$ diameter.
\$15/pr

## M.M. NEWMAN

Heli-Tube. Spirally cut. industrial grade. expandable. black polyethylene cable wrap applies like tape to protect/organize wires. . $25^{\prime \prime}$. . $38^{\prime \prime}$, $50^{\prime \prime}$ sizes for bundles up to $4^{\prime \prime}$ dia; 8 ft lengths: $0.50^{\circ} \ldots .$. . $\$ 2.25$ $0.38^{\prime \prime}$
$\$ 1.60$
0.25"
$\$ 1.45$

## NIKKO AUDIO

## C()-23 Crossover

3-way mono. 2-way stereo. 22-point crossover system: with double mids and turnovers. . . . . . . . . . . $\$ 700$

NSR350G Fiquipment Rack
Woodgrain black pro rack with double doors and glass top
$\$ 269$

## NILES AUDIO

## Speaker Selection Systems

Connects up to 4 pairs of speakers to a recelver and plays any or all pairs simuhancously: Accommodates high-definition speaker cables. Features imp protection switch: separate $L+R$ ch grounds. Ilandles 200 $1 \% / c h:$ genuine walmu side panels: rack mount bruckets optional.
MSA-10. Enables play of up to 10 pairs of 4-. 6- or 8ohm speakers off of any stereo amp. Features high-power-imp matching transformers: logic circuitry: 10 front-panel controls: rear connector accepts up to 14gauge speaker wire; separate $L+R$ ch grounds for use with bridged amps. Power handling $250 \mathrm{~W} / \mathrm{ch}$. Walnut side panels standard. rack mount ears optional. $12 \mathrm{lb} ; 17 \times 3.5 \times 6 \mathrm{in}$.
$\$ 550$

MSA-6R. Remote-controlled. 6-position speaker switching system to turn on or off either from a central location or remotely by using optional wall controls in different rooms. Turns on AC power to main system as well speakers in individual rooms. All 6 locations can be played at once. Maintains nominal 8 -ohm load on amp no matter how many pairs are played. $19 \times 5.25 \times 12.12 \mathrm{in} ; 16 \mathrm{lb} \ldots . . . . \$ \$ 599$ SYC-4. For 4 pairs of speakers. Features individual volume controls; connection for second amp; autotransformers; separate $L+R$ ch ground connections for use with bridged amps. 8 lb ; $11.2 \times 4.62 \times 5.31$ in.
$\$ 280$
SVC-4W. Same as SVC-4 except designed to be flush mounted into a wall. Pre-construction and retrofit versions available. . . . . . . . . . . . . . . . . . . . . . $\$ 325$ SVC-2. For 2 pairs of speakers. Individual volume controls; autotransformers.
$\$ 150$
SPS-1. Accommodates up to 14 -gauge speaker wire and power handling capacity up to $100 \mathrm{~W} / \mathrm{ch}$. Genuine walnut side panels.
Rack mounts
HDS-6 Speaker Switcher
Enables play of up to 6 pairs of speakers. Accommodates up to 8 gauge wire; power handling $250 \mathrm{~W} / \mathrm{ch}$ headphone jack; works with any type of amplificr. $\$ 200$
HDS-4. Same as above but for 4 pairs of speakers
$\$ 150$

## CPM-31 Patching Matrix

$6 \times 6$ patching matrix to connect tape decks. equalizers, and NR units. Allows a component's output to be fed to another component's input. Passive unit with RCA jacks on rear. $9 \times 4 \times 8.75$ in; 6 lb.
$\$ 180$

## ADA-6 Audio Distribution Amplifier

Stereo line-level audio distribution amplifier. A single input can be distributed to 6 destinations with no degradation of original signal
$\$ 140$
IRP-1 Power Supply
Power supply for infrared repeater system.
$\$ 140$
SV-5 Auviliary Selector
Expands auxiliary input to accommodate up to five different sources such as CD), tape deck, luner: passive volume attenuator enables adjustment of volume of each sound source
$\$ 90$
ISB-3 Tape Deck Switch Box
Allows record, playback and dub between any of 3 tape decks. Patching performed by turning knobs. Features RCA phono jacks; optional rack-mount ears and walnut end panels. $7.12 \times 2.65 \times 5.6 \mathrm{in}: 2 \mathrm{lb} \$ 80$

## 1RR-I \& IRC'-1 Infrared Receiser

Wall-mount infrared receiver. When connected to IRP-I and IRC-1 enables you to control almost any infrared remote control component; up to 30 IRR-I units can be connected to the IRP-1 power supply.
IRR-1
$\$ 70$
IRC-I
$\$ 20$
SCW-1 Volume Control
Wall-mounted stereo volume controls for remote speakers. Use of autotransformers instead of Lpads.
$\$ 48$
SCW-2. Similar to SCW-I with stereo headphone jack
$\$ 66$
SVC-I. Table top speaker volume control for remote speakers. Volume adjustment independent from main speakers. Uses autoformer volume control instead of L-pad.
$\$ 75$
SCW-2A. Similar to SCW-1 but has selector switch for 2 different amplitier inputs
$\$ 66$
$\mathbf{S C W}-2 \mathrm{HP}$. High-power version of SCW-1. Uses high-power autoformer instead of L-pads. Power handling $15-W / c h .4 .56 \times 4.5 \times 2.56 \mathrm{in} . \ldots . .$.

DPS-1 Amplifier/Speaker A-B Selector
Permits cither of 2 amps to be played into a single
pair of speakers, or a single amplifier to play into either of 2 pairs of speakers. Features high-power A-B selector switch box: handles $300 \mathrm{~W} / \mathrm{ch}$ : rear panel connector for up to 14 gauge speaker cable or high definition wire pin connector. $2 \mathrm{lb}: 6.12 \times 2.8 \times 3.15$ in. .
\$65

## AXP-1 Auxiliary Input Selector

5 -input. 1-output stereo selector box for 5 line-level signal sources. Allows selection by turning a knob. 1 $\mathrm{lb}: 5.12 \times 2.5 \times 5.12 \mathrm{in}$
$\$ 55$

## PS-1 Phono A-B Switcher

Connects 2 turntables to a receiver with only one phono input. Features $I+R$ ch grounds; switches both the hots and the grounds for total isolation: RCA phono connectors. $4.75 \times 1.9 \times 4 \mathrm{in}: .5 \mathrm{lb} . \ldots . . \$ 50$

## DPS-1W Amplifier/Speaker Selector

Wall-mount high-power A-B selector. Used to share a common pair of loudspeakers with 2 different sound sources
. $\$ 50$

## IWW-1 Volume Attenuator

Wall-mount line-level attenuator. When used with preamp and power amp it enables you to put volume control on the wall.
. $\$ 48$

## SJ-1 Wall-Mount Connector

Wall-mount plate containing two 5 -way binding posts for speaker connections. Designed to mount on wall similar to electrical outlet plate. Available in bone, brass. stainless steel. and white. $2.75 \times 4.5$ in.
$\$ 6.30$

## NITTY GRITTY

Mini-Pro Mk 2 Record Cleaner
Semi-professional-type record cleaner designed for consumer use. Wets, scrubs. and vacuums both sides of record simultaneously. Cleans record of all dust. grease, and static charge. Features large oak cabinet: strong vacuum motor: quieter operation. $10 \times 17 \times$ 10-in.. $\$ 699$
Hybrid 2. Same as above except cleans one side al a lime. Built-in hinged dustcover and adaptor for cleaning compact discs. $\$ 599$
2.5 Fi. Similar to Hybrid 2 without dust cover or CD cleaning. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 499$ 1.5 Fi. Similar to 2.5 Fi except no solid oak cabinet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 429$ Model 1.0. Similar to above except manual. . . \$259

## ONKYO

RC-AVIM Universal Remote Control
Audio/video universal remote control can be programmed to operate a variety of video (VCR's. TV's. cable boxes) and audio components with infrared remote capabilities. "Learns" the remote operations of a variety of components and can store more than 100 different functions into memory. Comes with control codes for Onkyo products already programmed in. Uses 4 ita batteries. $7.06 \times 2.88 \times 1.25$ in.
$\$ 119.95$

## RC-AV10N Universal Remote Control

Features 55 programmable functions: full control of more than 6 components: audio and video operation modes; pre-programmed with Onkyo RI command modes.
\$80

## ORA ELECTRONICS

## Studio Spec Brand

## TU2 Cable Ready TV Tuner

139 Channel, wireless remote TV tuner enables nonremote controlled TVs to be fully remote and cable ready. Front panel features 6 control buttons: back pancl features switchable channels. 3 or 4 outputs. 120 V outlet. VHF/UHF/cable, in and RF out, RCA jacks for audio/video out. and jack for MPX ste-
reo $\$ 300$
SDX1 Stereo TV Decoder
Decodes stereo TV audio signal for use with home audio/stereo equipment. Features switch for stereo/ mono/SAP: separate CH. 3: MPX selector switch: sterco left/right audio outputs.

CDA-I CD Car Adaptor
Equipped with 2-cable sets: one connects a CD or cassette player output to the adaptors input, the other connects the adapiors 9 -voll output to power external players. Complete with mounting hardware. . . . \$40

## S-VHS Cables

Cables designed for use with video equipment including all S-VHS monitors. VCRs. videodisc players, monitor/TVs, and dubbing equipment. 4-pin mini DIN male to 4 -pin mini DIN male cables enable separate transmission of $Y$ and $C$ signals to enhance signal to noise ration, horizontal resolution. contrast. and picture quality. Full shielding. $12 \mathrm{ft} . . . . .$. . $\$ 23$

## CD-2 CD Cleaner

Self-contained CD cleaning kit includes cleaning brush. chamois pad. cleaning base/box, and 1.5 oz of CD cleaning solution in pump-spray botile . . . . $\$ 13$

CD-4. Individual CD storage boxes. clear plastic jewel box design. 2 per package.

MK-116. Audio head maintenance kit includes felt. brush, and mirror probes. replacement felt pads, and head cleaning solution.
ATC-DC-113. Dual-capstan audio cassette head cleaner. Wet-type specially designed to clean entire tape path in dual-capstan or autoreverse cassette decks..
.... . \$4
ATC-112. Wel-type. audio cassette head cleaner. \$3

## ORTOFON

## RC-015 Stylus Cleaner

Electronic stylus cleaner with tuned oscillator vibrates all contaminants off the stylus assembly. Includes 20 ml botte of stylus-cleaning fluid: magnification mirror
$\$ 34.95$

## CC-021 Cassette Maintenance Kit

Includes autoreversc cassette cleaner and electronic head demagnetizer.
$\$ 29.95$
SC-060 Audio System Maintenance Kit
Includes carbon-fiber record cleaner: stylus cleaner: autoreverse cassette cleaner: CD cleaner . . . $\$ 24.95$

## RC-014 Electronic Static Eliminator

Ion gun with trigger control bombards record surface with static-ncutralizing ion particles. ...... . \$21.95

## RC-017 Acoustic Shock Absorbers

4 adjustable shock absorbing feet help prevent acoustic feedback and allow for leveling turntable. For use with turntables up to 45 lb .
$\$ 21.95$
CD-040 Compact Disc Maintenance Kit
Includes cleaning cloth. cleaning spray. lens cleaner. in album storage box with padded cleaning surface . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 19.95$
CD-042. Replacement spray for CD-040 . . . . $\$ 6.50$
CC-020 Autoreverse Cassette Cleaner
Wet-type cleaning cassette cleans all tape heads, capstans, and pinch-rollers in autoreverse cassette decks in 30 sec . Includes cleaning solution and replacement pads.
$\$ 12.95$

## CD-041 Component Isolators

Includes 8 absorbing feet with self-stick backing to eliminate vibration on all type components. . $\$ 9.95$

## RC-013 Record Care Kit

Includes walnut record brush with one-way pile; record cleaning solution to remove dirt and eliminate
static: stylus cleaner
$\$ 16.95$
RC-011. Replacement lluid for RC-013 . . $\$ 4.95$

## RC-010 Carbon Fiber Brush

Record cleaning system with polished carbon fibers to remove dirt from record grooves while built-in copper-wire grounding system eliminates static build-up
$\$ 9.95$

## RC-016 Disc Coupler

Designed to couple the record to the platter for increased bass response and improved imaging. Iacludes 2 center hubs to fit most center spindles
$\$ 9.95$
RC-018 Alignment Tool
Phono cartridge alignment tool features mirrored surface with two-point alignment system and center spindle cutout.
$\$ 4.95$

## RC-012 Stylus Cleaner

Cleaning fluid removes residue from stylus. Includes fluid and applicator brush .
$\$ 3.49$
RC-009. Stylus pressure gauge.
$\$ 2.95$

## O'SULLIVAN INDUSTRIES

79680 Entertainment Center
Solid oak frames with marshall-oak laminate finish. Features clear tempered glass doors: 3 adjustable or removable component shelves: shelf provided for smaller tele vision and VCR combo; twin oak drawers for accessories: casters. Overall: $45 \times 49.13 \times 20.75$
in. .
. \$299

## 79030 Entertainment Center

Finish in glossy black formica high-pressure laminate. Features tempered clear glass doors: 2 adjustable shelves; pull-out turntable shelf: double doors for storage area with cast-metal door pulls. Overall 47 $\times 48.2$. $\times 15.25 \mathrm{in}$.
\$289

## 79438 Entertainment Center

Finished in registry oak. Features 4 tempered clear glass doors with brass finish hardware; 2 adjustable compunent shelves; storage area with adjustable/removable shelf: drawer with an open storage area. Overall $71 \times 48.75 \times 14.75 \mathrm{in}$; TV area: $27.5 \times 29 \times$ 14.75 in.
. $\$ 239$

## 79480 Entertainment Center

Finished in registry oak laminates. Features roundededged design and sculptured rails with brass finish accents: tempered clear glass door protects adjustable/removable component shelves; bottom drawers are appointed with brass finished drawer pulls with wood-grain laminate inserts. Overall $43.24 \times 49 \times$ 15.37 in.
$\$ 199$

## 79227 Entertainment Center

Finished in colonial oak laminates. Features tempered clear glass doors protecting a top storage area; 2 adjustable/removable component shelves and twin doors with solid-wood pulls: TV area accepts most monitors. Overall $71 \times 14.75 \times 54.37 \mathrm{in}$; TV area: 27.5 $\times 14.75 \times 30$ in
. $\$ 179$

## 79236 Entertainment Center

TV area that accepts most $19^{\prime \prime}$ monitors: $t$ win veinlined doors concealing storage area; storage drawer: bottom right shelf is adjustable or removable: middle sheff component area; solid oak pulls on drawer \& doors. $69 \times 48.5 \times 14.75 \mathrm{in}$ : TV area $25.5 \times 26.75 \times$ 14.5 in ; right shelf $25.5 \times 19.88 \times 14 \mathrm{in}$; bottom shelf $16.5 \times 19.88 \times 14$ in
. $\$ 169$

## 79020 Entertainment Center

Finished in white laminates with adjustable or removable V(R shelf and ten component shelves. Features pull-out turntable shelf; tV area; tempered glass door and doors concealing storage area below. $47.25 \times 47.88 \times 15 \mathrm{in}$; TV area $27.38 \times 27 \times 15.38$ in.

## ACCESSORIES

pered clear-glass doors. Features iwin component shelving: large TV area for most 19" TV's; twin veinlined doors concealing storage area; solid oak door pulls. $47.25 \times 48.13 \times 15.5 \mathrm{in}$; component area $27.13 \times$ $19.13 \times 13.75 \mathrm{in}$
$\$ 159$

## 79980 Entertainment Center

Colonial oak laminate finish with adjustable vCR shelf; large TV area and adjustable component shelving: clear tempered glass door: I win double doors for storage area below. $47.25 \times 48.13 \times 15.5$ in $\ldots \$ 159$

## 79037 Entertainment Center

Rounded-rail door and top rail; accomodates larger TV's: component area; spacious lower storage area with shelf. $66.5 \times 48.5 \times 14.75 \mathrm{in}$; TV area $23.5 \times 27 \times$ 14.75
$\$ 139$

## 79018 Entertainment Center

Finished in bartonwood laminates with tempered glass doors. Features adjustable component shelf and a concealed storage area; iv shelf fits most $19^{\prime \prime}$ monitors and the bottom shelf will accomodate a VCR and tapes; solid wood door pulls. $40.75 \times 47.88 \times 15.5$ in. . $\$ 119$


Parsec LS-4

## 52192 Audio Cabinet

Features tempered, clear-glass lift-lid and door: black-pebble-grain laminate shelves: adjustable middle shelf; album and/or accessory storage spacel dualwheel casters; bartonwood laminate. $37.74 \times 19 \times$ 15.75 in ; component area: $13.12 \times 17.62 \times 14.36$ in $\$ 89$

## PARSEC

The FM Dish
Features GaAsFET Gallium Arsenide Field Effect Transistor: electronic tuning; multipath rejection: Azimuth markings on base
$\$ 219$

## The IS-4 Indoor FM Antenna

Features GaAsFET Gallium Arsenide Field Effect Transistor. Displays omnidirectional characteristics when placed in a vertical position; displays directional characteristics when placed in a horizontal position. $\$ 59$

## PIONEER

BSS-F1 Bodysonic Surround-Sound Chair Swiveling black leather chair designed for surroundsound applications. Features $3.2^{*}$ diaphragm stereo

speakers in headrest: dynamic damper bass drive unit mounted in seat: remote control mounted under seat; RCA jack: headphone jack. $40 \times 38 \times 38$ in $. \$ 2,000$

## (U-AV100 Smart Remote Control

Remote controls all Pioneer components on the system remote network. Features learning capability; 214-command capacity; 68 keys; 3 slide switches; $30-$ 60 minute memory backup for changing batteries . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 125$ CU-Al70. As above with 65 keys, 70-command capacity. . $\$ 85$

## JA-RFS RF Modulator

Converts composite (baseband) video to RF so that video from an $A / V$ system can be viewed on a TV without a video input. Features selectable output frequency; video/TV switch for VHF antenna loopthrough: S-pin DIN connector and "F"-type for video in/TV out. . $\$ 50$

## JD-M100 6-Disc Magarine

Additional 6-disc magazine for use with any Pioneer ( $n$ changer. Includes a complete set of labels and hard plastic storage sleeve. Available in 5 -piece master carton . . . . . . . . . . . . . . . . . . . . . . . . \$ $\$ 15 \mathrm{ca}$ JD-M108. As above for CD-3's ............... . $\$ 15$

## PREMIER By SUMIKO

## Catalyst Interconnect Cables

Designed for low series inductance: zero audio
transfer loss: transposed twin axial internal wire for low magnetic interference: 1-end grounded shield: gold-plated connectors; connection points machined from solid body: teflon dielectric. Custom lengths available on request.
0.5 meter stereo pair . . . . . . . . . . . . . . . . . . . . . $\$ 50$
1.0 meter stereo pair $\$ 60$
2.0 meter stereo pair $\$ 80$

## VTA-16 VTA Adjustment Device

To adjust tonearm height even while record is playing; tooled to complement MMT and other arms with $16-\mathrm{mm}$ mounting posts.

## PIB-1 Interface Box

Terminates any standard tonearm JIS plug to goldplated female RCA's: eliminates drag on turntable suspension; electrically neutral interface for interconnect cable
$\$ 80$

## HS-12 Universal Headshell

Solid magnesium; double-lock pins; adjustable azimuth; linear-cystal oxygen-free copper wire; highrigidity mounting-hardware kit . . . . . . . . . . . . . $\$ 32$ HL-29. LC-OFC headshell wires used in HS-12 \$12

## PROTON

Equipment racks for audio systems
R12. Contains enough surface area to accomodate 6 components and several records; constructed of wood; protcctive glass door: comes with casters $\$ 259$ RIIA. Contains enough surface area to accomodate up to 5 components and several records; constructed of wood: comes with casters
\$239

## REALISTIC

## Walnut-Veneer Audio Cabinet

Tempered glass door; hinged top, heavy-duty swiveling casters; software storage space; unassembled. 45 x $18.37 \times 17.5$ in
$\$ 130$

## Hickory-Grained Audio Cabinet

Full-length tempered glass doors: hinged top; 3 adjustable shelves: storage space for LP's and tapes: metal supports; heavy-duty swiveling casters; unassembled: hickory-grained vinyl finish. $37.5 \times 21.25 \mathrm{x}$ 17.25 in.
$\$ 120$

## Tape Control Center

Connects to tape-monitor loop to allow use of three tape decks for monitoring, recording, and dubbing: with illustrated manual
$\$ 25.95$

## Micro Ilead Cleaner

Nonabrasive tape in microcassette-type shell cleans tape path of microcassette machines
$\$ 2.99$
Mini and Micro Tape Tray
Holds 12 minicassettes or microcassettes: smoketinted cover.
$\$ 2.49$

## Tape Recorder Maintenance

Lighted Demagnetizer. 3.5"; for all tape decks $\$ 13.95$ Universal Demagnetizer. For all tape decks; 2 angled tips $\$ 9.95$
Cassette I Head Demagnetizer. In cassette shell: works in 1 sec; with battery . . . . . . . . . . . . . . . . . . $\$ 9.95$ Demagnetizer/Cleaning Kit. Demagnetizer cassette. probe. mirror. solution, cloth
$\$ 5.95$
Cleaner Cassette. Felt pads clean heads. pinch roller. capstan; with 0.5 oz of fluid $\$ 3.99$ 8-Track Cleaner. Cleans heads and capstan rollers: nonabrasive . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.99$ Cassette Ilead Cleaner. Removes oxide from head and capstan; with fluid . . . . . . . . . . . . . . . . . $\$ 2.69$ Head-Cleaning Kit. With 6 -dram bottle of Freon TF solvent and 6 foam swabs $\$ 2.59$ Pro-Style Solvent. Freon dissolves dirt and oxides on heads: 2 oz
$\$ 2.39$
Head-Cleaning Spray. Removes dirt and oxide uithout residue.

8-Track Cleaner, Removes oxide from heads; nonabrasive. . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.99$ Cleaning Swabs. Reusable lintless foam; 10 pack. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.95$ Cassette Head Cleaner. Nonabrasive tape in cassettc shell. $\$ 1.89$
Recorder Cleaning Kit, $2 \quad 1.25-\mathrm{oz}$ bottes of cleaner and lubricant; 10 swabs . . . . . . . . . . . . . . . . . \$1. 69
Cleaning Cloths. To clean tapes and equipment dustcovers: 4 pack . . . . . . . . . . . . . . . . . . . . . $\$ 1.49$
Cleaning Sticks. Cotton-lipped $6^{\prime \prime}$ wood sticks; 100 pack. \$1. 29
Head-Cleaner Solution. Cleans heads, tape guides. capstans, metal parts: 2 oz. . . . . . . . . . . . . . . . $\$ 0.99$
"Nonslip" Solvent. Reduces slipping of idler wheels, belts. etc.: fast drying; won't harm rubber ... \$0.99

Cassefte Accessories
Tape Splicer. Chrome cut/trim lever; with splicing tape and instructions. $\$ 6.49$
Repair Kit. With 32-page manual. housing. labels. splicing materials $\$ 4.99$
Hand-Winder. For winding cassettes . . . . . . . \$3.99 Index Cards. Fits standard cassette boxes; 20 pack. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.19$
'Tape Housing. With $24^{\prime \prime}$ leader tape and instructions . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.19$ Cassette Boxes, Hinged; clear plastic: 3 pack. \$1.19 Index Iabels. Adhesive; 6 each of red, yellow, blue. green; total 24 . . . . . . . . . . . . . . . . . . . . . . . . $\$ 0.99$
Molded Mailers. Meets first-class postal regulations; 3 pack
$\$ 0.89$
Budget Mailers. Cardboard boxes with labels; meets
first-class postal regulations; 6 pack . . . . . . . $\$ 0.79$
Open-Reel Accessories
7-Inch Metal Reel. With box . . . . . . . . . . . . $\$ 6.95$
7-Inch Plastic Tape Reel. . . . . . . . . . . . . . . . \$1.39
Tape-Reel Holders. Fits most recorders: 2 pack $\$ 1.19$
5-Inch Plastic Tape Reel. . . . . . . . . . . . . . . \$0.99
3-Inch Plastic Tape Reel. With index and timing chart $\$ 0.69$

## General Tape Accessories

Bulk Eraser. For all tape except metal and videotape
$\$ 15.95$
Editing Block. Aluminum splicer for all tape sizes with $90 x$ and $45 x$ cutting guides: with blade and mounting strip
$\$ 3.99$
Foot Switch. Remote-control on/off switch for typing from dictation; submini plug. $\$ 2.99$
Universal Splicer. Dual guides; levers secure tape: with blade and instructions. $\$ 1.99$
Phone Pickup. Suction cup attaches to handset; 1/8" mini plug; may be incompatible with electronic phones. $\$ 1.99$ Sensing Tape. Metallic tape stops or reverses recorders with contact or photosensitive systems; $100^{*}$ roll.
$\$ 1.99$
Leader Tape. $7 / 32 \times 200^{\circ}$ roll .............. $\$ 0.99$
Splicing Tape. $100^{\prime \prime}$ roll: $7 / 32^{\prime \prime}, 3 / 8^{\prime \prime}$. or $1 / 8^{*}$ widths $\$ 0.79$

## RECOTON

## Beammaster FM Antenna

Beammaster $\mathrm{FM}-100$ powered omnidirectional FM antenna. Features obelisk shape; vertical or horizontal positioning; buitt-in amplifier; adjustable from 0 25 dB ; can boost signals up to 125 times. $17.23 \times$ 4.125 in .
$\$ 49.95$

## CD-23 CI) Mounting Bracket

Mounting bracket for portable CD players when used in cars. Features cushioned shock-absorbing platform: easy installation; can be mounted on-dash. under-dash, or on a center console. Comes with adjustable top and side brackets. Fits all portable CD players.
$\$ 22.95$

## 3-Inch CD Adaptor Ring

Adaptor for playing 3-inch CD singles in standardsize or table-top players. Sold in pairs . . . . $\$ 3.99 /$ pr

## REVOX

B209 Easyline Infrared Multi-Room Remote
Multi-room remote system controls volume, treble, bass, and balance of loudspeakers individually in each room. While one source plays in main listening area, different music source from main system can play simultaneously in remote rooms. Allows connection of independent music source in each remote room; system requires power amp, speakers adn B209 module in each remote room.
$\$ 995$

## B208 Hand-I leld Infrared Remote

Specifically designed to work with new generation of Revox units but can be used on all Revox remote controlable components. Keypad has over 55 functions; light indicator confirms selected commands
$\$ 160$

## RUSSOUND/FMP

## RD-4 Speaker Control

Switchbox for controlling 4 stereo speakers. Combination power switch, volume control and transformer. Features individually programmable outputs; automatic imp protection: 4 ohm speaker protection; $100 \mathrm{~W} / \mathrm{ch}$ max power handling; separate left and right grounds. $17 \times 5 \times 2.13 \mathrm{in} . . .$. . . . . . . . . . . $\$ 259.95$

## AV-4 Audio/Video Switcher

Accomodates up to 4 VCR's or 3 VCR's and one A/V processor. Features passive operation; separate audio and video switching; dubbing, editing, and processing capability: compatible with all VCR's. $17 \times 3 \times$ 1.75 in .
$\$ 199$

## MA-5 Matrix Recorder/Processor Audio Switch

Allows connection of up to 4 tape recorders and processors; can make 3 copies of a tape, or 4 copies of external source.
$\$ 89.95$

## VC-1 Remote Speaker Control

Volume control for 1 pair of speakers; portable; 10 position switch: 10-autostep transformer.
$\$ 75$
ALT- 2 Wall-Mount Stereo Volume Control
Features mechanically-shielded box; plate; knob. Depth $<2^{\prime \prime}$
$\$ 47.95$

## SAEC by ANALOG EXCELLENCE

UIS-3X L'niversal Headshell
Antiresonant ceramic headshell. Made of sintered multi-crystallized aluminum oxide of $>99.7 \%$ purity. 18 g
$\$ 85$
ULS-2. Composite headshell. 9.5 g .
\$28

## IX-1020 Interconnect Cable

Separate parallel OFC cable; RCA plugs treated with rhodium (platinum) . . . . . . . . . . . . . . . . . . . . . $\$ 40$

CX-5006A MC Pickup Cord
Separate parallel OFC cable; terminals treated with rhodium (platinum); imp 20-120 ohms; $1.5 \mathrm{~m} . \$ 52$ CX-5006B. As above except imp 1-10 ohms ... $\$ 52$

## SANYO

RBUI Universal Remote Control Transmitter
Programmable infrared remote control uses an 8 -bit microprocessor to 'learn' and use the infrared codes from as many as three different remote control products. Features multi-function controls to execute up to 87 functions from a 36 -button keypad: 5 LED) indicators monitor 'learn' mode operation; preprogrammed to work with current Sanyo remote control audio/video components; color-coded controls for easy operation. Uses 4 AA batteries . . \$100

## SCOTCH

Record Care System
3-way record protection-dust cleaning. static removal
and friction reduction with Sound Life fluid. Applicator attatches to turntable spindle to meter a controlled aniount of fluid onto pad.
Total System.
$\$ 27.99$
Sound Life replacement fluid
$\$ 8.19$

## Turntable Dust Guard

Conductive foam turntable pad reduces external electrostatic field to repel airborne dust
$\$ 6.99$

## ERK-130 Cassette Edit/Repair Kit

Contains precision splicing block: spindle for manually winding cassette tape; 6 polyester picks (adhesive tipped for retrie val of tape ends lost in housing); $6130-\mathrm{mt}$ splicing tabs; detailed instruction booklet
$\$ 3.59$
SK-.22. 12.5 ft of 1.9 mil polyester splicing tape in dispense- kit
$\$ 2.49$
\$41, 0.5* x $150^{*}$ splicing tape . . . . . . . . . . . . $\$ 1.20$

## Re-Label Tape

$0.75^{\prime \prime} \times 700^{\prime \prime}$ write-on white tape supplied in dispenser. For tabeling all types of audio cassette. Removable
$\$ 1.99$
S-C-HC Cassette IHead Cleaner
Cassette head cleaner.
$\$ 1.89$

## SENTRY INDUSTRIES

SENALD42 Delune Cabinet
Deluxe woodgrain linish with 4 -cushioned feet protect surfaces; each drawer holds 14 tapes or an aggregate of 42 cassette tapes: can be stacked; master carton $\mathbf{6 . 3 3}$ cubic feet; 37 lb .
$\$ 15$

## SENHOS080 Mini-Speaker System

Two mini-speaker system fits all personal stereos: wedge style increases bass response. Includes 3 ft . cord with 3.5 mm stereo connector, $4.37 \times 3.0 \times 2.62$ in. $\$ 13$

## SENAUD33 Promotional Cabinet

Deluxe woodgrain finish with cushioned feet to protect sufraces; each drawer holds 11 tapes with boxes or 16 tapes without boxes; can be stacked; master carton 4 cubic feet: 40 lb

## SENA30WD Audio Cassette Deck

Deluxe woodgrain finish with dividers to hold tapes securely; wall mounting; can hold 30 cassette tapes; master carton 3.46 cubic feet; 53 lb
$\$ 9.95$

## SERVICE MANUFACTURING

## Carrying Cases

1354. Nylon video camcorder bag for VHS Camcorder. Sony Beta Movie and most other video camera outfits and accessories
$\$ 100$
1355. Nylon video camcorder bag for most VHS-C and 8 mm video camera outfits and accessories $\$ 80$ 1306. Nylon video camcorder bag for many 8 mm and compact video cameras
$\$ 60$
WM1-1. Shock protected Regency nylon personal stereo waist pack with extra wide adjustable waist belt
$\$ 10$
SC-1. Padded vinyl universal carry case for scanners. walkie-talkies. and portable telephones . . . . . . . \$9

## CD Carrying Cases

CD132. Classic carrying case in deluxe flannel-like material holds 32 single or 16 double CDs in individual compartments . . . . . . . . . . . . . . . . . $\$ 30$ CDI 43. Same as above in deluxe leather-like vinyl. $\$ 28$
CD118. Classic carrying case in deluxe flannel-like material holds 18 single or 9 double CDs in individual compartments . . . . . . . . . . . . . . . . . . . . . . $\$ 25$ CD119. Same as above in deluxe leather-like vinyl..
CD216. Regency nylon carrying case holds 16 single or 8 double CDs in individual compartments . . $\$ 20$

## ACCESSORIES

CD206. Nylon case holds most portable CD players with battery pack and CD's.
$\$ 13$ CDW-1. Regency nylon compact wallet protects 6 CDs in individual pockets without jewel boxes; velcro mounting strips included \$12

## Cassette Carrying Cases

1860. Shock protected "Softie" patented dual purpose Regency nylon double sided carrying case for 60 boxed or 120 unboxed audio cassettes . . . . . . . . $\$ 30$ 1834. Carry case with patented dual purpose insen holds 30 boxed or 60 unboxed cassettes; expandable front pocket with velcro closure ; adjustable double buckle shoulder strap; leather-like vinyl. . . . . . . \$26 1824. Shock protected patented dual purpose case in deluxe flannel-like material for 30 boxed or 60 unboxed audio cassettes. Expandable front accessory pocket
\$25
1861. Same as above in deluxe leather-like vinyl $\$ 26$ 1805. Soft-style, padded, nylon case holds 30 boxed or 60 unboxed cassettes. Includes padded carry handles and shoulder strap
.$\$ 25$
1862. Deluxe padded vinyl library case holds 60 boxed or 120 unboxed audio cassettes . . . . . . . $\$ 22$ 2060. Padded, vinyl, double-sided case holds 60 boxed or 120 unboxed cassettes. Hi-tech design $\$ 20$ 1804. Padded nylon carrying case with dual purpose inser. Holds 30 boxed or 60 unboxed audio cassettes.
\$18
1863. Shock protected patented dual purpose carry case in deluxe flannel-like material for 12 boxed or 24 unboxed audio cassettes. Expandable front accessory pocket. 1832. Same as above in deluxe leather-like vinyl\$ 16 1802. Soft, padded nylon case holds 12 boxed or 24 unboxed cassettes.
\$15
1864. Deluxe padded vinyl attache case holds 24 boxed or 48 unboxed audio cassettes . . . . . . . . \$14 2022. Deluxe padded denim-look vinyl attache case for holding up to 24 boxed, or 48 unboxed audio cassettes . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 14$ 2061. Padded vinyl attache case for 24 boxed or 48 unboxed audio cassettes
1865. Padded vinyl atlache case for 24 boxed 14 unboxed audio cassettes $\$ 13$
1866. Padded nylon carrying case with dual purpose insert. Holds 12 boxed or 24 unboxed audio cassettes in individual compartments $\qquad$ \$13
1867. Deluxe padded vinyl attache case holds 12 boxed or 24 unboxed audio cassettes . ........ \$11 2025. Padded, vinyl, attache case holds 30 boxed or 60 unboxed cassettes
$\$ 11$
1868. Shock protected carry case in deluxe flannellike material with clear front window; will hold 10 boxed audio cassettes.
$\$ 10$
1869. Padded, vinyl, case holds 12 , boxed or 24 unboxed cassettes.
. $\$ 10$
1870. Padded vinyl carrying case for 12 boxed or 24 unboxed audio cassettes
$\$ 10$
1871. Padded, nylon cassette pouch holds 10 cassettes and/or most popular personal stereo/stereo cassette players.
1872. Shock protected nylon cassette pouch holds 10 cassettes and/or most personal stereo/stereo cassette players; adjustable shoulder strap doubles as a waist belt
1906A. Pa settes in individual compariments
1873. Cassette wallet holds 6 unboxed cassettes in padded enclosure S8

## SHURE

## M64A Preamplifier

Fixed-gain stereo preamplifier with switch-selected phono, tape EQ; for use with unequalized amplifier inputs, mic's, as buffer amp in "flat" position; on-of switch; two phono jack inputs; 120 V AC $50 / 60 \mathrm{~Hz}, 5$ W.
$\$ 102$

## TTR-117 Test Record

Test record for testing cartridge response under different conditions

SFG-2 Stylus Force Gauge
Allows precise setting of optimum stylus force for maximum trackability and sharply reduced wear on records and stylus tip
$\$ 9.25$

## SIGNET

## Cleaners

SK315. Auto CD cleaning system. Combines wet and dry cleaning automatically. After a timed wet cycle, the pad retracts and chamois-type pad dries and buffs disc. Auto shut-off. Includes cleaning fluid and 4 AA batteries.
$\$ 60$ SK316. Replacement fluid and pads for SK316. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$15/se SK305. Electronic stylus cleaner. . . . . . . . . . . . . \$40 SK306. Replacement fluid for SK 305. . $\$ 5$
SK301. Liquid stylus cleaning formula. . . . . . . . . \$6
SK302. Contact cleaner/restorer with 3 -way action Removes oxidation, leaves protective coating to slow-down future oxidation, serves as a contact enhancer. Tools allow thorough cleaning of plugs and jacks. For both audio and video components . . \$25 SK312. Compact Disc cleaner. Features soft leather chamois for surface dust and cleaning solution with optical quality cleaning cloths for tougher dirt . \$25 SK-310. Record cleaning system with low-residue cleaning and humidifying solution, convenient storage base. Unidirectional brush reduces static charges on vinyl record surface
SK309. Replacement fluid for SK310 and othe record-cleaning systems to reduce residues..... \$5 other SK $309 / 500$. 500 ml bottle of cleaning agent for SK310. \$20
SK307. Audio cassette cleaner tape. Features phil-lips-type cassette with alternating wet/dry cleaning system and cleaning fluid
$\$ 15$
Cables
SK481. CD high definition LC-OFC interconnect cable; 1.0 meter . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 60$
0.5 meter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 50$
2.0 meter . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 70$

VK410. Maximum Transfer video interconnect. Features multi-strand wide-bandwidth center conductor surrounded by as thick-foam dielectric for low capacitance and extended high-frequency response. 2 shileds of denses copper braid and conductive polypropylene layers insures noise-free transmission of video signal. Gold-plated male-to-male RCA connectors. I- and 3 -meter lengths . . . . . . $\$ 30-\$ 40$

VK411. As VK410 with gold-plated Quick-F to Quick-F connectors. 1-and 3-meter lengths \$30-\$40 VK412. OFC stereo audio/video cable; gold plated RCA to RCA; 3.0 meter. . . . . . . . . . . . . . . . . . . . $\$ 65$
2.0 meter, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 60$
1.0 meter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 55$

VK212. Economy OFC sterco audio/video cable: gold plated RCA connectors; 3.0 meter ..... . . $\$ 30$
2.0 meter.
\$25
1.0 meter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 20$

SK402. Litz wire interconnector; low capacitance/ low resistance; 10 meter. . . . . . . . . . . . . . . . . . . . $\$ 99$
1.5 meter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 45$
1.0 meter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 40$
0.5 meter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 35$

SK403. High-quality all-purpose OFC interconnect
cable with ground wire: 2.0 meter. . . . . . . . . . . . \$18
I. 5 meter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 17$
1.0 meter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 16$
0.5 meter . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$15

SK485. LC-OFC headshell wire set . . . . . . . . . \$15
VK421. Gold plated RCA to RCA barrel connector\$7 VK422. Gold plated F to F barrel connector . . . . \$7 VK423. Gold plated female RCA to male F connector. SM500. Music line maximum transfer speaker cable . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1 / \mathrm{ft}$ SM20. Music line gold plated terminal end speaker wire; 20 ft . . . . . . . . . . . . . . . . . . . . . . . . . . . \$40/pr
SM15. Same as above $15 \mathrm{ft} . \ldots . . . . .$.
SM10. Same as above $10 \mathrm{ft} . \ldots . . . . .$. . $\$ 26 / \mathrm{pr}$

HT18. HiTec 16 gauge speaker wire. . . . . . . \$.22/f HT16. HiTec 18 gauge speaker wire....... \$. $\$ .15 / \mathrm{ft}$ GB50. Gold plated banana plugs: $w / \mathrm{red} /$ black insulators . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$2.00/ea GS200. Gold plated spade lugs; w/red/black insula tors . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$.50/ca GP200. Gold plated terminal pins; w/red/black insulators
\$.50/ea

## Miscellaneous Accessories

MK12T Moving Coil Transformer. MC transformer to match low output MC cartidges to conventional magnetic phono inputs: selectable impedance. $\$ 350$ MK10T. Same as above without selectable impedance.

## SME by SUMIKO

SME Tonearm Cable
Van den Hul 2-meter tonearm interconnect cable with right-angle connector.
$\$ 275$

## SME FD IV

Provides fluid damping and arm height/VTA adjustment for the Series IV tonearm.
\$275

## Tonearm Cable

Van den Hul Model 501 mono-crystal twin axial cable with right-angle metal DIN plug and goldplated RCA connectors; separately terminated electrostatic shields.
$\$ 175$

## Headshell Wires

Each lead has 7 strands of silver litz wire terminated to gold-plated clips designed for max contact with carridge pins
. \$24

## SME Phono Plugs

Phono plugs
\$24/pr

## P 925 Headshell Spacer

Increases arm-to-record clearance without compromising rigidity; matches SME headshell; raises arm $0.12^{\prime \prime}$ when reset for previous stylus rake angle . \$18

## SONEX

## SONEX Acoustic Foam

Sound-absorbing acoustic foam sheets kill hackground noise and control room acoustics by absorbing peak frequencies caused by standing waves. resonances, slap echoes, etc. Anechoic-type wedge shapes traps and diffuses sound for the same live-end/deadend effect used in recording studios.
Juniors. $2^{\prime \prime}$-thick $24^{\prime \prime} \times 24^{\prime \prime}$ sheets. Box of 4 sheets.
$\$ 54.00$

## SONRISE CABINET SYSTEMS

All cabinets come in a choice of walnut or oak (medium, light, or dark stain)

## SG-11A Swivel Audio Cassette Ilolder

Dual-sided holder for 48 tapes. $14.88 \times 10 \times 6.75$ in.

SG-IIAL Stacking Audio Cassette Holder
Holds 40 tapes horizontally, each on its own shelf; $13.88 \times 19.38 \times 3.75 \mathrm{in}$.
$\$ 69.95$
SG-11DL Stacking Compact Disc Holder
One-sided unit holds 40 discs horizontally, each on its own shelf; $9 \times 21.5 \times 6$ in . . . . . . . . . . . . $\$ 69.95$

## SG-11LP Stacking Holder

Stacking holder for laser video discs or LP's. Holds 75 discs or LP's vertically; $14.5 \times 14.5 \times 13 \mathrm{in}$. Available in choice of high-gloss black, white, or grey lacquer finish.
$\$ 69.95$

## SG-11D Swivel Compact Disc Holder

Dual-sided holder stores 40 dises horizontally, each on its own shelf; $10 \times 11.25 \times 11.25 \mathrm{in}$; may be ordered without the swivel for stacking purposes . . . $\$ 69.95$

SG-D) Stacking Compact Dise Holder
Holds 45 single compact discs vertically, or a mix of single. double and triple discs; $9 \times 21.5 \times 6 \mathrm{in}$; choice of high gloss black, white, or grey lacquer . . $\$ 49.95$

All audio systems have 1" shelves, fixed shelf at 13.5" with tins to accommodate LP's, and hidden casters Come in a choice of walnut, oak. silkwood. rosewood. highgloss black/white/grey lacquer.

## E-1 Dawning

Audio cabinet with 3-adjustable shelves: I fixed-
shelf; exterior height of $49^{\circ}$
$\$ 392$

## SM-2 Morning Star

Audio cabinet with 2 adjustable shelves. I fixed shelf;
exterior height of $42.5^{\circ}$
$\$ 360$
SA-1 First Light
Audio cabinet with adjustable shelf and fixed shelf exterior height $34.5^{\prime \prime}$. . . . . . . . . . . . . . . . . . . . . $\$ 312$

| SONY |  |
| :---: | :---: |
| A V1-555ES Source Selector |  |
| Audio/video source selector | \$450 |
| XP-CD7 CD (leaner |  |
| Automatic cleaner for compact discs | \$59.95 |
| Portable CD Accessories |  |
| SRS-150. Self-powered portable speakers. \$190/pr |  |
| RM-DMIK. Remote Commander and receiver. $\qquad$ $\$ 49.95$ |  |
|  |  |
| CPM1-100P. Car mounting plate . . . . . . . . . \$49.95 |  |
| DCC-120. Car battery cord . . . . . . . . . . . . $\$ 36.50$ |  |
| CPA-1. Car cassette adaptor allows hookup of a portable CD player to a car head unit . . . . . $\$ 29.95$ |  |
| Ck-CI6. Carrying case designed for portable CD |  |
| players. . . . . . . . . . . . . . . . . . . . . . . . . . . \$ \$19.95 |  |
| CK-CD01. Soft carrying case for portable CD play- |  |
|  | \$12.95 |

## SOUND RUNNER

Sound Runner Oxygen Free Speaker Cables
Unplated high density' copper strand cables.
8108. 8 gauge; stranding $133 \times 29$.
$\$ 1.50 / \mathrm{ft}$
8110. 10 gauge; stranding $238 \times 34 \ldots .$. . $\$ 0.99 / \mathrm{ft}$
8112. 12 gauge; stranding $168 \times 34$; teflon version available $\$ 0.69 / \mathrm{ft}$ 8116. 16 gauge: stranding $67 \times 34$; teflon version available . . . . . . . . . . . . . . . . . . . . . . . . . . . \$0.49/ft

## STANTON

## 310B Professional Phono Preamp/Equalizer

Designed to correctly interface all Stanton-selected magnetic cartridges for optimum playback of records and calibration of audio systems. Features universal mounting brackets; selection of flat or NAB potemphasis curves: switchable rumble filter; individual gain adjust; high frequency responses; capacitivecartridge loading trim. Can be used in balanced and unbalanced modes and in-phase and out-of-phase mix of $L$ and $R$ ch for mono reproduction of older records. Output/ch +20 dBm max; gain/ch adjustable $30-60 \mathrm{~dB}$ : balanced or unbalanced output; outpul source imp 5 ohms, designed for loads 150 ohms or higher: FR $\pm 0.5 \mathrm{~dB}$ from $20-20,000 \mathrm{~Hz}$ in Flat or Nab positions; rHD $-0.05 \%$ al 20 dBm ; rumble filter 3 dB knee at $28 \mathrm{~Hz},-35 \mathrm{~dB}$ at 5 Hz ; max input level at 1.000 Hz 120 mV ; input resistance 47 kilohms; input capacitance 15 pF switchable in 50 pF steps to 350 pF max; ch sep 60 dB min 20-15.000 $\mathrm{H}_{\text {L }}$ RCA phono jacks (input), 5 -terminal barrier strip (output). $7.25 \times 2.5 \times 5 \mathrm{in}$
. \$280

## RC5-Plus Record Cleaner

Kit contains cleaning fluid that safely dissolves oily film, loosens microdust, other debris, leaves no residue. Contains antistatic ingredient. Comes with polarized brush and conductive handle. Can clean up


## ARC- 5 Carbon Fiber Brush

Safe, fast and effective method of record care. eliminates static build up. Manufactured from aerospace high-elasticity carbon fiber, each filament is strong and flexible to reduce breaking or shedding on the record. Contains $1,000,000$ filaments, each filament is $0.0003^{*}$ ( 8 microns) diameter, allowing filaments to track record grooves like a diamond stylus. removing dust particles and static charges $\$ 15$

SC4 Mini Stylus Cleaning Kit. . $\$ 8$

## SUMIKO

FB-1 Fluxbuster
Eliminates gradual magnetization of phono cartridges; designed to improve sonic performance in dynamic range. imaging. high-end linearity . . . \$250

## AC-11 Stylus Cleaner

All-in-I brush and bottle
$\$ 16$
Rigid Mounting Kit
Tools and hardware for mounting cartridges to tonearm. \$10

## SYMDEX

## Tonearm Adaptor

Adaptor that converts 5-pin phono plug to Tiffany RCA connectors to allow use of high quality interconnect cable between the tone arm and preamplifier. Uses copper wire in Teflon sleeving, gold Tiffany connectors. Includes mounting hardware.
$\$ 185$

## Spikes

Adjustable speaker feet that mount integrally into the base of speakers or wooden speaker stands for rigid coupling to the floor. Minimize speaker/floor junction area, with best results on rugs and carpets. Level adjustment compensates for uneven floors. Includes drill bit. Sold in sets of 8
. \$40/set

## TALWAR

## Audio Cabinels

All Talwar audio cabinets are hand-finished wood. and fitted with solid-hrass hardware. Feature I" solid hardwood sides: structurally reinforced joints; tempered and beveled glass; 8-receptacle power supply with overcurrent protection: air columns; wire management system with wells for interconnects; removeable back: heavy-duty piano casters; full extension drawer for tapes and accessories: adjustable shelves. (ustom-made units with different dimensions. marble tops. and exotic wood available
K-270 Inow-boy. 3-sections, solid red oak, 3 adjustable shelves. $70.5 \times 30 \times 20 \mathrm{in}$; $320 \mathrm{lb} \ldots . . \$ 5,610$ C-270. Solid cherry . . . . . . . . . . . . . . . . . . . \$6.340 M-270. Solid mahogany . . . . . . . . . . . . . . . . . $\$ 6.690$ W-270. Solid walnut . . . . . . . . . . . . . . . . . . $\$ 7.420$ K-420 Standard Unit. Constructed of solid red oak Features three fully-adjustable shelves. $24 \times 48 \times 20$ in; 140 lb . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.010$ C-420. Solid cherry . . . . . . . . . . . . . . . . . . . $\$ 2,270$ M-420. Solid mahogany . . . . . . . . . . . . . . . . $\$ 2.390$ W-420. Solid walnut . . . . . . . . . . . . . . . . . . . $\$ 2.660$ K-320 Standard Unit. Constructed of solid red oak. Features two fully-adjustabie shelves. $24 \times 36 \times 20 \mathrm{in}$; 120 lb . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.840$ C-320. Solid cherry . . . . . . . . . . . . . . . . . . . $\$ 2.090$ M-320. Solid mahogany . . . . . . . . . . . . . . . $\$ 2,200$ W-320. Solid walnut . . . . . . . . . . . . . . . . . . . \$2,440
k-220 Standard Unit. Solid red oak, I adjustable shelf. $24 \times 30 \times 20 \mathrm{in}$ : $100 \mathrm{lb} . . . . . . . . .$. . . . $\$ 1.760$

| C-220. Solid cherry | 980 |
| :---: | :---: |
| M-220. Solid mahogany | \$2.090 |
| W-220. Solid walnut | \$2.320 |
| Cabiner Accessories |  |
| Rack Mounting Angles |  |
| $24^{\prime \prime}$ with hardware for 5 components | \$64 |
| $36^{\prime \prime}$ with hardware for 8 components | \$98 |
| $48^{\prime \prime}$ with hardware for 10 components | \$129 |
| Cabinet Lights |  |
| 30" long interior light. | \$160 |
| $22^{\prime \prime}$ long interior light. | \$110 |
| Addirional Shelves and Drawers |  |
| Wood shelf. $16 \times 20 \times .75$ in | \$78 |
| Glass shelf. $16 \times 20 \times .5$ in | \$102 |
| Play-free sliders for turntables | \$129 |
| 4"-deep drawer for cassettes, accessories | \$119 |
| 6.5"-deep drawer for CDs, video tapes | . \$167 |
| SVC-1 Vibration Isolator |  |

Isolation base with air springs to decouple turntable from air-borne and structure-borne vibrations. Features one $24.25 \times 20.25 \times 1.5 \mathrm{in}$. polished granite supported by air mounts. Requires bicycle pump or compressor to pump air into unit. Resonant freq 2.9 Hz ; mas loads $200 \mathrm{lb} ; 24.5 \times 3.5 \times 20.25 \mathrm{in} ; 95$ lb.

## PL.F-2 Power-Line Filter

Eliminates subtle distortion caused by equipment interaction as well as power line noise and hash. Functions as a safety device for excessive voltage spikes and can be plugged between affected component and outlet. Features active-tracking circuits making it insensitive to load impedance and allows users to plug in any combination of components withour distortion, power line noise, or loss of signal strength.
$\$ 695$

## SN-1 Static Neutralizer

Eliminates electrostatically-charged air particles that cause dust and debris accumulation on records. Generates positive and negative ions simultaneously. Operates continuously while record is plaving. Fits onto turntable platform or clips onto dustcover. Power consumption 0.5 watts; discharges 5000 volts to safe levels ( $<100 \mathrm{~V}$ ) within 2 seconds. $6 \times 1.5 \times 1.5$ in; 3 lb .
. $\$ 368$
Front Panel Remote Switch
Allows control of the power strip to be turned on and off from the fromt panel of the cabinet using a heavyduty relay
$\$ 168$

## FVS-I Fan Ventilation System

Features rack-mountable pancl; I fan; filter; vibration isolator; all mounting hardware. Noise level 26 dBA: air flow 45 (FM. Black anodized steel panel. 19 x $6 \times 2 \mathrm{in} ; 4 \mathrm{lb}$
$\$ 169$
Additional fan
$\$ 62$

## GB-1: Grounding Bus Bar

High purity copper bus bar eliminates hum induced by ground loops. Mounts into cabinet side. Includes hardware for 2 components. $1 \times 12 \times 0.25 \mathrm{in}: 2 \mathrm{lb}: 12^{\prime \prime}$ long.
. $\$ 71$

## TDK

HD-11 Tape Deck Head Demagnetizer
Compact demagnetizer for open-rect or cassette decks. Color-coded LED's show charge status and operating mode. Plastic-covered pivoting tip discharges magnetic build-up on hard-to-reach heads. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 25.00$

HD-i) Cassette-Deck Head Demagnetizer
Battery-operated demagnetizer housed in casselte shell. Discharges magnetic build-up. Recommended for decks that activate transport withoul power.


Youll find the most helpful shopping information in the 116 page Crutchfield catalog.

## FREE Stereo Catalog

Refer to the Crutchfield catalog before buying your next car stereo, home stereo, or video product:

- 116 pages of helpful articles, consumer tips, charts, and installation guides.
- Color photos, complete descriptions and technical specifications on hundreds of the finest brand name products.


## You get more value shopping Crutchfield:

- Toll-free product advice, ordering, and customer service.
- 24 hour shipping.
- Absolute satisfaction guaranteed.
- Full 30-day return privileges.
- Discount prices on Sony, Pioneer, JVC, Teac, Proton, Advent, Clarion, Akai, Kenwood, Canon, AR, Infinity, Bose, and many more!


## Call or send this coupon now

 for your FREE Catalog
## 800-336-5566

Be sure to mention Stereo Review when calling

| Name |  |
| :---: | :---: |
| Address | Apt. |
| City | Zip |

1 Crutchfield Park, Dept. SR. Charlottesville. VA 22906

## ACCESSORIES

HC-1 Cassette-Deck Head Cleaner
Designed to keep recording heads clean by removing oxide particles. Fits into deck like ordinary cassette. Recommended for use after 8 hours of use . . $\$ 1.50$

HCW-01. Wet-Type audio cassette head cleaner . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 8.99$


## Cables

SAC-215. 15-ft low-capacitance shielded dual RCARCA interconnect cable.
$\qquad$ $\$ 7.79$ 2321. 25-ft coiled sterco headphone extension cable with $.25^{\circ}$ phone plug at I end and jack at other end . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 7.49$

## TECHNICS

## SH-R700 Intelligent A/V Remote Control

Features LCD; programmable; displays for CID. TV. VCR, and audio equipment; for table-top or handheld operation .
. $\$ 240$ SH-Rilo. As above, preset for use with Technics audio equipment. Can be programmed for video $\$ 120$

## SH-8000 Firequency Analyzer

Features 31 -point warble-tone generator and 5 setting sound-level meter; tweeter-protector switch; sensitive condenser mike; switchable (fast/slow) meter response speed for indication of transient or average peaks; battery check switch and meter indication; carrying case. FR $20-20,000 \mathrm{~Hz} \pm 2 \mathrm{~dB}$; frequency precision $\pm 6 \%$ or better; output level/imp $70 \mathrm{mV} / \mathrm{kilohm}$; SPL measurement range $35-105 \mathrm{~dB}$ SPL ( $0 \mathrm{~dB}=2 \times 10^{-4} \mu$ bar): power source $\mathrm{D} \cdot 9 \mathrm{~V}$ : battery life 10 hrs continuous operation; $8.47 \times 2.44 \times$ $4.81 ; 2.2 \mathrm{lb}$ . $\$ 190$

SH-F101 Indoor Active Tuned FM Wing Antenna Compact dipole for reception in strong signal areas. Features auto electronic tuning circuit; high gain: manual tuning knob; die-cast base; relative gain -2 db ; figure-8 pattern; half-power angle 90 x : output imp 75 ohm; standing-wave ratio 1.2 or less; power source DC 18 V : 19 lb .
.$\$ 125$

SH-90S Universal/P-Mount Headshell Adaptor
Combination headshell/adapter allows use of $\mathbf{P}$ mount cartridges in universal-headshell arms . . \$30

SH-S1 Tripod Stand
Tripod stand for SB-F1 and SB-F2 speakers . . . $\$ 50$
SH-S2. Angle mount for SB-F1 and SB-F2 speak-
ers . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 40$
SH-S3. Suspension chain, bracket for SB-F2 speak-
er . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 30$

## TRACKMATE

TM 351 Compact Disc Cleaner
Safely cleans CD's inside the disc storage case to protect the delicate label/mirror side of the CD and is approved to package a Kodak optical lens cleaning solution. Features a patented, non-abrasive brush geared for effective radial cleaning . . . . . . . . $\$ 19.95$

TM 451 Record Cleaner
Dual-brush record cleaner removes dust, oils, and static electricity. Includes a stylus cleaner .. \$14.95

## TM161 Cassette Cleaner/Demagnetizer

Features cleaning solution pen; cleaner/demagnetizer: jewelbox storage case
$\$ 14.95$

## TM301 CD Shield

Protects the recorded lable side of the CD from permanent damage. Contains 10 shields and free $C D$ case
$\$ 14.95$

## TM 151 Cassette Deck Cleaner

Audio cassette deck cleaner cleans the entire surface of all tape-contact components, an area $175 \%$ greater than the tape path itself.
$\$ 9.95$

## TREE DIMENSIONS

CD-250 Cassette-CD-Video Storage Unit Solid oak hand rubbed oil finish cabinet. Capacity for 260 CD's or 160 cassettes or 19 videos; $36 \times 23.5 \times 9$ in: 16 lb .
$\$ 89.95$

## CD-130 Cassette-CD-Video Storage Unit

Solid oak hand rubbed oil finish cabinet. Capacity for 130 CD's or 80 cassettes or 17 videos. $17.25 \times 20 \times$ $6.5-\mathrm{in} ; 7.5 \mathrm{lb}$
$\$ 49.95$
V-30 Cassette-CD-Video Storage Unit
Solid oak hand rubbed oil finish cabinet. Capacity for 88 CD's or 54 cassettes or 34 videos: $17.25 \times 20 \times 6.5-$ in; 7 lb .
$\$ 39.95$
CD-80. Same as above. Capacity for 88 CD's or 54 cassettes or 17 videos; $11 \times 20 \times 6.5-\mathrm{in} ; 5.7 \mathrm{Ib} \$ 39.95$ CD-50. Same as above. Capacity for 54 CD's or 33 cassettes or 10 videos; $11 \times 13.25 \times 6.5-\mathrm{in} ; 5.5$ lb........................................... . . . $\$ 29.95$ V-15. Same as above. Capacity for 44 CD's or 27 cassettes or 17 videos: $8 \times 20 \times 6.5-\mathrm{in} ; 3 \mathrm{lb} . \$ 19.95$

## TWEEK By SUMIKO

## Tweek Fluid

Reduces contact resistance and rectification effects in all metal-to-metal slip-on cunnections, such as cartridge leads, interconnects, speaker terminals. Designed to make metals act as if conductivity had been increased. Pre-cleaning needed only if contact is badly corroded or very dirty. Brush-on applicator

## Prices Listed

 are manufacturers' suggested retail prices (also referred to as list prices); actual selling prices are set by individual dealers. All prices are subject to change without notice.bottle with 0.75 cc diluted in 6.25 -cc isopropyl alcohol. Treats system 4 to 6 times. $\$ 18$

## ULTRALINEARBy ESS

## UL (0020 Speaher Stands

Speaker stands for almost any speaker. Walnut grain
\$28/pr

## VANDERSTEEN AUDIO

## OL-I MC Pre-Preamplifier

Moving-coil preamp with variable loading and highfrequency roll-off. FR $1-500,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$ : $\max$ outpul 2 V : THD $0.01 \%$; IMD $0.01 \%$ 1HF; $4 \times 2.5 \times 6$ in: 5 lb
$\$ 285$

## VOGEL'S by TEI ELECTRONICS

VE 2500 Speaher Base
3-position adjustable stand suitable for many speakers; sturdy impact-resistant ABS plastic; matte black: Max weight 55 ths: min base $10 \times 8$ in $\ldots . . \$ 44 / \mathrm{pr}$

## VE 2000 Speaker Stand

Epoxy-finished metal speaker stands with continuously adjustable slope angle. Speaker may sit unattached on stand or can be mounted to stand with double-sided tape or screws. For speakers with base at least $8.5 \times 7.5 \mathrm{in}$. Max weight $45 \mathrm{lbs} . . . . . . . . . \$ 37$ VE 3000. As above. max weight $66 \mathrm{lb} \ldots . . . \$ 45$

DUO 220 Speaker Bracket
Speaker clamping bracket designed for speakers whose rear-panel construction makes them unsuitable for mounting with conventional brackets. Speaker clamps between 2 foam-rubber-covered $85-\mathrm{mm}$ discs. Pivot point approx $6^{\prime \prime}$ from wall. Max weight 45 lbs
\$34/pr

## BEK 100 Speaker Brachet

Rotating speaker-mounting bracket can be fixed to virtually any wall. Can be adjusted vertically and horizontally. Black-finished steel supports 55 lbs Brackel completely hidden by speaker ..... \$23/pr

Minor 50 Speaker Bracket
Wall bracket for mounting smaller speakers. Continuously adjustable through 180 x horizontally and 30 x verically. Black-finished steel supports 10 lbs . Bracket completely hidden by speaker
\$12/pr

## Yale audio

"Set-It-To-Here" Position Markers
Adhesive vinyl appliques indicate where controls should be set. Includes straight and curved arrows: arrows pointing to lines: pointing hands; switches buttons in: buttons out. Useful for tone controls equalizer sliders, tape-monitor buttons. processing loops, ete. Black. red. or white.
$\$ 6.49$

## YAMAHA

YSR-20B Audio Cahinet
Fits all standard size components. Features glass lift top and doors. Black vinyl finish
$\$ 400$

## SLC-10 Equipment Rack

Black metal. fits all standard $19^{\prime \prime}$ rack mount components. Features rack or shelf mounting ( 4 shelves provided). 77 lb

## IVR-2H Video Cabinet

Holds up to $27^{\prime \prime}$ monitor and VCR. Features double glass doors. Black vinyl finish
$\$ 300$

## VS-IB Video Cabinet <br> Genuine oak cabinet holds up to $27^{\circ}$ monitor and

 CR. Fealures glass doors and caslers ... $\$ 350$SPS-A1 Speaker Stands
For NS-I. Feature dark wood finish
\$199/pr

## OUR BEST HEADPHONEEVER!

Nothing in our past listening experience prepared us for our first audition of the new DM-90 Digital-Monitor headphones. We were absolutely stunned. We then took the sample to our "golden ear" dealers, and they too were amazed!

The verdict: THE DM-90 AT \$99.95 IS EQUAL TO, OR BETTER THAN ANY OTHER DYNAMIC HEADPHONE ON THE MARKET, AT ANY PRICE!

Some headphones can be said to have extended deep bass, others smooth midrange, some, transparent highs and supericr dynamic range. Our new


## CALIFOANIA

Erys Electronics. Fremont - Down 10 Earth Sterex, San Dieqo e Wong's. Sunn Francisco e Frys Ele Euctroncs. Sunnyvate © Digral Ear, Tus
COLORAOO Sound Shop Colorado Spgs - Sounditrack. Deriver - Sound Company. Grand Junction OISTAICT OF COLUMEIA The Equalizer
Sound Advice. Al locations. GrandsMiart. Miami - La Mirage Mami GEORGIA
Atlanta Slareo, Allanta
Sound Pro. Borse •Inkleys. Idaho ILINOIS
Musicralt. All locatonse Stereo Systerns, Aurora, Johel, Napervile
MASSACHUSETTS MASSACMUSETTS Cameras lic. Arlington Adrays. Dearton MINNESOTA Campus Aurro. Minneapolvs Sound Pro, Bozeman - Thirsty Ear. MEW HAMPSHIAE Cuomos. Saiem NEW JERSEY Wiz-Hecord Dept. All locations -
Rands Camera, Toms Alver Rands Camera, Toms Alver - Samm
Sound, W. Calowell $\bullet$ Consumer Electroncs. Made Snade
NEW YORIK WEW YORK Wex - Record Depl. All localions Applance. Albary - Focus Elaciromes. Brooklyn e Brothers Camera, Manhatlan - Jems Sound
Manhatian © SAS Sound CMy Manhantan Eflh Avenue Electronn Manhattan
NE WEXICO NEW MEXICO PENHSYVVANIA Sound Advice, Doylestown - Studio One, Ene - Gota Elecrfonics. Shatom
UTAH
Inkleys, Logan. Ogden, Sall Lak City - Gadquts. Soll Lake City Evergreen Audio, Brementon - Slere Shoope. Thacoma Wrowning

CIRCLE NO 1 ON READER SERVICE CARD

## Want more

 product information? Turn to page 208.Whenever a product advertised in Stereo Review sounds interesting, turn up the volume!

Use our FREE INFORMATION SERVICE to get the detailed facts and figures you need to make sound purchasing decisions.

Manufacturers are only too glad to send you their literature . . . free and without obligation.

Just make a note of the Reader Service Number at the bottom of an ad, and circle that number on the FREE INFORMATION SERVICE card facing page 208. Fill in your name and address and drop the card in the mail. No postage necessary.

> THE NEXT TIME AN AD TURNS YOU ON, TURN TO THE

## POCKETSTEREO



## AIWA <br> HS-J8010 Recording Pocket Stereo

Stereo recording capability complete with detachable one-point stereo mic. One hour quick charge battery system that includes ac adaptor/charger and an Aiwa

lead rechargeable battery for up to three hours playing lime. Features built-in clock and AM/FM synthesizer tuner with $1(\mathrm{D})$ display: autoreverse: Dolby B: metal and normal tape selection; includes battery case, carrying case, and headphones . . \$240 HS-T800. Same as above without recording capabilities.
. $\$ 220$

## HS-J 380 Recording Pochet Stereo

AM/FM recording pocket stereo with built-in clock and $A M / P M$ synthesizer tuner and $t(b)$ display. Cassette unit with autoreverse: Dolby B: metal/normal tape selection. Includes headphones, belt clip and stereo mic. . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 160$ 11S-I 380. As above, no recording . . . . . . . . . \$1.30

## 1IS-J360 Autoreverse Pocket Stereo

Pocket cassette player/recorder with $4 \mathrm{M} / \mathrm{FM}$ radio. Features stereo recording directly from built-in tuner. built-in electret mic; 3-way autoreverse; anti-rolling mechanism: auto stop; LEI indicator lights for operation and battery strength. Ac operation with optional AC-620 or RB-100 adaptors. Operates on rechargeable Ni -cad battery. $4.56 \times 3.06 \times 1.25$ in.. $\$ 130$

## HS-1280 AM/FM C'assette Player

AM/FM cassette pocket stereo with I(I) display and five station memory preset synthesized tuner. Features Dolby B: metal/normal tape selection: antirolling tape mechanism. Compatible with rechargeable Ni-Cad batteries and comes with headphones and belt clip. Available in black or white finish . . . $\$ 100$

HS-G:360 Autoreverse AM/FM Pocket Stereo
Features Dolby B NR, 3-band graphic EQ; metal/ (rO, tape selector: anti-rolling mechanism; compatible with rechargeable Ni -cad batteries. Uses 2 at batterics. $4.5 \times 3.38 \times 1.38$-in; $10.0107 \ldots . . . \$ 65$ HS-T260. Same as above without autoreverse and graphic EU. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 65$ 11S-T230. Same as HS-T260 without Dolby . . . $\$ 60$

## HR-SOIMKIJ AM/FM Pocket Stereo

Features folding headphones: second headphone jack. Uses $24+$ batteries. 4.6 oz
$\$ 75$

## JIS-P12 Headphone Cassette Player

Stereo headphone compact cassette player features anti-rolling drive mechanism: metal tape selector:
auto stop: belt hanger. A vailable in black (HS-PI2B). white (P-12A), or burgundy red wine ((P-12R) . $\$ 40$

## EMERSON

## CRR100CS AM/FM Recorder/Player

Built in condenser mic, record directly from tuner. IS power 3 V: 2 A A batteries ( $n$ ot included): belt clip: stereo headphones; $5.5 \times 3.5 \times 1.6$-in........

## (RS260CS

Graphic equalizer $\rightarrow \mathrm{M} / \mathrm{FM}$ portable stereo cassette. 4M/FM stereo switching: stereo headphones: autostop tape mechanism: attached belt clip; $3 \mathrm{~V}: 3.5 \times 5.1$ x 1.4 - in .
$\$ 49$

## CRS 24

AM/FMstereo switch; lightweight headphones: Fmstereo indicator: rotary tuning and volume controls: attached belt clip; $3 \mathrm{~V}: 5.3 \times 3.5 \times 1.4$-in. . $\$ 39$

## CS15CS

Stereo cassette tape player. Auto-stop tape system: lightweight stereo headphones: fast forward control: attached belt clip; $3 \mathrm{~V}: 3.5 \times 4.5 \times 1.8-\mathrm{in} . . . . . \$ 24$

## GE CONSUMER ELECTRONICS

7-1990 Pocket AM/FM Stereo
Mini-size portable $4 \mathrm{M} / \mathrm{FM}$ stereo radio. Features earbud-type headphones; adjustable armband; uses I


AtA-size battery: blue-and-yellow; rotary volume and tuning controls: band selector . . . . . . . . . . . . . . \$27

## HITACHI

CP-203R AM/FM Cassette Recorder
With headphones; locking rewind; auto stop; built-in condenser mic; $4 \mathrm{M} / \mathrm{FM}$ tuner: <1 lb. . . . . . . . . . $\$ 60$

CP 201R AN/FM Cassette Player
Auto stop: fast forward and rewind: FM $4 F C$ : headphones: carrying clip; needs 2 At batteries. FK $60-$ $12,000 \mathrm{~Hz}$ with normal tape $3.33 \times 5.5 \times 1.36$ in $\$ 30$

## JVC

CS-R9 Pocket Radio/Cassette Recorder Combination pocket AM/FM stereo radio and autore
verse cassette recorder with remote control. Features full-logic cassette mechanism; recording capability with external mic: rechargeable battery: bass enhancer: headphones . . . . . . . . . . . . . . . . . . . . . . $\$ 300$

## CX-F3K Pocket Radio/Cassette Player

 Combination pocket + M/FM radio and cassette player with 5 -band SEA graphic equalizer. Features headphones: Dolby B noise reduction: autoreverse: tape selector.$\$ 100$

## CN-F2K Pocket Radio/Cassette Player

Combination pocket AM/FM radio and cassette player with 3-band SEA graphic equalizer. Features headphones: autore verse: tape selector. . . . . . . . . . . \$100

## LENOXX

868 A M1/F M Stereo Recorder with Speakers
AM/FM stereo cassette recorder with built-in speakers and 3-band graphic cqualizer. Features $4 \mathrm{M} / \mathrm{FM} / \mathrm{FM}$ stereo slide rule tuner: records from $九 \mathrm{~m} / \mathrm{FM}$ or buittin mic: auto level control for recording: auto stop: FM stereo muting switch; built-in FM antenna: telescoping FM antenna; built-in condenser mic; lightweight headphones: $5.76 \times 3.5 \times 1.75 \mathrm{in}$; 11.507 ; uses $2-\mathrm{AA}$ batteries
.$\$ 59$
935 AM/FM Cassette Player with 3 EQ
Personal cassette player features slide-rule tuner: 3 equalizers: lightweight, adjustable headphones: auto stop: removeable belt clip: uses 2-AA batteries. $\$ 39$

900 Personal Receiver with Cassette Player AM/FM/FM stereo portable receiver with built-in stereo cassette player. Features lightweight, adjustable headphones: removable belt clip: auto stop: slide-rule tuner: stereo headphone jack: DC input jack: FM stereo muting switch; $6 \times 3.5 \times 1.5$ in: uses 2 AA batteries
$\$ 29$

## 894 Stereo Cassette Player

Plays all stereo or mono cassettes and metal tapes: Features rotary volume control: lightweight. adjustable headphones; built-in belt clip; $3.5 \times 4.75 \times 1.5 \mathrm{in}$; uses 2-AA batterics.
\$19

## 882 AM/FM Headphone Radio

Headphone radio receives $\mathrm{AM} / \mathrm{FM}$ broadcasts. Features adjustable headband; unbreakable antenna with safety tip: $6.5 \times 6 \times 1.75 \mathrm{in}$; uses 2-A.A batteries $\$ 10$

## PANASONIC

RX-SA 255 FM/AM Stereo Cassette Player FM/AM/FM personal stereo radio cassette player with remote control and rechargeability. Features Ni-Cad Battery charger provides 3-hour playback on 2-hour charge: auto-reverse/reverse mode selector: Jolby NR: metal/CrO2 normal tape selector: DX-local FM sens selector: FM stereo/mono mode selector: volume and tone controls: lightweight stereo earphones; LED power/batt indicator: jacks for DC-in and headphone: battery charger and case; $4.5 \times 2.94 \times 1 \mathrm{in} ; . .38$ lb ; operates on 2 AA batteries. $\$ 249$

RX-SA79 AN/FM/Cassette Pocket Stereo Exira Bass System (off, light, or heavy): autoreverse: NiCad battery charger for 3 hrs of play: 3 -band graphic equalizer: Dolby NR: IXX/local FM-sens
switch; headphones; belt clip: auto stop: uses battery charger or I AA battery. 9 oz
$\$ 169$


Panasonic R.X:S.42.55
RX-SA73 FM/AM Stereo Radio Cassette Player FM/AM/FM personal stereo radio cassette player with 3-band graphic equilizer and rechargeability. Features Ni-Cad battery charger provides up to 3 hours of playback on 2 -hour charge; auto-reverse/reverse mode selector: direction control: dolby NR: antirolling mechanism; auto-stop; DX-local FM sens selector: vol and tuning controls; LEI) tape/batt indicator: jacks for $D(-$ in and headphone: detachable belt clip: $4.5 \times 3.06 \times 1.13 \mathrm{in}$; 5 lb
$\$ 139$

## RF-HX7 FM Stereo Radio Headphones

FM stereo tuner built into headphones with cord to connect to pocket cassette player or portable CD player. mica-filled flat diaphragms: soft muting: FM stereo/mono switch; power LED; LC-OFC connection cord and phone plug adaptor: needs 2 AAA batteries 5.5 oz .
$\$ 109$

## RX-SA78 AM/FM/C assette Pocket Stereo

I radio-station preset; headphones; autoreverse; built-in 5-band graphic equalizer: Dolby NR: anti-roll mechanism; bias/EQ for normal or chrome/metal tape: DX/local FM-sens switch; FM sterco LED; belt clip; needs 2 AA batteries. 902
$\$ 109$
RX-SR 39 FM/AM Stereo Radio Cassette Recorder FM/AM/FM personal stereo radio cassette recorder with built-in front speaker and sound level equalizer. Features Ni-Cad battery charger; built-in condenser microphone; high/low tone selector; electronic pause control: auto-stop; IDX-local FM sens selector: FM stereo/mono mode selector: EC -in, ext. stereo mic and headphone jacks: detachable belt clip: $4.88 \times 3.38$ $\times 1.5 \mathrm{in}$; .5 lb ; Operates on 2-AA batteries .... $\$ 109$

## RX-SA67 FM/AM Stereo Cassette Player

 FM/AM/FM personal stereo radio cassette player with XHS and auto-reverse. Features anti-rolling mechanism; DX-local FM sens selector; forward/reverse direction control; LED FM stereo indicator: stereo headphones; detachable belt clip; jacks for $\mathrm{IC}-\mathrm{in}$ and headphone: $4.88 \times 3.38 \times 1.5 \mathrm{in}: .69 \mathrm{lb}$ : Operates on 2 AA balleries$\$ 89$
RX-SR29 FM/AM Stereo Radio Cassette Recorder FM/AM/FM personal stereo radio cassette recorder with cue and review controls. Features one-touch and follow-up recording: built-in FM/AM/FM stereo tuner; built-in condensor microphone; electronic pause control: DX-local FM sens selector; FM stereo/mono mode selector; beat proof switch; auto-stop; lightweight stereo headphones: detachable belt clip: jacks for $D(-i n$, ext stereo mic, and headphone: $4.88 \times 3.38$ $\times 1.5$ : 5 lb .
$\$ 89$
RF-IIDS FM Stereo Hleadphone Radio
Splash-proof collapsible radio with rubber helical
whip antenna; FM stereo/mono switch: DX/local FMsens switch; plays up to 30 hrs on one AAA battery (not included). 3 oz
$\$ 74$

## RX-SA66 AM/FM/Cassette Pocket Stereo

Autoreverse: Ultra-Phonic mode to boost highs and lows; anti-roll mechanism; DX/local FM-sens switch; FM sterco LED: belt clip. FF and rewind: headphones: needs 2 AA batteries or optional AC adaptor. 5.5 oz. $\$ 69$

RX-SA64 FM/AM Sterev Radio Cassette Player FM/AM/FM personal stereo radio cassette player with 48 -hour playback time. Features buill-in roll-up stereo earphones: auto-stop DX-local FM sens selector; volume and tuning controls: LED FM stereo indicator; head phone jack: $4.88 \times 3.38 \times 1.5 \mathrm{in}$; .69 lb ; Operates on 2-C batteries
$\$ 49$

## RX-SA 60 AM/FM/Cassette Pocket Stereo

With headphones; auto stop: DX/local FM-sens switch: FF and rewind: FM stereo LED; belt clip, needs 2 AA batteries or optional AC adaptor; ir black. red, pink. or silver. 8 oz
$\$ 45$

## RF-H6 AM/FM Collapsible Headphone Radio

FM/AM/FM stereo headphone radio with collapsible design. Features built-in FM stereo/AM tuner; openair head phones FM stereo/mono mode selector; DXlocal FM sens selector; rotary vol and tuning controls: ext. antenna jack and included FM antenna cord. . 19 lb ; Operates on I AAA battery $\$ 44$

## RF-H2 FM Stereo Headphone Radio

Open-air design; FM stereo/mono switch; DX/local FM-sens switch; built-in and external antennas; needs I AAA battery: in yellow, red, or lavender. 2 oz
$\$ 35$

## RQ-JA52 Stered Cassette Player

Stereo cassette player with lightweight stereo headphones. Features auto-stop; volume control; detachable belt clip: DC-in and headphone jacks: optional AC adaptor: $4.5 \times 3.38 \times 1.44 \mathrm{in}: .44 \mathrm{lb}$; Operates on 2 AA batteries
$\$ 25$

## RF-423 AM/FM Stereo Headphone Radio

FM/AM/FM stereo radio with lightweight stereo headphones. Features FM stereo/mono mode selector: lED FM stereo indicator: slide-rule tuning dial: detachable belt clip; headphone jack: lightweighı stereo headphones: $4.38 \times 2.5 \times .94 \mathrm{in}$, 25 lb : operates on afa batteries.
$\$ 24$

## QUASAR

GX3677 Cassette/AM/FM Pocket Stereo
Features autoreverse; metal/chrome capability; built-

in condenser microphone. Use 2 4a batteries. $\$ 100$

GX3676 Cassette/AM1/FM Pocket Stereo
Features 3-band equalizer: autoreverse with direction button; lacal/DX switch; anti-roll mechanism; FM


AFF: tone switch. Detachable belt clip and lightweight headphones included. Uses 244 batteries. $3.31 \times 5 \times$ $1.5 \mathrm{in}: 1^{1} \mathrm{oz}$
$\$ 60$

## CX3667 Cassette/AM/FM Pocket Stereo

Features lightweight headphones; auto stop: fast forward and rewind: LED FM stereo indicator: local/DX switch. available in black, pink, or lavender. Uses 2 at batteries.
$\$ 35$

## REALISTIC

## SCP-5 AM1/FM Stereo Cassette Recorder

Autoreverse: Dolby B; EQ switch for all tapes; LED's for tape direction, FM stereo, low batteries; belt clip; needs 24 A batteries. $5.75 \times 3.5 \times 1.4 \mathrm{in}$
\$80

## SCP-17 Stereo Cassette Recorder

Mono speaker: records in stereo with built-in mics: jacks for external mics; FF and rewind; $L$ and $R$ volume controls: compatible with rechargeable batteries: case with shoulder strap; needs 2 AA batteries. $5 \times 3.4 \times 1.9 \mathrm{in}$.
$\$ 80$
SCP-19 Stereo Cassette Player
Dolby P: autoreverse; EQ switch for all tapes: 1 ED's for tape direction, batteries; belt clip: needs 2 AA batteries. $4.75 \times 3.5 \times 1.4 \mathrm{in}$.
$\$ 60$

## SCP-24 AM/FM Stereo Cassette Player

L and R volume controls: FM stereo/battery LED; detachaole belt clip; auto stop; needs 3 AA batteries. $5.7 \times 3.7 \times 1.6$ in.
$\$ 40$

## SCP-20 Stereo Cassette Player

Equalizer boosts or cuts bands centered at $100,1,000$. and 10.200 Hz : auto stop: LED for batteries: detachable belt clip; needs 2 AA batteries. $4.5 \times 3.25 \times 1.3$ in.
$\$ 30$

## SCP-22 Stereo Cassette Player

L and R volume controls: auto stop: LED for batteries: detachable belt clip; needs 2 A A batteries. $4.5 \times 3.5 \times$ 1.4 in.
$\$ 25$

## SCP-20 Stereo Cassette Player

Weatherproof housing: belt clip; needs 2 AA batteries. $4.75 \times 4.1 \times 1.75$ in
$\$ 30$

## RHAPSODY B) ALARON

RY-381 AM/FM/Cassette Pocket Stereo
Cassette pocket stereo with 4M/FM tuner. Features FM-stereo indicator; stop. FF, play cassette operation; belt-clip; slide volume control: stereo headphone: 3 V
[ X - input jack. Uses 2 Aa batteries. $5.38 \times 3.75 \times 1.75-$
in. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 35$
RY- 378 AM/FM/Cassette Pocket Stereo
Cassette pocket stereo with AM/FM tuner. Features auto-stop; stop, FF, play cassette operation; belt-clip; volume control; stereo headphone. Uses 3 AA batteries. $6.38 \times 3.5 \times 1.38-\mathrm{in}$
$\$ 30$

## RY-280 Solar AM/FM Pocket Stereo

Solar cells recharge built-in Ni-Cad battery. Includes folding lightweight headphones; adjustable elastic arm band: pocket clip. $3.5 \times 1.63 \times 0.75-\mathrm{in} \ldots . \$ 30$

## RY-275 AM/FM Pocket Stereo

Includes folding headphones; adjustable elastic arm band; transparent pouch for all-weather use. $3.75 \times$ $1.25 \times 0.63$
$\$ 24$

## RY-278 AM/FM Headphone Receiver

AM/FM-multiplex featherweight headphone radio with adjustable headband that folds up for storage. Features foam-padded earpieces; LED stereo indicator; in-out jack: doubles to connect with other personal or home stereos (connecting cables not included); operates on 2 aA batteries (not included). $\$ 17$

## RY-270 Cassette Pocket Stereo

Cassette pocket stereo features slide volume control: stereo headphone; high-impact case. Uses 2 4A batteries. $4.25 \times 3.25 \times 1.38$-in


RY-212 AM/FM/Cassette Pocket Stereo
Cassette pocket stereo with AM/FM tuner. Features FM-stereo indicator: beli-clip; carrying strap; t./R volume controls; stereo headphone. Uses 2 4t batteries. Available bluc, black, or mauve; $5 \times 3.25 \times$ 1.38-in.
.$\$ 12$

## RY-273 Mini FM Receiver

Features headphone; slide switch for power and volume. Uses 3 a 76 button-cell batteries (not included). $3 \times 1.25 \times 0.44-\mathrm{in}$
. $\$ 10$

## SANSUI

EM-P2 Cassette Player/Mixer/Amp
Designed for musicians and vocalists. Features play; stop; rewind/review; fast forward/cue; tape/tone

selector; volume; headphone jack accepts plugs from musical instruments: stereo line-out jack: built-in mic; echo control; $\pm 15 \%$ pitch control . . . . . $\$ 175$

## SANYO

MGR95R Pocket AM/FM Stereo Cassette Player Mini-size AM/FM tuner/cassette player with autoreverse. Features recording from detachable stereo mic or from either radio band: EBSS (Extended Bass Sound System).

WR66 Pocket AN1/FM Stereo Cassette Player
Mini-size splash-proof cassette player with built-in AM/FM tuner. Features specially sealed case; antirolling mechanism; AFC; stereo/mono switch; FMstereo indicator: auto-stop mechanism; stereo head
phones; belt clip; locking fast winds. Uses 2 at batteries 880

## MGR85D Pocket AM1/FM Stereo Cassette Player

 Mini-size AM/FM tuner/cassette player with auto-everse. Features Dolby noise reduction: 3-band graphic EQ; cue and review; rechargeable capability; EBSS bass enhancementMGR87 Pocket AM/FM Stereo Cassette Player
Mini-size autoreverse cassette player with built-in M M/FM tuncr. Features 3-band graphic equalizer: rechargeable capability; auto-stop mechanism; locking fast winds; FM-stereo indicator: lightweight headphones: belt clip. Uses 2 AA batteries. Available in black, white, or red.
. $\$ 00$
MGR84RG Pocket AM/FM Stereo Cassette Player Mini-size AM/FM tuner/cassette player. Features 3 band graphic equalizer; auto stop; stereo headphones; FM stereo indicator; detachable belt clip: rechargeable AA-size batteries; Ac charger . . . . . . . . . . . . . . . $\$ 55$ MGR84. As above, without batteries or charger $\$ 50$

## MGP34RG Pocket AM/FM Stereo Cassette Player

 Mini-size AM/FM tuner/cassette player. Features 3band graphic equalizer; lightweight stereo headphones; locking fast-forward: detachable belt clip; 2 rechargeable AA-size NiCd batteries; AC charger $\$ 40$ MGP34. As above. without batteries or charger $\$ 35$
## RP90 Headphone Radio

One-piece AM/FM stereo headphone radio. Features folding headband; thumbwheel volume and tuning controls; telescopic rod antenna. Comes in red. black. and yellow. .
\$35

## SHARP

Optonica Pocket JC-870 AM/FM/Cassette Player Ultra-mini-size unit. Features full-logic autoreverse: wired remote control; AM/FM stereo; Dolby B noise

reduction; X-Bass; rechargeable battery pack; antirolling mechanism; oxygen-free copper cord for headphones.
. $\$ 250$

## Optonica Pocket JC-280 Cassette Player

Ultra-mini-size portable cassette player with Dolby $B$ and $C$ noise reduction. Features full-logic autoreverse: wired remote control: X-Bass; rechargeable battery pack; amorphous head; gold-plated jack and headphone plug: anti-rolling mechanism: oxygenfree copper cord; ultra-thin headphone plates. $\$ 230$ Optonica JC-270. As above without ultra-thin headphone plates or Dolby C NR
. $\$ 200$

## JC-K15G Pocket Cassette Player

Ultra-mini-size cassette player with Dolby B noise reduction. Features autoreverse; bass-boost system: metal-tape capability; headphones; LED power indicator.
\$130

## JC. 534 Pocket Radio/Cassette Player

Mini-size unit with autoreverse. Features X-Bass; Dolby NR: 3-band graphic equalizer; anti-rolling mechanism; AM/FM stereo radio; LED batterystrength indicator; detachable belt clip: headphones. .


Sharp JC:K15G

## JC-R88 Pocket Radio/Cassette Player

Pocket 4 M/FM stereo radio and cassette player. Features autoreverse: 3-band graphic equalizer: antirolling mechanism. Available in black, blue, red. and yellow.
. $\$ 80$

## JC-516 Pocket Radio/Cassette Player

Ultra-compact size pocket radio/cassette player with autoreverse and 3-band graphic equalizer; antirolling mechanism. A vailable in black, blue, red, and silver . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 70$ JC-136. As above without graphic equalizer . . . \$30

## JC-508 Pocket Radio/Cassette Player

Features autoreverse; lockable FF/REW controls: antirolling mechanism; LEI) FM-stereo indicator: lightweight headphones; belt-clip. Available in black or red. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 50$

## JC-128 Pocket Radio/Cassette Player

Compact-size pocket radio and cassette player. Features volume control: FF: REW: STOP. Available in pink, yellow, black, blue, and red .

JC-130 Pocket Radio/Cassette Player
Features lightweight headphones; auto-stop system; locking fast-forward; detachable belt clip: FM-stereo indicator.
$\$ 30$

## SONY

## WM-D6C Pocket Cassette Recorder

Features record and play modes; Dolby B \& C: disc quartz-lock drive system; stereo mini microphone jack: anti-rolling mechanism; 3-way power supply. Includes headphones, case. and connection cord. Uses 4 ta batteries. $6.74 \times 1.5 \times 3.75 \mathrm{in}$; $1 \mathrm{lb} .7 \mathrm{oz} \$ 400$

## WM-D3 Pocket Cassette Recorder

Features record and play modes; Dolby B \& C; disc drive; stereo mini microphone jack: anti-rolling mechanism; 3-way power supply. Includes headphones, case, connection cord. and strap. Uses 2 AA batteries. $5 \times 1.38 \times 3.25 \mathrm{in} ; 13.1 \mathrm{oz}$.
. $\$ 270$

## WM-F200II Pocket Cassette/Radio

Features autoreverse; record and play modes; Dolby B; stereo mini microphone jack: belt drive system: anti-rolling mechanism; AM/FM tuner; local/Dx switch; 3-way power supply. Includes headphones. rechargeable battery, charger, one-point stereo microphone, and case. $2.75 \times 4.38 \times 0.88 \mathrm{in}: 8.2 \mathrm{oz} \$ 250$

## WM-F109 Pocket Cassette/Radio

Features remote control; rechargeable battery; Dolby B noise reduction; autoreverse; belt-drive system: anti-rolling mechanism; $A M$ mono and $F M$ stereo reception; local/DX switch. Comes with charger, battery, and carrying case: $4.5 \times 2.88 \times 1$ in: 7.4 oz. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 230$

## POCKETSTEREO

## WM-F601 Pocket Cassette/Radio

Features Sony Mega-Bass; Dolby B noise reduction: autoreverse: rechargeable battery; belt-drive system; anti-rolling mechanism; AM mono and FM stereo reception; local/Dx switch. Comes with battery, charger, carrying case, and $D C$-in charger. $4.25 \times 2.75$ $\mathrm{x} .91 \mathrm{in} ; 6.7 \mathrm{oz}$
. \$220

## WM-F100111 Pocket Cassette/Radio

Features autoreverse; Dolby B; belt-drive system; anti-rolling mechanism; AM/FM tuner; local/DX switch: 3-way power supply. Includes headphones, rechargeable battery, charger, and case. $2.75 \times 4.36 \times$ $0.78 \mathrm{in} ; 7.1 \mathrm{oz}$.
$\$ 160$

## WM-100111 Pocket Cassette Player

Features play mode; Dolby B; belt-drive system; antirolling mechanism; autoreverse; headphone; comes with batteries, charger, and carrying case. $4.38 \times 2.75$ x .78 in ; 6.7 oz
. $\$ 140$

## WM-F73 Pocket Cassette/Radio

Features autoreverse; Dolby B; water-resistant design; belt drive system; anti-rolling mechanism; AM/FM tuner; local/DX switch; 3-way power supply. Includes headphones and belt clip. Uses 2 aA batterics. $3.48 \times 4.53 \times 1.42 \mathrm{in}$; $11.2 \mathrm{oz} . . . . . . \$ 120$

## WM-AF64 Pocket Cassette/Radio

Features preset tuning: Dolby B noise reduction; autoreverse; belt-drive system; anti-rolling mechanism; AM mono and FM stereo reception; local/DX switch. Comes with belt-clip. $4.63 \times 3.5 \times 1.5 \mathrm{in} ; 8.7$ oz.
$\$ 100$
WM-F46 Pocket Cassette/Radio
Features record and play modes: stereo mini microphone jack; belt-drive system; AM/FM tuner; local/DX switch: 3-way power supply. Includes headphones and belt clip. Uses 2 AA batteries. $3.47 \times 5.5 \times 1.45 \mathrm{in}$; 12.3 oz .
$\$ 80$

## WM-F45 Pocket Cassette/Radio

Features water-resistant design; belt-drive system; anti-rolling mechanism; AM/FM tuner: local/DX switch. Includes headphones and strap. Uses 2 AA batteries. $5.5 \times 3.62 \times 1.5 \mathrm{in} ; 11.3 \mathrm{oz}$.
$\$ 75$

## WM-AF55 Pocket Cassette/Radio

Features autoreverse: Sony Mega-Bass; belt-drive system; AM mono and FM stereo reception; local/DX switch. Comes with belt-clip. $3.75 \times 5.25 \times 1.56 \mathrm{in} ; 9.7$ oz.
\$70

## WM-A52 Pocket Cassette Player

Features play mode: belt-drive system; headphone. Comes with belt clip. $4 \times 5.5 \times 1.63 \mathrm{in} ; 11.3 \mathrm{oz} . \$ 63$

WM-A39 Pocket Cassette Player
Features play mode; Dolby B noise reduction: Sony Mega-Bass: belt-drive; anti-rolling mechanism; autoreverse. Comes with belt clip. $3.66 \times 4.78 \times 1.56 \mathrm{in}$ : 8.1 oz . \$63

## WM-AF42 Pocket Cassette/Radio

Features autoreverse; belt-drive system; AM mono and FM stereo reception; local/DX switch. Comes with belt-clip. $3.75 \times 5.25 \times 1.5 \mathrm{in} ; 9.3 \mathrm{oz} \ldots . . . \$ 60$

## WM-AF28 Pocket Cassette/Radio

Features rechargeable battery; belt-drive system: AM mono and FM stereo reception; local/DX switch. Comes with belt-clip, battery, and charger. $3.47 \times 5.28$ $\times 1.28 \mathrm{in} ; 8.1 \mathrm{oz}$
$\$ 53$

## SRF-M40W Pocket Radio

Features PLL-synthesized tuner; 7 AM/7 FM station
For explanations of abbreviations, specifications and technical terms, consult the glossary on page 209.
presets: AM mono and FM stereo reception; local/DX switch. Comes with belt-clip. $3.7 \times 3.3 \times 1.09 \mathrm{in}: 6$ oz. $\$ 50$

## SRF-5 Pocket Radio

FM-only radio with water-resistant design and local/DX switch. Includes headphones and holder. Uses 2 AA batteries. $1.5 \times 4 \times 0.56 \mathrm{in} ; 2.2 \mathrm{oz} \ldots . . . . \$ 50$

## WM-A F22 Pocket Cassette/Radio

Features belt-drive system; AM mono and FM stereo reception; local/DX switch. Comes with bett-clip. 3.47 $\times 5.28 \times 1.25 \mathrm{in} ; 7.9 \mathrm{oz}$
. $\$ 43$

## SRF-R7 Headphone Radio

Features AM/FM tuner and local/DX switch. Uses 2 AA batteries. 4.8 oz
$\$ 40$

## WM-A 18 Pocket Cassette Player

Features play mode; belt-drive system. Comes with belt clip, battery, and charger. $3.47 \times 4.81 \times 1.28 \mathrm{in}$; 7.2 oz. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 40$

## SRF-4 Pocket Radio

AM/FM radio with water-resistant design and local/DX switch. Includes headphones and holder. Uses 2 AA batteries. $2.25 \times 4.25 \times 0.84 \mathrm{in} ; 4 \mathrm{oz} . \ldots . . \$ 33$

## WM-A 10 Pocket Cassette Player

Features play mode; belt-drive system. Comes with belt clip. $3.47 \times 4.81 \times 1.25 \mathrm{in} ; 7.7 \mathrm{oz} . . .{ }^{2} . .$. . $\$ 30$

## SRF-FM2 Headphone Radio

FM-only radio with local/DX switch. Uses 2 aA batteries. 3.6 oz
$\$ 30$

## SRF-35W Pocket Radio

AM/FM radio with 3-band graphic EQ and local/DX switch. Includes headphones and belt clip. Uses 2 AA batteries. $3.41 \times 2.72 \times 0.88 \mathrm{in} ; 4.4 \mathrm{oz}$. \$27

SRF-19W Pocket Radio
AM/FM pocket radio uses 2 AA batteries. $4.33 \times 2.38 \times$ $0.88 \mathrm{in} ; 3.6 \mathrm{oz}$.
\$20

## SRF-16W Pocket Radio

FM-only radio with local/Dx switch. Include headphones and belt clip. Uses 2 at batteries. A vailable in different colors. $2.5 \times 4.38 \times 0.88 \mathrm{in} ; 1.702 \ldots . . \$ 15$

## TOSHIBA

## KT-4088 Pocket Radio/Cassette

Combination AM/FM radio/cassette player. Features Super Bass; autoreverse; wired remote control; Dolby B NR: music quick start system; carbuds . . . . . \$230

## KT-4978 Pocket Cassette Player

Features Super Bass; autoreverse; Dolby B NR; full ic logic wired remote control; anti-rolling mechanism; earbuds with case; uses on AA battery.
$\$ 190$

## KT-4078 Pocket Radio/Cassette

Combination 4M/FM radio/cassette player. Features autoreverse; wired remote control; Dolby B NR; music quick-start system; earbuds . . . . . . . . . \$190

## KT-4188 Pocket Cassette Player

Mini-size pocket cassette player. Features Super Bass; autoreverse; Dolby B NR; full IC logic wired remote control: anti-rolling mechanism; earbuds with case; uses on AA battery

## KT-4868 Pocket Radio/Cassette

Combination AM/FM radio/cassette player. Features autoreverse cassette mechanism; desktop AC charger;Dolby B noise reduction; stereo headphones; up/ down channel selector; 3-band graphic equalizer; carrying cradle
$\$ 180$

## KT-4968 Pocket Cassette Player

Mini-size pocket cassette player. Features Dolby B noise reduction; autoreverse cassette mechanism; anti-rolling mechanism; earbud style stereo headphones: uses AA
. $\$ 170$

## KT-4568 Pocket Radio/Cassette

Combination AM/FM radio/cassette player. Features autoreverse; digital tuning: Dolby B noise reduction; headphones; up/down radio-channel selector; 3-band graphic equalizer; carrying cradle
\$170

## KT-4087 Pocket Radio/Cassette

Built-in mic for rec; 3 band graphic EQ; autoreverse: Dolby B NR; AM/FM tuner
$\$ 160$

## KT-4848 Pocket Radio/Cassette

Combination AM/FM radio/cassette player. Features autoreverse; Dolby B NR; headphones; 3-band graphic EQ: carrying cradle; rechargeable NiCd.
$\$ 120$

## KT-4538 Pocket Radio/Cassette

Combination AM/FM radio/cassette player. Features autoreverse; digital tuning; Dolby B NR; headphones; up/down channel selector; 3-band graphic EQ; carrying cradle; 10 random presets
$\$ 110$

## KT-4048 Pocket Radio/Cassette

Combination AM/FM radio cassette player. Features autoreverse cassette mechanism; Dolby B noise reduction; stereo headphones; 3-band graphic equalizer; belt clip; anti-rolling mechanism
$\$ 90$

## RP-2068 Headphone/Radio

1 -piece design stereo headphone/AM/FM radio. Digi:al tuning with 10 AM 5FM preset stations; clock and alarm functions
$\$ 80$

## KT-4038 Pocket Radio/Cassette

Combination AM/FM radio cassette player. Features autoreverse cassette mechanism; headphones; 3band graphic EQ; belt clip; anti-rolling mechanism; 3band graphic EQ
. $\$ 80$

## RP-2057 Pocket Radio

Features digital-synthesized tuning: 10 station presets; up/down channel selector; uses 2 AAA-size batteries.
. $\$ 70$

## KT-4028 Pocket Radio/Cassette

Combination AM/FM radio cassette player. Features headphones; 3-band graphic EQ; belt clip; 3-band graphic EQ.
. $\$ 60$

## KT-401B Pocket Radio/Cassette

Combination AM/FM radio cassette player. Features headphones; auto shutoff; belt clip.
$\$ 50$

## RP-2028 Pocket Radio

Features 3-band graphic equalizer; FM stereo indicator; stereo headphones; belt clip
\$40

## RP-2018 Pocket Radio

Features FM stereo indicator; built-in AFC; headphones: belt clip.
\$25

## Prices Listed

are manufacturers' suggested retail prices
(also referred to as list prices); actual selling prices are set by individual dealers.
All prices are subject to change without notice.


## BASF

## Digital Audio Tapes

Ulira-fine metallic pigment specifically developed for helical-scan recording.
DAT C120. $120 \mathrm{~min} . . .$. . . . . . . . . . . . . . . $\$ 11.99$
DAT C 90.90 min . . . . . . . . . . . . . . . . . . . . $\$ 10.99$
DAT C60. 60 min . . . . . . . . . . . . . . . . . . . . . $\$ 9.99$

## Metal Maxima IV Cassettes

Metal particle formulation fealures high performance cassetle mechanism.
C120. 120 min . . . . . . . . . . . . . . . . . . . . . . . . $\$ 6.49$

## Chrome Maxima // Cassertes

As above, chrome formulation.
C 90.90 min
$\$ 4.29$
C 60.60 min$\$ 3.29$

## Chrome Exrra // Casserres

Pure chrome formulation features high-performance cassette mechanism.
C90. 90 min . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.99$
C60. 60 min . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.69$

## Ferro Super / Cassettes

Iron oxide formulation features extra high frequency sensitivity for greater frequency response.
C90. 90 min
$\$ 2.54$
C60.60 min . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.94$

## Ferro Extra / Cassettes

Iron oxide formulation features exiended signal-ionoise ratio over the entire frequency range.
C 90.90 min
$\$ 1.69$
C60.60 min . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.49$

## DENON

All Denon cassettes feature large window: life-time warranty. and head cleaning leader.

## High Density Series

## HD-M Meral Cassetres

High-stability pure metal tape formulation uses highdensity dispersion technology that yields a residual magnetic flux density of over 3.500 Gauss and a coercivity of 1,200 Oersted.
HDM-100. 100 min . . . . . . . . . . . . . . . . . . . . . $\$ 5.99$
HDM-90. 90 min . . . . . . . . . . . . . . . . . . . . . . . $\$ 5.50$
HDM-75. 75 min. . . . . . . . . . . . . . . . . . . . . . . . $\$ 4.99$
HDM-60. 60 min . . . . . . . . . . . . . . . . . . . . . . . $\$ 4.50$
HD8 High-Bias Casserres
High-density metal particle formula uses New High Technoroum magnetic pigment to increase residual

flux density to 3,000 gauss yiciding an moL. of -4.5 dB at 10 kHz .
HD8-100. 100 min . . . . . . . . . . . . . . . . . . . . . . $\$ 4.99$
IID8-90. 90 min . . . . . . . . . . . . . . . . . . . . . . . . $\$ 4.75$
HD8-75. 75 min. . . . . . . . . . . . . . . . . . . . . . . . $\$ 4.25$
11D8-60. 60 min . . . . . . . . . . . . . . . . . . . . . . . $\$ 3.75$

## IID7 High-Bias Cassettes

Type-1] formulation with extended high-frequency response and low noise. Residual flux density 1.850 Gauss, MOL -6.5 dB at 10 kHz .
11D7-90. 90 min . $\$ 4.00$
HD7 -60.60 min $\$ 3.00$

## HD6 High-Bias Cassetres

Type-II formulation with extended high-frequency response. Residual flux density 1.700 Gauss. mol -5.7 dB at 10 kHz .
HD6-90. 90 min . . . . . . . . . . . . . . . . . . . . . . . $\$ 3.25$
HD6 -60.60 min
$\$ 2.50$

## DX Series

DX4 Ferric Normal Cassertes
Type-I formulation with extended frequency response. Residual flux density 2.000 Gauss, mol. -5.0 dB at 10 kHz .
DX4-90. 90 min.. . . . . . . . . . . . . . . . . . . . . . . . \$4.00)
DX4-60. 60 min.. . . . . . . . . . . . . . . . . . . . . . . . \$3.0x)

## DXI Ferric Normal Cassettes

Low-noise high-output type I cassette with high sensitivity and high mOL ( -7.5 dB at 10 kHz ).
DXI-90. 90 min
$\$ 2.25$
DXI-60. 60 min . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.75$

## FUJI

## FR Metal Series Cassetre Tape

Metal-coated rape with tensilized polyester base, designed for metal bias, 70-usec E e.
FR (C-90). 90 min
$\$ 8.49$
FR (C-60). 60 min $\$ 6.39$
FR (C-46). 46 min . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 4.99$

## FR-II Series Casserve Tape

Chromium dioxide cassettes with tensilized polyester hase; designed for Type $/ 1 / \mathrm{CrO}$, bias, $70-\mu \mathrm{sec}$ ee. Comes packaged in hinged plastic box.
FR-II (C-90). 90 min
$\$ 5.99$
FR-11 (C-60). 60 min
$\$ 4.49$

## FR-II Super Series Casselfe Tape

Super-premium Type II high-bias casethes with $70 \mu \mathrm{~s}$ $E Q$ and cohalt-modified Beridox particles.
FR-II Super (C-90). 90 min.
n. . . . . . . . . . . . . . . $\$ 6.49$

FR-II Super (C-60). 60 min .
$\$ 4.89$
DR Series Cassetre Tape
DR (C-90). 90 min
$\$ 3.49$
DR (C-60). 60 min .
$\$ 2.59$

## Digital Audio Tape

Super-Fine Metallix ullra-fine metal magnetic particle formulation. For use with digital audio tape players and recorders.
DAT (R-I 20). 120 min
$\$ 12.95$
DAT (R-90). 90 min . . . . . . . . . . . . . . . . . . . $\$ 11.95$
DAT (R-60). 60 min $\$ 10.95$


Fuji D.1T (R-120)

## GOLDSTAR

All tapes have tensilized polyester hase material: tape width 3.81 mm ; tape linght 135 m ; yield strength (5\%) kg ; breaking strength 1.0 kg ; residual clongation $0.05{ }^{\circ} \%$; squareness ratio 0.85 ; sens uniformity 0.3 dB ; output fluctuation 0.4 dB (except for (IID: 0.5 dB ).

AIID-901I
Coercivity 340 Oe; retentivity 1.300 (Gauss; sens +0.5 $d B$ ( 315 II二)
C-90. 45 min per side.
$\$ 0.99$
AHR-9011
Coercivity 340 (o): retentivity' $1.5(10$ (iauss. sens +1.0 $d B$ (315 11z).
C-90. 45 min per side. . . . . . . . . . . . . . . . . . . $\$ 1.29$
AIIZ-9011
Cocrcivity' 360 Oe: retentivity' 1,600 Gauss; sens +2.0 $d B$ (315 112).
C-90. 45 min per side. . . . . . . . . . . . . . . . . . . \$1.99
AHP-9011
C-90. 45 min per side. . . . . . . . . . . . . . . . . . . \$1.19
CRX'901I
Cohalt-doped iron-oxide particles. Coercivity 550 Oe: retentivity 1,600 Gauss; sens +2.5 dB ( 31.5 Hz ).
C-90. 45 min per side.
$\$ 2.49$

## MTX-9011

Pure metal narticles. (oercivity 1.050 Oe: retentivity
3.000 Gauss.: sens +2.0 dB (315 H 二)

C-90. 45 min per side.
$\$ 4.99$

## IRISH

## High-Oulpur Cassettes

Precision-shell ferric cassette in Norelco box.
XR-90. 45 min per side
$\$ 2.70$
XR-60. 30 min per side
$\$ 2.10$

## Low-Noise Cassertes

Precision-shell ferric cassette in Norelco box
LN-90. 45 min per side
LN-60. 30 min per side . . . . . . . . . . . . . . . . . . $\$ 1.75$
LN-30. 15 min per side . . . . . . . . . . . . . . . . . $\$ 1.50$

## JVC

## F Series

XFIV. Metal tape. Equalization 70us.
C-90.

|  |  |
| :---: | :---: |
| C-90. | \$2.60 |
| C-60. | \$2.35 |
| AFI. Normal hias tape. Equaliz |  |
| C-90. | \$2.20 |
| C-60. | \$1.80 |
| Gil Normal-Bias Cassetre Tape |  |
| Popular series. Coercivity 370 Oe. |  |
| C-90.90 min. | \$1.60 |
| ( -60.60 min . | \$1.30 |

## LASER by SWIRE MAGNETICS

Laser UHID-I/ Cassettes
High-bias ferric cassettes with high energ.' and extended frequency response.
C-90. 45 min per side.
\$2.59

## Laser UHD-/ Casseftes

Normal-hias ferric casseltes with high-cnergy: highdensity formulation.
C-90. 45 min per side. . . . . . . . . . . . . . . . . . . . $\$ 2.59$
C-60. 30 min per side. $\$ 1.99$

| Laser . 12 Cassettes |  |
| :---: | :---: |
| Normal-hias ferric cassettes with extra low noise for voice or music. |  |
| C-90. 45 min per side. | \$1.89 |
| C-60. 30 min per side. | \$1.49 |
| C-45. 22.5 min per side | \$1.39 |
| AFII. Itigh Bias lupe (C) | Ous. |
| C-90. | \$2.60 |
| C-60. | \$2.35 |
| AFI. Normal hias tape. |  |
| C-90. | \$2.20 |
| 60 | \$1. |

## Gl Normal-Bias Casserte Tape

Popular series. Coercivity 370 Oe.
C-90. 90 min
$\$ 1.60$


| MAXELL |  |
| :---: | :---: |
| Digital Audio Tape |  |
| Features ('eramic-.frmor metal-particle formulation |  |
| R-120DM. 120 min | \$14.99 |
| R-901)M1. 90 min | \$12.99 |
| R-60DM1. 60 min | \$10.99 |
| R-46I)N1. 46 min | \$8.99 |
| M.1. Metal Cassertes |  |
| Metal hias/EQ. |  |
| MX-90.90 min. | \$5.29 |
| MX-60. 60 min . | \$4.39 |
| WIII-S Epitaxial Casseltes |  |
| High-level hias; 70-usec E:Q. |  |
| XIIII-S90. 90 min . | \$4.39 |
| XL.11-560. 60 min . | \$3.59 |
| X.I-S Epitaxial Cassettes |  |
| Normal bias; 120-4.sec EQ, |  |
| XI.1-S90. 90 min | \$4.39 |
| XLI-S60. 60 min | \$3.59 |
| . L -/I Epitaxial Cassetres |  |
| (hrome type: high-level hias: |  |
| (-100. 100 min . | \$4.39 |
| (-90.90 min. | \$3.99 |
| C-46. 46 min . | \$3.29 |
| ( -60.60 min . | \$3.29 |
| UDS-I Normal-Bias Cassettes |  |
| Features phase accuracy' shell. frictionless slip sheets.Quin-Lok hubs, cleaning leader. |  |
|  |  |
| (-90. | \$3.29 |
| C-46. | \$2.49 |
| C-60. | . \$2.49 |
| UDS -// High-Bias $\mathrm{CrO}_{2}$ Cassettes |  |
| Features phase acturacy shell, frictionless slip sheets, |  |


| Quin-Lok hubs, clsaming leader. |  |
| :---: | :---: |
| C-90. | \$3.29 |
| C-46. | \$2.49 |
| C-60. | \$2.49 |
| Normal-Bias Cassetres |  |
| UR-120. 120 min | \$2.79 |
| UR-90.90 min | \$1.79 |
| UR-46. 46 min . | \$1.49 |
| UR-60. 60 min | \$1.49 |
| Open-Reel Tapes |  |
| XLI Back-Coaled Open-Reel Tapes |  |
| NI.I 35-180B. 3,600 ft, 10.5" reel | \$35.79 |
| XLI 35-90B. 1,800 ft, $7^{\prime \prime}$ reel. | \$12.79 |
| Ultra-Dynamic Open-Reel Tapes |  |
| UD35-180. $3.600 \mathrm{ft}, 10.5{ }^{\prime \prime}$ reel. . | \$28.39 |
| UD35-90. 1,800 ft, $7^{\circ \prime}$ reel | \$9.19 |

## MEMOREX by MEMTEK

## CDX II High-Bias Cassettes

Metal lape for High Bias (type II) selling. Superior lape for recording CD or digitally-sourced music at high hias, $70 \mu \mathrm{sec}$ setting. Greater headroom for distortion-free reproduction at significantly higher recording levels than conventional high bias tapes. New permanent reference cassette mechanism shell. C-90.
$\$ 4.99$

## HBX // High-Bias Cassettes

High-performance ferric/cobalt tape for use at high hias $70 \mu \mathrm{usec}$ setteng. Higher MOL's. greatcr sensitivity compared to standard high hias and $\mathrm{CrO}_{2}$ tapes. Nen permanent reference cassette mechanism.
HBX II High Bias C-90 . . . . . . . . . . . . . . . . . . . $\$ 3.79$
HBX II (type II) C-60 . . . . . . . . . . . . . $\$ 2.99$

## HB /I High-Bias Cassertes

Premium rape for high hias 70 usec eq position. Improved low end MOL, greater sensitivity, new permanent reference cassette mechanism; high visihility clear shell
HB II High-Bias C-90 . . . . . . . . . . . . . . . . . . $\$ 2.79$
IIB II (type II) C-60 . . . . . . . . . . . . . . . . . . . $\$ 2.29$
MRX I Normal-Bias Cassertes
Premium normal bias tape. Full lifetime warranty:
C-90. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.69$
C-60.......... . . . . . . . . . . . . . . . . . . . . . . . . . \$2.19


## ZX Reference Cassetre Tapes

Metalloy (metal-particle) formulation for recording on metal-compatible decks only: features ultra-high coercivily' and retentivity for improved aistortion and 1/OL: $70-\mu \mathrm{sec}$ FQ.
2.X-C90. 90 min
. $\$ 10$
ZX-C60. 60 min . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 7.25$
SX I/ Reference Cassette Tapes
Double-coated ionized coball and ferric-oxide formulation. ( $\mathrm{rO}_{2}$ hias and $\mathrm{EQ}(70 \mu \mathrm{sec})$.
Comes with transparent, hinged case.
SXII-C90. 90 min
$\$ 8.90$
SNII-C60. 60 min
$\$ 6.50$

## SX Reference Cassette Tapes

Single-coated ionized cohalt and ferric axide formulation: high coercivity permits use of CrO , bias and EQ ( $70 \mu \mathrm{sec}$ ) for 45 dB hetter $\mathrm{s} / \mathrm{s}$ ratio.
$\mathbf{S X}-\mathbf{C 9 0 . 9 0} \mathbf{~ m i n}$
$\$ 6.50$
SX-C 60.60 min
$\$ 4.50$

## EX // Reference Cassefte Tapes

Single-coated ferricohalt formulation: same bias and EQ( $120 \mu \mathrm{sec}$ ) as EX tape; extra-low noise, high output. EXII-C 90.90 min . $\$ 6$
EXII-C60. 60 min $\$ 4.25$

## PANASONIC

$\mathrm{CrO}_{2}$-Position Cassettes
RT-90EX2. C-90 length. 2 pack
$\$ 9.95$
Normal-Bias Cassettes
RT-60FS2. Fashion series. C-60 length. Color-tinted shell. 2 pack
$\$ 5.45$
RT-80EN2 C-90 length ?
RT-60EN2. C-60 length. 2 pack . . . . . . . . . . . \$ 3.95

## Microcassettes

RT-604 MC. C-60 length. 4 pack . . . . . . . . \$11.95
RT-90 AMC. C-90. Angrom composition . . . $\$ 6.95$
RT-602 MC. C-60 length. 2 pack.
$\$ 5.95$

## REALISTIC

## Cassette Tape

Prices mav' vary according to quantity purchased. with prices lower per tape with larger quantities.

MIV Type IV Meral Casserte Tape
Fine-grain metal particles; 5 -screw housing: hinged storage bex.
MIV-90. 90 min .
\$6.99-\$4.89
MIV- 60.60 min .
\$5.99-\$4.19
M// Metal Type // High-Bias Tape
Metal lape for recording and playback with Type I/ hias and E:Q: head-cleaning leader: hinged storage hor.
MII-90. 90 min
\$5.69-\$3.99
MII-60. 60 min
\$4.89-\$3.43

## HD Hi-Definition Chrome-Equivalent

For recording and playhack with high-bias Type I/ hias and te: head-cleaning leader; hinged storage thox: index card.
HD-90. 90 min
. . . . . . . . . . . . . . . . $4.29-\$ 2.97$

XR Type I Premium Ferric Tape
Hinged storage box with index card.
XR-120. 120 min . . . . . . . . . . . . . . . . . . \$4.99-\$3.29
XR-90. 90 min . . . . . . . . . . . . . . . . . . . . \$3.79-\$2.59
XR-60. 00 min . . . . . . . . . . . . . . . . . . . . \$2.79-\$1.89
XR-45. 45 min . . . . . . . . . . . . . . . . . . . . \$2.45-\$1.79
LN Low-Noise Type I Standard Ferric
Hinged storage box with index card.
LN-120. 120 min
\$3.49-\$2.29
IN-90. 90 min . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.79-\$ 1.85$
LN-60. 60 min . . . . . . . . . . . . . . . . . . . . \$1.99-\$1.29
LN-30. 30 min . . . . . . . . . . . . . . . . . . . \$1.59-\$1.05
Concertape Type I Cassettes
C-120. 3-pack; each 120 min. . . . . . . . . \$4.99-\$4.39
C-90. 3-pack; each 90 min . . . . . . . . . . . . $\$ 3.59-\$ 3.19$
C-60. 3-pack: each 60 min . . . . . . . . . . . \$2.59-\$2.29
C-30. 3-pack; each 30 min . . . . . . . . . . . \$1.99-\$1.79
C-90. Single: $90 \mathrm{~min} . . .$.


## Open-Reel Tape

Supertape Premium. Polyester base, super-calendared.
$5^{\prime \prime}$ reel: 900 ft 1.0 mil ; $1-9$ tapes . . . . . . $\$ 3.99$ each
5" reel: $900 \mathrm{ft}: 1.0$ mil; $10+$ tapes . . . . . . $\$ 3.19$ each
7 reel; 1.200 ft ; 1.5 mil ; $1-9$ tapes . . . . . $\$ 5.99$ each
$7{ }^{7 \prime}$ rect; $1,200 \mathrm{ft}: 1.5 \mathrm{mil}$; $10+$ tapes ... . $\$ 4.79$ each
7 " reel; $1,800 \mathrm{ft}$; 1.0 mil ; $1-9$ tapes .... . $\$ 6.99$ each
7 "reel: 1.800 ft: 1.0 mil : $10+$ tapes . . . . $\$ 5.99$ each
$7{ }^{\prime \prime}$ reel; $3,600 \mathrm{ft} ; 0.5 \mathrm{mil} ; 1-9$ tapes .... $\$ 12.99$ each
$7^{\prime \prime}$ reel; $3,600 \mathrm{ft}: 0.5 \mathrm{mil}$; $10+$ tapes...$\$ 10.39$ each
Low-Noise. Polyester Base.
$7^{\prime \prime}$ reel; $1,800 \mathrm{ft}: 1.0 \mathrm{mil}$.
\$5.99-\$4.39 each

| 7" reel; $2,400 \mathrm{ft}$; 0.5 mil . . . . . . . . \$6.99-\$5.19 each |  |
| :---: | :---: |
| $7{ }^{\circ}$ reel: $3,600 \mathrm{ft} ; 0.5$ mil . . . . . . . . . . $57.99-56.39$ each Concertape. Polyester Base. |  |
|  |  |
| $7{ }^{\prime}$ reel; $1,800 \mathrm{ft}$ : 1.0 mil . . . . . . . . . . . . . \$ $\$ 2.49$ each |  |
| 8-Track Cartridges |  |
| Supertape. 90 mins total time. |  |
| 1-11 cartridges | 3.99 each |
| 12-24 cartridges | 33.49 each |
| 25-49 carridges | \$3.19 each |
| 50+ cartridges | \$2.99 each |
| Low Noise. Polyester base. 40 mins. |  |
| 1-1\| carridges | 1.99 each |
| 12-24 cartridges | 1.79 each |
| 25-49 carridges | \$1.59 each |
| 50+ cartridges | \$1.39 each |
| Low Noise. Polyester base. 80 mins. |  |
| [-1] cartridges | 2.69 each |
| 12-24 cartridges | 2.39 each |
| $25-49$ cartridges | 2.15 each |
| 50+ cartridges | 1.89 |
| Microcassettes |  |
| Micro-90. Max-length microcassettes record 90 mins |  |
| at $2.4 \mathrm{~cm} / \mathrm{sec}$ or 180 mins at $1.2 \mathrm{~cm} / \mathrm{sec}$. For capstandrive recorders. I-9 tapes. . . . . . . . . . . . . \$6.95 each |  |
| Micro-90. 10 or more tapes. . . . . . . . . . \$5.95 each |  |
| Micro-60. Records 60 minutes at $2.4 \mathrm{~cm} / \mathrm{sec}$ and 120 |  |
| mins at $1.2 \mathrm{~cm} / \mathrm{sec}$. For capstan-drive recorders. 1.9 |  |
| tapes | \$3.49 each |
| Micro-60.10 or more tapes. . . . . . . . . . \$2.99 each |  |
| Minicassettes |  |
| Mini-30. For rim-drive cassette recorders such as |  |
| Realistic Minisette. 30-minute recording time. 1-9 |  |
| tapes . . . . . . . . . . . . . . . . . . . . . . . . . \$2.89 each |  |
| Mini-30. 10 or more tapes | \$2.49 each |

## RECOTON

## Gold Series XR90

Features low noise; high energy; normal bias; 90 minutes. Sold in ten packs.
$\$ 9.99$

## SCOTCH

## XSM IV Cassertes

Fine metal magnetic particle formulation; delivers maximum output up to 10 dB belter than typical oxide tapes and up to 7 dB greater than chrome tapes; low distortion, added high-frequency response, and improved $5 / \mathrm{N}$ ratio.
90 min .
\$6.99
60 min . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 5.49$

## XS II Cassertes

Features redeveloped premium grade formula with improved signal-to noise ratio; less tape hiss; duallayer. cobalt-modified ferric oxide; for use with recorders in the chrome or $70 \mu \mathrm{sec}$ equalization position; improved shell for critical mechanical permanence and 3-head equipment.
90 min. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3.79$
60 min . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.99$

## CX Cassettes

Normal-bias ferric oxide cassette fealuring improved low frequency output and clarity. 6-screw impact polymer shell houses an inner assembly with specially made low-friction roller guides; album package.
90 min .
$\$ 2.99$
60 min .
$\$ 2.40$

## BX Cassettes

Ferric-oxide formulation for all-purpose cassette use: polvester base. 5 -screw impact polymer shell.
90 min . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.95$
60 min .
$\$ 1.69$

## SONY

## ES Metal Casserte

Type.IV position ( 70 microsecond equalization); met-
al-particle formulation.
ES- 90.90 min .......................... $\$ 9.99$

## UX Series Cassertes

Type-II position ( 70 microsecond equalization)
UX-Pro. C-90 . . . . . . . . . . . . . . . . . . . . . . . . $\$ 7.99$
UX-Pro. C. $60 \ldots . .$. . . . . . . . . . . . . . . . . . $\$ 5.99$

UX-ES. C-90 .............................. $\$ 5.49$
UX-S. C-90. . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3.99$
UX-ES. C-60 . . . . . . . . . . . . . . . . . . . . . $\$ 3.99$
UX. C-90. . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3.29$
UX-S. C-60................................... $\$ 2.99$
UX. C-60.................................. $\$ 2.49$

## HF-S Series Cassetres

Type I position (Normal bias. 120 microsecond equalization)
HF-S 90.90 min
$\$ 2.69$
HF-S 60.60 min ............................. $\$ 1.99$

## HF Series Cassettes

Type I position (Normal bias, 120 microsecond equalization)
HF 120.120 min . . . . . . . . . . . . . . . . . . . . . . . $\$ \mathbf{\$ 2 . 9 9}$
HF 9090 min . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 2.29$
HF 60.60 min . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.70$


## TDK

## MA-XG Metal-Alloy (Type IV) Casserte Tape

Metal bias: 70-sec EQ: 3-layer RS-II vibrationdamping mechanism designed to eliminate sympathetic vibrations for reduced modulation noise.
MA-XG 90.45 min each side
$\$ 9.25$
MA-XG 60.30 min each side . . . . . . . . . . . . . . . . . . $\$ 7$

## MA-X Metal-Alloy (Type IV) Casserte Tape

Metal bias; 70-sec EQ: 2-layer plastic mechanism: improved Finavinx formulation designed for superior output level and wide dynamic range.
MA-X 90.45 min each side.
. $\$ 5$
MA-X 60.30 min each side
$\$ 4.25$
MA Metal-Alloy (Type IV) Cassette Tape
Metal hias; 70-sec EQ: Laboratory Standard mechanism.
MA-90. $\mathbf{4 5}$ min each side
. $\$ 4$
MA-60. 30 min each side
$\$ 3.50$

## SA-XG High-Bias (Type I) Casserre Tape

RS-II high-performance cassette mechanism; Super Avilyn formulation.
SA-XG 90, 45 min each side. . . . . . . . . . . . . . $\$ 9.25$
SA-XG 60. 30 min each side.
\$7
SA-X High-Bias (Type II) Cassetre Tape
2-layer shell; dual-coated Super-Avilyn formulation: $70-\sec E Q$.
SA-X 90. 45 min each side . . . . . . . . . . . . . . . $\$ 3.50$
SA-X 60.30 min each side
3.5

SA High-Bias (Type II) Cassette Tape
Laboratory Standard Mechanism.
SA Limited Edition. Euro-style case, Super A vilyn 90 min tape.
$\$ 4.99$
SA 90.45 min each side . . . . . . . . . . . . . . . . . . $\$ 2.50$
SA 60.30 min each side . . . . . . . . . . . . . . . . . $\$ 2.25$
AD-X Normal-Bias (Type 1) Cassetre Tape
Super Avilyn particle for extra headroom; Laboratory
Standard Mechanism. $120-\mu \mathrm{sec} E Q$.
AD-X 90.45 min each side
\$3
AD-X 60.30 min each side . . . . . . . . . . . . . . . . . . $\$ \mathbf{\$ 2 . 5 0}$


| AD-90. 45 min each side |  |
| :---: | :---: |
| AD-60. 30 min each side | \$2.25 |
| D (Dynamic) Cassette Tape |  |
| Normal hias; 120-sec EQ: precision mechanism. |  |
| D-90.90 min each side . . . . . . . . . . . . . . . . . . . . $\mathbf{\$ 2}$ |  |
| D-60. 30 min each side |  |
| D-46. 23 min each side . . . . . . . . . . . . . . . . $\$ 1.60$ |  |
| D-30. 15 min each side . . . . . . . . . . . . . . . . \$1.50 |  |
| DA Digital Audio Tape Cassette |  |
| Super Finavinx pure-metal particle formulation with |  |
| high-durability TDC (Three Dimensional Compound) binder. |  |
|  |  |
| DA-R60. 30 min each side . . . . . . . . . . . . . . $\$ 10$ |  |
| DA-R90. 45 min each side . . . . . . . . . . . . . . . . \$12 |  |
| DA-R120.60 min each side . . . . . . . . . . . . . . \$14 |  |
| Microcassettes |  |
| D-MC60B3. Same dynamic formulation as standardsize cassettes. Low noise for speech recording. 60 min ea; 3-pack |  |

## TRIAD

Cassette Tape
MG-X90. Metal bias (type IV); EQ $3180 \mu \mathrm{~s} / 70 \mu \mathrm{~S}$; recording time 45 mins $\times 2$; FR $10,000 \mathrm{~Hz}+0 \mathrm{~dB}$; MOL $315 \mathrm{~Hz}+5.0 \mathrm{~dB}$; SOL $10,000 \mathrm{~Hz}-10 \mathrm{~dB}$; retentivity 3300 G ; coercivity 1150 Oe. ..... $\$ 5.99$ CD-IV. Metal bias; recording time 76 mins total $\$ 5.79$ CD-II 102. Chrome tape with exclusive metal alloy; recording time 120 mins total. . . . . . . . . . . . $\$ 5.99$
CD-II 76. As above with recording time 76 mins
total. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 5.39$
EM-X90. High bias (type II); EQ $3180 \mu \mathrm{~s} / 70 \mu \mathrm{~s}$; recording time 45 mins $\times 2$; FR $10.000 \mathrm{~Hz}+0.5 \mathrm{~dB}$; MOL $315 \mathrm{~Hz}+5.0 \mathrm{~dB}$; SOL $10,000 \mathrm{~Hz}-3.0 \mathrm{~dB}$; retentivity 3100 G ; coercivity 720 Oe. ...... $\$ 4.99$ F-X90. Normal bias (type 1); EQ $3180 \mu \mathrm{~s} / \mathbf{1 2 0 \mu s}$; recording time 45 mins $\times 2$; FR $10,000 \mathrm{~Hz}+3.0 \mathrm{~dB}$; MOL $315 \mathrm{~Hz}+5.5 \mathrm{~dB}$; SOL $10,000 \mathrm{~Hz}-6.0 \mathrm{~dB}$; retentivity 1800 G; coercivity 380 Oe. . . . . . . $\$ 3.99$

## VISA BY INTERWORLD ELECTRONICS INC.

## UCX-II-S High Tech Turbo

High-bias cassette tape with ultra-refined $\mathrm{CrO}_{2}$ coating and special housing.
90 min ..... $\$ 4.99$
60 min ..... $\$ 3.49$
UCX-II High Tech Turbo
High-bias cassette tape.
90 min ..... $\$ 3.99$
60 min . ..... $\$ 2.99$
UFX-I High Tech Turbo
90 min ..... $\$ 3.99$
60 min . ..... $\$ 2.99$
CX-II Professional Tape
High-bias cassette tape.
90 min ..... $\$ 3.49$
60 min ..... \$2.49
FDX-I Professional Tape
Ferric cassette tape.
90 min . ..... $\$ 2.79$
60 min . ..... $\$ 1.99$
Extra Performance II Tape90 min$\$ 2.49$
60 min . ..... $\$ 1.99$

## High Performance I Tape

Ferric cassette tape with iron dioxide coating. Comes in transparent, hinged case.
90 min .
$\$ 1.99$
90 min .
60 min .

# $\|\mid\|\|\|$ BLLLSSHITI 

Note: Words in italics are defined elsewhere in the glossary.

AC (alternating current): The current available from the power outlets in American homes; it alternates direction sixty times a second.
acoustic-suspension: A type of inft-nite-baffle speaker that uses the air pressure inside a sealed speaker box to control driver motion. It has no port or opening.

AM (amplitude modulation): A band of radio frequencies that carries information by changing the strength of the signal. Most AM broadcasts are in mono, but many stations are adding equipment to broadcast stereo AM programs. You must have an AMstereo tuner to receive them in stereo.
amplifier: A separate component, or a section built into an integrated component, that strengthens the electrical signal (increases its amplitude). A power amplifier must be connected to a preamplifier (or "control amplifier") to switch and process the sound. An integrated amplifier combines poweramplifier and preamplifier functions in the same unit. A receiver adds an AM/FM Iuner to the integrated-amplifier configuration.
analog: Type of audio component or recording medium that operates with signals whose waveforms are directly analogous to the sounds they represent; see digital.
antenna: A metallic structure (usually a wire or rod) that receives radio or television broadcast signals over the air and sends them to a tuner for processing.
automatic turntable: One that sets the stylus onto a record to begin play and removes it at the end of play without the user having to touch the tonearm.
autoreverse: A feature of some cassette decks that allows them to play or
record both sides of a cassette without the user having to turn it over manually.
aUX (auxiliary): An input jack found on some receivers, integrated amplifiers, and preamplifiers that can be used to connect source components such as a compact disc player or a cassette deck but not turntables, which require special phono inputs.
azimuth: The angle between the actual recorded information and the edge of the audio tape. While the azimuth angle is theoretically set at 90 degrees, azimuth often varies from one tape deck to another.
balance: A control found on some receivers, integrated amplifiers, and preamplifiers that changes the relative volume of the left and right channels.
band: A particular segment of a frequency spectrum. For example, a graphic equalizer may divide the audio frequency spectrum into ten bands, with one control to adjust the relative volume of each band. The A.M and $F M$ bands are distinct parts of the $R F$ (radio frequency) spectrum.
bass: The lower frequencies in the audio spectrum, such as those produced by a string bass or bass guitar. An instrument producing bass tones vibrates air more slowly than one producing treble tones.
bass reflex: A type of speaker system that has an opening, called a vent or port, in its enclosure so that the sounds produced by the backward motion of the bass driver(s) reinforce those produced by their forward motion, which come out of the front.
belt drive: A method of rotating the platter of a turntable by means of a belt, usually made of rubber, that connects the turntable's motor to the platter.
bias: A very high-frequency signal
added to an audio signal being recorded on tape to reduce distortion. Type I (normal or ferric) tape requires less bias than Type Il (chrome or chromeequivalent) or Type IV (metal) tape.
cantilever: The rod or tube in a phono cartridge that supports the stylus, and transfers the stylus's motion to the signal-generating elements of the cartridge.
capstan: A rotating shaft in a tape recorder that pulls the tape across the heads. The tape usually travels between the capstan and the pinchroller. A dual-capstan machine has two capstans; see closed-loop.
capture ratio: An important specification for an FM tuner, it indicates the minimum ratio between the strengths of two FM signals at the same frequen$c y$ that enables the tuner to suppress the weaker signal by 30 dB . Smaller numbers indicate better performance.
cardioid: A heart-shaped polar response of a microphone, with strong rejection signals arriving from the rear.
cartridge, or phono cartridge: A small component mounted on the end of the tonearm in a turntable, it holds the stylus, which vibrates in the record groove. The cartridge converts the vibrations into a changing electrical current, or audio signal.
cassette: A kind of magnetic-tape cartridge containing two reels.
cassette deck: An analog component that uses standard-size audio cassettes for recording and playback; also known as tape deck. Audio signals are recorded onto, or played back from, the magnetic tape contained in the cassette; see heads.

CD (compact disc): A 4.8-inch plasticcoated, metalized disc that stores up to 75 minutes of digitally recorded music. The non-recordable disc con-
tains microscopic pits that are read by an optical laser pickup in a compact disc player. Each microscopic pit contains digitally encoded audio information.

CD (compact disc) player: A digital audio component based on the PCM recording system that plays back compact discs. Unlike turntables, which play back conventional vinyl records, a CD player has no stylus and therefore makes no contact with the disc. Rather, a laser mechanism optically reads information contained on the CD.

CD video (CDV): A compact disc that combines up to twenty minutes of digital audio with approximately five minutes of video. CDV's are goldcolored to distinguish them from sil-ver-colored, audio-only CD's.
channel: A distinct path for an audio signal. Stereo signals consist of two channels, left and right, which are sent to left and right speakers (or headphones), respectively (see separation). A surround-sound system adds one or more additional channels, usually for the rear. Mono (or monophonic) signals have only one channel.
closed-loop: A drive system used in tape decks in which the tape is pulled by dual capstans, one on either side of the heads, so the part of the tape being played or recorded is held taut and fully isolated from the hubs.
compliance: A measurement of how easily the stylus of a phono cartridge can be moved by the grooves of a record. A high-compliance cartridge has a more flexible stylus than a lowcompliance cartridge.
crossover, or crossover network: A circuit that divides lower-frequency sounds from higher-frequency sounds. Crossovers are used in speakers that have more than one driver. In a two-way speaker system, for instance, the crossover sends the low frequencies to the woofer and the high frequencies to the tweeter. Crossovers are also available as separate components for use in more elaborate systems.
crossover frequency or crossover point: In a crossover network, the frequency at which audio signals are divided so they can be routed to the
appropriate driver (low frequencies to a woofer and high frequencies to a tweeter, for example).
damping: The application of mechanical resistance, such as a rubber or silicone material, to the cantilever pivot to reduce the amplitude of a resonance.

DAT (digital audio tape): A cassette that is about half the size of a standard audio cassette. The cassette shell houses a reel of magnetic tape that contains digitally encoded audio information.

DAT (digital audio tape) deck: A digital recording/playback component that is based on the $P(M$ recording system. Digitally encoded audio information is recorded onto, and retrieved from, magnetic tape. DAT recorders use a transport mechanism similar to ones found in analog cassette decks.
dB (decibel): The common unit used to measure the volume of sound or an electrical signal that represents sound (also called loudness or amplitude). The decibel is a logarithmic ratio of two power levels. When sound-pressure level (SPL) is measured in decibels, for example, a whisper is about 40 dB and a jet engine about 120 dB . The decibel scale is logarithmic, meaning that an increase of 10 dB represents a tenfold increase in power: it takes ten times as much energy to produce an SPL of 80 dB as one of 70 dB , even though 80 dB is subjectively only twice as loud as 70 dB . Doubling the power raises the SPL by about 3 dB ; cutting the power in half reduces the volume about 3 dB . Doubling or halving the volume requires a change in SPL of about 10 dB .
dBf: One decibel referred to a standard power level of one femtowatt (one quadrillionth of a watt).
dbx: Ordinarily, a noise-reduction sys-tem-more precisely known as dbx II-developed by the dbx company and used in some cassette decks. This system reduces the dynamic range of the audio signal during recording, making the soft parts of the music louder and the loud parts softer. During playback, the processing is reversed, restoring the original dynamic range and reducing the noise added by the tape. The dbx I system is
used in professional studio tape recorders. Another type of dbx noise reduction is used in the mTS stereoTV broadcasting system.

DC (direct current): Electricity that flows in one direction only; see AC (alternating current).
de-emphasis: A form of equalization used in FM tuners that is complementary to a pre-emphasis used in transmission. The purpose is to improve the overall $S / N$ ratio (signal-to-noise), while maintaining a uniform frequency response. Some compact discs also are processed with a frequency preemphasis; these discs automatically engage de-emphasis circuits in the player.
defeat: To bypass a signal-processing feature, removing it entirely from the circuit. Tone controls are sometimes accompanied by a tone-defeat switch, which enables the user to eliminate their effects without changing their settings, allowing easy comparisons of the sound with and without tonecontrol modifications.
digital: A digit is a number, and digital components use numbers in some way. A digital tuner, for example, may only use numbers on its front-panel display, or it may use digital-synthesis tuning circuits for improved reception. Compact discs contain a pattern representing a series of binary numbers (strings of ones and zeros); a CD player converts these numbers into a continuously changing current that represents the sound of the master recording. Digital audio tape (DAT) recorders turn analog input signals into binary numbers and record these on tape; for playback, the numbers are read from the tape and converted into an analog signal.
dipole: A type of speaker that radiates as much sound from its rear as from its front.
dipole antenna: A type of antenna that receives radio broadcasts from two directions. A T-shaped, folded dipole antenna is often supplied when you buy a tuner or receiver.
direct-drive: A method of rotating a turntable platter by using the motor shaft as the platter spindle.
dispersion: The spread of a speaker's
high-frequency output, measured in degrees.
distortion: An unwanted alteration in an audio signal; also see THD (total harmonic distortion), noise, and $I M$ (intermodulation).
dither: Very low-level noise added to a signal being digitized to reduce the high-order distortion caused by quantizing very low-level audio signals. See quantization.

Dolby B and Dolby C: Noise-reduction (NR) systems designed and licensed by Dolby Laboratories for use in consumer tape recorders. They work by making the high sounds softer during recording and louder during playback. Dolby C is more effective than Dolby B, but Dolby B is more common.

Dolby HX Pro: A special circuit for tape recorders-the HX stands for headroom extension-that lowers the amount of bias added during recording when the signal being recorded already has a lot of high frequencies. This allows high frequencies to be recorded at higher levels with less distortion.

Dolby Surround: A system developed for movie theaters, now available in add-on home components and in some audio/video receivers, that adds two more audio channels (centerfront and rear) to the ordinary right and left stereo channels. To derive the extra channels, a Dolby Surround decoder adds the left- and right-channel signals together for the centerfront channel and subtracts them from each other for the rear channel, usually sent to two rear speakers.
driver: Any individual speaker within a system, such as a woofer or tweeter.
dubbing: The process of making a recording of another recording. A dubbing cassette deck can record from one tape in one transport to another in a second transport. Dubbing can be done with two single-transport decks or one dual-transport deck.
dynamic range: The difference, in decibels ( $d B$ ), between the softest and the loudest possible sounds that a component can produce. Higher ratings are better because they indicate that the component can more accurately reproduce the full dynamics of
recorded music that is played through it.
effective mass: A measurement of how a tonearm resists motion. Tonearms must move freely to follow the groove of a record, and lighter tonearms usually perform this task better than heavy ones.
efficiency: The percentage of the electrical input power to a speaker that is converted to acoustic energy. Usually specified for speakers, an efficiency measurement can be helpful when matching an amplifier to a particular speaker. Speaker efficiency can range from a fraction of 1 percent to as much as 10 percent or more. Note that efficiency indicates nothing about sound quality, only quantity of acoustic energy for a given input power. A more common way of expressing speaker efficiency is sensitivity.
electrostatic: Speakers and headphones that use a method of producing sound by moving a flat diaphragm suspended in a high-voltage electrical field.
elliptical stylus: A stylus whose cross section, as seen from above, is an ellipse placed across the record groove. This type of stylus traces the finer high-frequency modulations of a record groove more accurately than a spherical stylus.

EQ (equalization): The process of changing the relative volume levels of different segments of the audio frequency spectrum to compensate for losses or distortion at some stage of recording or reproduction. For instance, the output from speakers can be equalized to compensate for room acoustics. Phono signals require a specific type of playback equalization because of the equalization built into the process of cutting a record.
equalizer: A component, or part of a component, that is used to equalize (see $E Q$ ) an audio signal received from a source component by dividing the signal into various separately adjustable bands. The most common type is the graphic equalizer, which derives its name from the way its sliding controls make a rough graph of the selected frequency changes on its front panel.
expander: A device used to restore
natural dynamic range. This is achieved by counteracting the compression of dynamic range that occurs when recordings are made and when a signal is broadcast.
filter: A circuit that removes or attenuates a specific part of an audio signal. A subsonic (or infrasonic) filter removes low frequencies. Some cassette decks have MPX filters to remove the $19,000-\mathrm{Hz}$ stereo pilot tone from $F M$ broadcasts. Tone controls and equalizers are adjustable filters.
flutter: A wavering sound caused by abrupt changes in the speed of electromechanical components such as turntables and cassette decks. Expressed as a percentage of variation from the correct speed, flutter measurements are usually combined with wow measurements in a single wow-and-flutter ( $W \& \%$ ) specification. Lower figures are better.

FM (frequency modulation): A type of radio broadcasting that carries audio information by changing the frequen$c y$ of the broadcast signal. An FM station with a center frequency of 88.1 $M H Z$ will actually broadcast a signal that changes from slightly less than 88.1 MHz to slightly more according to the waveform being broadcast.
frequency: How often something vibrates or changes. Sounds are vibrations and can be represented by electrical signals that change at different rates; a low-pitched sound is represented by a slowly changing current, while a high-pitched sound is represented by a quickly changing current. Frequency is measured in cycles per second, or hertz (abbreviated Hz ). Most people can hear notes as low as about 20 Hz and as high as 15,000 or $20,000 \mathrm{~Hz}$. In radio, frequency refers to the wavelength of the carrier signal of the station, such as 88.1 MHz for an $F M$ station or $1,010 \mathrm{kHz}$ for an $A M$ station.
frequency balance: The relative volume of different segments of the audio frequency range, from low bass to high treble.
frequency response: This important specification indicates how evenly a component reproduces different frequencies. A typical spec might be 20 to $20,000 \mathrm{~Hz} \pm 3 \mathrm{~dB}$, which means that the component will reproduce sounds
as low as 20 Hz and as high as 20,000 Hz , and all those in between, not more than 3 dB too loud or too soft. If a frequency-response specification does not include a tolerance (the plus-orminus decibel figure), it is essentially meaningless.
graphic equalizer: see equalizer.
head amp: see $M C$ (moving-coil).
heads: The parts of a tape deck that impose a magnetic pattern on a tape (for recording) or detect one that is already there (playback). Most audio decks also have another head for erasing tapes, or randomizing the magnetic pattern on the tape so that a new one can be recorded. The heads of analog recorders are stationary, but those of digital audio tape (DAT) recorders rotate like the helical heads in VCR's.

HX Pro: see Dolby HX Pro.
Hz (hertz): The standard unit of frequency, named after the German physicist Heinrich Hertz. Measurements in hertz represent cycles per second, that is, changes away from a basic state and back again. In audio, the basic state is defined either as ordinary air pressure (without sound) or its electrical equivalent (a zerolevel signal).

IF (intermediate frequency) rejection: The ability of a superheterodyne $A M$ or FM tuner's IF circuits to reject external interference at the intermediate frequency.
image rejection: The ability of a tuner to ignore signals removed from the desired frequency by twice the intermediate frequency ( 10.7 MHz in home $F M$ receivers, 455 kHz in home $A M$ receivers.)

IM (intermodulation) distortion: When a two-tone test signal is used, distortion components appear at frequencies that are sums and differences of multiples of the input frequencies. Their magnitude is expressed as IM distortion, which is more distressing to the ear than THD (total harmonic distortion). As with all types of distortion, lower figures are better.
impedance (imp): Measurement, in ohms, of the total opposition (resistance and reactance) that a compo-
nent has to electrical power; usually found in discussions of speakers.
infinite-baffle: A type of speaker where the back wave produced by the driver is prevented from interfering with the front wave, usually by placing the driver in a sealed enclosure. See acoustic-suspension.
infrared: A part of the electromagnetic spectrum that is invisible to the human eye. Infrared frequencies are used by wireless remote controls to send signals to the components they control.
integrated amplifier: A component that performs the functions of both a preamplifier and a power amplifier.
isolation: The separation between a structure and everything surrounding it; usually in reference to turntable tonearms and platters.
$\mathbf{k H z}$ (kilohertz): $1,000 \mathrm{~Hz}$.
LaserDisc: Pioneer's trademark for a laser-read videodisc system. (Other videodisc formats are no longer available in the U.S.) LaserDisc players are similar to $C D$ (compact disc) players, therefore combination units that play both kinds of discs as well as the new $C D$ videos are available.

LCD (liquid-crystal display): A type of electronic readout that does not generate its own light and, therefore, uses very little power.

LED (light-emitting diode): An electronic readout that produces its own light.
linear-tracking tonearm: A type of tonearm that moves in a straight line across the radius of a record; see pivoted tonearm.
logic: In cassette decks, the ability to switch from one transport function, such as fast forward, to another, such as rewind, without first pressing the stop button; doing this in decks without logic controls can damage the tape. In a surround-sound system, logic circuits are used to process encoded signals.
loudness compensation: A form of equalization that progressively emphasizes low frequencies (and sometimes high frequencies) as volume is
reduced. Loudness-compensation circuits, which appear in some preamplifiers and receivers, compensate for the human ear's loss of sensitivity as the sound level decreases.
magnetic cartridge: A phono cartridge that generates an audio signal from the relative motions of a magnetic field and a coil or coils. The output is proportionate to the velocity of the stylus motion. See $M C$ (moving coil) and MM (moving magnet).
matrix: Circuits in surround-sound processors that can synthesize a rear channel for ambience even if the original recording consists only of left and right stereo channels.

MC (moving-coil): A type of phono cartridge in which the magnets are stationary and the coils where the signal is generated move in response to the motions of the stylus in the record groove. Some MC cartridges produce very little current, and their output must be amplified to standard levels by a "head amp" or pre-preamplifier before further processing by a phono-preamplifier section.
$\mathbf{M H z}$ (megahertz): One million Hz .
microphone: An electroacoustic pickup device that converts acoustical energy-such as live music or a voice -into an electrical signal that is essentially equivalent in shape and amplitude to the acoustical input.
midbass: The segment of the audio frequency spectrum covering sounds produced in the upper bass and lower midrange region; special midbass drivers can be used to reproduce these frequencies.
midrange: The segment of the audio frequency spectrum between the bass and treble frequencies. The midrange includes most voices and the fundamental tones produced by most musical instruments. Midrange drivers reproduce sounds in this frequency range.

MM (moving magnet): The most common type of phonograph cartridge. A moving-magnet cartridge has magnets attached to the interior end of its cantilever. The stylus motion causes these magnets to move near coils of wire, generating an electric current representing the audio signal.
mono (or monophonic): An audio sig. nal in which all the information is combined in one channel; also, a component that handles only one channel, such as a mono amplifier (used in pairs for stereo programs).

MPX (multiplex): A method of combining two or more signals into one. Some tape decks have an MPX filter that removes the $19,000 \mathrm{~Hz}$ pilot tone from stereo FM broadcasts.

MTS (multichannel television sound): The system devised by Zenith and dbx for stereo TV broadcasting in the United States. An MTS decoder, which may be built into an audio or video component, receives stereo broadcasts and produces stereo signals from them. See SAP.
multipath: A condition that occurs when a broadcast radio signal reaches the antenna over two or more paths of different lengths. The result is interference that causes distortion and a loss of stereo channel separation.
mV (millivolt): One thousandth of a volt.
$\mu \mathrm{S}$ (microsecond): One millionth of a second.
$\mu \mathbf{V}$ (microvolt): One millionth of a volt.
noise: An unwanted part of a processed signal that is not related to the original signal. Audio noise usually sounds like hiss.

NR (noise reduction): A system designed to reduce the noise added to an audio signal during recording. See $d b x$ and Dolby.
ohm: The basic unit of impedance.
output level: A measure of how strong a signal produced by a component is, usually in relation to the strength of the signal put into it.
oversampling: A digital filtering technique used in some compact disc players. The $44.1-\mathrm{kHz}$ signal from the $C D$ is sampled at some multiple of that frequency (usually two or four times), which raises the frequencies of any spurious signals created by the digital recording process well above the audio range. The spurious signals are then removed by an analog filter
with a gentle slope, which is said to cause fewer phase irregularities than the sharp-cutoff filter required when oversampling isn't used.
passive radiator: An unpowered speaker assembly that is placed in the port of a vented enclosure system to produce a more uniform sound wave. Also called a "drone cone" or "slave cone."

PCM (pulse-code modulation): A system of recording that encodes an audio signal in a series of binary numbers (ones and zeros). Compact disc players, digital audio tape (DAT) decks, and digital signal processors all use PCM encoding.
peak indicator: Usually a flashing $L E D$ on a tape recorder that indicates when transient signal levels have exceeded the recorder's ability to handle them without distortion; a supplement to recording-level meters.
peak-reading meter: A recording-level meter that rises rapidly and declines at a moderate speed so the user can judge the levels of transient peak waveforms.
phono: Abbreviation for "phonograph"; used to refer to the low-level signals produced by a phono cartridge and to the phono input where a turntable is connected to a preamplifier, integrated amplifier, or receiver. Phono inputs use $R C A$ connectors, sometimes called phono plugs.
piezoelectric (cartridge): A phono cartridge with a ceramic, crystal, or electret generating element that produces electricity when bent, iwisted, or stressed. The cartridge's output, which can be fairly high, is proportionate to the amplitude of the stylus motion, rather than stylus velocity. See magnetic cartridge.
piezoelectric speaker: A speaker principle used in some tweeters that employs a ceramic element which expands or bends when fed a signal voltage. This deflection generates sound.
pivoted tonearm: The most common type of tonearm, it swivels on a fixed point so that the cartridge it holds can track the record groove from edge to center along a shallow arc. See lineartracking tonearm.

PLL (phase-locked loop): A type of tuner circuit that improves reception of radio broadcasts by locking the received frequency to a synthesized reference frequency, which is usually generated by a quartz crystal.

P-mount: A standardized type of phono cartridge that plugs into a specific kind of tonearm; it requires no adjustment or calibration.
port: An opening in a bass-reflex speaker system that allows the sound wave from the back of a driver to reinforce the sound wave from the front.
power amplifier: A component that takes the audio signal from a preamplifier and makes it strong enough to drive speakers.
preamplifier: A component that switches and processes audio signals from source components. Typically, preamplifiers amplify only the lowlevel phono signals from turntables (more precisely, from phono cartridges), raising them to the same level as signals from other source components (called "line level") and applying the necessary RIAA equalization.
preset: On a tuner or receiver, a memory position where the frequency of a selected radio station can be entered for instant recall.
programming: Giving a component instructions to carry out at a later time. For instance, many compact disc players can be programmed to play selected tracks in any order.
quancization: In a digital audio signal, the number of possible values available to represent various levels of amplitude. In a CD (compact disc) system, the resolution of the quantization is 16 bits, which means that each sample can have any value between zero and 65,535 . Higher figures are better because they allow for more accuracy. See sampling frequency.
quartz-synthesis: See PLL.
random access: The ability to go directly to the beginning of a song, track, or program without having to scan the intervening material; the process is usually initiated using numbered buttons on a component's front panel or remote control.

RCA connector: The most common kind of connector for home audio systems, using small, one-pin phono plugs. The cables usually come in pairs, with the right channel marked in red and the left channel in black, gray, or white.
receiver: An audio component that performs three basic functions: receiving radio broadcasts, switching and processing audio signals, and amplifying the selected signal so it can drive speakers.
record: A 12-inch vinyl disc, also known as an LP or long-playing record, with intricate grooves that contain analog audio information. By vibrating in these grooves, the stylus of a phono cartridge converts mechanical information into a usable audio signal that can be amplified and sent to a pair of speakers. Seven-inch vinyl discs are called $45-\mathrm{rpm}$ records, or singles.
recording-level meter: An indicator on a tape recorder that displays the signal levels being recorded onto tape from moment to moment; used to set proper recording levels.

RF (radio-frequency): The very highfrequency signals used to broadcast radio programs.

RFI (radio-frequency interference): Noise created in audio systems by interference from strong, nearby radio broadcasts.

RIAA: The Recording Industry Association of America, which has set standards for the equalization used on phonograph records. Every record has reduced bass and boosted treble, and these characteristics must be compensated for on playback by the phono preamplifier.
ribbon speaker: A form of high-frequency driver using a light ribbon suspended in a magnetic field that generates sound when current is passed through it.
rms (root mean square): A common method of averaging power measurements.
rpm: Revolutions per minute.
rumble: A measurement of how much motor noise is transmitted through a
turntable to the cartridge. Lower figures are better.
sampling frequency (or rate): In digital audio, the number of times a signal is sampled each second. The standard sampling rate for the $C D$ (compact disc) format is 44.1 kHz , which means each second of sound is encoded by 44,100 numbers for each channel. Higher sampling rates are better because they can record higher frequencies.

SAP (separate audio program): A separate mono channel that is broadcast along with the two stereo channels in the MTS system for stereo TV. The SAP channel can be used for various purposes, such as providing an alternative soundtrack in a language different from that used on the primary channels.
saturation: A condition that occurs when an audio tape becomes fully magnetized and an increase in signal input level does not produce a corresponding increase in recorded level. Saturation also can occur in the magnetic structure of the tape heads.
scan: A tuner feature used to move quickly from one broadcast station to another, stopping on each frequency for a few seconds so the user can sample it. On compact disc players, the scan feature is used to move around quickly within a track, much like fast forward on a tape deck.
selectivity (sel): A specification that tells how well a iuner or receiver can differentiate between the selected broadcast channel and other stations using nearby frequencies. Adjacentchannel selectivity (adj-ch sel) measures rejection of signals from stations broadcasting on either side of the selected station; alternate-channel selectivity (alt-ch sel) measures rejection of signals from stations two channels away from the desired one. Higher numbers are better for both of these specifications.
semiautomatic turntable: A kind that lifts the tonearm from the record automatically at the end of a side; the stylus must be set onto the record by hand, however.
sensitivity (sens): A measurement of speaker efficiency that tells how much sound is produced 1 meter away from
the speaker with an input of 2.83 volts (1 watt into 8 ohms ). Higher numbers are better.
separation: The difference, measured in decibels $(d B)$, between the left and right channels of an audio signal, indicating the amount of leakage between channels in a component. Higher figures are better.
servo control: A technique that forces the speed or position of a moving device into conformity with a desired speed or position. The speed of a servo-controlled turntable is established by a precision voltage or frequency standard to which it is compared. Automatic adjustments are made to minimize differences and ensure the correct rpm.
signal: An electrical current that is modulated (changed) to represent information.

S/N (signal-to-noise ratio): Measured in decibels $(d B)$, the difference in level between the loudest possible signal a component can produce and its residual noise. Higher figures are better.
source: The program signal that is being recorded or played back. Components provide program signals either by playing a recorded program (turntables, cassette decks, compact disc players, etc.) or receiving a broadcast program (tuners and receivers).
specification (spec): A numerical measurement of a component's performance as provided by the manufacturer.
speaker (or loudspeaker): A component that accepts audio signals from a receiver or amplifier and converts them into sound waves. Also called a driver.
spherical stylus: A stylus whose shape is conical; typically used in cheaper cartridges. The downward-facing point of the cone, which vibrates in the record groove, is rounded to a specified radius of curvature. See elliptical.

SPL (sound-pressure level): A measurement of acoustic energy, usually encountered in the sensitivity rating of a speaker. See $d B$.
stereo: The use of at least two separate
channels (signal paths) to create the illusion that music is being produced in the space between, and even beyond, a pair of speakers.
stylus: The needle-shaped material, usually diamond, at the end of the cantilever of a phono cartridge; it vibrates in record grooves, providing the cartridge with the energy needed to produce audio signals.
subwoofer: A separate speaker designed to reproduce only bass frequencies. Subwoofer systems sometimes contain an amplifier and a crossover network.
supertweeter: A tweeter used to reproduce only extremely high frequencies; usually found in four- or five-way speaker systems.
surround sound: See Dolby Surround.
tape monitor: A switch on a tape recorder that allows the user to listen to a tape as it is being recorded to insure proper recording; also may allow external signal processors to be used.

THD (total harmonic distortion): The percentage of an audio signal that consists of harmonics, or multiples of the fundamental frequencies. These harmonics are introduced by an amplifier or other component in its handling of the original signal. Lower figures are better.
tonearm: The cylindrical rod on a turntable that supports the phono cartridge. See pivoted tonearm and linear-tracking tonearm.
tracking: The ability of a compact disc player or phono cartridge to follow the pattern recorded on a $C D$ or vinyl record.
tracking error: In playing a record, the tonearm should hold the cartridge as perpendicular to the record's surface as possible. Tracking error is expressed as the number of degrees away from perpendicular.
tracking force: The pressure of a stylus on a record, measured in grams.
transport: The parts of a tape deck that move the tape, including the motor(s), hubs, capstan(s), pinchroller(s), and other mechanisms. In a
compact disc player or turntable, the transport system rotates the $C D$ or record.
treble: The high part of the audio frequency range; see bass and midrange.
tuner: A component that receives radio signals from an antenna and allows the user to select a specific station.
turntable: Also known as a phonograph or record player, a turntable rotates vinyl records; see cartridge and stylus.
tweeter: A driver in a speaker system that is designed to reproduce treble sounds (high frequencies).
two-way, three-way: Refers to the number of frequency bands a speaker system's output is divided into. A twoway system typically has a woofer and a tweeter, a three-way system adds a midrange speaker to that configura-
tion. Systems up to five-way have been marketed.
volume: Usually expressed in decibels $(d B)$, the strength of a sound wave or audio signal.

W/ch (watts per channel): A specification that indicates how much power an amplifier or receiver will deliver to each of a pair of speakers.

W\&F (wow-and-flutter): A combined specification indicating the speed accuracy of mechanical components such as turntables and cassette decks. Lower figures are better. See wow and flutter.
woofer: A driver in a speaker system designed to reproduce the low, or bass, part of the audio frequency spectrum.
wow: A measurement of slow speed variations; usually combined with flutter, a measurement of fast speed variations. Lower figures are better.

AC-alternating current
A/D-analog to digital
AFC-automatic frequency
control
alt-ch-alternate channel
amp-amplifier
CD-compact disc
CIRC-cross interleave Reed-
Solomon code
$\mathrm{CrO}_{2}$-chromium dioxide
D/A-digital to analog
DAT-digital audio tape
dB-decibel
dBf-decibel femtowatt
DC-direct current
EE-extraefficiency
EFM-eight-to-fourteen modulation
EIA-Electronic Industries
Association
EIA.J-Electronic Industries
Association of Japan
EQ-equalization
F-farad
FeCr -ferrichrome
FET-field-effect transistor
FR-frequency response
g-gram(s)
HD-harmonic distortion
HX-headroom extension
Hz -heriz (cycles per second)
1C-integrated circuit
1EC-International Electro-
technical Commission
IEEE-Institute of Electrical

Electronic Engineers
IF-intermediate frequency
IHF-Institute of High
Fidelity
IM-intermodulation (distortion)
imp-impedance
IPS--inches per second
$k$-one thousand
$\mathbf{k H z}$-kilohertz (one thousand
cycles per second)
LCD-liquid-crystal display
LED-light-emitting diode
1./R-left/right

LSI-large-scale integrated (circuit)
m-meter (as in SPL/W/m)
$\mathbf{m}$-milli (one thousandth, as in msec )
Mb/sec-megabits per second
MC-moving coil
MM—moving magnet
MNOS-metallic nitrogenoxide semiconductor
MOL-maximum output level
MOSFET-metal-oxide semiconductor field-effect transistor
mm-millimeter
ms-millisecond
$\mathbf{m V}$-millivolt
mW-milliwat
MPX—multiplex
$\mu$-micro(one millionth)

MSB-most significant bit
NAB-National Association of Broadcasters
nWb-nano Weber
NR-noise reduction
PCM-pulse-code modulation
pF—picofarads
PLL-phase-locked loop
P-P—peak-to-peak, push pull
RF-radio frequency
RIAA-Recording Industry
Association of America
rms-root mean square
RPM-revolutions per minute
sel-selectivity
sens-sensitivity
sep-separation
SMPTE—Society of Motion
Picture and Television Engineers
S/N-signal-to-noise ratio
SPL-sound-pressure level
THD-total harmonic distor-

## tion

TIM-Iransient intermodula-
tion
V-volt(s)
VU-volume unit
W-watt(s)
W\&F-wow and flutter
Wb-Weber
wrms-weighted root mean
square
wtd-weighted

## LOUDSPEAKERS

 TECHNICS SBL-35 Powertul Loudspeaker System - Linear Phose 2.Way System - Large Diom. $10{ }^{\prime \prime}$ Wooter - Antir resonanccabinet - Atr cabinel - Atroctive
Woodgroin Finlsh List 58000 eo sale: $\$ 41.00$ ea.
E.P.I. CD55

Way Speaker system
Frequency Response

- Constani Disporsion

Design - Speciolly De
signed High Etiliency
signed
Cabinet
sale: $\$ 99.00$ ea.


TECHNICS SBK14 3.Way Speaker system

- $12^{\prime \prime}$ Wooler - Horn Super tonce - Emiclency Bass RellexDesion. Heary Duly Anli-Re sonance List $\$ 14000$ sale: $\$ 79.00$ ea.
E.P.I. T/E 10011 2-Way Loudspe - Smoother High Frec.
Response - Wide Dispe sion - Ook Veneer finish List: $\$ 120,95$ sale: $\$ 75.00$ ea.



## : PORTABLES

## TOSHIBA RT4048 <br> AM/FM Stereo Radio

Cassete Player - Dolbsy B N . Auto
 - Aulo Shut.Oll - Lighl. weight heoaphones
 sale: $\$ \mathbf{5 5 . 0 0}$

SONY WMF-100II somy Super Walkman - AMFM Slereo Cassethe - Auto Reverse - Quick Charget - Dalby B NR sale: $\$ 129.95$

SONY D-15 Discman Partable CD Player - Ulita Small \& Ligniwi. - 24.rack Random Music
 - Unilinear Converter

CALL FOR PRICE
AUTO


SONY ESS.93 $6^{6 \prime \times 9}$ " 3 .Way Car Speakers - Hi. Power - Oval Smode - 80 Wath Max List $\$ 40995$ Palir


SHERWOOD CRD350
Car Stereo whith Cassette Deck - AM StereolFM Stereo Recelver. Full Logic Controilled - Dolby Bic NR. Auto Re verse - Bulit.|n Amp wiralance \& fadel

- Localidist. Swith. Piesel Scon. Cloct - Security Cover

List 5320.95 sale: $\$ \mathbf{1 8 2 . 0 0}$


TEAC V-285CHX
Stereo Cassette Deck - Dolbv R Cs, MXPRONR. Biasfine Tuning potille $\cdot 3$-pos lape Select - 3-Digil Tape LISt 149.95 SALE: $\$ 99.95$


TEAC R435X
Auto Reverse Cassette Deck - Bi.Directional recora ana playbock - 3 -position tape selector . Oulput level controls
List: \$205.00 Sale: $\mathbf{\$ 1 4 9 . 9 5}$


TECHNICS RST-55R Double Quick Reverse Cossette Deck

- Auto Reverse on Both lope Dives. 24 Mr
 CALL FOR PRICE


TEAC W990RX
Auto Reverse Double Cassette Deck - Coninnuous Recarding/ployback - 3.MOIOR IC Legic . Wirieless Remole C - Reverse Ediling - Dolby a Cabx NR

CALL FOR PRICE

## .HEADPHONES

 KOSS PRO 4XChoice • Digitiol Reoay
Llist \$90.00 SALE: \$49.95
SENNHEISER HD414SL
Open Air - Innovative Design List: S89.95 Sale: \$49.95

SONY MDR CD6

- Digital Reody

List: 5119.95 SALE: $\$ 79.00$


TECHNICS SA. 918 Quartz Synthesizer AM/FM Stereo Recelver - 70 Want ( $35 \times 2$ ) • 10 Memory Presets $\cdot$ lape Mon. Switch • Bass 8 Treble Cont

- Quaniz Clock - Low Distothon


TECHNICS SAR-310 Quartz Synthesizer AM/FM Remole Stereo Recelver -5-Band Ea \& Spectrum Analyzer - 24
Memory Presels. 40 Key Wirevess Remo - 110 Wams (55 ${ }^{2}$ )

List: \$460.00 SALE: $\mathbf{\$ 2 4 9 . 9 5}$


AKAI AAV-405
surround Sound Receiver
 List: $\$ 599.95$ SALE: $\$ \mathbf{3 8 9 . 0 0}$


JVC RX-999
Remote Controlled Recelver * 200 Watts ( 100 k 2 ) - Digutai Dolby Surround
 - Preset Sca

CALL FOR PRICE
AUDIO TAPE CARTRIDGES
TDK SA. 90
Uiliro Quiet Mi.bias
SONY UX.PRO 90 High bias perlect tor live - 24.89

MAXELL UDS149
Standara Mi-bias cassetl
40 lo \$16.95
MAXELL MX90
ヶ० t० $\mathbf{\$ 2 9 . 9 5}$

## 明 - P?

12 E. Delaware PI., Chicago 60611
16 YEARS OF MEETING THE NATION'S STEREO NEEDS WITH THE ABSOLUTE BEST PRICES ON TOP NAME NATIONAL BRANDS Call Mon. thru Sat. 10 to $5(312) 664-0020 \cdot 1$ ( 800 ) 621.8042
 Freight charges nof included in prices. All
merchandise shipped brand new, factory tresh with full warranty. Not responsible tor typographical errors.
NOTE: This is just a partial listing of our extensive inventory, please call for quotes on additional items or to request a free price list.


SHARP DX-650
Compact Dlsc Playe - 3-Beam Loser Pick-up - Programmabl List: $\$ 249,95$ SALE: $\$ 119.95$


TECHNICS SLP-420 Remote Controlled CD Player - High Resolution Digital Filter - Double Repeal • Programmable List \$475.00 Sale: $\mathbf{\$ 2 1 9 . 9 5}$


SONY CDP- 21
Compact CD Player - Unilinear Converlor wiligitol Fifter - Env Sensor - Auto Music Sensor $\cdot 4$ Repeat Modes wishultie Ploy
List: $\$ 250.00$ Sale: $\$ \mathbf{1 4 9 . 9 5}$


TECHNICS SLP400C Multi-DIsc CD Changer - Programmable 6 -Disc Changerliplaver

- Remole Control 036 Step Random Access Progrom. Quadruble Oversampiling CALL FOR PRICE


JVC XLM600 CD Multi Changer - - Disc Capability - Remote Contiol from 7 discs - Repeat - Memory back-up - 3 Beam loser Pick-up and digilal tiller CALLFOR PRICE

## TURNTABLES



CALL FOR PRICE
TECHNICS SLDD33 Phose Locked Direc Drive Automatic Turntoble - Highly Sensifive Gimbol Carl. Connector System CALL FOR PRICE

## DUAL CS505.2

Belt Driven
Semi-Automatic Turntable

## - Ulira Low Mass fonear

- Interchongeoble $1 / 2$

Mount Pick-up Heod

- Fine Speed Adjusime

Skale Device • Floailn - Two Scale Antl|
Lust $\$ 299.00$ SALE: $\$ 199.95$

## 

Accuphase (sec Madrigal)
Ace Audio
532 5th St.
East Northport, NY 11731
516-757-8990
Acoustic Interface
P.O. Box 6632

Santa Barbara. CA 93160
805-964-0247
Acoustic Research
330 Turnpike St.
Canton, MA 02021-2703
617-821-2300

## Acoustic Sciences

P.O. Box 1189

Eugenc, OR 97440
800-272-8823

## $A D C$

851 Traeger Ave.
San Bruno, CA 94066
415-266-8500

## Adcom

11 Elkins Rd.
East Brunswick. NJ 08816
201-390-1130

## a/d/s

One Progress Way
Wilmington. MA 01887
617-729-1140

## Advent

4138 North United Parkway
Schiller Park, IL 60176
800-323-1566

## Aiwa

35 Oxford Dr.
Moonachie, NJ 07074
201-440-5220

## Akai

225 Old New Brunswick Rd.
Piscataway, NJ 08854
201-562-8500

## AkG Acoustics

77 Sclleck St
Stamford, CT 06902
203-348-2121

## Alaron

185 Park St.
P.O. Box 550

Troy, MI 48099
313-585-8400

## Allison Acoustics

7 Tech Circle
Natick, MA 01760
617-237-2670

Allsop
4201 N. Meridian
Bellingham, WA 98225
206-734-9090

## Alphasonik

701 Heinz Ave.
Berkeley, CA 94710
415-548-4013

## Altec Lansing

Milford, PA 18337
717-296-4434

Ambria (see Parasound)

## Analog Excellence

12021 Wilshire Blvd., No 131
W. Los Angeles, CA 90025

213-453-6303

## Analogic Design Group

Box 6227, 1241 Montlicu Ave
High Point, NC 27262
919-884-7394
Andante (see Sumiko)

## Angstrom Associates

2108 th St
Lewiston, NY 14092
800-387-8193

Aphex Systems
13340 Saticoy St.
North Hollywood, CA 91605
818-765-2212

## Apogee Acoustics

35 York Industrial Park
Randolph, MA 02368
617-963-0124
Arcam by A\&R Corporation
RR \# 2 Box 478
Highland Lakes, NJ 07422
201-764-8958
Astatic
Conneaut. OH 44030-0:20
216-593-1!11
ATC Loudspeaker Technology
231 Eimwood Dr.
Rochester, NY 14616
716-865-9938

## Audio By Van Alstine

2202 River Hills Dr
Burnsville, MN 55337
612-890-3517

## Audio Control

22313 70th Ave. W.
Mountlake Terrace, W. 98043
206-775-8461

Audio Design Associates 610 Mamaroneck Ave.
White Plains. NY 10605
914-946-9595

## Audio Dynamics

851 Tracger Ave.
San Bruno. CA 94066
415-266-8500

## Audio Festasy

231 Elmwood Dr
Rochester, NY'14616
716-865-9938

## Audio Pro(sec Sonic Research)

Audioques:
P.O. Box 3060

San Clemente, CA 92672
714-498-2770

Audio Research
6801 Shingle Creek Pkwy.
Minncapolis, MN 55430
612-566-7570

## AudioSource

185 Chess Dr.
Foster City. CA 94404
415-574-7585
Audio-Technica
1221 Commerce Dr.
Stow. OH 44224
216-686-2600

## Azden

147 New Hyde Park Rd
Franklin Square, NY 11010
516-328-7500

## B\&h Components

P.O. Box 331

Orchard Park, NY 14127
800-543-5252

## BWW Ioudsperakers

P.O. Box 653

Buffalo. NY 14240
416-297-0595

Bang \& Olufsen
1150 Fechanville Dr.
Mount Prospect, IL 60056
312-299-9380

## BASF

Crosby Dr.
Bedford, MA 01730-1471
$617-271-4000$

## Bedini Amplifier:

13410 Sayre St.
Sylmar, CA 91342
818-367-7922

Belles Research
P.O. Box 307

AI Country Club Rd.
East Rochester. NY 14445
716-586-7.300

## The David Berning Company

I 1007 Candlelight Lane
Potomac. MD 20854
301-299-8970

## Beyer Dynamic

5-05 Burns Ave
Hicksville. NY 1180
516-935-8000

## Bib

10497 Centennial Rd.
Littleton. CO 80127
303-972-(0410

## Bose

The Mountain
Framingham, MA 01701
508-879-7.330

Boston Acoustics
247 Lynnfield St.
Pcabody, MA 01960
508-532-2111

## Boulder Amplifiers

4850 Sterling Dr.
Boulder. (O) 80301
303-449-8220

Bozak (see NF.AR)

## Bryston

RFI) \#24. Box 2255
Montpelier, VT 05652
802-233-6159

BSNI (sec I aser Audio)

## Buff Stufi

P.O. Box 43128

Upper Montclair, NJ 07043
201-509-9355

## Bush Industries

1 Mason Ir. P.O. Box 460
Jamestown. NY 14702-0460
800-228-BUSH: in NY 800-248BUSH

Calrad Electronics
819 N. Highland Ave.
Los Angeles. C'A 90038-3488
213-465-2131
Cambridge Audio
89 Doug Brown Way
Holliston. MA 01746
617-429-6706

| Cambridge Soundworks | Counterfeet (see Sumiko) | DIC Digital | Forte |
| :---: | :---: | :---: | :---: |
| 154 California St. |  | 2 University Plaza | 1955 Industrial Dr. |
| Newton, MA 02158 | Counterparts (see Sumiko) | Hackensack, NJ 07601 | Auburn. CA 95603 |
| 617-332-9461 |  | 201-487-4605 | 916-888-0609 |
|  | Creek Audio (see Music Hall) |  |  |
| Canton |  | Digitrac (see Ortofon) | Fosgate/Audionics |
| 915 Washington Ave. S. | Crown International |  | P.O. Box 70 |
| Minneapolis, MN 5541 5-1245 | 1718 W. Mishawaka Rd. | Discrete Technology | Heber City, UT 84032 |
| 612-333-1150 | Elkhart. IN 46517 <br> 219-294-8000 | 3254 Fifth St. Oceanside, NY 11572 | 801-654-4046 |
| Carter-Craft Jnc. |  | 516-764-1121 | Fostex |
| P.O. Box 5185 | Custom Woodwork \& Design |  | 15431 Blackburn Ave. |
| Rockford. IL 61125 | 5200 W. 73 St. | Discwasher | Norwalk, CA 90650 |
| 815-963-2100 | Bedford Park, IL 60638 312-563-1745 | 4310 Transworld Rd. Schiller Park, IL 60176 | 213-921-1112 |
| Carver |  | 312-678-9600 | Fried Products |
| P.O. Box 1237 | Dahlquist |  | 7616 City Line Ave. |
| Lynnwood, WA 98046 | 601 Old Willets Path | DNM (see Music Hall) | Philadelphia, PA 19151 |
| 206-775-1202 | Hauppauge, NY 11788 516-234-5757 | Dual (sce Ortofon) | $215-473-7474$ |
| Celestion Industries |  |  | Fuji |
| 89 Doug Brown Way | Davidson-Roth | Electrocompaniet (see Music \& | 555 Taxter Rd. |
| Holliston, MA 01746 | P.O. Box 95707 | Sound Imports) | Elmsford, NY 10523 |
| 617-429-6706 | Hoffman Estates, IL 60195 312-843-1797 | Emerson | 914-789-8100 |
| Cello |  | One Emerson Lane | Funai |
| 315 Peck St. | Dayton Wright Group | N. Bergen. NJ 07047 | 100 North St. |
| New Haven, CT 06513 | 97 Newkirk Rd. N. | 201-854-6600 | Teterboro, NJ 07608 |
| 203-865-1237 | Richmond Hill, Ontario Canada L4C 3G4 | Eminent Technology | 201-288-2606 |
| Cerwin-Vega | 416-884-8586 | 225 E. PalmerSt. | GE Consumer Electronics |
| 555 E. Easy St. |  | Tallahassee, FL 32301 | 600 N. Sherman Dr. |
| Simi Valley, CA 93065 | dB Plus | 904-575-5655 | Indianapolis, IN 46206 |
| 805-584-9332 | 135 Torbay Rd. Markham, Ontario | Energy | 317-267-5000 |
| Chapman Sound | Canada L3R 1G7 | 135 Torbay Rd. | Geneva Group |
| P.O. Box 18123 | 416-475-0050 | Markham, Ontario | 9909 South Shore Dr. |
| Seattle, WA 98118 |  | Canada L3R IG7 | Plymouth, MN 55441 |
| 206-526-8647 | DB Systems Main St. | 416-475-0050 | 612-546-5620 |
| ChicagoSpeaker Stand | Rindge Center, NH 03461 | EPI (Epicure Products) | Gold Sound |
| 1495 Greenleaf | 603-899-5121 | 25 Hale St. | P.O. Box 141 |
| Elk Grove Village, IL 60007 |  | Newburyport. MA 01950 | Englewood, CO 801 10 |
| 312-228-0080 | dbx <br> 71 Chapel St. | 617-462-1000 | 303-761-6483 |
| Citizen | Newton, MA 02195 | Epoch (sec Stanton) | GoldStar |
| 2999 Overland A ve. \#203 | 617-964-3210 |  | 1050 Wall St. West |
| Los Angeles. CA 90064 |  | Epos (see Music Hall) | Lyndhurst, NJ 07071 |
| $213.558-0960$ | DCM Corporation |  | $201-460-8870$ |
| 1-800-421-6516 | 670 Airport Blvd. <br> Ann Arbor, MI 48108 | ESM (sce Energy) | Grace (sce Sumiko) |
| Classe Audio | 313-994-8481 | ESS Laboratory |  |
| 9414 Cote De Liesse Rd. |  | 2575 El Presidio St. | Grado |
| Lachine, Quebec | Dennesen Electrostatics | Long Beach, CA 90810 | 921 Tice Place |
| Canada H8T \|AI | 715 Hale St., Box 51 | 213-537-2037 | Westfield, NJ 07090 |
| 514-636-6384 | $\begin{aligned} & \text { Beverly, MA } 01915 \\ & 617-927-2521 \end{aligned}$ | Euphonic Audio | 201-233-5893 |
| Clear Audio |  | $\text { R.R. \#1, Box } 266$ | Gusdorf |
| P.O. Box 7028 | Denon | New Egypt, NJ 08533 | 11440 Lackland Rd. |
| Westlake Village, CA 91359 | 222 New Rd. | 201-929-2613 | St. Louis, MO63146 |
| 818-889-9828 | Parsippany. NJ 07054 201-575-7810 | Fineline Distributing | 314-567-5249 |
| Clements Audio |  | P.O. Box 90 | Reuben Guss Enterprises |
| 9108 Yonge St. | Design Acoustics | Londonderry, NH 03053-0090 | 61 West 62ndSt. |
| Richmond Hill, Ontario | 1225 Commerce Dr. | 603-432-6716 | New York, NY 10023 |
| Canada L4C 2Z9 | Stow, OH 44224 |  | 212-582.7781 |
| 419-886-5373 | 216-686-2600 | Fisher 21350 Lassen St. | David Hafler |
| Conrad-Johnson | Desktop Loudspeaker Systems | Chatsworth, CA 91311-2329 | 5910Crescent Blvd. |
| 2800R Dorr Ave. | P.O. Box 3340, Rosedale Station | 818-998-7322 | Pennsauken. NJ 08109 |
| Fairfax, VA 22031 | Kansas City, KS 66103 |  | 609-662-6355 |
| 703-698-8581 | 816-561-1878 | Focus Speaker Systems 1101 East Second St. | Harman Kardon |
| Convergent Audio Technology | D.G. Industries | Dayton, OH 45403 | 240 Crossways Park West |
| 24 Falcon Dr. | 7740 Lemona Ave. | 513-222-3946 | Woodbury, NY 11797 |
| West Henrietta, NY 14586 716-359-2700 | Van Nuys, CA 91405 818-787-031! |  | 516-496-3400 |



## Hartley Products

1200 N. 23 rd St., Suite 105
Wilmington, NC 28405
919-763-7422
Heco
701 Heinz Ave.
Berkeley, CA 94710
415-548-4013
Heybrook by D'Ascanio Audio
11450 Overseas Highway
Marathon, FL 33050
305-743-7130
Highphonic (see Analog Excellence)

## Hitachi

401 West Artesia Blvd.
Compton, CA 90220
213-537-8383
Hunt (see Music Hall)

## Image

135 Torbay Rd.
Markham. Ontario
Canada L3R IG7
416-475-0050

## Infinity

94090wensmouth
Chatsworth. CA 91311
818-709-9400

## Innovative Concepts

1705 Junction Court, Suite 160
San Jose, CA 951 12-1023
408-436-1777
International Components 105 Maxess Rd.
Melville, NY 11747
516-293-1500
Intraclean by A.R.T.
4505-2H Industrial St. Box 3592
Simi Valley, CA 93063
805-527-9580
Irish Magnetic Tape
270-78 Newtown Rd.
Plainview, NY 11803
516-293-5582

## Jadis (see Madrigal)

## Jamo

425 Huchl Rd.. Bldg 3A
Northbrook, IL 60062
312-498-4648

## JBL

240 Crossways Park West
Woodbury, NY 11797
516-496-3400
Jecklin (see Astatic)

## Jensen

4136 N. United Parkway
Schiller Park, IL 60176
312-671-5680

## JPW Loudspeakers

4632 Cross Roads Park Dr.
Liverpool, NY 13088
315-451-5721

JRM
3716 Broadway NE
Knoxville, TN 37917-3120
615-688-650।
J.S. Engineering

519 E. Middle Turnpike
Manchester, CT 06040
203-643-2160
JVC
41 Slater Dr.
Elmwood Park, NJ 07407
201-794-3900
KEF
14120-K Sullyfield Circle
Chantilly, VA 22021
703-631-8810

## Kenwood

2201 E. Domingucz St.
Long Beach, CA 90810
213-518-1700
Kindel Audio
3615 Presley Ave.
Riverside, CA 92507
714-787-0662
Kinergetics
6029 Reseda Blvd.
Tarzana, CA 91356
818-345-285।
Kinetic Audio
P.O. Box 31075

Chicago, IL 60631
312-625-9322

## Kirksaeter

4648 Evansdale Rd.
Woodbridge, VA 22193
703-680-5548
Kiseki (see Sumiko)
Klipsch
P.O. Box 688

Hope. AR 71801
501-777-6751
Klyne Audio Arts
828 7th Ave. SE
Olympia, WA 98501
206-943-5420

## Koss

4129 N. Porl Washington Ave.
Milwaukee, WI 53212
414-964-5000

## Kyocera

100 Randolph Rd., CN 6700
Somerset, NJ 08873-1284
201-560-0060
Laser (see Swire Magnetics)
Laser Audio
Il408th Line
Iroquois Industrial Ctr.
Oakville, Ontario
Canada L6H 2R4
416-842-2850
Lazarus Electronics
4480 Shopping Lane

Simi Valley, CA 93063
805-581-0885
Lazer-Tech Speakers
P.O. Box 28342

Spokane, WA 99228-8342
509-467-9369

Lenoxx
14043 rd St .
Brooklyn, NY 11232
718-499-4005
Leslie Dame Enterprises
$111-2073$ rd Ave.
Forest Hills, NY 11375
718-261-4919

## lineage

1556 3rd Ave.
New York, NY 10128
212-722-0123
Linn Products
8709 Castle Park Dr.
Indianapolis, IN 46256
317-849-5880
Logan I.abs (see Symdex)

## LTSound

7980 LT Parkway
Lithonia, GA 30058
404-482-4836

## Luxman

19145 Gramercy Pl.
Torrance, CA 90501
213-326-8000

## Madrigal

2081 S. Main St., Box 78 I
Middletown, CT 06457
203-346-0896
Magnat (sce Magnasphere)

## Magnasphere

70 Atlantic Ave.
Marblehead, MA 01945-3038
617-639-1400

## Magnavox

I-40 and Straw Plains Pike
P.O. Box 6950

Knoxville. TN 37914
615-521-4316

## Magnepan

16459 th St
White Bear Lake, MN 55110
612-426-1645
M\&K (Miller \& Kreisel)
10391 Jefferson Blvd.
Culver City, CA 90230
213-204-2854
Marantz
20525 Nordhoff St.
Chatsworth. CA 91313
818-998-9333
Mark Levinson (see Madrigal)
John Marovskis Audio
2889 Roebling Ave.
Bronx, NY 1046
212-892-7419

Martin-Logan
P.O. Box 741

2001 Delaware St.
Lawrence, KS 66044
913-749-0|33
Maxell
60Oxford Dr.
Moonachie, NJ 07074
201-794-5900
M.B. Quart Electronics

25 Walpole Park South
Walpole, MA 0208I
617-668-8973
Mclntosh
2 Chambers St.
Binghamton. NY 13903-2699
607-723-3512

## Melos Audio

723 Bound Brook Rd.
Dunellen, NJ 08812
201-968-877
Memorex by Memtek
P.O. Box 90121

Ft. Worth. TX 76101
817-878-6700

## Meridian (see Madrigal)

Mirage Acoustics
! 35 Torbay Rd.
Markham, Ontario
Canada, L3R 1G7
416-475-0050
Mission Electronics
5985 Atlantic Dr.. Unit 6
Mississauga, Ontario L4W IS4
416-673-3777

## Mitsubishi

5757 Plaza Dr.
Cypress. CA 90630
714-220-2500

## M. M. Newman

148 Linden St.. Suite 105
Wellesley, MA 02181
617-237-5860
The Mod Squad
542 Coast Highway 10
Leucadia, CA 92024-0965
619-436-7666

## Mogami

P.O. Box 2027

Culver City, CA 90230
213-390-6608

## Monitor Audio by Kevro

Electronics
P.O. Box 1355

Buffalo, NY 14205
416-831-4741

## Monster Cable

IOI Townsend St.
San Francisco, CA 94107
415-777-1355
Morel Acoustics
414 Harvard St.
Brookline, MA 02146
61 7-277-6663

Motif (see Conrad-Johnson)
MTX Loudspeaker Systems
(Mitek Group)
One Mitek Plaza
Winslow, IL 61809
815-367-3000
Music \& Sound Imports
30 Snowflake Rd.
Huntingdon Valley, PA 19006
215-357-7858

## Music Hall

108 Station Rd.
Great Neck, NY 11023
516-487-3663

## NAD

575 University Ave.
Norwood. MA 02062
617-762-0202

## Nady Systems

114565 th St.
Oakland, CA 94608
415-652-241]
Nagaoka
2108 th St .
Lewiston. NY 14092
Nakamichi
19701 S. Vermont Ave.
Torrance, CA 90502
213-538-8150
Namiki (see Analog Excellence)
NEAR
5 East St.
New Britian, CT 0605 I
203-225-7816
NEC Home Electronics
1255 Michael Dr.
Wood Dale, IL 60191-1094
312-860-9500
Nikko Audio
5830 S. Triangle Dr.
Commerce, CA 90040
213-721-4373

## Niles Audio

12331 S.W. 130 th St .
Miami, FL 33186
305-238-4373

## Nitty Gritty

4650 Arrow Hwy., \#F4
Montclair, CA 91763
714-625-5525
Nova Electro-Acoustics
P.O. Box 25488

Los Angeles, CA 90025
213-477-7491

## Novak Loudspeaker

Merrits Island Rd.
Pine Island, NY 10969
914-258-4363

## Numark

503 Newfield Ave., Raritan Center
Edison, NJ 08837
201-255-3222

Onix (se
Onkyo
200 Williams Dr.
Ramscy, NJ 07446
201-825-7950

## Oracle Audio

505 Industrial Blvd. Sherbrooke, Quebec, Canada
JILIX7
819-566-5566

## Ortofon

122 Dupont St.
Plainview, NY 11803
516-349-9180

## O'Sullivan Industries

1900 Gulf St.
Lamar, MO64759
417-682-3322

## OWI

14016 Bora Bora Way, 128-G
Marina Del Rey, CA 90292
213-822-9083
Panasonic
One Panasonic Way
Secaucus, NJ 07094
201-348-7000
Parasound Products
950 Battery St.
San Francisco, CA 94111
415-397-7100

## Parsec

400 W .9 th St .
Wilmington, DE 19801
302-651-9189

## Perreaux

135 Torbay Rd.
Markham, Ontario
Canada L3R1G7
416-475-0050
Phase Technology
6400 Youngerman Circle
Jacksonville, FL 32244
904-777-0700

## Philco

P.O. Box 14810

Knoxville, TN 37914
615-521-4316

## Philips

P.O. Box 14810

Knoxville, TN 37914
615-521-4316

## Pickering

Sunnyside Blvd.
Plainview, NY 11803
516-349-0200

## Pinnacle Audio

517 Route 111
Hauppauge, NY 11788
516-360-9410

## Pioneer Electronics

P.O. Box 1540

Long Beach, CA 90801
213-835-6177

Plateau
P.O. Box 347

Montgomery Center, VT 05471-
0347
315-474-7588
Polk Audio
5601 Metro Dr.
Baltimore, MD 21215
301-358-3600
Precise Acoustics
200 Williams Dr., Suite B
Ramsey, NJ 07446
201-934-1335
Premier (see Sumiko)
Proton
737 W. Artesia Blvd.
Compton, CA 90220
213-638-5151

## PS Audio

4145 Santa Fe Rd.
San Luis Obispo, CA 93401
805-543-6655

## PSB Speakers

575 University Ave.
Norwood, MA 02062
617-762-7453

## Quad

14120-K Sullyfield Circle
Chantilly, VA 22021
703-631-8618

## Quasar

1325 Pratt Blvd.
Elk Grove Village, IL 60007
312-228-6366

## Quicksilver Audio

3707 N. Merrimac Circle
Stockton, CA 95209
209-462-771।
RCA
600 N. Sherman Dr.
P.O. Box 1976

Indianapolis, IN 46201
317-267-5000

## Realistic

1700 One Tandy Center
Fort Worth, TX 76102
817-390-3300

## Recoton

46-23 Crane St.
Long Island City, NY I 1101
718-392-6442

## Reel to Real Designs

2105Claremont
Springfield, IL. 62703
217-529-8793
Revolver (see Music Hall)

## Revox

1425 Elm Hill Pike
Nashville, TN 37210
615-254-5651
Rhapsody (see Alaron)

RH Labs
6844 S. W. 60th Ave.
Portand, OR 97219
503-245-8666
Rich Acoustic Iabs
3 Cleveland St.
Headland, AL 36345
205-693-5082
Rockustics
41 E. MainSt.
Bay Shore, NY 11706
516-665-6497

## Ross Marks

8 W. Division St.
Chicago, IL 60610
312-776-8273
Rotel
P.O. Box 653

Buffalo, NY 14240
416-297-0595
Jeff Rowland Design Group
20-C Mountview Lane
Colorado Springs, CO 80907
303-528-8388
Russound/FMP
135 McDonough St.
Portsmouth, NH 03801
603-431-5282

## SAE

1502 Gage Rd.
Montebello, CA 90640
213-726-9999
SAEC (see A nalog Excellence)

## Samsung

30I Mayhill St.
Saddle Brook. NJ 07662
201-587-9600

## Sansui

1250 Valley Brook A ve.
Lyndhurst, NJ 07071
201-460-9710
Sanyo
1200 W. Artesia Blvd.
Compton, CA 90220
213-537-5830

## Scott

5601 Westside Ave.
North Bergen, NJ 07047
201-662-2000

## Seattle Sound

P.O. Box 30028

Seattle, WA 98103
206-624-4038
Sennheiser
6 Vista Dr., Box 987
Old Lyme, CT 06371
203-434-9190
Sentry Industries
252C Lake Ave.
Yonkers. NY 10701
914-968-0180

## Shahinian Acoustics

33 A\&B Cedarhurst Ave.
Medford. NY 11763
516-736-0033

## Sharp

Sharp Plaza
Mahwah. NJ 07430
201-529-8200

## Sherwood

I 3845 Artesia Blvd.
Cerritos, CA 90701
213-926-6337

## Shure

222 Hartrey Ave.
Evanston. IL 60202-3696
312-866-2200

## Signet

4701 Hudson Dr.
Stow, OH 44224
216-688-9400
SME (see Sumiko)
Snell Acoustics
143 Essex St.
Haverhill, MA 01830
617-373-6114

## Sonance

32992 Calle Perfecto
San Juan Capistrano, CA 92675
714-661-7558
Sonex by Illbruck
3800 Washington Ave. $N$.
Minneapolis. MN 55412-2197
612-521-3555
Sonic Research
180 Sunny Valley Rd.
New Milford, CN 06776
203-354-9332
Sonographe (see Conrad-Johnson)

## Sonrise

13622 N.E. 20th. Suite F
Bellevue. WA 98005
800-231-8663; 206-641-1900
Sonus (see Sonic Research)
Sony
Sony Dr
Park Ridge, NJ 07656
201-765-3535
Sota Industries
P.O. Box 7075

Berkeley, CA 94707
415-527-1649

Sound Concepts
27 Newell Rd.
Brookline, MA 02146
617-566-0110
Soundcraftsmen
2200 S. Ritchey St.
Santa Ana, CA 92705
714-556-6191

## Soundesign

Harborside Financial Center
Plaza Two

34 Exchange Place
Jersey City, NJ 07302
201-434-1050

## Sound Dynamics

135 Torbay Rd.
Markham. Ontario, Canada L3R 1G7
416-475-0050
Sound Runner
P.O. Box 2027

Culver City. CA 90230
213-390-6608
Speakerlab
735 N. Northlake Way
Scattle, WA 98103
206-633-5020
Specialty Woodworks
7211 Pottsburg Dr.
Jacksonville, FL 32216
904-725-695!
Spectrascan
1!10A Elkton Dr.
Colorado Springs, CO 80907
303-599-9254
Spectrum Loudspeakers
1021 Nevada St.
Toledo. OH 43605
419-698-4488

## Spica

1601 Paseo de Peralta
Santa Fe, NM 87501
505-982-1894
SPI.
135 Torbay Rd.
Markham. Ontario
Canada, L3R 1G7
416-475-0050
Ssangyong
601 16th St.
Carlstadt. NJ 07072
201-939-4300
Stanton
Terminal Dr.
Plainvicw, NY 11803
516-349-0235
Stax
940 E. Dominguez St.
Carson. CA 90746
213-538-5878
Straight Wire
1909 Harrison St., Suite 208
Hollywood, FL 33020
305-925-2470

Sumiko
P.O. Box 5046

Berkeley. CA 94705
415-843-4500

## Sumo

21300 Superior St.
Chatsworth, CA 91311
818-407-2426

## Superphon

1035 Conger \#3

Eugene. OR 97402
503-345-4226
Supex (see Sumiko)
Surround Sound
400 South Date Ave.
Alhambra, CA 91803
818-282-9419
Swire Magnetics
301 E. Alondra Blvd.
Gardena, CA 90248
(213) 515-0494

Sylvania
P.O. Box 14810

Knoxville. TN 37914
615-521-4316
Symdex
Box 359
Gloucester, MA 01930)
508-281-4447
Symphonic (see Funai)
Synthesis (see Conrad-Johnson)

Talisman (see Sumiko)
Talwar
31I West Point Terrace
West Hariford. CT 06107
203-521-2263

## Tandberg

122 DupontSt.
Plainview, NY 11803
516-349-9206

## Tannoy

300 Gage A ve, Unit I
Kitchener. Ontario N2M 2C8
519-745-1158

## TDK

12 Harbor Park Dr.
Port Washington, NY 11050
516-625-0100
TDI.
652 Glenbrook Rd.
Stamford. CT 06906
203-324-7269
Teac
7733 Telegraph Rd.
Montebello, CA 90640
213-726-0303
Technics
One Panasonic Way
Secaucus, NJ 07094
201-348-7000
Thiel
1042 Nandino Blvd.
Lexington, KY 40511
606-254-9427
Thorens (see EPI)

## Threshold

1945 Industrial Dr.
Auburn. CA 95603
916-888-0600

Toshiba
82 Totowa Rd
Wayne, NJ 07470
201-628-8000
Trackmate
8 W. Division St.
Chicago, IL 60610
312-776-8273

## Triad

240 Crossways Park West
Woodbury, NY 11797
516-496-3400
Tweek (see Sumiko)
Uher
7067 Vineland Ave.
N. Hollywood, CA 91605

818-764-1120
Ultralinear (see ESS)
Vandersteen Audio
116 W. 4th St.
Hanford, CA 93230
209-582-0324

Vector Research
1230 Calle Suerte
Camarillo. CA 93010
805-987-1312
Velodyne Acoustics
1746 Junction Ave.
San Jose. CA 95112
408-436-0688
800-835-6396
Visa by Interworld Electronics
9920 N.W. 12 th St.
Miami, FL $33!72$
305-592-9506

Vogel's by TEI Electronics
570 West 18th St.
Hialeah, FL 33010
305-888-3980; 800-327-881I

## Wharfedale

P.O. Box 2146

Peekskill, NY 10566-2146
914-739-6267
Wingate Audio
20 Sunnyside Ave.. Suite A-194
Mill Valley, CA 94941
415-381-5018
Wolcott Audio
2250 N. Bigelow Ave.
Simi Valley. CA 93065
805-527-8842
W'right Audio
13995 S.W. Butner Rd. \#1
Beaverton. OR 97006
503-644-7303

## Yale Audio

2702 Azeele St.
Tampa, FL 33609
813-876-6789

## Vamaha

6660 Orangethorpe Ave.
Buena Park, CA 90620
714-522-9105

## $\mathrm{C}_{\text {Lex }}^{\text {Messifilie }} \mathrm{D}$

## FOR SALE

## 

## CALL FOR PRICE

 FAST \& FRIENDL SERYICE Most Orders Shipped Within 48 Hours HOME AUDIDYAMAHA ADS BOSE. MAFLER. HARMAN KARDON INFINITY, AR, SONY, DEX, JEL. JVC AIWA IECHNICS. AKAI SAE, ADCOM PIONEER MAGNAVOX AND MANY MORE CAR AUDIO AOS ALPINE, BLAUPUNKT. CONCORD. SONY
KENWOOD, PIONEER, CLIFFOAD TECHNICS YIDEO
SONY JVC RCA PANASONIC ZENITH GE 7887 Dunbrook \#G, San Diego. CA 92126

EAE • MOOUSTC RESEAROH

## Tl|e: Sound Stuller

For the Musical Dillerence Authorized Deater For

| Acoustat | NAD (in store only) |
| :--- | :--- |
| Audio Control | Belles |
| Nitty Gritty | CWD |
| Mak | dbx |
| Nakamichi | Fried |
| Oracle | Harman Kardon |
| Polk | 30 |
| PROAC | Orikyo |
| Proton | Grado |
| STAX | Audioquest |
| Thorens | Celestion |
| Dahlquist | DCM |
| Haller | Niles |
| Monster Cable | Kinergetics |
| Citation | Duntech |

1706 Main St Marinette, WI 54143 (715) 735-9002

HIGH-END LOUDSPEAKER systems, speaker kits and the widest selection of raw drivers from the world's finest manufacturers. For beginners and audiophiles. Free catalog. A\&S SPEAKERS, 3170 23rd St., San Francisco, CA 94110. (415) 641-4573

High-end and hard-to-find audio components Low, low prices! AUDIO AMERICA (Virginia) Call 1-703-745-2223


## GET LOW PRICES ON ALL

types of audio equipment - including high-end and esoteric products not nor mally discounted. Now we can SAVE YOU MONEY on the equipment you real ly want. Extensive selection - no need to settle for second choice. Thousands of satisfied customers world-wide. All products feature USA manufacturer's warranty. Call us for price quotes or friendly. expert advice. Catalog $\$ 1.00$ 616-451-3868. Audio Advisor. 225 Oakes. S.W.. Grand Rapids. MI 49503. We accept VISA/MC/AMEX/DISCOVER.

## LOWEST PRICES <br> On over 150 brands <br> Car - Home , Video <br> For Specials List and Catalos only 800-233-8375

HIGH QUALITY BRANDS-Car. Home. Video Including esoteric. Audio Unlimned. 1203D Adams Ave.. La Grande. Oregon 97850. (503) 963-5731.


LOUDSPEAKER COMPONENTS-KITS. Dynaudio, Morel Eclipse. Focal, Peerless, Eton. Vifa, more! Crossove parts-design books also. Catalog \$1. MENISCUS, 3275 Gladiola, Wyoming. MI 49509. (618) 534-9121.

## SERIOUS AUDIOPHILES DESERVE SERIOUS SERVIC.

And that's what woull get
at Reference Audio sis
ems. De offer the be:c
in high end audio and
the best in friendle ser
sice br our knowledge
able staff. From the latest
CD plater to a classic
nega- sall amplificr you'll sike our surprising. ly affordable prices and fast stipping.

GRADO - MAGINLMA
OUAL ORTOFDA

## Bafercice Audio Systems

Call Us... (213) 719-1500

Member Botter Business Bureau 18214 Jatton Ave, Dept. D, Gardena, CA 90248 Hours: M-F 9 to 6, Sat. 9 to 1 Pacific Time

THE FINEST IN HOME AUDIO, CARSTEREO \& VDEO EQUIPMENT

## AUTHORIZED DEALER FOR

- ADS
- AKG
- ALTEC-LANSING
- AUDIO CONTROL
-AUDIO PRO
- AUDIO SOURCE
-B \& W
$\cdot d b x$
-DENON
-GUL
- INFINITY(CAR)
- KENWOOD
- K
- M NOLTA
- MISSION
- MONSTER C.ABLE
- ORION
-OLYMPUS
- POLK AUDIO (CAR)
- PROTON
- SAE
- SANSUI
- SURROUND SOUND
- SNOOPER
- SONANCE
- SOUND

CRAFTSMEN

- TERK ANTENNAS
- CELESTION
- CERWIN VEGA


## Sman Cly

Mazadtown Shopping Center Roste 23 South Kinnelon, N.S. (201)

838-3444

## CABLE TV CONVERTERS/DESCRAMBLERS

Guaranteed lowest prices in U.S. Jerrold, Hamlin, Zenith-many others! Lowest dealer prices! Orders shipped within 24 hours! MasterCard-Visa-C.O.D accepted. FREE CATALOG! Call (800) 345-8927 only! PACIFIC CABLE CO., INC., 73251/2 Reseda Blwd. \#1343, Reseda, CA 91335 . All other information, call (818) 716-5914

## hifi buys

## YOU CAN AFFORD SOMETHING BETTER AT HIFI BUYS

WE CARRY THE BEST STEREO \& VIDEO AT THE BEST PRICE!

- Advent
- KEF
- NEC
- Bang \& Olufisen
- Kenwood
- Kıcker
- Magnavox
- Mirsubishi
- Monster Cable
- Nakamichi
- Nak
- Infinity
- Bazooka
- Belles
- Pickering
- Sharp
- Signet
- Sony

Sony

- Panasonic - Thorens
- Sennheiser - Velodyne


## 14 ATLANTA LOCATIONS (404) 436-1231



AI SOUND STAGt you can talk 100 knowledgeable salesperson who will advise you on the best audio or video equipment that meets your needs and buaget. From our large selection you can compare performance specifications and prices

All SOUND STAGE equipment Includes:

- 30-dar best pice protection
- tree 3-year warranty with parts a labor
- free delliver

PLEASE. NO MAIL ORDER


SimG WITH THE WORLD'S BEST BAMDS\&
An Unlimited supply of Backgrounds from standard stereo records! Record with your voice or perform live with the backgrounds. Used in Professiona' Performance yet connects easily to a home component stereo. This unique product is manufactured and sold Exclusively by LT Sound - Not sold through dealers. Call or writh for a Free Brochure and Demo Record.
LI Sonmd, Dept. SBG, 7980 LT Parkway Lithonia, GA 30058
Manifctured and Sold Encluslvely by LT sound


EQUIPMENT
WE SELL SECOND HAND HIGH QUALITY AUDIO VIDEO MONEY BACK GUARANTEE! Send Name and Addross for free MONTHLY INVENTORY

ROSS STEREO

## MAIL ORDER MART

lets you turn up the volume where your customers are.. want to beam your mail order message where the customers are? Sell surplus ínventory? STEREO REVIEW's new Mail Order Mart was designed with your marketing needs in mind. And this flexible new medium is so budget wise, you can't afford not to use itl
(800) 445-6066

INDEX TO ADNFRTISFRS

$2 \quad$ Beyer Dynamic ..... 107
$\begin{array}{ll}2 & \text { Beyer } \\ 69 & \text { Bryston }\end{array}$ ..... 59
$70 \quad$ Cambridge Soundworks ..... 87
71 Cerwin-Vega ..... 69
.200
Crutchfield
5 Discwasher ..... 39
12 Epicure ..... 135
Illinois Audio ..... 216
75 Jamo HiFi ..... 118
73 Jensen/Advent . ..... 137
74 Klipsch ..... 73
55 Koss. ..... 108
76 Luxman ..... 53-56
77 Magnepan ..... 84
78 Mitsubishi ..... 2-4472 Oak Tree Industries 35
79 Ohm ..... $138-139$
Onkyo. ..... 109-1 05
81 Ortophon .....  134
Pinnacle Speakers ..... 140Perfectbound Pres67,177
90 Polk ..... Cover 2,
10 Proton .....  .61
Radio Shack ..... $\begin{array}{r}.37 \\ \hline 107\end{array}$82 Keel to Keal Designs ....................... 107
13 Sherwood.................................Cover 3




If you would only buyaudio from a real hi-fi company and video from a ieal video manufacturer, from whom do you buy audio/video? The company that builds both high-end audio and video. Akai. Akal's AA-V435-BAN Receiver is proof of what happens when audio and video are fully integrated. Its audiophile features include a "clean" 125 watts per channel; variable loudness, external processor loop, motor-driven volume control, source direct and much more.

The AA-V435-B's extensive video capabilities include the widest assortment of audio/video inputs and outputs including S-VHS, front panel video, and video RE

The true beauty of the sleek AA-V435-13 is the way it
ties everything together. Featuring the most logical rear panel and internal switching designs, it takes full control of your audio/video system, even remotely with its universal remote (capable of "learning" up to 35 functions from almost any remote audio or video components).

Sight and sound are brought together to create a genuine theatrical experience via the AA- $\mathbf{V}^{2} 435-\mathrm{B}$ 's Dolby ${ }^{8}$ Surround Decoder, which even includes extra siereo amplifiers for two rear speakers.

The Akai AA-V435-B. Buile for people who know that the very best in audio/video only happens when audio and video are treated as one.



[^0]:    BYWILLIAMWOLFE Prove by Hing / Narlon

[^1]:    SAMSUNG
    RCD1000 Portable CD System
    Combination CD player/cassette deck/AM/FM tuner. Features 3-beam vertical-type pickup; 16-track programming; repeat track and disc: one-touch record: autostop; $\mathrm{L}(\mathrm{D}$ D track number and time; synchrodubbing CD-to-tape. $23 \times 6.63 \times 6.25 \mathrm{in} ; 9.25 \mathrm{lb} \$ 270$

    ## SaNSUI

    CD-X701i CD Player
    Features 3 beam laser: oversampling digital filter. 28-

[^2]:    . $\$ 149$

