

Stereo Review

US \$2.50 • UK £1.95 • CANADA \$2.95 • MAY 1992

CAR STEREO: UP-FRONT OPTIONS

SIGNAL PROCESSING

How to make bad sound good and good sound better

CONDUCTOR KURT MASUR COMES TO AMERICA



TESTED: Nakamichi Tape Deck, Harman Kardon CD Changer, Klipsch Speaker, Cerwin-Vega Speaker



OPTIMUS



LIVE IN CONCERT! SM



Tonight, enjoy the performance that continues where others end. The Optimus® CD-6120 changer plays up to five compact discs in sequence, up to 32 selections in any order, even random selections for a different concert every time. You get remote control convenience plus a design that lets you view titles and add or remove discs during play. Most importantly, the sound is superb—pure digital stereo with all the energy of the live performance. Like all Optimus brand audio equipment, the CD-6120 is designed, crafted and tested to the highest quality standards in consumer electronics. It's technology that performs for you. Hear it today.

Radio Shack
AMERICA'S
TECHNOLOGY
STORE

A DIVISION OF TANDY CORPORATION
CIRCLE NO. 33 ON READER SERVICE CARD

BULLETIN

by William Livingstone and Glenn Kenny

So Long, Longbox

The Recording Industry Association of America (RIAA) has announced the imminent demise of the environmentally wasteful 6 x 12-inch cardboard "longbox" package for compact discs. CD's are sold in their 5 x 5½-inch jewel boxes almost everywhere else in the world, and according to the RIAA, packaging of that size will become standard for new releases on compact discs in the United States by April 1993.

Precious Metals

Carefully tracking sales, the Recording Industry Association of America has already given a number of 1992 multi-Platinum (for multimillion sales) and Gold and Platinum awards to popular recording artists. In January, Prince's "Diamonds and Pearls" (Paisley Park) went double-Platinum, and Michael Jackson's "Dangerous" (Epic) hit multi-Platinum with sales of four million units. More recently U2's "Achtung Baby" achieved multi-Platinum with sales of three million. Recent Gold awards went to Nine Inch Nails for "Pretty Hate Machine" (TVT), the soundtrack to *Juice* (MCA), and Vanessa Williams's "The Comfort Zone" (Wing).

May Music on PBS

Among outstanding scheduled musical shows on PBS is the May 5 telecast of *Live from Lincoln Center*, featuring the New York Philharmonic under its new music director, Kurt Masur, playing Tchaikovsky's Fifth Symphony and Samuel Barber's Cello Concerto with Lorne Monroe as soloist. On May 22 PBS will present Jacksonville Jazz XII, taped at the 1991 Jacksonville Jazz Festival with the Chick Corea Electric Band, Diane Schuur, Bela Fleck and the Flecktones,

and the trumpeter Arturo Sandoval. Check local listings.

Equipment Care

Bib America has prepared a brochure, "Caring for Your Audio-Video Equipment," to help you protect your equipment and get the best performance from it. To receive a free copy of this pamphlet, write to Bib America, 10497 Centennial Rd., Littleton, CO 80127-4218, or call (800) 325-0853. . . . For LP holdouts, Underground Sound in Memphis is offering *How to Set Up and Tune Your Turntable and Tonearm*, a sixteen-page booklet, for \$8.95 postpaid. Order from Underground Sound, 2125 Central Ave., Memphis, TN 38104.

Buying In

Last year 206,554 laserdisc players were sold in the United States. (There were barely that many in use in the whole country a few years ago.) The Japanese electronics giant Matsushita predicts that 900,000 players will be sold in Japan in 1992 and a total of 800,000 in other countries. Mitsubishi, another Japanese electronics giant, has bought \$4 million worth of stock in Image Entertainment (a manufacturer and distributor of laserdiscs), which gives it 3.5 percent of the company. Mitsubishi has been pressing discs for Image during the past year.

Buying Out

Warner Music International has acquired all outstanding shares in the French classical record company Erato Disques, which now becomes a wholly owned Warner subsidiary. Erato has contracts with Daniel Barenboim and the Berlin Philharmonic and Chicago Symphony orchestras, Ton Koopman and the

Amsterdam Baroque Orchestra, and Joel Cohen and the Boston Camerata, among others. . . . The British conglomerate Thorn EMI has bought the Virgin Music Group from its founder, Richard Branson, for close to \$1 billion. Virgin has recording contracts with such artists as Paula Abdul, Genesis, Janet Jackson, and the Rolling Stones.

Music Notes

The official theme music for the U.S. Open, to be played when the tennis matches are telecast on CBS in August, has been composed by Henry Mancini and recorded by the flutist James Galway. The music can also be heard on Galway's album "Greatest Hits Volume II," scheduled for May release by BMG Classics on its RCA label.

. . . Jazz artist Branford Marsalis has been named to become music director of *The Tonight Show* (NBC) when Johnny Carson is replaced as host by Jay Leno in May. . . . Newport Classic is celebrating the twenty-fifth anniversary of the New York debut of the conductor/keyboardist Anthony Newman with the release of four CD's of Newman performing music by Bach, Handel, Mozart, and himself. . . . The U.S. Postal Service is offering the public the opportunity to vote on designs for a stamp honoring Elvis Presley, with ballots placed in post offices from April 4 to 26. Announcement of the winning design is expected in May. . . . The American soprano Deborah Voight, thirty-one, from Fullerton, California, who has already won several international singing competitions, is the recipient of the 1992 Richard Tucker Award, which carries a stipend of \$30,000. . . . The saxophonist Lee Konitz, sixty-five, from Chicago, is the recipient of this year's International

Jazzpar Prize, awarded by the Danish Jazz Center, which carries a stipend of \$30,300.

Kids and Cats

We are in the midst of another baby boom, and there are already 22,196,000 children in the U.S. between the ages of two and seven. Sony is the latest company to move into this potentially lucrative market with Sony Kids' Music and Sony Kids' Video, featuring Tom Chapin, Dan Crow, Tom Paxton, Rory, Kevin Roth, and Lois Young. . . . Recent releases from Kid Rhino include *The Boy Who Drew Cats* read by William Hurt and *Puss in Boots* read by Tracey Ullman, which made us think that there are 63 million cats in this country, so how come nobody is making records or videos for them? . . . Well, they are. Petavision Inc. has released "Video Catnip," a 25-minute VHS tape intended as entertainment for cats. The price is \$19.95 plus \$4 for shipping and handling from Dick Shapiro's Cats. Call (800) 268-1630 in the U.S., (800) 268-9328 in Canada. Recommending it for adult cats only, we rate it PG. It was far too exciting for our six-month-old Korat kitten Lucia. □



UNSURPASSED VALUE IN BOOKSHELF SPEAKERS



Model PN5+



Model PN70



Model PN50 New Center Channel & Video Speaker

HERE'S WHY

The New York Times

"PINNACLE LOUDSPEAKERS HAS ACHIEVED WONDERS WITH ITS PATENTED VERSION OF A BASS REFLEX ENCLOSURE.

— Hans Fantel, October 21, 1990

Stereo Review

"AT 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...!"

— Julian Hirsch, January 1988

HIGH FIDELITY

"...THE PN6+ IS A MUST HEAR MODEL FOR YOUR AUDITION LIST."

— Robert Lang, November 1989

stereophile

"THE LARGER PN8+ WAS SHOCKINGLY GOOD FOR THE MONEY..."

— Peter Mitchell, April 1990

Inc.

"GOOD SPEAKERS FOR LESS THAN \$200 ARE HARD TO FIND. THE PINNACLE PN5+...BOASTS TRUE HIGH FIDELITY SOUND IN SMALL CABINETS."

— Cary Lu, September 1990

Stereo Review

"HEAR THE PN8+...ESPECIALLY IF YOU ARE LOOKING FOR AN EXCEPTIONAL VALUE IN A SPEAKER."

— Julian Hirsch, July 1990

HEARD ENOUGH?

Patented Loudspeakers from \$150 per pair.

PINNACLE®

255 Executive Drive, Plainview, N.Y. 11803 (516) 576-9052
CIRCLE NO. 26 ON READER SERVICE CARD



Cover

The Nakamichi TunerDeck I, Jensen CD-9500, and Alpine Model 7980 represent some of today's options in car stereo head units. For more, see "Heads First" on page 42.

Photograph by Jeffrey Krein

BULLETIN 1

LETTERS 8

RECORD MAKERS 10

NEW PRODUCTS 12

AUDIO Q&A 17

SIGNALS 20

TECHNICAL TALK 24

POPULAR MUSIC 69

CLASSICAL MUSIC 81

BACKBEAT 96

COPYRIGHT © 1992 BY HACHETTE MAGAZINES, INC. All rights reserved. Stereo Review, May 1992, Volume 57, Number 5. Stereo Review (ISSN 0039-1220) is published monthly by Hachette Magazines, Inc. at 1633 Broadway, New York, NY 10019; telephone (212) 767-6000. Also publishers of Car Stereo Review, Sound & Image, and Stereo Buyers' Guide. One-year subscription rate for the United States and its possessions, \$13.94; Canada, \$18.94; all other countries, \$21.94; cash orders only, payable in U.S. currency. Second-class postage paid at New York, NY 10001, and at additional mailing offices. Printed in the U.S.A. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. Canadian GST number 126018209. POSTMASTER / SUBSCRIPTION SERVICE: Please send change-of-address forms and all subscription correspondence to Stereo Review, P.O. Box 55627, Boulder, CO 80322-5627. Please allow at least eight weeks for the change of address to become effective. Include both your old and your new address, enclosing, if possible, an address label from a recent issue. If you have a subscription problem, write to the above address or call (800) 876-9011. PERMISSIONS: Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to: The Editor, Stereo Review, Hachette Magazines, Inc., 1633 Broadway, New York, NY 10019. BACK ISSUES are available. Write to Stereo Review, Back Issues, P.O. Box 7085, Brick, NJ 08723, enclosing a check for cover price plus \$1.75 shipping and handling for each copy ordered. EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care, but the publisher assumes no responsibility for return or safety of unsolicited art, photos, or manuscripts.

Stereo Review®

INCORPORATING HIGH FIDELITY®

EQUIPMENT

Hirsch-Houck Labs Equipment Test Reports 27

Harman Kardon TL8600 Compact Disc Changer, page 27

Klipsch kg^{4.2} Loudspeaker System, page 30

Nakamichi CassetteDeck I.5, page 33

Cerwin-Vega DX-7 Loudspeaker System, page 39

Heads First 42

The front end, or "head unit," of a car stereo system is a critical factor in its performance • *by Daniel Kumin*

Systems 48

An audio/video sanctuary • *by Rebecca Day*

A Music Lover's Guide to Signal Processing 50

What to do about bad sound • *by E. Brad Meyer*

Buying Time 59

Amplifiers—sixth in a series on the practical business of buying audio equipment • *by Ian G. Masters*

Page 50



MUSIC

Kurt Masur 55

"My idea is to try to bring something of the Old World to the New" • *by Herbert Kupferberg*

Best Recordings of the Month 65

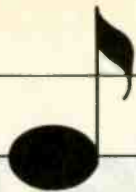
Bill Morrissey, Mozart piano sonatas, Died Pretty, and Tchaikovsky and Rachmaninoff piano concertos

Page 55





Are you
missing
out on the
natural highs?



You know those sweet high notes in your favorite music? Well, they're the first to go when you trash your ears by cranking up the volume. Once it's gone, it's gone for good!

So keep the volume in check.

For more information on how to protect your hearing, contact:

HOUSE EAR INSTITUTE

HIP Campaign Headquarters
2100 West Third Street
Los Angeles, CA 90057
213/483-4431

The Evolution of Strength Training



Stone Weights
5,000 B.C.



Dumbbells
1894

NordicFlex Gold™ Marks the Ultimate Evolution of Strength Training Equipment.



Soloflex®
1978



NordicFlex Gold™
1991

Advanced Technology has made NordicFlex Gold™ 5 ways better than Soloflex®.

1. NordicFlex Gold has linear motion to better simulate free-weights.
2. NordicFlex Gold has isokinetic resistance to better match your natural strength curve.
3. NordicFlex Gold is faster to use than Soloflex®.
4. NordicFlex Gold has electronics to monitor your performance.
5. And, best of all, NordicFlex Gold costs 1/3 less than Soloflex®.

Call today for a 30-day, in-home trial.

NORDIC FLEX Gold

FREE VIDEO and brochure **1-800-445-2360** EXT. 1K1E2

Or write: NordicTrack, Dept. #1K1E2, 141 Jonathan Blvd. N., Chaska, MN 55318

©1991 NordicTrack, Inc., A CML Company. Soloflex is a registered trademark of Soloflex, Inc.

All rights reserved.

Stereo Review®

Vice President, Editor in Chief
LOUISE BOUNDAS

Executive Editor
MICHAEL RIGGS

Art Director
SUE LLEWELLYN

Director, Hirsch-Houck Laboratories
JULIAN HIRSCH

Popular Music Editor Classical Music Editor
STEVE SIMELS ROBERT RIPPS

Managing Editor
DAVID STEIN

Senior Editor
GLENN KENNY

Associate Art Director
MINDY OSWALD

Assistant Editors
JAE SEGARRA, MARYANN SALTZER

Editorial Assistants
BARBARA AIKEN, JOSE GARCIA

Senior Contributing Editors
WILLIAM WOLFE, ROBERT ANKOSKO
Editor at Large
WILLIAM LIVINGSTONE

Contributors: Robert Ackart, Chris Albertson, Rebecca Day, Richard Freed, Phyl Garland, Ron Givens, David Hall, Bryan Harrell (Tokyo), Roy Hemming, Ralph Hodges, George Jellinek, Stoddard Lincoln, Ian Masters, Alanna Nash, Henry Pleasants (London), Ken Pöhlmann, Parke Puterbaugh, Charles Rodrigues, Eric Salzman, Craig Stark, David Patrick Stearns

Vice President, Group Publisher
NICHOLAS MATARAZZO

Consumer Electronics Group
Advertising

VP/Regional Advertising Director, East Coast:
Charles L. P. Watson, (212) 767-6038
Regional Account Manager, East Coast:
Christine B. Forhez, (212) 767-6025

VP/Regional Advertising Director, Midwest:
Scott Constantine, (212) 767-6346

VP/Regional Advertising Director, West Coast:
Robert Meth, (213) 954-4831
Regional Account Manager, West Coast:
Paula Mayerl, (213) 954-4830
Sales Assistant: Nikki Parker

National Record Label Sales Representatives:
The Mitchell Advertising Group (MAG Inc.)
Mitch Herakowitz, (212) 490-1715
Steve Gross, (212) 490-1895

Assistant to the Publisher: Nadine L. Goody
Operations Manager: Sylvia Correa
Advertising Coordinator: Linda Neuweiler
Sales Assistant: Yvonne Telesford
Classified Advertising: (800) 445-6066

Production Manager: Vicki L. Feinmel
Production Director: Patti Burns
Business Services Director: Greg Ropertl
Newsstand Sales Director: Margaret Hamilton



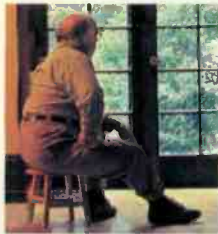
Stereo Review is published
by Hachette Magazines, Inc.

Chairman and CEO: Daniel Filipacchi
President and COO: David J. Pecker
Executive VP and Editorial Director: Jean-Louis Ginibre
Senior VP, Director of Corporate Marketing: Paul DuCharme
VP, General Counsel: Catherine Flickinger
VP, Circulation: Leon Rosenfield
VP, Manufacturing & Distribution: Anthony Romano
VP, Magazine Development: Marcia Sachar
VP, Special Marketing: Bette Rockmore
VP, Research: Susan Smollens
VP, Controller: John Milev
VP, Treasurer: John O'Connor
VP, Corporate Communications: Jolie Cross Doyle
VP, Network Sales: Donald Cooke
VP, Advertising Director, Network Sales:
Peter Beckenbach





Henry Kloss Does It Again. And Again.



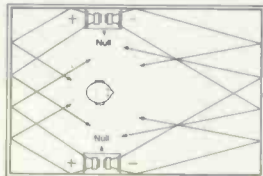
"Henry Kloss has demonstrated a rare talent for spotting important new concepts and incorporating them into readily affordable consumer products. His new models have stemmed from a deeply rooted desire to move audio technology forward and provide buyers with previously unavailable benefits." Audio Magazine, February 1992

Audio Hall of Fame member Henry Kloss created the dominant speakers of the '50s (AR), '60s (KLH) and '70s (Advent). Now he's created a new *kind* of audio company with factory-direct savings... Cambridge SoundWorks.

The Surround™ II. Price Breakthrough In Dipole Radiator Surround Speaker.

The Surround II is specifically designed for use as a rear/side speaker in Dolby Surround or DSP systems. They "surround" the listener with *non-directional* ambient sounds, unlike conventional speakers that are designed to create a precise stereo "stage."

The Surround II is a dipole radiator. Mounted on the side walls of your listening room, the sound is directed towards the front and rear of the room, using



The Surround II delivers dipole radiator, surround sound performance at a fraction of the cost of competing speakers using similar technology.

phase cancellation to create a null in the direction of the listener. The sound then reaches the listener from *all* directions, the way it was meant to be heard. The acoustic performance of The Surround II is essentially identical to that of our original surround speaker, The Surround®. At \$249 pr., The Surround II is *the* value on the market.

Introducing The In-Wall Ambiance™ Speaker System.

Ambiance In-Wall provides overall performance (particularly deep bass response) unmatched by its competitors. Unlike many in-wall speakers, Ambiance In-Wall uses a true acoustic suspension enclosure. We know of no other system like it that can match its bass performance.

Henry Kloss designed Ambiance In-Wall with

Our Ambiance In-Wall speakers use a true acoustic suspension sealed cabinet for optimum bass response.

a wide dispersion tweeter delivering accurate response over a wide area. Place Ambiance In-Wall where it *looks right* in your wall (or your ceiling), and still have it *sound right* no matter where you are in the room.

Stereo Review said Ambiance "easily held its own against substantially larger, more expensive speakers." Ambiance In-Wall is also very simple to install—it's a custom installer's and do-it-yourselfer's delight.† At \$329 a pair (\$165 each), direct from the factory, it's an outstanding value.

Turn your TV into a home theater! In our catalog you'll find complete Dolby Surround Sound systems starting at under \$1,000.



CALL 1-800-FOR-HIFI.

24 hours a day, 365 days a year. We'll send you our 48-page color catalog with components from Cambridge SoundWorks, Pioneer, Philips, Denon and others.

We Know How To Make Loudspeakers.

CAMBRIDGE SOUNDWORKS

© 1992 Cambridge SoundWorks. Ensemble is a registered trademark of Cambridge SoundWorks. Ambiance and The Surround are trademarks of Cambridge SoundWorks. AR & Advent are trademarks of Jensen Laboratories. †Except for overall power-handling capability. ‡For those who want all-out bass response, it is also compatible with our Ensemble subwoofer systems.

CIRCLE NO. 6 ON READER SERVICE CARD

The Critics Love Ensemble And Ensemble II. What's The Difference, Anyway?

Cambridge SoundWorks changed the audio world when we began direct-marketing Ensemble* by Henry Kloss. Ensemble is a revolutionary dual-subwoofer/satellite speaker system offering all-out performance, without cluttering up your room with huge speaker cabinets. Available *only* factory-direct from Cambridge SoundWorks, with no expensive middle-men, Ensemble is priced at hundreds less than it would have sold for in stores. *Audio* magazine says Ensemble "may be the best value in the world."

And Then There Were Two.

Now Cambridge SoundWorks has introduced Ensemble II, a more affordable version of Ensemble using only one cabinet to hold both subwoofer drivers. Ensemble II has joined Ensemble in the ranks of the country's best-selling speak-



The real difference is in the subwoofer.

ers. We believe Ensemble II is a better system than the new Bose* AM-5 Series II. And because we sell it factory-direct, it's half the price. *Stereo Review* said "Ensemble II performs so far beyond its price and size that it can be compared only with much larger speakers at substantially higher prices." We agree with the writer who said, "It's hard to imagine going wrong with Ensemble." The question is, which Ensemble system is right for *you*?

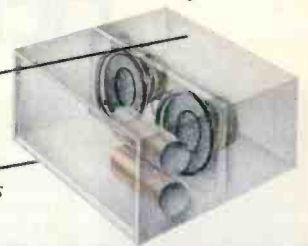
The Same Satellite Speakers.

When you listen to either Ensemble system, almost 90% of the music you hear is being reproduced by the satellite speakers. Both Ensemble and Ensemble II use satellite speakers that are virtually identical.*

Unlike many competing systems, Ensemble's satellites are true two-way speaker systems, each containing a high performance tweeter and a 4-inch woofer. *Stereo Review* said, "The Ensemble satellites delivered a smoother output than

True acoustic suspension, sealed subwoofer cavity.

Cavity acts as acoustic band-pass filter.



"Ensemble may be the best value in the world." *Audio*



many larger and more expensive speakers."

Small (8½"×5¼"×4") and unobtrusive, they'll fit into the decor of any room. They're available in scratch-resistant gunmetal grey Nextel, or primed so you can paint them any color you wish.



Ensemble satellite speakers are available primed for painting, so they can match your decor exactly.

The Same Overall Sound.

In many rooms, Ensemble II sounds virtually the same as Ensemble, especially when Ensemble's two subwoofers are placed right next to each other. The real difference between the two systems is that Ensemble, with its two ultra-compact subwoofers (12"×21"×4½"), gives you *ultimate placement flexibility*.

The Same Attention To Detail.

Ensemble and Ensemble II are constructed with the very best materials and no-compromise workmanship. Their subwoofers use heavy-duty woofers in true acoustic suspension enclosures. The satellites are genuine two-way systems with very high quality speaker components. Individual crossover networks are

built into every cabinet for maximum wiring flexibility. Robust construction is used throughout, featuring solid MDF cabinets and solid metal grilles.

The Same Factory-Direct Savings.

Cambridge SoundWorks products are available *only* factory-direct. By eliminating the middle-men, we're able to sell Ensemble and Ensemble II for hundreds less than if they were sold in stores.

The Same 30-Day Total Satisfaction Guarantee.

Choosing a loudspeaker after a brief listen at a dealer's showroom is like deciding on a car after one quick trip around the block. So we make it possible to audition our speakers the *right way*—



Stereo systems featuring Ensemble and Ensemble II speakers with Pioneer or Philips electronics start at only \$799, including CD player. Dolby Surround Sound systems start at only \$999.

in your own home. You get to listen for hours without a salesman hovering nearby. If within 30 days you're not happy, return your speaker system for a full re-

fund. We even reimburse original UPS ground shipping charges in the continental United States.



The only difference in satellites is that the original Ensembles use gold-plated connectors that allow use of even the heaviest gauge wire.

The Real Difference: The Ultimate Placement Flexibility Of Dual Subwoofers.

Placement of bass and high-frequency speakers in a room—and how those speakers interact with the acoustics of the room—has more influence on the overall sound quality of a stereo system than just about anything. As an alternative to spending hundreds (or thousands) of dollars on this or that "latest" amplifier or CD player design, you should invest some of your time experimenting with various speaker positioning schemes. Ensemble's two ultra-slim (4½") subwoofers give you more placement flexibility than any speaker system we know of (including Ensemble II), and is most likely to provide the performance you want *in real world...in-your room*.

How To Order.

The dual-subwoofer Ensemble system is available in two versions. With handsome black-laminate subwoofers for \$599. Or with black vinyl-clad subwoofers for \$499. Ensemble II is priced at \$399. For more information, a free 48-page catalog, or to order...

CALL 1-800-FOR-HIFI


24 hours a day, 365 days a year. We'll send you our 48-page color catalog with stereo and surround sound components and systems from Cambridge SoundWorks, Pioneer, Philips, Denon and others. Because we sell factory-direct, eliminating expensive middle-men, you can save hundreds of dollars.

We Know How To Make Loudspeakers.

CAMBRIDGE SOUNDWORKS

© 1992 Cambridge SoundWorks. Ensemble is a registered trademark of Cambridge SoundWorks. Ambiance and The Surround are trademarks of Cambridge SoundWorks. AR & Advent are trademarks of Jensen Laboratories. Bose is a registered trademark of Bose Corporation. Prices do not include shipping. *Only the connecting terminals are different.

CIRCLE NO. 6 ON READER SERVICE CARD



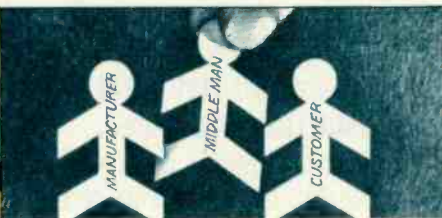
"Ensemble II performs so far beyond its price and size that it can be compared only with much larger speakers at substantially higher prices." *Stereo Review*

Why Other Loudspeaker Companies Can't Run This Ad.

There are almost 400 speaker companies in the United States.
But none of them can offer you all this...



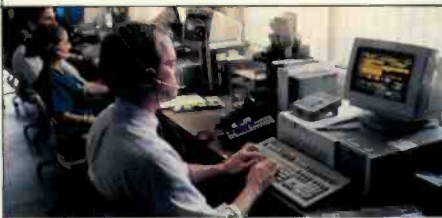
Audio Hall of Fame member Henry Kloss.
Cambridge SoundWorks products are designed by our co-founder, Henry Kloss, who created the dominant speakers of the '50s (AR), '60s (KLH) and '70s (Advent).



We eliminated the expensive middle-men.
By selling factory-direct to the public, we eliminate huge distribution expenses. Don't be fooled by our reasonable prices. Our products are very well made.



High performance portable system.
Our Model Eleven combines a powerful 3-channel amplifier, two satellite speakers and a BassCase™ subwoofer/carrying case. Works on 110, 220 & 12-volts.



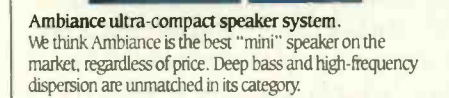
Audio experts on call 365 days a year.
Our knowledgeable audio experts (not clerks) are on duty for advice, hook-up information, or orders, 8AM-midnight every day, including Sundays and holidays.



Ambiance ultra-compact speaker system.
We think Ambiance is the best "mini" speaker on the market, regardless of price. Deep bass and high-frequency dispersion are unmatched in its category.



The best values in Dolby Surround Sound.
We believe The Surround and The Surround II are the country's best values in surround speakers. Complete Dolby Surround Sound systems start at under \$1,000.



30-Day Total Satisfaction Guarantee.
Try our speakers in your own home, with your music, for 30 days. If you're not satisfied, return them for a refund. We even refund original ground shipping charges.



Free 48-page color catalog.
Our catalog is loaded with high-value systems and audio products from Cambridge SoundWorks, Pioneer, Philips, Denon, Sony, Thorens and more.



30-Day Total Satisfaction Guarantee.
Try our speakers in your own home, with your music, for 30 days. If you're not satisfied, return them for a refund. We even refund original ground shipping charges.



Free 48-page color catalog.
Our catalog is loaded with high-value systems and audio products from Cambridge SoundWorks, Pioneer, Philips, Denon, Sony, Thorens and more.

We'll send you our 48-page color catalog with components from Cambridge SoundWorks, Pioneer, Philips, Denon and others.

We Know How To Make Loudspeakers.

CAMBRIDGE SOUNDWORKS

154 California St., Suite 102MY, Newton, MA 02158 *1-800-367-4434 Fax: 617-332-9229

Canada: 1-800-525-4434 Outside U.S. or Canada: 617-332-5936 We ship worldwide, including APO & FPO.

© 1992 Cambridge SoundWorks. Ensemble is a registered trademark of Cambridge SoundWorks.

Ambiance and The Surround are trademarks of Cambridge SoundWorks. AR & Advent are trademarks of Jensen Laboratories. *Except for overall power-handling capability.

LETTERS

DAT Lives

After reading "DAT Lives!" by Glenn Kenny in the March issue, I decided to "give in to DAT." What I found was that prices have dropped dramatically, making a digital audio tape deck all the more attractive. I strongly encourage anyone who has been considering DAT but has postponed a commitment because of price to reassess his position. The quality is more than worth the price.

THOMAS B. GREEN
Salt Lake City, UT

U2, or Not U2

As a long-time U2 fan, I was quite perturbed by Steve Simels's mean-spirited reference to the band in his March "Backbeat" column. U2 had absolutely nothing to do with the suit that resulted in Negativland's "U2" being pulled from stores. It was all done by Island Records without any input from the band. U2 is anything but "the world's most self-righteous band," as Mr. Simels calls them. They may not always have been right, or successful in accomplishing what they wanted to do, but at least they have cared enough to try.

ROY L. HENRY
Pigeon Forge, TN

Steve Simels replies: Whether U2 knew about the suit to begin with depends on whom you talk to, but by the time "Backbeat" was written, they almost certainly knew about it and could probably have stopped it if they had wanted to. They didn't, and now Negativland and SST Records are out \$90,000 they never had.

Boss Sightings

In his March review of Southside Johnny's latest album, Parke Puterbaugh stated that it contained the only appearance on record by Bruce Springsteen in the past year. In fact, Springsteen contributed backing vocals to John Prine's Grammy-winning album "The Missing Years."

TERRY CONTAS
Manchester, NH

We stand corrected.

Amplifier Sound

The "null test" described in the March test report on the Carver Silver Nine-t Mark II amplifier does not prove that two amplifiers "sound" the same. It proves that both amps have the same frequency response. They "sound" different because their distortions are different and they also differ in transient response.

TONY MAULDIN
Lewisville, TX

CALL 1-800-FOR-HIFI* 24 hours a day, 365 days a year.

CIRCLE NO. 6 ON READER SERVICE CARD

A null test will expose any differences between two amplifiers, including not only frequency response but also distortion, noise, and so forth. In general, if two amplifiers have identical frequency responses into the speaker load (within a tenth of a decibel or so) across the audio band along with low enough noise and distortion, they will sound the same when reproducing music so long as neither is driven into overload. Consequently, low output in a null test usually indicates that the amplifiers will sound the same within their power limits. Short of a perfect null, however, the only sure way to establish this is by means of a properly controlled A/B comparison of the two amplifiers' outputs.

Switched Headphones

In the article on headphones in January, photo No. 13 does not show the Nady WH-95 wireless phones, as the caption says, but the Stax SR Gamma. I could not figure out which picture was of



the Nady phones because all the others except the Beyer Dynamic model were shown with wires.

AMAR JOSEPH
Haifa, Israel

We very much regret that the Stax and Nady photos were transposed. Photo No. 1 (page 66) shows the Nady WH-95 phones, which do have a wire that runs from the phones to a compact receiver the user carries or places next to his chair. Between the receiver and the transmitter the signal is carried by radio waves. See the accompanying photo for a view of the full system.

CD Capacity

I have heard that the compact disc and the 12-inch LP were both designed to hold the same amount of music, based on the playing time of Beethoven's Ninth Symphony (76½ minutes). Is there any truth to this?

Also, whatever happened to the 3-inch compact disc single?

MICHAEL R. HOULE
Golden, British Columbia

According to Dr. H. Nakajima, who headed Sony's design team for the compact disc, its diameter was changed from 4 to 4.72 inches specifically to fit a typical recording of Beethoven's Ninth Symphony. But that is much more than can fit on a single LP without severe signal compression, low-frequency rolloff, or both. For high-fidelity performance, the playing time of an LP must be restricted to about 20 to 25 minutes per side. As for 3-inch CD's, they seem to be popular in Japan, but they never took off here.

TDK Cassettes

Why is it that you show a TDK AR100 tape cassette not once but twice in the March (tape) issue, on pages 48 and 57, yet in the listing of available TDK tapes on page 57, the AR series is not included? Similarly, you tested the Pioneer Elite CT-93 deck with TDK AD tape, but according to the list, we can't buy that tape either to do our own tests.

PAUL MOUNT
Teaneck, NJ

TDK advised us that the AR and AD series cassettes were being discontinued, replaced in its line by the new DS-X formulation, and the listings reflected that, but these popular tapes are probably still available in many stores. The cassettes pictured were illustrative only, but we agree that the AR100 was not the best choice.

CD Storage

Glenn Kenny's "Neatness Counts" in February was helpful but did not say whether CD's should be stored vertically (like LP's) or if their smaller size and greater rigidity are enough to allow horizontal storage, making for easier reading of their spine labels.

SOREN N. S. LAURSEN
Mahwah, NJ

As long as they are in their protective jewel boxes, there is no reason CD's should not be stacked. The main reason most people store them vertically is that it's easier to pull out the one you want that way.

We welcome your letters. Please address correspondence to Editor, STEREO REVIEW, 1633 Broadway, New York, NY 10019.

You should include your address and telephone number for verification. Letters may be edited for clarity and length.



Our
Transportable
Component
System.

Model Eleven
110, 220 or 12 volts

FREE Audio Catalog



Our 48-page color catalog is loaded with stereo components and music systems from Cambridge SoundWorks, Pioneer, Philips, Denon, Sony, Thorens and others.

Because you buy factory-direct, you can save hundreds of dollars.

For example, you can buy a complete Dolby Surround Sound system—with our Ensemble II subwoofer-satellite speaker system, rear speakers, Pioneer Dolby Surround receiver, CD player and system remote—for under \$1,000. So call today and find out what thousands and thousands of satisfied customers already know: This is the right way to get the right deals on the right audio components.

- Call toll-free for factory-direct savings.
- Save hundreds on components and systems from Cambridge SoundWorks, Pioneer, Philips, Denon, Sony and more.
- Audio experts will answer your questions, before and after you buy. 8AM—midnight, 365 days a year—even holidays.
- 30-day Total Satisfaction Guarantee on all Cambridge SoundWorks products.

CALL 1-800-FOR-HIFI

24 hours a day, 365 days a year.

We'll send you our 48-page color catalog with components from Cambridge SoundWorks, Pioneer, Philips, Denon and others.

We Know How To
Make Loudspeakers.

CAMBRIDGE SOUNDWORKS

154 California St., Suite 102MY, Newton, MA 02158
1-800-367-4434 Fax: 617-332-9229 Canada: 1-800-525-4434
Outside U.S. or Canada: 617-332-5936

© 1992 Cambridge SoundWorks

Ensemble is a registered trademark of Cambridge SoundWorks.

R · E · C · O · R · D

by Robert Ripps,
Maryann Saltser,
& Steve Simels

CONDUCTOR John Mauceri and the Hollywood Bowl Orchestra made their recording debut with "Hollywood Dreams," an album of movie music, and followed it up with "The Gershwins in Holly-

cast of country singers yet to be announced).

THE first disc in a Tchaikovsky symphony cycle by Gennady Rozhdestvensky and the State Symphonic Kapelle of Moscow has been released by Erato. Rozhdestvensky and the musicians (formerly the U.S.S.R. Ministry of Culture Symphony Or-

chestrally released and unreleased tracks by the same performers are featured on the label's new midprice CD sampler, "Antone's Women," which also includes fresh material by four artists just signed by Antone's: newcomers Sue Foley and Toni Price, and blues veterans Barbara Lynn and Lavelle White. All four have solo albums scheduled for release later this year.



Bartoli: rising star

THE twenty-five-year-old Italian mezzo-soprano Cecilia Bartoli has made her presence felt in this country with outstanding albums of Rossini and Mozart on London Records. More recently she took part in Daniel Barenboim's series of Mozart operas staged in concert with the Chicago Symphony Orchestra and has appeared in recital in Boston, New York, Los Angeles, and San Francisco. Her upcoming U.S. dates include debuts at the Mostly Mozart Festival, Carnegie Hall (with the Montreal Symphony under Charles Dutoit), and the Hous-

"Got Love If You Want It," on Pointblank/Charisma, was produced by J. J. Cale and features performances by Cale, Little Charlie & the Nightcats, and John Lee Hooker, who enlisted Hammond's help last year for his "Mr. Lucky" album. Hammond has also been doing some work in television, hosting a special called *The Search for Robert Johnson*. In it he interviews some of Johnson's contemporaries and demonstrates how his performances in San Antonio's Gunter Hotel were originally recorded. The program will be seen on Britain's ITV this spring and later on American TV and home video.



Antone's Women: blues power

ton Grand Opera, where she'll appear as Rosina in *The Barber of Seville*. Her latest London CD, "Rossini Heroines," was released in March.

WITH his first major-label release in over fifteen years, blues singer John Hammond finds himself in some pretty impressive company.

RALPH GABRIER/PHILIPS



Mauceri (second from left) with Rodgers and Hammerstein heirs

wood." This year they turn to Rodgers and Hammerstein, with a CD devoted to overtures from their musicals due from Philips Classics in June. The recording so impressed the Rodgers and Hammerstein families that they gave their permission for Mauceri to record two complete scores, *The King and I* (with Julie Andrews) and *Oklahoma!* (with a

chestra) toured the U.S. and the world early this year in the company of another Erato artist, pianist Viktoriya Postnikova. In May Erato will release the team's most recent recording, the Saint-Saëns *Carnival of the Animals*, with pianist Jean-François Heisser and the Ensemble Musicale joining in.

SINCE 1987, Antone's Records in Austin, Texas, has been doing its part to preserve the blues in America. It is also one of the very few record labels run almost entirely by women and presenting mostly women artists. In 1990 the album "Dreams Come True" by the label's founder, Angela Strehli, and two of its other singer-musicians, Marcia Ball and Lou Ann Barton, was named Best Blues Album by the National Association of Independent Record Distributors. Previ-

ELEKTRA CLASSICS



Rozhdestvensky: globetrotter

VINCENT/FARRELL ASSOC.

ANTONE'S RECORDS

M · A · S · O · K · E · V · E · R · S

ELEKTRA RECORDS

chestra led by James Levine. Artists making house recital debuts are pianist Mitsuko Uchida and baritone Thomas Hampson, and there will be solo reappearances by pianists Evgeny Kissin, Murray Perahia, and Krystian Zimerman and singers Christa Ludwig, Dimitri Hvorostovsky, and Jessye Norman.

DON'T call the music played by the Dolphins fusion—call it new electric jazz. "There aren't any fusion bands any more," says Dolphins bassist Rob Leon. "It's a dead term." Whatever you call it, however, the band's new CD, "Old World, New World" on DMP, is something of a smorgasbord, with elements of funk, Middle-Eastern scales, modern jazz harmony, and unusual rhythmic approaches derived from Indian music. Incidentally, if the Dolphins' drummer, Dan Brubeck, looks familiar, that's because he resembles his very famous father—the jazz piano great Dave Brubeck.

BASED on a Pulitzer Prize-winning novel, the movie *The Mambo Kings* traces the lives of two brothers who emigrate from Cuba to New York City in the Fifties to form their own mambo band. Naturally,



Assante and Puente: Mambo Kings

music is an essential ingredient in the film's soundtrack, now available on Elektra. It features performances by Linda Ronstadt, Los Lobos, Arturo Sandoval, Celia Cruz, and Tito Puente that authentically convey the sound of the mambo era. Puente, a major force in Latin music since the early Fifties, reprises three of his biggest hits in the film, including *Ran Kan Kan*, which is a hit again today as a single. Puente recently celebrated the release of his hundredth album, "Mambo King, the 100th LP," with a special concert at New York's Madison Square Garden. He was also nominated for a Grammy this year (it would have been his

fifth if he had won) and received a Lifetime Achievement award at the second annual Caribbean Music Awards.

IS Yoko Ono a groundbreaking, misunderstood artist who was two decades ahead of her time? That's the rationale behind "Onobox," a six-CD retrospective from Rykodisc. The 105 tracks, including an entire unreleased album from the early Seventies, range from 1969 to 1985, and guest musicians include Ono's husband, John Lennon, as well as George Harrison, Eric Clapton, Mick Jagger, and Paul Shaffer. Ryko is also releasing a single-disc Ono compilation titled "Walking on Thin Ice" that features nineteen songs from 1972 to 1992, including the previously unreleased *O'Oh*.

GRACENOTES. The newly revived Southern rock label Capricorn Records is releasing "The Scepter Records Story," a three-CD retrospective of the Sixties label responsible for hits by the Shirelles, Dionne Warwick, B.J. Thomas, and the Isley Brothers. . . . Deutsche Grammophon has released two special collections to celebrate the 150th anniversary of the Vienna Philharmonic Orchestra. One is a deluxe, specially priced twelve-CD set of live recordings under conductors closely associated with the orchestra, including Richard

Strauss, Bruno Walter, Wilhelm Furtwängler, Herbert von Karajan, and Leonard Bernstein. The second is a two-CD set of the music of Johann and Josef Strauss conducted by various maestros over six decades. . . . Mosaic Records (telephone 203-327-7111) has released "The Complete Candid Otis Spann & Lightnin' Hopkins Sessions," recordings made in 1960 by the legendary blues performers. The limited-edition set is available on three CD's or five LP's. . . . The Metropolitan Opera's acclaimed production of Wagner's *Ring* cycle conducted by James Levine was released in March by PolyGram Video. The four operas, totaling 15½ hours of music, are available either separately or in a complete set. PolyGram has also released on video "The Metropolitan Opera Gala 1991," with Luciano Pa-

RYKODISC

DMP RECORDS



The Dolphins: new electric jazz?



Ono: all collected

varotti and Placido Domingo joining Levine and the orchestra in complete acts from three different operas, and the Met production of Rossini's *The Barber of Seville* featuring Kathleen Battle and Leo Nucci. All are available on both laserdisc and VHS tape. □

NEW PRODUCTS

Mobile Fidelity

Mobile Fidelity Sound Lab, long known for its audiophile LP and CD releases, enters the hardware market after ten years of research with the Ultra-Amp series. It consists of a 100-watt dual-mono power amplifier, an active "line amplifier" (preamplifier) with full-function switching between six line-level inputs, and a quadruple-oversampling,

16-bit digital-to-analog converter. A separate phono stage will soon be available. The components are being sold factory-direct only, with a thirty-day home trial. Price: \$1,295 for each component. Mobile Fidelity Sound Lab, Dept. SR, 105 Morris St., Sebastopol, CA 94752; telephone (800) 423-5759.

Circle 120 on reader service card



Celestion

Celestion's first entries into the auto-sound category are the AP and AD Series subwoofers, three models in each line. The AP 10, AP 12, and AP 15 feature 10-, 12-, and 15-inch drivers, respectively. Each has a rated power-handling capacity of 400 watts. The AD Series subwoofers are said to have both higher sensitivity and greater power-handling ability. The AD 12 has a 12-inch driver, and the AD 15 and 15H are both 15 inches. The AD 12 and AD 15 can handle 600 watts, the AD 15H 1,200 watts. Prices: AP 10, \$139; AP 12, \$159; AP 15, \$189; AD 12, \$279; AD 15, \$339; AD 15H, \$469. Celestion, Dept. SR, 89 Doug Brown Way, Holliston, MA 01746. Circle 121 on reader service card

ADI

The CW Series auto subwoofers from ADI feature paired compound-loaded drivers (face to face and wired out of phase) in fourth-order vented enclosures. The design is said to provide low distortion and extended low-end response in boxes half the size of conventional subwoofers. The CW-650 (top left in photo) has 6½-inch drivers and is rated down to 36 Hz -3 dB; maximum power handling is 100 watts. The CW-800 (top right) has 8-inch drivers, a -3-dB point of 30 Hz, and 160 watts maximum power handling. The CW-1000 (bottom left) and CW-1200 (bottom right) respectively have 10- and 12-inch drivers, response limits of 28 and 32 Hz, and input limits of 250 and 300 watts. Dimensions range from 21¼ x 9 x 10½ inches (CW-650) to 21 x 14½ x 17 inches (CW-1200). Prices: CW-650, \$260; CW-800, \$330; CW-1000, \$425; CW-1200, \$475. Audio Design Innovations, Dept. SR, P.O. Box 402, Osseo, MN 55369.

Circle 122 on reader service card



The only
reason not to
buy an Onkyo
CD Carousel
is if you're
into antiques.

The World's First 6 Disc Carousels



With the introduction of the world's first six disc carousels, Onkyo takes the CD changer into the future and consigns all other models to the past.

But, Onkyo's new DX-C909, DX-C606, and DX-C206 6 Disc Carousels don't accomplish this by just being "one better" than conventional 5 disc players.

The Integra DX-C909, for example, incorporates design elements usually reserved for only the most costly single play components.

It utilizes Onkyo's proprietary Single Bit D/A Converters and AccuPulse Quartz System for unsurpassed linearity and stability, resulting in musical reproduction that's indistinguishable from the original performance. Onkyo's AEI Transformer eliminates electro-magnetic flux leakage (a hazard common to other players) that can cause distortion. A copper plated chassis provides greater shielding and lower noise levels, while optical outputs insure the purest possible signal transmission.

With Onkyo's new six disc carousels, optimum engineering joins breakthrough convenience for the first time as well. Onkyo's Next Selection Function lets you change the next track programmed without interrupting the track that's playing. No other carousel, magazine changer or single play machine has this ability.

So, if you're purchasing a CD changer, Onkyo's new carousels are really the only choice you have.

Unless you're into antiques.



ONKYO®

200 Williams Drive, Ramsey, NJ 07446 201-825-7950

NEW PRODUCTS

Fox

The Fox800 multisystem remote control can replace as many as eight dedicated audio and video remotes. It features a touch-screen LCD panel that shows only the appropriate controls for the component being operated. It can be programmed using a built-in library of remote-control codes, and it can also learn the codes of additional remotes. The Fox800 can set up a VCR for unattended recording without using the timer section of the VCR itself; the user has only to enter the time, date, and channel of a desired program. Price: \$99.95. Fox Electronics & Technology, Inc., Dept. SR, 220-F Zanker Rd., San Jose, CA 95131.

Circle 127 on reader service card



AudioSource

The SS Four surround-sound processor from AudioSource uses a new Dolby Pro Logic integrated-circuit chip designed and manufactured in the U.S. The chip is said to be the first Pro Logic IC to incorporate an auto-balance function, which provides dynamic correction of left/right input-level imbalances for im-

proved center-channel definition. The SS Four includes two built-in 24-watt amplifiers for the center and rear channels, and it comes with a full-function remote control. Price: \$330. AudioSource, Dept. SR, 1327 North Carolan Ave., Burlingame, CA 94010.

Circle 128 on reader service card

Paradigm

Paradigm's Titan is a low-price two-way speaker system. Its woofer has a polypropylene cone and a Kapton voice-coil former; an oversized magnet is said to insure high power handling and low distortion. The ferrofluid-cooled tweeter has a wide-dispersion polyamide dome and an aluminum voice-coil former. Frequency response is rated as 55 to 20,000 Hz ± 2 dB, sensitivity as 88 dB, and power-handling range as 15 to 100 watts. Dimensions are 7 $\frac{3}{4}$ x 12 $\frac{1}{2}$ x 9 $\frac{1}{2}$ inches. Available in oak, white, or black-ash vinyl veneer. Price: \$199 a pair. Distributed in the U.S. by AudioStream, Dept. SR, P.O. Box 2410, Niagara Falls, NY 14302.

Circle 129 on reader service card



Onkyo

Onkyo's PCS-D1 is a compact music system with some unique twists that provide a good deal of placement flexibility. Unlike minisystems wired together with special cable, the PCS-D1 uses optical digital transfer technology to send signals from the portable control unit, which is equipped with both a CD player and a cassette deck, to the 30-watt-per-channel receiving amplifying unit, which contains an AM/FM tuner. Bookshelf speakers complete the array. Price: \$1,100. Onkyo U.S.A., Dept SR, 200 Williams Dr., Ramsey NJ 07446.



Proof Positive, Rock And Roll Is Here To Stay.

Who says "there are no guarantees in life"?

At Cerwin-Vega, it's our company policy to give you an insurance



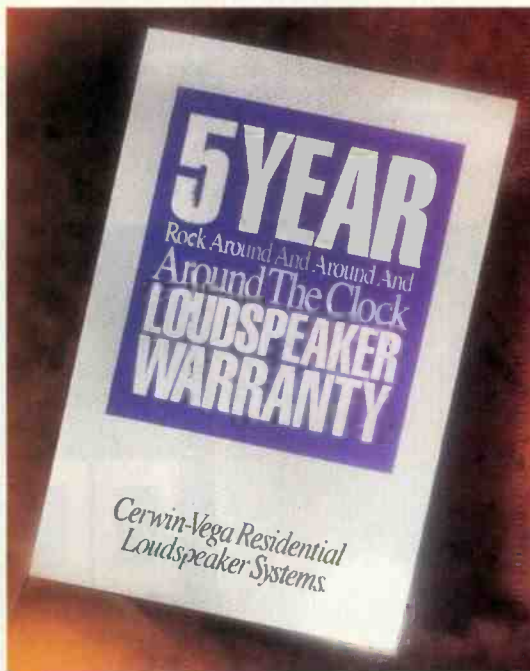
Our die-cast aluminum frames are really more like die-hard aluminum frames.

policy. A full 5 year warranty on every one of our residential

loudspeakers. Now admittedly, this isn't in keeping with the trend toward a throwaway society, but planned obsolescence has never been part of our plan.

Which is why we've developed rigid die-cast aluminum frames to dissipate heat. And give you greater power handling. In our DX Series speakers, we've gone to great lengths to build the strongest cones in the industry.

All the way to the jungles of Southeast Asia. Where our engineers have found that the tubular



fibers of paper made from the kapok tree are far more durable than paper formed by strands.

What's more, our 12" and 15" systems benefit from overall fuse protection. And every Cerwin-Vega tweeter has a self-resetting circuit breaker.

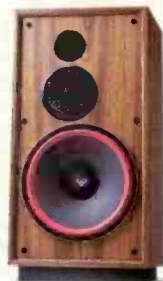
Of course, even all this protection is protected. By our 3/4" thick, scuff-resistant cabinets.

All of which has resulted in loudspeakers

that are durable enough for, say, *Metallica*. Yet delicate enough for *Mozart*.

Look at it this way. Every time you sit down in front of a pair of our speakers, there'll be someone standing behind them.

We've put years of work into our DX loudspeakers, so you'll get years of play out of them.



Cerwin-Vega!

NEW PRODUCT



3M

The new 2020 High Position and 4040 Metal Position cassettes are the latest in 3M's Black Watch line. The 2020 cassettes, designed for everyday use in car and portable players, use a formulation that combines pure metal particles with cobalt-modified ferric oxide. The 4040 cassettes use oxide-free metal-particle tape that is said to be able to capture the wide dynamic range of CD's. Prices: 2020, \$4 and \$6 in 74- and 100-minute lengths; 4040, \$7 and \$9 in the same lengths. 3M Black Watch Products, Dept. SR, c/o The Ginther Group, 1 Appletree Sq., Bloomington, MN 55425. **Circle 130 on reader service card**



Custom Woodwork & Design

CWD's Shaker-style Woodstock birch cabinet, with blue satin stain and cherry top and accents, can accommodate a 35-inch direct-view TV set. There are four adjustable shelves for audio and video components and two drawers for storing

tapes, CD's, and laserdiscs. Dimensions: 68 x 57 x 25½ inches. Price: \$1,495. Custom Woodwork & Design, Dept. SR, 5200 W. 73rd St., Bedford Park, IL 60638.

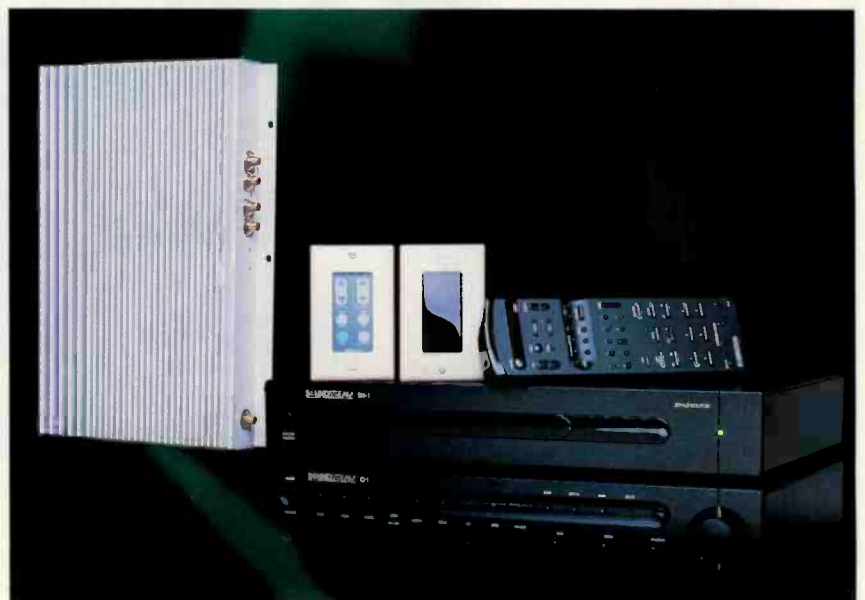
Circle 131 on reader service card



Pioneer

Pioneer's latest LaserKaraoke combi-player, the CLK-V920, features digital signal processing (DSP) and automatic two-sided play. The DSP circuitry enables users to adjust the instrumental and vocal tracks on sing-along karaoke discs to enhance the sound; it can also be used for CD's and videodiscs. Karaoke features include a nine-step digital key controller to adjust music for the key of a singer's voice. A built-in cassette deck facilitates recording karaoke performances, and there is also a built-in amplifier and a pair of speakers. Price: \$1,900. Pioneer Laser Entertainment, Inc., Dept. SR, 2265 E. 220th St., Long Beach, CA 90810.

Circle 132 on reader service card



Soundstream

Soundstream's whole-house audio/video system is now available in a stand-alone version, the SN-1 Mk II Simul-source. The system distributes and controls five audio and three audio/video sources in four zones. Users can operate the system with either a soft-touch keypad or a handheld infrared remote. The system

routes audio signals using balanced lines for low noise and distributes video in composite form to avoid picture-degrading RF modulation and demodulation. Price: \$1,195. Soundstream Technologies, Dept. SR, 120 Blue Ravine Rd., Folsom, CA 95630.

Circle 133 on reader service card

STATE-OF-THE-ART OFFER FROM COLUMBIA HOUSE. TAKE ANY 8 CDs FOR 1¢

**PLUS A CHANCE TO GET 1
MORE CD FREE!**
See details on other side.



U2—Achtung Baby. *The Fly, Mysterious Ways, One*; many more hits. (Island) 431-213
Mariah Carey—Emotions. Title cut; *Can't Let Go, Make It Happen*; others. (Columbia) 428-029

Natalie Cole—Unforgettable. *The Very Thought Of You, Paper Moon*; etc. (Elektra) 422-279
Prince And The New Power Generation—Diamonds And Pearls. *Cream, Gett Off*; etc. (Paisley Park) 427-419

Mötley Crüe—Decade Of Decadence '81-'91. *Live Wire; Home Sweet Home; Smokin' In The Boys' Room*; etc. (Elektra) 429-316
Michael Bolton—Time, Love & Tenderness. *When A Man Loves A Woman; Love Is A Wonderful Thing*; etc. (Columbia) 415-711

Bonnie Raitt—Luck Of The Draw. *Something To Talk About, I Can't Make You Love Me; Slow Ride*; etc. (Capitol) 423-186
Stevie Ray Vaughan & Double Trouble—The Sky Is Crying. Title cut; *Empty Arms; Boot Hill*; many more. (Epic) 429-256

Very Best Of The Righteous Brothers—Unchained Melody. *You've Lost That Lovin' Feelin'; Ebb Tide*; more. (Verve) 423-772
Various Artists—Two Rooms—Songs Of Elton John & Bernie Taupin. *Rocket Man* (Kate Bush); many others. (Polydor) 430-421

Enya—Shepherd Moons (Warner Bros.) 431-718
George Strait—Ten Strait Hits (MCA) 432-617
Jody Watley—Affairs Of The Heart (MCA) 432-609
Tevin Campbell—T.E.V.I.N. (Warner Bros.) 431-585

Various Artists—New York Rock & Soul Review (Giant) 431-411
John Williams & Boston Pops—Spielberg/Williams (Sony Classical) 431-254
Yanni—Celebration Of Life (Private Music) 431-247

Neil Young and Crazy Horse—Weld (Reprise) 430-645/390-641

The Platters—Very Best (Mercury) 430-611
Earl Klugh Trio, Vol. 1 (Warner Bros.) 430-561

Erasure—Chorus (Sire/Reprise) 430-546
Allman Brothers Band—Decade Of Hits, 1969-79 (Polydor) 430-349
Frank Sinatra—The Very Good Years (Reprise) 430-363

Joe Sample—Collection (GRP) 430-280

Kenny Loggins—Leap Of Faith (Columbia) 430-256

New Edition—Greatest Hits Vol. 1 (MCA) 430-066
"The Commitments" (Sndtrk) (MCA) 429-753
Eric Clapton—24 Nights (Reprise/Duck) 430-249/390-245

The Cult—Ceremony (Sire/Reprise) 428-300

Thomas Hampson—Night And Day (EMI Classics) 429-696
Pixies—Tromp Le Monde (Elektra) 429-571

Jerry Garcia Band (Arista) 428-425/398-420

Fourplay (Warner Bros.) 428-334

Ozzy Osbourne—No More Tears (Epic/Associated) 428-128

Public Enemy—Apocalypse 91 (Def Jam/Columbia) 428-003

Ratt—Ratt & Roll 8191 (Atlantic) 427-799

Simple Minds—Real Life (A&M/Virgin) 427-203

The Byrds—20 Essential Tracks (Columbia/Legacy) 426-940

The Rippingtons—Curves Ahead (GRP) 426-874

Vanessa Williams—The Comfort Zone (Wing) 426-510

Trisha Yearwood (MCA) 426-148

Seal (Sire/Warner Bros.) 425-827

The Best Of Stevie Nicks (Modern) 425-694
Spyro Gyra—Collection (GRP) 420-950
Electronic (Warner Bros.) 422-097

John Mellencamp—Whenever We Wanted (Mercury) 430-231

Amy Grant—Heart In Motion (A&M) 424-457

Robyn Hitchcock & The Egyptians—Perspex (Island A&M) 425-645

Wynton Marsalis—Thick In The South, Vol. 1 (Columbia) 425-587

Carreras/Domingo/Pavarotti—Encore! (Sony Masterworks) 425-470

Keith Sweat—Keep It Comin' (Elektra) 431-130

John Mellencamp—Uh-Huh (Riva) 423-574

Eric Clapton—Time Pieces (Polydor) 423-467

Jon Bon Jovi—Blaze Of Glory (Mercury) 423-400

John Williams—I Love A Parade (Sony Class.) 422-717

Crowded House—Woodface (Capitol) 422-253

Skid Row—Slave To The Grind (Atlantic) 422-220

Allman Brothers Band—Shades Of Two Worlds (Epic) 422-212

Bad English—Backlash (Epic) 422-170

Kenny G Live (Arista) 401-505

The Psychedelic Furs—World Outside (Columbia) 422-055
Marc Cohn (Atlantic) 421-552

The Manhattan Transfer—The Offbeat Of Avenues (Columbia) 420-208

Jodeci—Forever My Lady (MCA) 430-959

EMF—Schubert Dip (EMI) 421-487

Midori—Live At Carnegie Hall (Sony Class.) 420-570

The Moody Blues—Days Of Future Passed (Deram) 423-749

Paul McCartney—Tipping The Live Fantastic/Highlights! (Capitol) 417-477

David Lee Roth—A Little Ain't Enough (Warner Bros.) 416-610

Gloria Estefan—Intq The Light (Epic) 415-943

Big Audio Dynamite II—The Globe (Columbia) 414-649

Madonna—The Immaculate Collection (Warner Bros./Sire) 414-557

Paul Simon—The Rhythm Of The Saints (Warner Bros.) 412-809

David Bowie—Changes-bowie (Rykodisc) 412-247

Stevie Wonder—"Jungle Fever" (Sndtrk) (Motown) 412-130

INXS—X (Atlantic) 412-106

Garth Brooks—No Fences (Capitol) 411-587

Travis Tritt—It's All About To Change (Warner Bros.) 422-113

C&C Music Factory—Gonna Make You Sweat (Columbia) 416-933

INXS—Live Baby Live (Atlantic) 430-298

Hollies—Epic Anthology (Epic) 409-730

Toto—Past To Present 1977-1990 (Columbia) 411-371

The Robert Cray Band—Strong Persuader (Mercury) 426-189

Rod Stewart—Downtown Train/Selections: Storyteller Anthology (Warner Bros.) 425-322

The Vaughan Brothers—Family Style (Epic/Associated) 411-306

George Michael—Listen Without Prejudice, Vol. 1 (Columbia) 411-181

L.L. Cool J—Mama Said Knock You Out (Def Jam/Columbia) 411-165

AC/DC—The Razors Edge (ATCO) 410-662

Jane's Addiction—Ritual De Lo Habitual (Warner Bros.) 407-098

Wilson Phillips (SBK) 406-793

Harry Connick, Jr.—We Are In Love (Columbia) 406-645

Whitney Houston—I'm Your Baby Tonight (Arista) 411-710

Depeche Mode—Violator (Sire/Reprise) 405-423

Billy Joel—Storm Front (Columbia) 387-902

Jim Croce—Photographs & Memories—Greatest Hits (Saja) 246-868



Paula Abdul—Spellbound (Virgin) 420-257

P.M. Dawn—Utopian Experience (Gee Street/Island) 430-207

Roger Waters—The Wall Berlin 1990 (Mercury) 423-855/393-850

Tears For Fears—Songs From The Big Chair (Mercury) 423-848

Rush—Chronicles (Mercury) 423-780/393-785

"Pretty Woman" (Sndtrk) (EMI) 405-407

Yes—Union (Arista) 417-824

Blind Faith (Polydor) 423-673

Scorpions—Crazy World (Mercury) 423-608

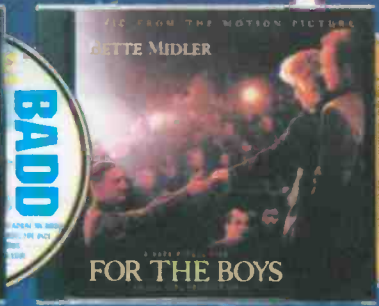
Dire Straits—On Every Street (Warner Bros.) 428-359

COLUMBIA HOUSE: We Entertain America...One Person At A Time.

MORE SELECTIONS

TAKE ANY 8 CDs FOR 1¢ PLUS A CHANCE TO GET EVEN MORE MUSIC—FREE!

See details below



Color Me Badd—C.M.B. I Wanna Sex You Up; I Adore Mi Amore; plus more. (Giant/Reprise) **402-916**

Bette Midler—For the Boys (Original Soundtrack). Every Road Leads Back To You; many more. (Polydor) **430-421**

Bryan Adams—Waking Up The Neighbors. Can't Stop This Thing We Started; plus many more. (A&M) **429-779**

Boyz II Men—Cooleyhighharmony. Motownphilly; It's So Hard To Say Goodbye To Yesterday; etc. (Motown) **424-754**

R.E.M.—Out Of Time (Warner Bros.) **417-923**

Vladimir Horowitz—The Last Recording (Sony Classical) **405-985**

Nine Inch Nails—Pretty Hate Machine (TVT) **402-438**

Warrant—Cherry Pie (Columbia) **411-389**



Harry Connick, Jr.—Blue Light, Red Light (Columbia) **429-191**

Chicago—Grt. Hits 1982-89 (Reprise) **401-166**

Robert Palmer—Addictions, Vol. 1 (Island) **400-937**

Eric Clapton—Journeyman (Reprise) **400-457**

Linda Ronstadt—Cry Like A Rainstorm-Howl Like The Wind (Elektra) **389-874**

Janet Jackson—Rhythm Nation 1814 (A&M) **380-918**

Reba McEntire—For My Broken Heart (MCA) **430-090**

Extreme—Pornograffitti (A&M) **409-003**

Joni Mitchell—Court And Spark (Asylum) **367-102**

Chris Isaak—Heart Shaped World (Reprise) **306-144**

Michael Bolton—Soul Provider (Columbia) **303-083**

Tom Petty—Full Moon Fever (MCA) **382-184**

"Beaches" (Sndtrk) (Atlantic) **379-669**

Roy Orbison—The All-Time Hits, Vols. 1 & 2 (CSP) **377-945**

The Who—Who's Better, Who's Best (MCA) **376-657**

Creedence Clearwater Revival—Chronicles-20 Grt. Hits (Fantasy) **308-049**

Journey's Greatest Hits (Columbia) **375-279**

Van Halen—OU812 (Warner Bros.) **369-371**

Marvin Gaye's Grt. Hits (Motown) **367-565**

Bob Dylan's Greatest Hits (Columbia) **138-586**

Sting—The Soul Cages (A&M) **424-440**

James Taylor's Grt. Hits (Warner Bros.) **291-302**

Tom Petty & The Heartbreakers—Into The Great Wide Open (MCA) **429-795**

Mariah Carey (Columbia) **407-510**

Basia—Brave New Hope (Epic) **428-722**

Bell Biv DeVoe—Wbbd-Bootcity (MCA) **429-217**

Jesus Jones—Doubt (SBK) **417-691**

Fleetwood Mac—Greatest Hits (Warner Bros.) **375-782**

The Jimi Hendrix Experience—Smash Hits (Reprise) **291-641**

The Very Best Of The Everly Brothers (Warner Bros.) **372-912**

Van Halen—For Unlawful Carnal Knowledge (Warner Bros.) **420-273**

Stevie Wonder's Original Musiquarium I (Tamla) **314-997/394-999**

Peter Dinklage—The Well-Tempered Clavier, Vol. 1 (Columbia) **424-333**

Meat Loaf—Bat Out Of Hell (Epic) **279-133**

Bruce Springsteen—Born To Run (Columbia) **257-279**

Legendary Jazz

Dinah Washington —Compact Jazz (Mercury) 429-613	Bird (Original Soundtrack) (Columbia) 373-332
Ella Fitzgerald —The Cole Porter Songbook, Vol. 1 (Polydor) 426-692	John Coltrane —Giant Steps (Atlantic) 371-591
Nat King Cole —Jumpin' At Capitol (Rhino) 421-982	Count Basie —Essential Volume 1 (Columbia Jazz Masterpieces) 357-756
Herbie Hancock —Makden Voyage (Blue Note) 408-724	Duke Ellington —Ellington At Newport (Columbia Jazz Master.) 354-662
Billie Holiday —Lady's Decca Days, Vol. 1 (MCA) 407-635	Dave Brubeck Quartet —Time Out (Columbia Jazz Masterpieces) 353-060
The Divine Sarah —The Columbia Years 1949/53 (Columbia) 374-280/394-288	Miles Davis —Kind Of Blue (Columbia Jazz Masterpieces) 353-045
Elton John's Greatest Hits (MCA) 319-541	Fleetwood Mac —Rumours (Warner Bros.) 286-914
Foreigner —Records (Atlantic) 318-055	M.C. Hammer —Please Hammer Don't Hurt 'Em (Capitol) 403-477
Squeeze —Singles 45's & Under (A&M) 317-974	The Best Of The Doors (Elektra) 357-616/397-612
Best Of The Doobies (Warner Bros.) 291-278	Yes —Fragile (Atlantic) 351-957
Eagles —Grt. Hfts. 1971-75 (Asylum) 287-003	Aretha Franklin —30 Greatest Hits (Atlantic) 350-793/390-799
ZZ Top —Eliminator (Warner Bros.) 319-624	Red Hot Chili Peppers —Blood Sugar Sex Magik (Warner Bros.) 428-367
U2 —The Joshua Tree (Island) 354-449	
James Taylor —New Moon Shine (Columbia) 429-209	

Selections with two numbers contain 2 CDs and count as 2—so write in both numbers.

© 1992, The Columbia House Company

COLUMBIA HOUSE, 1400 N. Fruitridge Ave. P.O. Box 1129, Terre Haute, Indiana 47811-1129

Please accept my membership application under the terms outlined in this advertisement. I am enclosing check or money order for \$186 (that's 1¢ for the 8 CDs indicated here, plus \$185 for shipping and handling). I agree to buy six selections, at regular Club prices, in the next three years—and may cancel membership anytime after doing so.

My main musical interest is (check one): (But I may always choose from any category)

- | | | | | |
|---|--|--|---|---|
| <input type="checkbox"/> Hard Rock | <input type="checkbox"/> Soft Rock | <input type="checkbox"/> Modern Rock | <input type="checkbox"/> Light Sounds | <input type="checkbox"/> Rap |
| <input type="checkbox"/> Van Halen, | <input type="checkbox"/> Michael Bolton, | <input type="checkbox"/> R.E.M., Red Hot | <input type="checkbox"/> Bette Midler, | <input type="checkbox"/> L.L. Cool J., |
| <input type="checkbox"/> ZZ Top | <input type="checkbox"/> Mariah Carey | <input type="checkbox"/> Chili Peppers | <input type="checkbox"/> James Taylor | <input type="checkbox"/> Public Enemy |
| <input type="checkbox"/> Heavy Metal | <input type="checkbox"/> R&B/Soul | <input type="checkbox"/> Easy Listening | <input type="checkbox"/> Jazz | <input type="checkbox"/> Dance Pop |
| <input type="checkbox"/> Skid Row, | <input type="checkbox"/> Boyz II Men, | <input type="checkbox"/> Frank Sinatra, | <input type="checkbox"/> Earl Klugh, | <input type="checkbox"/> C&C Music Factory, |
| <input type="checkbox"/> Ozzy Osbourne | <input type="checkbox"/> Luther Vandross | <input type="checkbox"/> Ray Corinfil | <input type="checkbox"/> The Rippingtons, | <input type="checkbox"/> Jody Watley |
| <input type="checkbox"/> Country: Randy Travis, | <input type="checkbox"/> Ricky Van Shelton | <input type="checkbox"/> Classical: V. Horowitz, | <input type="checkbox"/> J. Rampall | |

Mr. Mrs. Miss Print First Name Initial Last Name Age _____

Address _____ Apt. _____

City _____

State _____ Zip _____

Do you have a VCR? (04) Yes No
Do you have a credit card? (03) Yes No **417/S92**

Note: We reserve the right to reject any application or cancel any membership. These offers not available in APO, FPO, Alaska, Hawaii, Puerto Rico, write for details of alternative offer. Canadian residents will be serviced from Toronto. Applicable sales tax added to all orders.

Send these 8 CDs for 1¢
Write one number in each box.

Extra Bonus Offer: also send one more CD now, for which I am enclosing an additional \$6.95.

--

...and I'm entitled to get this extra CD FREE!

--

HR5-BF-RN

HERE'S HOW TO GET YOUR 8 CDs FOR 1¢...

- **Just mail the coupon** together with check or money order for \$1.86 (that's 1¢ for your first 8 CDs, plus \$1.85 for shipping and handling).
- **You agree** to buy just six more selections in the next three years, at regular Club prices (currently \$12.98 to \$15.98, plus shipping and handling)—and you may cancel membership at any time after doing so.
- **Free Music Magazine** sent every four weeks (up to 13 times a year), describing the Regular Selection for your listening interest, plus hundreds of alternates. And Special Selection mailings up to six times a year (total of up to 19 buying opportunities).
- **Buy only what you want!** If you want the Regular or Special Selection, do nothing—it will be sent automatically. If you'd prefer an alternate selection, or none at all, just mail the response card always provided by the date specified.
- **You always have 10 days to decide;** if not, you may return the Selection at our expense.
- **Half-Price Bonus Plan.** If you continue your membership after fulfilling your obligation, you'll be eligible for our money-saving bonus plan. It lets you buy one CD at half-price for each CD you buy at regular Club price.
- **10-Day Risk-Free Trial.** We'll send details of the Club's operation with your introductory package. If not satisfied, return everything within 10 days for a full refund and no further obligation.
- **Extra Bonus Offer:** you may take one additional CD right now at the super-low price of only \$6.95—and you are then entitled to take an extra CD as a bonus FREE! And you'll receive your discounted CD and your bonus CD with your 8 introductory selections—a total of 10 CDs in all!
- **If the application is missing, write to:** Columbia House, 1400 N. Fruitridge Ave, Terre Haute, IN 47811-1129.



Entertaining America...
One Person at a Time.

AUDIO Q & A

by Ian G. Masters

Driving a Subwoofer

Q My main speakers are driven by a receiver and my subwoofer by a separate integrated amplifier. The main drawback is that levels have to be controlled separately. I could drive both from the receiver, but it doesn't have enough power. A separate preamplifier could drive two amplifiers, but I can't afford that option. How can I set a proper balance between my subwoofer and the rest of my system and control it with just one knob?

MARC APGAR
Mt. Laurel, NJ

A Although you don't say so, I assume your receiver lacks pre-out and main-in jacks. If it had them, there would be no difficulty in using Y-cords to feed the preamplifier output to the receiver's own amplifiers as well as an external power amp. The subwoofer's amplifier could then be balanced to the main unit once and then left alone. Much the same thing can be achieved, however, by feeding the external amplifier from your receiver's speaker outputs. You will have to install a simple volume control in the cables between the amplifiers to pad the level down so it won't overload the inputs of the external unit. The receiver's level control will then affect both amplifiers (so will the tone controls, but the effect on the subwoofer will be minimal). Even simpler would be to feed the external amplifier from your receiver's headphone jack, if it has one. Appropriate cords are available for this purpose, and you can probably dispense with the in-line volume control as well. The main drawback would be a large plug permanently attached to your receiver's front panel, but you might be willing to live with that.

VU Meters

Q For years I have noticed that meters on audio equipment are calibrated in something called "VU." Does this have any relationship to watts or volts, and if so, why is it used instead of the more common units?

DAVID HAHN
Laurel, MD

A The initials stand for "volume units," a holdover from early radio days when VU meters were used to match levels throughout the broadcasting chain. The reference level—0 VU—is very specific, representing one milliwatt of power in a 600-ohm circuit, and pure tones of that value were used to line up equipment. The professional meters also had very carefully controlled ballistics so that they would react to complex audio waveforms in a consistent way,

indicating approximately the average audio level, rather than the peak level. VU meters are calibrated in decibels above and below the reference level.

When professional tape recorders appeared, the existing radio VU meters were used to set recording levels, the reference point being a somewhat arbitrary "acceptable" amount of distortion. Consumer-grade recorders imitated this practice, although very few used true VU meters. In recent years, electromagnetic meters have been almost entirely replaced by faster, peak-reading liquid-crystal or fluorescent displays, and only rarely do these even pretend to be VU meters.

Mono Remote Speakers

Q I would like to add some speakers to be driven by my receiver's remote-speaker outputs. Is there any way I can arrange things so that the remotes play in mono and the main system in stereo?

ROGER VON DEYLEN
Napoleon, OH

A The only way to get mono from one set of speakers and stereo from another is to use separate amplifiers. Most receivers and integrated amplifiers do provide terminals and switching for extra speakers, but these are mostly a matter of convenience; behind the panel they are connected together in parallel. And if you strap the remote outputs together to get mono, you'll probably damage your amplifier. The internal impedance of an amplifier's output stage is very low; connecting one output section to another is like hooking up a speaker whose impedance is a small fraction of an ohm. The current skyrockets, and the amplifier is likely to fry.

Videotape Life

Q I have made a number of irreplaceable videotapes on my camcorder. At one time I was told that videocassettes deteriorate in a relatively short period of time—five to seven years—after which the picture fades. Is there any way to prolong a videotape's life, or should I periodically make copies of the originals?

STEVE DELIE
Bloomington, MN

A There is no inherent "half-life" for videotape; lots of us have tapes going back to the mid-1970's that look as crisp today as when they were recorded. Still, videocassettes are fairly fragile, so they have to be treated with respect or deterioration may occur. The rules are

What is PARA?



Professional
Audio/Video
Retailers
Association

PARA stands for Professional Audio/Video Retailers Association. We are a nationwide organization of independent specialty audio/video stores dedicated to providing our customers with expert advice, quality products, and world class customer service. Our members foster the highest standards of business ethics and professionalism for the protection of the consuming public.

Why Buy from a Store That Belongs to PARA?

We Help You Find What's Right for You! In today's competitive market, it's easy to get so confused you don't know what to buy. The superstores tout low prices, but there's never anyone who can answer your questions or help you choose a component that will be compatible with what you already own. Because all PARA members specialize in selling music and home video systems, we are committed to educating our employees to understand today's newest products and technologies so they can explain them to you in language that is clear and easy to understand. We are dedicated professionals who love music and want to help you purchase the best sound your money can buy.

We Let You Hear and See the Difference!

Because all components are not created equal, PARA retailers maintain sophisticated showrooms and demonstration facilities to help you see and hear the difference between components. Our stores are designed to make your shopping experience easy and enjoyable. We believe in the personal approach that treats each person's needs differently and strives to give you the most value for the money you have to spend.

We Believe in Customer Service First, Last, and Always! The hallmark of a PARA audio/video store is our total dedication to customer service and a true concern for the well-being of our customers. PARA-member stores are more concerned with your lifetime patronage than any single sale. By consistently going that extra mile to make sure your needs are satisfied, we hope to provide you and your family with the best in home entertainment systems today and for years to come.

To locate a PARA dealer near you, call: (816) 444-3500



The new Santa Fe DCM 42 FM/AM cassette receiver with CD control stands out as a triumph of European design, the extraordinary integration of ergonomics and economics. The Santa Fe DCM 42 boasts a High Definition FM Tuner, a high frequency response autoreverse cassette deck and full

BLAU

**THE ROOF
OFF!**

BLAUPUNKT
Bosch Telecom

The Blaupunkt name and BLUE DOT symbol are registered trademarks of Blaupunkt — Werke GmbH Bosch Telecom.

featured CD Changer control circuitry. It's just one of all the new very sophisticated and very affordable Blaupunkts available at a dealer near you. Admittedly, the technology and design may be copied in a few years. But there will be pleasure in knowing you own an original. For the nearest dealer, call 1-800-950-BLAU, and start driving with the sound that's worlds apart. Worlds apart in car audio • cellular • navigation

CIRCLE NO. 2 ON READER SERVICE CARD

essentially the same as for audio tapes. Store them in their boxes vertically, away from extremes of heat, humidity, or magnetic fields. Ideally, for long-term storage you should play them through and file them without rewinding, as this results in the most even tape pack. That's usually inconvenient, however, because you won't be able to watch the tape without a long rewind time first. Normal rewinding should not cause severe problems, but you should avoid using high-speed outboard winders.

The greatest enemy to videocassettes, particularly if they contain inexpensive tape, is simply playing them. One remedy is to put the tapes through your VCR only rarely. If that's not practical, you may indeed want to make an everyday copy so the original can be preserved (to make another copy later, if necessary). Use high-grade tape for the duplication, and if you have Hi8 or S-VHS equipment, make the copies on that to minimize picture degradation.

Dirty CD's

Q An audio salesman told me that playing dirty CD's could cause some critical part of the laser assembly to wear out prematurely because it has to work harder to focus on the disc. Is that true?

BILL JONES
Lake Brownwood, TX

A All CD players contain servo mechanisms that keep the laser beam focused on a disc, and it is true that such electromechanical elements are usually the first parts of an audio component to wear out. But the amount of movement involved in maintaining focus is extremely small, so an enormous number of adjustments would be required before the focusing mechanism began to deteriorate. If you had CD's dirty enough to put your player at risk—and they'd have to be pretty filthy—they would mute and skip so much that they would probably be unlistenable anyway.

Ultrasonic Response

Q Does it do any good to buy speakers or a preamplifier with frequency response wider than that of my power amplifier? If not, why do some components specify response above 20,000 Hz since humans can't hear above that frequency anyway? STEVEN D. PICERNE
APO New York

A Ah, the 64-kilohertz question! Two reasons are usually advanced for extra-wide-bandwidth audio components: first, that extended high-frequency response improves a component's transient performance—its ability to react quickly to steep wavefronts—and second, that pushing the upper limit far-

ther up increases the likelihood of linearity within the audible range.

There have definitely been times when the latter reason has been valid: The prospect of four-channel sound in the LP era required that phono cartridges be able to respond up to 50,000 Hz, for instance, and their flatness in the audible band improved dramatically. Today, however, most designers can achieve

that sort of linearity without resorting to such tactics. As for transient response, a wider bandwidth often results in measurably better performance, but no one has ever convincingly demonstrated that the improvement is audible. That's not too surprising, since hearing the change in transient response would actually require sensitivity to ultrasonic signal components. □

CAR SOUND IS OUR RELIGION. PREPARE TO BE CONVERTED.

And on the fifth day, the engineering zealots at Boston Acoustics created the 800 Series and ProSeries component automotive speaker systems. And they saw that they were good. Actually, superb. With ultra-smooth frequency response, flexible mounting options and unsurpassed power handling. And on the sixth day, they decided to give people two hot CD's* plus a ton of useful information just for filling out a coupon and sending \$5 to cover shipping and handling. And on the seventh day they ordered out for pizza.

SEND TWO HOT CD'S AND OTHER STUFF UNTO ME.

I've enclosed a \$5 check or money order to cover shipping and handling to:
Boston Acoustics, Department CSR-2,
70 Broadway, Lynnfield, MA 01940

Name: _____

Address: _____

City: _____ State: _____ ZIP: _____

Car make: _____ Model: _____ Year: _____

*Don't you hate these pesky little asterisks? This is simply to tell you that the two discs we're offering are recorded to really put your system through its paces. They offer deep, punchy bass. Tight transients. Sharp, clean highs. And everything else you'll need to judge your system's frequency response. Plus, you'll love the music. Trust us. We know what's good for you. Offer good through December 1992.

BostonAcoustics



Beam Me Up, Scotty

THE captain isn't going to like this. Not one bit. I'm already an hour overdue, and I've hardly scratched the surface. But what do they expect? When the Zookmakians raided the earth in June 1992, they scooped up more than 800 million metric tons of consumer audio electronics. Why they promptly dumped it all here on Neptune is something no historian ever figured out. The site must be a hundred meters deep in late-twentieth-century electronics—a real treasure trove for archaeologists like me.

Hey! Look at this! A handheld virtual-reality projector. No, wait—it opens up to reveal an LCD screen, and underneath, a disc drive. Hmm . . . let me wipe away the dust . . . Data Discman Electronic Book Player DD-1EX. Must be some kind of ancient portable information storage and retrieval unit. Made by an outfit called Sony—perhaps some obscure American manufacturer. Let's see, here . . . miniature QWERTY typewriter keyboard, five function keys, YES and NO keys, and arrow keys. Looks like it could be powered from either batteries or AC line voltage. There's also a video output for connection to an external video monitor.

Here's a Nike shoebox . . . oh, it's full of 300-year-old baseball cards—how useless. Wait . . . the bottom's full of disc cartridges—an entire library of late-twentieth-century infor-

SIGNALS

by Ken C. Pohlmann

mation. The cartridges look a lot like ancient computer diskettes, but they hold 3-inch optical discs inside. Since they're in protective caddies, the information on them is even better protected than on ordinary compact discs. The discs themselves appear to be CD-ROM discs, probably each holding the equivalent of about 100,000 pages of printed text, 32,000 graphic images, or a combination of both. Look at all these titles—Bibles, telephone books, airline schedules, sports almanacs, language translators, encyclopedias, dictionaries, profiles of major corporations, a wine guide, cookbooks, novels, games!

Wow! The batteries are still charged. Let's try *Compton's Concise Encyclopedia*. Nice legible display on the screen, backlit with contrast adjustment, 256 x 200 pixels displaying graphics or ten 30-character lines of text. Line-by-line or page-by-page scrolling capability.

There appears to be a firmware search engine on board the player. The user can choose from six standardized search-and-retrieval methods to locate text or graphic information. A word search lets you select topics by entering the first few letters of the topic word. An end-word search lets you enter the last few letters in a topic word. A key-word search lets you enter up to five words relating to a subject. A menu search locates subjects by selecting headings from a table of contents. A multisearch prompts the user to provide one-word answers to four preprogrammed search questions. A graphics search lets you locate topics from a graphic menu. In addition, a cross-reference "hot-link" system lets you jump to and from screens of additional text or graphic information.

Best of all, the whole thing is user-friendly and needs an owner's manual! about as much as a paper book does. For example, if I want information about frogs, I type in the word, and a half-instant later I get a full description, a picture of a frog, and a list of references for further reading. Not bad considering the primitive intellectual capacity of twentieth-century scientists. I mean, those guys still thought cold fusion was a joke.

Look at this! A regular 3-inch audio

CD. Unbelievable! An actual Paula Abdul recording! She was truly the greatest classical composer who ever lived, even compared with other immortals like Bach, Beethoven, and Vanilla Ice. The Data Discman must play audio discs, too. It has a headphone jack and old-style CD controls. Here's a pair of headphones. Yes! The timeless music of Paula Abdul!

This Data Discman is pretty nifty. And what a futuristic product! It was handheld electronic books like this that signaled the end of paper books by making it possible to carry entire volumes of reference and reading material in your pocket. What an odd twist of history for the compact disc, an entertainment medium, to show a way to store all of human knowledge and let people retrieve it when and where they

The Sony Data Discman Electronic Book Player is user-friendly and needs an owner's manual about as much as a paper book does.

needed it. Hmm . . . I think I'll take this Data Discman with me and donate it to the Earth Museum of Consumer Electronics in Las Vegas.

But first I want to try another data disc. Here's one called "Roger Ebert's Movie Home Companion." It appears to be descriptions of screen-projected dramas and comedies of the era. Just for fun, let's ask for a listing of science fiction. Hmm . . . no fewer than six *Star Trek* adventures—they must have been really popular with earthlings back then. Starships? Klingons? Warp speed? Endangered humpback whales? Jeez, these stories are ridiculous. Clearly, they didn't have a clue about the future.

Oh, no—look at the time! Two hours late! I'd better have Scotty beam me up right away. Otherwise I'll have to endure another one of the captain's melodramatic temper tantrums. Not to mention the nasty looks I'll get from that creepy science officer with the pointy ears. That jerk doesn't even appreciate Paula Abdul. □

Live Your Life To Music.

Step Up To The Bose® Lifestyle® Music System Now!



The Bose Lifestyle® music system includes Direct/Reflecting® cube speaker arrays; Lifestyle® music center with built-in CD player and AM/FM stereo radio; remote control that works around corners and through walls. Also comes with hideaway Acoustimass® bass module (not shown).

Advanced technology that will change the way you enjoy music.

New Bose patented technology, including Acoustimass speaker technology and automatic dynamic equalization, has enabled us to reduce the size and complexity of the stereo system while actually improving performance.



The award-winning Lifestyle® music system replaces an entire rack of conventional equipment and speakers. And its ease-of-use and versatility will enable you to live your life to music in ways you never thought possible.

Enjoy sound quality second only to that of a live performance; audition the Lifestyle® music system.

"No visible speakers, no stack of components, nothing that looks like sound equipment... Hit the start button and suddenly the room fills with music of exemplary clarity and fullness."

— Hans Fantel, *The New York Times*, 1990*

Enjoy music even more with FREE speakers from Bose.

For a limited time, when you step up to a Lifestyle® music system, Bose will send you a pair of Lifestyle® powered speakers (a \$300 value) free. Put them in a second room and it's like having another stereo system, with no additional electronics needed.



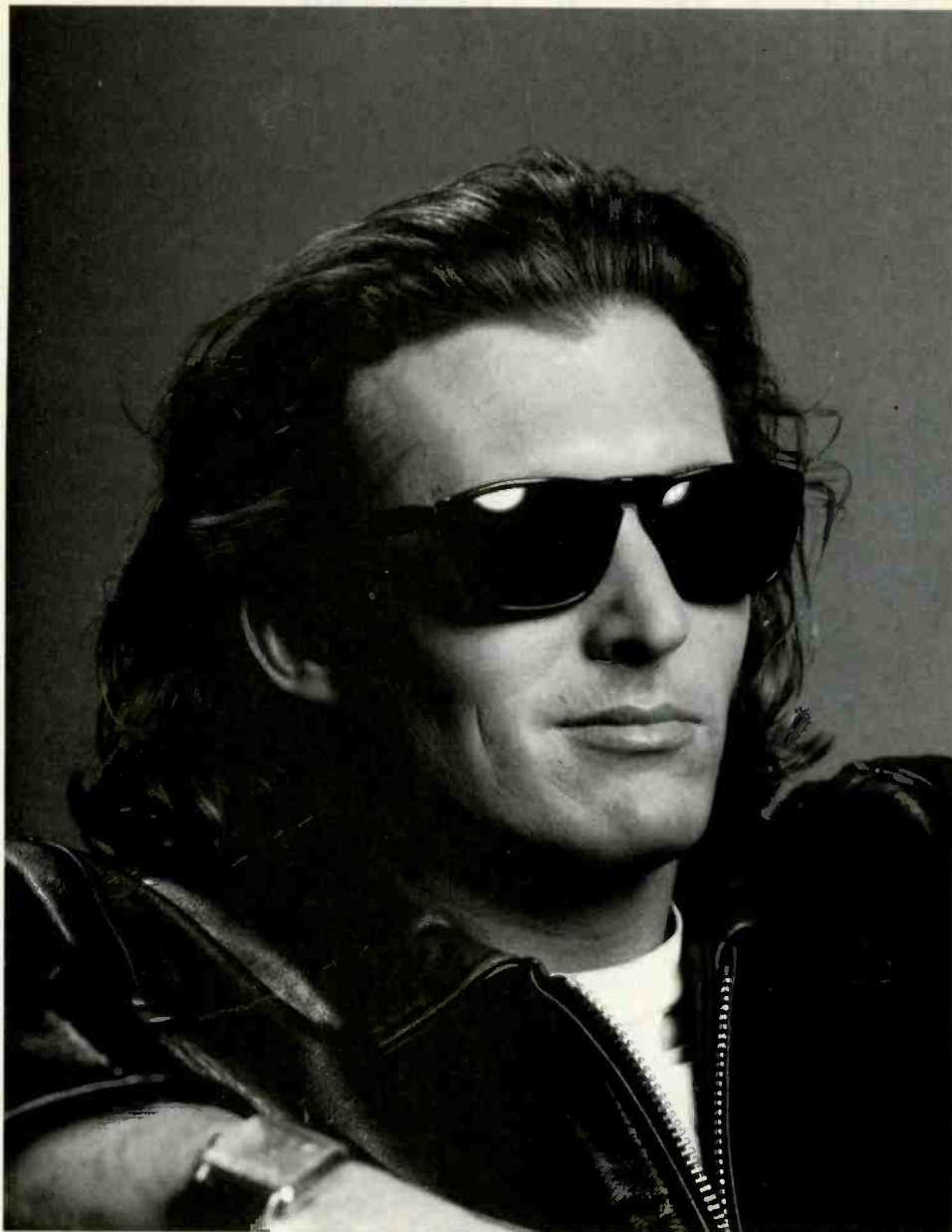
We invite you to visit your Bose dealer and compare the benefits of the Lifestyle® music system to much larger, more expensive stereo systems.

And if you already own a Lifestyle® music system, we have a special offer for you as well.

This event ends May 31, 1992. For information, and names of Bose dealers near you, call toll-free:

1-800-444-BOSE Ext. 106

USA, Monday-Friday 8:30AM-9:00PM, Saturday 9AM-5PM (ET)
Canada, Monday-Friday 9:00AM-5:00PM (ET)



NORMAL BIAS



HIGH

Maxell has a tape for those whose passion for music isn't normal or high, but intense.

The tape is XLII-S. The power behind it is Black Magnetite—a higher output magnetic material harnessed by Maxell engineers.

With 13% greater power than



BIAS

the magnetic coating on any normal or high bias tape, Black Magnetite helps XLII-S deliver higher maximum output levels and a wider dynamic range.

This might explain why CD Review magazine called XLII-S "head, shoulders and torso above the rest"



BLACK MAGNETITE

in their analysis of high bias cassettes.

"You'll know you're hearing something good," said their reviewer, "when your heart leaps into your throat."

That's not normal. That's not high. That's Maxell XLII-S with Black Magnetite.



**TAKE YOUR MUSIC
TO THE MAX.**

TECHNICAL TALK

by Julian Hirsch



High Fidelity In a Box?

COMPONENT high fidelity as we know it came into existence shortly after the Second World War. Until then, radios were constructed as single units, with tuner and amplifier on a common chassis. The loudspeaker was usually a single cone driver in an open-backed cabinet that also housed the electronic chassis. The record player, if one were included, was a single-speed (78-rpm) changer, or a single-play turntable in lower-price models, with a crystal or, less often, a magnetic pickup that might track at a force of several *ounces* (not grams).

Postwar audio hobbyists preferred separate tuners, power amplifiers, and preamplifiers (often from different manufacturers). Of course, the loudspeaker had to be external to the electronic cabinet (if any) and in its own enclosure.

Originally, music systems formed of separate components were the province of a small number of enthusiasts, or "audiophiles." The general public remained with the old single-unit radio format. To this day, most audiophiles consider component hi-fi to be the best way, if not the *only* way, to listen to music at home. Even mass-market all-in-one music systems attempt to imitate the appearance of stacked separate components.

In 1984, Bose Corporation introduced a novel one-piece home audio center called the Acoustic Wave Mu-

sic System (AWMS). The oddly shaped AW-1 contained an AM/FM stereo tuner, a cassette deck, three amplifiers, and three small speakers. Measuring only 18 inches wide, 10½ inches high, and 7½ inches deep, and weighing just 15 pounds, it was designed as a complete, self-contained music system for nonaudiophile users, though with overall performance and sound quality much closer to that of moderate-price component systems than to mass-market products.

Bose recently announced an updated version of this unique product, the Acoustic Wave Music System Series II (AWMS-II). Externally, it is almost identical to the original version except for its light cream color (the AW-1 was a light gray). As before, all controls are flush-mounted on the top, and the cassette deck has now been replaced by a CD player. Recessed hand grips on the sides of the cabinet are a welcome addition.

The frequencies above a few hundred Hz are radiated by two 3-inch cone drivers, which are at the upper front corners of the molded-plastic cabinet and angled outward about 20 degrees. A single 4-inch cone supplies

The Bose Acoustic Wave Music System Series II, a one-piece home audio center with a radio, CD player, and speakers, embodies some unique advanced technology.

the combined bass output for both channels. Each driver has its own dedicated amplifier.

There are no published specifications for the AWMS-II because it is designed for nontechnical buyers, but it embodies some advanced and unique technology. For example, how do you get useful bass output down to about 50 Hz from a single 4-inch loudspeaker driver with no apparent enclosure?

The answer: Have the driver loaded

front and rear by pipe resonators (Bose calls them "Acoustic Waveguides") about 3 and 4 feet long, with their open ends exiting at the lower front corners of the cabinet. As Dr. Amar Bose has shown mathematically and demonstrated practically in this and other Bose products, such a system can produce a reasonably uniform response over several octaves (in this case from about 50 Hz to about 200 or 300 Hz). Furthermore, the high efficiency of the dual-resonator system enables a small driver and a low-power amplifier to generate a very useful amount of bass output.

Next question: How do you fit 7 feet of 4-inch pipe into a box the size of the AWMS-II, in addition to a CD player and the electronics for three amplifiers? In the original AW-1, the pipe was folded into a remarkable labyrinth. The Series II has a basically similar mechanical structure, but redesigned for easier production without sacrificing performance.

Other minor changes have been made, such as adapting the flush-mounted pushbutton and slider controls to a CD player instead of a tape deck. Some other changes are not immediately visible to the eye, such as the cooling slots hidden in the hand grips and elsewhere that make it possible to operate so much electronic circuitry in a small space without overheating.

On the back of the molded-plastic cabinet are a collapsible FM antenna, phono-type jacks for auxiliary input, microphone input, and line-level output (to drive an external amplifier). The volume control is a slider on the top of the cabinet. The single tone-control slider provides flat response at its center setting, cutting bass or treble as it is moved to either side (no boost is provided).

The tuner controls include an on/off button, five station-preset buttons (each assignable to both an AM and an FM channel), the AM/FM selector, and up/down tuning buttons. A small LED window shows the selected band, the tuned frequency, and whether reception is in stereo. The CD controls include pause/play, stop, and track skipping in either direction. There is no fast-scan mode. The CD display window normally shows the

8

compact discs or cassettes

1

FOR THE PRICE OF

with nothing more to buy...ever!

Skid Row: Slave To The Grind (Atlantic) 54433

The Best Of Stevie Nicks: Timespace (Modem) 10940

White Lion: Mane Attraction (Atlantic) 54209

Pat Benatar: True Love (Chrysalis) 44663

Lenny Kravitz: Mama Sald (Virgin) 10041

Hank Williams, Jr.: Pure Hank (Warner/Curb) 60351

Starship: Greatest Hits (RCA) 90270

Contraband (Impact) 32031

Frank Sinatra: Sinatra Reprise: The Very Good Years (Reprise) 80304

Elvis Costello: Mighty Like A Rose (Warner Bros.) 60280

Aretha Franklin: What You See Is What You Sweat (Ansta) 72220

Spyro Gyra: Collection (GRP) 33286

Kool Moe Dee: Funke Funke Wisdom (Jive) 44195

Ziggy Marley: Jahmekya (Virgin) 54204

Paul Simon: Negotiations And Love Songs 1971-86 (Warner Bros.) 20461

Lynyrd Skynyrd: 1991 (Atlantic) 34437

Foreigner: Unusual Heat (Atlantic) 34465

Elvis Presley: Sing's Leiber And Stoller (RCA) 44359

José Carreras: Hollywood Golden Classics (Atlantic) 44656

Keith Washington: Make Time For Love (Owest) 14677

Diamond Rio (Ansta) 10702

Lisa Fischer: So Insecure (Elektra) 71152

Marc Cohn (Atlantic) 82983

Neil Diamond: 12 Greatest Hits (MCA) 84050

The Judds: Greatest Hits, Vol. 2 (RCA) 74054

Holly Dunn: Milestones—Greatest Hits (Warner Bros.) 83614

Guys And Dolls: Original Cast (MCA) 43962

McBride & The Ride: Burnin' Up The Road (Atlantic) 53806

Dying Young/Sdtk. (Ansta) 73769

Queen Latifah: All Hail The Queen (Tommy Boy) 74108

Foreigner: Records (Atlantic) 53317

Supertramp: Classics (14 Greatest Hits) (A&M) 04891

Extreme: Pornograffiti (A&M) 43557

Seal (Warner Bros.) 61992

Squeeze: Play (Reprise) 70549

Barry Manilow: Showstoppers (Arista) 64323

Gladys Knight: Good Woman (MCA) 84390

Bela Fleck & The Flecktones: Flight Of The Cosmic Hippo (Warner Bros.) 64436

Van Morrison: Moondance (Warner Bros.) 64585

Emerson, Lake & Palmer: Brain Salad Surgery (Atlantic) 54608

Glenn Miller: Chattanooga Choo Choo—The #1 Hits (Bluebird) 11052

Alabama: Greatest Hits, Vol. 2 (RCA) 44504

Gene Rice: Just For You (RCA) 90101

Donna Summer: Mistaken Identity (Atlantic) 10609

Diana Ross: The Force Behind The Power (Motown) 63680

Jermaine Jackson: You Said (La Face) 84326

Joe Jackson: Laughter & Lust (Virgin) 64269

Hi-Fiers (Jive) 10542

Jefferson Starship: Gold (RCA) 64132

Connie Francis: Where The Hits Are (Malaco) 34739

Kix: Hot Wire (EastWest America) 64398

Chicago: Greatest Hits 1982-1989 (Reprise) 63363

Bad Company: Holy Water (Atlantic) 24784

Bob Marley: Legend (Island) 53521

Eric Clapton: Journeyman (Warner Bros.) 53940

Elvis Presley: The Number One Hits (RCA) 72190

Keith Whitley: Greatest Hits (RCA) 10728

Allman Bros.: Eat A Peach (Polydor) 63353

Paul Simon: Graceland (Warner Bros.) 72315

Take 6: So Much 2 Say (Reprise) 53580

Buddy Holly: From The Original Masters (MCA) 20069

Buffalo Springfield: Retrospective (ATCO) 00844

The Who: Who's Better Who's Best (MCA) 00790

Anthrax: Persistence Of Time (Island) 83468

The Cars: Greatest Hits (Elektra) 53702

The Best Of Dolly Parton (RCA) 51583

Vanilla Ice: Extremely Live (SBK) 70017

Travis Tritt: It's All About To Change (Warner Bros.) 64147

David Sanborn: Another Hand (Elektra) 54527

Heavy D & The Boyz: Peaceful Journey (Uptown/MCA) 10920

Janet Jackson's Rhythm Nation 1814 (A&M) 72386

Tom Petty: Full Moon Fever (MCA) 33911

Patsy Cline: 12 Greatest Hits (MCA) 53849

Teddy Pendergrass: Truly Blessed (Elektra) 14879

Keith Sweat: I'll Give All My Love To You (Elektra) 51603

U2: Rattle And Hum (Island) 00596

Scorpions: Crazy World (Mercury) 14795

Dionne Warwick: Sing's Cole Porter (Ansta) 53326

Fleetwood Mac: Greatest Hits (Warner Bros.) 00796

Dirty Dancing/Sdtk. (RCA) 82522

Paula Abdul: Shut Up And Dance (The Dance Mixes) (Virgin) 80326

Best Of Bad Company: 10 From 6 (Atlantic) 60321

Roy Orbison: A Black And White Night (Virgin) 64495

Quincy Jones: Back On The Block (Owest) 64116

Led Zeppelin: Houses Of The Holy (Atlantic) 34321

Rod Stewart: Downtown Train (Warner Bros.) 10708

The KLF: White Room (Ansta) 23333

Trisha Yearwood (MCA) 64033

Londonbeat: In The Blood (MCA) 44569

Bon Jovi: Slippery When Wet (Mercury) 43465

The Bonnie Raitt Collection (Warner Bros.) 00569

Anita Baker: Compositions (Elektra) 00921

Best Of Dire Straits: Money For Nothing (Warner Bros.) 00713

Bryan Adams: Reckless (A&M) 51540

Eagles: Greatest Hits, Vol. 2 (Asylum) 63318

The B-52's: Cosmic Thing (Reprise) 14742

Clint Black: Put Yourself In My Shoes (RCA) 24690

Bell Blv DeVoe: Poison (MCA) 00547

Mötley Crüe: Dr. Feelgood (Elektra) 33928

The Cure: Mixed Up (Elektra) 74190

Nelson: After The Rain (DGC) 74079

Alan Jackson: Don't Rock The Jukebox (Ansta) 43877

Damn Yankees (Warner Bros.) 14852

Pebbles: Always (MCA) 11001

Fine Young Cannibals: Raw & The Remix (I.R.S.) 53904

Another Bad Creation: Coolin' At The Playground Ya Know! (Motown) 10456

Stevie Wonder: Jungle Fever/Soundtrack (Motown) 54197

Keith Whitley: Kentucky Bluebird (RCA) 34233

Vanilla Ice: To The Extreme (SBK) 24689

The Judds: Love Can Build A Bridge (RCA) 24549

Slaughter: Stick It To Ya (Chrysalis) 42308

Jane's Addiction: Ritual de lo Habitual (Warner Bros.) 10020

Kenny G: Live (Arista) 64505

The Police: Every Breath You Take—The Singles (A&M) 73924

Peter Gabriel: Shaking The Tree: 16 Golden Greats (Geffen) 11089

16 #1 Motown Hits From The Early '60s (Motown) 74336

James Taylor: Greatest Hits (Reprise) 23790

AC/DC: Back In Black (Atlantic) 13772

Sinéad O'Connor: I Do Not Want What I Haven't Got (Chrysalis) 33512

Traveling Wilburys, Vol. 3 (Warner Bros.) 24817

Yes: Union (Arista) 10735

Bette Midler: Beaches Sdtk. (Atlantic) 00793

Best Of Aretha Franklin (Atlantic) 20078

Traveling Wilburys' Vol. 1 (Warner) 00711

Best Of Carly Simon (Elektra) 43787

Paul Simon: The Rhythm Of The Saints (Warner Bros.) 10455

R.E.M.: Out Of Time (Warner Bros.) 24762

Natalie Cole: Unforgettable (Elektra) 83452

Paula Abdul: Spellbound (Virgin) 73320

Boyz II Men: Coolin'—Harmony (Motown) 10930

START SAVING NOW—MAIL TODAY!

YES, please accept my membership in the BMG Music Service and send me the four selections as I have indicated here, under the terms of this offer. I need buy just one more hit at regular Club prices during the next year. After that I can choose 3 more hits FREE! (A shipping and handling charge is added.)

SEND MY SELECTIONS ON (check one only): COMPACT DISCS** CASSETTES

RUSH ME THESE 4 HITS NOW! (Indicate by number):

I am most interested in the music category checked here — but I am always free to choose from any (check one only):

- 1 EASY LISTENING
Bette Midler
Barry Manilow
- 2 COUNTRY
Clint Black
Reba McEntire
- 3 HARD ROCK
ZZ Top
Van Halen
- 4 POP/SOFT ROCK
Madonna
Elton John
- 5 CLASSICAL
Luciano Pavarotti
Vladimir Horowitz
- 6 JAZZ
Kenny G
George Benson
- 7 HEAVY METAL
AC/DC
Slaughter

Mr. Mrs. Ms. First Name Initial Last Name (PLEASE PRINT)

Address Apt. City State Zip

Telephone, please () Area code

Signature Have you bought anything else by mail in last 6 months year never



PLUS INSTANT 50% OFF BONUS DISCOUNTS FOR MEMBERS WHO CHOOSE CDS! It's the BMG difference!

You earn instant 50%-off bonus discounts right with the very first and every regular Club price CD you buy. In a nutshell buy 1, take another at half-off! With other clubs you must first buy 6 or more selections at full price and become a "Preferred Member" before you can get savings like this.

SEE OTHER SIDE FOR MORE HITS

MS470

**Members who select CDs will be serviced by the BMG Compact Disc Club. Current BMG CD Club members not eligible. Full membership details will follow, with the same 10-day, no-obligation privilege. We reserve the right to request additional information or reject any application. Limited to new members, continental USA only. One membership per family. Local taxes, if any, will be added.

8 compact discs or cassettes 1

with nothing more to buy...ever!



Randy Travis: High Lonesome (Warner Bros.) 11075

Jesus Jones: Doubt (SBK) 44654

Bell Biv DeVoe: WBBB-Boot City!-The Remix Album (MCA) 54360

Madonna: The Immaculate Collection (Sire) 54164

Van Halen: For Unlawful, Carnal Knowledge (Warner Bros.) 10016

Bette Midler: Some People's Lives (Atlantic) 53568

Ratt: Ratt & Roll 8191 (Atlantic) 60096
Wilson Phillips (SBK) 00726
Carreras, Domingo, Pavarotti: 3 Tenors (London) 35078
Trixter (Mechanic/MCA) 61594
Paula Abdul: Forever Your Girl (Virgin) 00933
Daryl Hall & John Oates: Change Of Season (Arista) 00543
Tony! Toni! Toné!: The Revival (Polydor) 00565
Best Of Grateful Dead: Skeletons From The Closet (Warner Bros.) 83892
George Harrison: Best Of Dark Horse, 1976-1989 (Dark Horse) 80307
Elton John: Greatest Hits, Vol. 3 (Geffen) 34463
Dire Straits: Brothers In Arms (Warner Bros.) 14734
Sting: Nothing Like The Sun (A&M) 73965
Styx: Edge Of The Century (A&M) 74498
Tracy Chapman (Elektra) 53582
Young MC: Stone Cold Rhymin' (Delicious Vinyl) 54058
Clint Black: Killin' Time (RCA) 01112
Best Of Robert Palmer: Addictions (Island) 10819
K.T. Oslin: Love In A Small Town (RCA) 74327
Lynyrd Skynyrd's Innyrds (MCA) 01150
Rick Astley: Free (RCA) 53656
Black Box: Dreamland (RCA) 84063

Whitney Houston: I'm Your Baby Tonight (Arista) 10663
ZZ Top: Recycler (Warner Bros.) 73969
Jon Bon Jovi: Blaze Of Glory (Mercury) 44490
Alan Jackson: Here In The Real World (Arista) 53833
Johnny Gill (Motown) 00738
Soul II Soul: Vol. II-1990-A New Decade (Virgin) 00567
Bobby Brown: Dancel...Ya Know It (MCA) 73660
U2: The Joshua Tree (Island) 53501
Winger: In The Heart Of The Young (Atlantic) 00570
Kiss: Smashes Thrashes And Hits (Mercury) 00736
The Sound Of Music/ Sdk. (RCA) 00046
Prince And The Revolution: Purple Rain (Warner Bros.) 60175
Metallica: Master Of Puppets (Elektra) 34552
Jethro Tull: Thick As A Brick (Chrysalis) 01023
Ralph Tresvant (MCA) 14889
Andrew Lloyd Webber: The Premiere Collection (MCA) 53868
Technotron: Pump Up The Jam-The Album (SBK) 34781
Amy Grant: The Collection (A&M) 44643
David Lee Roth: A Little Ain't Enough (Warner Bros.) 10551
INXS: X (Atlantic) 64378
The Best Of The Every Brothers (Warner Bros.) 03826

Boyz N The Hood/Sdk. (West) 24419
Divinyls (Virgin) 74057
AC/DC: The Razors Edge (ATCO) 33379
Chris Isaak: Heart Shaped World (Reprise) 73735
Prince: Graffiti Bridge (Paisley Park) 34107
B.B. King: Live At The Apollo (GRP) 24735
Brooks & Dunn: Brand New Man (Arista) 64331
Van Halen: Women And Children First (Warner Bros.) 44743
Cleo Laine: Jazz (RCA Victor) 23471
Patty Loveless: Up Against My Heart (MCA) 11141
De La Soul: De La Soul Is Dead (Tommy Boy) 64101
Lita Ford: Stiletto (RCA) 63893
Kentucky Headhunters: Pickin' On Nashville (Mercury) 24740
Whitney Houston (Arista) 54381
Deep Purple: Slaves & Masters (RCA) 11145
Bruce Hornsby & The Range: A Night On The Town (RCA) 63689
John Denver's Greatest Hits (RCA) 13777
Earl Thomas Conley: Yours Truly (RCA) 20033
Gary Burton: Cool Nights (GRP) 63652
Classic Yes (Atlantic) 50248
Steve Winwood: Chronicles (Island) 34501
Kathy Mattea: A Collection Of Hits (Mercury) 10791
Daryl Hall & John Oates: Rock 'N Soul Pt. 1 (RCA) 13313

Corina (ATCO) 24725
Rythm Syndicate (Impact/MCA) 62320
Classic Soul (MCA) 10843
Bing Crosby's Greatest Hits (MCA) 04709
Michael Penn: March (RCA) 83798
Reba McEntire: Rumor Has It (MCA) 44609
Restless Heart: Greatest Hits (RCA) 24774
Led Zeppelin IV (Runes) (Atlantic) 12014
The Best Of Liberace (MCA) 04712
Billy Ocean: Greatest Hits (Jive) 24510
Desert Rose Band: A Dozen Roses (MCA) 11113
The Drifters' Golden Hits (Atlantic) 03859
Sha Na Na: Rock & Roll Is Here To Stay (Buddah) 61568
Chuck Berry: The Great 28 (Chess) 64137
Yanni: Reflections Of Passion (Private Music) 24223
Eagles: Greatest Hits Vol. 1 (Asylum) 23481
Fleetwood Mac: Rumours (Warner Bros.) 24025
America: Greatest Hits (Warner Bros.) 23757
Sheena Easton: What Comes Naturally (MCA) 43334

D.J. Jazzy Jeff & The Fresh Prince Base: Homebase (Jive) 21073
Steve Winwood: Refugees Of The Heart (Virgin) 54232
Jimmy Buffett: Songs You Know By Heart Greatest Hit(s) (MCA) 42157
Rod Stewart's Greatest Hits (Warner Bros.) 33779
Robert Plant: Manic Nirvana (Es Paranza) 54122
Air Supply: Greatest Hits (Arista) 34424
Morrissey: Kill Uncle (Reprise/Sire) 20568
Billy Idol: Charmed Life (Chrysalis) 62264
Engelbert Humperdinck: Love Is The Reason (Critique) 94103
Ronnie Milsap: Greatest Hits (RCA) 10243
Roberta Flack: Best Of (Atlantic) 40381
Travelling Wilburys Vol. 1 (Warner Bros.) 06711
Jethro Tull: Original Masters (Chrysalis) 63846
Dionne Warwick: Greatest Hits (Arista) 00667
La Bamba/Sdk. (Slash) 20062
Alabama: Greatest Hits (RCA) 20247
Steppenwolf: 16 Greatest Hits (MCA) 13453

START WITH 4 COMPACT DISCS OR CASSETTES FOR 1¢ NOW! Yes, start with any 4 hits shown here. You need buy just 1 more hit at regular Club prices (\$8.98 and up for tapes, \$14.98 and up for CDs), and take up to one full year to do it! Then choose 3 more hits FREE! That's 8 for the price of 1 with nothing more to buy...ever! (A shipping and handling charge is added.)

HOW THE CLUB OPERATES You'll receive the Club's exclusive magazine, highlighting the Featured Selection in your listening category, about every three weeks — 19 times a year. If you want it, do nothing. It will come to you automatically. If you prefer another selection, or none, just say so on the card always provided, and return it by the date specified. You'll always have 10 days to decide, or return the Featured Selection at our expense. As a member in good standing, send no money when you order, we'll bill you later. And you may cancel your membership upon completing your enrollment agreement by writing to us.

FREE 10-DAY TRIAL! Listen to your 4 introductory CDs or Cassettes for a full 10 days. If not satisfied, return them with no further obligation. You risk nothing! So don't delay. Pick your hits, write their numbers on the postpaid reply card, and mail it today.

*A shipping and handling charge is added.
 MS470 BMG MUSIC SERVICE, 6550 E. 30th St., Indianapolis, IN 46219-1194. TRADEMARKS USED IN THIS ADVT ARE THE PROPERTY OF VARIOUS TRADE-MARK OWNERS. ©1991 BMG DIRECT MARKETING, INC. Dog and horn are trademarks of General Electric Company, U.S.A. BMG logo TM BMG Music.



BUSINESS REPLY MAIL
 FIRST CLASS MAIL PERMIT NO. 5071 INDIANAPOLIS, IN.

POSTAGE WILL BE PAID BY ADDRESSEE



BMG MUSIC SERVICE
 P.O. Box 91001
 INDIANAPOLIS IN 46209-9637

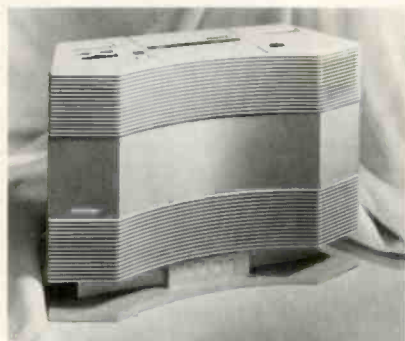
NO POSTAGE
 NECESSARY
 IF MAILED
 IN THE
 UNITED STATES



TECHNICAL TALK

current track number and elapsed time; only when the player is switched to stop does it show the total number of tracks and playing time on the disc (unlike many other players, which provide this information when first turned on). There are no programming controls or other CD features beyond the basic functions.

Because of the AWMS-II's all-in-one design, it was difficult or impossible for us to make many of our usual



The Bose AWMS-II with optional base

performance measurements. We tried measuring the speaker's response in several different ways, driving the amplifier through the auxiliary inputs. The tuner and CD measurements were more straightforward.

The FM tuner section's 50-dB quieting sensitivity was 17 dBf in mono and 39 dBf in stereo, with distortion readings of about 0.1 percent in mono and 0.6 percent in stereo. Channel separation was 45 dB, and adjacent-channel selectivity was 61 dB. Altogether, it was a competent and listenable FM tuner, comparable to those of most medium-price home receivers. The AM tuner section's response was useful up to 5,000 Hz or higher, which is actually much better than we're used to seeing in modern hi-fi gear.

The CD player was comparable in some ways to early portable models. Its channel separation ranged from 58 dB at low frequencies to 43 dB at high frequencies—not as wide as that of most home units but more than sufficient for good listening quality. Similarly, the distortion, typically about 0.2 percent at most frequencies and signal levels, was higher than in most home players but far below the usual threshold of audibility.

Low-level linearity was excellent, with errors of less than 1 dB from -60 to -90 dB. The player's resistance to physical shock was only fair, and its defect-tracking ability was marginal (about 300 micrometers, the minimum requirement for a CD player).

As for the speakers, the acoustic frequency response of the system was ± 10 dB from 20,000 down to 50 Hz, falling off rapidly at lower frequencies. Over most of the range above 400 Hz, the response was relatively flat, within ± 5 dB up to nearly 20,000 Hz.

The sound quality was generally very good, though there was a tendency toward bass-heaviness on voices (the original AW-I system shared this characteristic). With most music the sound was very listenable.

The Bose AWMS-II is a product that should satisfy the needs and taste of a large sector of the listening public, including many who have invested in component hi-fi because it was "the thing to do." On the other hand, it is a bare-bones product in respect to features. This is particularly evident in its built-in compact disc player, which sounds perfectly fine when playing discs from start to finish but lacks the programming abilities of even some portable CD players.

There is another factor to be considered: The AWMS-II is not inexpensive. But although its \$997 price seems high for a small portable system, there is little to compare it with except a low-price component system. Although it might be likened to a deluxe boom box, it is vastly more sophisticated and complex. An equivalent component system at the same price would comprise a receiver, a CD player, and two speakers. Such a system might sound a little better than the AWMS-II (not necessarily), but it would require choosing suitable components from a large field, setting them up, and interconnecting them. The contrast with the ease of installing and operating the all-in-one AWMS-II is striking.

In the AWMS-II, Bose has made an already successful product even better. It is available directly from Bose, which offers an in-home demonstration or a fourteen-day home trial. You can get more information by calling (800) 282-BOSE.

FREE Stereo Catalog

In 100+ pages, you'll see the latest in home and car stereos, video and telephones. Crutchfield's one-of-a-kind catalog brings you quality brands like Sony, Pioneer, Kenwood, Advent, Bose, AR, and many others—all at discount prices.

You'll see each component in detailed color and get Crutchfield's exclusive comparison charts of specs and features. Our technical staff and writers highlight the unique benefits of every product, so you can choose the model you like best.

Call or send this coupon now for your free catalog

800-955-9009

(US and Canada)

8am - Midnight (Eastern time)

7 days a week

Be sure to mention Stereo Review when calling.

Name _____

Address _____ Apt. # _____

City _____ State _____ Zip _____

Optional - Are you in the market for:

Computers/Fax Machines

CRUTCHFIELD

1 Crutchfield Park, Dept. SR, Charlottesville, VA 22906

MULTIPLE CHOICES

If you always wanted to bring your favorite bands to life as you drive, but didn't have the room for the amplifiers and crossovers needed to do the job, there is an alternative. **MULTI CHANNEL** amplifiers are designed to provide 2, 3, 4, 5, or even 6 amplified channels, and two- or three-way electronic crossovers, all built into **ONE** single chassis. Ranging from 44 watts to 300 watts, the choice for clean power is crystal clear.

**HEAR THE DIFFERENCE
AUDITION THE SERIES VII MULTIPLE
CHANNEL AMPS AT YOUR LOCAL
HIFONICS DEALER.**



Stephen is an established producer, engineer, studio musician, president of Marshall Electronics, and writes a column for MX Magazine, the leading publication in the professional recording industry. His work accomplishments include studio mixes for Stevie Wonder and remixes of re-released movies like *Gone With the Wind*, *The Wizard of Oz*, *Singing in the Rain*, and various Disney cartoons. When Stephen wanted to replicate his Lightning Studio in his car he chose HiFonics. Ask him why HiFonics and he replies: "I chose your amps because after very careful comparison testing, it became clear that nothing else delivered the tight, solid, effortless sound quality that they do."

HiFONICS[®]
MADE IN THE U.S.A.

Power
from the
Gods



**Stephen St. Croix
and his Lightning Studio**

For the name of the dealer near you call 1-800-999-6668
P.O. Box 843, 11 Victoria Terrace, Ridgefield, NJ 07657 (201) 945-8880 FAX (201) 945-1218
1875 Angus Avenue, Simi Valley, CA 93063 (805) 582-9077 FAX (805) 582-2137
In Canada, Jestar International, Inc. (416) 831-8088

CIRCLE NO. 17 ON READER SERVICE CARD

TEST REPORTS



Harman Kardon TL8600 Compact Disc Changer

Julian Hirsch, Hirsch-Houck Laboratories

THE Harman Kardon TL8600 is a distinctively styled top-loading carousel-type CD changer. Its revolving tray, which holds up to five discs, is in full view through a clear window, about 13 inches in diameter, in the top cover. The cover rises slowly when a button near its front edge is pressed, but it must be closed manually.

The TL8600 is a large, solidly built changer measuring 17 $\frac{3}{8}$ inches wide,

16 $\frac{1}{8}$ inches deep, and 4 inches high and weighing about 15 pounds. On its rounded upper front edge are twelve control buttons and a display window, which normally shows the playing status (pause or play), the disc, track, and index numbers, the numbers of the unplayed tracks on the current disc, and the elapsed time in the track. Indicators for other operating modes, such as program, repeat, and random, are displayed as required. A second

display, on top of the machine, shows just the track and index numbers.

The front-panel buttons are curved so as to be visible and operable from the front or top of the machine. They include the power switch, DISK SKIP (which rotates the carousel to the next position), and conventionally marked transport controls for track skipping and fast scan in both directions, play/pause, and stop. To the right of the window are buttons that turn the display on or off, toggle the time display between its default reading of elapsed time in the current track, the time remaining in the track or on the disc, and the total time on the disc. The remaining buttons select random play (which can include random selection of discs) and repeat play of all tracks on all discs.

TEST REPORTS

At the lower righthand corner of the panel is a headphone jack. An adjacent volume knob controls the signal level to the phones and to the variable line-output jacks on the rear panel (another pair of jacks delivers a fixed-level output). A row of small round buttons in an arc around the edge of the disc door enables direct selection of any of the five discs on the carousel. Others enable you to program the TL8600 to play up to thirty tracks in any order from any of the discs, to check the programmed sequence, and to clear the program from memory. A second row of buttons along the player's top front edge enables direct numerical selection of any track (up to No. 99).

The remote control that comes with the TL8600 duplicates all of its front-panel controls except power on/off and adds five others. These include Intro Scan, which plays the first 15 seconds of each track on each disc (or of each track in a programmed sequence), and Auto Space, which inserts a 4-second silent interval between tracks for convenience in taping a number of selections. The A-B Repeat continually repeats any selected program segment, and two buttons are provided for skipping to the next or previous index point on discs that have these markers. Finally, a pair of buttons adjust the level at the headphone and variable line-output jacks

by means of a motor that turns the small volume knob on the front of the player.

The TL8600 employs 1-bit digital-to-analog (D/A) conversion, with a pulse-width-modulated (PWM) output at a clock rate of 33.8688 MHz. Harman Kardon says that its low-level linearity is within ± 0.2 dB at -90 dB and that its frequency response is flat within $+0$, -0.2 dB from 4 to 20,000 Hz. Other specifications include total harmonic distortion (THD) of 0.003 percent, a dynamic range of 98 dB, and a signal-to-noise ratio (S/N) of 104 dB. The line-output level is specified as 2.0 volts into a 10,000-ohm resistance. Price: \$699. Harman Kardon, Dept. SR, 8380 Balboa Blvd., Northridge, CA 91325.

FEATURES

- Five-disc carousel changer; can play 3-inch discs without adaptors
- Can play up to thirty tracks from one or several discs in programmed sequence
- Repeat of disc, track, programmed sequence, or user-defined segment (A-B repeat)
- Track skip and manual search with sound
- Random play from one or all discs
- Display of track, disc, and index numbers, elapsed or remaining time on track or disc, numbers of unplayed tracks on current disc (music calendar), status of special functions
- Second display visible from top shows track, index, and disc numbers
- Displays can be switched off
- Fixed- and variable-level line outputs
- Headphone jack with volume control (also controls variable-level line output)
- Remote control duplicates all front-panel functions except power switching, plus Intro Scan (first 15 seconds of each track), Auto Space, A-B repeat, and index skipping in either direction

LABORATORY MEASUREMENTS

Maximum output level: 1.95 volts
Frequency response: $+0$, -0.2 dB from 20 to 20,000 Hz
Channel separation: 118 dB at 100 Hz, 114 dB at 1,000 Hz, 90 dB at 20,000 Hz
Dynamic range: 100.4 dB
Distortion (THD + N): at 0 dB, 0.003 to 0.008 percent from 20 to 20,000 Hz; at 1,000 Hz, 0.0025 percent from -60 to -5 dB
Signal-to-noise ratio (A-weighted): 105.2 dB

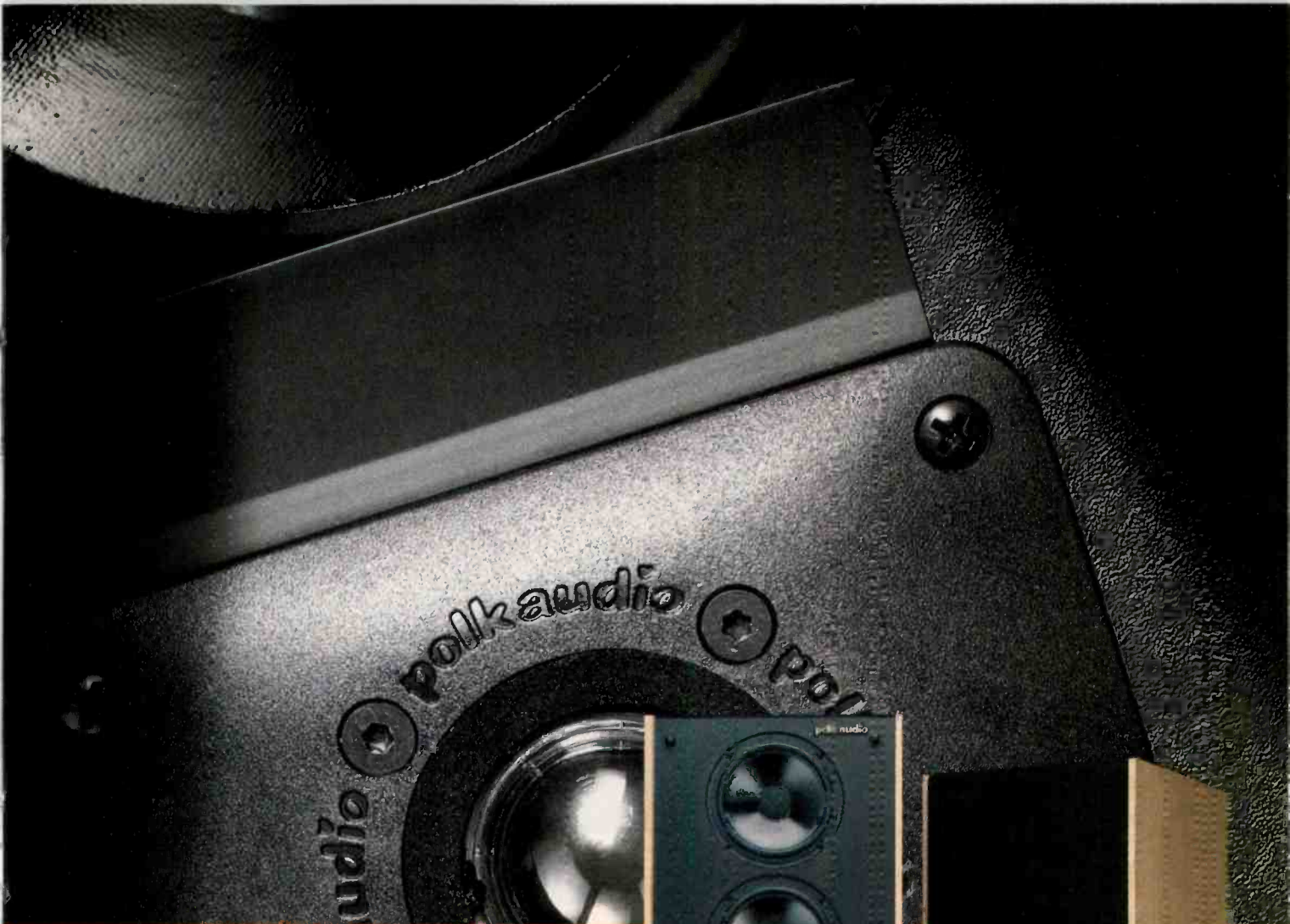
Maximum interchannel phase shift: -0.35 degree at 20,000 Hz
Linearity error: -0.35 dB at -60 dB, -0.4 dB at -70 dB, -0.5 dB at -80 dB, $+0.5$ dB at -90 dB, -0.3 dB at -100 dB
Defect tracking: tracked 1,500-micrometer errors on Pierre Verany #2 test disc
Slewing time: 1.8 seconds
Cueing accuracy: A
Disc-change time: 11 to 17 seconds
Impact resistance: top, A; sides, B+

Lab Tests

The TL8600's frequency response was as specified, perfectly flat from 100 to 8,000 Hz and down 0.2 dB at 20,000 Hz and 0.05 dB at 20 Hz. Channel separation was 118 dB at 100 Hz and 114 dB at 1,000 Hz, narrowing slightly to 90 dB at 20,000 Hz. Maximum interchannel phase shift was -0.35 degree at 20,000 Hz. Total harmonic distortion plus noise (THD + N) at 0 dB (maximum recorded level) was between 0.003 and 0.008 percent from 20 to 20,000 Hz. The 1,000-Hz distortion was 0.0025 percent at levels from -5 to -60 dB.

The changer's dynamic range was 100.4 dB, and its A-weighted S/N was 105.2 dB. Quantization noise was -92.1 dB. The linearity of the D/A converters was exceptional, with errors substantially less than 1 dB at levels from -60 to -100 dB.

Output (fixed-level or maximum variable-level) was 1.95 volts at 0 dB, and headphone volume was excellent. The player was able to track through disc errors (on the Pierre Verany #2 test disc) of 1,500 micrometers, but some mistracking occurred at 2,000 micrometers. The laser pickup slewed rapidly, moving from Track 1 to Track 15 of the Philips TS4 test disc in 1.8 seconds. The time required to cue from the first track of a disc in the first position on the carousel and the corresponding point on a disc in the fifth position was 11 seconds. Cueing from Disc 5 to Disc 1 required 17 seconds (the carousel rotates clockwise only). The player resisted impacts well, re-



Breathtaking

Listen To The Next Generation Of Loudspeakers

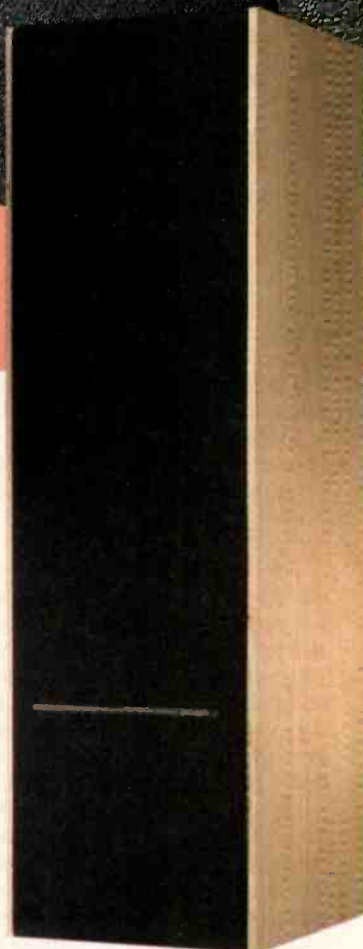
The new RTA 15TL is both a sonic and aesthetic breakthrough. It is also priced to create a new standard in value. Ask for a demonstration at your authorized Polk dealer. You'll hear the detail, depth and excitement of a live performance.

You'll hear...and see... the next generation of loudspeakers.

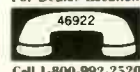
polk audio

The Speaker Specialist®

5601 Metro Drive, Baltimore, MD 21215 USA
(301) 358 - 3600



For Dealer Location



Call 1-800-992-2520

TEST REPORTS

quiring a fairly hard palm slap on the side (and an even harder one on the top) to cause mistracking.

Comments

The Harman Kardon TL8600 is an excellent changer, and the few things we could fault about its design are relatively minor. There was considerable mechanical noise as the carousel rotated (a characteristic of carousel changers in general) but not so much that we considered it objectionable. Removing a disc from the carousel required a bit of care (and practice), since it is somewhat awkward to grip the edge of a disc after it is loaded into its carousel well. And, of course, a top-loading carousel changer requires

The Harman Kardon TL8600 is one of the most flexible CD players we have tested, and its 1-bit D/A converters delivered outstandingly linear operation.

that the player have nothing on top of it and enough room above it for the lid to open. The TL8600 needs about 16½ inches clearance above the shelf on which it rests. We also noted that the hinged top cover, which took a leisurely 9 seconds to open fully (about 45 degrees) after its button was pressed, had a tendency to gather visible dust when the changer was placed on an open shelf.

The TL8600 is one of the most flexible CD players we have tested, with its five-disc capacity and full programming capabilities. Its 1-bit D/A converters demonstrated their superiority in an unmistakable fashion by delivering outstandingly linear operation over the full 100-dB range of our test discs. In addition, the TL8600's ability to play through disc defects and conditions of shock and vibration was above average. We have tested compact disc changers that cost less or that have more features, but none that tops the TL8600 for styling or overall performance. They just don't come much better than this one. □



Klipsch kg^{4.2} Loudspeaker System

Julian Hirsch, Hirsch-Houck Laboratories

THE Klipsch kg^{4.2}, a medium-size floor-standing loudspeaker, offers a number of unusual design and performance features at a surprisingly moderate price. It is a two-way system with a horn-loaded tweeter crossing over at 1,800 Hz to a 10-inch woofer. The 2-cubic-foot enclosure is tuned with a 10-inch passive radiator. The driven woofer and the passive radiator have carbon-graphite composite cones and compliant rubber surrounds. The woofer has a 2-inch-diameter voice coil and a 30-ounce magnet.

The tweeter's Tractrix horn, which has a mouth 8 inches wide and 4 inches high, is said to have a coverage of 40 degrees vertically, widening to about 100 degrees at the crossover frequency. Its rated horizontal coverage is approximately 90 degrees up to 10,000 Hz, narrowing to about 50 degrees at higher frequencies. The woofer's rat-

ed vertical and horizontal coverage is 90 degrees at the crossover point, where the two drivers have similar directional properties. Klipsch says that the system's optimal listening axis is approximately 40 inches from the floor, with the listeners about 2 to 3 meters (6 to 10 feet) from the speakers. The system has a nominal impedance of 6 ohms and a rated sensitivity of 95 dB sound-pressure level (SPL) at 1 meter with an input of 2.83 volts.

The speaker cabinet, 31 inches high, 14 inches wide, and 12 inches deep, is available in oak, walnut, or black-lacquer finishes. Two heavy-duty metal binding posts, which accept single or dual banana plugs as well as bare wires, are recessed into the rear panel. The front is covered by a removable black cloth grille supported on a perforated molded plastic frame. Four 1-inch feet are supplied for raising the speaker slightly from the floor if de-



If you don't want to enjoy



a movie in 70 mm,



you can go to church.



A ball game.



A jazz club.



A play.



A concert.



Or you can always go out.

A man's home has always been his castle. But with Yamaha's new 7-channel DSP-A1000 audio-video amplifier, it can be almost anything he wants.

What makes it all possible, is the combination of Dolby* Pro Logic and Yamaha's Digital Soundfield Processing.

We call it Dolby Pro Logic with Enhancements. The Dolby section delivers precisely the same effects and dialogue placement that could only be experienced in the finest movie theatres.

The Enhancement portion funnels all the Dolby Pro Logic information through Yamaha's exclusive

Digital Soundfield Processing circuitry.

The end result makes listening to music or a movie at home seem like you're actually somewhere else. Like a colossal 70 mm movie theatre. A huge stadium. An intimate jazz club. Or — you get the idea. All at the push of a button.

Stop by your Yamaha dealer today. And discover the only audio-video amplifier that can take you out just by turning it on.



YAMAHA®

TEST REPORTS

sired. Each speaker weighs 44 pounds. Price: \$700 a pair. Klipsch, Dept. SR, P.O. Box 688, Hope, AR 71801.

Lab Tests

The composite frequency response of the kg^{4.2}, formed by combining its room response from two speaker positions with close-miked measurements of the woofer and passive-radiator outputs, was very flat and smooth (± 1.5 dB) from 550 to 12,000 Hz. There was a 5-dB peak at 15,000 Hz, and the output level returned to its average value by 20,000 Hz. The output rose slightly below 500 Hz, and there was a broad plateau between 40 and 200 Hz (flat within ± 1.5 dB) that averaged about 5 dB higher than the midrange level. Relative to the bass plateau, the output fell to -4 dB at 30 Hz and -11 dB at 20 Hz.

Frequency-response measurements at 1 meter, made with swept one-third-octave bands of pink noise, generally conformed to the room measurements made with a sweeping sine wave. With the swept noise signal, we measured the system response on-axis and 45 degrees off-axis. The two curves began to diverge slightly above 1,000 Hz and were typically about 5 dB apart from 2,000 to 10,000 Hz, increasing to a difference of 11 dB at 20,000 Hz.

Quasi-anechoic measurements, using the digital capabilities of our Audio Precision System One equipment, greatly reduced the effect of room boundaries on the response curves. Although for the most part the quasi-anechoic data were valid only above 500 or 1,000 Hz, they closely confirmed our composite-response data.

Minimum system impedance was 4 ohms at 120 Hz. The two bass-resonance peaks (at 22 and 54 Hz) were each 32 ohms, and the maximum treble impedance was 30 ohms at 4,500 Hz. Overall, the speaker's impedance was typically near or above its 6-ohm rating. Sensitivity was 94 dB SPL at 1 meter with a 2.83-volt input of pink noise. Since we measure distortion with an input corresponding to a 90-dB SPL, we used a 1.8-volt drive signal for woofer-distortion measurements.

The crossover between the woofer and the passive radiator was at 50 Hz. Placing the microphone close to the front of the speaker, between the woofer and the passive cone, we found the bass distortion to be between 0.7

and 1.5 percent from 40 to 450 Hz. Readings increased at higher frequencies, but this measurement is not valid under those conditions. At lower frequencies, distortion rose to 9 percent at 30 Hz and 30 percent at 24 Hz.

In spite of the high sensitivity of the kg^{4.2}, which enables it to develop very high listening levels with much less amplifier power than most other speakers, it was able to absorb high-level signals for short periods without damage or serious distortion. A one-cycle burst at 100 Hz caused the woofer cone to bottom with an input of 890 watts into its 4.4-ohm impedance. At 1,000 and 10,000 Hz, the amplifier clipped at levels of 945 watts (into 7.3 ohms) and 625 watts (into 12 ohms) before the speaker's output waveform became visibly distorted.

Comments

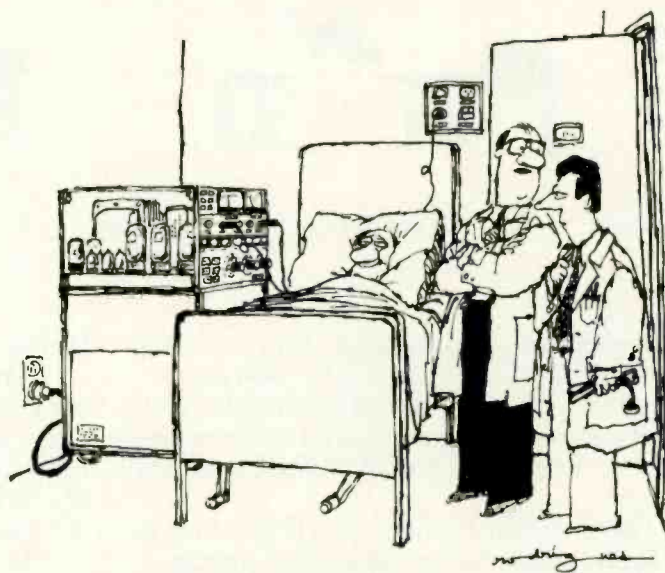
The sound of the Klipsch kg^{4.2} was notably smooth and clean. It had none of the "horn" character that has sometimes been bothersome when horn-loaded tweeters were used in home music systems. The blending of the outputs of the cone woofer and the horn tweeter was excellent, with no anomalies occurring in the crossover region (probably because the directivities of the two drivers were well matched at that frequency).

Before setting up the kg^{4.2} speakers,

we had been listening to a pair of much smaller speakers that lacked punch in the lower octaves. The kg^{4.2} was a real ear-opener, reaching almost an octave below the limits of most compact speakers we have used. It was interesting to note how effectively its relatively large woofer and horn tweeter had been blended without an audible clue to their disparate natures.

When we first unpacked and set up the Klipsch kg^{4.2} system, we did not know its price. After a few minutes of listening, we looked it up and were quite surprised. Judging from the sound alone, \$1,000 a pair or even more would have seemed quite reasonable. This sort of sound—and appearance—is not at all common in speakers in the \$700 price range.

Since the creation of the Klipschorn about fifty years ago, speakers bearing the Klipsch name have usually employed horn tweeters. But for many years horns were associated with public-address speakers of dubious fidelity, with the result that they almost vanished from the arena of fine home speakers. The kg^{4.2} serves as a reminder that there is still a place in high fidelity for a well-designed horn-loaded tweeter—one whose high efficiency is combined with the range, uniformity of output, smoothness, and dispersion we have come to expect from high-quality direct-radiating drivers. □



"You see, Dr. Buckley, it *does* make a difference. Yesterday on the solid-state life-support machine he was restless, irritable. Today on the vacuum-tube machine he's content, serene. . . ."

FREE TO MARKET STUDY PARTICIPANTS

YOU PAY ONLY RETURN POSTAGE AND HANDLING

SOLEX™ PREMIER SPORTS SUNGLASSES

QUALITY OPTICS



"A" LINE COMPARE AT ~~\$190.00~~—YOURS FREE



"B" LINE COMPARE AT ~~\$56.00~~—YOURS FREE



"AA" LINE COMPARE AT ~~\$120.00-\$160.00~~

The SOLEX "AA" Line includes our highest quality and most costly sunglasses, therefore, we must charge an additional \$10.00 per pair.

SOLEX™ QUALITY OPTICS

SOLEX PREMIER SPORT SUNGLASSES are the hottest styles and are among the highest quality sunglasses in the world. (Verified by independent lab testing). We are pleased to provide you, a subscriber to "Stereo Review", on a test market basis, with up to 4 FREE pair of our most refined sunglasses. Comparable price is ~~\$120.00 - \$160.00~~ each for the "AA" Line, ~~\$90.00~~ each for the "A" Line, and ~~\$56.00~~ each for the "B" Line. However, you are only required to pay return postage and handling. (The "AA" Line requires a slight additional charge.) We will include a questionnaire along with your FREE sunglasses regarding SOLEX new features. Answering the questionnaire is optional, although, we would appreciate your co-operation in its completion. We will process your order the same day it is received and return by first class mail. Call our factory warehouse for even faster service. 303-455-3545. See other side for descriptions and order form. Allow approximately 7 days for your delivery.

INDEPENDANT LAB TESTED to be among the world's best!

Superior viewing clarity with optimum infra-red protection.

Use the attached check to pay the amount for one, two, three or all four sunglasses ordered. (You're only required to pay the cost of delivery)



Post Office Box 480847
Denver, CO 80248-0847

SOLEX QUALITY OPTICS provide 99-100% UV Protection.

Over for simple instructions.

CHECK NO. SV1 9212197-2

DOLLARS	CENTS
360	00

CREDIT EXACTLY ~~\$360~~ 360 AND 00 CTS.

SUBMIT BEFORE
JUNE 30, 1992

TO THE ORDER OF

SOLEX QUALITY OPTICS

This check pays only for the purchase of SOLEX Quality Optics. (Postage and handling additional.)

AUTHORIZED SIGNATURE

⑆005786⑆ ⑆10530 53⑆



High fashion, high quality, clear optics, 100% UV protection, unbreakable lightweight frames and a lifetime warranty are the qualities in SOLEX Quality Optics for Sports.

The SOLEX fan knows what effective glare reduction plus extreme clarity can mean when the sporting conditions are overly bright or overly shaded. From our all-weather glare-resistant lenses to the crystal clarity of our SOLEX Quasar, SOLEX will be leading the way in sport eyewear style and usability. SOLEX offers extremely lightweight lenses and frames that all but eliminate nose discomfort and skin marks. Try SOLEX Quality Optics for Sports and treat yourself to fashion, quality, and comfort.

TO ORDER YOUR COMPLIMENTARY SOLEX QUALITY OPTICS for Sports:

You may order a limit of up to 4 pair (your choice of styles)

Complete the order form with complete mailing address of each person ordering. Make checks payable to Solex. Must be in U.S. funds only.

Add \$2.00 per pair ordered outside the U.S.A.



P.O. Box 480847
Denver, CO 80248-0847
(303) 455-3545

Thank you for your help—we know you and your friends will enjoy using these terrific sunglasses.

"AA" LINE SOLEX PREMIER SPORT SUNGLASSES

- 0175** SOLEX PROFESSIONALS—Professional competition grade day and night sunglass. High Impact resistant, high definition polycarbonate lens. UV protected in BOTH clear and amber lens. Includes protective case and strap. Indicate amber or clear. (Requires a \$10.00 additional charge.)
- 0185** SOLEX NORTH STARS—High metropolitan fashion with unique lens colorings. Includes protective case and strap. Indicate black frame with bronze lens or tortoise shell frame with light gold lens. UV protected. (Requires a \$10.00 additional charge.)
- 0195** SOLEX SAFARI—The NEW all sports hit. Versital, functional and fashionable—all in one. Don't miss out on this one! Polycarbonate lens. Includes protective case and strap. Indicate honey or black frame. UV protected. Requires a \$10.00 additional charge.)

"A" LINE SOLEX PREMIER SPORT SUNGLASSES

- 2917** SOLEX ULTRALIGHT FULL LENS—Peripheral and complete viewing protection make the Ultralight a great substitution for bulky goggles. Self-venting to avoid fog-up, polycarbonate lens, high definition. The SOLEX Ultralight will be the choice for the technocrat. Indicate black or white frame and blue or gold lens. UV protected.
- 3920** SOLEX NEXT—Durable cool frame. Hot lens colors and right now styling. Indicate blue or gold lens and crystal or black frame. UV Protected.

- 2717** SOLEX OUASAR—State-of-the-art lens quality, poly-carbonate lightweight and glare reduction are the features that position this glass as a favorite among all outdoor sports enthusiasts. Top retainer is removeable. Indicate hot pink, blue, or yellow frame with color mirror lens. Indicate black or white frame with blue or gold lens. UV protected.
- 9900** SOLEX NEW YORKERS—This season's hottest high fashion unisex sports sunglass. Carbon frame, extreme lightweight lens. Indicate marbled frame with gold lens or black frame with blue lens. UV protected.
- 2720** SOLEX MIST—Modified as an extreme featherweight yet featuring unbreakable frame and polycarbonate, high definition lens. Indicate black, white, or pink frame. UV protected.
- 4001** SOLEX OUTLANDS—Mix high fashion with the sporting quality of Outlands. Indicate blue or gold lens. Indicate black or crystal frame. UV Protected.
- 1984** SOLEX UP TOWNS—Today's trend setting style, glass lens. Indicate black or tortoise shell frame. UV protected.
- 8001** SOLEX WRAPS—A stylsh contemporary design with full view protection, lightweight with polycarbonate high definition lens, self-venting. Indicate black or rainbow frame. UV protected.
- 8888** SOLEX ADVENTURER—Features state-of-the-art accordian tension temples, high definition, flash mirror, polycarbonate lens. UV protected.
- 5001** SOLEX SOLOS—Metal frame, hot fashion, a great look. Indicate black or tortoise-shell frame. UV protected.
- 8020** SOLEX TERMIN-X—Sleek, fashionable and wild. A great all round sport and motorcycle fashion. Polycarbonate lens. Indicate black or tortoise shell frame. UV protected
- 7010** SOLEX STARLIGHTS—One of our best built and highest quality products. High consumer satisfaction rating. You won't believe you got them free. Indicate black frame with mild mirror lens or gold frame with mild rose lens. UV protected.
- 2410** SOLEX CRYSTALS—State-of-the-art platinum pearl lens with crystal clear highly detailed frame. It's hot! Polycarbonate lens. Indicate blue or light gold lens UV protected.

"B" LINE SOLEX PREMIER SPORT SUNGLASSES

- 2117** SOLEX ADMIRAL STYLE— Compare this classic to any other similar sunglass and you will see why SOLEX Admiral Style is the superior product. Indicate black or gold frame. Indicate straight or wire temple stems. UV protected.
- 1090** SOLEX TRAVEL—Extremely lightweight for maximum "longdrive" comfort. Superb clarity with excellent contrast. Indicate blue or gold lens. UV protected.
- 7007** SOLEX CLASSICS—Impact resistant glass lenses, extremely durable frames. A classic, stylish sunglass. Indicate pink, blue or black frame. UV protected.

SOLEX Quality Optics Order Form
I would like _____ pair(s) of SOLEX Quality Optics.
Please indicate AA LINE or A LINE or B LINE and the
order number for the style of sunglass desired (from the color
display), with names and mailing addresses of those who are
to receive the SOLEX Quality Optics (limit 4): **PLEASE PRINT**

1. Name _____
Address _____
City _____ State _____
Zip _____ Phone (____) _____
LINE AA A B ORDER NO. _____

2. Name _____
Address _____
City _____ State _____
Zip _____ Phone (____) _____
LINE AA A B ORDER NO. _____

3. Name _____
Address _____
City _____ State _____
Zip _____ Phone (____) _____
LINE AA A B ORDER NO. _____

4. Name _____
Address _____
City _____ State _____
Zip _____ Phone (____) _____
LINE AA A B ORDER NO. _____

I've enclosed \$9.95 for EACH "A" LINE SOLEX Sunglass ordered to cover the cost of full replacement insurance and first class return postage and handling. (Each SOLEX "AA" LINE also requires an additional \$10.00 surcharge).

I've enclosed \$9.95 for EACH "A" LINE SOLEX Sunglass ordered to cover cost of full replacement insurance and first class return postage and handling.

I've enclosed \$6.95 for EACH "B" LINE SOLEX Sunglass ordered to cover first class return postage and handling.

"AA" LINE SOLEX Quality Optics ordered:
No. of sunglasses _____ x \$19.95 = \$ _____
(\$9.95 plus \$10.00 surcharge—total \$19.95)

"A" LINE SOLEX Quality Optics ordered:
No. of sunglasses _____ x \$9.95 = \$ _____

"B" LINE SOLEX Quality Optics ordered:
No. of sunglasses _____ x \$6.95 = \$ _____

TOTAL enclosed \$ _____

Make checks payable to SOLEX and mail to:
P.O. Box 480847, Denver, CO 80248-0847. (303) 455-3545

Or charge it: VISA MC Exp. Date _____
Card # _____
Name on card _____
Signature _____
(Allow approximately 7 to 10 days for first class delivery.)
 YES, keep me informed on new SOLEX Sunglass styles.

TEST REPORTS



Nakamichi Cassette Deck 1.5

Craig Stark, Hirsch-Houck Laboratories

If you're looking for the high-quality sound and engineering that have made the Nakamichi name legendary, and you're willing to forgo a few costly frills, the company's new CassetteDeck1.5 may be just what you're after. With three heads and three motors, a closed-loop dual-capstan tape transport, Dolby B and Dolby C noise-reduction systems, a unique tape-search facility, a bias-trim control, and a switchable FM-multiplex filter, the Model 1.5 boasts plenty of features. But to make it accessible to a wide range of users, Nakamichi has left out some of the features offered on most previous cassette decks in its line.

Nakamichi invented the three-head cassette deck, which enables instantaneous comparison between source and recording. The other important advantage of three-head design is that it enables use of both a relatively wide recording head gap, to maximize signal-to-noise ratio (S/N), and a relative-

ly narrow playback head gap, to reproduce the highest audio frequencies. While the CassetteDeck1.5 retains these benefits, it dispenses with the costly azimuth-adjustment systems used in most earlier Nakamichi recorders by housing the separate recording and playback head elements in a single case that fixes them in proper alignment to each other. Happily, that head case still incorporates another Nakamichi innovation, a pair of projecting bosses that prevent a cassette's felt pressure pad from forcing the tape against the head. A well-designed transport system can supply the proper tape-to-head tension without noise-inducing pressure pads.

The tape-holdback tension is created by using slightly different diameters for the two capstans in a closed-loop drive configuration. The leading capstan tends to rotate slightly faster than the lagging one, holding the tape taut against the head, which protrudes slightly into the tape path. An addi-

tional benefit of the asymmetry is that the two capstan systems do not have any common resonance frequencies, which could actually increase wow and flutter, defeating the purpose of a closed-loop dual-capstan transport.

The capstans are driven by a DC servomotor, and a second DC motor handles the high-speed winding chores. A third DC motor powers a cam system that takes the place of solenoids to operate the tape-gate and pinch-roller mechanisms. The usual transport-control buttons are thus simple and quiet three-position switches.

Any tape slack is automatically reeled up when cassettes are loaded, but the Model 1.5 does not automatically detect the tape type in use. Instead, three pushbuttons, located behind a decorative pull-down front panel, are used to set bias and equalization for Type I (ferric), Type II (chrome and chrome-equivalent), and Type IV (metal) tapes. The cassette-well door is easily removable to facilitate cleaning and demagnetizing the tape path.

Thanks in part to backlighting, the narrow window in the cassette-well door affords at least an eye-level view

TEST REPORTS

FEATURES

- Separate recording and playback heads
- Three-motor asymmetrical closed-loop, dual-capstan transport
- Dolby B and Dolby C noise reduction
- Twelve-segment peak-indicating level indicators
- User-adjustable bias
- High-speed counter search
- Switchable FM multiplex filter
- Remote-control option

LABORATORY MEASUREMENTS

Fast-forward time (C-60): 93 seconds

Rewind time (C-60): 93 seconds

Speed error: -0.16%

Dolby tracking error: Dolby B, +0.5, -1 dB; Dolby C, +1, -1.2 dB

Wow-and-flutter: 0.021% wrms, 0.044% DIN peak-weighted

Line input for indicated 0 dB: 55 mV

Line output at indicated 0 dB: 0.71 volt

Meter indication at IEC-standard 0 dB: +1.5 dB

• **Tape: TDK AD (Type I, ferric)**

IEC 0-dB distortion: 0.73%

Meter indication at 3% THD + noise: +5 dB

Signal-to-noise ratios (in decibels):

	Unwd.	A-wtd.	CCIR/ARM
NR off	54.7	58.8	55.7
Dolby B	61.8	68.3	65.7
Dolby C	63.3	74.6	74.3

• **Tape: TDK SA (Type II, chrome-equivalent)**

IEC 0-dB distortion: 1.0%

Meter indication at 3% THD + noise: +3 dB

Signal-to-noise ratios (in decibels):

	Unwd.	A-wtd.	CCIR/ARM
NR off	57.1	62.2	59.1
Dolby B	63.0	71.1	69.2
Dolby C	64.4	76.7	76.4

• **Tape: TDK MA (Type IV, metal)**

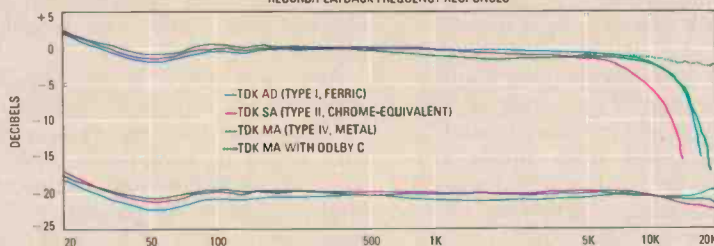
IEC 0-dB distortion: 0.63%

Meter indication at 3% THD + noise: +8 dB

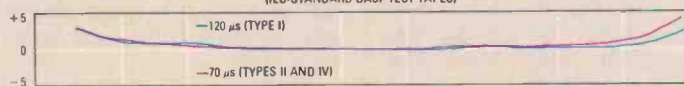
Signal-to-noise ratios (in decibels):

	Unwd.	A-wtd.	CCIR/ARM
NR off	59.4	63.8	60.4
Dolby B	66.0	73.1	70.6
Dolby C	67.9	78.9	78.6

NAKAMICHI CASSETTE DECK 1.5
RECORD/PLAYBACK FREQUENCY RESPONSES



PLAYBACK-ONLY RESPONSES
(IEC-STANDARD BASF TEST TAPES)



FREQUENCY IN HERTZ

of how much tape remains on a side. That's important because the four-digit LED tape counter registers hub revolutions only, not elapsed or remaining time. The peak-reading LED level display has twelve segments per channel, covering a range from -40 to +10 dB. Although not so marked, the 0-dB indication appears to be calibrated at Dolby level (200 nanowebers per meter), a sensible, long-time Nakamichi practice.

Although it has no selection-programming capabilities, the CassetteDeck1.5 has an unusual preview feature that can help you identify the contents of a tape. If you press the fast-forward or rewind button twice, the tape fast-winds in the appropriate direction for 5 seconds, then plays from that point for 5 seconds; the deck repeats this process until the end of the tape is reached. The usual rewind-to-zero and repeat-play facilities are also included.

The noise-reduction and multiplex-filter switches are located behind the pull-down panel, as are the rather small recording-level and balance controls. There, too, is the user-adjustable bias-trim control. Again unlike some of the more costly Nakamichi decks, the CassetteDeck1.5 does not provide any calibrated test tones for determining the optimum setting of the bias control for a given tape. The user must therefore fall back on the less accurate expedient of recording a noise source, such as FM interstation hiss, at a low (-20-dB) level while adjusting the control to minimize the audible difference between source and tape playback.

The CassetteDeck1.5 has a front-panel headphone jack, but its output as well as the main outputs have a fixed level, with no volume control. In addition to the usual input and output jacks, the back panel has connections for an optional wired remote-control device.

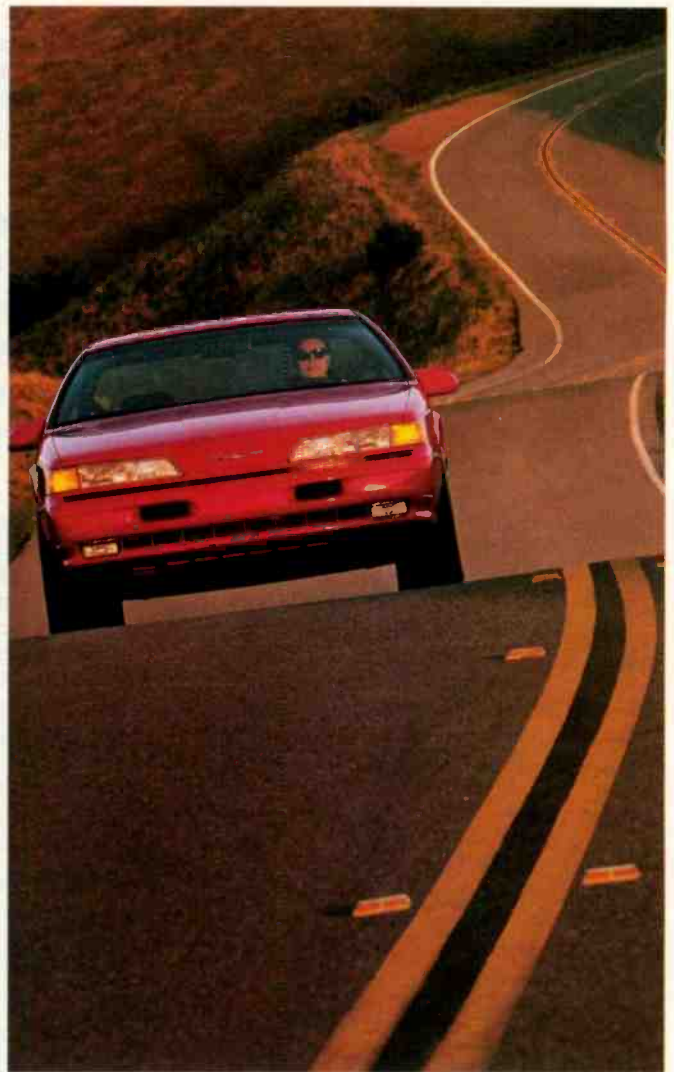
Overall, the Nakamichi CassetteDeck1.5 measures 17 inches wide, 12½ inches deep, and 5 inches high, and it weighs a little less than 12 pounds. Price: \$699. Nakamichi America Corporation, Dept. SR, 19701 S. Vermont Ave., Torrance, CA 90502.

Lab Tests

Measurements of the Nakamichi CassetteDeck1.5 with our ferric and

Their Opera House

Our Opera House



Ford was the first domestic car company to offer Digital Audio Tape and compact disc players in our premium sound systems. We're not stopping there.

For 1992, we're introducing Digital Signal Processing. DSP is a dramatic new way to electronically change the listening environment of a car.

With the DSP option, it's possible to program the way music is heard in a concert hall, an orchestra hall, a cathedral, an opera house, a stadium, or a night club.

And when combined with the optional Ford JBL Audio System, the results are exceptional.

Another feature of the Ford Audio DSP system is the talk mode, which optimizes sound reproduction for all-talk and all-news radio formats.

The Ford Audio DSP system is available as a dealer-installed option on selected Ford, Mercury, and Lincoln vehicles. It's the next generation of sound, and it's a generation ahead of anything you've heard before.



AUDIO SYSTEMS
The Sound of Quality

For more information,
call 1-800-367-3333.

TEST REPORTS

CrO₂ IEC-standard (BASF) calibrated playback test cassettes showed very flat response (± 0.5 dB) from 100 to 10,000 Hz, coupled with a rise of 2 to 3 dB at the extreme ends of the audio spectrum. The treble rise is typical of Nakamichi recorders, which use slightly different playback equalization from that of most other decks. Nakamichi has long contended that its approach to playback and recording EQ is the correct one based on the actual magnetization level of the tape and that its magnetic-flux measurements of the standard test tapes indicate they are "hot" at the highest frequencies, making the playback responses of inferior decks look better than they actually are.

Overall record/playback response, checked at the usual -20 -dB level with our centerline samples of TDK AD (ferric), TDK SA (chrome-equivalent), and TDK MA (metal), was also within the CassetteDeck 1.5's specification of ± 3 dB from 20 to 21,000 Hz. At an IEC 0-dB level (1.5 dB above the deck's own 0-dB marking), high-frequency response still extended to 15,000 Hz with the metal tape, 14,000 Hz with the ferric, and 10,000 Hz with the chrome-equivalent. Even at this high recording level, with Dolby C noise reduction switched in the response with metal tape dropped by only 2.5 dB at 20,000 Hz.

A-weighted signal-to-noise ratios with Dolby C ranged from 74.6 to 78.9 dB for the three tapes, showing both very good performance and proper attention to head design. (With good heads, the S/N with metal tape should measure at least 4 dB better than with ferric.)

Wow-and-flutter was very low, measuring 0.021 percent on a wrms basis and 0.044 percent by the more rigorous DIN peak-weighted method. Speed accuracy was also very good; the measured error of -0.16 percent means that a standard 440-Hz A would be reproduced at 439.3 Hz, which is a negligible discrepancy. The fast-winding time of 93 seconds in either direction for a C-60 cassette was about average for a deck in the Nakamichi 1.5's price class.

Dolby error was negligible, within $+0.5$, -1.0 dB for Dolby B and $+1.0$, -1.2 dB for Dolby C. The required input level of 55 millivolts for a 0-dB-level recording and the output level of

700 millivolts from a 0-dB recorded test signal were both entirely normal.

Comments

While old Nakamichi hands are used to it, newcomers may at first find the need to select tape type manually a trial that results in occasional error.

The CassetteDeck 1.5's human engineering lived up to our expectations for a Nakamichi product: Every operation was silent, smooth, and sure.

And the lack of a headphone volume control is a significant omission for those who frequently listen through headphones—ours were simply too loud to enjoy. For the rest, however, the CassetteDeck 1.5's human engineering fully lived up to our expectations for a Nakamichi product: Every operation was silent, smooth, and sure.

We were surprised when playing

back prerecorded tapes to find ourselves turning down the treble control on our preamplifier. Part of the reason was undoubtedly that the tapes we use for our listening evaluations tend—unlike most commercial releases—to have a slightly hot high end, which became excessive when played on a deck with a rising treble response. That rising response is likely to be a benefit rather than a drawback when listening to more typical prerecorded cassettes, however.

It was in dubbing from CD's that the true sonic merits of the CassetteDeck 1.5 became most apparent. The frequency response and dynamic range were as wide as those of our sources, and the clarity was superb. Moreover, the stereo image did not seem to be altered in *any* way when we switched from source to playback. Indeed, we had to hit the stop button several times during our tests to be sure we were really listening to the tape and not to the source. Such high-quality record/playback performance in an analog cassette deck requires not only superb heads and electronics but very stable tape motion as well. All these Nakamichi hallmarks are now made more affordable by the splendid new CassetteDeck 1.5. □



**"This is your final notice. Please mail in the warranty card on your Audiex T3 receiver today or the service agreement will be null and void."
—J. Boucher, Jr., Audiex Customer Relations"**

The Finest In-wall Speaker.



WHAT DOES IT TAKE to build the finest in-wall speaker?
Quite simply, better design execution.

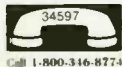
Better in-wall performance demands better materials. So, rather than flimsy plastic parts, we use a rigid aluminum diecasting that combines the main chassis, mid/bass driver chassis and tweeter faceplate into a single unit. Instead of inadequate mounting hardware made of plastic parts, metal clips etc., we use a rigid diecast-aluminum full-perimeter mounting flange. Add PARADIGM's renowned driver technology and seamless dividing networks, and the performance results are amazing! Articulate and transparent, these speakers simply reveal more of the musical and spacial reality of the live event.

EVEN MORE ASTONISHING IS THE PRICE! For the same or even less than conventional in-wall speakers, *you can own the best...* PARADIGM ARCHITECTURAL MONITOR SERIES speakers.

You won't find PARADIGM ARCHITECTURAL MONITOR SERIES speakers everywhere. A product this good requires the expertise of a qualified audio specialist. So, before you buy any in-wall speaker, visit your AUTHORIZED PARADIGM DEALER and listen to the finest of in-wall speakers.

FOR MORE INFORMATION CALL 1-800-553-4355
Ext. 41274 or write: AUDIOSTREAM, MPO Box 2410
Niagara Falls, NY 14302. In Canada: PARADIGM,
569 Fenmar Drive, Weston, ON M9L 2R6.

Sound & Vision
Critic's
Choice Award



Paradigm®

Pyle World Class Woofers

the wild side of sound!



Pyle engineers originated and perfected the art of producing high power, superior quality, massive motor subwoofers. Now that tradition continues with the wild free spirit, raw power and natural bass of Pyle World Class Woofers.

Our new IronMax™ motor technology produces the industry's most indestructible voice coil, while our exclusive ProLinear™ polyfoam suspensions are individually designed to provide optimum tuning.

Choose from 48 new World Class Woofers featuring polymer laminate cones, high energy magnet structures and vent-cooled motors to give you the perfect combination of pure musical quality and sheer sonic energy.

Listen to the low growl and loud roar of the wild side of sound — only with American-made Pyle World Class Woofers.

PYLE

For the name of the Pyle dealer nearest you write:
Pyle Industries, Inc. • Huntington, IN 46750

For technical assistance call 1-800-852-9688.

H A Harman International Company



New Wave Subwoofers —
Superb free air
bass for
enclosureless
applications



PRO Series —
Subwoofers designed
for the primal instincts
of the true sound
enthusiast



Pyle Driver® —
The newest technology
and three generations
of quality at a very
affordable price

Made in U.S.A.
Member
IASCA

CIRCLE NO. 16 ON READER SERVICE CARD

TEST REPORTS



Cerwin-Vega DX-7 Loudspeaker System

Julian Hirsch, Hirsch-Houck Laboratories

CERWIN-VEGA'S new DX Series consists of four models. The DX-7, next to the top of the group in size and price, is a floor-standing speaker measuring 15 x 34 x 14 $\frac{3}{4}$ inches and weighing about 64 pounds. It is a three-way system whose 12-inch cast-aluminum-frame woofer operates in a ported enclosure. At 250 Hz there is a crossover to a 6 $\frac{1}{2}$ -inch cone midrange driver. The second crossover, at 5,000 Hz, is to a 1-inch dome tweeter, radiating through what is described as an "acoustic transformer," a short horn with a central phase-correcting plug. Both crossovers have slopes of 12 dB per octave.

Nominal impedance is 4 ohms, and the system's rated bandwidth is 34 to 20,000 Hz. The DX-7 is specified for use with amplifiers delivering between 5 and 255 watts per channel. Its rated sensitivity of 98 dB is unusually high for a home loudspeaker.

The cabinet, made of braced $\frac{3}{4}$ -inch particleboard, is finished in woodgrain (oak) vinyl on all the visible surfaces

and behind the removable black cloth grille. The input connectors, spring clips on $\frac{3}{4}$ -inch centers that accept wire ends or banana plugs, are recessed into the back panel. Next to them is the holder for a 2 $\frac{1}{2}$ -ampere system fuse. The tweeter is also protected by an internal self-resetting circuit breaker. The woofer port is at the bottom of the rear panel.

The drivers are mounted in a vertical array, tweeter at the top and woofer at the bottom. The high-frequency and midrange drivers are located about 1 $\frac{1}{2}$ inches to the left of the center-line of the front panel. The midrange driver cone is protected by a nonremovable metal grille. The brilliant pink-red flexible edge surround of the woofer cone is not visible with the grille in place. Price: \$410 each. Cerwin-Vega, Dept. SR, 555 E. Easy St., Simi Valley, CA 93065.

Lab Tests

We placed the Cerwin-Vega DX-7 speakers about 8 feet apart, 4 feet from

the side walls, and 2 feet from the wall behind them. Our microphone was placed on the forward axis of the left speaker and about 12 feet away from it, and we plotted the room response of each speaker on the same graph paper using a sweeping sine wave with a superimposed one-third-octave "warble." Their average formed a single room curve.

We measured the woofer response with a close microphone spacing, separately for the cone and port outputs. Combining the two curves (corrected for the different diameters of the woofer and port) with the room response created a composite frequency-response curve. The bass and room curves overlapped almost exactly from 60 to 500 Hz, resulting in a composite frequency response whose maximum output was between 130 and 220 Hz. The output fell off at lower frequencies, by about 8 or 9 dB at 40 Hz, then rose 3 dB at 27 Hz.

From 200 to 500 Hz the output fell about 5 to 6 dB, then it leveled off and remained within ± 2.5 dB from 400 to 12,500 Hz. There was a peak of about 3 dB at 15,000 Hz that extended to 20,000 Hz. Overall, the system's response was quite uniform above 400 Hz, emphasized by perhaps 5 or 6 dB in the 130- to 220-Hz range and falling off at lower frequencies to a level only about 5 dB below the average midrange and high-frequency level all the way down to 20 Hz.

Quasi-anechoic response measurements confirmed the essential features of our composite room-response curve. In particular, they confirmed the reality of the output increases at 200 and 15,000 Hz. The DX-7's horizontal dispersion was not as broad as that of some other speakers. The on-axis and 45-degree off-axis response curves diverged above 2,000 Hz, with a difference between them of 8 to 9 dB from 3,000 to 8,000 Hz and of 16 dB at 20,000 Hz.

The minimum system impedance was 3.5 ohms at 130 Hz, and the maximum was 27 ohms at 50 Hz. Over most of the audio range, the impedance was comfortably above the 4-ohm rating. With a 2.83-volt input of pink noise, the sound-pressure level (SPL) was 99 dB at 1 meter, one of the highest sensitivities we have measured from a home speaker.

Bass distortion with an input of 1

TEST REPORTS

Stereo Review presents

THE BASIC REPERTORY ON COMPACT DISC



a critical
discography

new for

1992

In response to readers' requests, the noted critic Richard Freed has chosen the best available CD recordings of the standard compositions in the classical orchestral repertory. Hundreds of recordings of symphonic works from Bach to Wagner!

To receive your copy of this useful pamphlet, send a self-addressed business-size (#10) envelope, stamped with 52¢ postage, and a check or money order for \$3, payable to Stereo Review (no cash, please), to The Basic Repertory, Stereo Review, 1633 Broadway, New York, NY 10019. Outside the United States, where you cannot buy American stamps, send the self-addressed envelope and \$4 (payable in U.S. funds) to the same address.

volt (equivalent to a 90-dB SPL in our sensitivity measurement) was between 0.2 and 0.4 percent from 60 to 250 Hz. Below 60 Hz, output from the port was predominant, and distortion rose from 0.5 percent at 60 Hz to 1 percent at 40 Hz and 2 percent at 20 Hz.

In single-cycle tone-burst power tests at 100, 1,000, and 10,000 Hz, the driving amplifier clipped before the speaker's output showed signs of overload or serious distortion. The clipping power level was in the range of 1,000 to 1,500 watts at all three frequencies, each of which was handled by a different driver.

Comments

With most program material, the Cerwin-Vega DX-7 sounded as uniform as the major part of its frequency response would suggest. Middle and high frequencies were smooth and well balanced, and the low bass was strong and clean.

Our greatest concern was the response hump in the upper bass and lower midrange, roughly between 100 and 300 Hz. Because of the speaker's flatness over much of the audio range, this effect stood out quite prominently in a number of measurements made using several very different techniques. It *had* to be a real characteristic of the speaker.

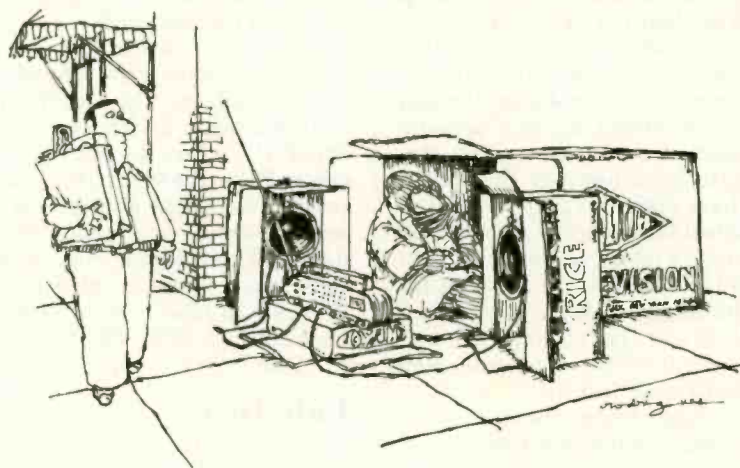
Well, it is, but under most conditions it was so much less audible than one might expect that it could easily be overlooked. Most speakers have a similar rise, though not always as prominent. It is most easily heard as an unnatural heaviness in male voices, especially when their bass content has

been exaggerated by too-close miking. We were pleasantly surprised to find that with the DX-7 this effect was *less* apparent than with most other speakers we have used. This simply confirms once again that the correlation between loudspeaker measurements and sound quality is often poorer than one might hope.

At any rate, the frequency balance and smoothness of the sound were excellent, especially in view of the DX-7's moderate price. The low bass was very much present without being overpowering, and bass distortion was exceptionally low. The measured directivity of the high-frequency output was somewhat narrower than average, but this did not seem to impair the speaker's sound in any way. A number of speakers, in all price ranges, are meant to be "toed in" slightly to the center of the room, and that would probably be advisable with this one if optimum imaging is your goal. We did not find it necessary in our room.

The DX-7's sensitivity is extraordinary for a home system. Although this might seem to indicate an ability to play extra loud (which the DX-7 certainly can do), we found exploiting that capacity rather overwhelming in a 15 x 20 x 8-foot room. Another perspective on this quality is that it enables very high sound levels to be generated with little amplifier power. You really don't need a 100-watt amplifier with this speaker; 10 to 20 watts per channel should be quite adequate.

Either way you look at it (or listen to it), the Cerwin-Vega DX-7 is a lot of speaker for the money. Performance and appearance are both first-rate. □



WIMPY CAR STEREO NEED CAR STEREO REVIEW.

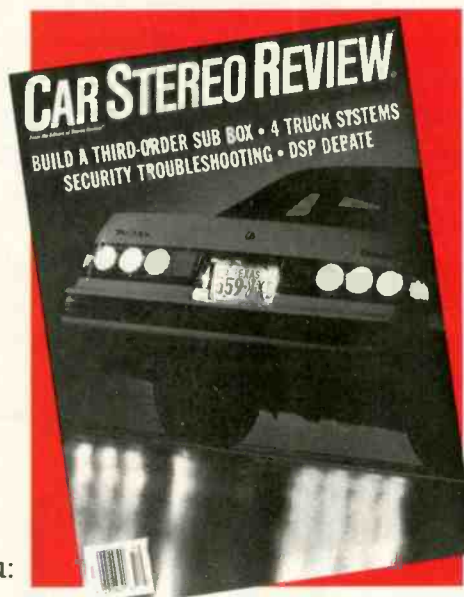
Tired of wimpy woofers, tinny tweeters, and hissing cassette decks?

Want to upgrade your car stereo to a state-of-the-art system with all the bells and whistles?

Then look no further. Turn to Car Stereo Review and tune in studio-quality sound. No other magazine brings you:

More no-holds-barred test reports on tuners, cassette decks, CDs, speakers, amps, equalizers, security systems and cellular phones. More in-depth features on installations, wiring, acoustics, troubleshooting, and upgrading your system.

PLUS... you get more new product reviews and head-to-head comparisons on all the latest car stereo equipment.



So, before you plunk down your hard-earned cash, check out Car Stereo Review and you're sure to come out with the best possible system. At the best possible price.

**Shift into high gear
with this
Introductory Offer!
One Year just \$16.98.**

To get home delivery of Car Stereo Review, simply detach and mail the attached card.*

You'll get a one-year subscription (6 issues in all) at our Special Introductory Rate of just \$16.98. If you're not absolutely delighted, we'll send you a full refund on all unmailed copies. Sounds like a great offer... and it is!

**If someone already beat you to the attached card, send your order to: Car Stereo Review, P.O. Box 57316, Boulder, CO 80322-7316.*

CAR STEREO REVIEW T.M.

HEADS

TAKING delivery of a new car usually generates an enormous sigh of relief, signaling the end of the marathon of decisions, budget quandaries, and the thousand and one choices that buying a vehicle entails. But for the mobile audio fanatic, driving off the lot is only the beginning—the real fun comes in selecting, designing, installing, and enjoying a new sound system custom-tailored to the new set of wheels.

The options are only slightly less overwhelming than those of the automotive world itself. There are hundreds of car stereo components vying for attention, and when you're assembling a system the possible combinations are very nearly beyond number. A little thoughtful planning, however, will narrow the field considerably. One of the very first things you should do is choose the system's front end, or "head unit." This is perhaps your most critical decision, for a car stereo system, like any hi-fi system, can be no better than its program sources.

Currently available complements for the ubiquitous road-going AM/FM radio include cassette tapes, compact discs, and, to a very small extent, digital audio tape (DAT). If you already own an impressive tape collection, selecting a primary source is easy: You're going to want a cassette deck packaged with your radio. Similarly, if your shelves are well stocked with CD's, a CD tuner or receiver is

PHOTO BY JEFFREY KREIN

FIRST

BY DANIEL KUMIN

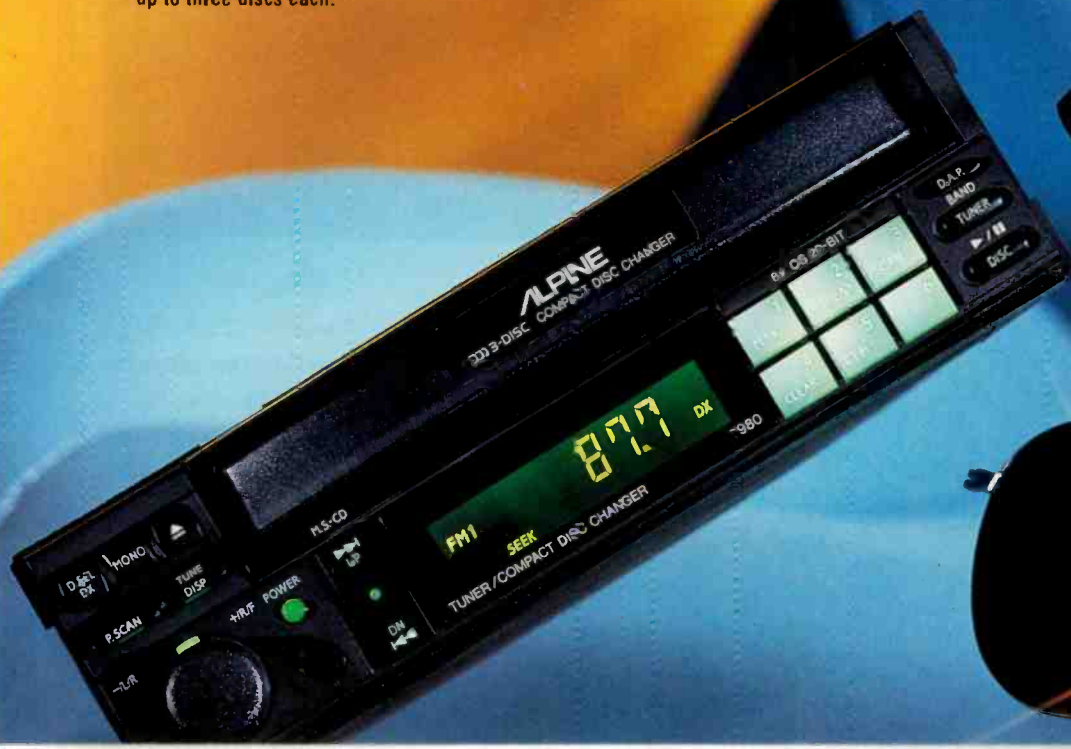


The Jensen CD-9500 (\$429) combines an AM/FM tuner, a CD player, and a 20-watt stereo amplifier on a removable DIN-size chassis.



Nakamichi's removable TunerDeck1 (\$830) slips into any of the company's PowerPort sleeves for power and amplification.

Alpine's \$900 Model 7980 is the world's first in-dash tuner/CD changer. Its slide-in magazines can hold up to three discs each.



the obvious choice. If you're starting from scratch, however, or if you're open to change, weigh the modest cost penalty for a CD player against its undeniably superior performance and convenience. With a CD player you can instantly cue up any selection, rapidly search forward or back with intelligible sound, and (depending on the model) avail yourself of all kinds of neat programming functions such as shuffle play (playback of tracks in random order), intro scan (which plays the first few seconds of each track), and automatic repeat.

On the other hand, you can't make your own CD's, which means taking your precious discs on the road. With reasonable care, they'll suffer no ill effects. But if you're the sort who stores tapes on the passenger-side floor among discarded soft-drink cans and burger wrappers, you'd probably be well advised to stick with cassettes. One advantage of a cassette player is that you can carry taped copies of your CD collection in your car instead of risking the originals. And you can even make special compilations on tape just for mobile listening.

Many prospective buyers wonder how well a seemingly delicate CD player can work in the rough-and-tumble of a moving vehicle. Are skips, mutes, and stutters inevitable? In fact, improvements in transport mechanisms, laser pickups, and error-correction systems have made the best car players nearly impervious to the bumps and shocks of all but the most primitive roads.

It's also perfectly possible to have your cake and eat it, too. You can combine a lunchbox-size six-, ten-, or even twelve-disc magazine-type CD changer, installed in the trunk or another out-of-the-way spot, with an in-dash unit that plays cassettes and AM/FM radio as well as controlling the CD changer. The only drawback is cost. Such a combo head unit will run 20 to 40 percent more than an equivalent tape-only model—and you'll still have to buy the CD changer itself.

Powering Up

After you settle the tape/CD question, the next basic issue is power. For a relatively simple system, a CD or cassette receiver with built-in amplifiers and outputs for two or four speakers may be all you need. These head units usually provide only a few watts per channel; even "high-power" car receivers are not, in fact, particularly powerful by home audio standards. But with careful speaker selection and



▲ The Optimus CD 12-1941 pull-out CD receiver from Radio Shack (\$350) features compatibility with 3-inch CD's, a four-times-oversampling digital-to-analog converter, audible scan in either direction, and a four-channel power amplifier rated at 18 watts per channel maximum.



▲ Blaupunkt's Orlando CD tuner (\$420) has presets for eighteen FM and six AM stations, plus six FM Travel Store presets, which give you quick access to local stations when you're away from home without replacing any regular presets.

The Denon DCC-9770 removable CD tuner (\$750) has dual 18-bit D/A converters with eight-times-oversampling 20-bit digital filters, eighteen FM and six AM station presets, four line-level outputs, and controls for the company's CD changers. It also comes with a remote control (shown on facing page).



The Cooustic RX-739 pull-out cassette receiver (\$280) features eighteen FM and twelve AM station presets, a rear input and front-panel switch for an outboard CD player, and a power amp rated at 5 watts per channel in four-channel mode or 15 watts per channel in two-channel mode.



The Eclipse ECD-411 removable CD receiver (\$700) has controls for the company's ECD-430 twelve-disc CD changer and EQS-1001 DSP Sound Processor. Its internal CD player has 18-bit D/A converters, and its stereo amplifier section is rated at 12 watts per channel.



Features of the Clarion Model 9772RT slide-out cassette receiver (\$280) include automatic local/distant switching, fifteen FM and five AM station presets, a head-cleaning indicator, and a rated output of 15 watts each into four channels or 20 watts each into two.



SECURITY COUNSEL

MAYBE you can't take it with you, but you might be able to keep it while you're here. No matter where you live, if you have a nifty car stereo system, someone, someday, is going to consider separating it from your car without your consent. To inhibit this process, car stereo manufacturers have come up with some clever theft deterrents.

Actually, you *can* take it with you. Most of today's head units, of whatever type, feature a removable chassis that slides into a metal sleeve installed in the dashboard. Usually a handle folds down to clip the unit into the sleeve and folds up to release it. When you leave the car, you just slide the whole unit out and carry it away. A few removables have locking clips so that they can be semipermanently stored in the dash.

Removables provide the ultimate in dashboard security: Thieves can't steal what isn't there. But we humans are a lazy lot. Eventually even the best of us will forget to pull the unit out when we dash in for a coffee to go. Sometimes it's inconvenient, too—what do you do with the thing while you're putting mustard on your hot dog? So several manufacturers, led by Pioneer, now offer removable-faceplate designs. On these units, only the faceplate comes off, complete with all controls and some critical circuit connections. The

faceplate is small enough to slip into a pocket or a purse, so there's less excuse for leaving it behind, and without it the head unit is entirely—and obviously—useless.

Security-code models are usually not removable. The idea is that if the power-supply connection is broken—as it will be if, say, the unit is crowbarred out of the dashboard—a multidigit code must be entered on the front panel before the unit will work again. Most head units featuring security codes carry a prominent warning that the unit will commit electronic suicide if removed, along with window decals to make the message more obvious. Unfortunately, car stereo thieves are not a particularly literate bunch and have been known in the heat of the moment to overlook (or disregard) such notices.

Automotive security systems, whether factory equipment or retrofits, have the advantage of protecting your wheels as well as your stereo. They can at least slow down ambitious thieves and may discourage the less zealous altogether. Perhaps the best combination is a well-designed (and well-installed) car security system along with a removable or removable-face head unit—and an owner who religiously removes the chassis or faceplate every time the car is left unattended.

Pioneer's removable-faceplate system provides convenient, effective theft deterrence.



professional installation, a car receiver can provide modest listening levels with reasonable sound quality, which may be all you're looking for.

If, on the other hand, you want your mobile music loud, with significant deep bass and demo-quality fidelity, you'll need to add an external power amplifier—or two, three, or more. In that case, a line-level head unit—one without any on-board power amplifier—is the better choice. There is also a middle way. Many car stereo receivers provide preamp-output jacks in parallel with speaker wires served by the on-board amplifier. These enable you to drive one or more speaker pairs with an external power amp while the built-in amp handles another, smaller pair—usually in the dash or front doors.

No matter what kind of head unit you select, it's almost certain to come loaded with features. Autoreverse tape play, plentiful station presets, auto skip and intro scan for tapes and discs, random play for CD's, and dozens more are almost universal. So instead of concentrating on the features a given model may have that *aren't* standard, spend some time evaluating its basic performance.

Tuning In

Begin with the lowly radio. The fact is that many people spend most of their mobile listening time tuned in—usually to FM. But the FM-tuner performance of head units varies widely. The good news is that the best mobile tuners are true technological wonders, able to deliver terrific sound quality in a moving vehicle at considerable distances from the transmitter. The bad news is that not all car tuners are anywhere near that good, and the specs are not especially reliable predictors of in-the-car, on-the-road performance.

The best way to evaluate a head unit's FM abilities is to drive around in a car in which it is installed, in your own neighborhood, tuned to your favorite stations. In the unlikely event that you're able to do this, let your ears be the judge. You probably won't get that chance, however, and you'll have to take someone's word for it—most likely the dealer's. So finding a reliable dealer is a high priority.

Tapes and Discs

Next, tape. Nearly all automotive tape decks are autoreverse decks, which play an entire cassette without requiring you to flip it over. Although it's certainly convenient, autoreverse

complicates tape-head and transport design. Be sure to listen to a prospective deck using both playback directions to check for extended treble and solid bass on both sides of the tape. Also make sure that the deck can adjust equalization according to the tape type, either automatically or manually with NORMAL/METAL buttons. Manual buttons have the advantage of allowing you to select the "wrong" EQ setting deliberately in order to extract more treble from low-quality or poorly recorded tapes (with a certain noise penalty), but automatic switching is more convenient and increasingly prevalent.

Dolby B noise reduction is pretty much standard in car decks these days, and Dolby C—a more effective but rather finicky system—is included on many higher-cost head units. If you play only store-bought prerecorded tapes, Dolby C will be of little use to you, as commercial cassettes almost universally use Dolby B. But if you have a good Dolby C home deck and want to make your own higher-quality road tapes, consider buying an equivalently endowed car unit. The enhanced dynamic range afforded by Dolby C is worthwhile in some cases, particularly with jazz and classical music.

Sonic variations in compact disc head units are unlikely to be as profound or perceptible as those found among car radios and cassette players, but differences in disc-tracking performance and resistance to vibration are substantial. As with radio performance, these qualities are impossible to evaluate in the showroom; you've got to hit the road. If you can't try the unit out before you buy it, make sure you can exchange it for another one if it falls short on the roads you drive. A player's ability to keep the music going regardless of road conditions can have a profound effect on your long-term satisfaction.

The best head-unit CD players are remarkably resistant to skipping, even when subjected to axle-bending potholes, but lesser models can be troublesome on less-than-perfect road surfaces. Cost is often—but by no means always—a rough guide to quality. Once again, the best reality check is a ride in a car equipped with a candidate player; failing that, seek advice from a reliable source. Be aware, too, that the automobile itself can affect disc tracking. A player that mistracks and hangs up repeatedly in a Jeep is likely to do much better when it's installed in a Cadillac.

Human Engineering

At least as important as performance considerations are ergonomic ones. Your head unit's controls should be easy to distinguish and operate, its displays legible and simple to understand. A model that lacks these qualities will become increasingly irritating over time; worse, it can even be a road hazard by distracting you while you're driving. Look for controls that are clearly marked, well lit, and not over-complicated; displays that are large and bright enough to read at a glance in daylight as well as at night (the best automatically dim in the dark); and minimal button-clutter. Often a head unit with fewer features but more thoughtful design will prove a better choice than one with a dense population of buttons, knobs, and indicators.

Appearance and fit are factors, too, particularly if you're selecting a system for an apple-of-your-eye new car. Nearly all head units today, and most cars, conform to the German DIN dashboard-cutout standard, so major installation problems are relatively rare. But some incompatibilities remain, so be certain that a particular unit will fit in your car before you fall in love with it. Styling varies, so let your eye be the judge of what will integrate smoothly into your vehicle's interior design. Night lighting is another consideration; several manufacturers offer head units whose illumination color can be changed from amber to red or green to complement a car's interior.

Finally, consider all those features we mentioned earlier. If you have any money left in the budget after meeting your requirements for program sources, sound quality, performance, ergonomics, fit, and appearance, by all means move on up to a fancier model. Some head-unit tricks are truly useful, some merely glitter. As long as you satisfy the important selection criteria first, it won't much matter. You'll have a solid basis for your car stereo system in any case. Then you can go on to the next challenge—choosing, or upgrading, your car speakers, maybe adding a subwoofer. And that should make you do some thinking about adding an outboard power amp, perhaps an equalizer or ambience processor. Even a basic system can evolve gradually into a very sophisticated one. Think of it this way: Buying something new for your car stereo system every year is more fun than buying a new car—and a lot cheaper. □



**OFTEN A HEAD UNIT
WITH FEWER
FEATURES BUT MORE
THOUGHTFUL DESIGN WILL
PROVE A BETTER CHOICE
THAN ONE WITH A DENSE
POPULATION OF BUTTONS,
KNOBS, AND INDICATORS.**



SYSTEMS

An Audio/Video Sanctuary

by Rebecca Day

MAYBE all audiophiles, at some point in their lives, threaten to mortgage the house so they can build a room devoted entirely to audio and video entertainment. David Rubenstein is one who actually did it.

A teacher and a part-time jazz musician, Rubenstein and friends built the 30 x 20 x 14-foot sanctuary next to his house in Mount Tremper, New York. In it he assembled a painstakingly researched collection of audio/video equipment: a California Audio Labs Tempest II Special Edition CD player, Nakamichi Dragon and Model 680ZX cassette decks, a Magnum Dynalab FT-101 FM tuner, a Pioneer CLD-3080 laserdisc player, a Mitsubishi HS-U70 S-VHS VCR, an Audio Research SP-11 Mark II preamplifier, a Lexicon CP-1 surround-sound processor, five Counterpoint SA-20/220 power amplifiers, a Technics JX-S300 video switcher, and a Mitsubishi VS-1200 ceiling projector. Infinity IRS Beta's are the main speakers, and five in-wall Infinity ERS-800's make up the surround ensemble.

Because placement of the projector needed to be exact (13 feet, 2 inches from the screen), Rubenstein "put the cart before the horse," installing the Draper Envoy motorized screen first, then the projector, then the rest of the equipment and the furniture. In designing the rest of the room, he added touches appropriate for an audiophile's retreat. The few components that were not rack-mountable were installed on shelves bolted to the black Formica rack, which also serves as the live end of the live-end/dead-end room. The ceiling is peaked to break up standing waves, and the 14-inch walls are filled with absorbent material to prevent sound from leaking into the main house. The system is also isolated electrically, powered from a dedicated 200-ampere transformer. The transformer feeds three Aris Model 615 power-distribution rack illuminators, which provide switched and unswitched AC outlets as well as surge protection. To prevent heat from building up inside the cabinet, Rubenstein installed six Audio Research RMV-3 rack ventilator panels above each of the five power amplifiers and the preamplifier.

All his efforts have paid off, Rubenstein maintains. "My system has that live sound that I love," says the musician. "And it adds to the value of the house," says the homeowner. "And," says the teacher, "the kids are being schooled in classical music, jazz, and r-&-b." Just ask daughter Rebekah, who's five. Listening to the car radio recently, she correctly pegged the composer of a piece she had never heard. "That's Vivaldi," she announced, "just like *The Four Seasons*." □



PHOTOS BY GEOFFREY GROSS



A
Music
Lover's
Guide
to

SIGNAL PROCESSING

WHAT TO DO ABOUT BAD SOUND • BY E. BRAD MEYER

RECORDINGS vary tremendously in quality. The ability of compact discs to deliver virtually perfect replicas of their master tapes has taught us that although the best recordings are thrilling, some sound pretty awful, and there are examples falling everywhere in between.

One reason is that every recording is optimized according to the producer's preferences, which may reflect goals having little to do with realism on high-quality audio systems and which are guided in any case by the sound of the speakers and room he or she uses to monitor the recording. For example, if the monitor speakers have lots of bass, as do those in many pop studios, then the final mix will probably sound thin on less-colored speakers because the engineer reduced the bass tracks to balance correctly on the monitors.

So despite the accuracy of digital recording and playback you will still need to tailor the sound of many CD's to fit your system. This is where signal processors come into the picture. For our purposes, signal processing is anything you can't do with the normal volume, balance, bass, and treble controls. Signal processors fall into three broad groups according to whether they alter tonal balance, stereo image, or dynamic range.

Alteration of tonal balance with an equalizer is the most common kind of processing. Equalization, or EQ, can be used to correct the response of an entire system, in which case the controls are set once and left alone, or it can be adjusted to compensate for the peculiarities of individual recordings.

Stereo-image processors expand the apparent source of the music—sometimes called the sound stage—making it seem to spread out beyond the area between and behind the speakers. Some image enhancers work with an existing two-channel setup, whereas others require additional speakers and amplifiers. Both types can be optimized for music or film sound.

Dynamic-range processors use compression—boosting soft passages and attenuating loud ones—to decrease the dynamic range or expansion to increase it. There are reasons for both, which we will go into shortly.

Equalizers

A graphic equalizer, the most common type, divides the audible spectrum into contiguous bands, each with its own slider control, arranged from left to right in order of increasing frequency. The sliders are moved upward or downward from their central "flat" settings to boost or cut output

in the individual bands, their physical positions forming a rough depiction of the imposed response curve.

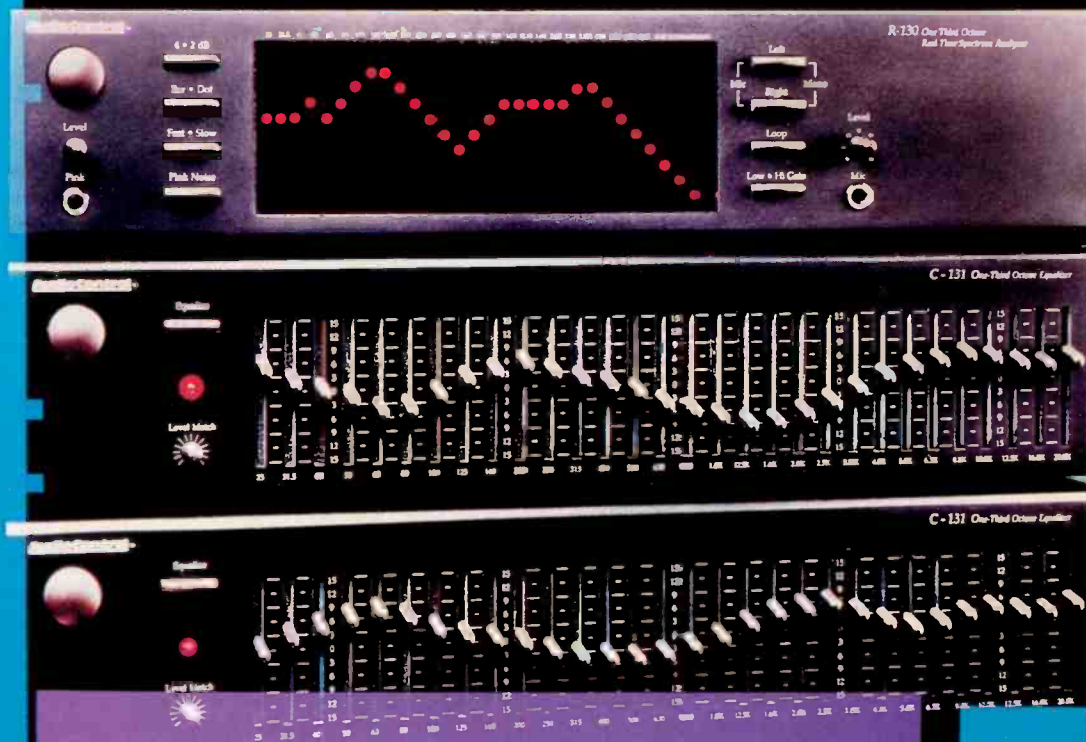
Graphic equalizers range from the simple five-band designs found in some receivers (with each slider controlling both channels at once) to stand-alone octave-band models with separate controls for the left and right channels. These are available in varying degrees of sophistication and accuracy at prices from \$150 to \$400.

Even if you don't use it regularly to tune your system or rebalance bad recordings, an octave equalizer can be both fun and educational. The audible spectrum is ten octaves wide; the lowest band, centered at 31.5 Hz, covers the range from 20 to 40 Hz and con-

tains only the deepest bass-drum and organ sounds. Through using an equalizer you will learn that most of what we think of as low bass is in the next band, centered at 63 Hz and spanning 40 to 80 Hz; that few classical recordings contain much energy in the top octave, above 10 kHz, but that many pop recordings do; and that what happens between 100 Hz and 3 kHz determines the sound's basic character.

Equalizer/Analyzers

There are graphic equalizers that divide the audio range into thirty or more bands, but they are designed mainly for professional use and cost more than most of us would want to spend on such a device. Besides, a ten-band octave equalizer is difficult enough to adjust by ear; equalizers with many more bands are almost impossible to use without a real-time analyzer, an instrument that displays the instantaneous level of an audio signal in each band. Some equalizers designed for home use include an octave-band analyzer, a microphone, and a circuit called a pink-noise generator, which puts out a waterfall sound containing equal energy in each band. With such a setup you can play pink noise through the system, put the mi-



The ultimate in signal-processing flexibility—for those who can handle it—is provided by Audio Control's one-third-octave-band R-130 real-time spectrum analyzer (top, \$679) and a pair of matching C-131 single-channel graphic equalizers (\$529 each). The R-130 has a built-in pink-noise generator and comes with a microphone.

crophone at your listening chair, and set the controls for flat response.

Unfortunately, the situation is too complicated for this procedure to work well. One problem is that a system that measures flat by this method will sound bright and thin with almost all recordings. The main reason is that what you measure at your chair is a combination of the direct sound from the speaker and the reflections and resonances of the room. Your ears hear these separately to some extent, so when you correct for the response of the room you may alter the direct sound for the worse.

Every room is different, but the best tactic in most cases is to place the microphone directly in front of the speakers' tweeters, about 3 feet away, and adjust the equalizer for flat measured response from 250 Hz to 1 kHz, with a gentle rise below that range and a gentle rolloff above it, so that the 31.5-Hz band is up about 4 dB and the 16-kHz band is down about 6 dB. Then move the microphone back to the listening chair, measure again, and move the controls about half as far as necessary to correct the new curve to the previous one. You may still find that you prefer your system's basic sound without room EQ, however.

WHAT if you do like the way your speakers sound in your listening room and just want to correct for the vagaries of different recordings? An octave-band equalizer can often help, largely because you can use the sliders to make adjustments in specific frequency ranges that can't be isolated with ordinary tone controls.

Many popular recordings sound hard and bright; lowering the 2-, 4-, and 8-kHz sliders by 3 dB while boosting the 16-kHz control about the same amount can mitigate the harshness without sacrificing top-end airiness. Plagued by thick, boomy upper bass? Set the 31.5-Hz slider at +5 dB, the 63-Hz one at 0, and the 125-Hz control at -4 dB to tame the thump while solidifying the low bass. Midrange honkiness can sometimes be fixed by playing with the 250- and 500-Hz and 1-kHz sliders. Can't figure out what's wrong? Push one slider at a time all the way up or down until you find the one that exaggerates the problem, then pull that control back as far as necessary to fix it. These techniques won't make every recording into an audiophile special, but they will make a significant proportion of your problem discs sound much better.

Stereo-Image Processors

There are two basic types of stereo-image processor. The first type—using a process known generically as interaural crosstalk cancellation—mixes one channel into the other with a short delay and some equalization in order to prevent left-channel signals from being heard by the right ear and vice versa. The sonic effect is a broader and deeper sound stage extending horizontally well beyond the speakers. The biggest advantage of crosstalk cancellation is that it works with only two speakers, so no extra equipment, beyond the processor itself, is required. The drawbacks are that it almost always produces distinct colorations (alterations of tonal balance), the effect varies widely with recording technique (type and placement of microphones and so forth), and the image expansion usually works only if you listen from exactly on, or very close to, the center line between the speakers. In the rest of the room you will hear the coloration, but the spatial effect will be lost.

The second kind of image processor—called a spatial or sound-field processor or an ambience-enhancement device—requires two or more extra speakers and one or more extra channels of amplification. Common to all these processors is that the original sound, or some part of it, is delayed before being fed to some of the extra speakers. Your ears can pick up the sound from the front speakers largely unaltered, augmented a few tens of milliseconds later by sound from the sides or back of the room, which increases the sense of spaciousness. This type of processing ranges from simple delays generated by conventional analog electronics to elaborate digital manipulations that duplicate the timing and frequency responses of reflections that would occur in real spaces.

The most sophisticated spatial processors work digitally, either taking analog signals and quantizing them or accepting digital signals directly from a CD player or another appropriate source. Once the sound is digitized, it is possible to mathematically generate artificial reflections whose timings and tonal balances mimic those of reflections in actual acoustic spaces, enabling the listener to choose any of a wide variety of halls or rooms in which to place the performers. These processors are effective within a broad central listening area, and the additional

ambient sound is audible even outside the room.

We have been talking about image processors designed for music playback, but there is another type that is optimized for film and video soundtracks. The simplest of these are Dolby Surround decoders using analog circuits to separate the four channels (left, center, right, and surround) contained in most modern movie soundtracks. Dolby Surround decoders with a delay circuit and an extra power amplifier for the surround speakers can be found in audio/video receivers selling for as little as \$200. More complex are Dolby Pro Logic circuits, which use a technique called steering to enhance the separation between side, center, and surround channels. Dolby Pro Logic works in the same way as the processors found in movie theaters and can be found in high-end A/V amplifiers and receivers as well as outboard processors.

Dynamic-Range Processors

A number of years ago a company called dbx introduced a family of processors that could either expand or compress the dynamic range of audio signals. Other manufacturers followed with similar products, and the category flourished for a while before nearly fading away. Now dynamic-range processors are making a comeback as digital versions begin to appear in CD players, preamplifiers, and outboard units.

Expansion increases level differences, making loud sounds louder and soft ones softer. Carefully used, it can restore something approximating the original dynamic range to the many recordings that have been compressed in production or broadcast.

The opposite process, compression, reduces dynamic contrasts. Compression can be a great help with modern classical recordings, whose dynamic range may be too great for casual or background listening—meaning any time you're not concentrating exclusively on the music. Compression is especially helpful when you're listening in a car or on the street, keeping soft passages audible over the background noise without letting the loud passages blast you.

Noise Reduction

Signal processing can also be used to reduce the noise in old recordings to some degree without seriously compromising the sound, although most



Sony's TA-E1000ESD preamplifier (\$1,000) uses DSP for equalization, dynamic-range processing, and surround sound.



Yamaha's DSP-A1000 A/V integrated amplifier (\$1,499) features a dozen sound-field programs and Dolby Pro Logic.



The Lexicon CP-3 sound-field processor (\$2,895) meets Home THX standards for enhanced Dolby Surround reproduction.



MTX/Soundcraftsmen's Pro-EQ 22 (top, \$349) and DC-2215 (\$449) are ten-band graphic equalizers with ± 15 -dB ranges.

CD reissues have already been through such a process. Some dynamic-range expanders can automatically reduce their output whenever the input signal level drops below a preset threshold, to attenuate low-level noise that would become obtrusive in the absence of music loud enough to mask it. Such circuits, found in current components from Carver Corporation and in discontinued units from dbx, can reduce noise a few decibels in most recordings without audible side effects, but when asked to do more they often subtract some of the low-level music as well or cause the background noise to "pump" annoyingly up and down with the signal.

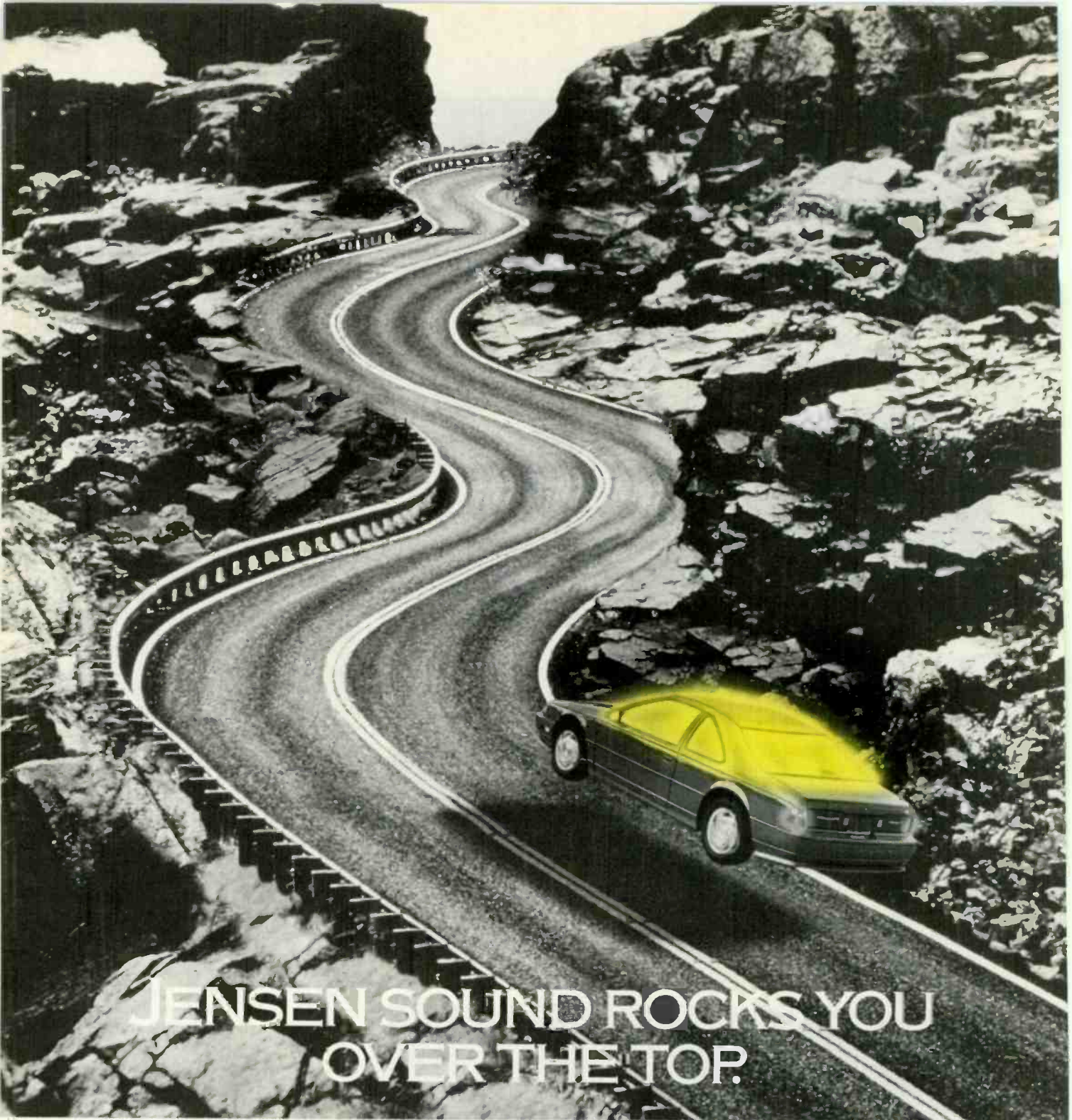
A similar approach, with similar benefits and drawbacks, is taken by processors that alter their high-frequency response according to the signal level in the treble range, reducing bandwidth to remove hiss when the signal is weak. The most prominent example of this kind of circuit is called DNR, or Dynamic Noise Reduction.

For LP fans there are tick-and-pop suppressors, some examples of which may still be available on the used-component market. Such circuits try to identify the steep waveforms produced by dirt or other defects in the vinyl and quickly substitute a small bit of the preceding sound, taken from a short-term storage circuit called a delay line, to smooth over the flaw. A well-designed tick-and-pop suppressor can deliver big audible improvements at small sonic cost.

The Nay-Sayers

Some audiophiles advise against the use of *any* signal processing on the grounds that every additional transistor or other electronic part in the signal path degrades the sound. Even with its sliders all set to zero, they say, an equalizer audibly compromises an audio signal's purity and transparency.

In my experience, it is sometimes possible to hear when a zeroed-out equalizer is in use, but only because the center positions of the sliders aren't exactly accurate. Using a high-quality analyzer to set each band to true 0 dB renders a properly designed equalizer inaudible (even some low-price models pass this test thanks to integrated circuits and modern manufacturing methods). And since equalizers usually go into a tape-monitor loop anyway, a push of a button takes them completely out of the circuit. Meanwhile, when you do run into a bad recording, you can do something about it. □



JENSEN SOUND ROCKS YOU OVER THE TOP.

400 WATT A432BBE*
HIGH DEFINITION AMP



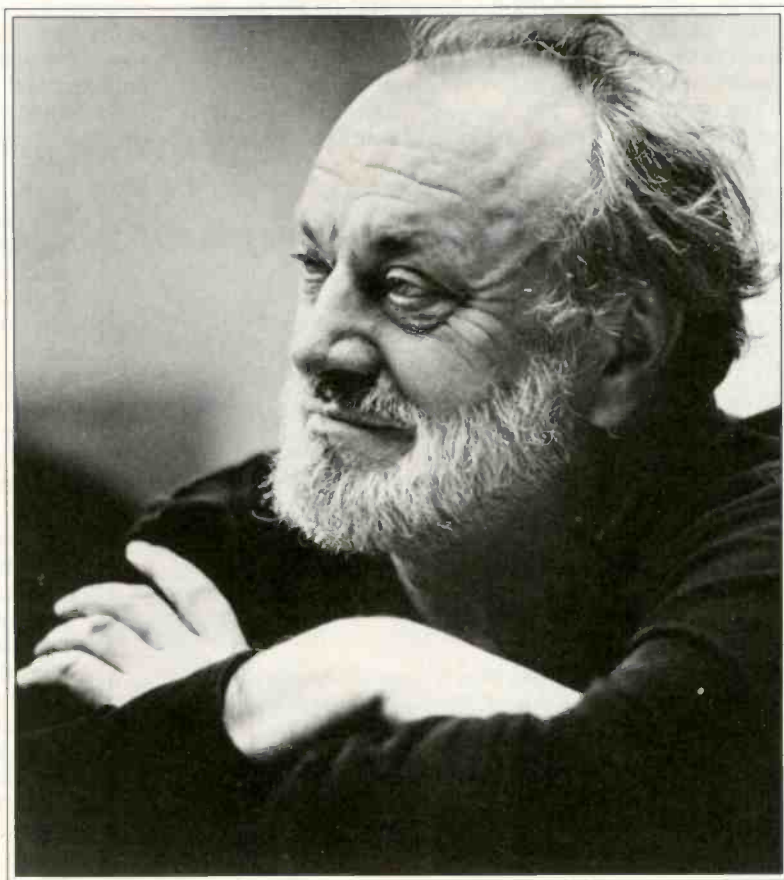
GET READY FOR A PEAK EXPERIENCE. THE NEW A432BBE® HIGH DEFINITION AMP. THE ONLY CAR AMP IN THE WORLD TO ACTUALLY IMPROVE SOUND WITH RECORDING STUDIO TECHNOLOGY. WITH OTHER AMPS, SIMILAR INSTRUMENTS ARE SOMETIMES HARD TO TELL APART. BBE TECHNOLOGY DIVIDES AND DEFINES SOUND SO YOU HEAR EACH INSTRUMENT DISTINCTLY. AND, OF COURSE, IT HAS 400 WATTS OF HEART-STOPPING POWER. WITH THE FLICK OF A SWITCH, IT GROWS FROM 2 TO 3 TO 4 CHANNELS. TEAM IT WITH JENSEN SPEAKERS, RECEIVERS OR CD PLAYER.

FOR FREE LITERATURE AND THE NAME OF YOUR
NEAREST DEALER, CALL 1-800-67-SOUND.

JENSEN®
THE MOST THRILLING SOUND ON WHEELS.

©1992 JENSEN IS A REGISTERED TRADEMARK OF INTERNATIONAL JENSEN, INC. BBE IS A REGISTERED TRADEMARK OF BBE SOUND INCORPORATED. IN CANADA, CALL SCL PRODUCTS 604-273-1095 (VANCOUVER); 416-890-0294 (TORONTO).

KURT MASUR



by **Herbert Kupperberg**

“**My idea is to try to bring something of the Old World to the New,”**

says Kurt Masur, who has just started a six-year term as music director of the New York Philharmonic. So far the sixty-four-year-old conductor from East Germany seems to be succeeding in a solid if unspectacular fashion, with programs and performances that have achieved approving reviews and, even more important from the Philharmonic's standpoint, evident audience contentment. Listeners beyond New York will soon be able to pass their own judgment

PHOTO COURTESY CAMI

on the new combination, because Masur and the Philharmonic have launched a six-year exclusive recording arrangement with Teldec that will bring forth thirty-two CD releases in that period.

Masur, who was by no means the Philharmonic's first choice to take over the podium left vacant by Zubin Mehta (the job was originally offered to Claudio Abbado, who preferred Berlin), represents something of a departure in style for the orchestra. The most recent Philharmonic music directors—Mehta, from India by way of Los Angeles; Pierre Boulez, the Parisian modernist; and the incomparable Leonard Bernstein—have all been glitzy as well as gifted. But Masur, who for twenty-two years has been the director of

the Leipzig Gewandhaus Orchestra, stands squarely in the tradition of solidly grounded Middle European conductors who play their music straight and are most comfortable in middle and late nineteenth-century Romantic repertory. Perhaps this is what American symphony audiences are presently yearning for—at least the parallel appointment of the similarly inclined Wolfgang Sawallisch to succeed Riccardo Muti in Philadelphia would seem to point in the same direction.

Masur, who speaks excellent English, is as aware as anyone of his musical outlook. "I don't want to thrill people," he said in an interview at his Avery Fisher Hall office. "I'm not the type of conductor who wants to be glorious. I want to reach the hearts of people. Whether people come to the Philharmonic for one night or for many nights, I would like to touch them. I don't want them just to have a nice evening, but to go home thinking about what they've experienced."

While Masur says that it won't be until next season at the earliest that he expects to put his own personal stamp on the orchestra's policies and goals, he has already begun to make changes. He has rearranged the orchestra's seating, switching the position of the cellos and violas and ranging the doublebasses on risers in a line across the rear of the stage. He's working with acousticians on making alterations (again!) in the hall to enable the musicians to hear one another better. He is also seeking more direct contact with audiences by instituting "Philharmonic Forums," free 45-minute sessions at Avery Fisher at which the public is invited to ask questions and express their views.

Some of his musical tastes have also become quickly apparent. His choice of Bruckner's Seventh Symphony for his opening concert (and first Teldec recording) was no accident, for it is a work he has played many times and one that was first performed (under Arthur Nikisch) by the Leipzig Gewandhaus in 1885.

Masur also feels a particular affinity for the music of Felix Mendelssohn. One of his most arresting concerts, given with the Philharmonic last summer at the Tilles Festival at C. W. Post College on Long Island, was devoted in toto to the *Midsummer Night's*

Dream music, with actor B. D. Wong reading Shakespearean passages and the orchestra playing the interludes, bridge passages, and charming little odds and ends that other conductors always ignore. Audience and critics found it a ravishing experience.

Mendelssohn is generally credited with turning the Leipzig Gewandhaus Orchestra into the best in Europe in the 1830's and 1840's, and he also founded the Leipzig Conservatory. But that didn't prevent the Nazis from banning his music and removing his statue from the Gewandhaus because of his Jewish origins in the years when Kurt Masur was growing up.

"That doesn't mean we weren't aware of him," Masur said. "My pi-

music director of the Gewandhaus in 1970, the Lord Mayor said to me, 'Since I've read Mendelssohn's letters I've come to realize what a nice guy you are!' In New York I've learned that the Philharmonic musicians also like Mendelssohn's music. And they have as good a feel for it as any European orchestra. I have plans to play quite a lot."

Masur, who is tall and solidly built, with a close-cropped graying beard, cuts an imposing figure on the podium. Offstage he prefers sports jackets and string ties. He has conducted extensively throughout Europe and made a hundred and some recordings. His U.S. debut came with the Cleveland Orchestra in 1974, and his first appearance with the Philharmonic, also as a guest, was in 1981. He has conducted both the Leipzig Gewandhaus and the Israel Philharmonic Orchestras on U.S. tours, and he figures that altogether he has appeared in about ninety American cities.

But his base of operations has always been East Germany. He was born in Brieg, Silesia, in 1927, studied piano, conducting, and composition at the Music College in Leipzig, and went on to hold gradually more important posts at regional opera companies and orchestras — the traditional path to advancement for a middle-European Kapellmeister. In Leipzig he became a popular and influential civic personality, even playing a part in the East German democracy movement in 1989. When it succeeded, he is said to have briefly considered running for the presidency of his country.

Masur will continue to spend part of his year in Leipzig, for he will retain his post at the Gewandhaus. But he has relinquished the position he has held since 1988 as principal guest conductor of the London Philharmonic, and he is eliminating virtually all other guest engagements.

Masur expects that much of his New York repertory will overlap with that of Leipzig. "Look," he said, "there are major points in the repertory that are the same everywhere. Every orchestra plays Beethoven, Brahms, Bruckner, Mahler, Mendelssohn, Dvořák, Tchaikovsky . . . We all try to educate audiences, but there are different tastes all over the world. In Japan, Bach and Beethoven are at the center. In England, audiences like cer-

Recent Recordings by Masur

Beethoven: Symphonies Nos. 1 and 5.

Leipzig Gewandhaus Orchestra. PHILIPS 426 782-2.

Bruckner: Symphony No. 7.

New York Philharmonic. TELDEC 73243-2.

Dvořák: Symphony No. 9 ("From the New World"); Slavonic Dances Nos. 6, 8, and 10.

New York Philharmonic. TELDEC 73244-2.

Schubert: Symphony No. 9.

Leipzig Gewandhaus Orchestra. PHILIPS 426 269-2.

Schumann: Symphonies Nos. 2 and 3 ("Rhenish").

London Philharmonic Orchestra. TELDEC 46446-2.

R. Strauss: Don Quixote; Till Eulenspiegel.

Heinrich Schiff (cello); Leipzig Gewandhaus Orchestra. PHILIPS 426 262-2.

Tchaikovsky: Symphony No. 3 ("Polish"); Festival Coronation March; Copak from "Mazeppa."

Leipzig Gewandhaus Orchestra. TELDEC 46332-2.

ano teacher told me about him and said, 'This is a banned composer.' Some people played Mendelssohn's music in their homes, even though it wasn't allowed in public and none of it was printed during the war. There were other things that went on like that—when Handel's *Judas Maccabeus* was performed, it was under the title *The Commander*."

Masur believes Mendelssohn's music is both misunderstood and underestimated today. "People think of him as nice, gentle, polite," he said. "But he was a fighter, not just a midsummer night's dreamer. He wrote to the Lord Mayor of Leipzig demanding pay increases for the musicians of the Gewandhaus Orchestra, and he got them. I know that when I became

tain things, such as Holst's *The Planets*, that German audiences aren't very enthusiastic about. Sibelius is well received in Russia and the northern countries, but not so much in central Europe and even less in southern Europe—Italy and Spain. Personally, I like Sibelius, but I have never been able to play his music very much because my audiences didn't understand the feelings of a composer from such an isolated part of the world.

"New York I find different from all other cities, American or European. In New York there is every nationality—they seem not to be minorities, but majorities! There is a special pride in New York—here they try to understand all kinds of music, art, languages. It is very interesting for me to meet and play for this variety of people.

"Sometimes I think that differences in tastes aren't as extreme as they used to be. When I played Schnittke's Cello Concerto, I had similar reactions in New York and in Leipzig. Or take Shostakovich—understanding of his music is growing in both places. I really believe that the world is moving closer together."

For Masur, one of the principal divergencies in repertory will always involve contemporary music. "It is necessary to play the contemporary music of the country you are in," he said. "I've been busy studying American scores."

The first fruits of his studies have already begun to show up, for his opening program with the Philharmonic included Aaron Copland's *Old American Songs*, with the baritone Thomas Hampson as soloist, and two short pieces by John Adams, *Tromba Lontana* and *Short Ride in a Fast Machine*. One of his most imaginative programs to date, devoted to several sets of variations by different composers, included the Variations on *America* by Charles Ives, arranged for orchestra by William Schuman. Asked whether he had ever played the Ives piece before, Masur laughed and said: "Played it? I never even heard it before! But it's music that gives you the feeling that Ives had fun writing it, making games with it. I enjoyed playing it."

This May Masur will have the opportunity to play another piece he never heard before, as he is scheduled to preside over the New York pre-

mière of Ellen Taaffe Zwilich's Flute Concerto, with the Philharmonic's own Jeanne Baxtresser as soloist. Later in the month he'll wind up his first season by conducting Benjamin Britten's *War Requiem*.

The Masur-Philharmonic deal with Teldec represents the most extensive recording program the Philharmonic has had in many years. The 1992 releases will include three symphonies—Franck's D Minor, Dvořák's "New World," and Mahler's First—plus the "Variations" record devoted to Brahms and Max Reger in addition to Ives. Subsequent projected repertory includes works by Brahms, Beethoven, Richard Strauss, Tchaikovsky, and others.



"I'm not the type of conductor who wants to be glorious. I want to reach the hearts of people, to touch them."

Perhaps the most unusual aspect of the project is that all the recordings will be made live, at actual Philharmonic concerts in Avery Fisher Hall, rather than in the studio. Economic factors aside, Masur insists that he prefers to do it that way. "You never know in the studio how good an orchestra really is," he explained. "A live recording gives you a much stronger connection to an actual concert. Too often a studio recording is just another example of frustrating perfection—a boring new recording of a symphony."

As for the problem of audience coughs and other extraneous sounds, the orchestra solves that by playing one runthrough without an audience, just in case an emergency splice becomes necessary. Incidentally, while Teldec's exclusivity rights cover the Masur-Philharmonic combination, the conductor and the orchestra are each free to make individual recordings for other labels. Masur will continue his long series of CD's with the Gewandhaus Orchestra for Philips, including a Beethoven symphony cycle of which Nos. 1 and 5 have already been released. Among others in the works are Janáček's *Glagolitic Mass* and overtures by Mendelssohn and Weber.

Masur has been married three times. He and his present wife, the soprano Tomoko Sakurai, have a twelve-year-old son, and he has four other children from his previous marriages. Undoubtedly encouraged by his warm reception in New York, he is looking forward to celebrating two anniversaries in the 1992-1993 season—the 150th of the Philharmonic and the 250th of the Gewandhaus.

"When the offer [to lead the Philharmonic] came from New York," he has said, "I felt that being music director of both these orchestras would be like combining an old marriage with a new love, and that it would work. Being with the Philharmonic makes me fresh again because it's a challenge. I feel that I'm a little bit younger, and that makes me happy." □

Herbert Kupferberg, a senior editor of *Parade* magazine, is the author of *The Book of Classical Music Lists* (Penguin) and other books on music.

Give Your Car
What It's
Screaming For!

SERIES 1™

Introducing the "NEW"
Series 1 amplifiers.
230sd. 260sd. 460sd.

Rockford Fosgate performance at an entry level price. Series 1 amplifiers push the limits of what the creative application of "hot, new technology" can accomplish. To give you clean, efficient power our engineers developed an innovative audio drive circuit (sd) that uses all N-type vertical MOSFETs (V-FETS). So that power stays within safe operating range we added a unique protection circuit called "Real Time Power Protection". It constantly monitors current, voltage, impedance, and heat in real time ...while the music is playing. With 60 to 240 Watts of power the Series 1 amplifiers are 2 Ohm stable and bridgeable mono/stereo simultaneously.

To complete your Series 1 system, our on-going engineering advances have also created Series 1 Loudspeakers, producing outstanding performance built to respond to the power of the new Series 1 amplifiers.

Series 1. Affordable performance when only the audio standards of Rockford Fosgate will do.

For the Rockford Fosgate dealer nearest you, call 602-967-3565 (USA & Canada), International Fax (602) 967-8132.

Rockford Fosgate

A PASSION FOR PERFORMANCE

The Rockford "Diamond R" logo/trademark, Rockford Fosgate, and Series 1 are trademarks of Rockford Corporation, Tempe, Arizona U.S.A.

CIRCLE NO. 33 ON READER SERVICE CARD

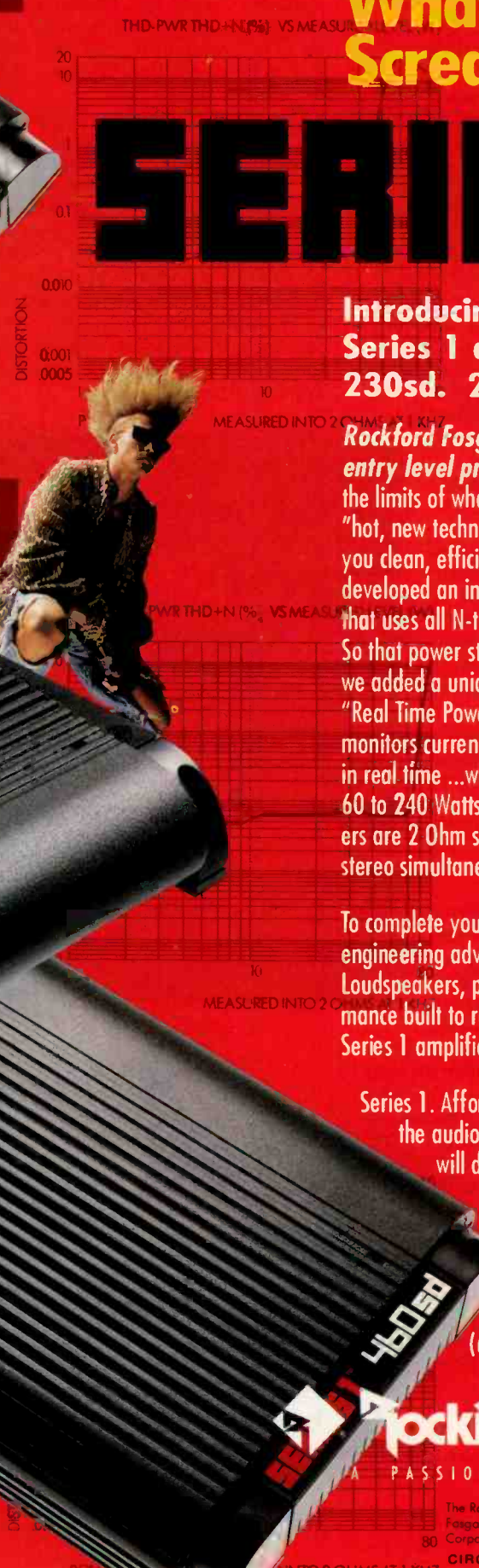
230sd



260sd



460sd



The Powers That Be

Amplifiers—sixth in a series on the practical business of buying audio equipment

MOST audio components deal with very low-level electrical signals. The voltages at a tuner's antenna terminals or at a preamplifier's phono inputs, for instance, are minuscule and must be boosted to what is vaguely called "line level" for their trip through the rest of the system. But even line level is a tiny amount of electricity, usually less than 1 volt.

In the end, however, the signal will be called upon to do some real work. A loudspeaker is a kind of electric motor designed to push air about in a controlled fashion that results in sound—musical sound, one hopes. That takes a considerable amount of effort, and to accomplish it, the line-level signal must be boosted to many times its original strength while still retaining the shape of its waveform. That task falls to an audio amplifier, which uses the output of a preamplifier to modify AC current from your wall outlets to produce a large-scale replica of the original audio signal.

How large that signal has to be varies considerably, depending on your listening habits, your room, and your speakers. But it is output power, measured in watts, that determines an amplifier's suitability for a particular situation; everything else is secondary.

The range of options on the market is huge, extending from amplifiers with a few watts output for use in small spaces to huge components delivering many hundreds of watts for truly Brodingnagian applications. In most cases only a modest amount of pow-



er—from 50 to 100 watts, say—is all that's needed. Remember, however, that doubling the power output results in an increase in volume of just 3 dB, which is not very much audibly. To achieve real gains, massive power increases are necessary. (Doubling the perceived loudness requires a boost of approximately 10 dB, which translates to ten times as much power from the amplifier.) Fortunately, watts are relatively inexpensive, so it's usually wise to err on the side of too much power rather than not enough; if you're worried about your speakers, you can always reduce the power being fed to them by turning down the volume.

All audio systems require amplifiers

of some sort, but these can be packaged in different ways. At the bottom end of the scale are milliwatt amplifiers used to drive headphones; these are routinely built into components like CD players and tape decks and are rarely thought of as real amplifiers. In some cases, amplification is built into speakers, which simplifies amp/speaker matching but may not be appropriate for your particular application. More often the amplifiers are either separate components, called power amplifiers, that do nothing but amplify (and can be hidden away, if space is a problem) or are combined with control functions as integrated amplifiers. By far the most popular format, however,

ILLUSTRATIONS BY MARK FALLS

is the receiver, which includes a tuner for radio reception as well as an amplifier for power and a preamplifier for control.

WHAT MATTERS

Whatever form it may take, the amplifier is critical to any audio system, and any flaws or shortcomings in it will affect all your listening. Fortunately, there is rarely much audible variation in performance between one high-fi-

delity amplifier and the next as long as both are operating within their power limits, so the factors you have to consider are usually relatively few.

- **POWER OUTPUT.** This is the biggie. Amplifiers are about power, so the main concern in choosing one is how much power you get, and at what cost. In practice, "too much power" is almost never a problem. Most modern speakers can safely absorb extremely

high inputs on the brief musical peaks most likely to precipitate them, so you needn't shy away from buying a big amp. Remember, if an audio signal is loafing along at an average level that translates into an amplifier output of a couple of watts (not at all unusual) and a modest 20-dB peak comes along, it will require a hundredfold power increase, or 200 watts.

Most of us can't afford superpower amplifiers. Fortunately, most amps are able to put out levels 2 or 3 dB (sometimes more) above their rated output for very brief periods, so most applications don't really require amplifiers rated in the hundreds of watts. But many factors have to be taken into account in determining the amplifier capacity that will suit your needs: Output requirements increase if you like to crank up the volume, if your room is large or acoustically dead, or if you choose speakers with low sensitivity. For example, to produce the same acoustic output, a speaker with a sensitivity of 87 dB sound-pressure level, or SPL, will require twice as much power as a speaker with 3 dB greater sensitivity (90 dB SPL). In a sense, picking an amplifier is part of the same process as picking the right speakers, as the two components have to work very closely together.

- **MASSAGING THE POWER.** If you do find you require a large power reserve, one way to achieve that is to use two stereo amplifiers, each "bridged," or "strapped," to mono. Not all models permit this, however, so be sure that the one you select does. The owner's manual will tell you how to go about bridging the amp; if it doesn't say anything about the subject, you probably can't do it and will damage the amplifier if you try.

High outputs and difficult speaker loads can strain amplifiers in different ways. If you foresee a problem, or if your dealer suggests you may have unusual requirements, check for such things as thermal-protection circuits (or, in extreme cases, cooling fans) and a high current capacity. The latter is particularly important if you choose low-impedance speakers (rated at 4 ohms or less) or if you plan to run more than one pair of speakers simultaneously from a single stereo amplifier. You can tell a high-current amplifier by its ability to deliver more power as

The Lingo

In some ways an amplifier is the simplest of components: It just takes a small signal and makes a big one of it. But there are various ways of going about this task, and of packaging the result, and these have given rise to some distinctive terms.

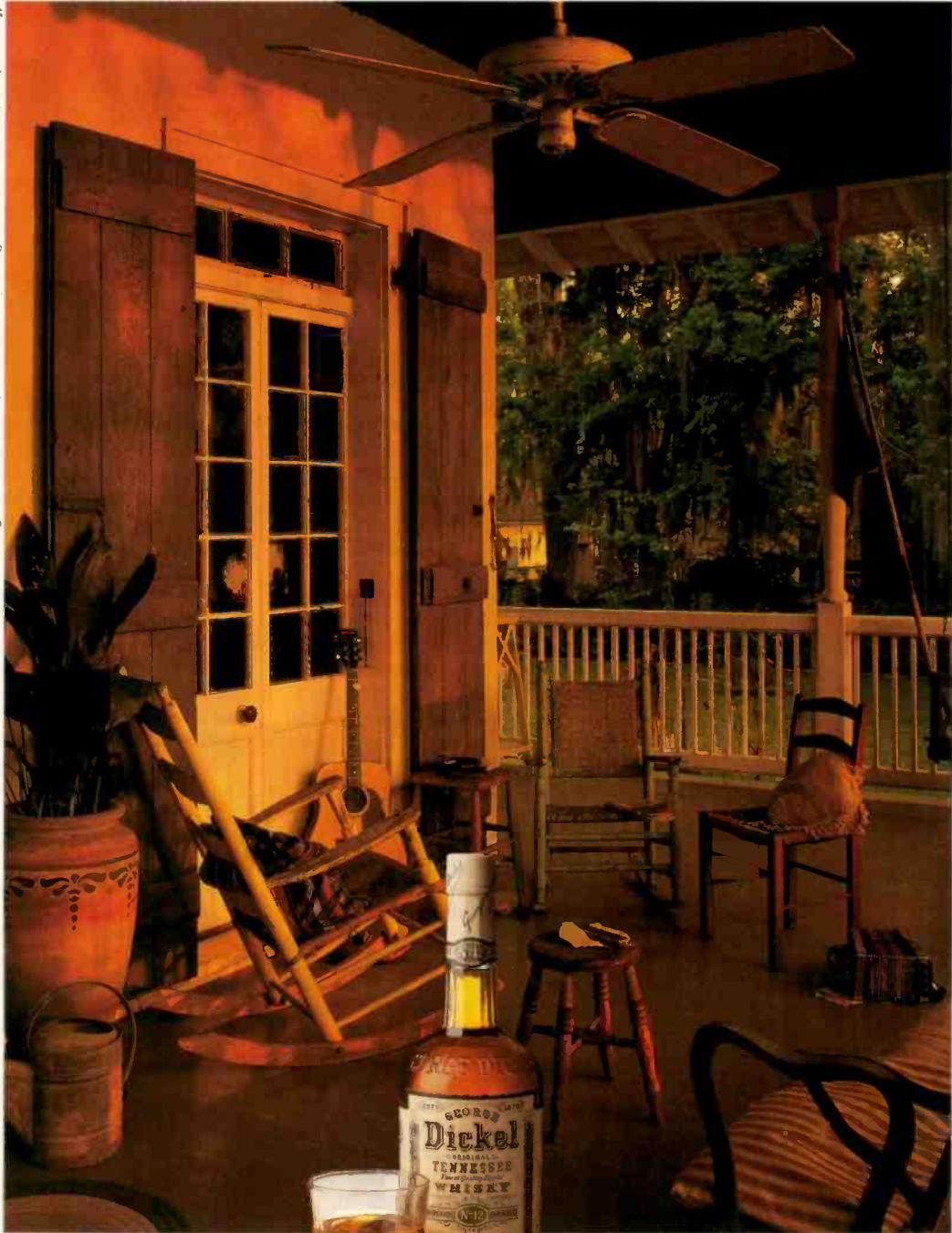
POWER VS. INTEGRATED. The workhorse of the audio system is the power amplifier, which just amplifies. This component is sometimes called a "main amplifier," but that may be a misnomer, as a multichannel system might have several "main" amps. The principal use of this variant term is in connection with the "pre-out/main-in" jacks provided on some integrated amplifiers and receivers, which enable you to insert a signal processor between the output section of the built-in preamplifier and the inputs of the power-amplifier stage. Some power amplifiers include output-level indicators, which are more ornamental than useful, and input-level controls, which can be helpful in matching the amplifier to the rest of the system. Anything more elaborate in the way of controls, and the component becomes an integrated amplifier, which combines the control functions of a preamplifier and the muscle of a power amplifier on a single chassis. (A receiver is the same thing plus an FM—and usually AM—tuner as well.)

FEEDBACK. Amplifier designers use a number of techniques to reduce nonlinearities. Perhaps the most common is "negative feedback," in which a small portion of the output

signal is fed back to the input, out of phase, to cancel distortion. How much feedback is used, or whether the designer has chosen an alternative technique, such as feedforward, is a matter for his own conscience. These days, amplifiers routinely achieve such a high level of performance that the nuts and bolts of equipment design are of little relevance to most consumers.

CLASS. Amplifier circuits can be designed to operate in a number of modes, which involve different trade-offs between efficiency and basic linearity. These operating modes have been categorized as Class A, Class B, Class AB, and so forth, depending on which technique has been chosen. It seems intuitively correct that Class A should be the best, and many hybrid designs have been given names to imply that they use some form of Class A design. But traditional Class A amplifiers are large, hot, expensive, and usually deficient in output power. Practically all of today's hi-fi amplifiers use some form of Class AB operation, and they almost always perform flawlessly from a sonic point of view. The only other mode that might be worth consideration eventually is one that has been dubbed Class D, which indicates that it uses a form of digital amplification. There are many practical difficulties to the design of Class D amplifiers, which is why you won't find any in stores just yet, but when perfected, they will offer a unique combination of high linearity and extremely high efficiency.

© 1991 George A. Dickel & Co., Tallahoma, TN. George Dickel® - 45% Alc/Vol (90 Proof)



*Intermission at the Couquil Cottage Sunday Concert, "No ticket scalping, please,"
Madisonville, LA, and the smooth, mellow taste of George Dickel No. 12.
Ain't Nothin' Better.*

GEORGE DICKEL NO. 12



Amplifiers are about power, so the main concern in choosing one is how much power you get, and at what cost.

the load impedance is reduced (more into 4 ohms than into 8 ohms and, usually, more into 2 ohms than into 4 ohms).

- **INPUTS AND CONTROLS.** A pure power amplifier is likely to have only a single set of inputs and, perhaps, a pair of level controls, which are not essential but can be useful for matching the amplifier to the rest of the system in some circumstances. Occasionally a power amplifier will provide switching for multiple speaker pairs or a headphone output, but these features are found primarily on integrated amps and receivers. If you choose an integrated amplifier or receiver, take the same sort of care to make sure it has enough flexibility as you would in choosing a separate pre-amplifier. Such features as video switching, adequate inputs, tape loops, phono preamps, and so forth are as important in integrated components as they are in separates.

Also look for such features as a built-in surround-sound decoder, additional channels of amplification beyond the usual stereo pair, stereo image-enhancement circuits, and so on, as these can extend the flexibility of your system considerably and are usually much cheaper when built into an integrated amplifier or receiver than they are as free-standing components.

WHAT DOESN'T

The basic performance of high-fidelity audio amplifiers—their ability to reproduce audio signals accurately—has reached such a high level that it is seldom possible to make meaningful distinctions among them on that basis. This situation has encouraged manufacturers to develop numerous special performance features and design wrinkles as inducements for you to buy their products instead of their competitors'. Few of these are really significant, however—at least, not in any way that you will hear.

- **EXOTIC CIRCUITS.** There's no real mystery to amplifier design, and the simplest, most traditional techniques often yield the best results—or results as good as anybody else's but at a lower price. (A good rule of thumb is that if a manufacturer gives an amplifier design a *name*, you're likely to pay a premium for it.) In most cases

you can buy an amplifier on the basis of power, operational features, and price and ignore how the thing is wired together.

- **TUBES, ETC.** Ditto for the components inside the box. Expensive amplifiers often boast unusual devices within—toroidal transformers, oddball capacitors, and the like—and these rarely have a negative effect on performance. But any advantages they may provide are usually so subtle that they hardly justify their price. And the ultimate “in” component—the vacuum tube—can be a positive disadvantage. Even tube fans will admit that they tend to be hot, expensive, fragile, and unreliable. Most of the electronics industry abandoned tubes a quarter-century ago, for good reason.

- **SPECIFICATIONS.** Obviously, if there is some massive flaw in an amplifier you have to take that into account, but that's almost never an issue these days. The differences between one amplifier's electrical performance and another's, although easily measurable, are almost always inaudible. Even that minority of audiophiles who claim to hear variations routinely from one amp to the next have to work *very* hard to do so, and their claims tend to evaporate under close scrutiny.

- **BELLS AND WHISTLES.** The operating features of an integrated amplifier are important, and level controls can be convenient, even on a power amp. Nothing else is really necessary: Illuminated output meters and glowing status lamps serve little purpose other than to add some visual interest to what is in essence a black box.

GET WITH IT

Other than the sorts of things that are required for your audio system as a whole—decent cables, adequate shelving, and so forth—all an amplifier needs is ventilation. Modern amplifiers usually run pretty cool, but there is always some heat buildup, and it has to have some way of escaping or it could damage your equipment. In extreme cases this may mean the addition of a ventilation fan, but mostly it's just a matter of allowing a free flow of air around the amplifier. □

NEXT: *Loudspeakers*

WORLD'S LARGEST CD CATALOG

ALMOST **FREE CD**



New catalog subscribers may choose to receive a **free** Erato CD sampler. The CD features works by Mahler, Strauss, Mozart, Debussy, Grieg, Poulenc, Saint Saens and more. Reg. Price: \$9.99 + S&H. **New Subscribers pay only the \$3.95 S&H charge.** (66449)

CD Samplers from \$4.99

Contemporary Jazz Masters Sampler, Vol. 1 – 16 cuts. Including selections by Miles Davis, Paul Desmond, Art Farmer, Maynard Ferguson, Alan Holdsworth, Tom Scott and more. \$9.99 (43486)

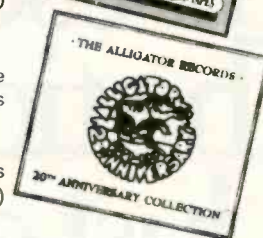
Alligator Records 20th Anniversary Collection – Over 30 historic cuts including songs from Albert Collins, Hound Dog Taylor, Lonnie Brooks and more. 2CDs \$14.99 (55761)

Alligator's Genuine Houserockin' Music – \$6.99/CD
Vol. 1 (43488) Vol. 2 (43489) Vol. 3 (43490) Vol. 4 (44863)

IMP Classics 3-CD Samplers – This collection includes three \$5.00 coupons, which are redeemable by purchasing any IMP Classics title from Bose Express Music. 3CDs \$14.95 (56896)

Dorian Digital Sampler Vol. III – This sequel presents highlights from the On The Banks Of Helicon and more. \$4.99 (51776)

Teldec Classics International – 22 cuts, highlighting Teldec's 1991 releases. \$4.99 (65567)



Any Recording In This Issue \$12⁹⁹

You can order any title reviewed or advertised in this issue, that is regularly priced less than \$17.00 per CD, for our new subscriber low price of \$12.99/CD (only \$7.99 for cassettes), plus \$3.95 shipping and handling **per order**. Just call 1-800-451-BOSE or use the coupon to order. Please include artist, title, format & inventory number, if known.

BOSE
Express Music

Bose Express Music Catalog is like having an enormous record store all to yourself. You can shop for the music you want, when you want it. We carry everything in print in Rock, Jazz, Blues, Pop...you will find it all here in our 240 page, 50,000-title source book.

We carry the complete catalog of all the major labels, plus independents like Sheffield, Delos, MFSL, DMP, Alligator, RYKO, Chandos, Telarc, Chesky, Dorian ...in total, over 1,000 independents. Ordering from us couldn't be easier. Call our 800 number, or send the order form to us by fax or post.

Our 240-page CD, Tape and Video Catalog includes over 50,000 titles. Your first issue includes a refund certificate for \$6.00, plus \$50.00 in additional merchandise credits. There is no purchase obligation or unrequested shipments.

Free Updates

New subscribers will receive 1 Free year of Updates, covering new releases, reviews, recommendations & monthly specials.

1-800-451-BOSE

SUBSCRIPTION/MAIL ORDER FORM

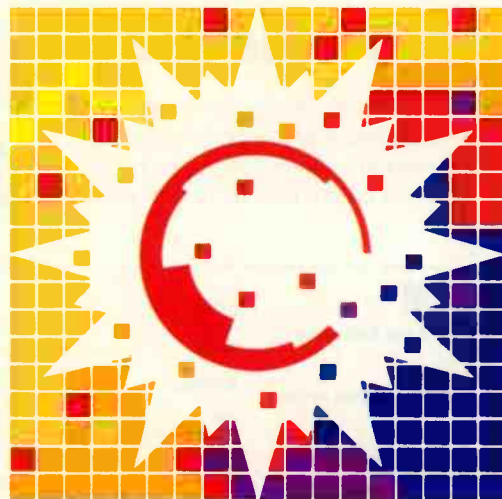
- Send the 240-page Catalog (\$6.00/yr, refundable on the first order from the Catalog).
- Yes. Please include my FREE Erato Sampler. I'm enclosing an extra \$3.95 for Shipping and Handling. (66449)
- Send me the attached list of recordings checked above (include artist, title, format [CD or CA] & number) or I'm enclosing \$12.99/disc + \$3.95 S&H per order (*Music orders Only*)
- Check or Credit Card Visa MC AMEX
(Outside U.S. Credit Card Only, Please)

CC # _____ Exp _____
Name _____
Address _____
City _____ State _____ Zip _____

CALL 1-800-451-BOSE OR MAIL WITH PAYMENT TO:
BOSE EXPRESS MUSIC
The Mountain, Framingham, MA 01701
Fax: 508-875-0604

The dates:
May 30th & 31st.
The place:
McCormick.
The city:
Chicago.
The experience:
Awesome.
The tickets:
Just call.

It's all right here, the biggest, most electrifying Consumer Electronics Show ever. There will be something for everybody this summer in Chicago and it's all because you, the public, are invited for the first time ever. Exhibit after exhibit will touch upon the way you live and work and drive. You'll see and hear "high-tech" redefined. You'll see and hear the meaning of the term "cutting edge." There's everything you could hope for in exciting, new



car electronics. Including the latest in amplifiers, CD players, speakers, equalizers, surround sound, everything that will be music to the ears of the true car audiophile. Since you're a loyal reader of this audio magazine, we've prepared for you a special CES brochure, complete with a schedule of celebrity-led seminars and attractions. Just call 1-800-388-6901 for tickets and prepare to experience the World's Fair of consumer electronics.

**THE INTERNATIONAL SUMMER
CONSUMER ELECTRONICS SHOW® '92**

McCORMICK PLACE ■ CHICAGO ■ MAY 30, 31



Bill Morrissey's Home Truths

THE best songwriters—from Hank Williams to Bob Dylan to Joni Mitchell to Elvis Costello and beyond—are revered for their ability to distill universal truths into personal stories of the events and emotions that shape a life. More to the point, they communicate wisdom through beauty and, not incidentally, economy of language. In doing so, they marry moral passion and entertainment.

New Hampshire folk singer Bill Morrissey knows a lot about good songwriting. But rather than dissect it, he simply sets about doing it in his new album, "Inside." *Man from Out of Town*, for instance, has these Raymond Carveresque lines: "The house burned down a rainy night / And they never did find out why / I just stood alone beneath the silver maple / Trying to keep my cigarettes dry / Waiting for the fireman / I couldn't save a thing / And deep inside my home / Above the roar of the flame / I swore I heard my telephone ring."

For this fourth album, Morrissey, who's forty, has moved away from his previous theme of the importance of work and its place in the psychological make-up. Now he puts more emphasis on examining failed romantic relationships—the sexually charged longing of *Everybody Warned Me*, the loneliness of *Inside* (where Suzanne Vega supplies the conscience and background voice), the solitude of *Casey, Illinois*—and the regret or nostalgia that accompanies the ghost of memory. Sometimes, he has a bit more to show for it: "Coughing up blood in a Motel 6 / Thinking this time it's for real." He's also expanded his solo acoustic folk guitar sound with delicate back-up instrumentation, at times reminiscent of Dylan's "Desire" album (with Johnny Cunningham replacing Scarlet Rivera on violin).

Yet Morrissey, whose voice sounds like a cross between an old, grizzled, black bluesman and a hip, friendly bullfrog, shines brightest here in his songs of social observation and biog-

raphy, especially *Robert Johnson*, a spooky, hallucinogenic portrait of the troubled blues singer. Framed by producer John Jennings's Eric Clapton-style guitar, the song gets goose-pimpling good in describing Johnson's seduction by Death, who appears to him in the form of a whiskey-toting vagrant: "He said, 'This is my very best / Drink it down / Drink it slow / 'Cause when I call your name again / You just pack up and go.'"

There are bits of whimsy here, some terrific pointed lines (a girl friend calls up John Hinckley and tells him Bill kissed Jodie), and some cryptic narratives. But there is always beauty and freshness, even in a reworked version of the traditional *Hang Me, Oh Hang*

Me, which Morrissey and duet vocalist Greg Brown stir to full pathos. With many more albums like this, Morrissey may find his name added to the lists of important American songwriters. And passionate truth-tellers.

Alanna Nash

BILL MORRISSEY: *Inside*. Bill Morrissey (vocals, guitar); Suzanne Vega, Greg Brown, Ellis Paul (vocals); John Jennings (electric and slide guitar, keyboards); other musicians. *Inside*; *Everybody Warned Me*; *Off-White*; *Gambler's Blues*; *Long Gone*; *Man from out of Town*; *Rite of Spring*; *Robert Johnson*; *Hang Me, Oh Hang Me*; *Chameleon Blues*; *Sister Jo*; *Casey, Illinois*. PHILO © CDPH 1145 (42 min), © CPH 1145, LP PH 1145.



PHOTO: SUSAN WILSON/PHILO



Honest Mozart from Andreas Haefliger

WHILE there was a time when a recorded performance of a single Beethoven string quartet or Brahms symphony could be undertaken, enjoyed, and evaluated on its own, we've become conditioned now to having any such release serve notice of another complete cycle. Andreas Haefliger's new Sony Classical disc of Mozart piano sonatas may indeed be serving such notice, but it would be no less treasurable if it should prove to be as far as this pianist plans to go with this material—and it is a treasure.

Haefliger, the son of the tenor Ernst

Haefliger, neither uses a period instrument nor in any manner attempts to imitate one, but draws upon the resources of the modern piano to deliver bracing and insightful realizations of the Fantasy and Sonata in C Minor, K. 475/457, the Sonata in F Major, K. 332, and the Sonata in B-flat Major, K. 333. His approach is at once unapologetically large-scale and uncontrivedly intimate. It is honest and direct musicmaking, totally free of that "studied simplicity" too often affected by performers of this material, favoring instead great subtlety in dynamics and an unfailing steadiness of pulse that does not put meaningful

limits on flexibility. Personally, I have not enjoyed recorded performances of Mozart sonatas so much since London brought out Andrés Schiff's about a dozen years ago.

Haefliger's approach in the four works here is similar to Schiff's in broad outline. Both are enlivening in the best sense, both are unfailingly tasteful, and both keep the big gestures as well as those of lyric expressiveness within credible dimensions. Haefliger allows himself a somewhat broader expressive range here and there, and occasionally he shows a surer instinct for what works best—as in the final movement of K. 333, which in his hands asserts itself with remarkable spontaneity and conviction. He makes a stunning case for that sonata and K. 332 as truly big works, without allowing their proportions to be distended in the process, and the two great C Minor pieces, which some musicians feel ought *not* to be combined, make superb sense as a unit here.

Sony, for its part, has come through with exceptional sonics, not merely realistic in a general sense but with the piano in ideal perspective for these particular performances.

Richard Freed

MOZART: *Piano Sonatas in F Major (K. 332), B-flat Major (K. 333), and C Minor (K. 457); Fantasy in C Minor (K. 475).* Andreas Haefliger (piano). SONY CLASSICAL © SK 46748 (71 min).



Died Pretty: "Doughboy Hollow"

DOUGHBOY Hollow" from the Australian quintet Died Pretty is a left-field creeper, a gorgeous album whose unassuming grandeur probably dooms it to be lost in the shuffle of a marketplace where more clamorous music rules. But passing it up would be a big mistake, because it contains some of the choicest music yet made in the Nineties. Falling roughly in an electrified folk-rock vein, it's doleful and pretty but surprisingly sturdy beneath the

surface, a flawless album that ranks with the work of R.E.M., Joy Division, and the leading West Coast bands of the late Sixties—it is that assured and powerful. Every note and nuance is there to serve the songs, which stand solidly on their merits without distracting production fakery.

It's the little things that count: the languorous bass lines bubbling under and around songs like *Turn Your Head* and *The Love Song*, the delicate, arpeggiated guitar intros to *Doused* and

Sweetheart, the solid but unobtrusive drumming, the driving piano chords that give *D.C.* and *Godbless* their air of urgency and excitement (how refreshing to hear an acoustic piano in a rock context again!), the passionately tempered melancholy in Ronald S. Peno's voice, recalling the likes of Gene Clark, Ian Curtis, and Marty Balin.

In short, without tricks, mirrors, or trap doors, Died Pretty creates and sustains a bewitching mood—ineluctably sad, but oddly compelling, even

PHOTO: COLBERT ARTISTS/MGMT.



Russian Piano Concertos from Rudy and Janssons



BEGGARS BANQUET

Died Pretty: music without mirrors

hypnotic once you get used to it—through the entire album. The textural subtlety of the arrangements sinks in after a few listenings; all the pieces fit together. Instruments are extremely well integrated into the framework of the songs. The U2-type guitar background in *Godbless*, for instance, is so tightly woven with the vocal that you don't specifically hear it; the atmospheric effect is more subliminal. Up front, meanwhile, surging chords from guitar and piano ground the song in an earthier dimension, and a steady buildup in intensity by the drums carries it to a churning climax.

Choruses, especially those of *Out in the Rain* and *Satisfied*, are so instantly attractive and hummable you'll swear you've heard them before. Occasional tasteful, sparing use of cello and violin reinforces the air of graceful melancholy. Mostly, though, it's just the five band members playing with minimal overdubs and no wasted notes. "Doughboy Hollow" ought to be required listening for all the MTV-addled hordes who dream of forming a band. It's a captivating album made the old-fashioned way: from the songs up, with skill, passion, and soul.

Parke Puterbaugh

DIED PRETTY: *Doughboy Hollow*. Ronald S. Peno (vocals); Brett Myers (guitar); John Hoey (keyboards); Steve Clark (bass); Chris Welsh (drums); other musicians. *Doused*; *D.C.*; *Sweetheart*; *Godbless*; *Satisfied*; *Stop Myself*; *Battle of Stanmore*; *The Love Song*; *Disaster*; *Out in the Rain*; *Turn Your Head*. BEGGARS BANQUET/RCA © 61106-2 (42 min), © 61106-4.

PHOTO RIGHT: S. FOLLOWS/EMI

THE new EMI recording of the two most popular Russian piano concertos, the Tchaikovsky First and the Rachmaninoff Second, represents surefire programming. But it is the topflight performances and the spacious, well-balanced sound that make the CD a winner. Recorded before the disintegration of the U.S.S.R. and the reversion of Leningrad to its original name of St. Petersburg, so it is still the Leningrad Philharmonic in the credits, these performances are so superbly integrated that they suggest chamber music; the soloist Mikhail Rudy, the conductor Mariss Janssons, and the orchestra seem to function as a single organism.

In the Tchaikovsky, Rudy adopts something of the same poetic lyricism as Van Cliburn in his celebrated recording, but there is a shade more brilliance—without, however, edging into display for its own sake. The lyrical episodes of the first movement can be played poetically, but it's not so easy with the nervously agitated main theme that follows the imposing introduction. The slow movement is elegance itself here, both in the songlike portions and in the nimble *scherzando* central section. The finale is wonderfully spirited, with beautifully proportioned pacing and dynamics. It is a pleasure not to hear the "big tune"

overly inflated, but the famous double-octave cadenza still has wallop.

The Rachmaninoff concerto is similarly admirable in pacing, dynamics, and tempo relationships. I prefer a slightly more urgent tempo in the first-movement recapitulation, but tastes differ. The adagio reveals perhaps the most masterly and intense collaboration between the conductor and soloist: Every element fits perfectly, without any loss of vitality or poetic quality. The finale is a triumph of virtuoso musicianship, most vividly in the fugato passages toward the end and the superb phrasing accorded Rachmaninoff's "big tune."

The recorded sound from the orchestra's home auditorium (the Assembly Hall of the Nobles in Tsarist days) is very spacious, even a bit distant, as though heard from the higher reaches of the balcony, but it is effective within its own acoustic frame of reference. All told, I would rate this as the most satisfying digital recording of these two masterworks on one disc.

David Hall

TCHAIKOVSKY: *Piano Concerto No. 1, in B-flat Minor, Op. 23*. **RACHMANINOFF:** *Piano Concerto No. 2, in C Minor, Op. 18*. Mikhail Rudy (piano); Leningrad Philharmonic Orchestra, Mariss Janssons cond. EMI CLASSICS © CDC 54232-2 (71 min).



Pianist Mikhail Rudy: poetry and brilliance

ORIGINAL MASTER RECORDING™

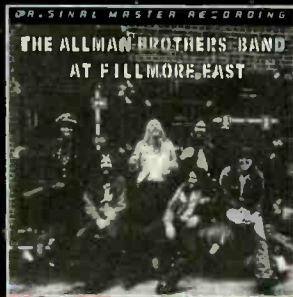
ULTRADISC™



UDCD 556



UDCD 557

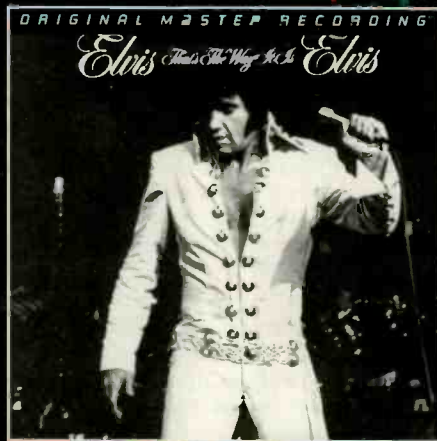


UDCD 2-558



UDCD 559

New Release



UDCD 560

 mobile fidelity
sound lab
a division of MFSL, INC.

For a free catalog, call 800-423-5759

CIRCLE NO. 21 ON READER SERVICE CARD

Discs and tapes

reviewed by Chris Albertson,

Phyl Garland, Ron Givens,

Roy Hemming, Alanna Nash, Parke

Puterbaugh, and Steve Simels

CHET ATKINS AND JERRY REED: *Sneakin' Around*. Chet Atkins (guitars, vocals); Jerry Reed (guitar, bass, percussion, vocals); Mark Knopfler (guitar); Mark O'Connor (fiddle); Suzy Bogguss, Amy Grant (background vocals); other musicians. *Summertime*; *Cajun Stripper*; *Vaudeville Daze*; *Here We Are*; *The Claw*; *First Born*; and five others. COLUMBIA © CK 47873 (47 min), © CT 47873.

Performance: *Not bad*
Recording: *Excellent*

Country guitar legend Chet Atkins has been testing the jazz fusion and New Age waters for the past few years, and Jerry Reed has . . . well, what *has* Jerry Reed been up to? Anyway, Atkins and his duet partner from the Seventies give the old formula one more try, with the added support of Mark Knopfler and Darryl Dybka, in this album mostly of instrumentals. Atkins is more melody oriented here than in his recent albums, usually supplying an electric lead to Reed's gut-guitar rhythm, which serves to ground Atkins's flights of fancy.

While the picking is almost always exemplary—especially in a seductive arrangement of *Summertime* and in a Reed original, *The Claw*—the material occasionally veers off into big-time schmaltz. *Gibson Girl*, for example, an anthropomorphic ode to the guitar, is Atkins's idea of a cute little lyric. And in *Here We Are*, the kind of buddies-for-life tune that would have been a song-and-dance number in vaudeville, the old pals abandon their single-note guitar form and attempt to harmonize. It's not a pretty thing: Atkins's singing is the musical equivalent of defuzzing a sweater, while Reed sounds as if he's got hemorrhoids in his throat. There's also a wretched big-guitar-tremolo number, *Nifty Fifties*, that owes a lot to the Tornados' 1963 hit, *Telstar*. As long as they stick to real music, though, Atkins and Reed still sound like vital musicians, not just some old guys on a nostalgic fling. A.N.

PHOTO: JOHN CASADO/CHARISMA

Explanation of Symbols

- Ⓢ = Compact disc
- Ⓣ = Tape cassette

BELLAMY BROTHERS: *Rollin' Thunder*. Bellamy Brothers (vocals); other musicians. *All in the Name of Love*; *Down to You*; *She Don't Know That She's Perfect*; *The Strength of the Weaker Sex*; *Anyway I Can*; *Rollin' Thunder*; and four others. ATLANTIC © 82232-2 (39 min), © 82232-4.

Performance: *Trying to go legit*
Recording: *Good*

The good news is that the Bellamy Brothers have made an entire album without including one of their trademark trite tunes about some current trend or with exasperating word play, such as *If I Said You Had a Beautiful Body (Would You Hold it Against Me)*. The bad news is that there's little continuity to the album, and most of the offerings are about as deep as a fishbowl.

A couple of the songs—*Anyway I Can*, about a baffling and bewitching female, and *Down to You*—do show a bit of forethought and illuminate relationships that seem more complicated than the ones the Bellamys usually explore. And there's more good news—the Bellamys have opted for a fuller pop sound, demonstrating a fondness for Sixties-style jangling guitars and chugging melodies, though a couple of the riffs sound a tad too familiar. Howard and David Bellamy might as well be Chad and Jeremy in such lightweight pop songs as *She Don't Know That She's Perfect* and *All in the Name of Love*. But they were never really country musicians to start with, and the retro format here leaves plenty of room for their hand-in-glove vocal harmony to hang in the air like good cologne, a fairly pleasurable thing. Whether the Bellamys can sustain their wobbly career without smarmy, yuppie-country hit material is a big question. But at least they're finally beginning to grow up and dump the pretense. A.N.

LARRY BOONE: *One Way to Go*. Larry Boone (vocals); Albert Lee (guitar); Mark O'Connor (fiddle); other musicians. *Rock on the Road*; *I Need a Miracle*; *One Way to Go*; *It Wouldn't Kill Me*; *Keeper of My Heart*; *Standing in the River*; and four others. COLUMBIA © CK 47050 (30 min), © CT 47050.

Performance: *Good instincts*
Recording: *Very good*

Newcomer Larry Boone's debut album all but got lost in the ascension of Garth Brooks, country's resident Wonder Horse, and in the recent flurry of activity by Alan Jackson and Doug Stone. To be sure, Boone's album doesn't pose any threat to those guys, but it deserves better. He looks like Kevin Bacon playing a construction worker, but there's nothing phony about his pipes or his sure-footed handling of his repertory,

which includes jaunty country blues, ballads, country folk, honky-tonk weepers, and a remake of Charley Pride's 1969 hit, *All I Have to Offer You (Is Me)*. Although *Rock on the Road*, a witty, Fifties-style piece of kicking country, and the folky, Pozo Seco Singers-sounding *Keeper of My Heart* should be enough to get Boone the requisite radio play, the album lacks a big, hook-filled winner. Maybe Boone just has too much integrity to score at radio—he seems to value substance over flash. All the same, radio's loss is the country aficionado's gain. A.N.

BUCKWHEAT ZYDECO: *On Track*. Stanley "Buckwheat" Dural, Jr. (vocals, accordion, keyboards); other musicians. *Won't You Let Me Go?*; *Cry to Me*; *Cooking with Pierre*; *The Midnight Spe-*




Stanley "Buckwheat" Dural, Jr.

cial; *On Track*; and five others. CHARISMA © 91822-2 (44 min), © 91822-4.

Performance: *Richly eclectic*
Recording: *Very good*

Whether or not you like zydeco, or even know what it is, you should find something to enjoy in its rich blend of Cajun music, folk, blues, rhythm-and-blues, and even a touch of traditional country music. Reflecting the cultural diversity of its Louisiana birthplace, zydeco has found a niche in pop music through its infectious spirit. One of those who played a major role in its crossover is Stanley "Buckwheat" Dural, Jr., a versatile singer, composer, accordionist, and multi-instrumentalist. He absorbed zydeco at its source, yet he also has an extensive background in rhythm-and-



THE
STEPPING
STONE

APPROACH
TO

INCREDIBLE
SOUND.

Change what you want
when you want with
flexible Phase Linear
components.

Now you don't have to live with the same set-up forever, if you don't want to.

Because Phase Linear® components let you change just about anything you want. Without trashing the Phase Linear components you already own.

You can configure Series 48" midranges and subwoofers as single 4 ohm, single 8 ohm or dual 8 ohm drivers. So you can use a speaker, first, as a 4 ohm driver, then switch it later to 8 ohms as a "stepping stone" up to

a bigger system.

All Phase Linear amplifiers, including our U.S. made MOSFET models, have selectable crossovers built in.

You can even control the dispersion of our multi-mount tweeters by using their 'eyeball' mounts to fire them in any direction. And surface or flush mount them — your choice.

We make all our own speakers right here in the U.S.A. using graphite composite cones for

accurate response and utter reliability. So the sooner you switch to incredible, flexible Phase Linear components, the sooner you can fill your life with exciting changes.

For free information and the name of your nearest dealer call 1-800-28-GRAFITE.

HIGH
PERFORMANCE
CAR
AUDIO

phase linear®

© 1992 Phase Linear is a registered trademark of International Jensen Inc. In Canada, call SCL Products (604) 273-1095 (Vancouver), (416) 890-0298 (Toronto).

blues. It's a great combination, as this latest recording by him will attest.

The most fascinating thing about "On Track" is its tremendous variety, unified by Dural's folksy vocals and cascading accordion, the essential instrument in zydeco. He also wrote most of the songs and arranged all of them in an assortment of styles. *Won't You Let Me Go?* and *Funky Filly* sound like solid r-&-b. *Everything Hurts (Tout Que'qu' Chose Fait Mal)* is a Creole ditty with accordion, guitar, and percussion bounding along at a fast clip. The folk classic *The Midnight Special* puts across its mournful message, and *Hey Joe* is served up as an irresistible blues. Aply assisted by Michael Melchione and Melvin J. Veazie on guitar, Wilbert Miller on harmonica, and others, Dural and his band have stirred up an intoxicating cauldron of pleasing sounds. **P.G.**

CRACKER. Cracker (vocals and instrumentals); Benmont Tench (piano). *Teen Angst; Happy Birthday; Cracker Soul; I Saw the Light; St. Cajatan; Mr. Wrong;* and six others. VIRGIN © 91816-2 (51 min), © 91816-4.

Performance: *Woolly*
Recording: *Raw*

I like Cracker a lot, but I think the band, or maybe just lead singer-songwriter David Lowery, is a little too smart for its (or his) own good. This album makes a lot of sense in a sprawling kind of way. When Lowery sings, "What the world needs now are some new words of wisdom, like lah lah lah lah lah lah lah lah lah" (*Teen Angst*), he conveys the ultimate precocious reaction to life—clever enough to know it's screwed up, clever enough to know nothing can be done.

Lowery, formerly of Camper Van Beethoven, knows enough to cut his jaded pretentiousness with a jaundiced sense of humor in wacky little narratives and sarcastic little details. But for all the intelligence behind these songs, there isn't a lot of emotion here. Only *Another Song (Rain)*, a murky story about lost love, really seems to come as much from the heart as from the brain, and even it is coated in layers of protective irony. The music, which moves from electric folk to country-and-blues-flavored rock, is punchy and catchy and snappy enough to keep me interested, but not enough to keep me from concentrating on the guy who's singing. And wishing he didn't think so hard. **R.G.**

MARTIN DELRAY: *Get Rhythm.* Martin Delray (vocals, guitar); Johnny Cash (vocals); other musicians. *Get Rhythm; The Very Thought of You; One in a Row; If the Wind Blows Sand; New Wine; Lillie's White Lies;* and four others. ATLANTIC © 82176-2 (34 min), © 82176-4.

Performance: *New way home*
Recording: *Very good*

Ex-schoolteacher Martin Delray may be a honky-tonking chameleon of the Merle

Haggard—Johnny Cash—Waylon Jennings schools of modern country music, but he's a chameleon who deserves attention for his own hues as well as those he borrows from others. For example, Delray's tender-tough, craggy-silk baritone makes the words of Johnny Cash's jumpy *Get Rhythm*—done here in a souped-up blues version with a knife-wielding guitar moan—sound right in his mouth. But he also knows how to make a lushly romantic ballad like *The Very Thought of You* burrow into your heart.

Delray excels at finding songs like *If the Wind Blows Sand*, about an unlikely love affair, and *Who, What, Where, When, Why, How*, about a cuckolded mate, that say the same old things in imaginative new ways. Most of all, he knows how to make a terrific country debut, handling with authority and aplomb everything from snappy Western-swing to left-field songs about romance. Looks like we'll have to make room for another hitmaker. **A.N.**

DIED PRETTY: *Doughboy Hollow* (see Best of the Month, page 66)

STEVE FORBERT: *The American in Me.* Steve Forbert (vocals, guitar, harmonica); Pete Anderson (electric guitar); other musicians. *Born Too Late; If You're Waiting on Me; Responsibility; When the*

Sun Shines: The American in Me; Baby, Don't; and four others. GEFLEN © GEFD-24459 (34 min), © GEFC-24459.

Performance: *Still practicing*
Recording: *Good*

In "The American in Me," Steve Forbert paints a bleak landscape of life in the Emergency Lane. From the album's opening song, *Born Too Late*, in which he's pursued by the memory of a wife in Cleveland who "hates my guts" and a wooden Indian who laughs at him when he loses his keys, to the closer, *New Working Day*, which lampoons the stress and anonymity of corporate toiling, Forbert sees the world as going to hell in a handbasket. That's a hackneyed phrase, of course, but no more so than one Forbert employs—"Stop an' smell the roses"—in *Responsibility*.

Hailed as a new Dylan in the late Seventies and early Eighties, Forbert petered out without coming near to fulfilling his promise or his hype. In this comeback attempt he seems depressed about it all while demonstrating exactly why things turned out the way they have. His melodies, which lope along on acoustic guitar with harmonica lacing, are hummable and winsome, but his whispery, thin voice is barely able to convey his ideas. Yet his biggest problem is that he really doesn't have much

You May Be A Part Of CD History.



If you bought the world's first home CD player, the Sony model CDP-101, it's possible you own the very first CD player sold in America. To find out, send us your Sony CD player's serial number on the "SONY SEARCH FOR THE FIRST" coupon found on page 77 of this magazine. The oldest Sony CDP-101 we find will earn its owner a new Sony digital masterpiece—our CDP-C77ES (pictured). It's all part of our Sony 10th Anniversary CD Celebration.

This search is going out only through the pages of Audio and Stereo Review. It's our small way of thanking all of you who fell in love early with Sony CD sound.

Employees of Sony, Hachette Magazines, Inc., their agents and consultants are not eligible. © 1992 Sony Corporation of America. All rights reserved. Sony and the Compact Disc 10th Anniversary logo are trademarks of Sony.



SONY

ELECTRO-STUFF

SALE

CHECK CASHIER



**WE'RE PROUD TO SAY GENEVA AUDIO/
VIDEO ACCESSORIES ARE NOT SOLD EVERYWHERE**



It's no surprise that the Geneva brand is only found in better electronics and video stores. • Because Geneva and quality simply go

hand-in-hand. • So if you're looking for ways to get maximum performance from your audio and video gear, look for Geneva accessories. • From our leg-

endary head cleaners, to our remarkable new Performance Series Speaker and Interconnect cables—Geneva is your assurance of a difference

you can see. And hear. • Call 1-800-328-6795 ext. 382 for your nearest Geneva dealer. Or just look for a place where performance counts.

WHERE PERFORMANCE COUNTS

Look for Geneva Audio and Video Accessories at Better Electronic Stores Everywhere.
Audio Products
Cassette head cleaner
Cassette demagnetizer
Cassette system saver

Auto-stop CD cleaner
Manual laser disc cleaner
Turbo disc lens cleaner
DiscWipes
CD storage unit
CD cassette adaptor
Compact disc tote
Record cleaning system

Video Products
VHS video tape path cleaner
VHS camcorder tape path cleaner
Beta tape path cleaner
VHS-C tape path cleaner
8mm tape path cleaner
Video game cleaner

VHS-C adaptor
Video enhancer
Laser disc sleeves
Erasers & Demagnetizers
Cassette tape eraser
Video/audiotape eraser
Tabletop bulk eraser
Head demagnetizer
Head degausser

Professional Products
Audio/video splicing kit
Reel tabs
Alignment tape
Rubber revitalizer
SuperBlast
Splicing block
Lapping paper
Magview developer

Camcorder Products
Full-size bag
Compact bag
Palmcorder bag
Auto on-off camlite
Video tripod
Quick charger/refresher
Battery reconditioner

Performance Series Cable Products
Speaker cable
Source cable
Video cable
Banana plugs
FOR THE NEAREST DEALER CALL 1-800-328-6795 ext. 382.

Geneva™

to say. Writing occasionally with grace, but not much wit, he too often lapses into such meaningless lines as, "live long enough and you're older." And in the album's liveliest tune, the knotty blues *Change in the Weather*, he runs headlong into the writing problem that also dogs *Born Too Late*: The chorus, nifty as it is, isn't supported in any way by the stanzas. It's as if he combined two songs into one without noticing that they were about different subjects. *Rock While I Can Rock*, an all-out raver, and the romantic plea *Baby, Don't* have a certain head-turning appeal, but they're only brief excursions from Forbert's extended plaint: "I don't like this adult responsibility." Or, apparently, the notion that he should make music that's out of the ordinary. A.N.

MARVIN GAYE: *The Last Concert Tour*. Marvin Gaye (vocals); vocal and instrumental accompaniment. *Third World Girl*; *I Heard It Through the Grapevine*; *Come Get to This*; *God Is My Friend*; *What's Going On*; *Ain't Nothing Like the Real Thing*; and seven others. GIANT © 24436-2 (63 min), © 24436-4.

Performance: *Mixed*
Recording: *Lo-fi*

This album was recorded during Marvin Gaye's last concert tour, the summer of 1983. Gaye held his fans over the years and greatly broadened his base after the album "What's Going On" cast him as the soul balladeer of the protest generation. He had a rare charisma that made you eagerly anticipate his next record, and he could mesmerize a live audience with the sensuality he projected.

He comes alive again here, though the performances become riveting only after he has warmed up. In the earlier selections he sings only in snatches and offers more whoops, hollers, and "woo"s than songs. He seems intoxicated with himself, but once he establishes a rapport with the increasingly ecstatic audience, the artist within begins to emerge.

The selections range from his earliest hits, like *Your Precious Love* and *I Heard It Through the Grapevine*, through the most popular excerpts from "What's Going On" to *Sexual Healing*, one of his later hits. The sound quality is not up to current standards, however, since the on-site recording was made using a two-track analog tape deck without noise reduction. But the technical shortcomings are actually less irritating than the truncated manner in which most of the selections are presented. Nonetheless, this album should appeal to those who wish Gaye were still around to produce at least one more record. P.G.

EMMYLOU HARRIS AND THE NASH RAMBLERS: *At the Ryman*. Emmylou Harris and the Nash Ramblers (vocals and instrumentals). *Guitar Town*; *Half as Much*; *Cattle Call*; *Guess Things Happen That Way*; *Hard Times*; *Mansion on the Hill*; *Scotland*; *Montana Cowgirl*; and

eight others. REPRISÉ © 26664-2 (61 min), © 26664-4.

Performance: *A treasure*
Recording: *Very good*

As much as cable TV has contributed to the further decline of civilization, we can at least thank that vaster wasteland for this new Emmylou Harris album. "At the Ryman" is the soundtrack for a TV special recorded last year at the longtime home of the Grand Ole Opry. Harris delivers a winning tour of country music, old and new, from hits by Hank Williams and Stonewall Jackson to more recent winners by Steve Earle and the O'Kanes. Along the way she takes us for a bluegrass sidetrip with three tunes by Bill Monroe, and she goes off the beaten path for songs by Stephen Foster and Bruce Springsteen. From the churchified *Calling My Children Home* to the mildly rocking *Lodi*, Harris always lifts her crystalline soprano with pure feeling, whether the impulse underneath is loneliness, heartbreak, or regret. Clearly, she loves all these songs, and, what's more, she makes us love them, too. R.G.

BILL MORRISSEY: *Inside* (see Best of the Month, page 65)

NUCLEAR VALDEZ: *Dream Another Dream*. Nuclear Valdez (vocals and in-

strumentals); other musicians. *The Will*; (*Share a Little Shelter*; *I Think I Fell*; *Dream Another Dream*; *Aragon*); and five others. EPIC © EK 46968 (40 min), © ET 46968.

Performance: *Busy*
Recording: *Shrill*

"Dream Another Dream" is the sort of overwrought commercial pop that is ultimately soiled by its own calculation and compromise. It came as a shock to find a real drummer credited, because the synthetic rhythm tracks sound more like the work of the Energizer Bunny. It was similarly surprising to discover that Nuclear Valdez is a two-guitar band, because most of the time they're buried beneath characterless electronic treatments. And after being prepared to diss the band for sounding so L.A., I was floored to learn that they're from New York and the album was recorded in Miami. Lesson: In the world of market-oriented pop, what you see isn't necessarily what you get. With their sleekly manufactured songs about the age-old travails of living with and without 'em, Nuclear Valdez is heir apparent to the smarm of the late, gross Ambrosia. If that doesn't convince you to avoid this album, then try this *bon mot* (from *I Think I Fell*): "What's love anyway? It's just a word you wanted me to say." P.P.

Does Your Car Have A Place In CD History?



If you have a Sony CDX-R7 compact disc player in your dash board, you're driving a CD classic! In fact, you could have the very first car stereo CD player sold in America. So get at that serial number and send it in on the "SONY SEARCH FOR THE FIRST" coupon found on page 77 of this magazine. The oldest CDX-R7 will earn its owner the incredible Sony CDX-U8000 (pictured). It's all part of our Sony 10th Anniversary CD Celebration!

This search is going out only through the pages of Audio and Stereo Review. It's our small way of thanking all of you who fell in love early with Sony CD sound.

Employees of Sony, Hearstte Magazines, Inc., their agents and consultants are not eligible. © 1992 Sony Corporation of America. All rights reserved. Sony and the Compact Disc 10th Anniversary logo are trademarks of Sony.



SONY

The Sullivan Years

SIXTIES activists used to claim that "the revolution will not be televised," a comment on TV's pro-establishment bias, but in a way it was. Anyone who caught the Beatles' debut on the *Ed Sullivan Show* knows the rock revolution was born that evening. Clear to the end of the decade and on past Woodstock, Ed Sullivan gave rock-and-roll a forum on his Sunday night variety show. Awkwardly sandwiched in among European circus acts, aging vaudevillians, opera singers, and comedians whose shtick consisted mainly of Sullivan impressions, the rockers nonetheless impressed youthful America like a branding iron. An unlikely midwife, Ed Sullivan helped give birth to the rock counterculture, which in the end, ironically, made his kind of variety show obsolete.

The New York-based TVT label has begun releasing a twenty-five-volume series of CD's and videos taken from master tapes of the Sullivan shows. Four are out already, with big-band and comedy volumes joining the rock discs reviewed here. And though they have their occasional shortcomings—spotty sound and canned music among them—they're important as historical documents and a heck of a lot of fun. "Born to Be Wild—Rock Classics" features the more venturesome, FM-oriented bands. "Happy Together—Sixties Rock" pays tribute to the poppish, Top 40 side of things.

In "Born to Be Wild," the Vanilla Fudge acquires itself nicely with dense, gothic versions of Motown plums (*You Keep Me Hanging On* and *Shotgun*) that grind and churn like Wagner on acid. The crispest performances come from Jefferson Airplane (a vocally stunning *Crown of Creation*) and the Band (a loose-limbed romp through *Up on Cripple Creek* that rivals the album original). Richie Havens and Joe Cocker turn in solid one-song spots as well. But the showstopper is Janis Joplin. Performing with her short-lived Kozmic Blues Band, Joplin rages like a woman possessed in two inspired covers: Eddie

Floyd's soul chestnut *Raise Your Hand* and the Chantels' 1958 hit, *Maybe*. Not so strong are Santana, in a medley that suffers from poor sound quality, and Steppenwolf, in a clunkily spiced-together medley over canned backing tracks, though Sullivan's introduction is worth the price of admission all by itself: "And now, for all you teenagers, here are the long-haired Steppenwolf rock-and-rollers!"

The pop disc is a well-organized affair, with the Turtles, the Lovin' Spoonful, the Grass Roots, and the Association complementing one another. The Turtles shine brightest, giving rich, full-bodied, and full-length versions of three hits, but the Association makes its mark as well with a vocally arresting reading of *Along Comes Mary* that all but reinvents that anthem to altered reality.

Both discs end, appropriately enough, with Topo Gigio asking Ed Sullivan for a kiss goodnight. Ah, what an era that was.

Parke Puterbaugh

THE SULLIVAN YEARS: *Born to Be Wild—Rock Classics*. Vanilla Fudge: *You Keep Me Hanging On*; *Shotgun*. Janis Joplin: *Raise Your Hand*; *Maybe*. Richie Havens: *High Flyin' Bird*. Santana: *Persuasion*. Jefferson Airplane: *Crown of Creation*. Steppenwolf: *Born to Be Wild*; *Magic Carpet Ride*; *It's Never Too Late*. The Band: *Up on Cripple Creek*. Joe Cocker and the Grease Band: *Feelin' Alright*. TVT © 9430-2 (43 min), © 9430-4.

THE SULLIVAN YEARS: *Happy Together—Sixties Rock*. The Turtles: *She'd Rather Be with Me*; *She's My Girl*. The Lovin' Spoonful: *Do You Believe in Magic*; *Daydream*; *Darling Be Home Soon*. The Grass Roots: *I'd Wait a Million Years*; *Midnight Confessions*; *Let's Live for Today*; *Temptation Eyes*. The Association: *Along Comes Mary*; *Never My Love*. The Chambers Brothers: *I Can't Turn You Loose*; *People Get Ready*; *Time Has Come Today*. Paul Revere and the Raiders: *Him or Me (What's It Gonna Be?)*. TVT © 9426-2 (36 min), © 9426-4.



Jefferson Airplane on the *Ed Sullivan Show* circa 1968

TERRI NUNN: *Moment of Truth*. Terri Nunn (vocals); Karl Hyde (guitars, sitar, bass, vocals); Andrew Flashman (keyboards); other musicians. *Confession Time*; *Desire Me*; *Once Upon a Time*; *Moment of Truth*; *Let Me Be the One*; *89 Lines*; and five others. DGC © DGCD-24451 (54 min), © DGCC-24451.

Performance: *Yuck!*

Recording: *Unpleasant*

Terri Nunn's old group, Berlin, was an intermittent entity that slung out audio pornography, some of which (the smutty *Sex . . . I'm a* and *It Doesn't Matter Anymore*) stuck to the proverbial wall. Peripherally identified with the synth-pop side of New Wave, they were really opportunists cutting in on a piece of the action with tacky, heavy-breathing sound effects. "Moment of Truth" finds Nunn on her own, but, sad to report, little has changed. If anything, the music behind her now is even more strident and nondescript. In the title track she's got purring, hot-to-trot pipes capable of arousing prurient thoughts, but the lyrics are so lame ("birth, love, pain, sex, desire," she chants breathlessly) that the song doesn't even get to first base. Lacking stylistic anchors, the album features such absurdities as a harmonica solo stuck in the middle of the chilly techno-funk of *Desire Me* and an inept rap in *89 Rhyme*. As usual, technology and banality combined add up to an appalling mess. P.P.

THE REAL PEOPLE. The Real People (vocals and instrumentals). *Window Pane*; *I Can't Wait*; *For You*; *The Truth*; *Everyday's the Same*; *Wonderful*; *Open Up Your Mind (Let Me In)*; and five others. RELATIVITY © 88561-1080-2 (40 min), © 88561-1080-4.

Performance: *Rich*

Recording: *Good*

There is, it should be noted, no law that bands from Liverpool have to sound like the Beatles, although lately it feels that way. Witness, for example, the Real People, the second really wonderful and fairly Beatlesque band to emerge from that port city, following the La's. Of course, the Real People aren't a carbon copy of the Fab Four, but their irresistible hooks, catchy arrangements, and pretty harmonies do recall a time when rock could be both serious and cute.

The first five songs in the band's debut album overflow with inventiveness. The moods change from melancholy to regret to hope to enthusiasm to joy, and the melodies are as different as they are winning. Following that burst of creative heat, the remaining seven songs seem less than white-hot, but they definitely smolder.

I hesitate to pinpoint the roots of the Real People in Beatles music of the late Sixties, because none of these guys were even born then. But there are important similarities between the two Liverpoolian quartets. There is the same ambiva-

lent perspective on life, disillusionment about how things are mixed with hope about how they might be. And there is the chimy, driving beauty of this guitar-driven music, which never undercuts the seriousness of the songs. Nevertheless, the Real People have also assimilated the influences of a number of other groups, including the Rolling Stones and the Police, while never losing their own sharply etched identity.

The Real People are slightly hippified about what in our life and times is broken and how it can be fixed. To mend a bruised heart, they suggest that you "dream a dream." Social change, they argue, is up to us, meaning that we can make the world a better place for you and me: The Real People are the world, they are the children. But at the same time these guys seek nirvana, they understand that wishing won't always make it so. The quality of thought in their album isn't as convincing, however, as the music. The Real People put *pop* back into rock. Call it pop-and-roll—and stand back when this Fab Four begins to pop out. **R.G.**

THE SPONGETONES: *Oh Yeah!* The Spongetones (vocals and instrumentals). *Not So; Always Carry On; Got Nothing Left to Hide; Oh Yeah!; Infatuation; Are You Gonna, Do You Need to Love Me; Return the Boy;* and seven others. BLACK VINYL © BV 12064-2 (38 min), © BV-12064-4.

Performance: *Yeah, yeah, yeah!*
Recording: *Good*

One of America's best undiscovered bands is the Spongetones, a quartet from North Carolina that plays pure pop for now and then people. Those who grew up in the early Sixties on a daily diet of British Invasion music, especially the Merseybeat variety, will readily identify with the Spongetones, who have mastered the form. But in their four albums they've also taken the classic Brit-pop sound places it hasn't been before, giving it a spiffy update.

Anyone with a yen for melody, harmony, and a good beat will have a ball with the Spongetones' latest release, "Oh Yeah!" It has the richest harmonies yet, with lush background vocals and sharp, close-harmony leads. The fourteen cuts are actually an embarrassment of riches, like a greatest-hits album from the land of ought-to-be. *Infatuation*, for instance, is an achingly gorgeous acoustic number with a touch of sitar on the break. *Good-bye* is an infectious singalong whose surging chords are reminiscent of Freddie and the Dreamers' great *I'm Telling You Now*. *Are You Gonna, Do You Need to Love Me* not only has a wonderfully ungrammatical title but is the sort of instantly engaging tune that would have kept teens on both sides of the Atlantic in thrall back in the golden age of Top 40. The title track is a high-octane rocker allowing the guitarists to trade off hot, Chuck Berry-style licks, and *Brand New*

Start is a pure, high-energy Dave Clark 5 homage right down to the loud, climactic snare-drum rolls. And in *Always Carry On*, under the guise of a love song, the band affirms its camaraderie and commitment to the music that inspired them.

The Spongetones lift the spirits and rekindle some of pop's lost energy without getting mired in nostalgic sentimentality. "Oh Yeah!" is an instant party that will never go out of style. **P.P.**

THEY MIGHT BE GIANTS: *Apollo 18*. They Might Be Giants (vocals and instrumentals); other musicians. *Dig My Grave; I Palindrome I; She's Actual Size; My Evil Twin; Mammal; The Statue Got Me High; Spider; The Guitar; Dinner Bell;* and nine others. ELEKTRA © 61257-2 (43 min), © 61257-4.

Performance: *Dizzying*
Recording: *Good*

Listening to They Might Be Giants is like working a crossword puzzle. The words come at you like clues, propelled by a dizzying calliope of musical styles. One of these guys sings, "I palindrome I," and you try to figure out what that could possibly mean—life is a palindrome that begins and ends with yourself?—and maybe the song begins to take on form and meaning. But maybe that doesn't work at all and the song remains a jumble

of elliptical word play set to a hyperkinetic soundtrack.

My problem with "Apollo 18" is that the ratio of sense to nonsense isn't great enough—half and half by my reckoning. Not that I expect these wacky guys to be literal, or even rational, because the point of They Might Be Giants is to be artfully eccentric. I think *My Evil Twin*, for example, is a terrific song about schizophrenia: "I know he looks like me/Hates work like me/and walks like me/He's even got an evil twin like me." If more of the songs had this kind of focus, I'd be a happy postmodern guy. The title of the album, by the way, is a joke—NASA launched only seventeen Apollo missions. It's perfect, because the album is out of this world. **R.G.**

JODY WATLEY: *Affairs of the Heart*. Jody Watley (vocals); vocal and instrumental accompaniment. *I Want You; Call on Me; I'm the One You Need; Affairs of the Heart; Commitment of Love; It All Begins with You;* and five others. MCA © MCAD-10355 (53 min), © MCAC-10355.

Performance: *Good*
Recording: *Satisfactory*

Jody Watley, immensely popular as a purveyor of instantly forgettable dance music, takes a step forward in this album

Walking Around With A Piece Of CD History?



We're looking for the very first Sony Discman® portable compact disc player sold in America. So if you're holding on to a Sony Model D-5 Discman, send us the serial number on the "SONY SEARCH FOR THE FIRST" coupon found on page 77 of this magazine. The oldest Sony D-5 we find will earn its owner the latest Sony Discman, D-311 (pictured). It's all part of our Sony 10th Anniversary CD Celebration!

This search is going out only through the pages of Audio and Stereo Review. It's our small way of thanking all of you who fell in love early with Sony CD sound.

Employees of Sony, Hachette Magazines, Inc., their agents and consultants are not eligible. ©1992 Sony Corporation of America. All rights reserved. Sony, Discman and the Compact Disc 10th Anniversary logo are trademarks of Sony.



SONY

American Musical Classics

As our century nears its end, the best works of American musical theater of the past seventy years finally seem to be winning wider recognition as musical "classics." Happily, the CD revolution has come along at just the right time to spur fresh recordings of many of these scores, often in their original versions, by casts that mix top operatic and popular performers.

The most interesting new release is the original, 1927 version of George and Ira Gershwin's *Strike Up the Band*, which closed before ever reaching Broadway. The second Elektra Nonesuch release in a restoration project sponsored jointly by the Library of Congress and the late

closed in the spring of 1930, mainly because few regional companies could afford the enormous cast it needed. Some of the songs, however, have endured as standards (*You Do Something to Me*, *You've Got That Thing*) or cabaret specialties (*I'm Unlucky in Love*, *Tale of the Oyster*, and *The Queen of Terre Haute*). In 1987, the show's long-lost original materials were found in a private Manhattan library. The Alliance Française presented the complete restored score in a 1991 concert performance as part of the Porter centennial, and New World recorded that production. The cast includes some of the best young musical-theater talent around today, under Evans Haile's sprightly direction.

ings of *They Say It's Wonderful* and *Moonshine Lullaby*, but in the big, show-stopping numbers she generally overdoes things. Not so Thomas Hampson and the rest of the generally good cast.

Kismet has always been super-kitsch, dating back to nonmusical movie versions in 1920 and 1930 and the Ronald Colman-Marlene Dietrich remake in 1944. The 1953 musical version is closer to European operetta than to Broadway musicals. Its continuing popularity derives from the lush, soaringly romantic music, adapted from themes by Russia's Alexander Borodin, and from the appeal of a dynamic singing actor in the leading role as a beggar-poet straight out of the *Arabian Nights*. Alfred Drake filled that role unforgettably in the original Broadway production. Samuel Ramey in the new Sony Broadway recording does not. He is bland and virtually characterless throughout, and occasionally not quite on pitch. The weakness of his performance is made even more glaring by the zip and sparkle that Julia Migenes brings to the wily Lalume and the appropriately passionate singing of Jerry Hadley and Ruth Ann Swenson as the young lovers. Mandy Patinkin lets go loopily (and hilariously) in the ultra-brief *Zubbediya*, and Paul Gemignani's conducting is alternately spirited and rapturous in all the right places. The recording includes *My Magic Lamp*, which was cut from the original Broadway production, and *Bored*, which was written for the 1955 movie version. Roy Hemming



Julia Migenes and conductor Paul Gemignani: stars of a new *Kismet*

Mrs. Ira Gershwin, and supervised by archivist-producer Tommy Krasker, it turns out to be a genuine musical delight, spiritedly performed by a wonderful cast conducted by John Mauceri. Most theater historians blame the book (a cynical George S. Kaufman satire about war profiteering) for the show's failure, but the ambitious, cleverly book-integrated Gershwin score may have been ahead of its time, too. It includes extended choral passages and sophisticated patter songs but only a few long-lined Gershwin ballads—*The Man I Love* (also sung in the show as *The Girl I Love*) is the only one that managed to survive. An extensively rewritten version that added two enduring ballads, *Soon* and *I've Got a Crush on You*, fared moderately better on Broadway in 1930, and its seven new numbers are performed at the end of the album.

Although *Fifty Million Frenchmen* was Cole Porter's first big Broadway hit, it virtually disappeared after the show

and everyone performs with a zest and tanginess that we don't often get any more in show recordings. Of course, Porter's witty (and sometimes spicy) lyrics and cleverly distinctive melodies give them great material to work with.

EMI's new recording of Irving Berlin's greatest musical, *Annie Get Your Gun*, is rousingly conducted by John McGlinn. It conforms to the 1946 opening-night version—not the revision that Berlin made for Ethel Merman's 1966 Lincoln Center revival (although an appendix does include the exuberant *An Old-Fashioned Wedding* that Berlin wrote for the revival). Regrettably, the recording is undercut by its Annie. Kim Criswell may be better than Betty Hutton was in the movie version, but her big, often shrill voice lacks the warm, empathic character touches that both Merman and Mary Martin brought to their recordings. To be fair, Criswell does rein in her sound for effectively tender read-

STRIKE UP THE BAND (George and Ira Gershwin). Brent Barrett, Rebecca Luker, Jason Graae, Don Chastain, others; orchestra and chorus, John Mauceri cond. ELEKTRA NONESUCH © 79273-2 two CD's (110 min).

FIFTY MILLION FRENCHMEN (Cole Porter). Howard McGillin, Kim Criswell, Jason Graae, Karen Ziemba, Peggy Cass, others; Orchestra New England, Evans Haile cond. NEW WORLD © 80417-2 (53 min).

ANNIE GET YOUR GUN (Irving Berlin). Kim Criswell, Thomas Hampson, Jason Graae, Rebecca Luker, David Garrison, others; Ambrosian Chorus; London Sinfonietta, John McGlinn cond. EMI © CDC 54206-2 (79 min).

KISMET (Robert Wright and George Forrest). Samuel Ramey, Julia Migenes, Jerry Hadley, Ruth Ann Swenson, Mandy Patinkin, Dom DeLuise, others; Ambrosian Singers; Concert Chorale of New York; London Symphony Orchestra, Paul Gemignani cond. SONY BROADWAY © SK 46438 (68 min).

with material of a slightly less ephemeral nature. As in the past, she and André Cymone co-wrote most of the selections, but this time they're somewhat more thoughtful. Songs like *Commitment of Love* are about more than simply having fun. And this is one of those rare occasions when an album's title track is its best song: *Affairs of the Heart* is a hypnotically lovely piece about love and music. Even the dance songs seem to have a bit more meat to them this time, the most captivating being *I'm the One You Need*. Watley may not yet have a distinctive voice or style, but she seems to be developing a healthy respect for craftsmanship. Good move. P.G.

Jazz

JOHN BEASLEY: *Cauldron*. John Beasley (piano, synthesizers); Bob Shepard, Steve Tavaglione (reeds); Dean Parks (guitar); John Patitucci (bass); Ricky Lawson (drums); other musicians. *Run and Hide; Catalina; I'm Outa' Here; Zulu King; Sierra*; and four others. WINDHAM HILL JAZZ © 10134-2 (55 min), © 10134-4.

Performance: *Hackneyed*
Recording: *Good*

From Louisiana-born pianist John Beasley's bio—his grandfather played trombone in Twenties territory bands, his father taught jazz and brought him records by Charlie Parker and Art Blakey, his mother was a band leader—one could reasonably expect him to play music that is well rounded and deeply rooted. But then comes the clincher: "My dad brought home Herbie Hancock's 'Maiden Voyage' and it was all over." Indeed. Beasley's album is wrapped in synthetics and mired in hackneyed New Age noodling. The only positive thing I can say about this kind of formula-ridden music is that it has encouraged many young players to go for the real thing. "Cauldron" is characterless elevator music for the Nineties, and even the occasional decent solo can't take it beyond that. C.A.

SUSANNAH McCORKLE: *I'll Take Romance*. Susannah McCorkle (vocals); instrumental accompaniment. *A Beautiful Friendship; My Foolish Heart; It Never Entered My Mind; I Concentrate on You; That Old Feeling; I Thought About You*; and eight others. CONCORD JAZZ © CCD-4491 (58 min), © CJ-4491.

Performance: *Soft-lights mellow*
Recording: *Ditto*

Whether she's singing a ballad or a lightly swinging upbeat tune, Susannah McCorkle has the kind of voice that conjures up soft lights and romantic surroundings. She's very much in that mood in this topnotch set of fourteen mostly amorous songs by the likes of

Rodgers and Hart, Mercer and Van Heusen, Styne and Kahn, Loesser and McHugh, and a few others. As always, she gets behind the lyrics of each song in a way that few other singers of her generation even try, which makes you forgive her tendency to slip almost too casually into the exact pitch of certain notes (a failing shared with a few more famous jazz-oriented singers). Even an old curmudgeon like me can't help but enthusiastically toast an album as good as this one. R.H.

THE RAYMOND SCOTT PROJECT: *Volume One—Powerhouse*. Raymond Scott (piano); other musicians. *Twilight in Turkey; In an 18th Century Drawing Room; Christmas Night in Harlem; Oil Gusher; Dinner Music for a Pack of Hungry Cannibals*; and twenty others. STASH © ST-CD-543 (69 min).

Performance: *Stomping coconuts*
Recording: *Excellent transfers*

If you are not familiar with Raymond Scott's name, you have certainly heard his music transport rabbits, wolves, and assorted Warner Bros. cartoon creatures across your TV screen on Saturday mornings. And if you've been around long enough, you may also remember him from old radio shows or TV's *Lucky Strike Hit Parade*. In the mid-Thirties,

Scott formed a sextet, but he called it the Raymond Scott Quintette because that was easier on the ear. The group's music was easy on the ear, too. It was neither jazz nor pop, combining both elements along with a rich sprinkling of skillfully crafted novelty sounds. Technically, the Quintette was flawless.

"The Raymond Scott Project" offers radio transcriptions and rehearsal recordings that have been collecting dust in Scott's garage. It's a grab bag of sounds that will delight anyone who appreciates unpretentious musical spoofery. There's a bit of Willie Bryant and Cab Calloway here, and this is clearly where Spike Jones came from, but it's all dastardly clever and zany. Scott never painted himself into a stylistic corner. His groups included such noted jazz players as Bunny Berigan, Babe Russin, Artie Shaw, Jerry Colonna, and bassist Stewart Jackson (who became "Chubby" and went on to jazz fame in the Woody Herman band). In later years Scott also experimented with electronic music, inventing the Electronium, an "instantaneous composing machine," and he even did research for Motown's Berry Gordy. I don't know just what Gordy did with Scott's work, but the possibility that Scott may have had a hand in the Motown Sound is certainly intriguing. C.A.

To Find Out, Don't Wait Another Day.

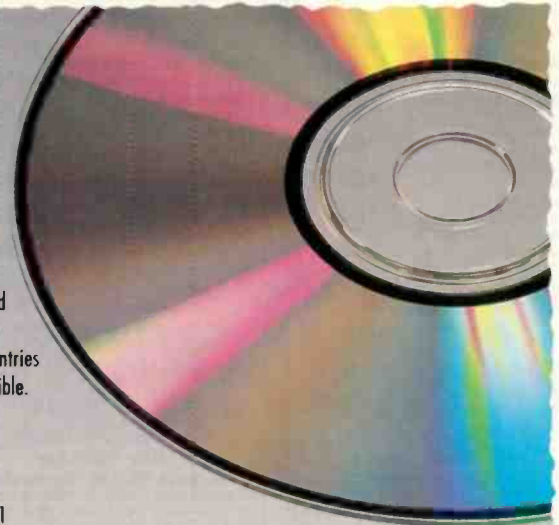
Are you a "SONY SEARCH FOR THE FIRST" winner? If you own a Sony CD classic—CDP-101, CDX-R7, D-5—fill in this coupon now! If your serial number is the earliest issued number we receive, you'll win the very latest Sony home, car or Discman CD player. Model numbers CDP-C77ES, CDX-U800 or D-311.

You'll also be a part of CD history and join in the Sony 10th Anniversary CD Celebration. But please hurry. Only entries received by June 15, 1992 will be eligible.

RETURN TO:
"SONY SEARCH FOR THE FIRST"
DP & M
P.O. BOX 1330, RIDGEWOOD, NJ 07451

Name _____
Age _____ Male _____ Female _____
Address _____
City _____ State _____ Zip _____
Model # _____ Serial # _____
Tel. # _____

Employees of Sony, Hachette Magazines, Inc., their agents and consultants are not eligible. © 1992 Sony Corporation of America. All rights reserved. Sony, Discman and the Compact Disc 10th Anniversary logo are trademarks of Sony. SR



SONY



Super Specials!

Laser Disc Specials

ORION HOME VIDEO

\$26⁹⁵ Laser

The Silence of the Lambs

The Rocketeer (CLV)\$34.95
 Terminator 2 (P/S or LTX)\$26.95
 Apocalypse Now (LTX)\$39.95
 Emmylou Harris Live\$24.95
 City Slickers\$29.95
 Thelma & Louise\$26.95
 Showdown In Little Tokyo\$26.95
 Dances With Wolves (P/S or LTX)\$39.95
 Robin Hood; Prince Of Thieves\$29.95
 Double Impact\$29.95
 Jungle Fever\$34.95
 Forbidden Planet (LTX)\$22.95
 The Mission (LTX)\$34.95
 The Thing From Another World\$42.95
 The Beatles First US Visit\$34.95

VHS Specials
Your Choice **\$16⁹⁵**

Judy Garland On Video!

Everybody Sing
 Listen Darling
 Little Nellie Kelly
 Thoroughbreds Don't Cry
 Presenting Lily Mars
 Listen Darling
 Broadway Melody Of 1938

Music Video Specials

Big Audio Dynamite
 Stevie Ray Vaughn At The El Mocambo
 Pet Shop Boys Videography
 Michael Bolton: Michael Bolton

Personal Stereo Portables

Aiwa HSJ-707 Radio/Cassette Personal Stereo Recorder

•AM/FM digital tuner •Stereo recording with supplied electret condenser microphone •Auto-reverse playback •Dolby B •Includes rechargeable battery & headphones

Our Low Price **\$199⁹⁵** (AIW HSJ707)

JVC CXF-100\$59⁹⁵
 •AM/FM/Cassette, auto-reverse
Panasonic RQ-V185\$69⁹⁵
 •AM/FM/Auto-rev Cassette
Panasonic RQA-170\$89⁹⁵
 •AM/FM/Cassette Recorder, built-in speaker
Sony WMS-XF33\$99⁹⁵
 •AM/FM/Auto-Rev Cassette Sports Walkman
Panasonic RQS-35V\$189⁹⁵
 •AM/FM auto-rev Cassette, remote
Sony M909\$299⁹⁵
 •World's smallest Microcassette Recorder

Video Specials

JVC HR-D910 Hi-Fi Stereo VHS Video Recorder

•4-head system •181-channel cable compatible tuner •On-screen menu •Digital A/V tracking •1-year/8-event programmable timer •Wireless remote control

Our Low Price **\$399⁹⁵** (JVC HRD910)

Craig PT-624A\$159⁹⁵
 •VHS Video Player, 3-speed, remote
Samsung VR-3711\$199⁹⁵
 •VHS Recorder, on-screen, remote
Panasonic PV-2110\$229⁹⁵
 •VHS Video Recorder, on-screen, remote
Samsung VR-8501\$299⁹⁵
 •Hi-Fi Stereo VCR, 4-head
Sony SLV-585CALL
 •VHS Hi-Fi Recorder, 4-head
Pioneer CLD-V720\$699⁹⁵
 •Laser disc Karaoke, sound processor

Video/TV

Panasonic PV-M2021 VHS Recorder/20" Color TV

•Digital quartz tuning •Quick play •On-screen programming •30/60/90 minute sleep timer •Digital audio tracking •1-month/4-event programming •Wireless remote

Our Low Price **\$499⁹⁵** (PAN PVM2021)

Casio TV-6500\$149⁹⁵
 •2.7 Inch LCD Color Television, AC/DC
Sony KV-13TR24CALL
 •13" Trinitron Monitor/Receiver
Samsung VM-3105\$399⁹⁵
 •VHS Recorder/13" Color TV Combo
JVC GR-AX5CALL
 •VHS-C Camcorder, 8x power zoom
Sony CCD-F401CALL
 •8mm Handycam Camcorder, 2-Lux, 8.1 power zoom
Panasonic PV-41CALL
 •VHS Camcorder, digital image stabilizer

Sony Audio/Video Tape

J & R EXCLUSIVE BUY METAL SELECT 80

Sony Metal Select 90 Audio Cassette Tape

•A superior metal tape for critical recording applications •Exclusive Extralloy metal particles provide ultra-high performance •Precision Infinity-Shaped shell for smooth tape transport

Our Low Price **\$19⁹⁵ 10-Pack** (SON MS90)

Sony CDT2-94\$14⁹⁰
 •New High Bias Tape, 94 minute 10-Pack
Sony UX-Pro 90\$16⁹⁰
 •High bias audio cassette 10-Pack
Sony CDT4-94\$17⁹⁰
 •New Metal tape, 94 minute 10-Pack
Sony T-120ES\$27⁹⁰
 •VHS Tape, standard grade 10-Pack
Sony L-750ES\$27⁹⁰
 •Beta tape, standard grade 10-Pack
Sony P6-120\$42⁹⁰
 •8mm Metal Formula Video Tape 10-Pack

Antennas/Remotes

TERK

Terk fam Model AF3000 Amplified AM/FM Stereo Antenna

•Unmatched AM and FM reception •20 X more powerful than passive wire dipoles •Optimum AM & FM performance •High tech design •Affordable price

Our Low Price **\$34⁹⁵** (TRK AF3000)

Memorex AV4\$29⁹⁵
 •Preprogrammed Remote, for 4 units
Parsec ARC\$49⁹⁵
 •AM/FM Electronic Antenna, frequency select
Gemstar VCR+\$59⁹⁵
 •VCR Instant programmer, 1-step
Recoton TV600\$69⁹⁵
 •VHF/UHF/FM Power Wave Antenna
Terk CFR-900\$79⁹⁵
 •Cellular Car Antenna, Invisible
One-For-All 12\$84⁹⁵
 •Preprogrammed Remote for 12 units

Audio/Video Accessories

Millennium Battery Recharger System

•Charges all standard size Millennium batteries in only 3 hours •Red LCD indicates charging on, switching to green when completely charged

Our Low Price **\$19⁹⁵** (MIL CH4C3)

Millennium B4AA-BP\$9⁹⁵
 •AA Rechargeable Batteries, 4-Pack
Discwasher CD\$9⁹⁵
 •CD Radial Cleaner with fluid
Maxell CD340\$12⁹⁵
 •Laser Lens Cleaner-Laser Lens Cleaner
Monster Cable Zapit\$12⁹⁵
 •Remote Control Power Booster
TDK NF-C09\$12⁹⁵
 •Digital Noise Absorber
Audio Source LLC-2\$19⁹⁵
 •CD Laser Lens Cleaner

Headphones

Sony MDR-CD550 Digital Reference Headphones

•Aura-nomic design positions driver in accordance with angle of ear •Circum-aural construction •Cushioned headband •45 ohms •Gold plated stereo unmatch plug

Our Low Price **\$79⁹⁵** (SON MORCD550)

Koss PortaPro\$39⁹⁵
 •Lightweight Headphones, dual plugs
Sony MDR-V6\$69⁹⁵
 •Closed Ear Headphones, digital-monitor
Sennheiser HD-450\$74⁹⁵
 •Open-air, dual plugs
Sony MDR-CD666XR\$89⁹⁵
 •Digital Monitors, titanium driver
AKG K-240DF\$109⁹⁵
 •Studio Monitor Headphones, closed-ear
Beyer DT-990 Pro\$199⁹⁵
 •Lightweight Monitoring Headphones

Car Stereo

Pioneer DEH-880 Removable Car Stereo With CD Player

•AM/FM tuner with 24 station presets •Scan/seek tuning •30 watts x 4 •Compact disc player uses 8 times over-sampling & 1 bit D/A converters •Volume/balance/bass/midrange/treble controls •Carrying case •Remote

Our Low Price **\$449⁹⁵** (PIO DEH880)

Audiovox AV-218\$99⁹⁵
 •Removable Car Stereo, AM/FM/Cassette
JBL GTQ-100\$159⁹⁵
 •4-Channel, 25 watts x 4
Clarion 9772RT\$199⁹⁵
 •AM/FM/Cassette Car Stereo
Panasonic CQD-55\$229⁹⁵
 •AM/FM/Cass Car Stereo, w/CD changer controller
Sony CDX-4040\$299⁹⁵
 •AM/FM/CD Car Stereo, 20 watts/channel
Aiwa CTX8\$399⁹⁵
 •AM/FM/Cassette, removable

Electronic Reference

Psion Series 3 Pocket Size Computer

•World's most powerful pocket-sized computer •Built-in Microsoft Word compatible software •Database •Time & Personal management •Auto dialing •Graphics •Multi tasking •240 x 80 high contrast screen •2 disk drives

Our Low Price **\$419⁹⁵** (PSN SERIES3)

Seiko TR-2500\$39⁹⁵
 •5-Language European Translator
Sharp EL-6260\$54⁹⁵
 •Auto phone dialer, 450/Inames
Casio SF-4300\$79⁹⁵
 •32K Databank, raised keys
Royal TM-18\$79⁹⁵
 •Translator, 6-languages
Franklin LM-6000\$249⁹⁵
 •Speaking Language Master
Sony DD-1EXSPECIAL
 •Discman Electronic Book Player

For a FREE catalogue call toll-free 1-800-221-8180 or Write J&R Music World Department SR0592 59-50 Queens-Midtown Expressway Maspeth, NY 11378

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

TO ORDER BY MAIL:

SEND MONEY ORDER, CERTIFIED OR CASHIER'S CHECK, MASTERCARD, VISA, AMERICAN EXPRESS or DISCOVER CARD (Include Inter-bank No. expiration date and signature.) To: J&R MUSIC WORLD, DEPT. SR0592, 59-50 QUEENS-MIDTOWN EXPRESSWAY, MASPETH, QUEENS, NY 11378. Personal and business checks must clear our Authorization Center before processing. Shipping, Handling & Insurance Charge 5% of Total Order with a \$4.95 minimum. (Candolan Orders Add 15% Shipping, with a \$9.95 minimum charge.) For shipments by air, please double these charges. \$25 MINIMUM ORDER. DO NOT SEND CASH. SORRY, NO C.O.D.'s. NEW YORK RESIDENTS PLEASE ADD SALES TAX. ORDER SUBJECT TO VERIFICATION AND ACCEPTANCE.

ALL MERCHANDISE SHIPPED BRAND NEW, FACTORY FRESH, AND 100% GUARANTEED. Copyright 1992 J&R Music World



CIRCLE NO. 20 ON READER SERVICE CARD



Call Brian today for Low Prices!

WDS

WISCONSIN DISCOUNT STEREO
2417 W. Badger Rd., Madison, WI 53713

1-800-356-9514

Call Mon.-Fri. 8 a.m.-8 p.m. • Sat. 8 a.m.-5:30 p.m. • Closed Sun.

If You Don't See It, Ask Us! We Probably Have It!

Due to manufacturers restrictions, we carry many items that we do not list here! Please call for pricing and product information on our complete inventory of car and home stereo, video and camcorders.

We Sell For Less!

And still give you the best service!

STEREO RECEIVERS



JVC RX-507 Special

New for '92, 80 watts, digital delay, 7 band EQ.

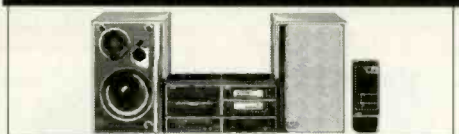
JVC RX-307 Call

New for '92, 80 watts, 40 presets, 0.03% THD.

JVC RX-807 Call

New for '92, 120 watts, Dolby Pro Logic, digital delay
69 key remote with power on/off

MINI COMPONENT SYSTEMS



JVC UX-1 \$439

Micro system, programmable CD, hyper-bass, 30 presets, 2 way bass reflex speakers

Denon G-05 In Stock

36 wts/channel, Tuner with 12 presets, Dolby B, music search

Panasonic SC-CH7 Special

20 watts/channel, CD with 20 track programming, Dolby B/C, tri-chamber bass, 2 way speakers

Yamaha YST-C11 \$679

CD player, dual auto-reverse cassette deck, 4 band EQ, 2 way ported speakers, tuner with 10 presets

CASSETTE DECKS



Aiwa AD-WX777 \$177

Dual well, Dolby B/C, fine bias control, full logic

JVC TDV541TN \$244

3 head, full logic, Dolby B/C/Hx Pro, MPX

JVC TDW307 Call

Titanium finish, twin A/R, full logic, continuous play

Teac V390 CHX \$99

Center mount mechanism, Auto tape selector

CD PLAYERS



Magnavox CDC-552 \$184

5 disc changer, 16 bit, 20 track programming, can change 4 during play!

Teac PDD-700 \$199

5 disc carousel, 18 bit, 8X, multi-function remote

Sherwood CD 1000 \$99

4X, fully programmable!

JVC XLM 407 Call

6 + 1 CD Changer, music calendar, random play, remote

INTRODUCING COMPUTERS!

486SX Complete System!

- 486SX20 MHz
- 4MB Memory
- 100MB hard drive
- 3.5" & 5.25" Floppies
- 1024 x 768 512K video
- 28 VGA color monitor
- Two button mouse
- MS Windows/PFS Window Works



\$1999

386SX/100MB Computer \$999

Panasonic KXP1123 24pin printer Call!

Panasonic KXP1624 24pin wide printer ... Call!

Panasonic KXP4420 Laser printer Call!

SPEAKERS

JBL L100t3

Factory authorized closeout!

Light walnut finish!

\$699/pr



JBL 4800 \$339/pr.

Final closeout! 3 way tower speakers, 10" woofer

Bose AM-3 Series II \$449

Subwoofer system, 100 watts

CAR AUDIO



Clarion 9731 \$187

A/R, Dolby, bass and treble controls, RCA out.

JVC XLG-2000 \$257

CD tuner, random play, seek and scan, 22 watts.

Alphasonik PMA 2050E \$146

50 watts per channel amp, 0.05% THD

PERSONAL ELECTRONICS

Sony D 802 Car Discman

Car cord and cassette adaptor included

\$229



Sony D-66, 3 way power \$176

Pana KXT4200, Cordless answer/phone ... \$169

Whistler 3SE, Compact, detector \$148



or C.O.D. Some items closeout, some limited items

**WDS, 2417 W. Badger Rd.
Madison, WI 53713**

*10-Day Return Policy: Returned items accepted within 10 days of purchase. (Must get prior authorization.) Original condition. 10% restocking fee. Shipping and handling not refundable.

Discs and tapes

reviewed by Robert Ackart,
Richard Freed, David Hall,
George Jellinek, Eric Salzman, and
David Patrick Stearns

BARTÓK: *Concerto for Orchestra*.
ENESCO: *Romanian Rhapsodies No. 1, in A Major, and No. 2, in D Major, Op. 11*.
Royal Scottish Orchestra, Neeme Järvi
cond. CHANDOS © CHAN 8947 (66 min).

Performance: *Colorful*
Recording: *Splendid*

In Bartók's *Concerto for Orchestra*, Neeme Järvi eschews the stern touch of a Mariss Jansons or a Pierre Boulez, opting instead to go all out for color and atmosphere. His pacing is marginally more expansive than theirs except in the second movement, yet he does not prettify or sentimentalize. The magical opening pages set the tone for the whole work. Although the percussion seems a bit loud in the bright ambience of Glasgow's Henry Wood Hall, it shows Järvi's flair for Bartókian wit. Notable in the brilliantly played finale is the highly effective lateral imaging of the instrumental groups in the fugato episodes.

Enesco's dazzling First Romanian Rhapsody and lyrical Second Rhapsody receive exemplary readings—gorgeous in coloration and wonderfully clear and precise in textural balance and clarity. There are, of course, many competitive recordings of these works, but if you want state-of-the-art sound for all three, this Chandos CD will certainly deliver the goods. *D.H.*

BEETHOVEN: *String Quartets, Op. 18, Nos. 1-6*. Vermeer Quartet. TELDEC © 46337-2 three CD's (154 min).

Performance: *Civilized*
Recording: *Excellent*

What a mellowing effect time can have on a musical ensemble. In the mid-1970's, the Vermeer Quartet was a blustery, untamed group led with sweaty earnestness by Shmuel Ashkenasi. He is still the group's focal point, mostly because of the grace and poetry of his phrasing, but there are times in these recordings when the playing seems cool and refined to a fault. Though much of

the group's old fire can be heard in the impassioned slow movement of the Second Quartet and in the dark opening movement of the Fourth Quartet, it's always clear that the main attraction in these performances is the music's internal workings, not an artificially pumped-up drama. They do not present Beethoven the fledgling Romantic so much as Beethoven the contemporary of Haydn.

I occasionally miss the bite in the

tually a secret missive in an illicit love affair. That justifies, I suppose, this rather unexpected coupling of Berg and Verdi. But these are two very different kinds of lyricism. The extreme passions of Berg swirl and scramble in a hailstorm of notes and rhythms, emotions, numereological theories and hidden messages. Nothing like that in Verdi, who, like a good Italian dramatist, tells it to us plain and straight.



Vermeer Quartet: Beethoven without bluster

sforzandos as well as snap and lilt in the rhythm, but not since the Quartetto Italiano's has a recording of Beethoven quartets given such a clear sense of the music's vertical sonorities. All sorts of coloristic effects come out, such as the hairpin texture changes in the Sixth Quartet, revealing the music's powerful *chiaroscuro*. Because the Vermeer Quartet has a lean and focused sound, there's never any danger of its imposing an artificial lushness on the music. The recording, made in the Siemensvilla, Berlin, has a subtle glow that audiophiles will prize. *D.P.S.*

BERG: *Lyric Suite*. **VERDI:** *String Quartet in E Minor*. Vogler Quartet. RCA VICTOR © 60855-2 (51 min).

Performance: *Brilliant*
Recording: *Close-up*

Someone discovered only a few years ago that the Berg *Lyric Suite*, far from being a twelve-tone abstraction, was ac-

Apparently the complexity of Berg's musico-sexual psychopathology appeals to the musicians here; they show an almost devilish glee in sorting it all out. Next to that brilliant performance, the Verdi pales. The wisdom of his piece is that of age and of another, simpler time and place. The Vogler Quartet is too young, too German, too much of our time quite to carry it off. Get this CD for the Berg; the Verdi is a pleasant extra. The close-up, high-level recording is surrounded with a lot of big-room reverb, making everything sound larger than life. *E.S.*

BRAHMS: *Piano Sonata No. 1, in C Major, Op. 1; Four Ballades, Op. 10*. Stefan Vladar (piano). SONY CLASSICAL © SK 47196 (54 min).

Performance: *On the surface*
Recording: *Lifelike*

A well-known pianist remarked recently that the sonatas Opp. 1, 2, and 5 are

Explanation of Symbols

- Ⓢ = Compact disc
- Ⓣ = Tape cassette

RECEIVERS



YAMAHA RX-V850*

- 390 Watt 5Channel A/V Receiver
- 40 AM/FM Presets • Remote **\$646**
- Dolby® Pro Logic • Sleep Timer

CARVER HR 732*	376	NAKAMICHI RECEIVER 1*	696
CARVER HR 742*	456	ONKYO TX-904*	276
CARVER HR 772*	596	ONKYO TX-906*	366
DENON DRA-435R*	276	ONKYO TX-SV70PRO*	596
DENON DRA-635R*	376	SANSUI RZ9500AV	CALL
DENON DRA-835R*	546	SONY STR-AV570*	176
DENON DRA-1035R*	696	SONY STR-AV770	246
DENON AVR-610*	466	SONY STR-AV970	336
DENON AVR-810*	586	SONY STR-AV1070	436
DENON AVR-1010*	726	SONY STR-AV2070	CALL
JVC RX-705VTN	326	SONY STR-GX47ES*	286
JVC RX-805VTN	396	SONY STR-GX67ES*	516
JVC RX-905VTN	656	TECHNICS SA-GX505	326
NAD 7240PE*	296	TECHNICS SA-GX710	486
NAD 7000*	456	TECHNICS SA-GX910	676
NAD 7100X*	596	YAMAHA RX-550*	316
NAKAMICHI RECEIVER 3*	296	YAMAHA RX-750*	396
NAKAMICHI RECEIVER 2*	496	YAMAHA RX-V1050*	926

TAPE DECKS



SONY TCWR-875

- Double Cassette Deck
- Dolby® B&C, HX Pro NR
- Quick Auto Reverse • Dual Record **\$376**

AIWA ADF-810	286	ONKYO TARW-909*	546
AIWA ADW-X888	296	SANSUI DX-21HXR	CALL
CARVER TDR 1200*	296	SONY TCK-870*	236
DENON DRM-510*	186	SONY TCK-870ES*	466
DENON DRM-710*	316	TEAC V-3000	CALL
DENON DR5-810*	386	TECHNICS RS-TR515	236
DENON DRW-850*	226	YAMAHA KXW-232	246
DENON DRW-850*	376	YAMAHA KXW-332	296
JVC TDW-541TN	236	YAMAHA KXW-952*	546
NAD 6340	316		
NAKAMICHI CASS DECK2*	316	CASIO DA-R100	896
NAKAMICHI CASS DECK1.5*	546	DENON DTR-80P*	696
NAKAMICHI CASS DECK1*	676	SONY DTC-750*	CALL
NAKAMICHI DRAGON*	1946	SONY DTC-75ES*	796
ONKYO TARW-404*	236	SONY TCD-03*	626

SEPARATES



ADCOM GFA-555MKII*

- 200 Watt P/C Power Amplifier
- Low-Negative-Feedback Design
- Torodial Transformer **\$696**

ADCOM GFA-535MKII*	316	CARVER TFM-45*	736
ADCOM GFA-545MKII*	456	DENON TU-660*	256
ADCOM GFA-565*	696	DENON PMA-860*	296
ADCOM GTP-500MKII*	546	NAD 2400THX*	496
ARCAM ALPHA 3	CALL	PARASOUND TDQ-260 II	246
AUDIO LAB 8000A	696	PARASOUND HCA-800	326
CARVER CM-1090*	436	YAMAHA MX-830*	546
CARVER TFM-25*	516	YAMAHA AX-550*	336
CARVER CT-17*	626	YAMAHA TX-550*	266

SURROUND PROCESSORS

AUDIOSOURCE SS-THREE	286	SANSUI AV-7000	CALL
CARVER DPL-33*	336	SHURE HTS-5300*	696
DENON AVP-3020*	726	SONY TAE-1000ESD*	886
LEXICON CP-3*	CALL	SSI SYSTEM 3000	CALL
ONKYO AV-810 PRO*	766	YAMAHA DSP-A1000*	1296

10-DAY MONEY-BACK RETURN POLICY
Returns accepted within 10 days (must be called in for prior authorization). Products must be in original condition. Returns subject to restocking fee, shipping and handling not refundable.

GUARANTEED DELIVERY ON ALL ADVERTISED ITEMS We do our Best to Have Sufficient Inventory on all Advertised Products. Rain Checks Available. Prices are for Mail Order

SPEAKERS



KEF Q-80*

- 2-Way Speaker • 8" Woofer
- 1 1/2" Fluid-Cooled Polymer-Dome Tweeter
- Handles 125 Watts

\$586

ALL PRICES PER PAIR

ACOUSTIC RESEARCH 570	266	INFINITY SM-152*	646
ACOUSTIC RESEARCH M1	186	JBL LX-44	386
ACOUSTIC RESEARCH M5	656	JBL LX-55	CALL
ADVENT BABY II.. TOP RATED!		JBL 2500	136
ADVENT LEGACY I/II TOP RATED!		JBL 2800	266
ADVENT HERITAGE	CALL	JBL 4800	346
ALLISON AL115 Top Rated	326	KEF Q-60*	446
ALLISON AL120 Top Rated	446	KEF Q-90*	766
B. ACOUSTICS HD-5**	126	KEF 102.2*	826
B. ACOUSTICS HD-7**	166	KEF 103.4*	1266
B. ACOUSTICS HD-9**	226	KEF 104.2*	1666
B. ACOUSTICS HD-10**	346	KEF 105.3*	2596
B. ACOUSTICS T-830SII*	396	KEF 107.2*	3996
B. ACOUSTICS T-930SII*	576	KLIPSCH KG-1*	CALL
BOSE 101	146	KLIPSCH KG-4.2*	526
BOSE 2.2	156	KLIPSCH KG-5.2	CALL
BOSE ROOMMATE II	299	NHT FULL LINE IN STOCK!!	
BOSE 901 CLASSIC VI	1398	OHM 3X0	1156
BOSE 10.2 SII	846	PINNACLE PMS+	146
CAMBER 1.6	496	PINNACLE PN-60	226
CELESTION 3-5-7-9-11	CALL	PINNACLE PMS*	296
CELESTION SL-6SI Top Rated!		POLK AUDIO M3*	IN STOCK
DESIGN ACOUSTICS PSOV	96	POLK AUDIO 5JR-SII*	276
INFINITY REFERENCE 1*	136	POLK AUDIO Monitor10 SII*	526
INFINITY REFERENCE 2*	236	POLK AUDIO Monitor12 SII*	696
INFINITY REFERENCE 4*	436	POLK AUDIO RTA8TL*	466
INFINITY REFERENCE 5*	536	POLK AUDIO RTA11TL*	736
INFINITY KAPPA 7*	966	POLK AUDIO RTA15TL*	1046
INFINITY SM-112*	426	WHARFEDALE DIAMOND 3 186	

IN WALL SPEAKERS

ADS C-300IS*	256	INFINITY ERS-800*	376
ADS C-400IS*	376	JBL S3	216
BOSTON ACOUSTICS 350**	226	JBL S4	266
BOSTON ACOUSTICS 360**	256	KEF CR-200*	CALL
BOSTON ACOUSTICS 380**	356	POLKAUDIO AB-800*	356
INFINITY ERS-500*	176	POLKAUDIO AB-700*	266
INFINITY ERS-600*	236	NILES FULL LINE IN STOCK	

3-PIECE SATELLITE SPEAKERS

ATLANTIC TECHNOLOGY PATTERN 100

- Powered Satellite Subwoofer System
- 60 Watt Amps
- Magnetic Shielding
- \$296**

A. TECHNOLOGY 200	CALL	JBL PRO III PLUS	496
B. ACOUSTICS SUB SAT 6**	416	POLK AUDIO Monitor 6SII*	296
BOSTON ACOUSTICS T6**	726	POLK AUDIO RM3000*	566
INFINITY INFINITESIMAL FOUR AND MICRO SUBWOOFER*	736		

LASER PLAYERS



PHILIPS CDV-600

- New Bitstream CombiLaser/ CompactDisc • Jog/Shuttle Remote
- \$796**

DENON LA-3000*	696	PIONEER CL-DV820... KARAOKE	
PANASONIC LX-1011J	436	TOSHIBA XR-770A	696
PIONEER CL-DV720... KARAOKE		SONY MDP-333	396

TURNTABLES

ARISTON Q DECK MKII	296	TECHNICS SL-1200MKII	376
DENON DP-47F*	346	TECHNICS SL-1210MKII	396
DUAL CS-431	196	THORENS TD-180 3 SPEED	
NUMARK TT-1400	CALL	THORENS TD-280MKII	276

WE ARE PLEASED TO ACCEPT THESE MAJOR CREDIT CARDS



ASK ABOUT 6TH AVE'S 30 DAY SPEAKER TRIAL!

NEXT DAY SERVICE

OVERNIGHT ANYWHERE IN THE U.S., PUERTO RICO & USVI
* PRODUCTS COME WITH 1-YEAR 6TH AVENUE ELECTRONICS WARRANTY ONLY
** 6TH AVE ELECTRONICS IS NOT AN AUTHORIZED DEALER OF BOSTON ACOUSTICS MERCHANDISE AND THE MANUFACTURER'S WARRANTY DOES NOT APPLY



MAIL ORDER MON THRU SAT 10AM -7

1800 39
FOR INFORMATION

HIGH END HEAD UNITS



NAKAMICHI TUNER DECK 2*

- Removable Cassette Receiver
- 18AM/FM Presets • Seek
- Auto-Reverse • Dolby® B & C **\$466**

BLAUPUNKT MALIBU	196	PIONEER KEH-1700R	166
BLAUPUNKT DAYTONA	CALL	PIONEER KEH-2200	CALL
CLARION 9772RT	216	PIONEER KEH-7200	CALL
DENON DCR7870	CALL	PIONEER KEH-8200	CALL
JVC KS-RG4	226	SHERWOOD XR4164P	176
JVC KS-RG8	296	SONY XR4147*	156
JVC KS-CG10	396	SONY XR5450* DETACH FACE	196
KENWOOD KRC-440*	246	SONY XR5500*	186
KENWOOD KRC-540*	246	SONY XR7070*	246
KENWOOD KRC-640*	276	SONY XR7180*	296
KENWOOD KRC-830*	336	SONY XR7280*	326
KENWOOD KRC-930*	376	SONY XR-U770*	CALL
NAKAMICHI TD540*	526	SONY XR-U880*	CALL
NAKAMICHI TD560*	686	SONY DTX-10 "DAT"	CALL
NAKAMICHI Tuner Deck1*	636	TOSHIBA TX-550	296

SPEAKERS

BOSTON ACOUSTICS PRO 5.2**

- 2 Way Component Sys
- Handles 130 Watts
- \$256**

ADS 200IS*	216	JBL T06	106
ADS 300S*	266	JBL T616	6" Ave Priced!
ADS 320IS*	376	JBL T300	86
B. ACOUSTICS 797**	156	JBL T803	CALL
B. ACOUSTICS 841**	146	KENWOOD KFC-H0100*	86
B. ACOUSTICS 851**	166	KENWOOD KFC-H0160*	116
B. ACOUSTICS 861**	176	KENWOOD KFC-6992*	126
B. ACOUSTICS PRO 4.2**	246	MB QUART OM215CS*	226
B. ACOUSTICS PRO 6.2**	226	MB QUART OM218CS*	246
B. ACOUSTICS PRO100*	146	MB QUART QM130KX*	166
BAZOOKA FULL LINE		NAKAMICHI SP1010*	136
INFINITY 52-K*	86	PIONEER TS-A6904	66
INFINITY 62-K*	96	POLK AUDIO MM4600*	46
INFINITY 692K*	126	POLK AUDIO MM4620*	86
INFINITY 693K*	166	PYLE KP-6940D	116
INFINITY CS-5*	176	R.FOSGATE SP124	276
JENSEN JXL-693	76	ROUNDSTREAM SS10*	176
JBL 1500GT	CALL	SONY XS-6951*	126

WEE

6th AVE ELECTRONICS
1991 BEST RETAIL MARKETING Dealerscope Magazine

FREE CALLS

PM (FOR ORDERS ONLY)

4-6 AVE

283
CALL 201-467-0100

CAR STEREO

CD PLAYERS



SONY CDX-5180
• CD/Receiver • 24 Presets
• 1 Bit D/A Converter • 8x OS
• Scan• Detachable Faceplate

\$366

CD CHANGERS

CLARION AUDIA 6200	...366	SONY CDX-A15*	...306
DENON DCC-1570*	...376	SONY CDX-A15RF*	...376
JVC XLMG600	...296	SONY CDX-U500*	...456
KENWOOD KDC-401*	...396	SONY XES-C1*	...CALL
NAKAMICHI CDCT101*	...686	PIONEER CDX-M40	...CALL

AMPLIFIERS

SOUNDSTREAM MC245*

• 240 Watt Power Amp
• Active Crossover
• 5 Channels • Bridgeable
• Thermal Overload Prot

\$436



PROCESSORS

ADS PH-15*	...456	R. FOSGATE PUNCH 45HD*	...226
ADS PO-8*	...136	R. FOSGATE PUNCH 75HD*	...316
ADS PO-10*	...316	R. FOSGATE PUNCH 150HD*	...386
ADS PO-20*	...516	SHERWOOD XA11810	...176
ALPHASONIK PMA4030E	...196	SHERWOOD XA12400	...216
CARVER M40501*	...316	SONY XES-M3*	...CALL
KENWOOD KAC-821*	...286	SONY XM-C6000*	...CALL
NAKAMICHI PA-302*	...366	S. STREAM D1001*	...256
NAKAMICHI PA-304*	...366	S. STREAM D2001*	...366
PROTON CA490	...296	S. STREAM MC 140X*	...346

RADARS

ADS 642CSI*	...186	BEL 966W	...226
CLARION 704EQA	...116	BEL 990	...246
KENWOOD KGCB042*	...216	COBRA RD3182	...116
SONY XE-1000*	...186	K-40 FULL LINE IN STOCK	...
SONY XE-8MKII	...246	KAIDEN RD9XL	...76
SONY XES-P1*	...CALL	UNIDEN RD65	...76
TOSHIBA TO-220	...196	WHISTLER SPEC 2SE	...CALL

CD PLAYERS



DENON DCD-2560*

- 16x Oversampling • Random
- 20 Bit D/A Converters • Repeat
- 20 Track Programming • Remote

\$526

ADCOM GCD-575*	...466	NUMARK CD-6020	...DUAL CD
CARVER SDA-450*	...376	ONKYO DX-702*	...186
CARVER SDA-490T*	...526	ONKYO DX-704*	...266
DENON DCD-570*	...186	ONKYO DX-706*	...396
DENON DCD-670*	...226	SONY CDP-491*	...146
DENON DCD-970*	...296	SONY CDP-591*	...176
DENON DCD-1560*	...426	SONY CDP-497*	...CALL
DENON DCD-3560*	...1076	SONY CDP-X111ES*	...256
JVC XLZ-4411T	...166	SONY CDP-X222ES*	...326
JVC XLZ-1050TN	...676	SONY CDP-X555ES*	...696
MAGNAVOX CDB-502	...196	TECHNICS SL-PG300	...136
NAD 5000*	...396	YAMAHA CDX-550*	...226
NAD 5440*	...326	YAMAHA CDX-750*	...286
NAKAMICHI CD PLAYER 4*	...276	YAMAHA CDX-1050*	...526

CD CHANGERS



SONY CDP-C515

- 5 Disc Carousel CD Changer
- 8x Oversampling • Program
- 1 Bit D/A Converter • Remote


\$226

CARVER SDA-350*	...326	ONKYO DXC-606*	...376
CARVER TLM-3600*	...526	ONKYO DXC-909*	...436
DENON DCM-320*	...226	SHERWOOD CDC-3010	...246
DENON DCM-420*	...296	SONY CDP-C325*	...196
DENON DCM-520*	...376	SONY CDP-C525*	...CALL
DENON DCM-777*	...496	SONY CDP-C615*	...286
JVC XLM-405TN	...206	SONY CDP-C715*	...326
JVC XLM-505TN	...236	SONY CDP-C67ES*	...336
JVC XLM-705TN	...316	SONY CDP-C77ES*	...CALL
MAGNAVOX CDC-552	...246	TECHNICS SL-PD607	...196
NAD 5060*	...336	TECHNICS SL-PD807	...226
NAKAMICHI CD PLAYER 3*	...456	YAMAHA CDC-625*	...246
NAKAMICHI CD PLAYER 2*	...626	YAMAHA CDC-715*	...326
ONKYO DXC-206*	...CALL	YAMAHA CDC-815*	...386

PORTABLE CD PLAYERS

AIWA XP-6R	...196	DENON DCP-70*	...206
SONY D-101	...156	DENON DCP-150*	...266
SONY D-202	...166	KENWOOD DCP-52	...CALL
SONY D-303	...226	PANASONIC SLNP1	...136
SONY DT-24	...186	PANASONIC SLPH1	...216
SONY D-802K	...226	PHILIPS AZ-6806	...226
SONY D-555	...276	TECHNICS SL-XP700	...246

HI-END MINI SYSTEMS



AIWA NSX-D9

- 20 AM/FM Presets
- Dolby® B&C
- Dual Auto Reverse Tape Deck • CD

\$696

AIWA Z-59	...376	JVC MX-90	...796
AIWA NSX-810	...CALL	ONKYO PCS-05*	...726
AIWA NSX-D3	...CALL	PANASONIC SCC-H55	...CALL
AIWA NSX-D5	...CALL	PROTON AI-3200	...546
DENON G-05*	...546	SANSUI MCX950AV	...CALL
DENON D-120*	...766	SHARP CDC-500	...596
DENON D-150*	...896	SONY FHB-70CD	...676
DENON D-200*	...1146	SONY MHC-1600	...476
KENWOOD UD-70	...CALL	SONY MHC-2600	...626
KENWOOD UD-90	...CALL	SONY MHC-3600	...746
JVC UX1	...SMALLEST SYSTEM	YAMAHA YSTC11*	...596

TELEVISIONS



TOSHIBA CZ3299K

- 32" FST Super Tube "IDTV"
- On Screen Dig "P-I-P"
- Surround Sound
- Unified Remote

\$1996

HITACHI CT2043B	...326	SONY KV-20EXR20	...426
HITACHI 27MX18	...486	SONY KV-20TS27	...346
HITACHI CT7893B	...586	SONY KV-27EXR25	...696
JVC AV-2081S	...416	SONY KV-27EXR20	...656
JVC AV-2781S	...696	SONY KV-27XBR55	...996
JVC AV-3551S	...1596	SONY KV-32XBR51	...1376
MITSUBISHI CS2010R	...356	SONY KV-32T85A	...1296
MITSUBISHI CS2710RA	...596	TOSHIBA CX2785A	...CALL
MITSUBISHI CS2724R	...696	TOSHIBA CX3568A	...35" TUBE
MITSUBISHI CS3515R	...1696		
MITSUBISHI CS3525R	...1896		
PHILIPS 27P275	...896	TV/VCR COMBOS	
RCA F27230ES	...Top Rated!	MAGNAVOX CRM-202	...596
RCA F35050ST 35"	...1699	PANASONIC PVM-1321	...436
SONY KV-13TR24	...246	PANASONIC PVM-2021	...476
SONY KV-19TS20	...336	QUASAR GV-1213	...486
		SONY VU-2008	...786

MANUFACTURERS USA WARRANTY

PROJECTION TV'S

HITACHI 46UX7B	...2196	MITSUBISHI CS-4507	...2396
MAGNAVOX RM-8341	...1396	MITSUBISHI CS-5007	...2466
MAGNAVOX RM-8550	...CALL	RCA P-52151	...CALL
SHARP VISION XV-101	...\$700 MANUFACTURER'S REBATE		
SHARP VISION XV-120	...\$500 MANUFACTURER'S REBATE		

VCR'S



MITSUBISHI HS-U54

- 4 Head Hi-Fi Stereo VHS
- Integrated Remote • On-Screen Menus • 8 Day/4 Event Timer


\$426

MANUFACTURERS USA WARRANTY

GO-VIDEO GV-201DX	...696	MITSUBISHI HS-U82	...1196
HITACHI VTF-351A	...346	PANASONIC PV-2101	...196
JVC HRD-X40U	...236	PANASONIC PV-4110	...246
JVC HRD-760U	...296	PANASONIC PV-4160	...306
JVC HRD-910U	...376	RCA VR665HF	...396
JVC HRD-940U	...426	SONY SLV-R5UC	...CALL
JVC HRS-4700U	...516	SONY SLV-S85HF	...426
JVC HRS-6700U	...636	SONY SLV-686UC	...466
MITSUBISHI HS-U55	...496	SONY EVS-900 8MM	...1546
MITSUBISHI HS-U65	...736	TOSHIBA SV-F990	...IN STOCK

MANUFACTURERS USA WARRANTY

GAMCORDERS



SONY CCD-TR9

- 4 Lux/Low Light
- 10:1 Zoom • 8mm
- Flying Erase Head

\$656

CANON AI DIGITAL	...1376	RIICOH R-88	...1096
CANON UC-1	...646	SONY CCD-TR7	...646
CANON UCS1	...1076	SONY CCD-TR81	...896
HITACHI VM-E25A	...796	SONY CCD-TR51	...656
JVC GR-AX10U	...636	SONY CCD401	...596
JVC GR-S90U	...S-VHS-C	SONY CCD501	...696
PANASONIC PV41	...796	SONY CCDV801	...1096
PANASONIC PV704	...596	YASHICA KX-77U	...896
PANASONIC PVS770	...1096	YASHICA KDH-170U	...1396

MANUFACTURERS USA WARRANTY

MULTI-SYSTEMS

SONY CCD-TR75E	...876	PAL CAMCORDER	...876
SONY CCD-TR105	...896	PAL CAMCORDER	...896
JVC GRAX-10E	...846	PAL CAMCORDER	...846
PANASONIC NV-M1000	...946	PAL CAMCORDER	...946
SONY KV-1484	...336	14" MULTI SYSTEM TV	...336
HITACHI CMT-2159	...596	21" MULTI SYSTEM TV	...596
PANASONIC AG-W1	...CALL	PAL MULTI SYSTEM VCR	...CALL

6TH AVE ELECTRONICS RETAIL LOCATIONS

NEW YORK

1024 & 1030 6th AVENUE, NY
7 DAYS A WEEK MON-SAT 10-5:30 SUN 11-5
212-391-2777

NEW JERSEY

331 Rt. 4 WEST PARAMUS, NJ
6 DAYS A WEEK MON THRU SAT 10-9
201-489-0666

NEW JERSEY

22 Rt. 22 WEST SPRINGFIELD, NJ
7 DAYS A WEEK MON-SAT 10-9 SUN 11-5
201-467-0100

Not Responsible for Typographical Errors. Ad Represents a Small Percentage of Inventory. Customer Service: Mon-Fri 10AM-6PM CALL 201-467-3905. PRICES VALID THRU 6/1/92.

"even more Brahmsian" in some respects than the composer's later works. Stefan Vladar seems to challenge that notion in the case of the Op. 1 sonata by staying doggedly on the surface of the music. It is not an unattractive surface as he presents it—there is no question about his technical assurance, and the recording itself is exceptionally life-like—but I wonder why he seems so determined to resist any inclination to peek beneath it. In the ballades Vladar seems to have allowed himself a deeper look, and his bracing, straightforward approach suits the music well. But Claudio Arrau on Philips and Emil Gilels and Arturo Benedetti Michelangeli on Deutsche Grammophon have found more poetry in these pieces, and so does Gerhard Oppitz, whose midprice Eurodisc survey of Brahms's piano works includes a fine statement of the Op. 1 sonata. *R.F.*

COPLAND: *El Salón México; Concerto for Clarinet and String Orchestra; Music for the Theatre; Connotations for Orchestra.* Stanley Drucker (clarinet); New York Philharmonic, Leonard Bernstein cond. DEUTSCHE GRAMMOPHON © 431 4672-2 (74 min).

Performance: *Exciting*
Recording: *Very good*

Leonard Bernstein was born to play Copland. Although almost twenty years



Conductor Hugh Wolff

Copland's junior, Bernstein reached an almost equivalent state of patriarchy while managing to keep a lot of his old youthful energy (ironically, the two men died only a few weeks apart in 1990). With great foresight, Deutsche Grammophon was at Avery Fisher Hall in October 1989 and recorded these pieces, like all of Bernstein's late recordings, live in concert. There is a coherence and an excitement in these performances that is most appealing. Even the dreaded *Connotations*—written for the opening of Lincoln Center and apparently Cop-

land's comment on cultural monumentalism (it is as nasty an orchestral piece as any written in this century)—becomes almost listenable. Benny Goodman's elegant Clarinet Concerto gets an especially fine performance by the Philharmonic's long-term and excellent first clarinet, Stanley Drucker. An old standby, *El Salón México*, gets the full treatment, and that quintessential Twenties piece, the wonderful *Music for the Theatre*, has its finest hour. Avery Fisher Hall never sounded better, either. *E.S.*

DVOŘÁK: *Serenade in E Major, Op. 22; Serenade in D Minor, Op. 44.* Saint Paul Chamber Orchestra, Hugh Wolff cond. TELDEC © 46315-2 (55 min).

Performance: *Delectable*
Recording: *Excellent*

At first hearing, this recording seems another suave candidate for the Classical Top 40—pretty music given a pretty performance. But closer listening reveals there's more to Hugh Wolff's readings, and to Dvořák, than that. Dvořák's relaxed, genial lyricism has never sounded so effortless, and it's one of those musical miracles that doesn't fade with each successive hearing. His melodies became more profound and characterful later in his career, but they were never more winning.

At thirty-eight, Wolff does not appear to have found his full personality as a conductor (he's only slightly older than Dvořák was when he wrote these pieces). But there's a wonderful sense of dance and rhythmic snap underneath the music's mellifluousness, and the Saint Paul Chamber Orchestra has rarely performed, or been recorded, more impressively. *D.P.S.*

ELGAR: *The Wand of Youth, Suites I and II, Op. 1a,b; Dream Children, Op. 43; Nursery Suite; Starlight Express, Op. 78, Overture and Finale.* Indianapolis Symphony Orchestra, Raymond Leppard cond. KOSS CLASSICS © KC-1014 (70 min).

Performance: *First-rate*
Recording: *Very good*

This well-filled compact disc includes virtually all of the music Elgar wrote either about or for children, beginning with the two suites from 1907 and 1908 titled *The Wand of Youth*. The thirteen movements were derived from music written in his early teens for a family play, and thanks to his unerring flair for orchestration, they offer an intriguing, if hardly profound, listening experience. The 1902 *Dream Children*, inspired by a Charles Lamb essay, is a gem in its airy tenderness. The *Nursery Suite* was one of Elgar's last works, composed in 1931 on the occasion of the birth of Princess Margaret Rose to the Duke and Duchess of York. Again Elgar drew from his storehouse of juvenilia and refashioned the material into seven movements with a charmingly light hand. The *Starlight Express* music, written for a not very

successful 1916 Christmas play, is for me the least substantial and interesting music on the disc. British-born Raymond Leppard, now music director of the Indianapolis Symphony, has the Elgar style in his bones and elicits elegant playing throughout. The recording itself is absolutely first-class. *D.H.*

ENESCO: *Romanian Rhapsodies Nos. 1 and 2* (see BARTÓK)

HANDEL: *Italian Cantatas* (see Collections—Julianne Baird)

HINDEMITH: *Concerto for Orchestra* (see SCHMIDT)

MAHLER: *Symphony No. 4, in G Major.* Edith Wiens (soprano); Orchestre de la Suisse Romande, Armin Jordan cond. ERATO © 45628-2 (56 min).

Performance: *Something different*
Recording: *Very good*

This is not the kind of Mahler Fourth Symphony most of us are accustomed to. The Franco-Swiss conductor Armin Jordan gives it a decidedly Gallic touch. The remarkable clarity of texture and the flowing line, minus the Viennese lilt, in the first movement are immediately striking. The second movement, with its subtly diabolic solo fiddle (tuned up a whole tone), takes on a chamber-music aspect. An even flow, like that associated with the *Parsifal* Good Friday music, characterizes the superb variations slow movement, but there is no apocalyptic surge in the transcendent E Major climax. The child's vision of heaven evoked in the finale's touching soprano solo comes off well, though I was conscious of Edith Wiens's rapid vibrato.

Erato has achieved beautiful recorded sound in Geneva's Victoria Hall, considerably warmer and more vibrant than in the old London recordings there with Ernest Ansermet. The only blemish is a slight imbalance favoring the horns, most noticeably in the first movement. While this may not be a Mahler Fourth for all tastes, on its own terms it is very well performed. *D.H.*

MOZART: *Sinfonia Concertante in E-flat Major (K. 364); Concertone in C Major (K. 190).* Cho-Liang Lin (violin); Jaime Laredo (viola in K. 364, violin in K. 190); English Chamber Orchestra, Raymond Leppard cond. SONY CLASSICAL © SK 47693 (60 min).

Performance: *Excellent*
Recording: *Handsome*

Cho-Liang Lin's survey of the Mozart violin concertos with Raymond Leppard conducting has been an unfailing source of pleasure since its first installment, and this final one is a true capstone, enhanced by the participation of Jaime Laredo, who has been Lin's performing partner as either violinist or violist on several occasions. A sense of familiar and delighted collaboration illumines

electronic WHOLESALERS

Div. of SAMMAN'S ELECT.

COMPETITIVE PRICING ... CALL NOW FOR YOUR BEST DELIVERED PRICE!

CAR STEREOS

DETACHABLE FACE



- AM/FM CASSETTE High Power, Pullout **\$199**
 - CAR CD CHANGER Remote Mount **\$279**
 - AM/FM CD PLAYER High Power, Pullout, 1 Bit Technology **\$359**
- ABOVE PRICES QUOTED ON TOP NAME BRANDS
- SPEAKER SYSTEMS
 - POWER AMPS OF THE GODS by HIFONICS
 - THOR & ZEUS

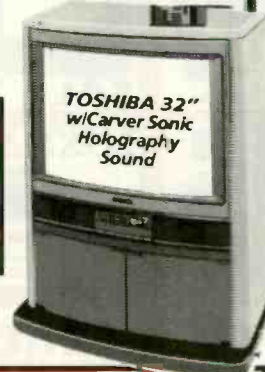


DOLBY® PRO-LOGIC HOME THEATER

DIRECT VIEW TV's

- 30" MTS. TV **\$739**
 - 32" PIP/MTS. STEREO TV **\$999**
 - 35" DIRECT VIEW TV **\$1499**
- LCD 70" PROJECTOR...\$1099**

27" SVHS STEREO \$449



CAMCORDERS

AUTHORIZED SALES CENTER
SONY, CANON, RCA,
JVC, PANASONIC+



- 1992 SPRING MODELS NOW ARRIVING!
- 8mm & VHS w/remote from .. **\$559 UP**



SUPER VHS & BETA SPECIALS of the MONTH

- 4+2 SUPER VHS HI-FI MTS Super Fly Erase/410 Lines/Synchro Edit . . . **\$499**
- TOSHIBA 4 HEAD HI-FI STEREO . . . **\$319**
- BETAMAX **\$299**
- 8mm PLAYER/RECORDER . . . **\$329**

HI-FIRECEIVERS

- DOLBY® PRO LOGIC 100 Watts Per Channel **\$299**
- DOLBY® SURROUND 85 Watts Per Channel Remote . . . **\$199**
- 40 WATTS Per Channel, STEREO **\$149**

ALL FAMOUS BRANDS



VIDEO PRINTERS



DIGITAL SPECIAL EFFECTS Picture in Picture

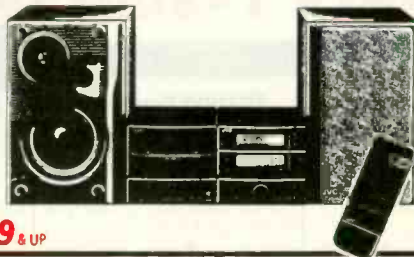
- DIGITAL SPECIAL EFFECTS - MULTI PRINTS 4/9/16 or 25 Different Images on 1 Print
- HIGH QUALITY IMAGE PROCESSING 256 Color Gradations, Nearly 17 Million Colors

ALL BRAND NAMES AVAIL. \$899

COMPACT BOOKSHELF STEREO

MOST BRANDS
ALL the HOTTEST MODELS & BRAND NAMES!

- ACTIVE HYPER-BASS CIRCUIT
- CD PLAYER w/PROGRAM PLAY OF UP TO 20 TRACKS from **\$299 & UP**

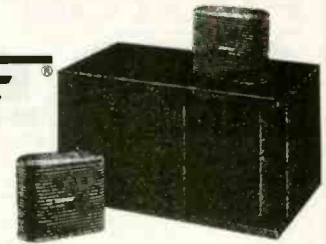


SPEAKER SYSTEMS

BOSE

- LIFELIKE SOUND
- VIRTUAL INVISIBILITY
- ALL MODELS AVAILABLE
- CALL FOR BEST PRICE

THE LOWEST PRICE EVER FOR PATENTED BOSE ACOLSTIMASS SPEAKER TECHNOLOGY!



VIDEO LASER PLAYERS



- VIDEO LASER DISC DIGITAL STEREO **\$299**
- VIDEO DISC DIGITAL STEREO w/Auto Reverse **\$499**
- LASER DISC w/Special Effects & Optical Output **\$769**



PORTABLE & CAR DISC PLAYERS

- PORTABLE CD **\$179**
- SONY® WALKMAN **CALL**



PORTABLE CD COMPACT STEREO

- STARTING AT **\$149**
- CD/DUAL CASSETTE **\$219**

OPEN: M-F 9-9 SAT 9-6 SUN Closed



electronic WHOLESALERS

1166 HAMBURG TPKE.
WAYNE, NJ 07470

CANADA WELCOME (201) 696-6531

WE WILL MATCH OR BEAT ANY LEGITIMATE PRICE

INFORMATION & ORDERS:

1(800) 444-6300



CIRCLE NO. 13 ON READER SERVICE CARD


CONVENIENT FAX # (201) 633-1476

FOR CUSTOMER SERVICE CALL:
(201) 696-6531


We ship within 24 hours. All prices quoted include manufacturer's standard accessories & U.S. Warranty. All units are factory sealed. Shipping & handling extra.

BEFORE YOU BUY...CALL US!

SELECTION, PRICE & EXPERT ADVICE

Come Audition at

The Full Line of B&W Loudspeakers

System 6 • System 7
 Satellite Subwoofer Systems
 "Triad Blows the Bose Away"
NOW ON SALE CALL FOR PRICES




LUXMAN Compact Disc Player

 1/2 Price
5 YEAR LUXMAN WARRANTY
 DZ-92 Remote Compact Disc Player
 Features dual D/A converters • 4X OS • 4-beam laser • 20 selection program play • Metal chassis
 Orig \$280
\$139


ROCK SOLIDS
 Indoor/Outdoor Speaker
 • 2-way 150W power handling system
 • 90dB sensitivity • Vnicco shielded
 • Black, grey, purple, white
 • Mounting brackets included
CALL



NAD MR13
 13" Color TV with stereo 6-VHS Monitor w/remote
 #1 Rated best 13" color TV tested in last 10 years by Video Magazine
SALE
 NAD 5325 Compact Disc Player **\$229**
 NAD 5340 Compact Disc Player **\$299**




POWERED PARTNER 570
 Self powered (35 watts dynamic) 2-way loudspeaker system 5" long throw woofer & 1" liquid cooled tweeter.
Best for center channel CALL



CELESTION
 Performance, Technology & Style
 Celestion 3 SL700 **CALL FOR PRICE**
 Celestion 5 SL65I
 Celestion 7 SL600SI
 Celestion 9 SL125I



LUXMAN Digital Surround Master

5 YEAR LUXMAN WARRANTY
SALE
 G007 Digital Surround Processor
 Digital delay surround processor w/Dolby® Surround w/7 band EO/spectrum analyzer & more **\$289**

LUXMAN Automatic Turntable

5 YEAR LUXMAN WARRANTY
SALE
 P007 Automatic turntable
 Features linear tracking tone arm, belt driven DC motor, auto record sensor, cartridge included. **\$169**

Rockford Fosgate
 A Division of Rockford Corporation
RF 2000 Power Amplifier
 • Powerful, musical, and musically accurate
 • 345 watts into 8 ohms, 565 watts into 4 ohms
 • 16 MOSFET output devices per channel
 • 1150 watts dynamic power into 2 ohms
\$639
 ORIGINALLY \$1198 NOW
RF 200 Power Amplifier
 The RF200 met or surpassed all its specifications in our tests... The bulletproof nature of the RF2000 amplifier was readily apparent.
 Julian Hirsch, Stereo Review
 ORIGINALLY \$699 NOW ONLY **\$279**

Hafler SUPER SALE
 A Division of Rockford Corporation

Hafler IRIS CD Player
 IRIS CD utilizes a low inertia swing arm mechanism controlled by high precision servo motors. This control system offers high accuracy, low friction and long life. The IRIS CD also features Premium Selected 16 bit digital to analog converters, & Orig. quadruple oversampling \$599 digital filter **NOW ONLY \$225**

XL280 MOSFET 145W/ch 400W Mono	\$529
IRIS J-FET design preamp w/remote	\$549
IRIS Tuner FM remote controllable tuner	\$225
SE130 AM/FM tuner Orig \$350 1/2 Price	\$175
SE Phono M/MC phono board	\$79⁹⁵

ATTENTION • ATTENTION
 ACT FAST AT THESE PRICES THEY WON'T LAST LONG QUANTITIES ARE LIMITED

PROTON OVERSTOCK SALE 1-800-542-SAVE

D940 FM Receiver
 40 watt AM/FM receiver. Features Schotz noise reduction for FM, Dynamic Power on Demand with peak power capabilities of 160W/ch into 8 ohms.
 ORIG \$400 **NOW ONLY \$259**



D540 Integrated Amp
 40 watt/ch amplifier. Capable of producing a phenomenal 380 watts/ch at 2 ohms (DPD). Also features a special anti clipping circuit to minimize distortion.
 ORIG \$319 **NOW ONLY \$169**



440 Digital Tuner
 AM/FM digital tuner. Features Schotz noise reduction circuitry, digital synthesis tuning, 12 memory presets, search and scan modes and more.
 ORIG \$269 **NOW ONLY \$169**



SD1000 Processor
 7-channel surround sound processor. Features 8 function remote control, music, cinema, and bypass modes, can be used with as many as seven speakers.
 ORIG \$1000 **NOW ONLY \$329**



D1200 Power Amp
 100W/ch power output @ 8 ohms. Dynamic Power on Demand capable of 100W/ch into 2 ohms. Features wide range power output meters. Factory B stock.
 ORIG \$699 **NOW ONLY \$369**



SONANCE SB30 In/Outdoor SPEAKER

The SB30 Features:
 • Water resistant, sealed box
 • All stainless steel hardware
 • 1" soft dome tweeter
 • 4" polypropylene woofer
 • FR 75 - 20KHz ±3 dB
 • 5 1/2" W x 8 1/2" H x 5 1/2" D
FULL LINE OF SPEAKERS & SWITCHERS AVAILABLE

ADVENT BEST BUYS

ALL IN STOCK

- ADVENT A1028 The Heritage**
Floor standing speaker 2 co-active 8" woofers & 1" ferrofluid tweeter
- ADVENT A1030 The Laureatte**
Floor standing speaker Two 6 1/2" woofers 1/2" ferrofluid tweeter
- ADVENT A1036 The Graduate**
NEW! 1992 8" high excursion woofer, 1/2" ferrofluid tweeter
- ADVENT A1014 The Baby II**
Compact bookshelf speaker 6 1/2" woofer, 8 1/2" ferrofluid tweeter
- ADVENT A1020 The Mini Advent In/Outdoor**
Weather resistant speaker design 5 1/4" woofer, 1/2" tweeter, metal grille

THE NEW VISION SERIES NOW AVAILABLE...CALL

MEADTOWN SHOPPING CENTER
 ROUTE 23 SOUTH
 KINNELON, NJ 07405

SOUND CITY

AMERICAN EXPRESS VISA DISCOVER Master

NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS • 7 DAY DEFECTIVE EXCHANGE (WITH PRIOR AUTHORIZATION)

1 800 542 SAVE

NHT

ALL MODELS IN STOCK CALL FOR PRICES

Brand Name 130W Pro Logic Receiver

• 65W for center ch
• 35W for rear channel
• CD direct playback
• DSP soundfield

Originally \$599 **\$399**
Now On Sale

STEREO HEADPHONES

JVC Sony MDRV6 \$67
AKG K500 **NEW CALL**
Sennheizer HD520 \$19.95
Sterling TE400 \$79
JVC HAD770 \$79
JVC HAD990 \$79
SENNHEISER AKG K280 \$159

AudioSource

Home Theater System
4001 Dolby Pro Logic

System Features:

- SS4 Dolby ProLogic Surround Sound Processor with built-in 24W x 24W center and rear ch amps with remote
- VS-One video shielded center channel full range speaker w/two 4" woofers, 1" tweeter and crossover
- One pair of LS-Ten/A surround sound speakers.

MAKE YOUR RECEIVER INTO A HOME THEATER SYSTEM \$399

EPICURE LOUDSPEAKERS

63% OFF

Model 4
2-way bookshelf speaker. Features 1" tweeter & 8" woofer Orig. \$490 **\$179**

Model 5
2-way bookshelf speaker. Features 1" tweeter & 8" woofer Orig. \$350 **\$129**

BBE Sound Inc. Reveals all the Sound You've Never Heard!

BBE1002 Sonic Maximizer A REAL IMPROVEMENT!

3012 CAR UNIT NOW ONLY \$139

NOW ON SALE **\$189**

a/d/s/ SUPER SALE

R4 Receiver \$569
45Watt receiver w/remote Orig. \$1000 NOW!

L400E Bookshelf speaker \$399
7" woofer & soft dome tweeter

SW4 Subwoofer \$239
Dual voice coil 10" driver in a tuned enclosure

M12 Tower Speaker \$799
The original M12 B stock

M15/90 Tower Speaker **CALL**
3-way 15" woofers Browsing capability

ALSO AVAILABLE:
SAT 5, SAT 6, SAT 7, STAND 1, SWS, SUB10, SUB12, 750IL, L200E, C300is, C400is
CALL FOR PRICES

ALTEC LANSING

B&W

CANTON

SONANCE

niles audio

INWALL SPEAKERS
INFRARED REPEATERS
VOLUME CONTROLS
SPEAKER SELECTORS
SPEAKER SWITCHERS

HUGHES MODEL AK-100

AUDIO PRODUCTS SOUND RETRIEVAL SYSTEM

In a dramatic SRS demonstration at a Hughes Laboratory, the effect blew me away.

Ken Pohlman Stereo Review Sept. 1990

"Perhaps the most effective stereo enhancement system, one that even simulates full surround sound."

Lon Feldman Video Review March 1991

NOW ONLY \$329

PINNACLE

Patented Compact Loudspeakers
PN2+

3/4" liquid cooled dome tweeter
10-40 watts RMS power handling
120W peak • 7 year warranty

\$59 ea

FULL LINE OF PINNACLE LOUDSPEAKERS

Come Audition the NEW
PN50 • PN60 • PN70

Ask about our FREE gift with the purchase of Pinnacle Loudspeakers

Sound City Is Your Car Audio Headquarters

CD Changer \$249

Hand Held Cellular Phone CALL

In-Dash CD Player \$229

Radar Detector \$79

CAR ALARM \$129

CD PLAYERS/CHANGERS • AMPLIFIERS
SPEAKERS • WOOFERS • EQUALIZERS
SIGNAL PROCESSORS • ALARMS

ALL IN STOCK

FACTORY SEALED OVERSTOCK • ONE-OF-A-KIND • DEMO

a/d/s/ M9190 Foot standing tower speaker	\$549	JVC XLM505 Retrol CD changer	\$239	Niles SPS1 Stereo processor	\$74.95
Aiwa ADF810 3-head cassette deck	\$299	Jensen JTX3469 6 x 9 triax car speakers	\$89.95	Panasonic SCCH10 Hi-Fi car stereo with remote	\$659
AKG K270 Top quality stereo headphones	\$159	JVC UX1 Micro system with remote	\$379	PS Audio 100 Delta Power supply	CALL
Audio Source EQ10 10 band graphic analyzer/EO	\$289	Sansui RZ9500 ProLogic AV receiver w/remote	\$489	Sansui TUX701 Power amp	\$299
Audio Source LLC2 CD laser amp	\$24.95	MB Quart 350 3-way floor standing speaker	\$499	Soundcraftsman Control-17 Stereo mixer	\$259
Atlantic Technology 100 Powered satellite subwoofer sys	\$349	MB Quart 650 3-way floor standing speaker	\$699	Signet EP350 Stereo processor	\$38.95
Atlantic Technology 200 ProLogic surround sound system	\$995	Memorex AV8 Programmable remote control	\$69.95	SSI 4000 Stereo processor	\$399
Cerwin Vega 300SE 3-way floor standing speakers	\$499	Memorex WM200 Programmable remote control	\$99.95	Teac X300R Stereo processor	\$899
Denon DCD1560 20 bit LAMDA MAX OS CD player	\$399	Mission 762 2-way floor standing speakers	\$299	Technics SAGX100 Stereo processor	\$169
JVC XLM405 Remote control CD changer	\$199	Monster Cable Interlink and speaker sys	CALL	Terk AF9925 Stereo processor	CALL

DENON
The First Name in Digital Audio

GOS Mini System

- AM/FM stereo receiver
- Compact disc player
- 5-element graphic EQ
- Auto reverse double cassette
- Power rated at 25W/ch

D120 • D150 • D200

DT-400 Table Radio

- AM/FM Hi-Fi stereo radio w/2 additional speakers
- Quartz lock auto timer alarm
- 5 pre-sets for each AM & FM
- Power rated at 25W/ch

Orig \$400 Now 1/2 Price \$199

IN STOCK

FACTORY AUTHORIZED INFORMATION

ONLY authorized dealers offer you the protection of a manufacturers warranty with your purchase: at other dealers, you may have no warranty at all. Authorized dealers stock only components designed for the US, and have the training to help select the right one for you.

201 • 838 • 3444

CUSTOMER SERVICE

201 • 838 • 1180

• RETURNS SUBJECT TO A RESTOCKING FEE • SHIPPING & HANDLING NOT REFUNDABLE • PICS FOR ILLUSTRATION ONLY

both works here—not only on the part of the two soloists, and between them and their conductor, but also, one might say, between all three and the composer. There is brilliance to spare, but it is never allowed to be an end in itself. The shifting moods of the great Sinfonia Concertante are captured fully and uncontrivedly, and the Concertone has never sounded more substantial or more ingratiating. The handsome recording does full justice to the performances. *R.F.*

MOZART: *Piano Sonatas, K. 332, 333, and 457; Fantasy in C Minor, K. 475* (see **Best of the Month**, page 66)

RACHMANINOFF: *Piano Concerto No. 2* (see **Best of the Month**, page 67)

RIMSKY-KORSAKOV: *The Golden Cockerel*. Artur Eizen (bass), King Dodon; Elena Brileva (soprano), Queen of Shemakha; Oleg Biktimirov (tenor), the Astrologer; others. Chorus and Orchestra of the Bolshoi Theatre, Evgeny Svetlanov cond. MCA CLASSICS © AED2-10391 two CD's (116 min).

Performance: *Engaging*
Recording: *Good*

Like Puccini's *Turandot*, Rimsky-Korsakov's *The Golden Cockerel*, based on a satiric fairy tale of Alexander Pushkin, mixes brutality with gentle fantasy, violence with romance. The story tells of King Dodon, old and weary of monarchy, who accepts from an astrologer a golden cockerel that will crow in time of danger. For this rather unusual security alarm, the king promises the astrologer to grant a wish. Dodon later marries the entrancing Queen of Shemakha, only to be challenged by the astrologer, who demands the queen as his due. Upon Dodon's refusal to forfeit his royal bride, he is pecked on the head by the cockerel and dies. Thus the opera ends, save for a brief epilogue offered by the astrologer, who suggests that the entire affair has been a figment of fancy and that he and the queen are the only real people in it.

Certain sections of the score are generally known: the introduction, Dodon's Dance, the Wedding March, and the celebrated Hymn to the Sun, a difficult and highly chromatic coloratura aria. Throughout the score are strains of delightful melody, but its chief interest is Rimsky's vivid orchestral colorations.

The cast in this 1988 Russian recording (only recently released here) is a good one. As Dodon, Artur Eizen employs his strong bass effectively—the siesta scene and his colloquy with the queen are especially engaging—and manages, despite the language barrier, to limn the king's personality touchingly and comically. Elena Brileva, as the queen, is at her vocal best in the Hymn to the Sun, but when she is called on for more dramatic utterance, she often sounds rather waspish and strident.

For a live recording, the sound is good. The Bolshoi Chorus and Orches-

tra, very much at home with this music, make the most of its lush sensuality and heightened effects under Evgeny Svetlanov's skillful direction. *R.A.*

SCHMIDT: *Symphony No. 3, in A Major*.
HINDEMITH: *Concerto for Orchestra, Op. 38*. Chicago Symphony Orchestra, Neeme Järvi cond. CHANDOS © CHAN 9000 (55 min).

Performance: *Splendid*
Recording: *Likewise*

Franz Schmidt has always been one of those composers whose music I can admire, and even enjoy hearing, without feeling a strong desire, let alone a need, to hear it again. Neeme Järvi's alert and committed reading of the Third Symphony, though, might change the way a lot of listeners feel about Schmidt. It seems a more interesting work than his Second Symphony, which the same forces gave us two or three years ago, or his Fourth, which numbers Zubin Mehta among its champions. The final movement of the Third has one of those naively endearing tunes that won't let go. Järvi's version scores over Libor Pešek's Supraphon recording with the Slovak Philharmonic by virtue of his canny infusion of vitality into both inner movements as well as the superior playing of the Chicago orchestra, and, unlike Pešek, he offers an additional work.

Against all aural evidence, Hindemith's Concerto for Orchestra, composed in 1925, actually preceded Schmidt's Third Symphony by a couple of years. It is not a towering masterpiece, but its pithy, no-nonsense character and directness of utterance are as much in its favor as its surprising range of color. With its insistent focus on its own time, it makes an effective foil for the Schmidt symphony's gestures of affection for a time already past. Both are splendidly played and recorded. *R.F.*



Robert Stallman: a fresh voice

SCHUBERT: *Symphony No. 5, in B-flat Major (D. 485); Symphony No. 6, in C Major (D. 589)*. Classical Band, Bruno Weil cond. SONY CLASSICAL © SK 46697 (56 min).

Performance: *Excellent*
Recording: *Fine*

The New York-based authentic-instrument group the Classical Band has emerged, after several crises, with conductor Bruno Weil at the helm. It is not an ensemble with great sensuous appeal, but this debut recording suggests that it is an intelligent group able to get to the heart of what the conductor is after. Weil may not have quite the poetic imagination of Roger Norrington, but in Schubert he shows a more confident sense of Classical style, which is particularly welcome in the graceful Symphony No. 5.

The performance of the rarely heard Symphony No. 6, the "Little C Major," is more than solid. The symphony's odd combination of proto-Romantic weightiness and Rossinian playfulness no longer seems like an unresolved contradiction thanks to the rhythmic unity Weil finds in it as a whole: The second-movement *andante* leads logically into the scherzo and then the fourth movement (*allegro moderato*). Weil makes the fourth movement, with its fascinating form and rich content, the symphony's center of gravity. The work has a wonderful cumulative impact in this recording. *D.P.S.*

TCHAIKOVSKY: *Piano Concerto No. 1* (see **Best of the Month**, page 67)

VERDI: *String Quartet* (see **BERG**)

VIVALDI: *Cantata, All'ombra di Sospetto* (see **Collections—Julianne Baird**)

VIVALDI: *Flute Concertos, Op. 10, Nos. 1-6; Concerto in C Minor (RV. 441)*. Robert Stallman (flute); Orchestra of St. John's, Smith Square, John Lubbock cond. ASV © CD DCA 733 (60 min).

Performance: *Clean*
Recording: *Good*

The modern transverse flute was just overtaking the recorder in Vivaldi's day, and these concertos, published in Amsterdam in the 1720's, are mostly transcriptions of music originally written for the violin or the recorder. They seem to work equally well on the flute, especially as performed by Robert Stallman, an American disciple of Jean-Pierre Rampal and a fresh voice. These are clean, highly articulated, modern-style performances of an evergreen repertoire, neatly recorded. *E.S.*

WAGNER: *Parsifal*. Siegfried Jerusalem (tenor), Parsifal; José van Dam (barytone), Amfortas; Matthias Hölle (bass), Gurnemanz; John Tomlinson (bass), Titirel; Günter von Kannen (bass), Klingsor; Waltraud Meier (mezzo-soprano), Kundry; others. Chorus of the Deutsche Staatsoper, Berlin; Berlin



Are you paying too much for Compact Discs and Cassettes?

If your answer is **YES**, then you should start shopping with **MUSIC BY MAIL**, the logical choice for the serious music listener.

Best prices - Best selection

The **MUSIC BY MAIL** catalog is 100 pages, filled with over **10,000 titles**. From your old favorites to today's top hits, we have everything in Rock, Soul, Jazz, Blues, New Age, Soundtracks and much more. No matter what your musical preference, you will find what you want with **MUSIC BY MAIL**. Our prices simply can't be beat, with most items **30% cheaper** than any music "Clubs" or other mail order services.

We are NOT a Club!

We are proud to say that we are **NOT** a club. You have **no restrictions** and **no obligations** to buy. **MUSIC BY MAIL** gives you the music **YOU** want, when **YOU** want it. You get **great service**, **low prices**, and **100% original tapes** and CD's from your favorite artists. We also offer a toll-free ordering line for credit card customers, which allows for ultra-fast shipping (usually within 48 hours.)

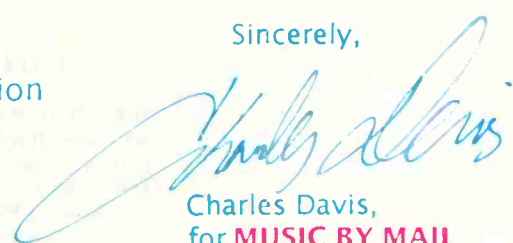
Just \$2 gets you started!

Simply send **\$2.00** and we will send you our latest catalog along with a **\$3 Savings Certificate** which you can apply towards your first purchase. If our catalog isn't everything we say it is, send it back for a **full refund**. Either way, you **can't lose!** Act now and start **saving money**, by shopping with **MUSIC BY MAIL**. Fill out the form below (or use separate sheet) and mail it along with your \$2.00 to:

MUSIC BY MAIL

P.O. Box 090066 Ft. Hamilton Station
Brooklyn, N.Y. 11209-0002

Sincerely,



Charles Davis,
for **MUSIC BY MAIL**

Remember!

\$2.00 =



+ \$3.00

SAVINGS CERTIFICATE

Index to Advertisers

Reader Service No.	Advertiser	Page Number
1	Adcom.....	C3
—	Basic Repertory.....	40
2	Blaupunkt.....	18
—	BMG CD Club.....	24a, b
—	Bose.....	21
—	Bose Express.....	63
—	Boston Acoustics.....	19
6	Cambridge Sound Works.....	5-7, 8, 9
10	Cerwin-Vega.....	15
—	Columbia House CD Club.....	16a, b
—	Comtrad.....	72
—	Consumer Electronics Show.....	64
—	Crutchfield.....	25
—	Electronic Industries Association/CEG.....	64
13	Electronic Wholesalers.....	85
—	Ford Electronics.....	35
15	Geneva Group.....	72
—	George Dickel.....	61
17	HiFonics.....	26
—	Illinois Audio.....	91
20	J&R Music World.....	78-79
—	Jensen-Car.....	54
—	Maxell.....	22-23
23	Mobile Fidelity.....	68
—	Music by Mail.....	89
24	Nordic Track.....	4
—	Onkyo.....	13
—	PARA.....	17
27	Paradigm.....	37
—	Phase Linear.....	70
26	Pinnacle.....	2
—	Pioneer.....	C4
—	Polk Audio.....	29
16	Pyle.....	38
33	Radio Shack.....	C2
—	Record Art.....	61
34	Rockford Fosgate.....	58
—	6th Avenue Electronics.....	82-83
—	Solex.....	32a, b
—	Sony.....	71, 73, 75, 77
—	Sound City.....	86-87
—	Wisconsin Discount Stereo.....	80
—	Yamaha.....	31

M a y

Philharmonic, Daniel Barenboim cond.
TELDEC © 74448-2 four CD's (256 min).

Performance: *Rich and passionate*
Recording: *Very good*

Among the excellent recorded *Parsifals*, this new one is certainly an outstanding ensemble effort, excellently cast and captured in appropriately rich sound. Daniel Barenboim paces this gargantuan and immensely self-indulgent work sensibly, resisting the temptation for undue expansion and further indulgence. Perhaps other conductors have made more of certain passionate climaxes, but Barenboim offers a serene, majestic statement of this complex drama. The choral and orchestral work are both excellent, though the rich and transparent orchestral perspective is sometimes accomplished at the expense of the singers.

The cast, all Bayreuth veterans, could hardly be bettered today. In many ways, Siegfried Jerusalem is a model Parsifal. In the first act, the naïveté he projects is entirely convincing, in the second act he addresses the Flower Maidens in tones of Mozartian delicacy, and he manages the transformation into a heroic presence in Act III with unexaggerated realism. Waltraud Meier is a vocally sumptuous Kundry with an impressive, ringing freedom in the upper extension of the part. José van Dam is as noble and expressive an Amfortas here as he was for Karajan. He intones the suffering king's lines in a smooth legato without resorting to dramatic overemphasis. Günter von Kannen is a properly menacing, evil-sounding Klingsor, and John Tomlinson brings dignity to Titurel's thankless role. The scene of the Flower Maidens is encased in a somewhat misty sound, and Matthias Hölle's Gurnemanz cannot challenge the best previous recorded interpretations. In sum, this is a very fine *Parsifal*, but those who already have the Karajan or Solti sets need not consider it absolutely essential. *G.J.*

Collections

JULIANNE BAIRD: Handel—*The Italian Years*. Handel: *Tra le Fiamme; Pensieri Notturmi di Filli; Alpestre Monte*. Telemann: *Trio in F Major from "Essercizi Musici"*. Vivaldi: *All'ombra di Sospetto*. Julianne Baird (soprano); Philomel Baroque Orchestra. DORIAN © DOR-90147 (55 min).

Performance: *Light and fresh*
Recording: *Splendid*

Baroque cantatas can seem musty affairs—florid, impersonal vocal lines set to texts made up of clichés. The fragile music depends on the elusive qualities of charm and style to come alive in performance. Few singers have been so successful at making such music live as Julianne Baird in this program of cantatas by Handel and Vivaldi (with a non-vocal Telemann trio thrown in).

Baird's spring-water-fresh voice has as little vibrato but fewer idiosyncrasies than that of the well-known early-music specialist Emma Kirkby, and she has just as much authority. Though she is sensitive to the meaning of the words and well schooled in authentic Baroque performance practice, she never sounds merely "correct." She uses all of the historical devices—such as shorter, lighter phrases and tastefully applied ornaments—to personalize the music, making even the simplest vocal lines communicate. The Philomel Baroque Orchestra, particularly the soloists playing obbligatos with the vocal line, seems to breathe with Baird in an ideal chamber-music style. *D.P.S.*

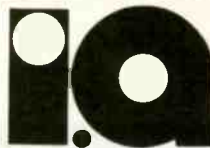
JESSYE NORMAN AND JAMES LEVINE: *Salzburg Recital*. Beethoven: *Six Sacred Songs, Op. 48*. Wolf: *Spanish Songbook; Italian Songbook (selections)*. Debussy: *Five Chansons*. Jessye Norman (soprano); James Levine (piano). PHILIPS © 422 378-2 (53 min).

Performance: *Splendid*
Recording: *Ideal*

Jessye Norman has made some excellent lieder recordings over the years, but none better than this "Salzburg Recital." Though not recorded live in the Austrian city but in a New York City studio, it offers the same program that Norman and James Levine gave there in 1988. Little spontaneity was lost in the transition from the stage to the studio; all of Norman's vocal and interpretive idiosyncrasies, however—such as the thickening of her middle register and her tendency to overdramatize the words—are either minimized or nowhere to be heard. Perhaps Levine is to be thanked for balancing Norman's innate authority with more subtlety, yielding some of the most restrained singing of her recent career. Of course, when the Wolf songs require an operatic wallop, she is certainly ready to supply it. But for the most part her rich musical resources are used with unusual care and musicality instead of a generalized grandness.

There's nothing generalized about the wildly different moods of the Wolf lieder, in which Norman's portrayals handily run the gamut from an infatuated girl to a hysterically angry wife. Particularly remarkable is the tranquility and stillness she gives to "*Nun lass uns Frieden schliessen*" ("Now let us make peace") against the gently rocking rhythm of Levine's piano part. This is great singing, and worth the price of the CD all by itself. So are the Debussy chansons, which feature some of Norman's most penetrating insights and graceful phrasing, even if she doesn't quite capture the light, quicksilver cross-cutting of poetic images in *Mandoline*. The Beethoven set seems to be her usual underdog choice—there's one in every Norman recital—and it is an eccentric, ungratifying one. But in this generously filled CD, it's easily skipped over. *D.P.S.*

SAVE MONEY, TIME AND FREIGHT ON FAMOUS BRAND STEREO EQUIPMENT

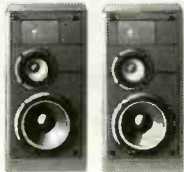


Illinois audio

(800) 621-8042 (312) 664-0020
Hours: Monday thru Saturday 9-5

12 E. DELAWARE PLACE • CHICAGO, IL 60611

LOUDSPEAKERS



**JBL-LX44
3 Way Speaker System**

- 1" titanium high frequency transducer
- 8" high polymer laminated bass transducer
- 5" midrange

List \$419.00 ea. **SALE \$189⁰⁰ ea.**

JBL PRO PERF+ List \$439.00 **SALE \$329⁰⁰**

WHARFEDALE DIAMOND II List \$150.00 **SALE \$90⁰⁰**

JBL L2013BK List \$299.00 **SALE \$140⁰⁰**

ALLISON CD-6 List \$230.00 **SALE \$129⁹⁵**

JBL 62T List \$115.00 **SALE \$69⁹⁵**

CASSETTE DECKS



**TEAC W-6000R
Double Cassette Deck**

- Auto reverse • Full function wireless remote • Dolby[®] HX Pro • One touch dubbing • Pitch control

List \$750.00 **SALE \$459⁰⁰**

TEAC V285CHX List \$145.95 **SALE \$89⁹⁵**

TEAC W520R List \$269.00 **SALE \$159⁹⁵**

TECHNICS RSTR-232 List \$199.95 **SALE \$149⁹⁵**

JVC TDR-441 List \$320.00 **CALL FOR PRICE**

JVC XD-2507 List \$1000.00 **SALE \$599⁹⁵**

JVC TD-W505 List \$500.00 **CALL FOR PRICE**

TEAC V-3000 List \$500.00 **SALE \$339⁰⁰**

RECEIVERS



**TECHNICS SA-GX505
Quartz Synthesized
AM/FM Stereo Receiver**

- 110x2 front • 10x2 rear • 10 center
- Dolby[®] Pro-Logic Surround

CALL FOR PRICE

TECHNICS SA-GX710 List \$270.00 **SALE \$179⁹⁵**

JVC RX-307TN List \$320.00 **CALL FOR PRICE**

TECHNICS SA-GX303 List \$320.00 **CALL FOR PRICE**

TECHNICS SA-GX 100 List \$320.00 **CALL FOR PRICE**

JVC RX-507VTN List \$480.00 **CALL FOR PRICE**

JVC RX-905V List \$480.00 **CALL FOR PRICE**

CD PLAYERS



**TECHNICS SL-PG300
Programmable
Compact Disc Player**

- A new generation of CD player using the MASH Digital-to-Analog converter
- 10 key direct access on front panel & remote control

CALL FOR PRICE

TECHNICS SL-PC705 List \$249.95 **SALE \$169⁹⁵**

TECHNICS SL-P5700 List \$249.95 **CALL FOR PRICE**

JVC XLZ-451 List \$299.95 **CALL FOR PRICE**

TECHNICS SL-PG100 List \$299.95 **CALL FOR PRICE**

TEAC AD-1 List \$299.95 **SALE \$169⁹⁵**

TECHNICS SLPC-505 List \$219.95 **SALE \$159⁹⁵**

TECHNICS SL-PD827 List \$480.00 **CALL FOR PRICE**

JVC XLM-507 List \$480.00 **CALL FOR PRICE**

JVC-XLZ-611 List \$480.00 **SALE \$279⁹⁵**

PORTABLES



**SONY WM-FX33
AM/FM Stereo Radio
Cassette Player**

- Auto-reverse with direction and mode selectors • Variable Mega Bass • Ultra-light MDR headphones

List \$84.95 **SALE \$49⁹⁵**

SONY D-33 List \$179.95 **SALE \$129⁹⁵**

SONY CFD-50 List \$199.95 **SALE \$139⁹⁵**

SONY CFD-460 List \$289.95 **SALE \$189⁹⁵**

JVC RCX-610 List \$299.95 **SALE \$219⁹⁵**

TECHNICS SLXP-300 List \$249.95 **SALE \$169⁹⁵**

AUDIO TAPE

MAXELL XLII-100 List \$21.99 **10 for \$21⁹⁹**

MAXELL R-60 DM List \$6.95

MAXELL MX-90 List \$19.99 **10 for \$19⁹⁹**

TDK SAX-90 List \$19.99 **10 for \$19⁹⁹**

SONY SR-90 List \$19.99 **10 for \$19⁹⁹**

TDK MA-110 List \$21.50 **10 for \$21⁵⁰**

VIDEO



PANASONIC LX-200

- Remote Laser Disc/CD Player • Auto-rew.
- Laser format • Optical output

List \$900.00 **SALE \$575⁰⁰**

JVC HRD 940 List \$699.00 **SALE \$426⁰⁰**

SONY SLV-585 List \$699.00 **CALL FOR PRICE**

SONY MDP-333 List \$699.00 **CALL FOR PRICE**

PANASONIC PV-S4167 List \$749.00 **SALE \$599⁹⁵**

AUDIO-SOURCE SS-3 List \$749.00 **CALL FOR PRICE**

NEW JVC-HRS6700U List \$749.00 **CALL FOR PRICE**

PHILIPS CDV-600 List \$749.00 **CALL FOR PRICE**

HEADPHONES

SONY MDR-CD6 List \$119.95 **SALE \$79⁹⁵**

AKG K-55 List \$50.00 **SALE \$33⁰⁰**

AKG K240M List \$120.00 **SALE \$72⁰⁰**

SONY MDR-M66 List \$94.95 **SALE \$59⁹⁵**

KOSS PRO4 XL List \$129.95 **SALE \$79⁹⁵**

SONY MDR 1F5K List \$199.95 **SALE \$99⁹⁵**

AUTO



PANASONIC CQ-DP 30

- AM/FM/CD • 1 bit Mash • 22x2 Amp.

List \$429.00 **SALE \$239⁹⁵**

JBL T-900 List \$99.95 **SALE \$79⁹⁵**

SHERWOOD XM-7000 List \$700.00 **SALE \$399⁹⁵**

SHERWOOD XA-1240G List \$350.00 **SALE \$179⁹⁵**



Illinois audio

12 E. Delaware Pl., Chicago 60611



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.



Prices in this ad are for mail-order only. Freight charges not included in prices. All merchandise shipped brand new, factory fresh with full warranty. Not responsible for typographical errors. Prices and availability subject to change.

RETURN POLICY: Equipment received within the first 14 days from date of shipment may be returned to us for repair or replacement at no additional charge. After the 14 day period it is the manufacturer's responsibility to repair or replace an item through their US warranty. NOTE: Certain manufacturers require all returns to be processed directly through them and not through us so please ask when making your purchase. All cancellations are subject to a service charge. **Does not include shipping fees**

TURNTABLES



**TECHNICS SL-QD33
Quartz Direct Drive
Turntable**

- Automatic dual motor system
- Gimbal suspension tone arm

CALL FOR PRICE

TECHNICS SL 1200 II List \$480.00 **CALL FOR PRICE**

CARTRIDGES

SHURE M-111HE List \$149.95 **SALE \$57⁰⁰**

AUDIO TECHNICA AT 155LC List \$299.95 **SALE \$119⁹⁵**

MINI SYSTEMS



PANASONIC SC-CH55

- Remote mini comp. system • AI Jog dial
- "Karaoke" • 25 watt/ch. • 19-band spectrum analyzer • Dbl. A/R deck w/Dolby[®] B
- CD player • 3-way bookshelf speakers

List \$799.95 **SALE \$479⁹⁵**

SONY MHC-1600 List \$1000.00 **CALL FOR PRICE**

JVC MX-70 List \$1000.00 **SALE \$679⁹⁵**

DENON DR-120 List \$1200.00 **SALE \$829⁹⁵**

CLASSIFIED

For Advertising Information Call 1-800-445-6066, 9am-5pm EST

FOR SALE

LOW PRICES!!!! NAD, DENON, NAKAMICHI, CARVER, BOSTON ACOUSTICS, LUXMAN, HAFLER, ADS, B&K, ONKYO, ADCOM, POLK & OTHERS!! SOUND ADVICE: (414) 727-0071. OPEN SUNDAYS!!!

LOW PRICES—HIGH END EQUIPMENT: Carver, Nakamichi, Hafler, Luxman, ADS, B&K, Bose, Onkyo, Proton, Philips and much more! (414) 725-4431.

S.B.H. ENTERPRISES

(800) 451-5851 NYC (718) 438-1027 FAX: (718) 438-4621 1678 53rd St. Brooklyn, N.Y. 11204 Mon.-Fri. 8-7, Sun. 9-6

Table with columns: RADAR DETECTORS, UNIDEN, WHISTLER. Lists various models and prices.

HOME STEREO

Table with columns: JVC RECEIVERS, CASSETTE DECKS, CD PLAYERS, PORTABLES, SONY, FISHER. Lists various models and prices.

CAR STEREO

Table with columns: SONY, PIONEER, PIONEER RECEIVERS, BLAUPUNKT. Lists various models and prices.

Table with columns: JVC, SANSUI RECEIVERS, LASER PLAYERS, CLARION. Lists various models and prices.

THE MINI AD WITH MAXI SAVINGS

SPEAKER CATALOG

Parts Express is a full-line distributor of electronic parts and accessories, geared toward the consumer electronics industry...



Parts Express 340 East First Street Dayton, Ohio 45402 1-800-338-0531

BANG & OLUFSEN - B&W - CARVER - KEF - ADCOM - NAKAMICHI - ADS - REVOX - DENON - HARMON/KARDON - POLK - INFINITY - KLIPSCH - YAMAHA - CELESTION - VELODYNE - MANY SUBWOOFER/SATELLITES. BEST PRICES! MANUFACTURER'S U.S.A. WARRANTIES. AMERISOUND SALES, INC. (904) 262-4000.

REPLICA WATCHES & ORIGINALS PREOWNED: Lowest Prices Nationwide! Exact Weight & Color! 18K Goldplated Moneyback Guaranteed! (404) 963-3872.

WE SELL PREOWNED high quality Audio and Video with a money back guarantee. For a FREE monthly inventory send your name and address to: ROSS' EXCHANGE, 3061 Clairemont Dr., San Diego, CA 92117 or call (619) 276-8235.



Unlimited Backgrounds™ An Unlimited source of Inexpensive, Instantly Available Background Music from Standard Stereo Records & CD's with the Thompson Vocal Eliminator™. Record with your voice or perform live with the backgrounds. Used in Professional performance yet connects easily to a home component stereo. This unique product is manufactured in the USA exclusively by LT Sound. Call or write for our Free Demo Record and Catalog on the Vocal Eliminator™ as well as almost every other item a singer could possibly want!

Singer's Supply, Dept. SR-3, 7985 LT Parkway Lithonia, GA 30058 Phone: (404) 482-4189 Ext. 553 24 Hour Demo/Info Request Line (404) 482-2485-Ext 553

Wholesale Connection

To order-Call: (718) 997-6644

Table with columns: CD PLAYER, JVC, Pioneer, Kenwood, Sony, Harmon/Kardon. Lists various models and prices.

Table with columns: RECEIVERS, JVC, Kenwood, Sony, Harmon/Kardon. Lists various models and prices.

Table with columns: TAPE DECK, JVC, Pioneer, Kenwood, Sony, Harmon/Kardon. Lists various models and prices.

CALL FOR PRICES on Models and Brands Not Listed

HRS: Mon-Sat 9 AM-6 PM EST Prices subject to change. Prices exclude shipping & handling. NGT responsible for typographical errors. MasterCard, Visa, American Express and C.O.D. Wholesale Connection 63-48 108th St. Forest Hills, NY 11375

FINE TUNE YOUR LISTENING ENVIRONMENT WITH OUR ACOUSTIC WALL DAMPING MODULES. GET THE MOST FROM YOUR AUDIO INVESTMENT. SOUND UNLIMITED. 1-800-878-7130.

HARD TO FIND DBX & ADC PARTS & SERVICE. CALL/WRITE RES. 5462 BUCHANAN PLACE, FREMONT, CA 94538. (510) 490-1622. FAX (510) 656-8878.



The mark of a true Denon.

This sticker tells you who is an authorized Denon dealer and who isn't. Some people who offer Denon products are not authorized dealers. That can lead to problems. First, only authorized dealers offer you the protection of a Denon warranty with your purchase: at other dealers, you may have no warranty at all. Authorized Denon dealers stock only components designed for the U.S., and have the training to help you select the one right for you. Authorized dealers know Denon technology inside and out and stock factory parts for your Denon to preserve true Denon sound. So before you buy your Denon, look for this Denon Authorized Dealer Sticker. It assures you of the authentic Denon technology and support you expect. And nothing less.

To find your nearest AUTHORIZED Denon Dealer call: 1-201-575-7810 (9:00 am-5:00 pm EST) DENON

Dial This Number And Save!

Many Makes And Models Not Listed

PLEASE CALL

1-800-522-8937 TOLL FREE

Table with columns: RECEIVERS, CD PLAYERS, CAR STEREO, CASSETTE DECKS, LOUDSPEAKERS, AMPS. Lists various models and prices.

Atlantic Buyers Club 162 Hwy 34 suite 189, Matawan, NJ 07747. All products are new & backed by our 10 day money back guarantee.

FOR SALE

CABLE TV DESCRABLERS
How You Can Save Money on Cable Rental Fees
Jerrold, Pioneer, Scientific Atlanta
30 Day Money Back Guarantee/Best Prices
FREE 20 page Catalog:1-800-772-6244
US Cable TV Inc. Dept. KSR592
4100 N. Powerline Rd., Bldg. F-4 Pompano Beach, NY 33073

Announcing STEVE'S AUDIO ADVICE. Featuring B&K, VMPS & other fantastic audio products at the very best prices nationwide. Call 1-800-752-4018.

RECORDS

LV/CD/RECORD COLLECTOR'S SUPPLIES. Jewell boxes, record jackets, sleeves, storage boxes, 78 sleeves, dividers, much more! Free brochure: CABCO PRODUCTS, ROOM 641, POB 8212, COLUMBUS, OH 43201. (614) 267-8468.

LP/CD BARGAIN! DELETIONS - OVERSTOCK - SURPLUS. LPs \$2.99-\$6.99/CDs \$4.99-\$8.99. FREE CATALOG! SPECIFY LP/CD. RPM SALES, PO BOX 1348, DEPT. SRC, SOMERVILLE, MA 02144. 1-800-388-1386/FAX 617-776-2514.

Needles/Cartridges. Expert Consultations & Fitting. One of Largest Stocks in Country. NEEDLES ARE HERE. 1-800-982-2620.

PROFESSIONAL SOUND, LIGHTING, EFFECTS. NEW & USED—DJs, BANDS, RINKS & NIGHTCLUBS. CALL FOR 50-PAGE BOOKLET. (502) 782-1172.

SoundSearch - Providing record research services of all kinds including appraisal, acquisition, sale/auction, documentary research & discographical information. SoundSearch, P.O. Box 5010, Hacienda Heights, CA 91745. Phone: (818) 855-7909 Fax: (818) 855-7913.

PRIVATE LP COLLECTION! Hard-to-Find. Out-of-Print, Treasures, 49,000 Mostly Sealed. 1950-1990. Available Individually. (203) 227-8326.

AUTHORIZED

SAVE 40% ON HIGH-END home speakers, subwoofers, amplifiers. FREE CATALOG! RTRD, 3021 Sangamon Ave., Springfield, IL 62702. 1 (800) 283-4644.

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.

WE SELL MORE HIGH PERFORMANCE SPEAKER KITS than anyone in the U.S. FREE CATALOG: 1-800-346-9183. AUDIO CONCEPTS, 901 S. 4th St., LaCrosse, WI 54601.

CALL TOLL FREE! 1(800) 826-0520; NAD * ONKYO * CARVER * M&K * VELODYNE * HARMAN KARDON * HAFLER * LEXICON * CWD * PRO-AC * FRIED * CELESTION * ACOUSTAT * STAX * AUDIOCONTROL * NILES * ATLANTIC TECHNOLOGY * PROTON * JBL * MONSTER CABLE * BELLES * DAHLQUIST * COMPONENT GUARD * KINERGETICS * NITTY GRITTY * GRADO * THORENS * SOUND SELLER, 2808 CAHILL RD., P.O. BOX 224, MARINETTE, WI 54143-0224. FAX#715-735-5838, PHONE 715-735-9002.

CALL US LAST

WE WILL BEAT ANY PRICE PRINTED IN THIS MAGAZINE ON HOME & CAR STEREO

The SOUND Approach
6067 Jericho Tpke., Commack, NY 11725
NO SONY PRODUCTS (800) 368-2344

SPEAKER COMPONENTS - KITS, Audax-Vifa, Crossovers, Books, more. Catalog \$2. MENISCUS, 2442 28th St. SW, Dept. D, Wyoming, MI 49509. (616) 534-9121.

Sell all kinds of electronic equipment. Low, low prices! Best selection. For more information call now. 1-703-745-2223.

"STEREO WORLD" IS YOUR DISCOUNT SOUND SOURCE WITH GREAT DEALS ON HOME AND CAR STEREO. TECHINICS, PANASONIC, JVC, SONY, PHILLIPSOUND LABS, MTX, PINNACLE, PIONEER, SHERWOOD, JBL, HIFONICS, BLAUPUNKT, AUTOTEK, ADVENT, SCOSCHE BFX AND MANY OTHERS. CALL OR WRITE FOR FREE CATALOG. FREE UPS IN 48 STATES. VIS/MC. COD ACCEPTED. P.O. BOX 596, MONROE, NY 10950. (914) 782-6044.

SLEDGEHAMMER, AUDAX, PEERLESS, FOCAL VIFA & DYNAUDIO LOUDSPEAKERS with good prices and fast service. MADISOUND SPEAKER COMPONENTS, 8608 University Green, Box 44283, Madison, WI 53744-4283. (608) 831-3433.

EXPERIENCED, FRIENDLY ADVICE! FREE SHIPPING! MIRAGE, PS, CWD, STAX, KINERGETICS, THORENS, PHILIPS, AUDIOQUEST, FRIED, MONSTER, QUAD, SPICA, STRAIGHTWIRE, MORE! READ BROTHERS, 593-B KING, CHARLESTON, SOUTH CAROLINA 29403. (803) 723-7276.

COMPACT DISCS

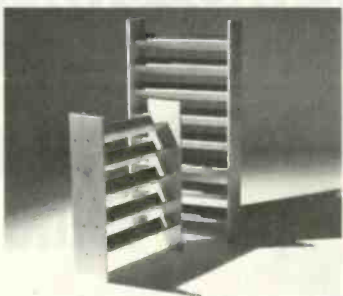
OVER 15,000 USED CD'S. \$3.99 TO \$9.99. Buy/Sell. 8th Year, Visa/MC. Send \$2 (Refundable) for 28 page catalog. AUDIO HOUSE, 4304B Brayan, Swartz Creek, Michigan 48473. (313) 655-8639.

DISCOUNT COMPACT DISCS!! Telarc \$11.99/cd. Chesky \$10.99/cd; DMP, Reference & Sheffield \$11.99/cd! Hundreds of other labels at low prices. Send SASE for catalog or your order with Visa / MC / Disc / Check + \$4 shipping to: THE ACME COMPACT DISC COMPANY, P.O. BOX 7004, EVANSTON, IL 60204.

CD DESK CLOCK! Impressive, hi-tech CD clock kit. Includes CD-blank (or your own), quartz movement, stand, battery, instructions. Send \$12.99 check/m.a. to Pinpoint-3S, 100-F Highway 34, Suite 150, Matawan, NJ 07747.

SELL YOUR CD'S. \$7.00 FOR SOME. Free details. Compact Music-3R, 1105 Webster, Sandy, Utah 84094-3151. (801) 571-9767.

CD'S U.S.A.—CD'S & CASSETTES at Discount Prices. Pop, Rock, Jazz, Oldies, Classical. Send \$2.00 for 30 pg. CATALOG or Call (516) 567-0846. CD'S U.S.A., 1801-A Arctic Ave., Bohemia, NY 11716.



STORADISC™ - See why CD Review picked our Library Series as their "top choice." Fine-furniture, quality in a variety of finishes and sizes. Call or write Davidson-Whitehall, 555 Whitehall St., Atlanta, GA 30303. 1-800-848-9811.

INVENTIONS WANTED

INVENTORS! Your first step is important. For FREE advice, call ADVANCED PATENT SERVICES, Washington DC, 1-800-458-0352. INVENTIONS / NEW PRODUCTS / IDEAS WANTED. Call TICI for free information & Inventors Newsletter, 1-800-468-7200, 24 hours/day—USA/CANADA.

INVENTORS, have a new idea for market? Call ALI for a free inventors kit 1-800-8-INVENT.

BLANK TAPES

WERE #1 IN AUDIO, VIDEO, DAT-TAPE OVER 500 DIFF. 1-800-DAT-TAPE						
DAT	SONY	FUJI	DUR	17TH YEAR	MAXELL	+
DAT 120 8.41	DAT 120 8.88	FUJI 120 8.58	WERE AMERICA'S	DAT 120	8.99	
SA-110 2.94	SAE 120 10.99	MAX 120 4.48	LARGEST DAT	MAX 90	2.99	
SA-90 2.99	MAX 120 13.99	090 8.99	TAPE SUPERIOR	MAX 90	2.99	
SA-100 2.88	METAL 90 3.99	OCTAVE	OVER 50 DIFFERENT	MAX 100	2.79	
SA-90 2.99	1.75	2.75	MUSIC, WE'LL BEAT ANY	MAX 90	2.49	
SA-100 2.88	1.90	2.65	PRICE! CALL 1-800-DAT	MAX 90	2.39	
SA-90 2.99	9V100 2.29	75-90 1.19	TAPE	MAX 90	2.39	
D90 2.99				MAX 90	1.99	
D120 8.79				MAX 90	6.99	
D90 2.99				JVC T120	2.59	
D90 2.99				MAX 120	7.99	
HCB-90 2.99				MAX 120 HDX	3.49	
HCB-100 2.79				TOR T120 PRO	6.99	
				FULLY 120 9PHS	7.99	
				SONY MAX 120	4.99	

DISC. VISA, MC NO EXTRA CHARGE

We will Beat Any Price of the Total Order including All Shipping & Handling Charge by 1% - 195 Shipping in a Business Address. Shipping to a Residence is \$6.99 for 1-20 Tapes, \$9.99 for 21 or More. C.O.D. Fee \$5.99 and Pre-Order. All Times Here.

CALL: (800) 368-2344

U.S. VISA: (800) 368-2344

TAPE WORLD 220 SPRING ST. BOX 21 BUTTS, PA 18003-0981

DAT DECIDE FROM 1488. PORTABLES FROM 7.99. PRC. NO SCMS. CAL.

MAIL 275-5700 FAX 275-5700

1800' AMPEX REELS USED ONCE—SAMPLE: \$3.00. NEW MAXELL REELS/CASSETTES. TDK AR100: \$1.39, SAX-60: \$1.99. AUDIO TAPES, BOX 9584-S, ALEXANDRIA, VA 22304. (703) 370-5555. VISA/MC. FREE LIST.

STOP PAYING RETAIL! BASF CHROME HI-BIAS CASSETTES FROM .41c. MAXELL DAT 120 (USED 1X - LIKE NEW) \$6.99. MON- EYBACK GUARANTEE! MCM/SA 800-321-5738.

CAR STEREO

(800) 736-5533

CAR AUDIO

*Sherwood	*Sony	*ADS
*Denon	*Audio Control	*Soundstream
*Yamaha	*Polk Audio	*Coartic
*Infinity	*Kenwood	*MB Quart

ALPINE	BOSTON	PP1
7915 \$420	4.2 255 pr	2050 AM \$275
7914 389	5.2 \$279 pr	2075 AM 375
7284 430	6.2 299 pr	2150 AM 489
3331 199	851 165 pr	4200 AM 410
3555 385	861 175 pr	AUDIO CTRL
72925 290	10.0LF 160 ea	Eqpt \$239
5957 430		Epicerator 169
7803 430	JVC	Eq 169
7802 379	XLG2000 \$229	
	KSRG4 239	KICKER
	XLGM600 289	C15 \$110 ea
XFR 12 \$99 ea	XLG3500 299	C12 80 ea
XFR 15 115 ea		C10 79 ea
XFR 12pvc 109 ea	RADARS	

Beil and Whistler

NAKAMICHI	PARASOUND	INFINITY
CD 2 \$645	HCA-800 II \$339	Sm 112 \$429 pr
CD 3 485	HCA-1200 649	Ref 2 239 pr
REC 1 765	HCA-2200 1245	Ref 5 529 pr
CASS 1 685	P/Fet-900II 350	Ref 6 659 pr
CASS 2 325	C/P/T-1000R 450	RENAISSANCE

PARADIGM	CARVER	JVC
3ea \$239 pr	CT-6 \$450	RX707 Authorized
9ea II 535 pr	CT-17 629	RX1050 Dealer
5ea II 349 pr	TFM 25 550	AVX1050 Call
7ea II 380 pr	TFM 45 879	XL 1050 Call
11ea II 630 pr	C-5 385	Mini Systems Call
Titan 169 pr	CD4 4901 550	TDV 541 Today

YAMAHA	PINNACLE	NAD
RXV 850 \$649	PN8+ \$296 pr	1600 \$319
RXV 1050 969	PN5+ 146 pr	2400 THX 479
DSPA 1000 1199	PN2+ 110 pr	5060 350
CDC 815 399	PN Sub 225 ea	7240PE 385
CDC 715 330		2100X 345
	POLK	7225PE 265

CELESTION	RTA-11TL	AUDIO SRC
Model 3 Call	RM 3000 569	
FRIED	CS 100 149	SS 3 \$279
Beta IV Authorized	M 12 760 pr	AMP 1 239
R/4 Dealer	M 10 579 pr	TUNER 1 185
A/3a Call III	M 5 jr 280 pr	UV One 89 ea
Q/4 Call III	M 4 150 pr	

All products covered by manufacturer's warranty or B. J. Audio's exclusive limited warranty. Ask for full details at the time of purchase.

"The Quick Connection"

B.J. AUDIO
991 Beachmeadow Lane
Cincinnati, OH 45238
(513) 451-0112

Visa Mastercard

WANTED TO BUY

LP's & CD's BOUGHT & SOLD: Classical, Rock, Jazz, Audiophile, Etc. PRINCETON RECORD EXCHANGE, 20 Tulane St., Princeton, NJ 08542. (609) 924-0881.

McIntosh and Marantz tube type Hi-Fi, and old JBL, Atec, Tannoy, EV Patrician and Western Electric speakers. David: 1-800-356-4434.

SANSUI SE5 OR SE7 GRAPHIC EQUALIZERS. CALL ANYTIME AFTER 5:00PM. YOU CAN CALL COLLECT IF NECESSARY. FRED (607) 865-4009.

MISCELLANEOUS

TERMPAPER assistance. 19,278 papers available! 306-page catalog—rush \$2.00. Research, 11322 Idaho, # 206X, Los Angeles 90025. TOLL FREE HOTLINE: (800) 351-0222 (California: 310-477-8226).

CLASSICAL MUSIC LOVERS' EXCHANGE®. Nationwide link between unattached music lovers. Write CMLE, Box 31, Pelham, NY 10803. (800) 233-CMLS.

LOUDSPEAKERS

SPEAKER RECONING; Reformatting Kits; Crossover Kits & Molds By "Vans Evers"; Grills Made To Specs; Diaphragms, Mids & Tweets; New Speaker Test Lab Using L.E.A.P.-L.M.S. THE SPEAKER EXCHANGE, 1242 E. Hillsborough Avenue, Tampa, Florida 33604. (813) 237-4800.

FOAM ROII? Replacement of Foam Surrounds. Any size. Any brand. 3'-to-18", two-day turnaround, two-year warranty. Atlanta, GA. For FREE estimates. (404) 933-0041. SPEAKER CLINIC.

IN-WALL SPEAKERS — IN-WALL SPEAKERS — OUTDOOR SPEAKERS — OUTDOOR SPEAKERS — LOWEST PRICES — CONTRACTORS WELCOME. THE SOUND APPROACH (800) 368-2344.

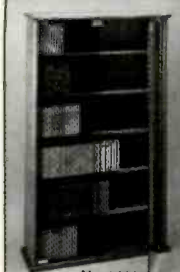
LASER VIDEO

USED LASER DISC CLEARANCE. WE BUY, SELL & TRADE. FREE CATALOG. VDI/J. 5339 PROSPECT #221. SAN JOSE, CA 95129.

AUDIO/VIDEO STORAGE

THE BEST DISC AND TAPE STORAGE SYSTEM IN AMERICA. Stackable, portable oak units hold all recording formats. FREE Mailorder Brochure (please mention Sterea Review). Per Madsen Design: (415) 928-4509. P.O. Box 330101, San Francisco, CA 94133.

CD STORAGE+



Store 300 CD's behind glass doors. Five adjustable shelves with brass bookends hold single & multiple CD's, Videos and Cassettes—in any combination. Comes in Solid Oak, Walnut, Teak or Cherry. Can stack or wall mount.

FREE Literature and Prices: Call 1-800-432-8005 FAX 1-201-748-2592



SORICÉ P.O. Box 747-4
Nutley, NJ 07110

CD STORAGE: Store over 600 compact discs in one unit. Solid oak, in a variety of finishes. Custom units available. MWP, 14 Cedar St., Amesbury, MA 01913. 800-553-3455.

CABLE TV

CABLE TV DESCRAMBLERS—FREE CATALOG! 1-800-648-7938. Jerrold, Oak, Hamlin, etc. Guaranteed Lowest Dealer and Retail Prices. Warranties. Immediate Delivery. MCM/SA/COD. Republic Cable Products, Inc., 4080 Paradise Road, #15, Dept. 727, Las Vegas, NV 89109.

Lowest prices on cable TV descramblers, converters, accessories. Name brands. Great service. Immediate delivery. Call Prime Time Cable: (800) 777-7731 for information and color catalog.

Cable TV Descramblers. Converters. Accessories. Name Brands. Lowest prices. Best service. Call CABLE READY COMPANY, (800) 234-1006 for FREE 16-page color catalog.

ARE YOU TIRED OF PAYING A HIGH MONTHLY CABLE FEE? WE STOCK ALL MAKES & MODELS OF CABLE EQUIPMENT. FOR FREE CATALOG SEND SASE TO: CABLE-TRONICS, INC., 450 SHAGBARK, ALGONQUIN, IL 60102 OR CALL (800) 232-5017. VISA/MC/COD. NO ILLINOIS ORDERS.

Copies of articles from this publication are now available from UMI Article Clearinghouse.

U·M·I

A Bell & Howell Company
300 North Zeeb Road
Ann Arbor, MI 48106 USA

CLASSIFIED ADVERTISERS:

You can reach millions of prime prospects for your mail order products or services through low-cost Market-place Classified advertising in this or other **Hachette Magazines, Inc.** titles.

To place an ad, or further information including rates, ad styles, sizes and multi-title discounts, call **Toll-Free**

(800) 445-6066
9am-5pm EST

Straight Talk....

For 32 years we have provided high quality, selection, and advice to music lovers throughout the U.S. at competitive prices!

106 Brands Available!



Acurus~Adcom~ADS~Alpine
Audio Prism ~ Audio Quest
Audio Control ~ B&W
Chicago Spk
Denon ~ Kef
CWD
Esoteric Audio ~ Fineline
Forte ~ Kimber Kable
Klipsch ~ Martin-Logan
Mitsubishi ~ Monster
NAD~Nakamichi~Niles
Onkyo ~ Paradigm
JVC~Phase Technology
SME ~ Phillips ~ Revox
Sanus ~ Sennheiser
Shure ~ Signet ~ Snell
Sony ~ Sony ES ~ Sumiko
Stax ~ Tara Labs ~ Target
Threshold ~ Velodyne
Yamaha

& 61 More

CALL ABOUT ANY BRANDS NOT LISTED

KIEF'S AUDIO/VIDEO

913-842-1811 Lawrence, KS 66046
Mon-Thur 10-8 Fri-Sat 10-6 Ext-3

25-35% OFF SUGGESTED RETAIL ON MOST BRAND NAMES



World Wide Electronics
47 Gadsden Place, S.I., NY 10314
Hours Monday—Friday 10 AM-7PM
Sunday 12 PM-5 PM

"THE CALL THAT SAVES YOU MONEY"
718-370-1303

- WE MAINTAIN THE MOST REASONABLE PRICES ON 75 DIFFERENT BRANDS.
- CALL & LET US WORKOUT THE BEST DEAL FOR YOU.
- ALL PRODUCTS ARE AMERICAN MODELS.
- 7 DAY MONEY BACK GUARANTEE.

CAR & HOME STEREO

- | | | |
|-----------------|---------------|------------------|
| ABC | COUSTIC | ONKYO |
| ADCOM | DBX | ORION |
| ADS | DENON | PARADIGM |
| ADVENT | HAFLER | PHASE LINEAR |
| ALPINE | HARMON KARDON | PHILIPS |
| ALTEC LANSING | HIFONICS | PINNACLE |
| AR | INFINITY | PIONEER |
| AUDIO CONTROL | JBL | POLK |
| AUTOTECH | JVC | PRECISION POWER |
| BAZOOKA | KENWOOD | PROTON |
| B&K | KEF | PS AUDIO |
| B&O | KICKER | PYLE |
| B&W | KLIPSCH | ROCKFORD FOSGATE |
| BLAUPUNKT | LEXICON | SHERWOOD |
| BOSTON ACOUSTIC | LUXMON | SONY |
| BOSE | MARANTZ | SONYES |
| CARVER | MB QUART | SOUNDSTREAM |
| CELESTION | MIRAGE | SUMO |
| CERWIN VEGA | MTX | TECHNICS |
| CITATION | NAD | THORENS |
| CLARION | NAKAMICHI | YAMAHA |
| CONCORD | OHM | |

ASK ABOUT FREE SHIPPING
All products covered by manufacturer or W.E.D. exclusive warranty. Extended warranty available.

Before you invest your money, spend some time with us.

Be well informed before you make a major purchase.

Our staff of knowledgeable professionals will guide you through today's maze of state-of-the-art components, as we help you design a system that is perfect for your environment and lifestyle.

We feature the latest in audio and video technology at affordable prices. We offer fast, convenient shipping and provide unparalleled service after the sale to make your investment a sound one.



REFERENCE
AUDIO • VIDEO



310 517-1700
FAX 310 517-1732

18214 DALTON AVENUE, DEPT S, GARDENA, CA 90248

MEMBER
BETTER
BUSINESS
BUREAU

- ACOUSTAT • AKG • APEX • AUDIBLE ILLUSIONS • AUDIO ALCHEMY • AUDIO CONTROL • BEYER
DYNAMIC • BOSE • CAL AUDIO LABS • CELESTION • COUNTERPOINT • CWD • DAHLQUIST • DCM
FOSGATE • HAFLER • GRADO SIGNATURE • HARMON KARDON • HUGHES • JAMO • JBL
JS ENGINEERING • LEXICON • MAGNUM/DYNALAB • MELOS • MFA • MOD SQUAD (McCORMACK)
NAD • NESTOROVIC • NHT • NILES • OHM • ONKYO • FARASOUND • PHILIPS • PIONEER • PROTON
PROAC • PS AUDIO • ROOMTUNE • RYAN • REVOX • SONANCE • SONY • STAX • TARGET • TDK
THORENS • TICE • VELODYNE • VPI • AND MANY MORE!

RETAIL MART

HI-FI CITY, INC

150 Fifth Ave., NYC
(Btwn. 19 & 20th Sts.)
212-691-5823

AUTHORIZED DEALERS FOR: DENON, TANNY, TARALAB, AIRTIGHT, CHARIO, A/D/S, CAMBRIDGE AUDIO, KLIPSCH, AUDIOLAB, TRIAD, JVC SUPERDIGIFINE, HARMAN KARDON, AUDIO ALCHEMY, ACROTEC, AUDIO STATIC, ETI, MIT, DAHLQUIST, CARY, MUSEATEX & others!

SOUND ADVICE • SOUND EQUIPMENT • SOUND DEALS

DENON D-150

Personal Component System
Listen To This...
You get a Receiver,
A CD Changer,
A Tape Deck and
a Pair of Speakers
all for a little under
\$1200. WOW!
Call Us Now for Special Deals
on other Denon Systems.

KLIPSCH

Kg 4.2 Speakers



New Tractix™
Technology Tweeters
under \$650
Full Line of
Klipsch Now in Stock

SATELLITE SYSTEMS

BOSE AM5-II
Only \$559.

TRIAD SIX
w/ sub woofer
CALL NOW!!!

DANTAX
SUB 1000
Complete From
Denmark
only \$229.

NEW

Rands

Quality Audio Equipment
Personal Service Since 1959
We Specialize In
Custom Home and Car Audio Installations

"Worth The Drive"
Alpine Bose Denon
Cooustic Mirage NAD
Nakamichi Sony Pinnacle
Pioneer Soundstream KEF
Sonance Velodyne Polk
Niles Pioneer Elite
And Many More!

Authorized Sales and Service
908-255-1935
1841 Hooper Ave., Toms River NJ 08753

AMERICAN AUDIO

- | | |
|--|--|
| ADVENT • AIWA
AKG • ALLISON
ALPHASONIK
ALTEC LANSING
AUDIO LAB • AUDIO QUEST
AVITAL • BAZOOKA • BEL
BEYER DYNAMIC
BLAUPUNKT • BOULDER
CANON • CAMBER • CARVER
CELESTION • CODE-ALARM
CONCORD • DAHLQUIST
ECLIPSE • ESOTERIC
FINYL • HAFNER
HARMAN KARDON
HIFONICS • JAMO
JBL • JVC • MAPLENOIL
MAGNAVOX • MINOLTA
MITSUBISHI • M&K
MKD • MOD SQUAD
MOTIF • MUSE | MUSIC & SOUND
MUSETEX • NEAR
NIKON • NILES • NSM
OHM • PANASONIC
PARSEC • PENTAX
PHILIPS • PHOENIX GOLD
PINNACLE • PIONEER
PIVOTELLI
PRECISION POWER
PREMIER • PYLE • RCA
RICOH • SANSUI/VINTAGE
SANSUI • SIGNET
SONOGRAPHIE
SONORISE • SONY
SSI • STEWART
SUMIKO • SUMO
SYNTHESIS • TDL
TEAC • TECHNICS
THORENS • TIFFANY
TOSHIBA • UNDEN
VAN DEN HUL |
|--|--|

BUY IT RIGHT...THE FIRST TIME

213 South Street / Route 24
Morristown, NJ 07960

201-984-8080

The Sound Seller

For the Musical Difference

Authorized Dealer For:

- | | |
|---------------|---------------------|
| Acoustat | NAD |
| Audio Control | Onkyo |
| M&K | Harmon Kardon |
| Nitty Gritty | Lexicon |
| Celestion | PROAC |
| Carver | Dahlquist |
| Kinergetics | Target |
| Monster Cable | Velodyne |
| Nakamichi | Atlantic Technology |
| Niles | Apature |
| Fried | CWD |
| Thorens | STAX |
| Proton | Component Guard |
| | Sony |

2808 Cahill Road
P.O. Box 224
Marinette, WI 54143
(715) 735-9002

TAKE THE SOUND APPROACH

AUTHORIZED DEALERS FOR:

- | | |
|--------------|-------------|
| • ADS | • KENWOOD |
| • ALPHASONIK | • JVC |
| • BAZOOKA | • NHT |
| • BOSE | • NILES |
| • CARVER | • ONKYO |
| • DENON | • PIONEER |
| • HAFNER | • POLK |
| • INFINITY | • SONANCE |
| • KICKER | • MANY MORE |

THE SOUND APPROACH
6067 JERICHO TPKE., COMMACK, NY 11725
(NO SONY PRODUCTS) **800-368-2344**

SELECTION, PRICE & EXPERT ADVICE! A

FACTORY AUTHORIZED

ONLY authorized dealers offer you the protection of a manufacturer's warranty with your purchase: at other dealers, you may have no warranty at all. Authorized dealers stock only components designed for the U.S., and have the training to help you select the right one for you.

- | | | | |
|-----------------------|---------------|-------------------|-------------------|
| • ACOUSTAT | • BERWIN VEGA | • MB QUART | • PARSEC |
| • ACOUSTIC RESEARCH | • BOUSTIC | • M&K | • RCA |
| • ADC | • CMO | • MINOLTA | • SHARP |
| • ADS | • DBK | • MITSUBISHI | • SANYO |
| • AIWA | • DEJON | • MONSTER CABLE | • SONANCE |
| • AKG | • ECLIPSE | • NAD | • SONY |
| • ALTEC LANSING | • EPICURE | • NADY | • SOUND CRAFTSMAN |
| • AMBICO | • FISHER | • NHT LABS | • SOUNDSTREAM |
| • ATLANTIC TECHNOLOGY | • FOM | • NILES | • STAX |
| • AUDIO QUEST | • GE | • OLYMPIUS | • STILLWATER |
| • BAW | • GRUNDIG | • ONKYO | • TICKERS |
| • BAZOOKA | • HAFNER | • OPTONICA | • SUNPACK |
| • BBE | • HI-FONICS | • ORION | • SURROUND SOUND |
| • BELTRONICS | • HFACHI | • PANASONIC | • TAMRAC |
| • BELLOGETTI | • INFINITY | • PARADIGM | • TEAC |
| • CAMBER | • JVC | • PHASE LINEAR | • TECHNICS |
| • CANON | • K&O | • PHILIPS | • THORENS |
| • CARTON | • KENWOOD | • PINNACLE | • TOSHIBA |
| • CARVER | • LEXICON | • PRECISION POWER | • TRIAD |
| • CELESTION | • LUMAM | • PROTON | • VELODYNE |

Meadtown Shopping Center • Route 23 • Kinnelon, NJ 07405



201-838-3444
The Only Number You'll Ever Need!

AUDIO VIDEO

BACKBEAT

by Steve Simels

PHOTO OF IRON PROSTATE BY LINDA COVELLO, COURTESY OF THE BAND



Heavy Metamucil

LATELY I've been thinking about this really great movie moment in George Lucas's *American Graffiti*. Well, actually, there are several great movie moments in *American Graffiti*, but the particular one I have in mind (for reasons that will become clear later on) is when the coolest aging greaser in town, played by Paul Le Mat, accidentally gives a ride to a gawky younger girl, played by McKenzie Phillips. The greaser, of course, is mortified at being seen with such pimply jailbait, so the two bicker constantly until (this being 1963) an early Beach Boys song comes on the radio, prompting Le Mat, disgusted, to change the station. Phillips, however, changes it back. "Don't you think the Beach Boys are bitchin'?" she asks. "I can't stand that surfin' shit," Le Mat snarls in reply. "Rock-and-roll's been all downhill since Buddy Holly died."

What's wonderful about the scene, of course, is that the fate it sums up comes to us all—that moment when whatever pop music we were weaned on begins to strike folks younger than us as quaint. But while Le Mat's greaser was the victim of the first such sea change in rock history, he could have

had the last laugh. By the early-Eighties New Wave boom, his beloved rockabilly was in fashion again.

Actually, if truth be told, no rock style ever really goes out of date, not completely. On rock's fringes, there are always earnest, purist bands flogging supposedly outmoded genres before like-minded crowds. Sometimes, when you least expect it, one of those bands even succeeds commercially, the most recent example being the Black Crowes' multi-Platinum, letter-perfect recreation of early-Seventies British blues rock.

Of course, the Crowes, who are in their twenties, are atypical; most revivalist bands tend to be . . . well, geezers. That might explain why the more successful keepers of the (various) flames tend to be on the blues/soul side of the street (Southside Johnny, say, or Danny Gatton) rather than the pop/rock one. Face it, forty-year-olds look kind of silly singing about teenage romance (which may be why a great pop band like Shoes never plays live). Besides, it's an open secret that getting old has long been the one truly taboo subject for rock songwriters.

In any case, what inspired these musings was "Loud, Fast and Aging

Rapidly," a genuinely exciting, and very funny, CD by a group of CBGB's punk veterans (the oldest is forty-one) called Iron Prostate. Strictly speaking, these guys (formerly known as Grecian Formula, heh heh) aren't revivalists—they're more like true believers, blasting out Ramones-style three-chord racket with all the fervor of people who think it's still 1978. But, as you can tell by the album's cover photo—a bottle of Jack Daniel's and a bottle of Geritol atop a Marshall amp—they also appreciate the inherent ridiculousness of schlepping band equipment out of a scuzzy Bowery night club at that point in your life when your hair has begun to thin and you're late with the car payments.

And so on their debut album, amidst the *de rigueur* punkish minimalism (complete lyrics of *Gilligan*: "I wear a white hat/I wear a red shirt/They all think I'm stupid/One day I'll kill them/I am Gilligan"), you also find something like *Hell Toupee*, the hilarious saga of a "middle-aged man with middle-aged needs" who sells his soul to the devil for a long-haired wig that lets him score with babes at rock clubs ("When I'm bored I'll take off my hairpiece just for kicks/And the label will say 'inspected by No. 666'"). Even better is *Rock 'n' Roll Nursing Home*, a Xerox-quality Ramones pastiche in which the hero "tools around in a black leather wheelchair" and propositions blue-haired old ladies with the line, "Baby, let me take you for a ride on my Craftmatic bed."

What all this proves, of course, I haven't quite sorted out. Maybe it's that any music remains valid as long as it's performed with passion and commitment. Or perhaps it's that adult concerns and essentially adolescent idioms need not be mutually exclusive. Or maybe it's just that loud noises are cathartic at any age. Whatever. The basic point is that Iron Prostate's "Loud, Fast and Aging Rapidly" (from *Skyclad/Screaming Skull Records*, P.O. Box 666, Middlesex, NJ 08846) is the kind of smart punk album the Dictators were supposed to have made but never really did. Both touching and funny, the album amounts to a *Wayne's World* take on the Who's famous dictum, "Hope I die before I get old" . . . not! □

Now, music lovers with different tastes have something in common: Adcom.



D. Vong



Listen to your CD player in one room while playing your FM tuner in another...and cassette tapes in another! The Adcom GFB-800 Music Control Center is a new concept in home music systems that allows the selection and control of different sources (FM, CD, tape, even records) in five or more different rooms. And, it's all designed around a choice of Adcom's highly renowned power amplifiers. Your entire family can have independent access to a superb, centralized Adcom music

system. Find out more about the Adcom GFB-800 system by contacting your authorized dealer. You'll discover why music lovers throughout the world have so much in common: Adcom.

ADCOM[®]
details you can hear

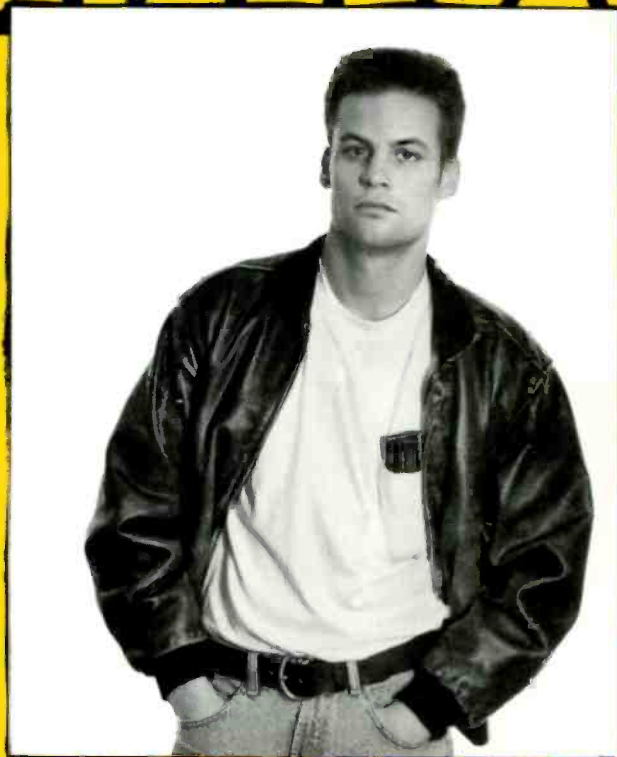
11 Elkins Road, East Brunswick, NJ 08816 U.S.A. (908) 390-1130
 Distributed in Canada by PRO ACOUSTICS INC. Pointe Claire, Quebec H9R 4X5

CIRCLE NO. 1 ON READER SERVICE CARD

Pioneer

Rule #17

Never
leave your
car
without
your
car stereo
in
your pocket.



Rules



Just slip the front panel of your Pioneer® Detachable Face Car Stereo into your pocket, and what's left behind is useless to thieves. Another Pioneer first, Detachable Face Security™ is available on more than 20 CD and cassette models, for the ultimate in security and convenience. To learn more, please call 1-800-421-1605, ext. 252.

 **PIONEER**
The Art of Entertainment