

# Stereo Review®

US \$2.75 • UK £1.95 • CANADA \$3.50 • OCTOBER 1993

## FIRST TESTS

**SoundEffects,  
JBL's Building-Block  
Surround System**

## HEAD-TO-HEAD TESTS

**\$500 Surround  
Receivers from Onkyo,  
Pioneer, and Yamaha**

## SHOPPING TIPS

**How to Choose the  
Right CD Player**

## ALSO TESTED

**Carver CD Changer,  
Sharp MiniDisc  
Portable, Advent  
Speaker, and more**



MR DAVID S BUCHANAN  
1100 OXMOOR WOODS PKY  
LOUISVILLE KY 40222-5569  
APR 94  
#BXBDHM\*\*\*\*\*5-DIGIT 40222  
#BCH11000098 1#430492  
#EJ10  
#VK07  
#JUN 94





SONY

## JUKEBOX YOUR CDs.

Pick a song. Pick 1000 songs. The new Sony 100 Disc Changer plays songs in any order from up to 100 CDs. Program your own mix.

CustomFile™ memory displays the name of each disc. It's the perfect way to store and play CDs.

For a free information packet, dial 1-800-648-SONY.

For your complete personal guide to all Sony consumer electronics, we're introducing Sony Style magazine. To receive your copy for \$4.95, plus \$1.50 shipping and handling, call the above number. Visa and MC. Offer expires 4/94. © 1993 Sony Electronics Inc. Reproduction in whole or in part without written permission is prohibited. All rights reserved. Sony, Sony Style and CustomFile are trademarks of Sony.

SONY



UNLOAD

CD PLAYER  
SERIES CDP-CX100

SONY

INPUT

FILE

ERASE

SELECT  
DISC/CHARACTER

DISC TRACK 200/UP  
1 2 3 4 5 6 7 8 9  
ENTER  
REPEAT PROGRAM SHUFFLE  
PUSH OPEN  
EJECT

LIMIT OUT  
LEVEL

# Adcom's multi-c offers you the p



**A**dcom's award winning GFA-2535 multi-channel power amplifier is a multi-purpose component. An ideal foundation for an authentic surround-sound, home theater system, it can also serve as a centralized power source for a multi-room, multi-speaker audio system. This unique versatility together with Adcom's legendary sound quality made it the choice of the audio industry at its introduction at the 1992

Consumer Electronics Show.

A single rear panel switch lets you select either 3 or 4 channel operation. For video applications, the 3 channel mode brings your home theater to life, delivering 200 watts of clean, distortion-free sound to the center channel and 60 watts to each of the rear channels. Add it to your existing 2 channel amp and you'll be at the center of a superbly balanced, awesomely

# channel amplifier power of choice.



powered sound stage so real you can practically touch it.

Flexibility for audio-only use is unparalleled. Use the GFA-2535 as four 60 watt amplifiers to drive two pairs of speakers. Or bridge two of the channels and send 60 watts x 2 to a pair of satellite speakers and 200 watts to a single subwoofer for an incredible display of musical strength so real, you can feel it.

Three channels or four...home theater, home audio...the award-winning Adcom GFA-2535 gives you twice the versatility of ordinary amplifiers...and twice the value that has made Adcom famous.

**ADCOM**<sup>®</sup>  
*details you can hear*

11 Elkins Road, East Brunswick, NJ 08816 U.S.A. (908) 390-1130.  
Distributed in Canada by PRO ACOUSTICS INC.  
Montréal, Québec (514) 344-1226

CIRCLE NO. 1 ON READER SERVICE CARD

# TIME DELAY



## 35 Years Ago

In the October 1958 issue, editor Oliver P. Ferrell described several "synthetic" stereo systems designed to improve the sound of mono recordings. Ferrell's conclusion: "No enhancing device, however excellent, is a substitute for genuine stereo."

Equipment tested this month included the Eico HTF-90 FM tuner, which was available as a kit (\$39.95) or factory assembled (\$65.95), and the Bell Model 2521 15-watt receiver, described as "one of the smallest combination units available to the hi-fi consumer." Among the new products noted were the Gonset FM converter for AM car radios. Fly in the ointment: A small halo antenna, not then available, was necessary to improve reception.

If it's so good, how come it's not on CD? Reviewing Ernest



The Gonset FM converter

Ansermet's recording of Stravinsky's *Petrouchka*, on London, critic John Thornton called it "the most startling stereo recording yet heard... a historic release."

## Stereo Review

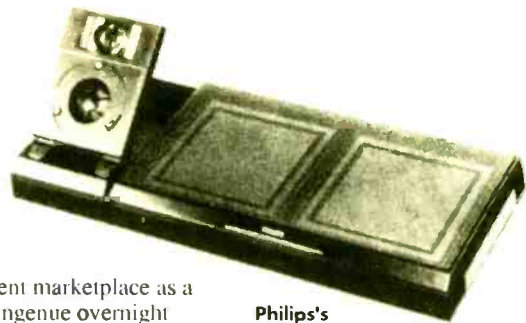
OCTOBER 1979 • \$1.00  
CHINESE MUSIC, PAST, PRESENT, AND FUTURE



## 20 Years Ago

In Best of the Month, Eric Salzman beat the drum for a Turnabout release of Biedermeier-period Romantic works by Kalkbrenner and Spohr ("What sweetness! What melancholy! What mastery!"). James Goodfriend proclaimed a BASF recording of Schubert's "Trout" Quintet with Jörg Demus and the Collegium Aureum on period instruments "one of the most important records of the year." And Joel Vance, vastly (too vastly) taken with "Rigor Mortis Seis In," by the Who's bassist, John Entwistle, declared, "I wish that listening to it might be made mandatory."

Elsewhere in the review sections, Noel Coppage considered a solo album by Steppenwolf's frontman John Kay and noted, "As a harmonica player, Kay isn't even a threat to me." And a despairing Peter Reilly concluded his critique of Jimmy Buffett's "A White Sport Coat and a Pink Crustacean" with the observation, "It has about as much chance of survival in



Philips's Sound Series 2000 car speakers

the current marketplace as a blonde ingenue overnight guest at a Transylvanian castle."

New products this month included the Sylvania RQ3748 four-channel receiver with built-in SQ decoder (\$550), the Elac/Miracord 760 three-speed automatic turntable, and the Applied Physics APL-9 speaker, a pentagonal column with three driver arrays. In test reports, Julian Hirsch examined the Perpetuum-Ebner PE 3060 turntable, which had an automatic record-sensing system to prevent the tonearm from leaving its rest unless a record was on the platter. He called the feature "analogous to an especially tasty icing on an already well-baked cake."

Who does he think he is—Kreskin? Reporting on the first World Record Congress, a critic-and-industry get-together in Italy, William



Steppenwolf's John Kay, 1973

Livingstone quoted a Polydor exec who announced that "the future of recordings lies in the video disc."

## 10 Years Ago

Letters to the Editor: Response to August's "Speaker Cables: Can You Hear the Difference?"—controlled listening tests showing that expensive Monster Cable offered no audible advantage

over standard zip cord—was passionate and mostly outraged. Typical was this reaction from four stereo salesmen from Rochester, Minnesota, who advised us to run the test again: "This time,

## Stereo Review

OCTOBER 1982 • \$1.00  
HOW TO BUY AN AMPLIFIER  
How Much Power Do You Need?  
Understanding Amplifier Classes  
Guide to Amplifier Specs

First Compact Discs from Telarc

Equipment Test Reports  
• Bangor CD-77 Compact Disc Player  
• VSP Labs Trues S105 Power Amplifier  
• Conquest Dorian 100 Speaker System  
• Fosgate 101A Late 2 Surround Stereo  
• Pioneer P-080 All-File Tuner  
Plus: Fujitsu Ten CR-432E Car Stereo



please use Johnson & Johnson Safety Swabs. Enclosed are twelve, marked for left and right ears!"

New products this month included the Jensen AVS-2100 video tuner (\$590) and Philips's Sound Series 2000 car speaker system with rotatable driver panels. In test reports, Julian Hirsch put the Fosgate Research 101A Tate II surround stereo system through its paces, concluding, "If you have long since relegated multichannel sound to the dim past, the Fosgate 101A could give you a pleasant surprise."

Aural Sex? In an ad for the discount equipment seller Stereo Corporation of America, a model with a low-cut dress and a come-hither look was pictured urging readers to call a toll-free number because "I've got something you've always wanted to get your hands on!" —Steve Simels



## WITH TECHNICS THE MUSIC NEVER STOPS. EVEN WHEN YOU STOP TO CHANGE DISCS.

Thanks to Technics you can change up to four discs while still listening to Beethoven's Fifth.

Here's the inside story. We isolate the laser pickup from the disc tray. Simple but very effective.

But "play one while changing four" is just one example of the innovative technology in Technics CD changers.

The SL-PD947 also has ID scan, which plays the loudest section of the first two minutes of a track. So you can identify the song quickly and easily.

And with the delete programming function, you can delete the songs you don't want to hear by simply touching a button. You also get 10-key direct

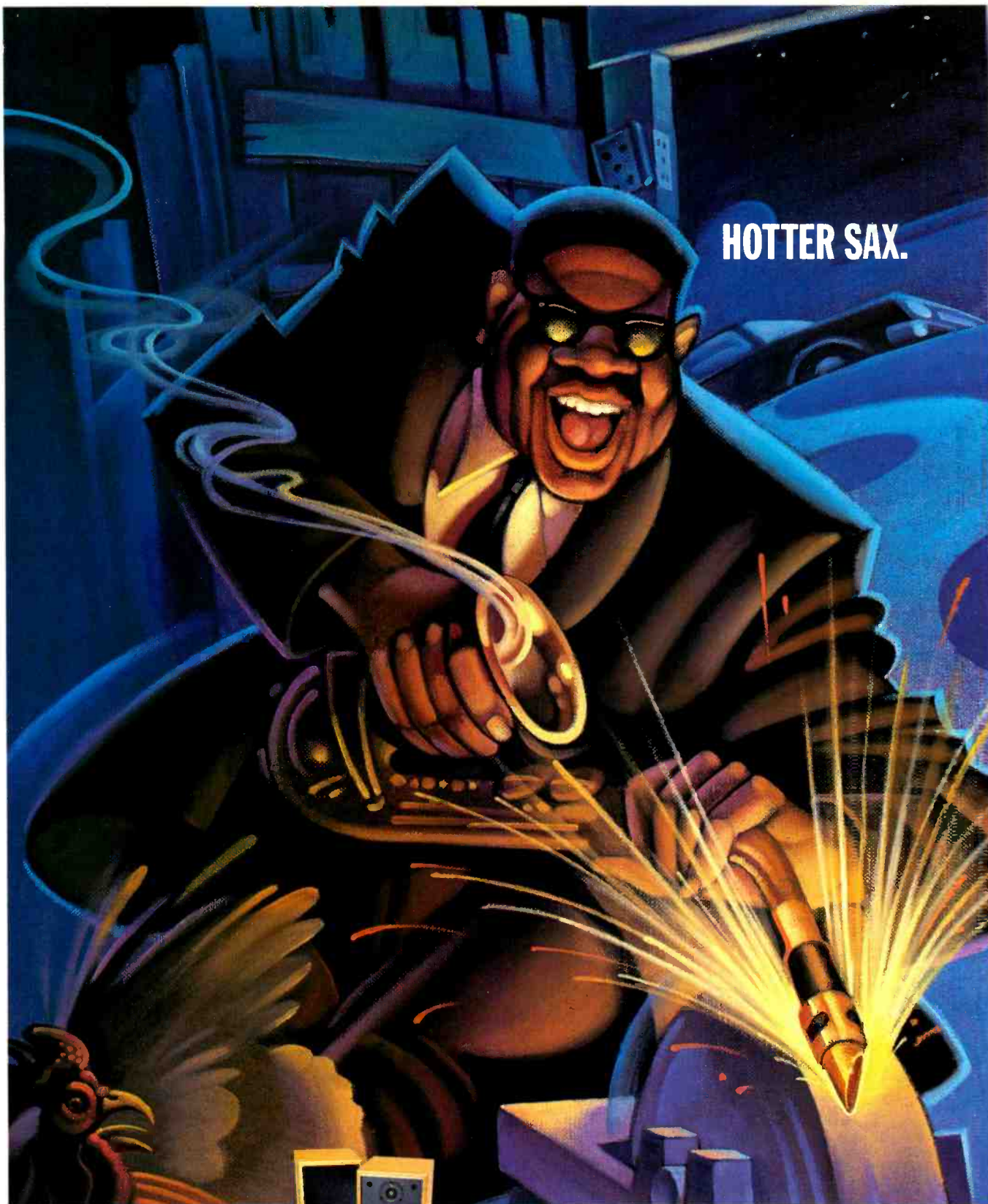
access on the front panel of the changer and on the remote control. So operating and selecting your favorite music is easy.

There's even pitch control, which enables you to alter the disc speed by plus or minus 12.5%.

Technics 5-disc rotary CD changers. The music never stops even when you stop to change discs.



**Technics®**  
The science of sound



**HOTTER SAX.**

Digital music sources and home theater have heated up the home entertainment scene. To meet the challenge, the all-new Infinity Reference Standard



Series speakers employ exclusive technologies to deliver hotter performance without burning a hole in your wallet.

At Infinity, we believe

it's not how much you spend,  
it's how well you spend it.

 **Infinity**

AS FAR AS YOU CAN HEAR.

H A Harman International Inc. Company. Call (800) 765-5556 for the Infinity dealer nearest you. In Canada, call (416) 294-4833, H. Roy Gray, Ltd.

CIRCLE NO. 22 ON READER SERVICE CARD





Cover

JBL's modular SoundEffects line includes the Take 2 RF transmitter, Center center-channel speaker, Sat 2 satellite speaker, and BassWave subwoofer (shown here with a 27-inch RCA Home Theater monitor/receiver and a Technics SA-GX650 A/V receiver). For details see the special test report beginning on page 62.

Photograph by Roberto Brosan

TIME DELAY .....	4
LETTERS .....	12
NEW PRODUCTS .....	14
AUDIO Q&A .....	21
PERIPHERALS .....	24
SIGNALS .....	26
TECHNICAL TALK .....	30
POPULAR MUSIC .....	98
CLASSICAL MUSIC .....	110
THE HIGH END .....	128

COPYRIGHT © 1993 BY HACHETTE FILIPACCHI MAGAZINES, INC. All rights reserved. Stereo Review, October 1993, Volume 58, Number 10. Stereo Review (ISSN 0039-1220) is published monthly by Hachette Filipacchi Magazines, Inc. at 1633 Broadway, New York, NY 10019; telephone (212) 767-6000. One-year subscription rate for the United States and its possessions, \$15.94; Canada, \$23.94 (includes 7% GST, GST registration number 126018209, Canadian Sales Agreement Number 99236); all other countries, \$23.94; cash orders only, payable in U.S. currency. Second-class postage paid at New York, NY 10001, and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. 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 (303) 447-9130. 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, 1633 Broadway, New York, NY 10019. BACK ISSUES are available. Write to Stereo Review-Back Issues, P.O. Box 7085, Brick, NJ 08723. Enclose a check for the cover price of each issue you want plus \$1.75 each for shipping and handling. For telephone credit-card orders, call 908-367-2900. EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care, but the publisher assumes no responsibility for the return or safety of unsolicited manuscripts, art, or photographs.

PRINTED IN THE U.S.A.

# Stereo Review

INCORPORATING HIGH FIDELITY®

## EQUIPMENT

### Equipment Test Reports

Carver SD/A-390t CD changer, page 32	32
Cambridge SoundWorks Model Six loudspeaker system, page 34	
Advent Legacy III loudspeaker system, page 40	
Sharp MD-D10 portable MiniDisc player, page 50	
Teac V-8000S cassette deck, page 56	

### Special Test Report: JBL SoundEffects

A modular system for music, movies, and "magic" • by David Ranada

### Shopping for a CD Player

A practical guide for 1993 • by Daniel Kumin

### Comparison Tests: Three \$500 A/V Receivers

How do "budget" Pro Logic receivers from Onkyo, Pioneer, and Yamaha measure up? • by David Ranada



## MUSIC



### Special CD Offer

Deutsche Grammophon enters the Fourth Dimension

### Cecilia Bartoli

Opera's new superstar: Too good to be true? • by John Ardoin

### Best Recordings of the Month

John Hiatt's "Perfectly Good Guitar," a "Pathétique" for Tchaikovsky's centenary, exuberant Latin classics from Miami's New World Symphony, and Paul Westerberg's "14 Songs"



## Introducing The Stereo System That Isn't For Everybody.

*"You have to hear it to believe it."*

We could claim that the Bose® Acoustic Wave® music system is for everyone. After all, it sounds like much larger, more expensive stereos. It fits almost anywhere you can put a briefcase. And it's as easy to use as your telephone.

But we think you're the one to decide if the only stereo system we know to be named *Invention of the Year* is for you. Because, with all the patented technology on the inside and all the simplicity on the outside, the Acoustic Wave® system is so advanced it may seem technically impossible. It also looks unlike any other stereo system you've ever seen. And its compact disc player, AM/FM radio, and built-in patented

speakers deliver sound you won't believe until you hear it in your own home.

So, if the idea of owning a revolutionary stereo from the best respected name in sound intrigues you, ask for our free video. Like the Acoustic Wave® system, it's available only by calling or writing Bose.



**Call For A FREE Video!**  
**1-800-282-BOSE Ext. 56A**

Yes, please send me a FREE video on the Bose Acoustic Wave® music system.

Name \_\_\_\_\_ 56A  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone ( \_\_\_\_\_ ) \_\_\_\_\_


Mail to: Bose Corporation, Dept. BCDD, The Mountain, Framingham, MA 01701-9168 USA

**BOSE**  
Better sound through research®  
© 1993 Bose Corporation JN94396-1  
Covered by patent rights issued and/or pending.

# NoiseBuster™

active noise reduction headset

Sound Relief!




NoiseBuster can reduce annoying noise by 50-95%, while leaving desired sounds, such as speech, music and warning signals clearly audible.

Use the comfortable, lightweight NoiseBuster:

- in the plane, car, bus, truck, boat, train, subway, city, home, office
- with lawn mowers, vacuum cleaners, home power tools, computers, fans
- and in many other everyday situations where noise is a nuisance.

Use NoiseBuster in conjunction with your portable audio equipment or in-flight entertainment system to reduce environmental noise, and enjoy better audio quality.

**How does "active" noise reduction work?**



Microphones in both headset earcups listen to the offensive noise, feed that information to the NoiseBuster electronic controller where it is analyzed, and an anti-noise wave is generated. When the anti-noise meets the offensive noise, that noise is reduced.

**\$149 + shipping/handling**

To order, call toll-free:  
**800-228-3141**  
Visa/MasterCard accepted

**nct** NOISE CANCELLATION TECHNOLOGIES, INC.  
800 Summer Street, Stamford, CT 06901

## Stereo Review®

**Vice President, Editor in Chief**  
LOUISE BOUNDAS

**Executive Editor**  
MICHAEL RIGGS

**Art Director**  
SUE LIEWELLYN

**Director, Hirsch-Houck Laboratories**  
JULIAN HIRSCH

**Senior Editor**      **Technical Editor**  
BOB ANKOSKO      DAVID RANADA

**Managing Editor**  
DAVID STEIN

**Popular Music Editor**      **Classical Music Editor**  
STEVE SIMELS      ROBERT RIPPES

**Associate Art Director**  
MINDY OSWALD

**Associate Editor**      **Assistant Editor**  
MARYANN SALTZER      JAE SEGARRA

**Editor at Large**  
WILLIAM LIVINGSTONE

Contributors: Robert Ackart, Chris Albertson, Rebecca Day, Richard Freed, Jose Garcia (Buyers' Guides), 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 Pohlmann, Parke Puterbaugh, Charles Rodrigues, Eric Salzman, Craig Stark, David Patrick Stearns

**Vice President, Group Publisher**  
THOMAS Ph. WITSCHI

**Consumer Electronics Group Advertising**  
VP/Associate Publisher  
Tony Catalano

Regional VP/Ad Director, East Coast:  
**Charles L. P. Watson**, (212) 767-6038

Regional Account Manager, East Coast:  
**Christine B. Forhez**, (212) 767-6025

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

Regional VP/Ad Director, West Coast:  
**Robert Meth**, (213) 954-4831

Western Advertising Manager:  
**Paula Mayerl**, (213) 954-4830

Sales Assistant: **Nikki Parker**

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

Assistant to the Publisher: **Aline J. Pulley**

Operations Manager: **Sylvia Correa**

Advertising Coordinator: **Linda Neuweiler**

Trade Show Coordinator: **Barbara Aiken**

Sales Assistant: **Yvonne Telesford**

Classified Advertising: (800) 445-6066

Production Manager: **Vicki L. Feinmel**

Production Director: **Patti Burns**

Business Manager: **Christine Maillet**

General Manager: **Greg Ropertl**

**HIFM**  
Hachette  
Filipacchi  
Magazines

Stereo Review is published  
by Hachette Filipacchi Magazines, Inc.

Chairman: Daniel Filipacchi  
President, CEO, and COO: David J. Pecker  
Executive VP and Editorial Director: Jean-Louis Ginibre  
Senior VP, Global Advertising: Paul DuCharme  
Senior VP, Director of Corporate Sales: Nicholas Matarazzo  
VP, Director of Strategic Planning, Advertising, & Circulation: Patrice Listfield  
VP, Chief Financial Officer: Paul DeBenedictis  
VP, General Counsel: Catherine Flickinger  
VP, Manufacturing & Distribution: Anthony Romano  
VP, Circulation: Leon Rosenfield  
VP, Research & Marketing Services: Susan Smollens  
VP, Communications & Special Projects: Keith Estabrook  
VP, Magazine Development: Marcia Sachar

**The Audio Bureau**      **MMA**



## Not For Sale.

When Denon, with the audio industry's longest heritage of digital design and music recording, charged its most talented engineers to create a range of cost-no-object components, clearly the goal was not for immediate sales. Instead, Denon applied the most advanced technologies to improve the resolution, integrity and stability of digital data transmission to achieve accurate, transparent sound reproduction and pure musicality.

What uniquely qualifies Denon in this endeavor is that the Company shares the same dedication to music of many esoteric manufacturers, but combines this fervor with the technology and resources gained through 83 years of recording music and building record/playback components. *No other high-end or mainstream audio manufacturer can make this claim.*

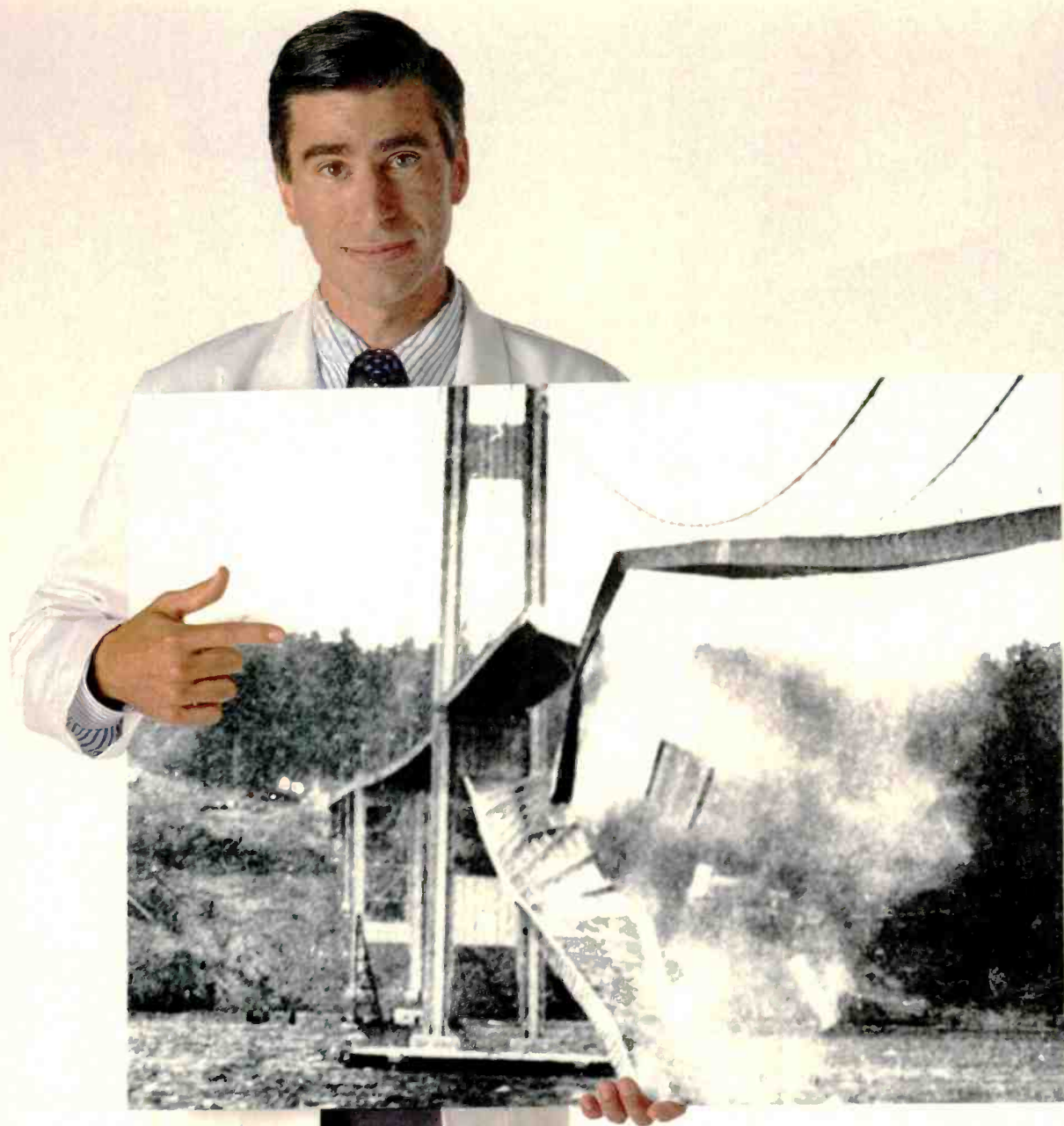
The intensive research and design that has gone into the very limited edition of S-Series components could never be recouped through sales, even at their seemingly lofty prices. Instead, Denon, in keeping with its "Design Integrity" philosophy, will explore ways to incorporate many of these advances in future Denon components. But, for those of you who can afford not to wait...

*TOP: The DP-S1 CD Transport is constructed using three levels of mechanical and acoustic isolation and a high-resolution laser system to deliver ultra-stable, jitter-free data. \$8,000.*

*MIDDLE: The DA-S1 D/A Converter employs S1-Gerlock clock and data transmission with Denon's exclusive ALPHA Converter System to achieve a full 20 bits of data integrity from any CD or other digital audio source. \$7,000.*

*BOTTOM: The POA-S1 Monoblocks combine parallel, complementary bipolar power supplies with a full differential power MOS-FET amplifier design to deliver more than 1,400 Watts into a 1 Ohm load. \$20,000 each.*

# DENON



*Matthew S Polk*

# DYNAMIC BALANCE. WITHOUT IT BRIDGES FALL DOWN AND SPEAKERS FALL SHORT.

In 1940 the Tacoma Narrows Bridge shook itself to death.

As a 42 mile-an-hour wind blew across the bridge, the steel, macadam and concrete began to resonate uncontrollably, and turned this 2,800 foot centerspan into instant jello.

This notion, that materials produce an amplified resonance when in motion, has been explored in everything from skyscrapers to the spaceshuttle.

Two years ago, we at Polk decided to look at it in speakers. Working in partnership with the Johns Hopkins University, we made discoveries that led us to undertake the most ambitious engineering and speaker design development program in our history.

For the first time we could actually see how energy moved through every part of a speaker. And using sophisticated instruments, and good old trial and error, we found out how to perfectly "marry" materials in motion to lessen their individual resonances, thereby eliminating distortion and heightening musical purity. The new S and LS Series represents this triumph of Dynamic Balance.™

We can safely boast they're built like no speakers on the market today. And the proof is in the listening. You'll see and hear how far our new lines of Dynamically Balanced speakers have outdistanced the competition.

It's a distance they won't be able to bridge.

**THE NEW LS & S SERIES FROM THE SPEAKER SPECIALISTS OF**

**polkaudio**



# LETTERS

## Used CD's

I've had about enough of the music industry's constant whining. One time they're carping about home taping, the next it's used CD's. Where did they believe used CD's would end up? In some landfill?

Now I read that Garth Brooks has come to tilt at this new windmill, refusing to sell his CD's to stores that also carry used CD's. So what's the gripe? Nobody else is reimbursed for sales of used items—not Chrysler, Maytag, John Deere, Levi-Strauss, etc. Americans hold garage sales every week of the year. Used-book stores have been around for decades. What makes music recordings exempt from disposal when they're no longer desired?

And if Brooks is such a "good old boy," how come he's siding with the corporate giants instead of the little guy?

H. J. ELLIS  
Veradale, WA

## Recording Rights

Now that we are paying royalties on blank digital tape, we have the right to record what we want to, don't we? If a friend or relative will lend me 300 CD's, I can record them, can I not?

ROB CAVE  
Princeton, TX

*Yes, for your personal, private use. You cannot legally sell copies, however.*

## A Better Bargain

All of us at Celestion appreciate Julian Hirsch's enthusiastic test report on the Celestion Trinity three-piece loudspeaker system in August. The prices quoted, however, were for the Trinity's component parts—Celestion One, \$199 a pair; CS135 subwoofer, \$259 (the actual price is \$249)—for a total of \$458, rather than the Trinity's "system" price of \$399.

Mr. Hirsch said that the Trinity is "one of the most economical three-piece systems, yet ranks close to the top in sound." We can't help but be curious what his reaction to the Trinity's price/performance ratio might have been if he'd considered the system at its correct suggested retail price of \$399.

PETER WELLIKOFF  
President, Celestion Industries  
Holliston, MA

## More Corroding CD's

Like Gerald V. DeOreo (July "Letters"), I have experienced corrosion of the silvery finish on compact discs—about six months after I moved to Dar es Salaam in Tanzania, East Africa, where my apartment was a scant four blocks from the Indian Ocean. It happened with both new CD's and those I had owned for years. The thin sponge-plastic pads

in multidisc sets also turned yellow and decayed over time. I believe these effects could have been caused by a combination of high heat, high humidity, and high salt content of the air.

PATRICK L. HARGROVE  
Miami, OK

The "CD rot" reported by Gerald V. DeOreo sounds like what's been happening to my CD's over the past four years or so. Out of a total of eighty-eight discs, ten are now slightly damaged, four moderately damaged, and three heavily damaged. Two of the last are completely unplayable—one looks like someone shot a 22-caliber bullet through it!

Interestingly enough, the effect has noticeably slowed down since I relocated from Morne Jaloux (more humid) to the Lagoon Road area (less humid). The lesson? If you want to keep your CD's forever, move to the Sahara, or perhaps California. BRIAN STEELE  
St. George's, Grenada

*Manufacturing standards for CD's are under discussion by the industry in an effort to prevent such problems, which should be very rare among current CD's.*

## D-d-d-d-DAD

I purchased the new Front 242 album, "06:21:03:11 Up Evil" (Epic), and noticed on the back, under the total time, the letters DDAD. Is this a new code to describe the recording/mastering technology? If so, how long has it been in use? It is new to me.

GARY C. RUISINGER  
Kirksville, MO

*According to Epic, the "A" means that the album's vocals were recorded by analog equipment, but everything else was digital. There is no industry-wide standard for this type of code.*

## The Last Obstacle

Compliments to Julian Hirsch for the down-to-earth views in his August "Technical Talk" column, "Is Distortion Desirable?" On the issue of live vs. recorded sound, I strongly believe that high fidelity has reached the point where the only obstacle to perfect reproduction is acoustics. I vaguely recall an experiment where speakers were placed directly on the stage in a concert hall along with the members of a string quartet. The music was switched back and forth between live and recorded, with minimal if any noticeable difference. If near-perfect reproduction can be achieved under identical acoustical conditions, then the recorded and live music must be nearly identical, and only the acoustics must be recreated.

Why can't that be done by picking up the sound in the home listening room through a

microphone and adjusting it, in real time, until the recorded and played-back signals match? Wouldn't that be similar to error correction in a CD player?

ERNEST WINTER  
Bethesda, MD

*That's a nice idea, but very difficult to implement with existing technology. The closest we can come today is with recordings encoded in Dolby Surround or Ambisonics or by means of DSP-based ambience enhancement.*

## Twin Receivers?

The July test report on the Nakamichi AV-1 audio/video receiver makes it seem almost exactly like my Sansui RZ9500AV. Are they manufactured by the same company?

DON RYBACKI  
South Milwaukee, WI

*We have no knowledge that the AV-1 and the RZ9500 are built by the same company, but it is possible. There is no corporate relationship between Nakamichi and Sansui, however.*

## Another Pop Classic

I was most disappointed with Roy Hemming's "Pop Classics" in August because he failed to mention any recording by Dick Haymes—the most underrated of all the pop singers, but perhaps the greatest.

RANDOLPH MORINI  
Ghent, NY

## "Carmelites"

Eric Salzman's reviews are uniformly good, but I want to thank him in a special way for his sympathetic and insightful review of Poulenc's *Dialogues of the Carmelites* in July. In my view, this is the only opera in the last two hundred years that treats the Christian view of life seriously and realistically. I might point out, however, that the final hymn—as the nuns march to the scaffold—is not *Te Deum* but *Salve Regina*. FRANCIS J. GUENTNER, S.J.  
St. Louis, MO

## Correction

In the special offer of Legacy's "The Beauty of the Blues" CD in September, the cost was incorrectly given in the text as \$3, but the amount stated in the coupon, \$4, was correct. We regret any confusion caused by this proof-reading error. □

**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.**

# THE ULTIMATE MOVIE EXPERIENCE.

## OWN 3 LASER DISCS \$1.00 EA.

SEE DETAILS BELOW.



The Bodyguard	*1105907	Universal Soldier	1059104
Cool World	*1084706	The Sound Of Music	*0003905
Bram Stoker's Dracula	*1102904	The Abyss	*0881102
Forever Young	*1104306	Die Hard	*0367607
Howard's End	*1102805	Die Hard 2	*0041806
Paul McCartney's "Get Back"	0234708	Black Rain	*0911701
Toys	*1103308	The Hunt For Red October	*0825000
Basic Instinct	*1033208	Backdraft	*0559005
Lawnmower Man	1014505	Alien	0000208
Scarface (1983)	0216804	Allens	0360909
Batman (1989)	*0642504	Allen 3	*1042506
Batman Returns	*1029909	Field Of Dreams	0920306
My Cousin Vinny	1033109	New Jack City	0971507
The Godfather	0000802	Bugs Bunny Classics	0297705
The Godfather: Part III	0842302	The Bible	*0074708
Hook	*0854307	Top Gun	0426908
The Blues Brothers	0211706	Fried Green Tomatoes	1005404
Dune	0211102	Conan The Barbarian	*0220509
Far And Away	*1046507	Always	*0921502
Boomerang	*1064005	The Prince Of Tides	*0847103
Goodfellas	*0969808	Fatal Attraction	0439307
Back To The Future	*0211409	North By Northwest	*0844209
Back To The Future Part II	*0921304	National Lampoon's Animal House	0211508
Back To The Future Part III	*0497008	The Wizard Of Oz	0001404
Home Alone	*0104208	Chinatown	*0202507
The Last Boy Scout	*0779108	Jaws	0100008
Death Becomes Her	*1071505	It's A Wonderful Life 45th Anniversary Ed.	0392308
The Last Of The Mohicans (1992)	*1071406	Robin Hood: Prince Of Thieves	*0976803
A League Of Their Own	*1078005	The Silence Of The Lambs	0805309
Madonna: Truth Or Dare	*0232900	Lethal Weapon	0630806
Passenger 57	*1087709	Lethal Weapon 2	*0642702
Sneakers	*1071604	Lethal Weapon 3	*1051507
Terminator 2: Judgement Day	*0233205	Ghost	*0826008
Under Siege	*1077908	Predator	*0364901
		Predator 2	*0104307

Star Trek—The Motion Picture	*0203505
Star Trek II—The Wrath Of Khan	*0201301
Star Trek III—The Search For Spock	*0201608
Star Trek IV—The Voyage Home	*0430603
Star Trek V—The Final Frontier	*0448605
Star Trek VI—The Undiscovered Country	*1001007
The Empire Of The Sun	*0633206
Henry V (1990)	0040303
Casablanca	0050708
The Man Who Would Be King	*0085803
The African Queen	0051102
Patton	0788703
Superman: The Movie	*0001305
Hard To Kill	0953505
Blue Velvet	*0515007
American Graffiti	0211300
Beverly Hills Cop	0205302
Bugsy	*0853408
Kindergarten Cop	0523407
Road Warrior	0602805
Chariots Of Fire	0601401
Beetlejuice	0633008
Dangerous Liaisons	*0638700
The Addams Family	*1000900
Memphis Belle	*0983502
Wayne's World	*0853705
Caddyshack	0602300
2001: A Space Odyssey	*0844308
E.T.: The Extra-Terrestrial	0681106
Patriot Games	*1051309
Bladerunner: The Director's Cut	*1097906

Here's a great way to build a collection of your favorite movies—on laserdiscs! Just write in the numbers of the 3 laserdiscs you want for \$1.00 each, plus shipping and handling. In exchange, you simply agree to buy two more laserdiscs in the next year, at regular Club prices (currently as low as \$29.95, plus shipping and handling)—and you may cancel membership at any time after doing so.

**Free Magazine** sent every four weeks (up to 13 times a year) reviewing our Director's Selection—plus scores of alternate choices, including many lower-priced laserdiscs. And you may also receive Special Selection mailings up to four times a year. (That's up to 17 buying opportunities a year.)

**Buy only what you want!** If you want the Director's 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. And you'll always have 14

days to decide; If not, you may return the selection at our expense.

**Money-Saving Bonus Plan.** If you continue your membership after fulfilling your obligation, you'll be eligible for our generous bonus plan. It enables you to enjoy great savings on the movies you want—for as long as you decide to remain a member!

**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.

For fastest service, use a credit card and call us toll free 24 hours a day:

**1-800-538-2233** Dept. M4Q



Entertaining America... One Person at a Time.®

### Columbia House Laserdisc Club

Dept. M4Q P.O. Box 1112, Terre Haute, Indiana 47811-1112

Yes, please enroll me under the terms outlined in this advertisement. As a member, I need buy only 2 more selections, at regular Club prices, within the coming year.

Send me these 3 laserdiscs for \$1.00 each plus \$1.50 each shipping and handling (total \$7.50)

Please Check How Paying:  My check is enclosed 2QY/2QZ

Charge my introductory laserdiscs and future Club purchases to:

MasterCard  Diners Club  AMEX  VISA  Discover

Acct. No. \_\_\_\_\_ Exp. \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_ Apt. \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Zip \_\_\_\_\_ Phone No. ( ) \_\_\_\_\_

Note: Columbia House Laserdisc Club reserves the right to reject or cancel any membership. Offer limited to continental U.S. (excluding Alaska). Applicable sales tax added to all orders. 1400 N. Fruitridge Avenue, Terre Haute, IN 47811-1112

\*Letterbox

© 1993, The Columbia House Company

122/F93

# NEW PRODUCTS



## ▲ FOSGATE AUDIONICS

Fosgate Audionics' four-channel Model 4125 amplifier is rated to deliver 75 watts per channel into 8 ohms or 125 watts into 4 ohms from 20 Hz to 20 kHz with 0.15 percent distortion. Either or both

pairs of channels can be bridged for 225 watts into 8 ohms or 275 watts into 4 ohms. Price: \$1,099. Fosgate Audionics, Dept. SR, P.O. Box 70, Heber, UT 84032.

● Circle 120 on reader service card



## ▶ CELESTION

Celestion's six-model Shield Series includes the AVC-1 center speaker (above, \$179) and the 34-inch-tall AV-6 (right, \$699 a pair), which features two 5-inch woofers and a low-frequency limit of 44 Hz. Both speakers are magnetically shielded. Celestion, Dept. SR, 89 Doug Brown Way, Holliston, MA 01746.

● Circle 121 on reader service card



## ◀ BLAUPUNKT

The detachable faceplate (left) of Blaupunkt's Monterey CDM83 car CD receiver is contoured so that the primary controls are oriented toward the driver. The head has CD-changer controls, a memory bank for CD or radio-station names, and a four-channel amp that delivers 80 watts. Price: \$550. Blaupunkt, Dept. SR, 2800 So. 25th Ave., Broadview, IL 60153.

● Circle 122 on reader service card

## ▶ DYNACO

Dynaco's Stereo 400 Series II amp, successor to the classic Stereo 400, is rated to deliver 205 watts per channel into 8 ohms and 300 watts into 4 ohms with 0.05 percent distortion. It can be bridged to 600 watts mono and has a high-current mode. Price: \$995. Dynaco, Dept. SR, 125 Cabot Ct., Hauppauge, NY 11788.

● Circle 123 on reader service card







**Come to  
Marlboro  
Country.**

© Philip Morris Inc. 1993

SURGEON GENERAL'S WARNING: Cigarette  
Smoke Contains Carbon Monoxide.

16 mg "tar," 1.2 mg nicotine av. per cigarette by FTC method.

# NEW PRODUCTS



## ▲ BBE

BBE's patented Audio Restoration System is said to enhance the clarity of musical recordings by correcting phase anomalies and restoring the proper balance between middle and high frequencies. It has a Definition

control to adjust the degree of processing and a Lo Contour knob to boost or cut low frequencies. Price: \$229. BBE Sound, Dept. SR, 5500 Bolsa Ave., #245, Huntington Beach, CA 92649.

● Circle 124 on reader service card

## ▶ ALTEC LANSING

The Model 96 speaker from Altec Lansing is a two-way minitower system using two 6½-inch woofers and a ¾-inch dome tweeter. Frequency response is given as 39 Hz to 20 kHz ±3 dB, power handling as 150 watts maximum, and sensitivity as 91 dB. The 32-inch-tall cabinet is finished in black-oak or dark-oak vinyl. Price: \$400 a pair. Altec Lansing, Dept. SR, P.O. Box 277, Millford, PA 18337-0277.

● Circle 125 on reader service card



## ◀ TEMA

Stereo sound from a single enclosure is the aim of Tema's Stereolith Duetto 500, one of four models in a series. Geometric positioning of the left and right speaker complements—a 1-inch tweeter and two 5¼-inch woofers—is said to produce a smooth, concentric dispersion pattern. Bandwidth is given as 70 Hz to 18 kHz. The 14½-inch-tall cabinet is finished in black-ash veneer.

Price: \$1,980. Tema Corp., Dept. SR, 301 E. Forest Lane, Palatine, IL 60067.

● Circle 126 on reader service card



## ◀ DIGITAL PHASE

The patented design of Digital Phase's AP-.5 two-way speaker, which couples a 3-inch woofer with a network of "acoustic reeds" to cancel its back wave, is said to achieve 30-Hz response from an 8½ x 13 x 9-inch ported box. Finish is black or oak. Price: \$650 a pair. Digital Phase, Dept. SR, 2841 Hickory Valley Rd., Chattanooga, TN 37421.

● Circle 127 on reader service card

## ▶ DENON

Denon's TU-650RD AM/FM tuner is able to receive the supplementary Radio Data System (RDS) broadcasts being transmitted by some sixty stations nationwide. A large display shows the call letters of a tuned

RDS station or a user-created tag for a non-RDS station, and you can search for RDS stations by format or music type. Price: \$375. Denon, Dept. SR, 222 New Rd., Parsippany, NJ 07054.

● Circle 128 on reader service card





Sting: Ten Summoner's Tales (A&M) 01334



Neil Young: Unplugged (Reprise) 64125



Kenny G: Breathless (Arista) 54317



Aerosmith: Get A Grip (Geffen) 20814

# GET 8 CDs FOR THE PRICE OF 1 WITH NOTHING MORE TO BUY... EVER!

- SWV: It's About Time** (RCA) 00151
- Zinman: Görecki, Symphony No. 3** (Nonesuch) 00110
- R.E.M.: Automatic For The People** (Warner Bros.) 00121
- 10,000 Maniacs: Our Time In Eden** (Elektra) 00126
- Garth Brooks: The Chase** (Liberty) 00141
- Red Hot Chili Peppers: What Hits?** (EMI) 00144
- Elton John: Greatest Hits 1976-1986** (MCA) 00150
- George Duke: Snapshot** (Warner Bros.) 00176
- A.C./DC: Live** (Atlantic) 00201
- Neil Young: Harvest Moon** (Reprise) 00208
- The Doors: L.A. Woman** (Elektra) 00215
- Frank Sinatra: The Best Of The Capitol Years** (Capitol) 00242
- David Benoit: Letter To Evan** (GRP) 00251
- Chieftains: The Celtic Harp** (RCA) 00323
- Phil Collins: Serious Hits... Live!** (Atlantic) 00324
- Erasure: Pop! The First 20 Hits** (Reprise) 00328
- John Lennon & Yoko Ono: Double Fantasy** (Capitol) 00333
- Silk: Lose Control** (Kela/Elektra) 00353
- Aladdin/Sdtrk.** (Walt Disney) 00411
- Bell Biv DeVoe: Hootie Mack** (MCA) 00412
- Reba McEntire: It's Your Call** (MCA) 00422
- Genesis: We Can't Dance** (Atlantic) 00423
- Best Of Dire Straits: Money For Nothing** (Warner Bros.) 00713
- Shal: If I Ever Fall In Love** (Gasoline Alley/MCA) 00757
- Fleetwood Mac: Greatest Hits** (Warner Bros.) 00796
- Cecilia Bartol: If You Love Me — Arie Antiche** (London) 00862
- Bon Jovi: Keep The Faith** (Mercury) 00868
- Richard Elliot: Soul Embrace** (Manhattan) 00871
- Brooks & Dunn: Hard Workin' Man** (Arista) 00857
- The Best Of The Alan Parsons Project** (Arista) 00877
- Madonna: Erotica** (Sire/Maverick) 00879
- Elvis Costello with The Brodsky Quartet: The Juliet Letters** (Warner Bros.) 00885
- Don Henley: The End Of The Innocence** (Geffen) 01064
- The Earl Klugh Trio: Volume Two: Sounds And Visions** (Warner Bros.) 01164
- Primus: Pork Soda** (Interscope) 01167
- Portrait** (Capitol) 01190
- Tina Turner: Simply The Best** (Capitol) 01195
- Kentucky Headhunters: Rave On!** (Mercury) 01202
- Ugly Kid Joe: America's Least Wanted** (Mercury) 01204
- Dr. Dre: The Chronic** (Interscope) 01241
- The Best Of Blondie** (Chrysalis) 01245
- Michael Feinstein: Forever** (Elektra) 01259
- John Michael Montgomery: Life's A Dance** (Atlantic) 01265
- Snow: 12 Inches Of Snow** (East West) 01266
- AI DIMEOLA World Sinfonia: Heart Of The Immigrants** (Mesa/Bluemoon) 01284
- Perlman: Brahms, Violin Concerto** (EMI Classics) 01321
- The Best Of Joe Cocker** (Capitol) 01338
- Moody Blues: A Night At Red Rocks With The Colorado Symphony Orchestra** (Polydor) 01339
- Sammy Kerashaw: Haunted Heart** (Mercury) 01340
- James Brown: 20 All-Time Greatest Hits** (Polydor) 01342
- Coverdale/Page** (Geffen) 01343
- P.M. Dawn: The Bliss Album...?** (Island) 01353
- Nana Mouskouri: Falling In Love Again: Great Songs From The Movies** (Philips) 01354
- Lever: For Real Tho'** (Atlantic) 01356
- Stone Temple Pilots: Core** (Atlantic) 00981
- Monte Love: In A Word Or 2** (Warner Bros.) 01357
- Gordon Lightfoot: Waiting For You** (Reprise) 01359
- Dwight Yoakam: This Time** (Reprise) 01360
- Big Daddy Kane: Looks Like A Job For...** (Reprise/Cold Chillin') 01361
- Perlman: Encores** (EMI Classics) 01387
- Glass, "Low" Symphony** (Point) 01398
- Robert Plant: Fate Of Nations** (Es Paranza) 01409
- Black 47: Fire Of Freedom** (SBK) 01418
- Talking Heads: Speaking In Tongues** (Sire) 01421
- Bryan Ferry: Taxi** (Reprise) 01426
- Michael Franks: Dragonfly Summer** (Reprise) 01427
- Hubert Laws: My Time Will Come** (MusicMasters) 01432
- Blues Traveler: Save His Soul** (A&M) 01433
- Bruce Hornsby: Harbor Lights** (RCA) 01262
- Kronos Quartet: Short Stories** (Nonesuch) 01444
- Belly: Star** (Reprise/Sire) 01449
- Pavarotti And Friends** (London) 01451
- K.T. Oslin: Greatest Hits: Songs From An Aging Sex Bomb** (RCA) 01461
- Green Jelly: Cereal Killer/Sdtrk.** (Zoo) 01499
- Roy Hargrove Quintet: Of Kindred Souls** (Novus) 01500
- Lords Of The Underground: Here Come The Lords** (Pendulum) 01507
- McBride & The Ride: Hury Sundown** (MCA) 01508
- David Crosby: Thousand Roads** (Atlantic) 01510
- Ahmad Jamal: Chicago Revisited** (Telarc) 01512
- Patty Loveless: Greatest Hits** (MCA) 01514
- Kiss: Alive 3** (Mercury) 01515
- Winger: Pull** (Atlantic) 01516
- Lee Ritenour: Wes Bound** (GRP) 01327
- Anthrax: Sound Of White Noise** (Elektra) 01517
- Made In America/Sdtrk.** (Elektra) 01518
- Aaron Neville: The Grand Tour** (A&M) 01519
- Creedence Clearwater Revival: Chronicle: 20 Greatest Hits** (Fantasy) 01520
- B. Brown Posse** (MCA) 01565
- Bing Crosby's Greatest Hits** (MCA) 04709
- Pet Shop Boys: Discography-The Complete Singles Collection** (EMI) 05605
- Rod Stewart: Downtown Train** (Warner Bros.) 10708
- James Galway: Greatest Hits, Vol. 2** (RCA) 10746
- Vince Neil: Exposed** (Warner Bros.) 10893
- The Thelouious Monk Quartet Featuring John Coltrane: Live At The Five Spot** (Blue Note) 10906
- Boyz II Men: Cooleyhighharmony** (Motown) 10930
- Depeche Mode: Songs Of Faith And Devotion** (Reprise/Sire) 01362
- Jackson Browne: Running On Empty** (Elektra) 11056
- Peter Gabriel: Shaking The Tree- 16 Golden Greats** (Geffen) 11089
- Bobby Brown: Bobby** (MCA) 11211
- James Ingram: Always You** (Warner Bros.) 11271
- Inner Circle: Bad Boys** (Big Beat/Atlantic) 14867
- Nirvana: Nevermind** (Geffen) 15600
- Buddy Holly: From The Original Master Tapes** (MCA) 20069
- Paul Simon: Negotiations And Love Songs 1971-86** (Warner Bros.) 20461
- Lindsay Buckingham: Out Of The Cradle** (Reprise) 20483
- Kathie Lee Gifford: Sentimental** (Warner Bros.) 20598
- Eurythmics: Greatest Hits** (Arista) 20611
- Jeff Lorber: Worth Waiting For** (Verve/Forecast) 20682
- Chris Isaak: San Francisco Days** (Reprise) 01428
- Peter Allen: At His Best** (A&M) 20730
- Vince Gill: I Still Believe In You** (MCA) 21063
- Eric Clapton: Timepieces-Greatest Hits** (Polydor) 23385
- The Eagles: Greatest Hits 1971-1975** (Polydor) 23481
- The Beach Boys: The Best Of The Beach Boys** (Capitol) 23946
- Fleetwood Mac: Rumours** (Warner Bros.) 24025
- The Rippingtons: Live In L.A.** (GRP) 24672
- Foreigner: The Very Best... And Beyond** (Atlantic) 24722
- Guru: Jazzmatazz Volume 1** (Chrysalis) 25063
- U2: Achtung Baby** (Island) 25174
- Amy Grant: Heart In Motion** (A&M) 25182



NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

**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



MS 625

Start with **4 FREE** Compact Discs now  
 Buy only **1** at regular Club price within a year  
 Then get **3** more CDs of your choice, **FREE**  
 Enjoy **8** CDs for the price of **1!**  
 Shipping & handling charges are added to all shipments.

**Nothing more to buy...EVER!**

**Porno For Pyros**  
(Warner Bros.) 01429 †  
**Olivia Newton-John:  
Back to Basics-  
The Essential  
Collection 1971-1992**  
(Geffen) 25334  
**Arrested Development:  
3 Years, 5 Months And  
2 Days In The Life Of...**  
(Chrysalis) 25357  
**House Of Pain**  
(Tommy Boy) 25416 †  
**Garth Brooks:  
Ropin' The Wind**  
(Liberty) 25535  
**The Eagles:  
Hotel California**  
(Asylum) 30030  
**Mary J. Blige:  
What's The 411?**  
(Uptown/ MCA) 30845 †

**Dire Straits:  
On The Night**  
(Warner Bros.) 01566  
**Kansas: Live At  
The Whiskey**  
(Innersound) 33961  
**Air Supply:  
Greatest Hits**  
(Arista) 34424  
**Elton John: The One**  
(MCA) 35022  
**Allman Brothers Band:  
A Decade Of Hits  
1969-1979**  
(Polydor) 35031  
**Carreras, Domingo,  
Pavarotti: 3 Tenors**  
(London) 35078  
**Kathleen Battle  
At Carnegie Hall**  
(DG) 35091

**Eric Clapton:  
Unplugged**  
(Warner Bros.) 23690  
**Johnny Gill:  
Provocative**  
(Motown) 35214  
**Diana Ross: Live-  
The Lady Sings...**  
Jazz & Blues  
(Motown) 35228  
**Guns N'Roses:  
Use Your Illusion I**  
(Geffen) 35469 †  
**Guns N'Roses:  
Use Your Illusion II**  
(Geffen) 25534 †  
**Mötley Crüe:  
Decade Of Decadence**  
(Elektra) 40298  
**Billy Ray Cyrus:  
Some Gave All**  
(Mercury) 41711  
**David Bowie:  
Changesbowie**  
(Rykodisc) 43693  
**Pete Townshend:  
PsychoDare!et**  
(Atlantic) 44200  
**k.d. lang: Ingenue**  
(Warner Bros./Sire) 44370  
**The Cure: Staring At  
The Sea/Standing On A  
Beach: The Singles**  
(Elektra/ Fiction) 50024 †

**Whitney Houston: The  
Bodyguard Soundtrack**  
(Arista) 54213  
**The Steve Miller Band:  
Wide River**  
(Polydor) 53541  
**4 Non Blondes: Bigger,  
Better, Faster, More!**  
(Interscope) 53593  
**The Pharcyde: Blzarrz  
Ride II The Pharcyde**  
(Delicious Vinyl) 53603 †  
**The Cars: Greatest Hits**  
(Elektra) 53702  
**Jazz Futures:  
Live In Concert**  
(Novus) 54022  
**John Anderson:  
Solid Ground**  
(BNA) 54084  
**MC Lyte: Ain't No Other**  
(First Priority) 54325  
**Yo Yo: You Better  
Ask Somebody**  
(East West) 54353 †  
**Uptown MTV Unplugged**  
(Uptown) 54441  
**Emerson, Lake & Palmer:  
Brain Salad Surgery**  
(Atlantic) 54608

**Bette Midler:  
Experience The Divine-  
Greatest Hits**  
(Atlantic) 62491  
**Megadeth: Countdown  
To Extinction**  
(Capitol) 63340  
**Chicago:  
Greatest Hits 1962-1989**  
(Reprise) 63363  
**Marc Cohn:  
The Rainy Season**  
(Atlantic) 63888  
**Yanni: In My Time**  
(Private Music) 63900  
**Bulletboys: Za-Za**  
(Warner Bros.) 64044  
**Paul Westerberg:  
14 Songs**  
(Reprise/Sire) 64176  
**The Best Of Roberta  
Flack: Softly With  
These Songs**  
(Atlantic) 64294  
**Van Morrison:  
Moondance**  
(Warner Bros.) 64585  
**Miles Davis: Doo-Bop**  
(Warner Bros.) 71151

**The John Lennon  
Collection**  
(Capitol) 73627  
**PJ Harvey: Rid Of Me**  
(Island) 73527  
**Kathleen Battle:  
The Bach Album**  
(DG) 73670  
**Tracy Byrd**  
(MCA) 73683  
**The Police: Every  
Breath You Take—  
The Singles**  
(A&M) 75924  
**Alan Jackson: A Lot  
About Livin' (And A  
Little 'Bout Love)**  
(Arista) 74074  
**Tony! Toni! Toné!  
Sons Of Soul**  
(Wing/Mercury) 74193  
**Steeley Dan: Gold**  
(MCA) 74339  
**Intro (Atlantic) 74530**  
**Air Supply:  
The Vanishing Race**  
(Giant/Reprise) 82228

**Tina Turner: What's  
Love Got To Do With It**  
(Virgin) 04166  
**Pat Metheny:  
Secret Story**  
(Geffen) 82267  
**Walter & Scotty:  
My Brother's Keeper**  
(Capitol) 82403  
**George Strait: Pure  
Country/Soundtrack**  
(MCA) 83064  
**Natalie Cole:  
Unforgettable**  
(Elektra) 83452  
**Ciannad: Banba**  
(Atlantic) 83647  
**Art Porter:  
Straight To The Point**  
(Verve) 83688  
**Tanya Tucker:  
Greatest Hits 1990-1992**  
(Liberty) 83769  
**Neil Diamond:  
12 Greatest Hits**  
(MCA) 84050



Donald Fagen: Kamakiriad (Reprise) 11330



Lenny Kravitz: Are You Gonna Go My Way? (Virgin) 34834



Duran Duran (Capitol) 01268



Taylor Dayne: Soul Dancing (Arista) 53498



Natalie Cole: Take A Look (Elektra) 03638

# GET 8 CDs FOR THE PRICE OF 1 WITH NOTHING MORE TO BUY... EVER!

**The Steve Miller Band:  
Greatest Hits 1974-1978**  
(Capitol) 33199  
**X: hey Zeul**  
(Mercury) 33362  
**Dave Grusin:  
Homage To Duke**  
(GRP) 33925

**Bernstein: The Final  
Concert** (DG) 35095  
**Bryan Adams: Waking  
Up The Neighbours**  
(A&M) 35175  
**Lionel Richie:  
Back To Front**  
(Motown) 35210

**New Order: Republic  
Concert** (Owest/Warner Bros.) 52039  
**Enya:  
Shepherd Moons**  
(Reprise) 53190  
**Bob Marley: Legend**  
(Island) 53521

**En Vogue:  
Funky Divas**  
(East West) 61717  
**Guys And Dolls/  
New Broadway Cast**  
(RCA Victor) 61964  
**RuPaul: Supermodel  
Of The World**  
(Tommy Boy) 63236

**Elvis Presley: The  
Number One Hits** (RCA) 72190  
**Diane Schuur: Love Songs**  
(GRP) 72523  
**Barry Manilow:  
Greatest Hits, Vol. 1**  
(Arista) 72863  
**Anita Baker: Rapture**  
(Elektra) 73404

**HERE'S HOW THE CLUB WORKS:**  
 \* **Get 8 for the Price of 1!** Start by choosing 4 CDs from this ad. Then buy just 1 CD within a year at regular Club price (currently \$14.98 and up) and get 3 more hits FREE! Shipping and handling charges are added to all shipments.  
 \* **10-Day Trial!** Along with your 4 introductory selections, you'll receive a "Welcome Package" with complete details on how the Club works. Enjoy your introductory selections for 10 days. If you are not completely satisfied, you may return them without any further obligation.  
 \* **Club Music Mailings**  
 - About every three weeks (19 times a year), you'll receive our exclusive Club catalog which contains hundreds of selections from which to choose.  
 - Each issue highlights a Featured Selection from your preferred music category. If you'd like the Featured Selection, do nothing and it will be sent to you automatically. If you prefer an alternate selection, or none at all, simply return the Notification Card enclosed with each issue of your magazine by the date specified on the card.  
 - You have at least 10 days to return the Notification Card. If you do not want the Featured Selection, and do not have 10 days, you may return the Featured Selection at our expense.  
 \* **Save with Instant Bonuses.** From day one, every time you buy one CD at the regular Club price, you're entitled to buy another one of equal or lesser value at half price.  
 \* **Stay a member as long as you like.** After joining the Club, you'll enjoy additional sales and discounts on your favorite music. However, after you pay for your regular-Club-price selection, you may cancel your membership simply by writing to us.  
 \* **If the reply card is missing,** please write to:  
 BMG Music Service  
 P.O. Box 91001  
 Indianapolis, IN 46291-0002.

**START SAVING! MAIL THIS POSTAGE-PAID CARD TODAY!**

Mail to: BMG Music Service / P.O. Box 91001 / Indianapolis, IN 46291-0002

1 Please accept my membership in the BMG Music Service and send me 4 FREE CDs as I have indicated here under the terms of this offer. I agree to buy one CD at the regular Club price during the next year. I will then receive 3 more FREE! Shipping and handling charges are added to all shipments. That's 8 for the price of 1, with nothing more to buy...ever!

2 RUSH ME THESE 4 CDs NOW (Indicate by number):

- 3 I am most interested in the music category checked here — but I am always free to choose from any (check one only):
- |  |  |   |  |
|--|--|---|--|
| 1 <input type="checkbox"/> LIGHT SOUNDS<br>Dionne Warwick<br>Frank Sinatra                 | 2 <input type="checkbox"/> COUNTRY<br>Reba McEntire<br>Brooks & Dunn | 3 <input type="checkbox"/> HARD ROCK<br>Aerosmith<br>Bon Jovi     | 4 <input type="checkbox"/> POP/SOFT ROCK<br>Madonna<br>Sting |
| 5 <input type="checkbox"/> CLASSICAL <sup>(1)</sup><br>Luciano Pavarotti<br>Itzhak Perlman | 6 <input type="checkbox"/> JAZZ<br>Pat Metheny<br>Yellowjackets      | 7 <input type="checkbox"/> HEAVY METAL<br>Iron Maiden<br>Megadeth |  |

Mr.  
 Mrs.  
 Ms.

First Name Initial Last Name (PLEASE PRINT)

Address Apt.

City State Zip

Telephone, please ( ) Area code

Signature

5 Have you bought anything else by mail in the last:  6 months  year  never

(1) Members who choose CLASSICAL as their listening interest will be serviced by the BMG Classical Music Service. Photocopies of this reply card are acceptable. We reserve the right to request additional information, reject any application or cancel any membership. Limited to new members. Local taxes, if any, will be added. Offer available in continental USA, Alaska and Hawaii. Offer not available in Puerto Rico, APO or FPO.

**INSTANT  
50% OFF  
BONUS DISCOUNTS**

**THE BMG MUSIC  
SERVICE  
DIFFERENCE**

From the moment you join, you're entitled to buy a CD at half price every time you buy one at the regular Club price. With other clubs, usually you must first buy 6 or more at full price and become a "Preferred Member" before you can get savings like this.



† = Parental advisory: contains explicit lyrics and/or artwork

BMG Music Service 6550 E. 30th St., Indianapolis IN 46219-1194  
 TRADEMARKS USED IN THE ADVERTISEMENT ARE THE PROPERTY OF VARIOUS TRADEMARK OWNERS.  
 © 1993 BMG Direct

Dog and Hom are trademarks of General Electric Company, U.S.A. BMG logo TM BMG Music

# NEW PRODUCTS

## ▼ JVC

JVC says it has extended the operating range of its HA-W75 cordless headphone system to 33 feet—a 40-percent improvement over previous models. The system includes cushioned headphones with a single built-in

volume control and a battery/AC-powered infrared transmitter that accepts standard RCA plugs or a stereo miniplug. Price: \$250. JVC, Dept. SR, 41 Slater Dr., Elmwood Park, NJ 07407.

• Circle 129 on reader service card



## ◀ WIRE TAPE

No more unsightly wires: Wire Tape is an 18-gauge-equivalent flat speaker cable with a peel-back adhesive surface. It's designed to be applied directly to sheetrock or plaster walls and can be wallpapered over or painted, making it ideal for concealing wire runs to wall speakers. Price: \$20 for a 16-foot roll and eight crimp connectors. Wire Tape, Dept. SR, 640 N. Cypress, Orange, CA 92667.

• Circle 131 on reader service card



## ▲ SONY

Sony's CDP-CX100 CD changer solves the hassles of storing, retrieving, and handling numerous CD's with a jukebox-like 100-disc carousel. Highlights include facilities to select discs

by music genre, to create multidisc sequences, and to store preferred track sequences for individual CD's. Price: \$1,200.

Sony, Dept. SR, 1 Sony Dr., Park Ridge, NJ 07656.

## COGNEO DESIGNS ▶

Forget which CD's are in your changer? Cogneo offers five- and six-disc versions of its 17-inch-wide, solid-oak Changer Minder rack. Available by mail order for \$15.95 plus \$4.50 shipping. Cogneo Designs, Dept. SR, P.O. Box 1338, Boulder, CO 80306.

• Circle 130 on reader service card



## ◀ EPIK MONITOR

Epik's 43-inch-tall Ultima X is a transmission-line speaker system with a 7-inch woofer and a 1-inch inverted-dome ceramic tweeter. Frequency response is given as 34 Hz to 27 kHz -3, +1.5 dB, sensitivity as 88 dB, and nominal impedance as 10 ohms. Recommended power is 50 to 200 watts. Cabinet is part solid light or dark cherry, part veneer; other finishes, including oak, are available at extra cost. Price: \$5,450 a pair. Epik Monitor Systems, Dept. SR, 1720 Lilac Dr., Walnut Creek, CA 94595.

• Circle 132 on reader service card

# NEW PRODUCTS



## ◀ HARMAN KARDON

Harman Kardon's compact Festival 500 system comprises a CD player, cassette deck, tuner, and 60-watt-per-channel integrated amp—all discrete components linked together by precut, labeled cables and controlled by a simple thirteen-button remote control. The component stack measures 10¼ x 14¼ x 13¼ inches. Price: \$1,499. Harman Kardon, Dept. SR, 8380 Balboa Blvd., Northridge, CA 91325.

• Circle 133 on reader service card



## ▲ SAMSUNG

In addition to playing music CD's and 8- and 12-inch laserdiscs, Samsung's DV710K VideOrche combi-player has elaborate karaoke (sing-along) facilities, including two microphone inputs, an echo control, a nine-step pitch

controller to adjust the key of the singer's voice, and voice cancellation to delete recorded vocals. Price: \$700. Samsung, Dept. SR, 105 Challenger Rd., Ridgefield Park, NJ 07660.

• Circle 134 on reader service card



## ◀ PINNACLE

Part of Pinnacle's Audio Cinema line, the 25½-inch-tall AC 850 speaker is a magnetically shielded, rear-vented system with an 8-inch woofer and an aluminum-dome tweeter. Maximum power handling is given as 125 watts continuous, 375 watts peak, and the low-frequency limit as 30 Hz. Finished in cherry or black woodgrain vinyl. Price: \$429 a pair. Pinnacle, Dept. SR, 255 Executive Dr., Suite 310, Plainview, NY 11803.

• Circle 135 on reader service card



## ▲ STIMULI

Stimuli's Half-Moon wall-mount storage rack (shown in a multitrack grouping) holds thirty-six CD's; capacity triples when two units are properly spaced. It also accommodates audio cassettes and VHS videotapes.

Available by mail order for \$50 to \$92 plus shipping in a variety of colors and finishes. Smaller racks are also available. Stimuli Inc., Dept. SR, 184 Lexington Ave., #15E, New York, NY 10016.

• Circle 136 on reader service card

## ▶ AMC

AMC's B1-20 powered subwoofer combines an 8-inch woofer, a two-way electronic crossover, and a 55-watt amplifier in a 12 x 15 x 12-inch cabinet. It features an input-sensitivity control, which can be adjusted to accommodate line-level or speaker-level inputs,

and an amplifier feedback loop, which is said to limit distortion. Bass output at 30 Hz is said to exceed 103 dB. Price: \$750. Weltronics, Dept. SR, 1414 So. Fair Oaks Ave., Suite 7, Pasadena, CA 91030.

• Circle 137 on reader service card



# You've probably heard a lot about THX. Now we'll see how well you were listening.

What the heck is this THX thing?

A running shoe? A dessert topping? Misconceptions abound. But here's the skinny. THX is a system designed by the folks at Lucas Entertainment. Its aim: to make a film sound just as impressive from your easy chair as it did from the director's chair in his fancy high-tech dubbing suite.

**MISCONCEPTION #1.** Most people think THX uses a new and different encoding method. Not so. In fact, at its heart, the THX controller has a Dolby ProLogic decoder, so it accepts any Dolby-encoded TV program, video tape or laser disc (unfortunately, that includes *Ishtar*). We like to think of it as Dolby ProLogic, refined.

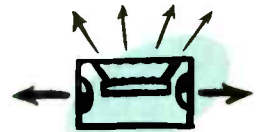
**MISCONCEPTION #2.** Some folks think you need to buy the entire system all at once. But, in fact, the pieces of the Boston THX system are available separately. You can even power them with your existing Dolby ProLogic receiver and upgrade to the THX electronics later.

The system consists of six THX speakers, and a THX controller/amplifier combo. Boston Acoustics THX speakers offer a great deal more than conventional speakers when it comes to home theater. Specifically, dialog is clearer, effects are more readily localized

on and off screen, and panning is more natural (a horse galloping across the screen sounds as such, with a smooth transition from side to side). All of this thanks to the 555x speaker's narrow vertical dispersion pattern. Sound travels to your ears without ricocheting off the floor or ceiling, which can blur crucial dialog and effects. Another advantage: a sense of

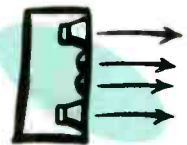


To receive a free copy of Number, the Boston Acoustics magazine of music, circle Reader Service No. 9



**MISCONCEPTION #3.** A surround is a surround. Nope. By firing sound forward and rear, the dipole 575x surround washes your walls with sound. Thereby transporting you to the middle of a canyon, a city street, or the forest planet Endor (please don't feed the Ewoks). In fact, we believe the 575x is the finest surround speaker ever built.

true space is achieved with Boston 575x surrounds. These dipolar speakers, unlike conventional ones, use walls to reflect sound several times before it reaches your ears. So the sound envelops you and you feel like



**MISCONCEPTION #4.** THX is electronics. Actually, most of what THX is lies in how the speakers are configured. Take our 555x front speaker. We had one aim in building it: your ears. Sound disperses horizontally, but is limited vertically. Since the sound you hear hasn't bounced off of the floor or ceiling first, dialog is incredibly clear, effects are crisp.

you're right in the middle of the scene. And finally, what's a movie without an explosion or two? So we built the tight, powerful Boston 595x subwoofers to deliver the visceral side of a movie's sound effects and music. All of which can be heard at your local Boston dealer. Stop by for a demo. Now that you know what you're listening to.

**Boston Acoustics**  
Just what's important

Boston and Boston Acoustics are trademarks of Boston Acoustics, Inc. All other trademarks are the property of their respective holders.

# RESTORE FAMILY HARMONY.

Studio  
24

Like mother, like son.  
Right.

You try to compare SCHOOL'S OUT  
with IN THE MOOD.

Which brings us to Studio 24, the  
new Fisher CD Management System.  
It not only plays twenty-four CDs.  
It arranges them. Your way. Her  
way. Any way.

Stores them. Vertically. Instead of  
horizontally.

And organizes them.

Into seven categories: choose from  
preprogrammed ones like rock or  
jazz or classical. Or make up  
your own.

And up to twenty-four subcategories:  
organize your collection by title or  
artist or even mood.

All at the touch of a button.

Peace.

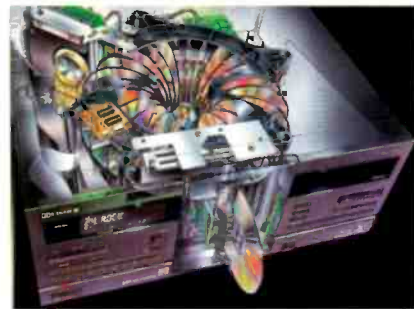
At last.



**FISHER**  
AUDIO/VIDEO

...Trust your senses®.

Call 800-209-2424\* for the dealer nearest you.



## Fisher Studio 24 CD Management System

- 24-Disc System
- 7 Pre-Set Categories and 24 Programmable Categories and Subcategories
- Alpha-Numeric 16-Digit (8+8) Scrolling Display
- Vertical Auto Loading System
- Bi-Directional Radial Transport
- 1-Bit Dual Digital-to-Analog Converter
- 8x Oversampling Digital Filter
- Remote Control

CIRCLE NO. 28 ON READER SERVICE CARD



ALICE COOPER  
AND MOM.



\*Call from 9/1/93 - 12/31/93.

© 1993 Fisher Audio/Video.

Ref. No. 123

INNOVATIONS '93





# AUDIO Q & A

BY IAN G. MASTERS

## Seeds for Home Theater

**Q** I currently have quite an elaborate stereo system, and I want to use it as the basis for a home theater system, but so far I have been unable to get the proper sort of direction at the audio shops I have visited. Is upgrading practical? If so, how do I go about it?

DENNIS WINDMULLER  
Southlake, TX

**A** The retailer would no doubt prefer it if you ditched what you've got and started over. But building a home theater system around an existing two-channel stereo setup is an eminently practical way of going about it, as it means that the facility can grow gradually as your budget allows. Actually, if you are able to feed the signal from your VCR or TV to your audio system you might be said to have a home theater system already—there's no rule that says a home theater can't be two-channel.

Assuming, however, that you ultimately want multichannel Dolby Pro Logic surround capability, your first step should probably be to add a surround decoder and a small pair of surround speakers. Many decoders have a built-in surround-channel amplifier; otherwise, a low-power external amp can be added at little cost. Be sure the decoder has line outputs for the main front channels so that you can simply feed those signals to your existing stereo system. Later, you can add a shielded center-channel speaker; again, it can be driven by an amplifier included in the decoder or by an outboard power amp. The main consideration in buying a center speaker is that it match the main front speakers as closely as possible in terms of tonal balance, so that sounds don't change character as they move about the soundstage.

Eventually you may decide to trash everything and put together a home theater system from scratch, a system in which everything matches. But if you're careful with the step-by-step approach, that shouldn't be necessary.

## DSP Magic?

**Q** A number of my CD's sound very strident when I play them normally, but when I use the "Hall" mode of my digital signal processor, the harshness magically disappears. Is there something in the acoustics of the hall this mode emulates that counteracts the unpleasant highs?

GEORGE NUSSBAUM  
New York, NY

**A** In real acoustic environments, high frequencies roll off increasingly as you get farther away from the source, so if the designer of the Hall mode in your DSP unit knew what he was doing, some treble attenuation would be built into that setting. If that characteristic makes some otherwise unlisten-

able CD's more bearable, great, but if you need it with more than a handful of older discs, you should check to make sure your system is not responsible for the harshness. Overenthusiastic equalization might be at fault, or high-frequency peaks in your speakers, which may not have been audible with older LP's and cassettes but are emphasized when you play a CD. If you're not sure, browse the record reviews for comments on well-recorded discs and buy or borrow one or two; if they sound harsh as well, it's probably not the discs.

## A Pause for CD

**Q** Is it possible to cause damage to a CD or laserdisc, or to the player itself, by leaving the mechanism in the pause mode for extended periods of time—several hours, for instance?

KEN SHVETZ  
Woxall, PA

**A** Unless there is a malfunction in your machine, nothing comes in contact with the disc's playing surface, so spinning indefinitely is not likely to cause it any harm. The same may not be true of the player mechanism, however—any device that incorporates moving parts will wear out over time, and letting the player run in the pause mode for long periods will hasten that process.

## Shelf System Salvage

**Q** I am planning to upgrade from a bookshelf system to a much larger setup using a separate preamplifier, power amplifiers, and a CD changer. I mostly listen to compact discs and am not interested in buying a separate tuner or tape deck to go with my new system, but I would like to be able to listen to tapes or the radio occasionally. I have thought of connecting my present small system to the new components for this purpose, but I'm not sure how to go about it; the bookshelf unit doesn't have line-out jacks. Is there another way to feed my old equipment into the new preamp?

BENJAMIN J. DiFABIO  
Avon, CT

**A** Even though the shelf system has a built-in cassette deck, there may be provision for connecting a second recorder for copying. If so, its record-out jacks are ideal for feeding a signal to your new system because they bypass the later circuitry of the smaller system and will feed a flat signal to the new preamp.

If that facility is lacking, however, you might try the shelf system's headphone output. Buy an adaptor cable with a headphone plug at one end and a pair of RCA plugs at the other, and connect the RCA plugs to a high-level input on your new preamp. Make sure

## Fisher Rewards Togetherness.



## Win The Family Harmony Sweepstakes

at your participating Fisher dealer now. Or pick up an entry form at Musicland • Sam Goody. Harmony has never been sweeter.

GRAND PRIZE  
**NORWEGIAN**  
CRUISE LINE  
7 Day Caribbean Cruise for 4 people  
(airfare included)+A Fisher 8mm Camcorder

## FIRST PRIZE



Complete Fisher Home Theater  
(7 Piece A/V System including Studio 24+27" Stereo TV)

## 24 SECOND PRIZES

Gift Certificate for 24 CDs (your choice) from  
**musicland** **Sam Goody**  
WE GOT WHAT'S HOT. GOODY GOT IT!

## 24 THIRD PRIZES

Fisher Personal CD Player

## 24 FOURTH PRIZES

Autographed Alice Cooper 3 Volume  
Boxed CD Set from Warner Bros. Records

## 240 FIFTH PRIZES

Alice Cooper/Fisher Souvenir T-Shirt



## No purchase necessary.

To enter sweepstakes, complete an official entry form found at participating Fisher retailers and at Musicland and Sam Goody stores and deposit in sweepstakes entry boxes at participating Fisher dealers. Or to enter by mail, print your name, full address and daytime phone number on an official entry form or a 3" x 5" piece of paper along with the words "Fisher Family Harmony" and mail in a stamped, hand-addressed envelope to: Fisher Family Harmony Sweepstakes, P.O. Box 6780, Monticello, MN 55561-6780. Entries must be received by 12/31/93. Limit one entry per envelope. No mechanical reproductions. Void where prohibited. Sweepstakes open to residents of the U.S., 12 and older. Entrants bound by additional restrictions contained in the official rules, which may be obtained at entry boxes or by sending a stamped, self-addressed envelope to: Fisher Family Harmony Rules, Dept. T, P.O. Box 6717, Monticello, MN 55561-6717. Odds of winning depend upon number of eligible entries received. Sweepstakes ends 12/31/93.

© 1993 Fisher Audio/Video.

that the shelf system's volume control is turned all the way down and that its tone controls are in the flat position, then switch the input to FM and tune in a clear station. Play a CD on the new system, and switch the preamp input back and forth between the CD and the input receiving the shelf system's tuner; gradually increase the shelf system's level until the two signals match. Mark the setting on the shelf system's level control and check periodically that it hasn't been disturbed. Use the shelf system's input selector to switch between tuner and cassette deck.

## Crawl or Wall?

**Q** I need advice on wiring my home for stereo. I have the option of running about 30 feet of speaker wire through a crawl space, which gets very cold in the winter, or about 60 feet through the walls, where the wires would have to cross several power lines and would probably have to run parallel with them for several feet, maybe 12 inches away. Which would have more adverse effect on my sound: the cold of the crawl space or the power lines in the wall?

DANIEL B. REIDER  
Bowling Green, OH

**A** I doubt that either would make much difference. Although I would hesitate to put low-voltage line-level runs close to power lines, even there the usual remedy is to let them cross rather than run parallel, so you would probably be safe. With speaker cables, however, the signal level is high enough that nearby AC wires will not degrade the audio signals. Still, unless it's inconvenient, I'd pick the crawl-space option because it involves shorter runs and therefore less series resistance (the temperature is irrelevant).

## Surround Opera

**Q** I recently bought a couple of operas on laserdisc and noticed that they were not encoded in Dolby Surround. I assume this means they won't benefit from Dolby Pro Logic decoding. If I play them in one of the ambience modes, such as "Hall" or "Opera," will the applause and vocals come through realistically? How about Monday Night Football in the "Stadium" mode?

STACEY MCINTURF  
Dublin, OH

**A** Operas and other classical-music performances are rarely encoded in Dolby Surround, but that doesn't necessarily mean you can't use your surround decoder to enhance them. Live recordings usually contain lots of out-of-phase ambience information, and that's exactly what Dolby Pro Logic is good at extracting. In most cases, it's not a good idea to use the normal Pro Logic mode, however, as that will direct the vocals to the center channel at least part of the time. There may be other undesirable directional steering effects as well. I'd suggest trying the phantom center mode, which relies on the main speakers' imaging ability, as in conventional stereo.

The alternative, as you note, is to switch in one of the enhancement modes, which might produce some very convincing effects, depending on the design of the circuit and the content of the recording. Again, experiment.

As for sports in the Stadium mode, that would make it sound as though the announcers (and the commercials) were being played through the stadium's public-address system—probably not the effect you want. But most sports broadcasts, encoded or not, decode terrifically in normal Pro Logic, with the announcers firmly anchored at the screen and the crowd all around.

## DIY Speaker Repair

**Q** The foam surrounds on all four of my speakers disintegrated in the past year. I have seen ads for new surrounds in all sizes, and replacing mine is tempting as the enclosures and drivers appear to be in good condition otherwise. Is replacement a sensible undertaking for a relatively skilled do-it-yourselfer, or is maintaining voice-coil centering and so forth too critical for an amateur?

EUGENE ALEXANDER  
Burlington, VT

**A** That sort of surgery is indeed very tricky, and you may end up ruining your speakers. But they're already ruined, so I suggest giving it a try. If you're careful, and everything works, it will be a lot cheaper than replacing the speakers outright. If you don't have confidence in your own ability, there are speaker-repair outfits that will replace foam surrounds for less than the cost of new speakers. Check the classified ads in this and other audio magazines.

## FM Maneuvers

**Q** I'm having a problem picking up a distant FM signal that is covered by a strong local station. I bought an amplified stereo antenna, but it has had no effect on the reception. Is there any inexpensive way to separate the two signals?

CHRIS PARSLEY  
Baltimore, MD

**A** The solution, if there is one, depends largely on the specific nature of the interference. Your attempt to fix things by amplifying the low-level signal was a step in the right direction, but you probably amplified the local signal as well. Increasing the height of your antenna might bring in the weaker station strongly enough to allow your tuner's rejection circuits to work, and if the two stations come from different compass points, a directional antenna might help. If worse comes to worst and you have to upgrade your tuner, look for one with excellent adjacent-channel selectivity—the tuner's ability to discriminate between stations only one channel apart on the dial (not to be confused with alternate-channel selectivity). Look for a rating of 20 dB or more and expect that you will still need a directional antenna. And don't put your money on the counter without arranging to try the tuner at home, or at least getting assurance that you can return it if it doesn't cure your problem.

If you have a question about hi-fi, send it to Q&A, Stereo Review, 1633 Broadway, New York, NY 10019. Sorry, only questions chosen for publication can be answered.

AK: Holt's Fairbanks Pyramid Anchorage.  
AL: In Concert Huntsville; Liria Audio Birmingham.  
AR: Leisure Electronics Little Rock.  
AZ: Jerry's Audio Video Phoenix Tucson.  
CA: Audio Concepts Long Beach; San Gabriel Coast Satellite TV; Alacadero Creative Stereo; Sta. Barbara, Ventura; David Rutledge Audio; Palm Springs; Henry Radio; Los Angeles; Pacific Coast A/V; Corona del Mar; Paradyme; Sacramento Performance Audio; San Francisco Sound Co.; Escondido, San Diego Sound Goods; Campbell, Min. View Systems Design; Redondo Beach; Wilson A/V; Woodland Hills.  
CO: Listen Up; Denver, Boulder, Colorado Springs.  
CT: Al Franklin's Hartford; Carlson's A/V Danbury; Robert's Music New London; Sound Playground; Newton, Orange, Norwich.  
DC: Suburbs Audio Associates.  
DE: Sound Studio; Dover, Newark, Wilmington.  
FL: Absolute Sound; Winter Park; Audio Ctr.; Ft. Lauderdale; Audio Video; Tallahassee; Audio Video Interiors; Melbourne; Hoyt Stereo; Jacksonville; Sound Ideas; Gainesville; Sound Insight; Ft. Pierce; Stereotypes; Daytona; Stereo World; Ft. Myers, Naples; Stuart A/V; Stuart.  
GA: Stereo Shop; Martinez; Stereo Video Systems; Marietta (Atlanta).  
HI: Maui Audio Center; Kahului.  
IA: Audio Logic; Des Moines; Camera Corner; Davenport; Custom A/V; Cedar Rapids; Hawkeye A/V; Iowa City & Cedar Falls.  
ID: Good Ear; Boise.  
IL: United Audio Centers; Chicago & Suburbs; Cars & Stereo; Rockford; Jon's Home Center; Quincy; Stereo Studio; Palatine; Select Sound; Naperville; Sterling Elect.; Sterling.  
IN: Ovation Audio; Clarksville, Indianapolis.  
KS: Accent Sound; Overland Park; Advance Audio; Wichita; Audio Junction; Junction City.  
KY: Ovation Audio; Lexington, Louisville.  
LA: Altman Audio; New Orleans, Metairie.  
MA: Goodwins Audio; Boston; Nantucket Sound; Hyannis; O'Colna; Worcester.  
MD: Audio Assoc.; Annapolis, Laurel, Rockville; Cumberland Elec.; Cumberland; Gramophone; Balt., Ellicott City; Soundscape; Balt.; Sound Studio; Salisbury.  
ME: Cookin'; Portland.  
MI: Pecar's; Detroit; Troy; Classical Jazz Holland; Front Row A/V; Flint; Future Sound; Ypsilanti; Listening Room; Midland, Saginaw.  
MN: Audio Perfection; Minneapolis.  
MO: Independence Audio Video; Independence; Sound Central; St. Louis.  
NC: Audio Video Systems; Charlotte; Stereo Sound; Durham, Greensboro, Raleigh, Winston Salem; Tri City Elect.; Conover.  
NE: Custom Electronics; Omaha, Lincoln.  
NH: Cookin'; Nashua, Manchester, Newton, Salem, S. Nashua.  
NJ: Sound Waves; Northfield; Sassafra; Cherry Hill; Woodbridge Stereo; W. Caldwell, W. Longbranch, Woodbridge.  
NM: West Coast Sound; Albuquerque, Santa Fe.  
NV: Upper Ear; Las Vegas.  
NY: Audio Breakthroughs; Manhasset; Audio Den; Lake Grove; Audio Expressions; Newburgh; Chemung Elect.; Corning, Elmira; Clark Music; Albany, Syracuse; Electronic Workshop; Manhattan; Hart Elect.; Vestal; Innovative Audio; Brooklyn; Listening Room; Scarsdale; Rowe Camera; Rochester; Sound Mill; Mt. Kisco, Yorktown Hts.; Speaker Shop; Amherst, Buffalo.  
OK: K Labs Premium Audio; Tulsa.  
OH: Audio Craft; Akron, Cleveland, Findlay, Mayfield Hts., Westlake, Toledo; Audio Etc.; Dayton.  
OR: Bradford's HiFi; Eugene; Chelsea Audio Video; Portland; Beaverton; Kelly's Home Ctr.; Salem.  
PA: GNT Stereo; Lancaster; Hart Electronics; Blakely, Kingston; Listening Post; Pittsburgh & suburbs; Sassafra; Bryn Mawr, Montgomeryville, Whitehall; Stereoland; Natrona Heights; Studio One; Erie.  
RI: Eastern Audio; North Providence.  
SC: Dashboard; Charleston; Stereo Video; Greenville; Upstate Audio; Columbia.  
TN: Hi Fi Buys; Nashville; Lindsey Ward; Knoxville; Modern Music; Memphis; New Wave Elect.; Jackson; Sound Room; Johnson City.  
TX: Audio Tech; Temple, Waco; Audio Video; College Station; Brock A/V; Beaumont; Bunkley's Sd. Systems; Abilene; Bjorn's; San Antonio; Don's Hi Fi; Amarillo; High Fidelity; Lubbock; Home Entertainment; Dallas, Houston; Marvin Electronics; Ft. Worth; Sound Towne; Texarkana.  
UT: Audio Works; Salt Lake City; Stokes Bros.; Logan.  
VA: Audio Associates; Arlington, Fairfax, Manassas; Audiotronics; Roanoke; Digital Sound; Virginia Beach; Ear Food; Winchester; Stereotypes; Charlottesville.  
VT: City Stereo; Burlington.  
WA: Audio Waves; Everett; DESCO Electronics; Olympia; Evergreen Audio; Silverdale; Pacific Sight & Sound; Watchee; Sound Mart; Spokane; Tin Ear; Kennewick.  
W.VA: Sound Post; Princeton.  
WI: Absolute Sound & Vision; Sheboygan; Audio Emporium; Milwaukee.  
Puerto Rico: Precision Audio; Rio Piedras.  
Canada: Advance Electronics; Winnipeg; Audio Ark; Edmonton; Audio Ctr.; Montreal, Ottawa, Quebec City; Bay Bloor; Toronto; CORA; Quebec City; Great West Audio; London; Kelly's; Vernon B.C.; Peak Audio; Halifax; Sight & Sound; Prince Georges B.C.; Smith's TV; Lethbridge; Ab. & Sound Advice; Calgary; Sound Hounds; Victoria B.C.; Sound Room; Vancouver; Sound Station; Courtenay B.C.; West End Elect.; St. Johns N.F.  
Mexico: Contact Grupo Volumen; Mexico City.

# “Definitive’s Absolute Sonic Superiority Proves America Does It Best!”

*Experience the Miracle of Bipolar Technology  
with Definitive’s Revolutionary BP8, 10 & 20!*

**“Truly Outstanding”**  
— *Stereo Review*

Experts agree that Definitive’s revolutionary bipolar BP8, BP10 and BP20 are three of the world’s finest speakers and are sonically superior to speakers selling for many times their remarkably affordable cost.

These American-made, advanced technology bipolar (front and rear radiating) systems combine lush spacious soundstaging, lifelike depth-of-field, razor-sharp resolution and pinpoint 3-D imaging with powerful subwoofer-like bass (to below 20 Hz), high efficiency, wide dynamic range and easy-to-position convenience.



The dramatic result is superb music and movie reproduction so real that it has been called, “a sonic miracle!”

**The Ultimate Home Theatre**  
Combine the BP8s, 10s, or 20s with our C/L/R 1000 or C1 center channel and BP2 bipolar surround speakers for the ultimate in home theatre sound.

Visit your nearest Definitive dealer and experience the absolute sonic superiority of these truly extraordinary ViVA Gold Product-of-the-Year and CES Design & Engineering Award winning loudspeakers.

**Definitive Technology®**

11105 Valley Heights Drive • Baltimore, MD 21117  
See dealer list on facing page (410) 363-7148

# PERIPHERALS

PRODUCTS AND TRENDS

THAT GO BEYOND

MAINSTREAM AUDIO/VIDEO

## PC Sound: More Than Beeps and Buzzes

BY PAUL WORTHINGTON

You've probably never thought of your personal computer as a medium for high-quality sound reproduction. That's understandable. Most PC's have a very simple audio circuit and a tiny speaker that were never intended to reproduce complex sounds, let alone music. Beeps and buzzes are about all they can handle.

That may be fine if you use your computer only for word processing or spreadsheets. But what if you or someone in your family wants to explore some of those new multimedia CD-ROM titles (*Dinosaurs* or *Time Table of History*, for example), a growing number of which have enhanced soundtracks? Or run a program that lets you create your own computer music? Or play the latest arcade-like computer games? Or produce a multimedia presentation that includes music, sound effects, and narration?

Thanks to an add-on device known as a sound card (or board), it is possible to upgrade the sonic capabilities of your PC. In the past year dozens of cards have become available, offering a range of features and options at affordable prices. The best cards can enable your computer to sound as good as your stereo system—provided you use a decent pair of speakers and run the right software.

Think of a sound board as an audio adaptor: You plug it into an empty expansion slot inside your computer, and it processes sound from the hard-disk drive or a CD-ROM. Many cards can also be used to record a stereo signal from analog inputs or a microphone, or straight from a CD-ROM, and store it on the computer's hard drive. These recordings can later be used in PC-based multimedia presentations, or they can even be attached to an electronic-mail file to give your message some vocal "punch."

Sound quality varies from card to card, mostly because of variations in technical design. The best use a 16-bit

architecture with a sampling rate of 44.1 kHz (that's right, the same as CD) or higher. In fact, *only* such cards are capable of sound reproduction that approaches CD quality, despite bold advertising claims to the contrary. A word on recording: Before you get any big ideas, bear in mind that one minute of CD-quality stereo sound consumes a whopping 10 megabytes of hard-drive space. In other words, serious PC-based recording requires massive storage capacity.

Although the number of 16-bit sound cards is growing, most cards use 8-bit or 12-bit designs with a 22-kHz sampling rate. They're okay for recording voices and some sound effects, but they aren't much good when

**A top-quality sound card can enable your PC to sound as good as your stereo system.**

it comes to music. On the bright side, recording at lower bit/sampling rates requires substantially less storage space. In terms of available software, most PC-based games incorporate 8-bit sound, and some CD-ROM-based games use CD audio clips.

Sound cards also vary in terms of the features they offer. Two or three stereo line-level inputs are standard. And when it comes to the speaker outputs, most are powered to the tune of 2 to 4 watts, but a few boards put out as much as 8 watts or as little as 0.25 watt. The typical card is also equipped with recording and playback mixers, which can be used to combine two or more sound sources into a single recording or output. Volume is adjusted by a rotary dial on the card or via software. Many sound cards are also

equipped with an interface for a CD-ROM drive, and most of those can play standard music CD's as well as an array of CD-ROM's from games to educational programs.

Another common sound-board feature is a MIDI (Musical Instrument Digital Interface) synthesizer, which plays music and sound effects that are stored as MIDI computer files. Instead of an actual recording, a MIDI file contains a set of instructions that tells the synthesizer which of the sounds in its palette it must play to create the desired sound effects and musical passages. (The General MIDI standard, which most MIDI devices now conform to, gives you 128 instruments and sounds to play with.)

MIDI files are a popular method of storing PC-game soundtracks or music files created with a MIDI keyboard. Unlike standard digital audio recording, which requires an immense amount of hard-disk storage space, MIDI files are very compact.

There are two basic types of MIDI synthesizers, those that use FM (frequency-modulation) synthesis technology and those that use wave-table synthesis. FM synthesis cards are more widely available, but their sound quality is somewhat cheesy. Wave-table synthesis, on the other hand, delivers better sound quality because it uses digital samples of actual instrumental sounds. The resulting output can give a surprisingly good simulation of a large band sitting on your desktop.

Ready to hear what you've been missing from your PC? A good 8-bit board can be yours for less than \$200, or you can drop another \$100 and get a 16-bit board. Whatever your choice, be prepared to spend more time with your PC—the power a sound card gives you is addictive. □

Paul Worthington is senior editor of *Multimedia World*, from the publisher of *PC World*.

# Definitive's Award-Winning Center Channels and Bipolar Surround Speakers for Your Ultimate Home Theater

**Absolute sonic superiority and unequalled value make Definitive loudspeakers your obvious choice.**



C1 • \$299 ea.

BP2 • \$249 ea.



C/L/R 1000 • \$450 ea.

*The C/L/R 1000, the world's finest center, is also a superb left and right main speaker.*

Enthusiasts and world renowned experts acknowledge the dramatic sonic superiority of Definitive loudspeakers for both the superb reproduction of music and the dramatic special effects and dialogue of home theater surround sound.

## World's Finest Center Channel Speakers

Optimum surround sound reproduction places heavy demands on the center speaker, the most important speaker because it handles 50% or more of the program material. It is no place to settle for second best. Definitive's C/L/R 1000 and C1 are the finest shielded, low profile, high resolution center channel/main speakers available. They use superior state-of-the-art components and technology for extraordinary ultra

high definition articulate clarity and high power handling (C/L/R 1000: 300 watts, C1: 200 watts).

## The BP2's Bipolar Advantage

BP2s are unique ultra compact high resolution bipolar (front and rear radiating) systems intended primarily for use on the rear/side surround channels of the finest home theater systems. Experts agree that Definitive's bipolars provide a perfectly diffuse sound source which is ideal for these applications.

The use of BP2s results in a much more lifelike, dramatic all-enveloping listening experience than is possible with conventional speakers. In addition, because of their superb performance characteristics, the BP2s also make exceptional main channel speakers.

## Voted #1 for Quality & Reliability

Definitive speakers are consistently top-rated and were chosen by experts in *Stereo Review* for their home theater "Dream System." A survey of U.S. dealers voted Definitive speakers #1 for quality and reliability among all speakers sold in the U.S.!

Visit your nearest Definitive dealer today and hear why our superior sounding loudspeakers have won the industry's most prestigious honors, including the CES Design & Engineering Award, *Video Magazine's* ViVA Gold Product of the Year Award and the AudioVideo Grand Prix.

**Definitive Technology**<sup>®</sup>

11105 Valley Heights Dr. • Baltimore, MD 21117  
See dealer list on page 22 (410) 363-7148

CIRCLE NO. 15 ON READER SERVICE CARD

# USE THIS.



# HEAR THIS FREE.



Photo © 1993 Chris Lee

It's easy. Just by using the Optima<sup>SM</sup> Card you can automatically earn points and redeem them for your choice of more than 80 OPTIMA<sup>SM</sup> REWARDS — from New York Philharmonic concert tickets to a selection of compact discs from J&R Music World.\*

Best of all, OPTIMA REWARDS are free. Every time you make an eligible purchase you receive a point for every dollar you charge. You don't even have to increase your spending to get the most from OPTIMA REWARDS — all you need do is use the Optima Card instead of other credit cards like VISA<sup>®</sup> or MasterCard<sup>®</sup>.

Of course, you already have excellent reasons to prefer the Optima Card. It's the only credit card that recognizes financial responsibility with low interest rates and the unsurpassed benefits and service of American Express.

#### OPTIMA REWARDS:

Just for using the Optima Card.

\*See terms and conditions of the OPTIMA REWARDS program for complete details of that program. Certain transactions such as cash advances are not eligible. Enrollment in the OPTIMA REWARDS program is required. Cardmembers whose Optima account is enrolled in the Membership Miles<sup>SM</sup> program are not eligible for OPTIMA REWARDS. For more information, or to enroll in OPTIMA REWARDS, call 1-800-635-5955. To apply for the Optima Card call 1-800-OPTIMA-6.



# SIGNALS

BY KEN C. POHLMANN

## Edison's Failure

In the late nineteenth century, perhaps half of all American homes had a piano; it was the focus of family entertainment and interaction. The invention of the phonograph heralded a profound change. People stopped making music and started simply listening to it. Thomas Edison had invented passive audio-only entertainment.

Clearly, the force of change is all around us, sweeping us into the future. We are like sticks of wood caught in a river—we feel the turbulence, but fail to understand how quickly the current is really moving. Too often we are lulled into the notion that constancy is the norm. We forget that it is change that is the norm. We are fooled into thinking that the longer things have persisted, the more secure their existence is. We forget that the opposite is true; the older something is, the more likely it will be superseded.

Edison's phonograph was invented in 1877. It effectively ended the age-old tradition of making and sharing musical experiences as folk entertainment. Why bother to learn to play an instrument when you could buy a recording of a vastly more talented musician? Day or night, anytime you wanted, over and over—the world's best performers. Simply wind the spring. Some people resisted passive music; they said it wasn't as good as real musicmaking. . . .

Radio, that once-great passive music medium, has become as stale as the concert hall; in many respects, both have become museums in which (mainly) old music is recycled endlessly for the amusement of older listeners. That's because many youngsters aren't listening. Who can blame them for turning elsewhere for entertainment? Playing a video game is infinitely more exciting than simply listening to music. As that young generation grows older, do you think it will lay aside its multimedia toys and be content with passive music instead? Or will it continue to shun passive music

and demand newer, more sophisticated multimedia products?

The signs of such a change are everywhere in our society. According to the *Wall Street Journal*, the video-game industry grossed \$5.3 billion in 1992, surpassing the revenue collected from movie theaters. And according to the Electronic Industries Association, factory sales of home computers that retail for less than \$1,250 are expected to hit \$4.9 billion this year, up from \$3.8 billion in 1990—figures that represent the cost of goods before wholesale and retail markups and say nothing about software and accessories. In comparison, factory sales of separate audio-only components are expected to slip to \$1.5 billion this year, down from \$1.9 billion in 1990.

**In a future world  
dominated by virtual  
reality, audio will  
be only one part of  
intense entertainment  
experiences.**

Many of today's established performers have already sensed these trends. Peter Gabriel, U2, David Bowie, Prince, Billy Idol, Mötley Crüe, Madonna, and Michael Jackson are all working on multimedia projects of one form or another. Todd Rundgren's first interactive album, "No World Order," contains a 4-hour musical database representing countless variations of the album. "Users would have to play the CD-I disc for 24 hours a day, seven days a week well into the next millennium in order to hear the same version of a song twice," Rundgren says. Kids of the future sitting down and simply listening to a recording for a whole hour, straight through? I don't think so.

Don't blame them. Look at your own audio habits. Keep a log. For one week, keep track of how many hours

**YOU HAVE YOUR OWN STYLE OF GOING PLACES.**



You know exactly where you're headed. Both personally and financially. That's why you use the Optima<sup>SM</sup> Card.

**Low interest rates.**

You appreciate the innovative way your interest rate, currently 14.25% for purchases,\* reflects your responsible approach to managing your account. With the opportunity to receive an even lower rate, currently 12%.\*

**Great rewards to enjoy.**

You like seeing your OPTIMA<sup>SM</sup> REWARDS points automatically add up to exciting free experiences — from a night on the town to a week-long getaway — just for using the Optima Card.

And you count on American Express personal service to be there for you. All with the Optima Card.

**YOU KNOW WHAT YOU'RE DOING.<sup>SM</sup>**



**Cards**

\*Optima Cardmembers in good standing receive an Annual Percentage Rate for purchases that is currently 14.25% (16.90% for cash advances). Cardmembers in good standing over a 12-month review period with at least one year of tenure on their American Express<sup>®</sup> and Optima Card accounts who spend at least \$1,000 on the Optima Card during the review period qualify for an APR that is currently 12.00% for purchases (16.90% for cash advances). All other accounts receive a competitive APR that is currently 18.25% for purchases (18.90% for cash advances). All rates are adjusted semiannually based on the Prime Rate as listed in The Wall Street Journal. The annual fee for the Optima Card is \$15 (\$25 for non-American Express Cardmembers). See terms and conditions of the OPTIMA REWARDS program for complete details of that program. Certain transactions such as cash advances are not eligible. Enrollment in the OPTIMA REWARDS program is required. Cardmembers whose Optima account is enrolled in the Membership Miles<sup>SM</sup> program are not eligible for OPTIMA REWARDS. For more information or to enroll in OPTIMA REWARDS call 1-800-635-5955. To apply for the Optima Card call 1-800-OPTIMA-6. © 1993 American Express Centurion Bank.



If you're from a small town, drop us a line and tell us about it.

IN THE SMALL TOWN of Lynchburg, Tennessee, nothing seems to change but the seasons.

Folks spend easy October evenings on the porch like they always have. The conversation is much like it's always been. And over in Jack Daniel's Hollow, we still make our Tennessee Whiskey in the very manner our founder perfected — the way our friends have always liked it. A sip, we believe, and you'll be glad the only thing changing here is the color of the trees.

## SMOOTH SIPPIN' TENNESSEE WHISKEY

Tennessee Whiskey • 40-43% alcohol by volume (80-86 proof) • Distilled and Bottled by Jack Daniel Distillery, Lem Motlow, Proprietor, Route 1, Lynchburg (Pop 361), Tennessee 37352  
Placed in the National Register of Historic Places by the United States Government.



you listen to music. Compare the number of hours spent watching television, or half-listening to music while driving or working around the house, with the number of hours spent actually sitting in a chair and *really* listening. And while you're at it, keep track of the hours you spend playing piano (or some other instrument) and singing for your family in the parlor.

When the compact disc was introduced more than a decade ago, some audiophiles protested its sound quality. Their claims were mainly wrong, but beyond that their fears were misdirected. The CD wasn't their enemy—it was the introduction of digital processing into the consumer market. When digital audio met the personal computer, exciting new product possibilities exploded. Audio enthusiasts might have protested more loudly if they'd realized that the CD represented not only the end of the LP—and analog audio—but the end of passive music itself.

Today, ten years later, it seems likely that sales of audio-only equipment will continue to deteriorate. In my view, future consumer audio products will have to contain elements of multimedia (the growing popularity of audio/video equipment for home theater underlines this trend) and interactivity—that's right, even game play. In a future world dominated by virtual reality, audio will be only one part of intense entertainment experiences, which could cause the disappearance of audio-only products as we now know them.

Before too long, we'll know whether the era of passive music has run its course. The compact disc will remain the dominant format in the foreseeable future, but eventually most of the CD's sold each year are likely to go far beyond musical recordings—offering movies, games, and forms of interactive educational and entertainment programming that we haven't even thought of. When we reach that point, it will be clear that Americans' entertainment expectations have changed forever.

The end of passive music's dominance will be sad. The question of what will replace it is profoundly interesting. Will the new multimedia technologies propel us forward to new experiences beyond passive music, or backward to the age-old experiences of involved musicmaking? If it is the latter, it would be correct to state that the Edison phonograph, the engine of passive music, was a short-lived historical aberration. □



SPECIAL CD OFFER

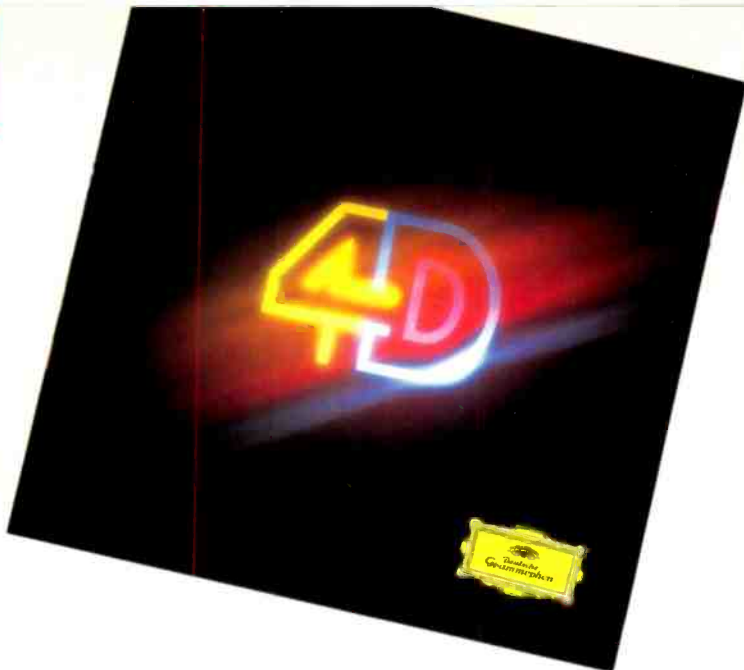
# DG Enters the Fourth Dimension

**T**HIS fall Deutsche Grammophon is releasing on CD its first recordings made in what the company calls "4D," a new method of digital recording intended to bring an added dimension of clarity and realism to compact discs. To participate in STEREO REVIEW's program of special CD offers, expanded for our thirty-fifth anniversary year, Deutsche Grammophon has produced a limited-edition sampler made up of excerpts from the first 4D recordings, most of which have not yet been released. To get your copy all you have to do is fill out the coupon below and send it in with your check or money order for \$2.

According to Klaus Hiemann, the director of DG's recording center in Hanover, Germany, "The sole aim of recording technology is that it should become inaudible." Hiemann has worked with engineers at Yamaha to design and manufacture the equipment needed to make recordings that "eliminate the listener's awareness of the technical medium, allowing the enjoyment of a completely natural sound quality."

Deutsche Grammophon's explanation of the 4D system dwells primarily on four areas of technical improvement. They are: a remote-controlled microphone preamplifier, a 21-bit analog-to-digital converter, the "Stagebox principle" (making the A/D conversion on the recording stage, thus eliminating the long analog pathway, which was formerly a major source of noise and distortion), and all-digital mixing. This last step employs the Yamaha DMC 1000 mixing console and DG's proprietary software for a mastering procedure called Authentic Bit Imaging.

To give you the best opportunity to judge the results of these 4D technological innovations for yourself Deutsche Grammophon has chosen a wide range of music for this special STEREO REVIEW sampler. The performances are by some of the most distinguished artists on the DG roster. They include the Adagietto from Mahler's Fifth Symphony played by the Berlin Philharmonic under Claudio Abbado, the final trio from Strauss's *Rosenkavalier* Suite by the Vienna Philharmonic conducted by André Previn, the Third Movement of Tchaikovsky's Fifth Symphony played by the Philharmonia Orchestra with Giuseppe Sinopoli, two of Brahms's Hungarian Dances by the NDR Symphony under John Eliot Gardiner, an excerpt from Rimsky-Korsakov's *Scheherazade* played by the Orchestre de l'Opéra Bastille conducted by Myung-Whun Chung, and two excerpts from Stravinsky's *Firebird* played by the Chicago Symphony under Pierre Boulez. The violinist Anne-Sophie Mutter



plays Sarasate's *Zigeunerweisen* with the Vienna Philharmonic conducted by James Levine.

In addition to these large orchestral works, there are such intimate pieces as Grieg's piano solo *To Spring* played by Andrei Gavrilov and the first movement of a Beethoven sonata for cello and piano played by Mischa Maisky and Martha Argerich. Early music is represented by the Gloria from a Palestrina Mass performed by the Gabrieli Consort and Players conducted by Paul McCreesh, and there is an excerpt from the new recording of Bernstein's *On the Town* with Tyne Daly and the London Symphony Orchestra conducted by Michael Tilson Thomas. The total playing time is 73 minutes.

The editors of STEREO REVIEW are especially pleased to cooperate with Deutsche Grammophon in making this generous exclusive offer to our readers. This 4D CD sampler will permit you to judge the technical results of the work of DG's engineers while you preview new recordings by some of the world's leading musicians. The \$2 fee for postage and handling brings you this CD below cost! Remember, this is a limited edition. When the supply runs out, the sampler will not be re-pressed. So don't miss out. Order today.

## DEUTSCHE GRAMMOPHON 4D CD SAMPLER

For STEREO REVIEW readers only

Send coupon and a check or money order for \$2 (in Canada send US\$2) made out to 4D Audio Sampler to:  
Music Marketing Network, att: Paul Chachko, 166  
Paterson Avenue, Shrewsbury, NJ 07702.

NAME (please print) \_\_\_\_\_

ADDRESS \_\_\_\_\_  
(STREET AND NUMBER)

(CITY) \_\_\_\_\_ (STATE) \_\_\_\_\_ (ZIP) \_\_\_\_\_

This offer is limited to the United States and Canada. We regret that we cannot accept requests from other countries. Do not send cash. Please allow six to eight weeks for delivery. Offer good only until November 30, 1993, or until supplies are exhausted.



# TECH TALK

BY JULIAN HIRSCH

## How Do I Know It's Right?

That is a recurrent question posed to me in letters from readers. It is usually the final question asked by someone who wants his music system to sound "right" but is not sure he will be able to recognize that result if he hears it. Sometimes the question is presented in more specific terms, such as: "How do I know how much bass to have? When it sounds right to me, my friend says there is too much (or not enough)."

Actually, the writer of the latest such letter to reach me answers the basic question pretty much as I would. After telling me that his technically minded friend thinks that because "music is recorded flat" it should be played back with the tone controls set "flat" and that loudness compensation should never be used, my correspondent says that he prefers more bass, which he gets from his tone controls. He concludes his letter with these questions: Is bass boost less accurate? Does it matter? Is most music recorded flat, and should it be reproduced the same way?

First of all, a major feature of today's highly versatile audio components is the degree of control they provide over such matters as frequency response and listening level. It is generally recognized that personal tastes differ widely, even in respect to what the original "live" performance should sound like. The controls provided by a modern amplifier let the listener modify the original in an effort to suit his own taste, and there is nothing wrong with that.

But there is more to the matter than frequency response (at least, the kind you can modify with tone controls). If you have heard a number of different music systems in as many different locations, you are probably aware that

rooms-and-loudspeakers (the two cannot really be separated) simply sound different from each other, and usually no amount of juggling the amplifier's frequency response will make them sound alike.

Experimenting with the room layout (both the furnishings and the loudspeakers), which is likely to involve considerably more time and energy, may be worthwhile if simpler actions do not produce satisfactory performance. "Perfectionist" audiophiles often go to surprising lengths to "tweak" their systems to the *n*th degree, and if they have a high degree of hearing acuity and a corresponding level of perseverance this approach can result in truly outstanding sound. If you are not fortunate enough to hit the right combination of conditions with a reasonable expenditure of time and money, however, it can be a frustrating procedure.

On the other hand, some people (me included) enjoy hearing classical instrumental music and are fortunate enough to be able to do so in a reasonably good concert environment. I would prefer that my reproduced mu-

sic sound like the original. My correspondent's questions—"Is it right?"—I have to say once more that there is no such thing as "right" in the sense of duplicating an original listening experience in a different environment. Who is to say what is "flat" in a recording made through a couple of dozen microphones? Certainly their combined outputs are in no way representative of what anyone in the audience is hearing during the performance, nor is any playback of a resulting tape or CD going to duplicate the original experience exactly. The best we can expect is a reasonable approximation.

Even if some ideal tone control (whatever that might be) were to be invented, it would go only part of the way toward recreating the original sound. Your listening room, its furnishings, and the placement of speakers and listeners will probably have a far greater effect on what finally reaches your eardrums than anything that can be done by the electronic components of the music system.

So my advice is to adjust your system's controls to obtain whatever results appeal to you, and enjoy the mu-

**Adjust your system to obtain whatever sound appeals to you, and enjoy the music.**

sic at home remind me as much as possible of a live concert experience. To that end, I almost never use a tone control (simply because they don't improve the things I am interested in hearing) and prefer to listen through speakers whose qualities suggest those of a concert hall (not any specific one, just a believable environment for a musical performance).

For me, that is "right." For my son, who has spent some years on the road as a rock musician, my musical and sonic tastes are probably difficult to understand, but then the reverse is equally true. One audiophile's meat is another's poison.

And to answer another of my corre-

spondent's questions, it will be your choice, and even if it doesn't sound exactly like the finely tweaked systems of your audiophile friends, you can derive some satisfaction from knowing that their multi-kilobuck systems will never sound exactly like yours, either.

Oh, yes—to answer the question that started this column: You'll know the reproduction is "right" when you can close your eyes and believe—truly believe—that you are sitting in a concert hall listening to a live performance. It has never happened to me, and probably not to anyone else, but, like the search for the Holy Grail, it is a worthy goal. Just don't hold your breath in anticipation of reaching it. □

# For far too long, replacing your stereo system has meant getting a new version of the same old technology.



The top-of-the-line Bose Lifestyle® music system, with:

- **Powered Acoustimass®-5 speakers.**  
Direct/Reflecting cube speakers – lifelike sound and added placement flexibility.  
Hide-away Acoustimass bass module (not shown) – deep bass with no audible distortion.
- **Lifestyle® music center with advanced technology remote control.**  
Built-in CD player and AM/FM stereo tuner.  
Remote control works around corners and through walls – system operation from anywhere in your home.

Conventional stereo system technology hasn't changed much over the past decade or two. Most of today's equipment looks and sounds about the same as the equipment you already own. That's not much reason to replace what you have.

Bose products are different; they reflect our commitment to research and our passion for excellence.

For example, our award-winning Lifestyle® music system replaces an entire rack of conventional electronics and speakers. It shows what can be accomplished as we apply breakthrough technology to the goal of providing clear benefits.



The Lifestyle® music system doesn't even look like stereo equipment. It won't dominate your room. It won't be too complicated to use. And its Virtually Invisible® speaker

design means it won't be the first thing your friends notice. Until you turn it on.

At that instant, its performance will speak for itself. And you'll realize that replacing your conventional system was actually a very good idea.

There are various Bose Lifestyle® music systems available. One will surely fit your needs. And your budget.

We invite you to compare our Lifestyle® music systems to larger, more expensive stereos. Just listen. You'll make your own decision in less than a minute. For more information, and names of Bose dealers near you, call toll-free:

**1-800-444-BOSE Ext. 271**

USA: Monday-Friday 8:30AM-9:00PM (ET)

Canada: Monday-Friday 9:00AM-5:00PM (ET)

**BOSE®**  
Better sound through research.

# TEST REPORTS



## Carver SD/A-390t CD Changer

JULIAN HIRSCH • HIRSCH-HOUCK LABORATORIES

**T**HE Carver SD/A-390t five-disc carousel-type CD changer offers an exceptionally large complement of operating features, including such unusual items as vacuum-tube output stages and a Soft EQ circuit that is said to make some discs sound much like top-quality vinyl LP records played with an audiophile-grade turntable/arm/cartridge combination.

Basically, however, the SD/A-390t resembles and operates like a number of other carousel CD changers. It has a relatively deep chassis, necessary to accommodate the large drawer with its five shallow disc wells. When the drawer is opened by a touch of a button on the panel (or on the supplied remote control), three of the disc wells are readily accessible, but the two rearmost ones (Nos. 1 and 5) are partly

blocked by the front edge of the cabinet. Some care may be needed when loading or unloading discs from the rearmost positions to avoid scratching them.

Conveniently, the drawer can be opened during operation without disturbing playback of the currently selected disc (which is effectively removed from contact with the carousel). That makes it possible to

change up to four of the discs while still playing the fifth.

The changer can be programmed to play as many as twenty tracks, in any order, from any of the five discs. It can also be set to repeat indefinitely any single track, any disc, or all of the discs. Its random-play mode can be applied to all the tracks on a disc, to all the discs, or to a group of programmed selections on any or all discs.

For all its versatility, the SD/A-390t presents a relatively uncluttered appearance. The disc drawer occupies most of the upper part of the front panel (not unlike that of a videodisc player). Below it is the display window and a row of small buttons used for track selection and programming. The right end of the panel contains five more small buttons, for disc selection, and larger ones for opening and closing the drawer, advancing the disc-tray position in either direction, and the conventional stop, pause, and play functions. This area also contains the Soft EQ button and the receiving sensor for the infrared remote control. At the left side of the panel are a stereo

### DIMENSIONS

17 INCHES WIDE, 4 1/4 INCHES HIGH,  
16 INCHES DEEP

### PRICE

\$700

### MANUFACTURER

CARVER CORP., DEPT. SR, P.O. BOX 1237,  
LYNNWOOD, WA 98046



Columbia House.

# The Face of Rock.

## 8 CDs for the price of 1

See details.

AND NOTHING MORE TO BUY EVER!

- Garth Brooks**—The Chase (Liberty) 448-746
- Billy Ray Cyrus**—Some Gave All (Mercury) 441-451
- Arrested Development**—3 Years, 5 Months & 2 Days (Chrysalis) 436-204
- Pearl Jam**—Ten (Epic/Associated) 428-433
- Reba McEntire**—It's Your Call (MCA) 450-361
- Bonnie Raitt**—Luck Of The Draw (Capitol) 423-186
- Van Halen**—For Unlawful Camel Knowledge (Warner Bros.) 420-273
- Don Henley**—The End Of The Innocence (Geffen) 383-802
- Patsy Cline**—Grt. Hits (MCA) 365-924
- George Michael**—Faith (Columbia) 362-228
- Guns N' Roses**—Appetite For Destruction (Geffen) 359-984
- U2**—The Joshua Tree (Island) 354-449
- The Police**—Every Breath You Take—The Singles (A&M) 348-318
- Peter Gabriel**—So (Geffen) 345-777
- Bob Marley & The Wailers**—Legend (Tuff Gong/Island) 337-857



**"The Bodyguard"**—Original Soundtrack (Arista) 448-159

**Dwight Yoakam**—This Time (Reprise) 456-913

**Joe Sample**—Invitation (Warner Bros.) 456-905

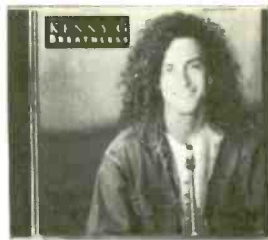
- Billy Joel**—Grt. Hits, Vols. 1 & 2 (Columbia) 336-396/396-390
- Bruce Springsteen**—Born In The U.S.A. (Columbia) 326-629
- Luther Vandross**—Never Let Me Go (Epic) 457-176
- Arrested Development**—Unplugged (Chrysalis) 457-895
- Big Head Todd And The Monsters**—Sister Sweetly (Giant/Reprise) 457-887
- Iron Maiden**—A Real Live One (Capitol) 457-754
- Brooks & Dunn**—Brand New Man (Arista) 429-969
- Jane's Addiction**—Ritual De Lo Habitual (Warner Bros.) 407-098
- Joey Lawrence**—Impact (Impact) 455-667
- Scorpions**—Best Of Rockers 'N' Ballads (Mercury) 423-590
- The Cure**—Standing On A Beach—The Singles (Elektra) 346-858
- Donald Fagen**—Kamakiriad (Reprise) 458-463
- "Silver"**—Original Sndtrk. (Virgin) 461-350
- James Ingram**—Always You (Warner Bros.) 460-345
- Billy Ocean**—Time To Move On (Jive) 459-552
- Radiohead**—Pablo Honey (Capitol) 458-885
- World Party**—Bang (Chrysalis) 458-836
- Al Dimeola**—Heart Of The Immigrants (Mesa) 458-800
- Patty Loveless**—Grt. Hits (MCA) 458-349
- Rush**—Roll The Bones (Atlantic) 452-268



**Donald Fagen**—Kamakiriad. Tomorrow's Girls; Countermoon; Trans-Island Skyway; and more. (Reprise) 458-463



**Luther Vandross**—Never Let Me Go. Little Miracles; Heaven Knows; Love Me Again; Hustle; and more. (Epic) 457-176



**Kenny G**—Breathless. Forever In Love; Sister Rose; By The Time This Night Is Over (With Peabo Bryson); and more. (Arista) 448-142

- Red Hot Chili Peppers**—What Hits? (EMI) 448-209
- The Robert Cray Band**—I Was Warned (Mercury) 447-508
- Diane Schuur**—Love Songs (GRP) 458-323
- Intro** (Atlantic) 458-091
- Funkdoobiest**—Which Doobie U B? (Immortal/Epic) 458-638
- Acoustic Alchemy**—The New Edge (GRP) 457-481
- Front 242**—06:21:03:11 Up Evil (Epic) 456-939
- Nanci Griffith**—Other Voices, Other Rooms (Elektra) 456-699
- Joe Cocker**—The Best Of Joe Cocker (Capitol) 455-790
- DADA**—Puzzle (I.R.S.) 455-212
- Cyndi Lauper**—Hat Full Of Stars (Epic) 454-439
- Elvis Costello, Brodsky Quartet**—Juliet Letters (Warner Bros.) 454-298
- Toad The Wet Sprocket**—Fear (Columbia) 428-466
- Winger**—Pull (Atlantic) 459-016
- "Menace II Society"**—Original Soundtrack (Jive) 459-586
- The Best Of Luther Vandross** (Epic) 400-473/390-476
- Tracy Byrd** (MCA) 446-468



**"Menace II Society"**—Original Soundtrack (Jive) 459-586

- Lynyrd Skynyrd Band**—Last Rebel (Atlantic) 454-538
- Denis Leary**—No Cure For Cancer (A&M) 454-397
- Portrait** (Capitol) 453-720
- The Sundays**—Blind (Geffen) 453-134
- After 7**—Takin' My Time (Virgin) 446-971
- Michael W. Smith**—Change Your World (Geffen) 446-955
- Patty Smyth**—Patty Smyth (MCA) 446-773
- The Best Of Southside Johnny** (Epic/Legacy) 444-760
- CeCe Peniston**—Finally (A&M) 433-805
- Kirk Whalum**—Cache (Columbia) 453-928
- "Boomerang"**—Orig. Sndtrk. (LaFace) 442-335

- Yes**—Yesstory (ATCO) 446-211/396-218
- Emerson, Lake & Palmer**—The Atlantic Years (Atlantic) 444-414/394-411
- Allman Brothers Band**—A Decade Of Hits 1969-79 (Polydor) 430-439
- The Byrds**—20 Essential Tracks 1965/1990 (Columbia/Legacy) 426-940
- Rod Stewart**—Sing It Again Rod (Mercury) 423-822
- Rush**—Chronicles (Mercury) 423-780/393-785
- The Very Best Of The Righteous Brothers**—Unchained Melody (Verve) 423-772
- Eric Clapton**—Time Pieces (Polydor) 423-467
- David Bowie**—Changes-bowie (Rykodisc) 412-247
- Lynyrd Skynyrd**—Skynyrd's Imnyrds/Grt. Hits (MCA) 381-129



**John Lennon Collection** (Capitol) 405-308

- ### CLASSIC ROCK
- Grateful Dead**—Skel-etons From The Closet (Warner Bros.) 378-406
- Roy Orbison**—The All-Time Hits, Vols. 1 & 2 (CSP) 377-945
- The Who**—Who's Who's Best (MCA) 376-657
- Fleetwood Mac**—Grt. Hits (Warner Bros.) 375-782
- Journey's Greatest Hits** (Columbia) 375-279
- Steppenwolf**—16 Grt. Hits (MCA) 372-425
- Marvin Gaye's Grt. Hits** (Motown) 367-565
- Best Of The Doors** (Elektra) 357-616/397-612
- Aretha Franklin**—30 Greatest Hits (Atlantic) 350-793/390-799
- Bad Company**—10 From 6 (Atlantic) 341-313
- The Cars**—Greatest Hits (Elektra) 339-903
- Motown's 25 #1 Hits From 25 Years** (Motown) 319-996/399-998
- The Best Of Blondie** (Chrysalis) 311-811
- Creedence Clearwater Revival**—Chronicle—20 Grt. Hits (Fantasy) 308-049

- Boston** (Epic) 269-209
- Santana's Grt. Hits** (Columbia) 244-459
- Janis Joplin's Grt. Hits** (Columbia) 231-670
- Simon & Garfunkel's Greatest Hits** (Columbia) 219-477
- Best Of Carly Simon** (Elektra) 291-856
- Alice Cooper's Grt. Hits** (Warner Bros.) 291-476
- James Taylor's Grt. Hits** (Warner Bros.) 291-302
- Steve Miller Band**—Grt. Hits 1974-78 (Capitol) 290-171
- Eagles**—Grt. Hits, 1971-75 (Asylum) 287-003
- Eagles**—Hotel California (Asylum) 286-948
- Jackson Browne**—Running On Empty (Asylum) 286-864
- Linda Ronstadt's Grt. Hits** (Asylum) 286-740
- Meat Loaf**—Bat Out Of Hell (Epic) 279-133
- Jimmi Hendrix**—The Ultimate Experience (MCA) 458-034

- Michael Jackson**—Thriller (Epic) 318-089
- AC/DC**—Back in Black (Atlantic) 305-045
- Eric Clapton**—Unplugged (Reprise/Duck) 446-187
- Johnny Gill**—Provocative (Motown) 460-824
- Bryan Ferry**—Taxi (Giant) 457-036
- Aerosmith**—Pump (Geffen) 388-009

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

Please accept my Trial Membership in the Club and send me the 4 CDs indicated below under the terms outlined in this advertisement. I agree to buy just one more CD at regular Club prices in one year's time, after which I can choose 3 more CDs FREE. So I'll get 8 CDs for the price of one—and there's nothing more to buy, ever! (A shipping and handling charge is added to each shipment.)

RUSH ME THESE 4 CDs RIGHT NOW (write one number in each box):

•	•	•	•
---	---	---	---

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

- |   |  |  |  |   |
|---|--|--|--|---|
| <input type="checkbox"/> <b>Hard Rock</b>   | <input type="checkbox"/> <b>Soft Rock</b>    | <input type="checkbox"/> <b>Alternative</b>    | <input type="checkbox"/> <b>Light Sounds</b> | <input type="checkbox"/> <b>Dance Pop</b> |
| <i>Van Halen</i>                            | <i>Michael Bolton</i>                        | <i>Depeche Mode</i>                            | <i>Neil Diamond</i>                          | <i>C&amp;C Music Factory</i>              |
| <i>Eric Clapton</i>                         | <i>Mariah Carey</i>                          | <i>Nine Inch Nails</i>                         | <i>Barbra Streisand</i>                      | <i>En Vogue</i>                           |
| <input type="checkbox"/> <b>Heavy Metal</b> | <input type="checkbox"/> <b>R&amp;B/Soul</b> | <input type="checkbox"/> <b>Easy Listening</b> | <input type="checkbox"/> <b>Rap</b>          | <input type="checkbox"/> <b>Country</b>   |
| <i>Megadeth</i>                             | <i>Boyz II Men</i>                           | <i>Frank Sinatra</i>                           | <i>L.L. Cool J.</i>                          | <input type="checkbox"/> <b>Jazz</b>      |
| <i>Ozzy Osbourne</i>                        | <i>Luther Vandross</i>                       | <i>Ray Conniff</i>                             | <i>Naughty By Nature</i>                     | <input type="checkbox"/> <b>Classical</b> |

Mr.  Mrs.  Miss  Miss

Print First Name \_\_\_\_\_ Initial \_\_\_\_\_ Last Name \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_ Apt. \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Do you have a VCR? (04)  Yes  No A telephone? (01)  Yes  No

Have you ever bought anything by mail in the past? (27)  Yes  No

How have you paid for your mail order purchase? Check below all that apply:

Cash (28)  Check (30)  Credit Card (29)  Money Order (31)

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 serviced from Toronto. Applicable sales tax added to all orders.

- Start off by picking any 4 CDs right now**—tell us which 4 you want on the coupon—and we'll send them right to your home.
- You agree** to buy just one more selection in the coming year, at regular Club prices: currently \$12.98 to \$16.98—and you may cancel your trial membership at any time after doing so. (A shipping and handling charge will be added to each shipment.)
- 3 MORE FREE!** After buying just one selection at any time during the year, you are then entitled to 3 MORE CDs FREE. (A shipping and handling charge will be added.) So it all adds up to 8 for the price of one! And that's it—there's nothing more to buy, ever!
- 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.
- New "Buy More—Pay Less" Bonus Plan.** If you continue your membership after fulfilling your obligation, you'll be eligible for our money-saving bonus plan. It lets you get a single CD for as little as \$3.99 (or a single cassette free) 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 and there's no further obligation whatsoever on your part.
- If the application is missing, write to:**

**COLUMBIA HOUSE** Entertaining America... One Person at a Time.™

# TEST REPORTS

headphone jack, its volume control, and a large, square power button.

The display window's dominant feature is a row of seven numerals. Except for the leftmost, which is slightly larger, they are the same size (about 1/4 inch high) and very close together. To their right, five smaller numerals enclosed in circles indicate the presence of discs in the carousel's wells. Other words and symbols appear in the window as required to show the changer's current operating mode.

The program level at one pair of rear-apron analog output jacks is fixed, but another pair carries a variable-level signal. There is also a standard coaxial digital output that is unaffected by any of the user controls.

The remote control's thirty-six buttons duplicate the front-panel controls and add quite a few more. Among these are buttons for the programming, repeat, and random-play functions, plus one that switches the time display to show the time remaining on the current track or on the disc (the default display is the elapsed time on the current track). Besides up and down buttons to control the level at the player's variable output, the remote has a Level File button that can be used to store volume settings for as many as a hundred discs. When any of these discs is subsequently played, the changer automatically adjusts the variable output level to the stored value (any stored level can easily be erased). Operating the level controls or pressing the Level File button temporarily replaces the normal elapsed-time indication with a volume display.

With Soft EQ off, the SD/A-390t's frequency response was quite flat, with just a small (0.2-dB) bump centered at 14 kHz. Switching on the Soft EQ boosted the output below 2 kHz, with a broad maximum of +1.8 dB (relative to the 1-kHz level) in the range below 100 Hz. Although that response variation appears large relative to the normal deviations of this and other CD players, it is actually rather small in the context of overall system response. All other measurements were made with Soft EQ off.

Distortion across the audio frequency range was higher than for most CD players we have tested, but not by what we would consider a significant amount. Below a -20-dB recorded

level, the 1-kHz total harmonic distortion plus noise (THD + N) was a constant (and negligible) -93 dB, but it rose rapidly at higher levels, to a maximum of -66 dB (0.05 percent) at or near the 0-dB (maximum) level. Although that reading is markedly higher than average for a CD player, it is still well below the threshold of audibility. Noise was typical for a good CD player and thus also completely inaudible.

The low-level linearity of the SD/A-390t's dual MASH digital-to-analog (D/A) converters was as good as we

have come to expect from CD players using this and other single-bit converters. The linearity error at levels between -60 and -90 dB did not exceed a fraction of a decibel.

Channel separation was identical in both directions (left to right and right to left) and much more than adequate. The output level was slightly (negligibly) lower than the 2-volt standard for CD players.

The SD/A-390t performed flawlessly in our listening tests. It was relatively insensitive to physical shock, requiring a rather hard slap on either the top or side to induce skipping while playing a disc. It was able to track through disc defects of 1,500 micrometers without audible errors, although a 2,000-micrometer flaw produced audible mistracking ticks. Slewing between tracks was reasonably fast (2.5 seconds from Track 1 to Track 15 of the Philips TS4 test disc), and a disc change required 8 to 9 seconds. As with most other CD changers we have used, a disc change is accompanied by quite audible mechanical noise. The headphone volume was good.

Although the SD/A-390t is one of the most versatile CD players we have tested, it has its idiosyncrasies. Probably its most annoying characteristic was the close spacing of the identical-size numerals in its display. From a distance of more than a few feet, it was difficult to interpret the string of six numbers all jammed together. Another annoyance concerned the use of the remote control, which is essential for operating many of the changer's features. The infrared receiving window on the player's front panel is at the extreme right end, and we found that simply pointing the remote at the panel in general (especially when close to the player) was not always effective; it was sometimes necessary to carefully aim the handset at the window.

On the plus side, despite the SD/A-390t's exceptional (and not always conventional) versatility, its instruction manual was a model of clarity, explaining in plain English the effect of each control and how to use the player's numerous special functions. With its aid, we confirmed that everything worked as claimed.

What about the Soft EQ? Its purpose is to compensate for poor master-



## MEASUREMENTS

<b>Maximum output level</b>	1.75 volts
<b>Frequency response</b> (Soft EQ off/on)	
off	20 Hz to 20 kHz +0.2, -0.1 dB
on	20 Hz to 20 kHz +1.8, -0.6 dB
<b>Channel separation</b>	
100 Hz	106 dB
1 kHz	95 dB
20 kHz	69 dB
<b>Signal-to-noise ratio</b> (A-wtd.)	103 dB
<b>Dynamic range</b>	98.4 dB
<b>Quantization noise</b>	-91.0 dB
<b>Distortion</b> (THD + N)	
1 kHz (-80 to 0 dB)	0.0023 to 0.05%
20 Hz to 20 kHz (0 dB)	0.006 to 0.05%
<b>Linearity error</b> (at -90 dB)	+0.6 dB
<b>Maximum interchannel phase shift</b>	
(at 20 kHz)	1.5 degrees
<b>Defect tracking</b>	
(Pierre Verany #2 test disc)	1,500 µm
<b>Slewing time</b>	2.5 seconds
<b>Disc-change time</b>	8 to 9 seconds
<b>Impact resistance</b>	top and sides. B +

# TEST REPORTS

**The Carver SD/A-390t performed flawlessly in our listening tests, tracked disc defects well, and was relatively insensitive to shock.**

ing practices that have left some CD's sounding harsher and less ambient than their analog counterparts, especially old CD's based on masters originally intended for LP's. While allowing that with some speakers Soft EQ produces almost no audible effect and that not all CD's will benefit from the processing, the manual does claim that with the right (or wrong, depending on your point of view) CD and speakers, a "discriminating listener will immediately notice a significant improvement." The most I ever heard from it was a minute increase in the lower midrange and bass—hardly what I would call a significant change. But evaluating this feature is a totally subjective judgment that each listener must make for himself.

The matter of the vacuum-tube outputs falls in much the same category; if you believe in the special qualities of "tube sound," you may well find them present in this case. The only tube-like characteristics I was able to positively identify were the warm-up time of 30 seconds or so and the slightly higher distortion readings (by no means a monopoly of tubes). Carver says the tubes are run well below their capacity and therefore should not deteriorate or need replacement over the life of the changer.

Overall, though, the Carver SD/A-390t is certainly a versatile CD changer that manages to do more with fewer controls than one would think possible prior to hands-on experience with it. Apart from the previous criticisms of its display and remote-control characteristics, I could not find anything about its operation and performance that was less than tops. □



## Cambridge SoundWorks Model Six Loudspeaker System

**JULIAN HIRSCH • HIRSCH-HOUCK LABORATORIES**

**I**n a career spanning four decades, Henry Kloss has been responsible for the design or production of some of the most successful and trend-setting loudspeakers of their times, including the AR-1, AR-2, and AR-3, the KLH Model Six, and the original Large Advent.

Most recently he has been associated with Cambridge SoundWorks, where he has developed a line of loudspeakers that carry on the tradition of offering exceptional performance for a modest price. The new Model Six, named for Kloss's KLH Model Six of the 1960's, brings that speaker's design approach into the 1990's.

Like most Kloss speakers, the Model Six is a two-way system. It is based on a newly designed 8-inch acoustic-suspension woofer that crosses over at 2 kHz to a 1¼-inch cone tweeter with a ½-inch center dome (the same tweeter

used in Cambridge SoundWorks' costlier Ensemble systems). Not a speaker that needs to be hidden from view, the Model Six has an attractive simulated-woodgrain finish in a choice of oak, teak, or black ash, and a nonremovable cloth grille in medium charcoal gray further enhances its appearance. Heavy-duty binding-post input termi-

### **DIMENSIONS**

11¼ INCHES WIDE, 18¼ INCHES HIGH,  
7¼ INCHES DEEP

### **FINISH**

OAK, TEAK, OR BLACK-ASH VINYL

### **PRICE**

\$119 EACH (FACTORY-DIRECT ONLY;  
TO ORDER, CALL 1-800-367-4434)

### **MANUFACTURER**

CAMBRIDGE SOUNDWORKS, DEPT. SR,  
154 CALIFORNIA ST., NEWTON, MA 02158

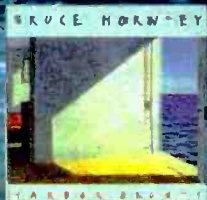


# JVC®

PRESENTS

## BRUCE HORNSBY TOUR SWEEPSTAKES

### WIN A TRIP FOR TWO! To the Harbor Lights of New York City to see Bruce Hornsby in Concert



Available on RCA Cassettes & Compact Discs

### HARBOR LIGHTS TOUR SWEEPSTAKES PRIZES

#### GRAND PRIZE

- Trip for 2 to New York City to see Bruce Hornsby in concert
- Complete JVC Home Entertainment System
- A meeting with Bruce Hornsby
- Tour Jacket & Harbor Lights CD

#### 1ST PRIZE (2)

- JVC MX-C5 Compact Component System
- Autographed Korg Synthesizer
- Tour Jacket & Harbor Lights CD
- One year subscription to KEYBOARD Magazine

#### 2ND PRIZE (20)

- JVC Portable Cellular Telephone
- JVC RC-Q50 Boom Box System
- Bruce Hornsby T-Shirt
- Harbor Lights CD

#### 3RD PRIZE

- A pair of Suncloud Sunglasses
- Bruce Hornsby T-Shirt
- Harbor Lights CD

### ENTER NOW TO WIN!

#### JVC BRUCE HORNSBY TOUR SWEEPSTAKES ENTRY FORM

Fill out this coupon or send the same information on a 3 x 5 card to:  
Harbor Lights Sweepstakes, P. O. Box 801120, Santa Clarita, CA 91330-1120

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Entry must be received by November 30, 1993 to qualify for drawing.

# TEST REPORTS

nals, compatible with single or dual banana plugs, lugs, or wire ends, are recessed into the back of the cabinet.

Although the Model Six comes with none of the usual speaker performance specifications, a couple of pages of its installation instructions contain more meaningful and useful information about speakers than a comparable amount of acoustic-measurement data or even many far longer treatises. In addition to the usual suggestions on placement and connection—18-gauge or thicker wire is recommended, with a refreshing note that “there is no audible benefit with these or other speakers from very heavy (and expensive) ‘audiophile’ speaker cable”—other universally applicable statements inform the user that “the apparent fullness of the sound is a function of mid-bass rather than low bass” and that the “subjective ‘openness’ is not so much a function of the high treble as it is of the lower midrange.” Finally, there is the relatively obvious (but often overlooked) suggestion that “program material varies greatly, so be sure to listen to a variety of recordings. This will prevent your being misled by the particular characteristics of a particular recording.” That is valid advice for judging *any* speaker, and I could not have said it better myself.

Our averaged room-response curve from the two speakers spliced to the close-miked woofer response with about an octave of overlap, producing a composite curve that was unusually uniform from 1 to 20 kHz. It had a few  $\pm 0.75$ -dB variations and an overall downward shift of about 1 dB above 1 kHz, but those were the only anomalies in that range.

The woofer response, flat within 2.5 dB from 75 to 600 Hz, sloped down by about 3 or 4 dB above that point as it overlapped the room curve. Overall, the woofer response seemed to be 3 to 5 dB higher than the averaged tweeter output. The bass output dropped at 12 dB per octave below 80 Hz; in the composite curve, the overall response was a very good  $\pm 4$  dB from 56 Hz to 20 kHz.

We also made a number of quasi-anechoic frequency-response measurements using the MLS program of our Audio Precision System One test set, with microphone distances of 1 and 2 meters, and some ground-plane

measurements to minimize the effect of floor reflections. Although there were some differences between the resulting measurements (because of unavoidable reflections), certain key features appeared in all the MLS response curves. (Our MLS measurements are not valid below 300 Hz, but above that frequency they give information that is pretty much independent of the speaker's environment.) Typically, there was a 3-dB peak (relative to the lower frequencies) at 3 kHz, followed by a drop of 5 to 6 dB to a minimum between 6 and 7 kHz, a return to the 3-kHz level from 7 to 8 kHz, and a 3-dB drop to a plateau ending at 13 kHz, above which the response fell about 5 dB as the frequency approached 20 kHz. Describing these curves in words may make them seem rather ragged, but in fact they're quite good for a loudspeaker, and they confirmed the impression from our listening tests that the Model Six is truly a high-quality speaker.

The tweeter's dispersion was satisfactory, with the response 45 degrees off its axis down 3 dB at 6 kHz, 5 dB at 9 kHz, and 18 dB at 20 kHz. The system impedance reached a maximum of 18 ohms at the bass resonance frequency of 75 Hz. There was a broad peak of 12 ohms at 1 kHz and two minimum impedance readings of 6.6 ohms at 180 Hz and 8 kHz (plus one of 6.2 ohms at 20 Hz). All in all, we would call the nominal impedance 8 ohms.

Sensitivity, with a 2.83-volt input of random noise, was 91 dB sound-pressure level (SPL) at 1 meter. Woofer

distortion was measured at 2.53 volts, corresponding to our reference level of 90 dB SPL. The distortion was between 1.5 and 3 percent from 2 kHz down to 75 Hz, rising at lower frequencies to 4.5 percent at 50 Hz, 8.5 percent at 40 Hz, and 12 percent at 30 Hz.

Despite its small size, the Model Six handled very large transient power levels without damage or even serious audible effects. The woofer cone hit its limits with a thump (but without damage) at a single-cycle 100-Hz input of 470 watts. At 1 kHz, where the cone movement for the same SPL is much smaller, the driving amplifier clipped at 550 watts, and the tweeter absorbed the full amplifier output of 950 watts at 10 kHz without difficulty.

From these measurements, one would expect the Cambridge Sound-Works Model Six to be a very fine-sounding speaker, and one would be right. Its clarity and precise imaging reflect Kloss's extensive “voicing” of the speaker to give it the optimum octave-to-octave balance. As for the lows, although the Model Six won't rattle the windows or make your ears pop with the pressure of low organ notes, you will know when they are present. It has an “all there” sound quality that belies its amazingly low price and does credit to its heritage. It even has a vinyl finish that looks and feels like real wood (our test samples were finished like teak and simply did not look as if they belonged in a bargain-basement price class). At only \$119 each, the Model Six is an exceptional value. □



“... Say ‘please.’...”



Great Performers!  
From the top — JVC XL-M509TN 6+1 CD Changer,  
RX-809VTN Audio/Video Receiver, and TD-V661TN Cassette Deck.

# The Next Best Thing To Front Row Seats

A concert hall without the crowd.  
A theater where the floors don't stick.  
A jazz club with no minimum.  
An outdoor stadium in any weather.

JVC audio/video receivers with Dolby® Pro Logic™ and our Digital Acoustics Processor, give you three-dimensional sound to simulate a variety of concert venues right in your own home. Add a JVC CD changer, cassette deck, TV and VCR, and you've got a home entertainment system that turns any chair or sofa into "the best seat in the house."

For 1993, JVC home audio components have been refined inside and out. The design is simple for a look that's sophisticated. The technology is sophisticated for operation that's simple.

In fact, you won't find home entertainment components that are easier to operate.

Our exclusive, Enhanced COMPU LINK system allows for one-touch operation. And even if *your* components aren't all *our* components, a JVC RX-809VTN receiver with our multi-brand remote still lets you control your home entertainment system right from your seat.

To experience "the next best thing to front row seats," visit an authorized JVC dealer. But don't be surprised if you catch yourself applauding.



**We bring the music to you.**

Dolby® and Pro Logic™ are trademarks of Dolby Laboratory Licensing Corporation

©1993 JVC Company of America

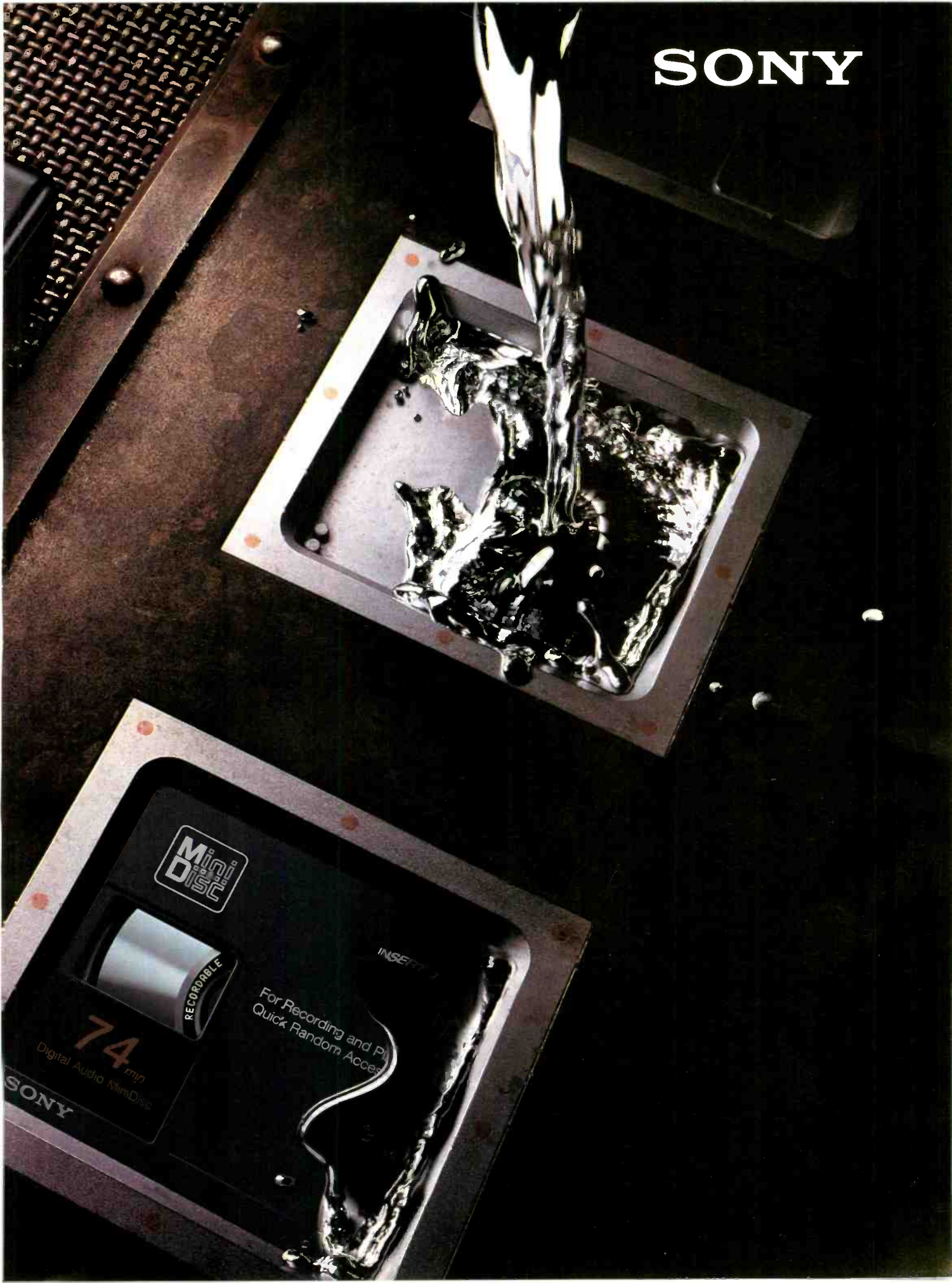


## NOW YOU CAN MINT YOUR OWN DISCS.

It's a digital disc that you create. The revolutionary Sony MiniDisc. It's recordable. Portable. And virtually unshockable. It gives you instant random access to mixes you make. And to hundreds of prerecorded titles from your favorite artists. Sony MiniDisc. For making your music your way, it's absolutely priceless.

For your complete personal guide to all Sony consumer electronics, we're introducing Sony Style magazine. To receive your copy for \$4.95, plus \$1.50 shipping and handling, call 1-800-848-SONY. Visa and MC. Offer expires 4/94. © 1993 Sony Electronics Inc. Reproduction in whole or in part without written permission is prohibited. All rights reserved. Sony, Sony Style and MiniDisc logos are trademarks of Sony.

SONY



MiniDisc

RECORDABLE

74 min  
Digital Audio MiniDisc

INSET

For Recording and Playback  
Quick Random Access

SONY

# TEST REPORTS



**The Legacy III's 10-inch woofer has an unusual dual voice coil that enables the system impedance to be toggled between 6 ohms and 8 ohms.**

## Advent Legacy III Loudspeaker System

JULIAN HIRSCH • HIRSCH-HOUCK LABORATORIES

**T**HE Advent Legacy III is a two-way floor-standing speaker system using a 10-inch woofer and a 1-inch soft-dome tweeter with magnetic-fluid damping. The woofer is unusual in having a dual voice coil that enables the system impedance to be set at either 6 or 8 ohms by means of a toggle switch on the back of the cabinet near the input terminals.

The manufacturer recommends using the 6-ohm setting when the amplifier is driving a single pair of speakers, since that will deliver the system's maximum sensitivity (efficiency). If two or more pairs of speakers are driven in parallel, as they might be in a multiroom installation, for example, the 8-ohm setting lightens the load on the amplifier.

The Legacy III's cabinet is made of

¾-inch particle board covered with black textured vinyl, with a solid pecan top plate and base trim. The front is covered by a removable black cloth grille. The woofer, operating in a sealed enclosure, is at the midpoint of the front grille, with the tweeter above it, near the top of the front panel. The

### DIMENSIONS

14 INCHES WIDE, 32½ INCHES HIGH,  
10½ INCHES DEEP

### FINISH

BLACK SIDES, REAR, AND GRILLE; SOLID PECAN  
TOP AND FRONT BASE TRIM

### PRICE

\$450 A PAIR

### MANUFACTURER

ADVENT, DEPT. SR, 25 TRI-STATE INTERNATIONAL  
OFFICE CENTER, LINCOLNSHIRE, IL 60069

input connectors, spring clips designed to accept only wire ends, are recessed into the rear panel, together with the impedance switch.

Advent's specifications for the Legacy III include a bandwidth of 40 Hz to 23 kHz, sensitivity (6-ohm setting) of 90 dB sound-pressure level (SPL) at 1 meter with a 2.83-volt input, and a crossover frequency of 2.5 kHz. The woofer's resonant frequency is given as 50 Hz,  $\pm 5$  Hz.

Our room-response measurements showed relatively flat output from 100 Hz to about 1 kHz and another flat range from 1 to 20 kHz at a 4-dB lower level. The close-miked woofer response was flat within 1 dB from 55 to 170 Hz, sloping down gently above that frequency to  $-3.5$  dB at 800 Hz. Below 60 Hz, its response fell off at 12 dB per octave, to  $-5$  dB at 40 Hz and  $-9$  dB at 30 Hz.

Close-miked response measurements of a 10-inch cone are invalid above a few hundred hertz, where its dimensions become comparable to the wavelength of the radiated sound. It was nonetheless possible to splice the close-miked and room-response measurements to form a believable composite response curve. It showed relatively uniform output (2.5 dB overall variation) from 50 Hz to 1 kHz, where there was an abrupt downward step of 4 dB, and a  $\pm 2$ -dB variation from 1.2 to 20 kHz. The tweeter's horizontal dispersion over a 45-degree angle was good, with on- and off-axis outputs diverging by about 2 dB at 5 kHz, 4.5

(Continued on page 49)

PHOTO: JOCK R. LEUNG

**Imagine** if you could turn  
your computer into  
a librarian, an artist,  
a teacher, a research  
assistant, a historian,  
a marketing expert  
and an entertainer.



# You have



**The power to teach.** With CDs, learning becomes more than looking at words and pictures. Interactive programs like the Discs Books series use movies, music, animation and sound to stimulate children with new discoveries. The continual interplay makes reading, math and other subjects fun and involving.



**The power of speed.** The AppleCD<sup>300</sup> disc drive represents a new generation of CD-ROM technology. This double-speed drive plays video clips and retrieves information much faster than first-generation CD-ROM drives. Yet the external drive for Macintosh<sup>®</sup>, shown here, costs only \$429. And an internal drive, the AppleCD 300i, is available for IBM-compatible PCs running Windows.

**Market Share - Q1/93**

**Rathbone**  
Marketing & Public Relations

- Over all industry growth is expected to remain flat.
- Corporate and government increased 25%, outpacing the industry.
- Academic. Rathbone's has risen from the middle three companies to number two.
- Forecasts indicate a dramatic increase in competitive pressure during the next fiscal year.

**The power to work better.** A CD-ROM drive gives businesses extraordinary new capabilities. You can easily add music, graphics and video to presentations. Create interactive training programs. Or consolidate important information on one disc and have it copied — an inexpensive way to store and distribute information.



**The power of knowledge.** A single CD holds more than 500 floppy disks can, making possible inexpensive reference tools that just weren't practical before: interactive encyclopedias; vast libraries of information for business, medicine and more; magazines and newspapers; even the business yellow pages for the United States and Canada.



You already know that a personal computer is an extraordinarily powerful tool for working with documents, spreadsheets and vast quantities of information. What you may not realize is that these capabilities represent only a fraction of the things a computer can do. It can also give you the power to work with sound, video, photographs, animation and other kinds of digital

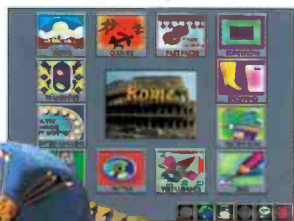


# the power.

**The power to have fun.** CD-ROM discs make learning more entertaining, so imagine what they can do for entertainment. Battle Chess, for example, turns the staid board game into a whimsical animated battle. And games like The Journeyman Project combine sophisticated story lines with spectacular sound, animation and video.



**The power to design.** CDs are an incredibly rich resource for graphics—thousands of pieces of clip art fit on one disc. You'll also find huge libraries of photographs, type fonts, sound effects, music and video clips. Even something as simple as a professionally designed background can give your work a crisp, professional look.



**The power to explore.** Nature. History. Art. Sports. Travel. From the Great Cities of the World to the Think & Talk language series from Berlitz, there are hundreds of subjects you can explore and new skills you can learn. And with interactive CD-ROM discs, you can learn at your own pace.



**The power of sound.** A CD-ROM drive brings CD-quality sound to your computer. You can make your own music with Rock, Rap 'N Roll from Macworld CD Ventures, or enjoy the performance, commentary and interactive tour of Voyager's Beethoven: Symphony No. 9. You can even play your own music CDs while you work.

information as easily as you work with words and numbers. You probably don't even need to buy a new computer. All you need to do is add a CD-ROM drive to the computer you already have. It's easy to do. It's inexpensive. And it can add an entirely new dimension to the way you work, learn and even have fun. So read on, and find out just how much more your computer can do.

# You have t



*Great Cities of the World*



*Business Yellow Pages*



*Just Grandma & Me storybook*



*Baseball's Greatest Hits*



*Roger Ebert's Home Movie Companion*



*New Grolier Multimedia Encyclopedia*



*Spaceship Warlock sci-fi game*



*Mayo Clinic Family Health Book*



*Exotic Japan*



*Learning is fun with educational CDs like Arthur's Teacher Trouble, which let young readers control the story.*



*Dialog Daily Newspapers on CD*



*The Outdoor Athlete training CD*



*Rock, Rap 'N' Roll music machine (Macrolum CD Ventures)*



*U.S. Presidents*



*CDs offer unparalleled new resources. The Family Doctor, for instance, is a richly illustrated, interactive health manual.*



*Adobe Font Folio*



*Mastering Math*



*Scurry Poems for Rotten Kids*



*All About Science*



*Business Backgrounds clip art/sound*



*Who Built America? documentary*



*Computer Select buyer's guide*



*History of the World*



*The Business Week 1000*



*800 College Boards preparation*



*World Atlas*



*Shakespeare complete works*



*Macworld Interactive*



*The Greatest Children's Stories Ever Told*



*CDs allow you to skip immediately to what interests you the most. Just set the clock in the Time Traveler CD and go.*



*Developing Writing Skills*



*Peter Gabriel: Explora (Brilliant Media)*



*Marketplace direct marketing system*



*Impressionism: Coates Art Review*



*The David Bowie CD-ROM (ION)*



*The View from Earth space study*



*Ocean Life*



*Adobe Type on Call*



*Battle Chess*



*Conception to Birth pregnancy guide*



*Let's Visit South America*



*Career Opportunities*



*AccuZip6 business mail manager*



*Sound Library 2000 (Wayzata)*



*Monarch Notes on CD-ROM*



*Dinosaurs! Multimedia Encyclopedia*



*Clinton: Portrait of Victory*

The most exciting software available today is only on CD-ROM discs. That's because CDs can hold an incredible amount of audio-visual information, making possible software that would be too impractical or too expensive with floppy disks, or even with a hard drive. Right now there are thousands of titles for Macintosh® and PCs running Windows. They cover virtually every conceivable

# he choices.



*Guinness Multimedia Disc of Records*



*KGB/CIA World Factbook*



*Rodney's Wonder Window*



*The Complete Audubon*



*Isaac Asimov's The Ultimate Robot*



*Berlitz Think & Talk French*



*National Register of Historic Places*



*Twelve Roads to Gettysburg*



*Desert Storm (Time)*



*NibongoWare Japanese course*



*The Best of Mark Twain*



*Entertainment becomes far more involving with audiovisual games. In Who Killed Sam Rupert?, you're the detective.*



*Poetry in Motion*



*Countries of the World Encyclopedia*



*Terrorist Group Profiles*



*DIVA VideoShop & The Image Bank CD*



*Stravinsky: The Rite of Spring (Voyager)*



*North American Indians*



*Sports Illustrated Almanac*



*Lunatics 3-D moonbase survival game*



*Ephemeral Films documentaries*



*History of the Blues (Queue)*



*Learn to Speak Spanish*



*How Computers Work*



*Lilia's Kitchen: Exotic Vegetables*



*The Adventures of Pinocchio*



*Dictionary of the Living World*



*USA Wars: World War II*



*The Great Buildings Collection*



*Experience the sights and sounds of the world. From Alice to Ocean follows one woman's amazing trek across the Australian outback.*



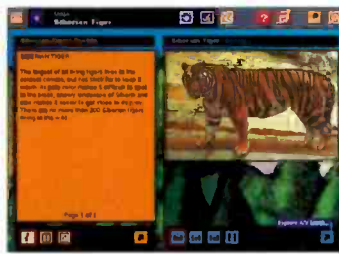
*Talking Jungle Safari*



*Sherlock Holmes, Consulting Detective game*



*A Silly Notsy House audio toy box*



*CDs combine media in entirely new ways. The Animals! lets you control film clips, photos, text and sound with friendly screen icons.*



*The Magic Flute (Warner New Media)*



*Funny (joke-tellers on film)*



*Great Wonders of the World*



*The Orchestra (Warner New Media)*



*Aesop's Fables*



*America Alive GUIDisc travel guide*



*LifeSaver2: First Aid Course*



*Curious George Learns the Alphabet*



*InPrint Art Library*



*20,000 Leagues Under the Sea*



*Digital Video Library*



*Indiana Jones adventure game*



*Uncle Alex's Guitar Tutor*

topic and interest, from business directories to cooking lessons, from nature programs to a street-by-street atlas of the United States. Only a fraction of the available CDs are shown here. New releases come out every week, and there are hundreds of titles in development. So if you don't have a CD-ROM drive in your computer, you're not just missing the fun. You're missing the future.

# All you need

## For PowerBook owners.

The single-speed, multi-session Apple® PowerCD player is the ultimate in portability. The PowerCD easily connects to Apple PowerBook® computers, any other Macintosh or even a TV.

## For Windows owners.

With the CD Multimedia Kit for PCs, you can get going right away. And it exceeds Multimedia PC Level 2 specifications. It includes:

The AppleCD 300i. Our internal disc drive fits neatly inside a PC. You also get a sound card, software and cables — everything you'll need for full multimedia capabilities.

AppleDesign® Powered Speakers. For crisp, CD-quality sound.

A free CD package. Compton's Encyclopedia on CD, the Multimedia Starter CD and up to three more CDs, which you can select from over 20 of the top titles for Windows listed in our special brochure.

## For Macintosh owners.

The AppleCD Multimedia Kit gets you off to a great start. It includes:

The AppleCD 300 disc drive. Just plug in this external drive, and you're ready to go.

AppleDesign® Powered Speakers. For true CD-quality sound.

A free CD package. Compton's Encyclopedia on CD, the Multimedia Starter CD and up to three other CDs — you choose from over 20 best-selling Macintosh titles listed in our special brochure.



## The deals.

If you have a Macintosh®, or a PC running Windows software, you can take advantage of great deals on premium multimedia bundles. The AppleCD™ Multimedia Kit for Macintosh and the CD Multimedia Kit for PCs are each valued at over \$1500.\* They're now available for less than half that. To get your kit, or the portable PowerCD, call today.

# is the drive.



**To get your AppleCD 300,  
call 800-732-5151, ext. 100.**

**The drive.**


Recently, the AppleCD 300 disc drive was named *Macworld's* Editor's Choice for Overall Value. Why? This double-speed drive is significantly faster than many other CD-ROM drives available today, yet it's still quite affordably priced. At \$429,\* the AppleCD 300 is a great deal. And to get it, all you have to do is call the phone number above.

\*All prices are Manufacturer's Suggested Retail Prices as of 8/1/93. Reseller prices may vary.

# If there's a computer in your future, make sure there's a future in your computer.



## Integrated Apple CD-ROM.

From this point on, a computer without a CD-ROM drive won't allow you to take advantage of the best computing has to offer. So if you're thinking about a new computer, consider one of the many Macintosh® models with the AppleCD™ 300i already built in. That's the easiest way to start exploring the vast array of CD titles available for Macintosh, and the many more to come. Call 800-732-5151, ext. 100, to locate an authorized Apple reseller, and stop in for a demonstration. With a CD-ROM drive inside it, you'll find that a new Macintosh delivers the most impactful kind of power. The power to be your best.® **Apple** 

\*All prices are Manufacturer's Suggested Retail Prices as of 8/1/93. Reseller prices may vary. © 1993 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, Macintosh and "The power to be your best" are registered trademarks of Apple Computer, Inc. AppleCD, AppleDesign and PowerBook are trademarks of Apple Computer, Inc. PowerCD is a trademark of 3M, Inc., Dallas, Texas. Mention of third-party products is for informational purposes only and constitutes neither an endorsement nor a recommendation. This ad was created using Macintosh personal computers. 10533211A

# TEST REPORTS

dB at 10 kHz, and 16 dB at 20 kHz, which is reasonable for a 1-inch dome tweeter.

We also made a number of quasi-anechoic response measurements, using the MLS (maximum-length sequence) program of the Audio Precision test system. These showed the abrupt drop in output above 1 kHz, with an amplitude of 3 to 6 dB, that appeared in the room curves, but did not match their smoothness at higher frequencies.

The system's sensitivity varied from a high 92 dB to a rather low 86 dB, depending on the setting of the impedance switch. Our tests revealed that the shape of the impedance curve altered dramatically between the two switch settings. The shape of the nominally 6-ohm impedance curve was like that of many speakers, with a bass-resonance peak of 23 ohms at 48 Hz and a broad minimum of less than 4.6 ohms between 100 and 200 Hz. There was a broad rise to 14 ohms at 1.5 kHz and a drop to just under 6 ohms at 20 kHz. In contrast, the 8-ohm setting gave a much more uniform curve, varying between 7 and 13 ohms over the full audio range.

It is hard to generalize about the audible effects of these differences, except to note that in some unusual cases the combined effect of an amplifier's internal impedance and the speaker-cable resistance can imprint the shape of a speaker's impedance

**A**dvent's Legacy III had the lowest deep-bass output we have heard from current speakers in its price range. I had to keep reminding myself it is only \$450 a pair.

curve on the system's frequency response, for better or worse. From that standpoint, the more uniform impedance with the 8-ohm setting would seem to be preferable.

We measured woofer distortion at an input of 4.5 volts (equivalent to a 90-dB SPL at the lower sensitivity). From a maximum of 9 percent at 20 Hz, the distortion dropped to 1.5 percent at 35 Hz and remained between there and 2 percent up to 900 Hz.

The woofer absorbed a single-cycle 1-kHz burst input of 550 watts before the driving amplifier overloaded, without audible complaint from the speaker. At 100 Hz, the cone bottomed noisily (but without damage) at a

1,000-watt input, and at 10 kHz, the amplifier reached its limit of 1,050 watts into the impedance at that frequency without evidence of distress to the speaker.

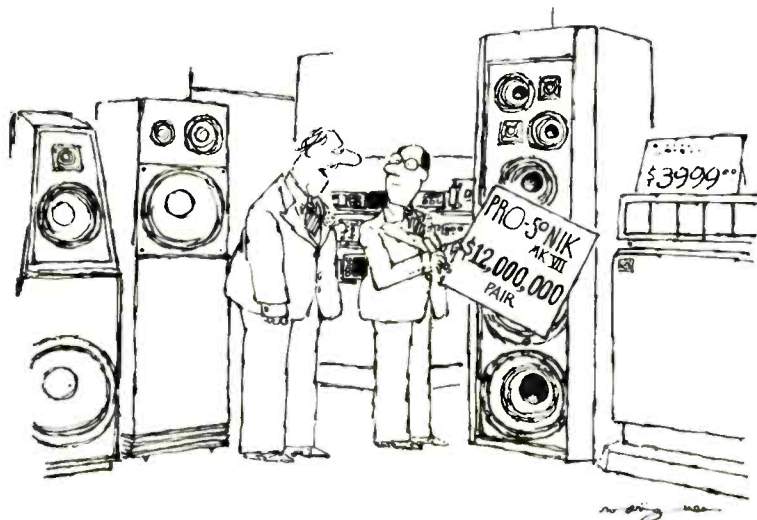
But measurements do not unambiguously define the sound of a speaker (in fact, they can tell you almost everything you want to know *except* how it sounds). For that, you have to listen.

The Advent Legacy III is unquestionably an excellent value for its price. It is a good-looking speaker, well finished, and its overall sound was balanced and musical. All the other loudspeakers we had on hand during our tests were more expensive than the Legacy III, and though it didn't outclass any of them, it didn't come off a clear second to most of them either.

The Legacy III had the deepest low-bass output we have heard from currently available speakers in its price range, or from many at considerably higher prices. It delivered honest, sole-tickling bass to somewhere under 40 Hz (my best guess is the low 30's). Nor has the rest of the audio range been neglected. I had to keep reminding myself that the speaker costs only \$450 a pair.

The one weakness we found in the Legacy III's performance was a noticeable boxiness imparted to the voices of male radio announcers, especially apparent in an A/B comparison with a somewhat costlier speaker that happened to be particularly free of this type of coloration. In fairness, I should say that the Legacy III shares this quality with many other speakers we have tested, in all price ranges.

It is rare to find a two-way speaker with a 10-inch woofer and a 2.5-kHz crossover frequency. It is difficult, if not impossible, to obtain a seamless transition from a relatively large woofer to a small tweeter at that high a frequency, but it is also impractical to work such a tweeter down to a significantly lower frequency. That design dilemma almost certainly accounts for my criticism. On the other hand, the large woofer helps the speaker achieve its fantastic bass performance. There is no free lunch—compromise is always necessary—but not too many speakers in this price range will give you the overall performance and the handsome appearance of the Advent Legacy III. □



*"John, I believe the price of that speaker is twelve thousand dollars a pair, not twelve million."*

# TEST REPORTS



## Sharp MD-D10 Portable MiniDisc Player

KEN C. POHLMANN • HAMMER LABORATORIES

**A**n important milestone in the evolution of any new format is the introduction of a product by a company other than the developer. It signifies that someone else, besides the originating company, has confidence in the new technology. The more partners, the better the chances for success, but the first is always the most important. The original Sony MiniDisc products have now been joined by two portable MD players from Sharp that define what MD is all about—small size. Specifically, the MD-D10 reviewed here is only about one-half to two-thirds the size of a typical portable CD player (though at 11.6 ounces it weighs only slightly less than many CD portables).

The MD-D10's disc-loading system is unlike the powered loading slot used in the Sony MD portables or the direct disc placement used in CD portables, and in fact is akin to a typical cassette release button. Then you can grasp the shell and raise it about a half-inch so that you can slip in an MD before

closing it again. When you release the shell to retrieve an MD, the shell opens slightly, you raise it further by grasping it, and the disc is nudged forward by an internal spring.

The top shell contains seven controls. The play/play-mode selector button initiates playback and engages disc repeat and random track playback. The off button stops playback and turns the unit off; if left in the stop mode for more than 5 minutes, the player turns itself off automatically. Forward and backward skip/search buttons move the laser pickup from track to track when tapped and engage audible fast search when held down.

### DIMENSIONS

3<sup>3</sup>/<sub>16</sub> INCHES WIDE, 1<sup>3</sup>/<sub>16</sub> INCHES HIGH,  
4<sup>1</sup>/<sub>16</sub> INCHES DEEP

### WEIGHT

11.6 OUNCES

### PRICE

\$599

### MANUFACTURER

SHARP, DEPT. SR, SHARP PLAZA, MAHWAH,  
NJ 07430-2135

The X-Bass/NC button changes the frequency response of the audio output signal. The X-Bass setting effectively provides a slight bass boost (actually by slightly cutting middle frequencies), whereas the NC (Noise Control) setting reduces audible sound leakage from headphones, which may annoy other people, by dramatically cutting high frequencies (a 9-dB reduction at 7 kHz).

The display button is used to view disc and track titles as well as total disc time and elapsed track time. A slide switch marked Hold is used to disable the other buttons to prevent accidental changes. Unlike many CD portables with similar features, the MD-D10 does not flash HOLD on its display when you try to use locked buttons—that would be a nice enhancement. Button-pushing is confirmed by a beep tone in the audio output; fortunately, you can defeat the tone by holding down the X-Bass/NC button.

The player's dot-matrix LCD can show as many as ten alphanumeric characters on one line. It flashes a POWER ON message when the play button is first pushed, then the track title scrolls across the display, followed by the elapsed track time. The track number is displayed simultaneously below the scrolling messages. This display sequence is repeated each time a new track is selected. When the stop button is pressed, the player displays the disc title, followed by the total number of tracks and total disc time. When the stop button is pressed again, a POWER OFF message comes up briefly. Other LCD indicators include symbols and labels for play, repeat play, random play, Noise Control, X-Bass, and low battery, as well as diagnostic messages for troubleshooting. The display contrast can be varied to suit lighting conditions.

There is a volume-control knob on the right side of the player and a mini-jack output on the back, which can be used both for headphone listening and for connecting the player to an external stereo system. The left side of the player holds a DC-power input jack. Underneath is a door to a compartment holding a rechargeable nickel-cadmium battery.

A 6-volt AC adaptor/battery charger is supplied; although there is no charging-status display on the MD-D10 it-



# Introducing The Next Best-Selling Loudspeaker Of All Time.

More than 30 years ago, Henry Kloss designed the now-legendary KLH Model Six, the first speaker to fully exploit the potential of two-way design. By using the then-new principle of the acoustic suspension woofer, as well as creating a new type of long-throw integral-dome tweeter, he was able to make a speaker that provided outstanding performance at a moderate cost. A decade later, he took these principles still further with the Advent loudspeaker, one of the best selling speaker models of all time. Both speakers were considered industry benchmarks for price/performance.

We are now pleased to announce Cambridge SoundWorks' Model Six, a two-way system named in honor of Henry Kloss' first ground-breaking two-way system.

## Not An "Extension Speaker."

Model Six is not an "extension speaker." It's a serious *main* speaker with sufficient frequency range and power-handling to satisfy serious listeners. Model Six speakers, when combined with a good receiver and CD player, comprise a music system for \$500-\$600 that seriously outperforms typical pre-packaged "shelf" or "rack" systems.

## Two-Way Design Advantages.

We believe that when lowest cost is not the ultimate consideration, the best speaker design is a subwoofer-satellite system like our Ensemble® and Ensemble II systems. But a properly designed subwoofer-satellite system requires three-way design, which entails the cost of two more drivers and a third cabinet. While neither Ensemble system is "high end" in price, a complete stereo system starts at about \$800, still too much for music lovers on a budget.

## QUANTITIES LIMITED



## The Country's Best Value In A Stereo System?

We've matched Model Six speakers with a best-selling stereo receiver and CD player to create what may be the best value *ever* in a stereo system. The receiver has 40 watts a channel and a remote. The CD player uses 1-bit technology for accurate, natural sound. Priced at only \$499, this is a *serious* music system for *serious* listeners.



Model Six continues a long tradition of best-selling, high performance, high value, two-way speakers by Henry Kloss. Very natural, accurate, wide-range sound—only \$119 each!

What does Model Six give up compared to our Ensemble systems? With big amplifiers in large rooms, Ensemble and Ensemble II can play louder, and they have greater low-bass extension. They also give you tremendous room-placement flexibility, which allows you to optimize performance, with little impact on the decor of your room.

## Costly Components. Thoughtful Design.

At the heart of Model Six are its drivers, a 1 1/4" cone tweeter with center 3/8" dome (the same tweeter we use in Ensemble), and a newly-designed 8" acoustic suspension woofer. While classic in their simplicity, these drivers differ greatly from other moderate-cost speakers.

Model Six's crossover frequency is 2,000 Hz, much lower than many other two-way designs. This makes it possible to ensure smooth, uncolored upper midrange with wide dispersion. Such a low crossover frequency would not work with conventional tweeters. But Model Six's tweeter uses a suspension that allows the "long throws" necessary to reproduce music in this range.

The 8" woofer cone is larger than those usually found in speakers of Model Six's size and price, allowing it to move substantial amounts of air at low frequencies. And Model Six puts emphasis on very low frequencies instead of the mid-bass "rise" common in many speakers. The result is bass that is more accurate and extended than similar systems.

But most important is how Henry Kloss went on to "voice" the system—painstakingly

fine-tuning the octave-to-octave balance. This is the most important factor in determining the overall sound of a speaker.

## Elegant Cabinet Design.

We devoted considerable time and effort to making Model Six visually appealing. Convincing simulated wood finishes were chosen—in oak, teak and black ash. A subtly rounded "bullnose" molding frames a medium charcoal grey grill that was custom-woven for Model Six.

## Factory-Direct Price: \$119 each!

Because we sell factory-direct, Model Six sells for *far* less than it would cost in stores. At \$119 each, in your choice of three finishes, it is *the* value in today's loudspeaker market. If you aren't satisfied, you can return Model Six within 30 days for a full refund.

For A Free Catalog, Call

# 1-800-FOR-HIFI

We Know How  
To Make Loudspeakers.

## CAMBRIDGE SOUNDWORKS

154 California St., Suite 102F  
1-800-367-4434

Canada: 1-800-

Outside U.S. or Can.

© 1993 Cambridge SoundWorks. © Ensemble SoundWorks, Inc. Cambridge SoundWorks is a trademark of KLH, Inc. Advent is a trademark of Cambridge SoundWorks. Cambridge SoundWorks is not affiliated with.

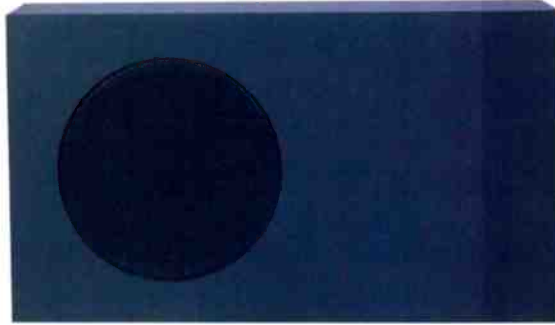
CIRCLE NO. 6 ON READER SERVICE CARD

# 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 its best-known competitor. 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*?

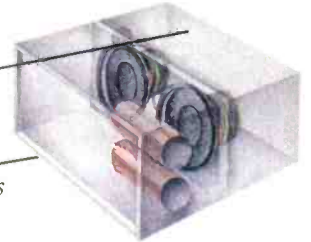
## The Same Satellite Speakers.

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 the 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 or to order call our audio experts, 24 hours a day, 365 days a year. We'll send you our 64 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.

For A Free Catalog, Call

**1-800-FOR-HIFI**

*We Know How To Make Loudspeakers.*

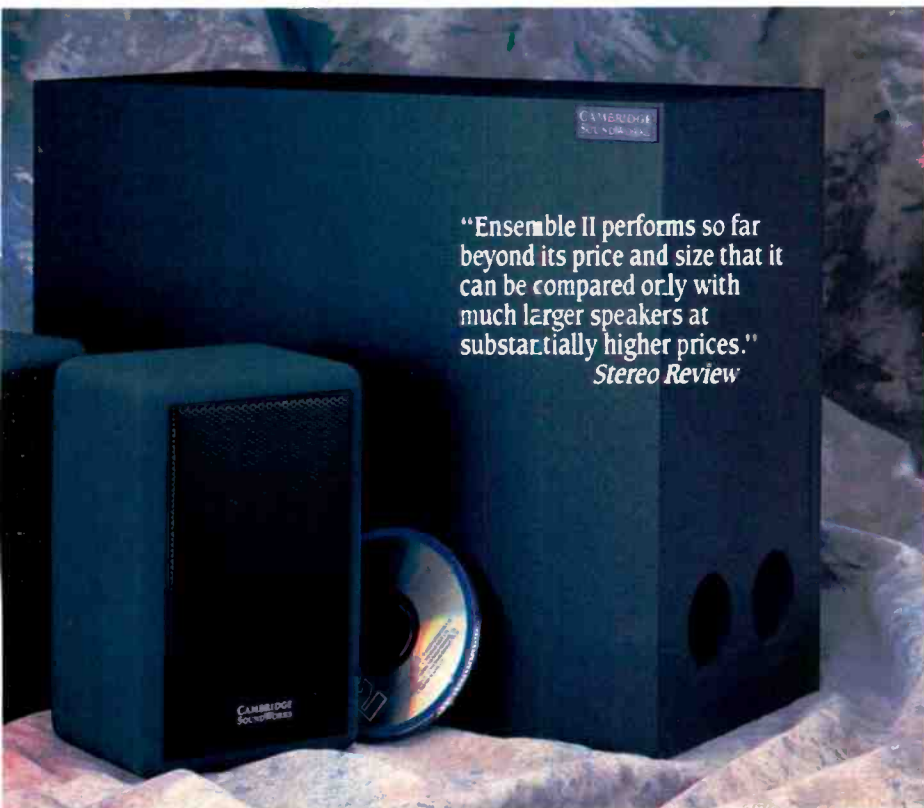
**CAMBRIDGE  
SOUNDWORKS**

© 1993 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*



# TEST REPORTS

self, a small red LED on the wall-plug module lights while the player's battery is charging and goes out when charging is completed. Charging takes about 5 hours, and the battery can be recharged approximately 500 times. Using a fully charged battery, maximum playback time is about 100 minutes for prerecorded MD's and about 90 minutes for user-recorded MD's. (That's one characteristic I definitely think needs improvement: Listening to one 74-minute user-recorded disc pretty much kills your battery.) Also included with the MD-D10 is a pair of inexpensive but serviceable headphones, a plastic carrying pouch, and an adaptor cable for connecting the MD-D10's mini-jack output to phono-jack inputs.

The MD-D10's dramatically diminutive size (much smaller than earlier MD players) is made possible by a trio of new Sharp-developed chips that consolidate a lot of the necessary circuitry and reduce power consumption. Like other MD players, the MD-D10 has an antishock buffer memory—in this case, a 1-megabit chip that holds 3.1 seconds of audio data—to help prevent vibration from disrupting playback. Following ATRAC decoding, the digital data stream is converted to analog audio by a 1-bit D/A converter.

Lab tests revealed no apparent weaknesses in audio performance. Frequency response, signal-to-noise ratio (S/N), dynamic range, distortion, and low-level linearity were all good to excellent. The only audio products we've encountered that rival this performance in such a small package are portable CD-3 (3-inch CD) players, which, like the discs themselves, are rare in this country.

But with any system based on perceptual coding—ATRAC in the case of MD—traditional measurements tell only part of the story; the sound quality of a perceptual coder cannot be estimated directly from such tests. The best way to evaluate sound quality is to listen carefully. I auditioned the MD-D10 both with headphones and over a high-end sound system. Using the supplied headphones, I was quite satisfied with the sound quality, which to my ears was essentially indistinguishable from that of portable CD players with their headphones. In oth-

## MEASUREMENTS

All measurements were made with the player powered by a fully charged NiCd battery.

Maximum output level	1.1 volts
Frequency response	+0.11, -0.19 dB, 20 Hz to 20 kHz
Channel separation	
1 kHz	79.7 dB
20 kHz	75.9 dB
Interchannel phase shift (at 20 kHz)	2.1°
Signal-to-noise ratio (A-wtd.)	90.2 dB
Dynamic range (A-wtd.)	100.2 dB
Harmonic distortion (THD + N at 1 kHz)	
at 0 dB	0.051%
at -20 dB	0.15%
Linearity error (at -90 dB)	-0.3 dB
Maximum playing time	
(single battery charge)	
prerecorded	100 minutes
user-recorded	90 minutes

er words, I suspect the limiting factors in each case were the headphones and the internal amplifiers.

When I played the MD-D10 in a high-quality home audio system, however, in which fidelity is much higher and direct A/B comparisons between CD and MD are possible, I could hear slight differences between the two. It's hard to describe, and certainly not immediately obvious, but in the MD playback the imaging was altered, with shifts of high-frequency sources, and high-frequency timbre was altered as well, with a blurring and hardening of the sound, particularly in transient material. The MD-D10's sound was not bad—not bad at all, in fact—but for now an MD simply ain't no CD.

Perhaps more important, any portable product must be evaluated on its portability. I therefore conducted my own highly scientific vibration test, in which I put on shorts and run around the block carrying the player. No CD or MD player that I have evaluated in the past has ever successfully completed this jog test. But after considerable exertion I decided to give the MD-D10 a passing grade. Although it muted momentarily a few times, it was decidedly capable of shrugging off shock and vibration. Given that this player uses only a 1-megabit buffer (about 3 seconds) and that a 4-megabit buffer (about 12 seconds) could easily

be designed into future models, I am confident that MD will eventually achieve full joggable status.

While playing the MD-D10, I made certain that it handled both 60- and 74-minute user-recorded discs as well as prerecorded discs (no problem). I was also happy to note its speedy track access—not as fast as the fastest CD players I've seen, but very fast. On the other hand, the LCD message scrolling was too slow (even small children, just learning to read, would become impatient). It was so slow that I rarely waited around to read it, and that effectively defeats its purpose.

Buying an MD player ultimately comes down to two questions: portability and repertory. The MD-D10 measures  $3\frac{5}{16} \times 4\frac{5}{16} \times 1\frac{3}{16}$  inches, weighs 11.6 ounces, and plays for 100 minutes. A portable CD player—the Technics SL-XPS900, for example—might measure  $5 \times 5 \times 1\frac{1}{16}$  inches, weigh 12.2 ounces, and play for  $2\frac{1}{2}$  hours (10 hours with supplementary battery pack). The MD wins on size, the CD wins on playing time, and they tie on weight (depending on how many batteries you're toting). The difference, of course, is the MD's superior shock resistance (although some portable CD players now incorporate similar shock-proofing systems). Repertory is another tough call. Many thousands of CD titles are now available, whereas MD is exactly where CD was in the beginning—about 300 titles. Of course, you can record your own MD's, but the blank discs cost as much as prerecorded CD's (or more), and you'll have to invest in an MD recorder. Bottom line: If you intend to use your player in a very active environment (such as jogging) and are content with the selection of prerecorded MD's, then the MD-D10 meets your needs. Otherwise, you can't ignore CD. And, despite inferior sound, you can't ignore analog cassette either—very cheap and a vast repertory.

Whatever your decision, it is evident that the MD format is gaining a foothold in the market. With recorders from Sony and players such as the Sharp MD-D10, the MD choices, applications, and price range are expanding. In particular, if you want to be amazed by big-time sound from a small-time portable package, the MD-D10 is ready to run with you. □



## DESIGNS BY HENRY KLOSS

*Our new Center Channel and Center Channel Plus speakers are magnetically shielded, so they won't cause video interference, even when placed very near a TV screen.*

# Our Center Channel Speakers Deliver Optimum Pro Logic Performance At Factory-Direct Prices.

Cambridge SoundWorks sells two speakers designed by Henry Kloss specifically for use as center channel speakers in Dolby Surround Pro Logic systems—the Center Channel and Center Channel Plus. Our experience with Dolby Surround Pro Logic systems has shown that the center channel is *very* important. A significant portion of movie soundtracks is directed to the center channel. It's crucial to use a speaker that reproduces that material



accurately, with the proper volume level and dispersion pattern.

### Center Channel by Henry Kloss.

Center Channel is a compact, two-way acoustic suspension speaker with a 4" woofer and a ring radiator tweeter. Because of its compact size (8½" x 5¼" x 4"), it's simple to place Center Channel directly on top of or below your TV screen, so that dialog and sound effects will seem to emanate from their on-screen source.

Center Channel is well shielded magnetically so that it can be placed very close to your TV without causing video interference. Acoustically identical to our Ensemble satellite speakers, it's ideal for center channel use in a Pro Logic system. The factory-direct price of Center Channel is \$149.

### Center Channel Plus by Henry Kloss.

The Center Channel Plus is a larger speaker recommended for achieving theater-like playback levels in the most sophisticated and powerful home theater systems. It uses

four 3" long-throw woofers and a tweeter that perfectly matches the acoustics of our Ensemble® and Ensemble II systems. The frequency range of the outer pair of 3" woofers is intentionally limited to maintain proper dispersion characteristics.

Because of its wide, low profile (25" wide, 4" high, 6½" deep), Center Channel Plus is ideal for placement directly on top of or, uniquely for a product of its type, *beneath* a TV—with optional support unit, it can act as a base for your TV. We don't know of any speaker, at any price, that outperforms Center Channel Plus. The factory-direct price of Center Channel Plus is \$219.

For A Free Catalog, Call

## 1-800-FOR-HIFI

*We Know How*

*To Make Loudspeakers.*

## CAMBRIDGE SOUNDWORKS

154 California St., Suite 1020, 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. Prices and specifications subject to change without notice.  
CIRCLE NO. 6 ON READER SERVICE CARD



Place our low-profile Center Channel Plus above your TV or, with optional support, use it as a base for your TV.

# TEST REPORTS



## Teac V-8000S Cassette Deck

CRAIG STARK • HIRSCH-HOUCK LABORATORIES

**T**OP-of-the-line in every respect, Teac's V-8000S cassette deck combines a solidly engineered tape transport with a complete range of performance and convenience features. In addition to Dolby B and Dolby C, the V-8000S includes the newer and sonically superior Dolby S noise-reduction system. Calibrated user-selectable bias and sensitivity adjustments enable accurate performance optimization for virtually any tape formulation, and Dolby HX Pro circuitry extends the deck's treble response with high-level signals. For convenience, the tape counter reads directly in minutes and seconds, and a fifteen-selection search facility enables rapid location of any selection on the tape. And the wireless remote control even includes a button for turning the display-panel lighting on and off.

In designing the V-8000S, Teac's

engineers paid particular attention to preventing mechanical vibrations, which can degrade the sound by producing either wow-and-flutter or modulation noise. Heavy steel chassis sub-assemblies provide not only electrical shielding but an unusually rigid interior structure as well. The transport mechanism is attached to a vibration-deadening structure of its own, and a spring-loaded cassette stabilizer and three-point mounting system prevent

shell vibrations from being transmitted to the tape. Even the top cover is secured with five additional screws to prevent any possibility of resonant rattling.

The dual-capstan tape transport uses a direct-drive, phase-locked-loop (PLL) DC capstan motor (the lagging capstan is belt-coupled). The rubber pinch-rollers are of slightly different diameters to prevent buildup of resonant vibrations from a common rotational frequency. Three additional DC motors operate the reel drives, the mechanism that pulls the head assembly and pinch-rollers into position, and the damped cassette-well door.

The tape heads have separate recording and playback elements in a common housing, insuring accurate alignment while enabling optimum design for each function and instant comparison between the incoming and the recorded signals during recording. The head cores are made of a multilayer amorphous cobalt compound and have oxygen-free-copper windings.

The cassette well contains sensors that automatically set the equalization and bias for Type I (ferric), Type II (chrome or chrome-equivalent), or

### DIMENSIONS

18½ INCHES WIDE (17⅞ INCHES  
WITHOUT SIDE PANELS), 5¾ INCHES HIGH,  
14 INCHES DEEP

### PRICE

\$1,300

### MANUFACTURER

TEAC, DEPT. SR, 7733 TELEGRAPH RD.,  
MONTEBELLO, CA 90640

# The Powered Subwoofer That Has The Audio And Video Press Jumping Out Of Their Seats.

A jet roaring in *Top Gun*. The heavy-footed killer robot in *Robocop*. A semi hitting concrete after a 20 foot fall in *Terminator 2*. These are examples of the substantial, very low-frequency effects on the soundtracks of today's movies. Such frequencies are rare in music, and are beyond the capabilities of most speakers designed for music.

The Cambridge SoundWorks Powered Subwoofer by Henry Kloss was created to reproduce those ultra-low, ultra-strong bass signals with the power and impact you would experience in movie theaters with the very best sound systems. It's designed to *supplement* (not replace) the subwoofer(s) of Ensemble or Ensemble II. It will also work with speakers from other companies.

## Remarkable bass performance.

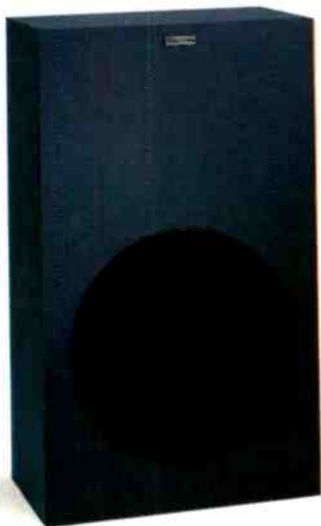
The Powered Subwoofer consists of a heavy duty, 12 inch long-throw acoustic suspension woofer integrated with a 140



watt amplifier—all in a high-pressure black laminate cabinet. Its control panel includes a bass level control and an 18dB per octave, four-position electronic crossover frequency selector (to match the subwoofer to your other speakers).

Additionally, an optional electronic crossover\* will provide 18 dB per octave,

## DESIGNS BY HENRY KLOSS



Powered Subwoofer



Slave Subwoofer

high-pass, line-level filters for the main and center amplifiers. These filters allow you to keep strong, low frequencies of sound effects out of the front speakers. These signals can cause distortion, even in speakers designed for full-range music.

The Powered Subwoofer's bass performance is simply *awesome*. It reproduces accurate bass to below 30 Hz. You'll hear soundtracks the way they were meant to be heard. In fact the bass is *better* than most

*Our Ultimate Home Theater Speaker System consists of our dual-subwoofer Ensemble system, our low profile Center Channel Plus speaker, a pair of our critically acclaimed surround speakers, The Surround, our Powered Subwoofer, our Slave Subwoofer. Factory-direct price: \$1,999.*



theaters! At the press event when we introduced our Powered Subwoofer, we had startled members of the audio and video press literally "jumping out of their seats" during demonstrations of movie soundtracks. The factory-direct price of the Powered Subwoofer is \$599.

## Optional "slave" subwoofer.

For all-out home theater performance, you can add our optional Slave Subwoofer, which is identical to our Powered Subwoofer except that it lacks the amplifier and controls. It uses the amplifier and controls built into the Powered Subwoofer. Amplifier output jumps from 140 to 200 watts when the Slave Subwoofer is connected.

The combination of the two speakers can reproduce a 30 Hz signal cleanly to a sound pressure level of over 100 dB in a 3,000 cubic foot room! That's enough clean, deep bass for the largest home theaters, and the most demanding listeners. The factory-direct price of the Slave Subwoofer is \$299.

## No compromises. No apologies.

The combination of our Ensemble speaker system, Center Channel Plus speaker, The Surround rear/side speakers, Powered Subwoofer and Slave Subwoofer (see photo at left) creates a home theater speaker system that we believe is the best of its kind.

Although you can spend thousands more on competing systems, we don't know of *any* that outperform this \$1,999 package. If you'd like more information, a free catalog or our new booklet, "Getting The Most From Your Dolby Surround System," call our toll-free number any time.

For A Free Catalog, Call

# 1-800-FOR-HIFI

We Know How To Make Loudspeakers.

## CAMBRIDGE SOUNDWORKS

154 California St., Suite 1020, 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. Prices and specifications subject to change without notice. \* Available late Fall, 1992.

CIRCLE NO. 6 ON READER SERVICE CARD

# No Other Loudspeaker Company Can Run This Ad.

Cambridge SoundWorks is a new *kind* of audio company, with factory-direct savings, and much, much more...



**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 designed and made.



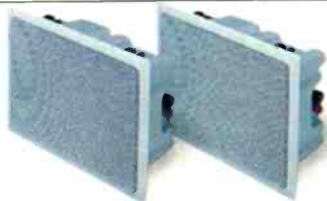
**Five year limited parts and labor speaker warranty.**  
All of our speakers are backed by a five year parts and labor warranty. In some cases, we'll even send you a replacement speaker before we've received your defective unit.

**NEW: The Cambridge SoundWorks Charge Card.**  
Qualified customers can now charge items from our catalog without tying up the credit lines of their other charge cards. Call for your application today!



**High performance dipole radiating surround speakers.**  
The Surround (\$399 pr) & The Surround II (\$249 pr) use dipole radiator technology for surround sound the way it was meant to be heard. Hundreds less than competing speakers.

**NEW: Model Eleven A transportable component system.**  
The same high performance of the original, in a smaller package. Carrying case doubles as system subwoofer. Works on 110, 220 & 12 volts. Introductory price \$699.



**Ambiance ultra-compact speaker system.**  
We think Ambiance is the best "mini" speaker available, regardless of price. Bass and high-frequency dispersion are unmatched in its category. \$175-\$200 each.

**Ambiance In-Wall high performance speaker system.**  
We don't know of any other in-wall speakers that match its performance, value and ease of installation. Includes acoustic suspension cabinet, gold plated speaker terminals. \$329 pr.

Call 1-800-FOR-HIFI for a free 64-page catalog with components and systems from Cambridge SoundWorks, Pioneer, Philips, Sony, Denon and others.

**We Know How To Make Loudspeakers.**

**CAMBRIDGE  
SOUNDWORKS**

154 California St., Suite 1020, Newton, MA 02458

1-800-367-4434 Fax: 617-332-9229 Canada: 1-800-525-4434 Outside U.S. or Canada: 617-332-5936 © 1992 Cambridge SoundWorks.

front panel shows the elapsed tape time (there's a pushbutton to select the tape length, necessary to insure accuracy). The same panel shows whether the deck is in record, play, or pause mode and is used to set the Compu-tomatic Program Search (CPS) system to find a desired selection on the currently loaded tape.

A large, calibrated-attenuator-style control sets the overall recording level, and a small balance knob is used to compensate for any left-right level discrepancies. Depending on the mode in use, the V-8000S automatically switches between source and tape settings, and an Auto-Monitor override button enables instant A/B comparison of the source and taped signals. Motor-assisted pushbuttons control the transport mode, and a return-to-zero (RTZ) button fast-winds the tape to the initial counter position. The Dolby selector switch has four positions: off, B, C, and S.

The FM multiplex filter is switch-selectable and should be used only when dubbing stereo FM broadcasts, as it chops off all frequencies above 15.6 kHz. (When needed, this filter prevents 19-kHz stereo pilot-tone leakage from causing Dolby mistracking.) The front-panel headphone jack has its own level control; the main, rear-panel output level is not adjustable. In addition to the regular rear-panel input jacks, a switch-selectable CD-direct input is provided, together with dub-synchronizing features for use with Teac CD players. An additional switch selects the deck's mode (record or playback) when it is operated from an external timer.

Measured with our BASF IEC-standard calibrated tapes, the V-8000S's playback response was very flat. The slight rise in the very-low-frequency region (around 40 Hz) reflects the "fringing effect" of playing a full-track recording with stereo playback heads. Thus, the playback response is even flatter than it appears in the curves.

For our overall record-playback tests we used our usual center-line samples of TDK AD (ferric), TDK SA (chrome-equivalent), and TDK MA (metal). In the bass, response from all three tapes was down by less than 2.5 dB all the way to 20 Hz. With the metal formulation, overall response at the



# TEST REPORTS



customary  $-20$ -dB level was within  $\pm 1$  dB from 24 Hz to 20 kHz. The response was equally flat at a 0-dB recording level when we used Dolby C noise reduction, whose somewhat lessened high-frequency pre-emphasis helps prevent tape saturation at the treble end. The overall response with TDK AD and SA, while not as superbly flat, was also good, being down by just a little over 2 dB at 18.5 kHz and 17 kHz, respectively.

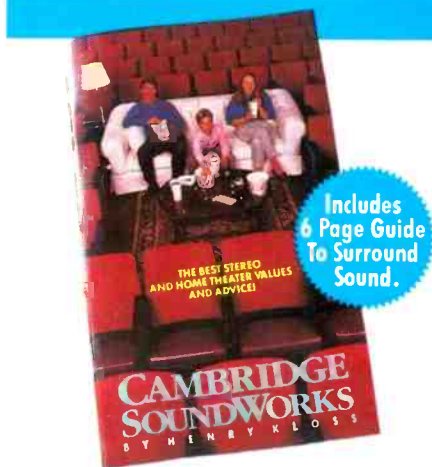
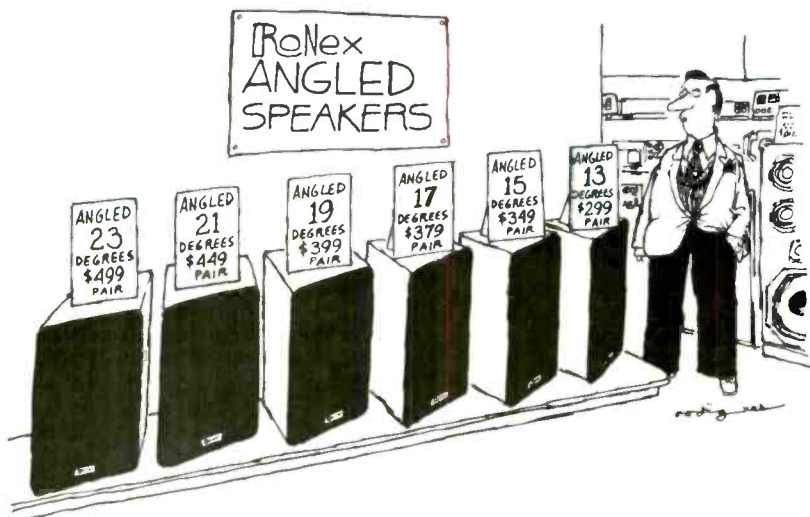
The wow-and-flutter figures we obtained from the V-8000S were among the lowest we have ever measured, and tape-speed error was practically

nonexistent. Clearly, Teac's engineers have succeeded spectacularly in achieving their goal of steady, accurate tape motion. Signal-to-noise-ratio (S/N) performance was no less impressive, measuring 78.1, 77.3, and 80.7 dB, respectively, for the three tapes (with Dolby C).

High-speed winding in either direction was very fast, and input and output levels were entirely normal. Dolby noise-reduction tracking error was within  $+1$ ,  $-0.5$  dB for Dolby B and  $+3$ ,  $-2$  dB for Dolby C and S.

The Teac V-8000S was in every respect all we could desire in a cassette deck. Silent and solid in operation, its controls are well laid-out and easy to use. Save for the omission of a main playback-level control (almost never found on cassette decks these days), it lacks no convenience or performance feature that we would want to have.

Sonically, it was superb. Good heads, good electronics, and a transport with negligible wow-and-flutter all contribute to a deck that can challenge the most critical ear to distinguish between original and copy when the levels are carefully matched. Frequency response and imaging were impeccable, and Dolby S proved able to remove the last traces of the low-frequency "grunge" that usually accompanies the dubbing process. In short, then, we found the Teac V-8000S to be one of the few decks we can recommend without reservation to the most serious listener. □



Includes 6 Page Guide To Surround Sound.

## FREE Audio Catalog

Our 64-page catalog is loaded with components and music systems from Cambridge SoundWorks, Pioneer, Philips, Denon, Sony and others. Because you buy factory-direct, with no expensive middle-men, you can save hundreds of dollars. For example, a Dolby Surround system with Ensemble II speakers, rear speakers, Philips Dolby Surround receiver, CD player and system remote is less than \$1,000. Call today and find out why *Audio* magazine said we "may have the best value in the world."

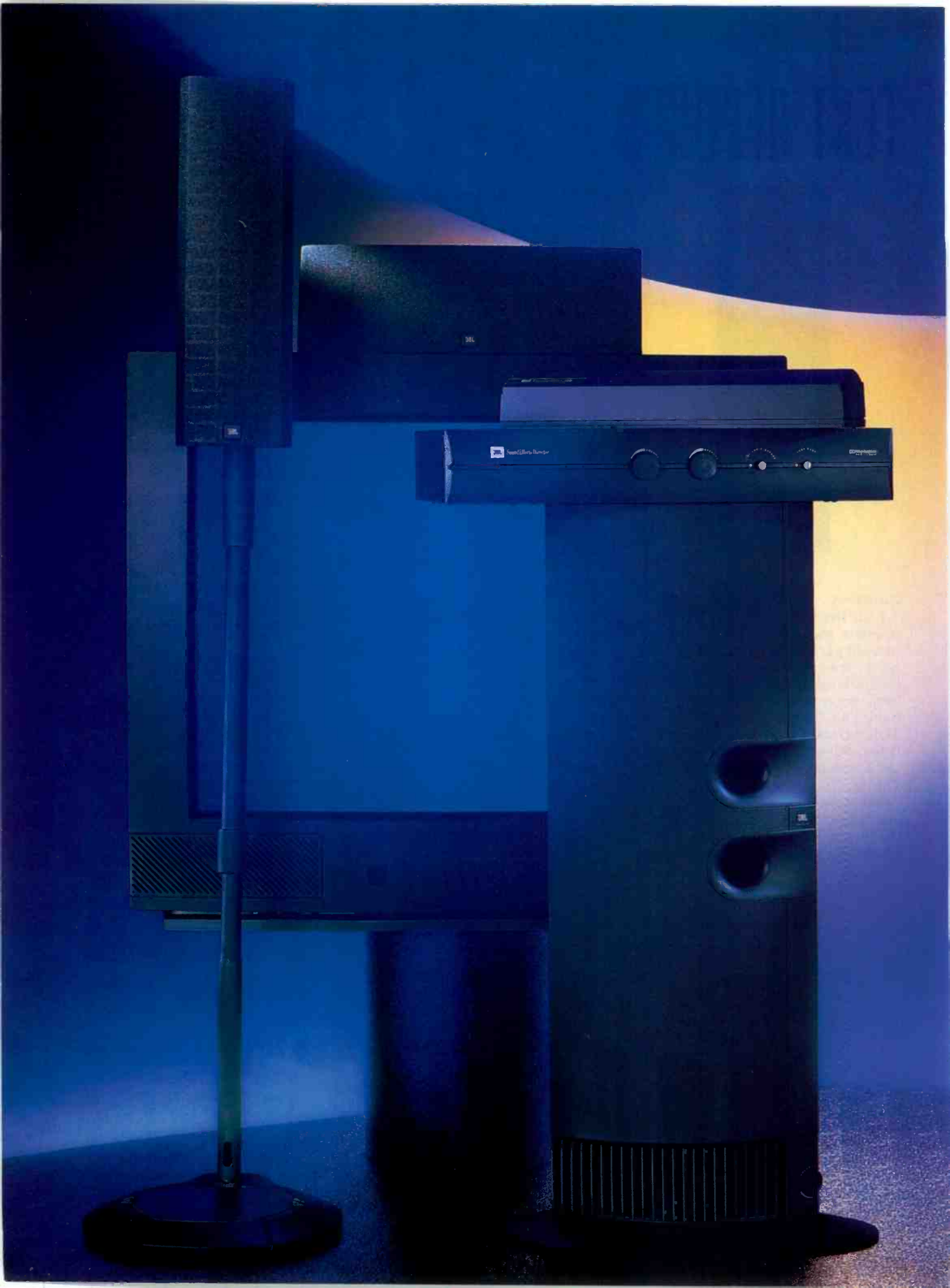
- Call toll-free for factory-direct savings.
- Save hundreds on components and systems from Cambridge SoundWorks, Pioneer, Philips, Denon, Sony and more.
- Audio experts will answer your questions before and after you buy. 8AM-midnight, 365 days a year—even holidays.
- 30 Day Total Satisfaction Guarantee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



1-800-FOR-HIFI  
We Know How To Make Loudspeakers.

**CAMBRIDGE SOUNDWORKS**

154 California St. Suite 1020, 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



5.1 Surround Sound System  
JBL  
www.jbl.com

JBL

JBL  
Sound Effects Receiver  
DVD Player  
JBL

JBL

JBL

JBL

# JBL

# SOUND EFFECTS

SPECIAL

TEST

REPORT

SoundEffects is the umbrella name given by JBL to a new line of speakers and related products designed to serve a multitude of domestic sound-reproduction needs. There are components for home theater and surround sound, for remote and multiroom listening, even for quasi-portable operation. And a couple of them are extraordinarily innovative.

Although most SoundEffects components can be bought separately, they are also more conveniently available in preselected packages at slight price breaks.

The key to the package deals is that they add up in well-thought-out stages to a complete matched-component home theater speaker system without product duplication and with a lot of versatility. Buying more than one of certain packages can add

flexibility, however (more on this later). You can start small and end up with multiroom, multichannel sound as your budget permits.

There are two sets of SoundEffects product packages, split basically along price/performance lines, though there is some overlap in the electronic components included with each set. We tested the higher-priced set, which comprises the Music 2, Movies 2, and Magic 2 packages. (The other set, less

**A modular system  
for music,  
movies, and "magic"**

PHOTOS BY ROBERTO BROSAN

**B Y D A V I D R A N A D A**

expensive but similarly structured, consists of the Music 1, Movies 1, and Magic 1 packages.)

**Music 2** (\$949) is a satellite/powered-subwoofer system suitable for audio or audio/video installations. The satellites, called Sat 2's (\$399 a pair if bought separately), are magnetically shielded two-way speakers, each with two 3½-inch neodymium-magnet midrange drivers and a titanium-dome tweeter in a slender, wedge-shaped, molded-plastic enclosure 4¾ inches wide, 14 inches tall, and 6¼ inches deep. Sat 2 grilles are removable, and the JBL logos rotate for horizontal or vertical operation, though the in-line driver layout suggests that the speakers will have better horizontal dispersion if used vertically (as they indeed did in my tests).

Each Sat 2 comes with a couple of mounting options. A wall-mounting bracket is provided that is held in place by twist-on knobs at the top and bottom of each enclosure. The knobs themselves are removable so that the speakers can also be screwed onto optional adjustable stands (called "Stand" by JBL, even though they are sold in \$199 pairs) or simply placed on a shelf.

**BassWave** (\$599 if bought separately) is the name given to the subwoofer, which incorporates two 5¼-inch drivers operating into a triple-chamber ported bandpass enclosure. It is driven by a bridged 100-watt amplifier built into its base. The enclosure stands 27¼ inches tall, spans 10¼ inches at its widest, and has the horizontal cross section of a quarter-circle, which accounts for the rounded front panel. The BassWave's 90-degree corner enables it to be placed right up against a wall or deep into a corner in either vertical or horizontal operation. JBL recommends that if it is used vertically, it should be placed close to a wall, a suggestion I would agree with.

**A**n audio system can drive a BassWave in a couple of ways. You can run a stereo line-level signal into its phono-jack inputs, or you can connect it in parallel with the satellite speakers, via spring-loaded connectors, to the speaker outputs of your amplifier (the BassWave places no significant load on the amp). From either of these stereo signals it derives a mono signal



JBL's Take 2 wireless RF receiver (top), the Take 2 transmitter, and the Director surround-sound decoder.

and feeds it through an electronic crossover before final amplification. The nominal crossover point between the BassWave and the Sat 2's is 120 Hz. The BassWave's amplifier plugs directly into a wall socket and constantly monitors its inputs for a signal to see whether it should turn on (indicated by a green LED on the amplifier section at the base of the speaker). There is a level-control knob next to the pilot light for adjusting low-bass balance. The subwoofer has no grille, removable or otherwise. The ports you get are the ports you see, unless you put the BassWave behind a couch or some other piece of furniture (a feasible option).

Supplied with each BassWave are two accessories: (1) a hookup block that attaches with its own leads to the main-amplifier speaker outputs and to which the satellites and subwoofer are in turn connected by standard stripped-wire speaker cable, and (2) a 1¼-inch-high stabilizing base to be screwed onto the subwoofer when it is operated standing up. The base serves two functions: It makes it more difficult to tip the subwoofer over, and it can hide excess lengths of power cord or speaker cable.

**Movies 2** (\$599) is a prepackaging of the components needed to turn a Music 2 speaker system into a home the-

ater system, provided you already have an A/V receiver or amplifier. It consists of another pair of Sat 2's, this pair to be used as surround speakers, and a center-channel speaker (called Center, \$259 if bought separately). Except for a horizontally oriented grille, making it suitable for above- or below-screen placement, the Center is exactly the same speaker as a Sat 2, which is good for matching the sound across the front during surround programs. Why it costs \$60 more than half the price of a pair of Sat 2's we don't know.

**Magic 2** (\$649) encompasses the remaining—and most unusual—components of this set of SoundEffects products. Included are the Power 20 (\$139 if bought separately), a 20-watt-per-channel stereo amplifier with built-in (nondefeatable) bass-extension circuitry intended for driving Sat 2's, and the Take 2 (\$499 if bought separately), a long-range (150-foot) wireless stereo transmission system consisting of a special 900-MHz transmitter and receiver. The Take 2 was, in fact, sufficiently unusual to merit separate measurement and evaluation (see "A Double Take on Take 2," page 66).

Holding all this together, literally, is the Taxi (not available separately), a combination component-mount and dual-speaker stand that has a built-in

handle for relatively easy movement. As you can see in the picture on page 65, the flying-saucer-shaped wireless receiver sits on top of the finned Power 20 amplifier, which in turn nestles into a cutout in the Taxi. Speaker cables can be fed up the Taxi's central tube to a pair of Sat 2's (not supplied as part of Magic 2). The whole setup is then ready to serve as an easily movable home hi-fi system, with the signal being supplied by the wireless transmitter back at the main audio setup. You can listen to the Magic 2 components anywhere within the relatively large transmitter coverage area, provided you have house current to power the amplifier and the receiver.

In addition to the above products, we were also able to play with a couple of separately available SoundEffects devices. The SoundEffects Director (\$299) is a very basic Dolby Pro Logic decoder (using the Analog Devices Dolby Pro Logic decoder chip and a delta-modulation digital delay line). It has a 25-watt power amplifier for the surround speakers and another for a center-channel speaker, and they can be bridged to 50 watts if you don't need to drive surround speakers from the unit. The controls are very rudimentary (on/off, center/surround balance, overall volume, bypass, and test signal), since the Director is intended for hookup in a tape-monitor loop of a standard (non-A/V) receiver or amplifier. Its performance was okay (meaning average among units we've used that have the same Dolby and delay circuits).

Finally, the Power 50 power amplifier (\$175) is a larger brother to the Power 20, but without its bass-extension equalization. Its output is bridgeable, presumably to provide 100 watts of power in mono operation. It, too, was okay, though it didn't have the lowest distortion or noise or the highest dynamic headroom we have seen.

### SoundEffects' Effectiveness

After that lengthy description—which, endless as it may seem, omits mention of the pleasantly futuristic look of most of the SoundEffects components—it would be not a little anticlimactic to report that the works didn't sound up to snuff. I'm pleased to say that Music 2 is as fine a moderately priced three-piece speaker system as I have ever heard. My listening tests—with the satellites at ear level and placed away from the walls on SoundEffects stands—revealed that the horizontal dispersion was wide, the imaging very precise and stable,

and the frequency response smooth and mostly uncolored. There was only a slight tendency toward sibilance or steeliness with some recordings. The "sweet spot"—the optimum listening area—was at least two persons wide.

**A**fter some experimentation with the subwoofer's placement and output level, we achieved a smooth "join" between the subwoofer and satellite outputs, with neither a spectral "black hole" between them nor a boomy upper bass, both common faults with subwoofer/satellite systems. There was firm and fairly clean output to below 30 Hz. As we found, however, you might have to fool around a bit with subwoofer location and level to obtain this class of performance. (When is some speaker company going to supply a setup CD with each subwoofer to enable you to set sub/sat balance by ear? Accurate level-setting is not an impossible task, but to save time I cheated by using a microphone and a spectrum analyzer.)

If you have the extra bucks for a second BassWave, JBL recommends a stereo subwoofer configuration in

which you feed one BassWave with just the left-channel signal (leaving the other input unconnected) and the other with the right-channel signal. I tried it and found that it made subwoofer placement less critical in terms of frequency balance and yielded a more spacious low-frequency sound quality (that probably has to do with how multiple woofers interact with room resonances).

In-line driver mounting like that used in the Sat 2's usually results in somewhat restricted vertical dispersion in the direction of that line. That did occur with the Sat 2's: When they were in their normal vertical orientation, each time I sat down I could easily hear the effect as a distinct change in tone color as my ears moved from off-axis while standing to on-axis while sitting. I'd therefore also recommend satellite placements that position the tweeters approximately at seated ear level (unless you normally listen standing up).

### Surrounded by Effects

When Sat 2's are used as surround speakers, as they are when you add a Movies 2 package to a Music 2 package, such considerations are less important. In fact, for Dolby Surround playback, the surrounds should if possible go to the sides of the primary



The JBL Taxi stand holds two Sat 2 speakers, a Take 1 RF receiver, and a Power 20 amplifier.



A  
DOUBLE  
TAKE ON  
TAKE 2

In terms of technical achievement, the most interesting members of the broad array of SoundEffects components are its radio-frequency (RF) stereo transmitter and remote receiver, both designed by the justly famous RF engineer Larry Schotz. The receiver (at top in the photo on page 64, above the transmitter and the SoundEffects Director Dolby Pro Logic decoder) is enclosed in a 7-inch-wide case reminiscent of the Martian flying saucers in the 1952 sci-fi movie classic *War of the Worlds*. It's available separately as the Take 1 (\$249) or together with a transmitter as the Take 2 (\$499). The Take 2, in turn, is included in Magic 2 (\$649), which adds the Power 20 stereo power amplifier and the Taxi stand.

Take 2 operates in a section of the radio spectrum around 900 MHz that was recently opened up by the FCC for this type of application. This happens to be the same band in which the new extended-range portable telephones operate. But don't worry about JBL-assisted eavesdropping: The Take 2 system looks for its own special pilot signal and mutes unless it is present.

To further reduce the possibility of interference, every transmitter and receiver has a small dial on its back panel that selects among ten different "house codes" (specific combinations of radio-carrier frequencies). A receiver is supposed to have its house code set to that of its intended transmitter. If you do get interference from other 900-MHz devices, you change house codes on both transmitter and receiver to the same new setting. If you are in an interference-free environment (one in which your signals won't interfere with your neighbor's, nor his with yours), you can simultaneously use as many as ten transmitters, each set to a different house code, to send lots of stereo signals to multiple receivers. And you can have any number of receivers picking up the same

transmitter, provided they are set to the same house code.

In fact, the system is even more versatile than that, for with each house-code setting you get *four* channels of audio transmission/reception. They come in two stereo pairs, labeled A and B. A pair is selected on the transmitter by simply plugging a stereo source into either the A or B inputs (line-level phono jacks); both pairs are always active, and if you use both the transmitter will send all four channels simultaneously. Three-position slide switches next to each input adjust the transmitter's sensitivity. To prevent overload when driving the transmitter directly from a CD player without an intervening volume adjustment, I'd recommend the lowest sensitivity setting, which goes into overmodulation at a bit over 3 volts (at 1 kHz), a safe level considering that CD players don't ever get much above 2 volts full output. At the receiver end, A/B selection is via a small slide switch at the right front of the saucer. (The receiver's transparent window has no function; the same housing will be used in other SoundEffects products that require an infrared window.) Each receiver has two pairs of phono-jack outputs, driven in parallel. Output at 100-percent modulation is a tad less than 500 millivolts—a line-level output, in other words. Both the transmitter and receiver are powered by external AC-adaptor modules.

Let's go over the hookup options of a Take 2 system. In a surround setup, you could use the Take 2 to eliminate long, unsightly, or impractical wiring runs to the surround speakers by transmitting the surround signals to a receiver at the back of the room, there to be amplified, JBL hopes, by a Power 20 power amp and fed to two JBL Sat 2 speakers attached to a Taxi stand. This is precisely the combination illustrated on page 65.

**I**t gets more interesting when you have more than one receiver. With the system's ability to transmit two independent stereo signals at once, you could, for example, feed your audio system's CD-player output to a remote receiver elsewhere in your house

while still transmitting surround-channel information to the back of your home theater room. If you choose to feed one input of the transmitter from the tape outputs of an amplifier or receiver—probably the most convenient hookup—this multiple-transmission function is an excellent reason to prefer receivers and amplifiers that let you separately select the source being listened to and the source being recorded (which in this case would be the source fed to the transmitter).

All this multichannel versatility would be pointless if the system didn't sound good. I'm happy to report that except for the most serious, ultra-critical auditioning, the kind where you'd probably not want to listen remotely anyway, the Take 2 transmitter/receiver combination sounded excellent—much like a good cassette deck operated with Dolby C or Dolby S. It certainly more than meets the demands of surround-channel signals.

The residual noise level was extremely low (–88 dB, A-weighted) thanks to the use of a wide-band companding noise-reduction system. Left/right separation was more than adequate at 50 dB, while A/B transmitter-channel separation was essentially infinite (the crosstalk was buried in the background noise, as was leakage from different house-code settings). Total harmonic distortion plus noise (THD + N) at first looked rather high at close to 1 percent, but spectrum analysis revealed that most of that figure was attributable to relatively innocuous background noise and that true distortion didn't become a factor until overload was approached. Linearity (the accuracy with which output level tracks input level) was about the same as a typical cassette deck's at 1 kHz. At full modulation, frequency response was essentially flat up to around 15 kHz, above which it started to roll off. At lower input levels the equalization of the companding system gradually introduced mild low- and high-frequency rolloffs (reaching 6 dB per octave above and below 1 kHz at very low levels) when measured using a swept sine-wave test signal. Response will vary with signal content, however, and we did not notice these rolloffs when listening to music.

In listening tests, the Take 2 system was audibly benign except with the same kinds of difficult signals that would be tough for a tape noise-reduction system such as Dolby B or dbx: solo flutes, harpsichords, and music with lots of high-level high frequencies or exposed single low-frequency tones. On these I could detect either a slight "pumping" of the background noise or the harshness that comes from distortion. Both effects were rare, becoming apparent only with specially selected source material. With typical pop and symphonic music, the system was very, though not completely, transparent.

**T**hese data and the listening-test results were obtained with a transmitter/receiver separation of 40 feet through five walls on the forty-fifth floor of a concrete-and-steel New York City skyscraper suffused with the potentially interfering RF emissions from dozens of personal computers and from the TV and radio antennas atop the Empire State Building just 1.5 miles away. In a typical home I'd expect to get much greater range out of the system at the same performance level, perhaps even to its 150-foot specification. Care might have to be taken with receiver and transmitter orientation and placement at longer distances, however. In most homes, even 40 feet is more than sufficient to get upstairs, down to the basement, and out on the deck, not to mention reaching the relatively few feet to your listening room's surround speakers. If you live in the city, 40 feet would probably extend into your neighbor's house!

The SoundEffects 900-MHz transmitter and receiver are such nifty devices, and provide such obvious versatility and convenience, that I fully expect other implementations of the circuitry to appear elsewhere soon. I can foresee immediate applications in wireless intercom and public-address systems. Meanwhile, you can take advantage of this leading-edge technology to enhance your surround-sound system and to fill not only your home theater with music but also your bedrooms, the basement, the garage, the tool shed, the apartment next door. . . . —D.R.

listening position, up on the walls above head height—the same relative position that movie-theater surrounds are in.

Followers of home theater technology may be concerned that Sat 2's are not dipole radiators of the type regarded by many (most prominently, Lucasfilm's THX group) as the best design for home surround-channel speakers. Although a dipole radiation pattern can facilitate production of the desired diffuse sound field—the surround speakers are supposed to create an ambient wash of sound in the room, not discrete, localizable sources—it is often possible to get very good results with careful placement of more conventional speakers. A trick that worked well with the Sat 2's was to aim them away from the listening position—easy to do, as they rotate in their mounting brackets. I never found the Sat 2's radiation pattern a drawback with any surround material I fed to them. In fact, with surround-encoded music CD's, the flatter response of Sat 2's, compared to that of many dipoles, produced a superior result, with less apparent muffling of high frequencies. Certainly with the music-enhancement digital-processing modes of many A/V receivers and amplifiers, speakers with a more normal radiation pattern might produce better results than dipoles.

The Center speaker, being internally identical to a Sat 2, also sounds that way, even when mounted horizontally, provided you aren't seated too far off-axis. This similarity yielded a precision and consistency of sound movement across the front when I was playing Dolby Surround soundtracks that simply cannot be obtained with a nonmatched center speaker. In all, the Music 2/Movies 2 combination provided excellent home theater speaker performance.

It remains for me only to re-emphasize the versatility of the matched-component modular design approach JBL has taken with SoundEffects, even for applications not directly related to music listening or home theater. For example, I found that a pair of Sat 2's driven by a Power 20 make a dandy multimedia speaker system for computer hookup, with more bass, flatter response, and less distortion (and, it must be said, a higher price) than most speakers sold expressly for that purpose. And the ear-opening sound quality of the Take 2 900-MHz transmitter/receiver combo makes multiroom audio more enticing than ever—you don't even need wires! □

With JBL's  
SoundEffects,  
you can  
start small  
and end up  
with  
multiroom,  
multichannel  
sound.



**JBL SoundEffects components, clockwise from top left: Sat 2 satellite speaker on a SoundEffects Stand, Center (center-channel) speaker, Take 2 RF transmitter, Director surround-sound decoder, and Basswave subwoofer.**



PUT A PIONEER® LASERKARAOKE® PLAYER

IN YOUR LIVING ROOM, AND

WATCH YOUR GUESTS FLOCK

TO IT LIKE MAGNETS TO

A REFRIGERATOR. NOW

YOU, YOUR FRIENDS AND EVEN THE NERVOUS GUY

WHO CRASHED THE PARTY CAN SING LEAD VOCALS ON

ANY ONE OF OVER 1500 SONGS, FROM MOTOWN

TO ROCK TO COUNTRY. LASERKARAOKE BACKS YOU

UP WITH INSTRUMENTALS, MUSIC VIDEOS, EVEN ON-

SCREEN LYRICS, FOR THE NIGHT'S LESS-THAN-COHERENT

MOMENTS. AND FOR MORE MODEST AFFAIRS, OR EVEN

A PARTY OF ONE, LASERKARAOKE STILL DELIVERS —

AT LONG LAST, THROW

**A PARTY**

WHERE EVERYBODY

**DOESN'T END UP**

IN THE KITCHEN.

THE NEW PIONEER CINEMA WIDE PROJECTION TV.

FIND OUT MORE. YOU'LL LIKE WHAT YOU HEAR,



IT PLAYS OVER 7000 LASERDISC MOVIES AND ALL YOUR FAVORITE MUSIC CDS. WITH PIONEER TECHNO-

LOGY, YOU KNOW YOU'LL

ALWAYS GET A LASER-

SHARP PICTURE AND THE

SUPERIORITY OF DIGITAL

SOUND. PLUS, THE SYS-

TEM HOOKS UP TO ANY

TELEVISION, INCLUDING

WHAT YOU SEE AND MAYBE EVEN WHAT YOU SOUND LIKE. CALL 1-800-PIONEER, EXT. 260, TO FIND THE

DEALER CLOSEST

TO YOU. PIONEER

LASERKARAOKE.

CLEARLY, IT'S THE

BEST THING TO HAPPEN

TO PARTIES SINCE THE

COCKTAIL WEENIE.



**LaserKaraoke®**  
**PIONEER®**  
The Art of Entertainment

BUY A PIONEER LASERKARAOKE PLAYER AND GET A FREE KARAOKE LASERDISC WITH OVER 50 SONGS. A \$225 VALUE.\*

\*OFFER VALID ONLY IN THE U.S., FROM 9/1/93 THROUGH 12/31/93. SEE DEALER FOR DETAILS. ©1993 PIONEER ELECTRONICS (USA) INC., LONG BEACH, CA



Shopping strategy No. 1: Take \$500 to your favorite electronics store and pick out a compact disc player you like at that price. Now move down two shelves, buy the \$250 player from the same manufacturer, and head for the nearest record shop to buy twenty CD's to expand or start your collection.

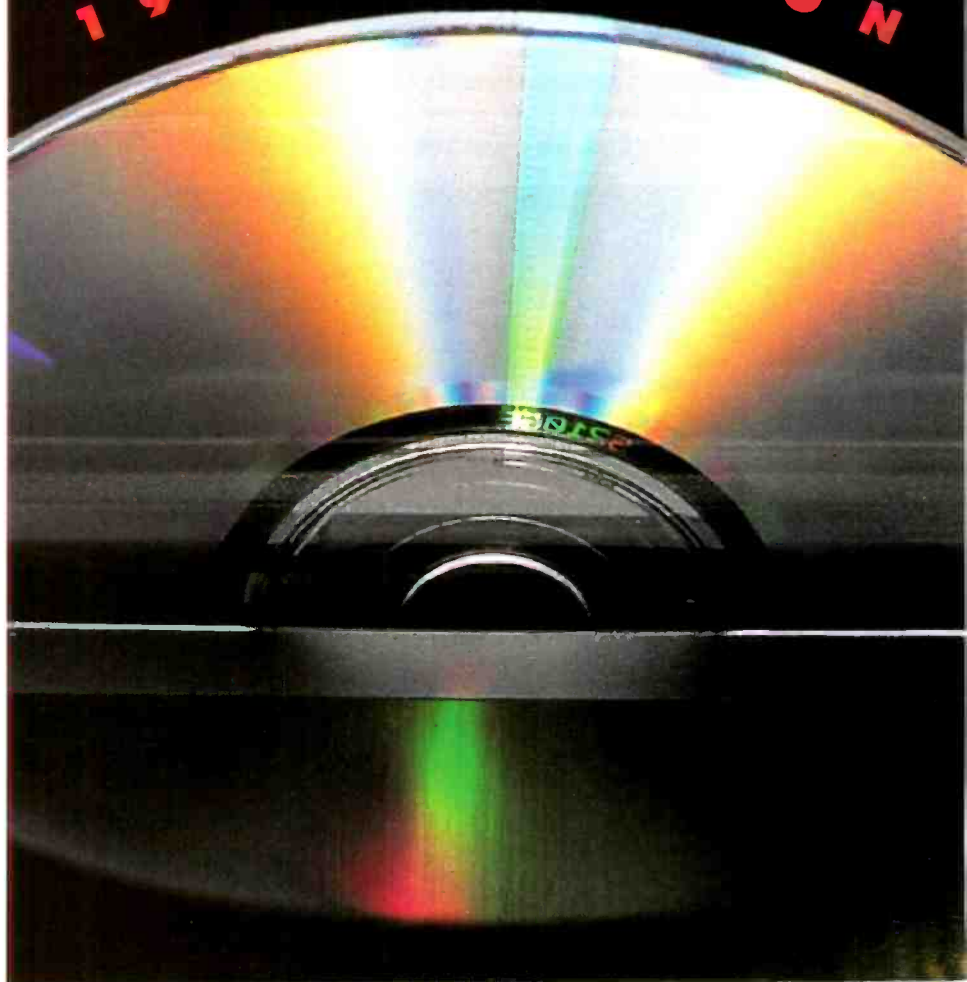
The above recommendation is only partly tongue-in-cheek. CD player performance has reached near-commodity status, and unless your system (and budget) is more than a little high-end, it's unlikely you'll encounter much in the way of dramatic performance distinctions among players in any price range. Which is not to say that differences don't exist—they do. But they may not be immediately obvious to the ear or eye—especially as you approach the \$1,000 mark.

You may glean slight (and we do mean *slight*) refinements in sonic performance from big-ticket players, and you will almost certainly find more sophistication in controls, features, and fit-and-finish. Beyond this point lies true high-end country, a land of claim and counter-claim by engineers and audiophiles alike. Enter at your own risk: High-end hi-fi is vastly entertaining, but it can be addictive and

BY  
DANIEL  
KUMIN

# SHOPPING FOR A CD PLAYER

1993 EDITION





Sony's CDP-C910 changer (\$480 with remote) features a ten-disc cartridge and a memory mode that lets you create display names and store preferred track sequences for 184 discs.



Fisher's Studio 24 changer (\$500 with remote) has a jukebox-like carousel that holds twenty-four CD's. Discs are loaded one at a time and can be classified under preprogrammed labels (Jazz, Rock, etc.) or assigned display names.

Denon's LA-3100 combi-player (\$1,200) has a drawer-type platter that accepts an 8- or 12-inch laserdisc or a CD. The LA-3100 plays both sides of a laserdisc automatically and has a jog/shuttle dial.



The Technics SL-PD847 five-disc carousel changer (\$230) lets you swap four discs while the fifth is playing. An ID Scan mode previews each track on a disc, playing the loudest (and most easily recognized) passage of each song for 10 seconds.



very expensive (see "High Hopes" on page 73).

The first question any shopper must answer is, what sort of player do I need? A single-disc model or one that handles five or more discs at a time? That depends on your listening habits and your lifestyle. If you're a connoisseur who regularly listens to musical works from start to finish, a single-disc player should suit you just fine. But if you do a fair amount of entertaining, listen to many different styles of music, or enjoy having background music on while you're puttering around the house, skip the single-play models and head for the changer shelf.

More than half of all home CD players purchased today are multidisc changers. Five- and six-disc "carousel" changers, which load CD's onto a top-loading or drawer platter that rotates each disc successively into place, are the most popular. Disc-access time is generally a little shorter than with "magazine"-style changers, and often you can swap some discs while another is playing—a very convenient feature.

Magazine changers, which typically accept six or ten discs in a pull-out magazine (or cartridge), offer different advantages: compatibility with a car changer of the same brand (or a similar one), long-term storage (additional magazines cost about \$25 apiece), and greater capacity. Pioneer, for example, makes changers that accept two or three six-disc magazines for twelve- or eighteen-disc hands-off play.

In fact, high-capacity changers are a coming thing. Fisher has a machine that ingests twenty-four discs in a jukebox-like carousel, yet preserves easy single-disc playback. Sony just introduced a hundred-disc model, and NSM's computer-controlled hundred-count player has been on the market for well over a year.

If you're leaning toward the changer option, keep in mind that some models—particularly magazine players—make it tough to load a single disc quickly for instant gratification. If that's a problem, check out a hybrid model that has a single-disc drawer and a six-disc magazine (available from JVC, Kenwood, and others). Also pay attention to disc-access time, which varies according to changer type and disc capacity. Finally, disc-handling mechanisms can be somewhat noisy while swapping discs, so be sure to listen *between* songs from different discs.

In any guise, changers offer the allure of extended, hands-off play, and

there is a tremendous variety of magazine and carousel models to choose from in the \$200 to \$500 range.

Another fetching option is the "combi-player," which handles ordinary music CD's and laserdisc movies and videos. Most combis offer audio performance and CD features equal to those of fine audio-only models, but at about twice the price. From an audio standpoint, about the only combi-player drawbacks are large size, relatively slow track access, (typically) higher mechanical noise, and, of course, price. On the other hand, when it comes to video reproduction, laserdisc is clearly superior to VHS tape in picture and sound quality. If you need a CD player and feel strongly that a home theater is in your future, visit the combi-player shelf first.

Then there's the portable pantheon. Handheld, battery-powered CD players from many manufacturers offer mobility and, in the case of higher-end models, at least, near home-player performance. Some subtle audible differences may show up in portables that sell for, say, \$250 or less when they are compared with the best home players, but these are largely the result of compromises inherent in miniaturization and the low-power-consumption design needed to extend battery life. The best portables, however, are nearly free of compromise when it comes to sound quality.

**A** portable CD player has obvious attractions, principally . . . well, portability: You can use it at home, in the car, at the office, and on planes, trains, and busses (many models include headphones). But portables can be harder to use than home machines because of their small, fussy controls and displays, and they may fall a bit short in the features department. They also, as a class, tend to have a shorter lifespan than their home counterparts, often the result of their hazardous, every-which-way-but-loose duty. It's a tough call. Many buyers solve the dilemma by purchasing a good portable for multimode use, adding a permanent shelf player when the budget permits.

As the twentieth century sinks slowly beneath the horizon, another CD option is rising in the east: interactive CD. The Philips CD-Interactive (CD-I) system, Sega CD, Panasonic's 3DO Interactive Multiplayer, and Pioneer's

## EXTRAS! EXTRAS!



**Marantz's CD-11 Mk 2 CD player (\$2,500) employs the latest-generation Bitstream 1-bit D/A converter from Phillips and features preferred-track-sequence memory for up to 195 discs.**

CD players offer a bewildering thicket of features and functions. Virtually any player should include such basics as full transport controls (play, pause, track skip, etc.), audible fast search, simple track and time displays, and rudimentary programming (track-reordering) abilities. Then there are the extras that many, but far from all players offer. They include:

- **Full-function remote control.** Wireless remotes are common fare, but the ultimate coach-potato tool is one that has a volume control and duplicates all major front-panel controls.
- **Digital output.** A must for serious systems, this special output—more common in fiber-optic than coaxial form—lets you bypass the player's D/A converter and pass digitized music signals directly to a digital recorder, preamp, or signal processor. It may also be your ticket to future add-on features—maybe even video!
- **Library/programming functions.** Although programming can be tedious, the ability to create tag lines for individual discs, which are displayed whenever they're loaded, is a nice touch. Some players also store your favorite track sequences for individual discs (or a load of discs in some cases).
- **Headphone jack.** Beware: Not all headphone jacks have a dedicated volume knob, which can be handy.

● **Visual displays.** A comprehensive, easy-to-read display is a valuable aid. Some players do not offer all of the possible time displays, such as elapsed or remaining disc and track time. Onscreen (TV) display is a worthwhile combi-player feature, provided there's also a front-panel display for CD-only playback.

● **Shuffle play, or random play.** This handy, one-button feature lends a fresh sound to old music by playing the tracks on a disc in a random order. Changers that can randomly select tracks from all of the discs in the tray or magazine, rather than from one disc at a time, produce a more interesting mix.

● **Integrated remote functions.** Some players can be connected to a same-brand receiver or integrated amp (via a rear-panel cable) for coordinated control from one remote handset—for example, hitting the play button turns on the CD player and the receiver as well as selecting the receiver's CD input.

● **Tape-recording aids.** Many players offer features that automate analog taping. One example is peak search, which scans the disc for the highest-level passage. Another is automatic editing: You key in the tape length, and the player selects tracks to fit as many as possible on each side of the tape.

—D.K.



Onkyo's DX-C210 six-disc carousel changer (\$350) lets you change up to three discs without interrupting playback. You can also create your own forty-track playback sequence, selecting songs in any order from any of the discs in the platter.

LaserActive system represent a new generation of CD players, which not only play standard music discs but also play interactive, visually oriented discs of one form or another. (All require a video monitor, of course, and the LaserActive system also plays conventional laserdiscs.)

The Panasonic and Pioneer players are just now beginning to hit store shelves. The game-oriented Sega CD has been around for about a year, but, strictly speaking, it offers less than



Pioneer's PD-TM3 changer (\$510) accepts three six-disc cartridges. It has a built-in digital signal processor with five ambience settings and a headphone jack with a dedicated volume control.



NAD's Model 502 CD player (\$299) features 1-bit MASH D/A converters, a coaxial digital output, and the ability to program a twenty-one-track playback sequence.

audiophile-grade CD playback. Philips CD-I players have been available for well over a year, and CD-I is currently the only interactive format with a substantial library of titles—about a hundred at last count.

Which, if any, of these formats will set the interactive-multimedia standard of the twenty-first century? It's anybody's guess. (If you know the answer to that question, go out and buy a lottery ticket—immediately!) Should you invest in one of these first-generation interactive players? Experience says probably not—at least as a primary CD player. But for secondary systems, video-game and computer junkies will be hard pressed to resist at least checking out this new form of home entertainment.



Kenwood's DP-R5750 five-disc carousel changer (\$299) offers repeat modes for a single track, a single disc, or a programmed sequence from one or all of the discs. You can switch two of the discs in the platter while another is playing.

### Digital Details

The technology of digital audio has evolved along several different paths since 1981, and manufacturers frequently boast of improved performance resulting from one refinement or another. Most such claims are technically legitimate, but few translate directly to appreciable sonic gains. The most prominent (and frequently trumpeted) refinement is in the type of digital-to-analog (D/A) conversion circuitry employed. Multibit (16-, 18-, or even 20-bit) D/A converters were the only game in town up until a few years ago, and they are still widely used to decode CD data. An 18-bit or higher-bit-rate chip theoretically offers some-



JVC's XL-M509TN (\$380) is a "6+1" changer that combines a six-disc cartridge and a single-play drawer for on-the-fly operation. You can assign eight-character labels to 156 discs (in twenty-six cartridges) and search for them by those names.

what greater accuracy than 16-bit conversion, though in practice a carefully engineered and calibrated 16-bit design can be equally precise.

Nowadays, "1-bit" converters such as those in the Philips Bitstream and Technics/Panasonic MASH chips dominate the field. Instead of using complex resistor networks to model each of CD audio's 65,000-odd possible values, they use very fast, very accurate digital clocking circuits. (For more detail, take a third-year electrical-engineering course at your local university.)

It's tough to generalize, but 1-bit converters tend to be more stable over time and to offer slightly better performance for the dollar—at least in the case of inexpensive players. Once you move beyond the \$500 level, sophisticated multibit designs are nearly as common as 1-bit converters, however, and the performance balance is quite even. At any price point, it's far from certain that even an experienced audiophile could identify audible differences between competing 1-bit and multibit players, so making a purchase based solely on the marketing hype of one technology or the other is not a wise strategy.

The same can be said of oversampling, another technological wrinkle of digital audio. Virtually every CD player today employs oversampling to permit digital filtering; four-times (or "4X"), eight-times ("8X"), and higher rates are widespread, and 1-bit players by definition include high resampling rates. Once again, these numbers provide little if any clue to audible performance.

Today's CD player specifications are a jungle of largely meaningless numbers: Flat frequency response, one-part-in-10,000 distortion (0.01 percent), and 90-dB or greater signal-to-noise ratios are typical. One spec—dynamic range, which expresses the headroom a design provides between a null ("digital zero") signal and a maximum-level signal—may provide a useful shorthand indication of overall digital and analog performance. A player rated for a 98-dB dynamic range yields reproduction that's clearly superior—at least on paper—to that of one specified at 88 dB.

But even dynamic-range specs are tough to compare, as different measurement techniques and tools may yield numbers varying 6 dB or more from the same player. In short, specs are of little use in picking a player, beyond confirming that a particular model meets today's standard perfor-

## HIGH HOPES

**Okay. You've budgeted more than \$1,000 to spend on a CD player. What should you expect from high-end models?**

• **Better sound? Maybe—but it'll be tough (or impossible) to confirm. Most high-end designs employ top-shelf D/A converter chips and associated circuitry, high-quality, tight-tolerance analog components, and advanced oversampling circuits with superior analog filters and output sections. All of this should add up to superior performance—but there's no guarantee that you, I, or anyone else will actually hear it. One sound argument in favor of high-end players is that disc-production techniques and standards are constantly evolving, resulting in subtle sonic improvements that top-shelf players are more likely to pass on to your ears.**

• **Excellent disc handling? Absolutely. Any player in the \$1,000-and-up range should handle errors caused by lightly scratched or dirty CD's without complaint. It should also provide above-average isolation from bumps and airborne vibration.**

• **More features? Maybe, but probably not. Paradoxically, high-end CD players (like other high-end hi-fi components) tend to offer fewer features in a quest for simplicity, which some feel enhances audio quality.**

• **High-end appearance, finish, and construction? Beyond doubt. Any kilobuck-plus CD player should look good, feel nice, and be crafted with obvious care from top-quality materials. If you're contemplating this level of expenditure, accept nothing less.** —D.K.

mance levels, as most players on the market in fact do.

A player's ability to handle disc defects is one performance area worth investigating. The ideal is a combination of disc transport, laser pickup, and error-correction circuitry robust enough to handle scratched, dirty, or marginally defective CD's without so much as a hiccup. The best way to determine a player's worthiness in this area is to play a test CD that puts its error-correction system to the test, enabling you to quantify its ability to handle increasingly egregious errors. (The excellent "Digital Test" two-CD set on the Pierre Verany label, 788031/32, can be ordered from Allegro Imports; call toll-free, 1-800-288-2007.)

All other things being equal, a player that can handle severe disc errors without audibly pausing or skipping is preferable. (Performance can vary from sample to sample, however, so confirm that the actual player you plan to purchase meets the standard of the demo unit you tested.)



Once you determine the type of player you need, and the features you want (see "Extras! Extras!" on page 71), what else matters? Ergonomics, or ease of use, is very important. The design and layout of controls, the size and legibility of displays, and the complexity and feel of remotes may seem like nits to pick now, but in six months' time they often loom large as worthwhile benefits—or aggravating flaws. Be sure to spend enough hands-on time with a prospective player to get a solid feel for it, and be a tough critic.

Finally, though it may seem self-evident, don't be afraid to trust your own instincts. If a player "sounds better" to you, buy it. You may be fooling yourself, but if you're happy with the sound, isn't that the whole point? More important, be sure to look, touch, and feel. A player that looks and feels well-made, has smooth-operating, high-quality controls and mechanics, and pleases your eyes is a better choice than one less carefully crafted or attractive (if it looks, walks, and quacks like a duck, it's probably a duck). Put another way, it's your money: Spend it on a player that pleases all your senses, including your sense of value, and you'll be happy with it for years to come. □



## BIG SPEAKER SOUND

It's a clear dilemma. Your lifestyle has changed, but not your speakers. What used to fit well into your dorm or first apartment looks out of place in your living room now.

However, there is a solution close at hand. Or, more accurately, one that fits in the palm of your hand. For that's how small these miraculous satellite speakers are. (Take a close look. They're sitting on the fireplace mantel on the facing page.)

And wait 'till you hear them! You and your guests will be astonished. Because we've miniaturized everything but that big, room-filling sound.

In fact, 1800 audio experts have recognized the outstanding performance of the RM3000. Judging it against its competitors, they have selected the RM3000 for the coveted Audio Grand Prix award every year since its introduction.\*

Enjoy the luxurious stone-like look of the Black Matrix satellites and the elegant gloss black. Or choose the gloss white satellites to have them disappear into your home. Either way you'll enjoy the lifelike sound and marvel at how they enable you to distinguish individual instruments and vocals.



The adjustable bracket allows you to position the RM3000 for precise imaging.

\*The Audio Grand Prix awards are sponsored annually by AudioVideo International Magazine.



## WITHOUT THE BIG SPEAKER



Polk's compact subwoofer design uses sophisticated bandpass technology to produce room-filling bass without distortion.

But the magic of the entire system lies in the sophisticated band-pass technology of our subwoofer. It means you can put it anywhere in the room, even hide it if you prefer. Your ears can't find it. But they certainly will enjoy the deep, detailed, wall-to-wall bass.

For literature and technical specifications, call 1-800-377-POLK.

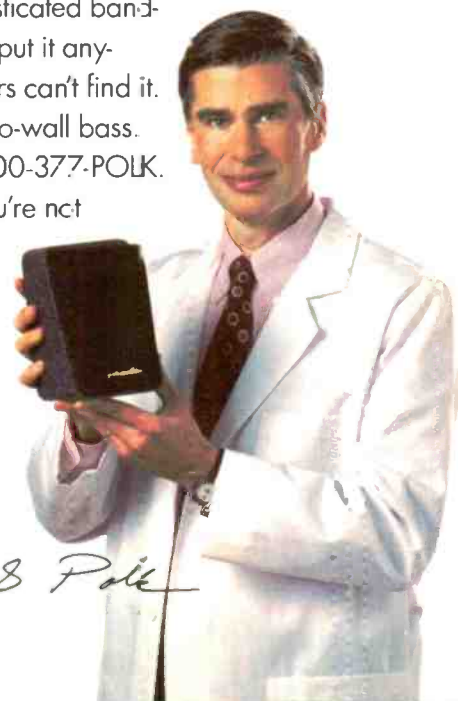
Once you hear the RM3000, you'll agree that you're not giving up that big speaker sound. Only the big speaker.

THE RM3000. FROM THE SPEAKER SPECIALISTS  
**polkaudio**

For Dealer Location  
46905  
Call 1-800-992-2520

In Canada call (416) 847-8888.

Polk Audio, Inc. 5601 Metro Drive, Baltimore, Maryland 21215 USA, (410) 358-3600



*Matthew B. Polk*

# The only way we could make home theater sound any better was to lower the price of admission.

There was a time when you had to be made of money to put together your very own home theater system.

Fortunately Yamaha's affordable new RX-V470 A/V receiver has changed all that.

It's the only receiver priced under \$500 that combines Yamaha Cinema DSP, digitally processed Dolby Pro Logic™ and equal power in the right, left and center channels (a powerful 50 watts each). The only one.

**CINEMA DSP**™ Cinema DSP, as you probably recall, is a remarkable advance that combines two of the most exciting developments to come down the audio turnpike in quite some time.

Yamaha Digital Sound Field Processing (DSP), a unique technology which recreates the actual acoustics of some of the most famous performance venues right in your home.

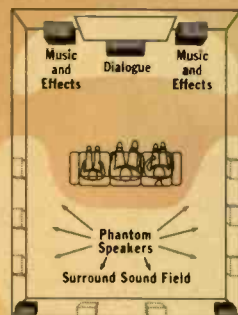
And Dolby Pro Logic, which places movie dialogue and sound effects around the room, precisely as the director intended.

When combined, these two technologies create "phantom" surround speakers that allow sound to travel beyond the normal range of your actual surround speakers. Something which expands your room's sound field to recreate the bigger-than-life acoustical experience of a modern-day movie theater.

In short, Cinema DSP stands everything else on its ears. And until now, it's something you could only expect to find on Yamaha's more expensive A/V receivers and amplifiers.

Yamaha's impressive new RX-V470. You'll be hardpressed to find an A/V receiver that gives you as much bang for your buck.

Or even as much crash and kaboom, for that matter. **YAMAHA**®



*Yamaha's exclusive Cinema DSP fills every nook and cranny.*

For the dealer nearest you, call 1-800-4YAMAHA today.





# CECILIA BARTOLI



**T**he cover of Cecilia Bartoli's first recording for London Records, a collection of Rossini arias, presented her as a femme fatale, with heavily painted lips and eyebrows, a mass of teased black hair, and a haughty stare. Nothing could be further from the real thing. In person she is more like a teenager with a galloping case of the giggles.

She is twenty-six, Italian, and filled to the brim with life. She seems too good to be true. Offstage, there are no demands, no attitudes, and certainly no vamping. She is unaffected, and

everyone and everything seems to interest her. You might call her the prima donna next door.

But onstage there is no mistaking her importance and magnetism. You can't take your eyes off of her. She is a seductive creature who has it all—voice, looks, technique, musicality, and the ability to set fires by simply smiling at an audience or launching into skyrocketing coloratura.

In the four short years since that first record was issued, she has become opera's most talked-about diva and darling. Her recent CD "If You

## Opera's New Superstar: Too Good To Be True?

**BY JOHN ARDOIN**

Love Me" soared to the top of the *Billboard* classical chart and at this writing remains high on the chart along with three of her other recordings. Stores that normally don't even stock classical recordings have Bartoli CD's for sale.

Yet, amazingly enough, she has so far been heard in only a handful of concerts in the United States. Last April she made her official American opera-house debut in Houston, Texas, as Rosina in Rossini's *The Barber of Seville*. She made the irrationalities of opera seem entirely believable, and she quenched the thirst of opera fans who'd been longing for an authentic heroine and personality.

She has made her mark so far primarily with the lighthearted operas of Rossini and Mozart. She is to comedy what Maria Callas was to tragedy—a Presence, a singer whose sound and being are a mirror held up to the music. For Bartoli, as it was for Callas, music is the bottom line. It is her power source, the generator that has made her opera's new superstar.

As incredible as it now seems, Bartoli's manager had difficulty booking recitals for her first season in America in 1991. No one knew who she was, and only a few were willing to gamble on her. She went back to Italy with about \$1,000 after expenses.

That was just a temporary setback. As more of her records followed, the demand for her live appearances increased, and her fee began to rise. Opera companies and concert promoters now line up to reserve one or two of the thirty-five to forty dates she limits herself to each season. While she is delighted by her sudden fame, it seems to have made little difference in her lifestyle or her outlook. She remains a spirited, uncomplicated person—a natural in every sense.

"Who is Cecilia?" I asked her after a matinee performance of *The Barber* in Houston.

"*Chi e Cecilia?*" she repeated. After a slight pause she answered:

"I think Cecilia is a person who above all else takes great pleasure in music. She is not preoccupied with success, only music. As a performer, the most wonderful thing that has happened to me, and also the biggest surprise, is being able to make such a direct contact with my audience. It's something God gave me along with my voice. I am able to forget Cecilia and become Rosina, or Cherubino, or Dorabella.



"If something happens I don't like, I am not so good, not so nice. Cecilia is a prima donna when she has to fight for the music."

"Also, Cecilia is very lucky, because she gets to work with the top musicians, like Daniel Barenboim and James Levine. The best compliment I have had came from Barenboim. He told me that when I sang 'Voi che sapete' in *Figaro* with him, my voice was an extension of his arm. *E bello, vero?* [That's beautiful, isn't it?]"

Although she is nominally a mezzo-soprano, Bartoli prefers not to be typecast. She has temporarily traded the role of Dorabella in Mozart's *Così Fan Tutte* for the soprano part of Despina (with which she makes her Metropolitan Opera-house debut in 1996). She recently sang Zerlina, another traditionally soprano role, in *Don Giovanni* at La Scala, and she would like to take on Susanna in *The Marriage of Figaro*—"at least," she says, "for a few performances to see how it fits my voice."

She is quick to tell you that the big Verdi mezzo-soprano "money" roles—Eboli, Amneris, Azucena—are not and never will be for her. The role of Carmen tempts her, but it is a temptation she will not give in to for a long time to come, if ever.

Because she is so happy and so successful in her current niche, it is easy for her to say no to offers that are not right for her voice. What interests her most for the immediate future are certain Rossini tragic operas, such as *Otello* and *La Donna del Lago*.

"But now is a good time and a good age to spend a lot of time with comedy," she says. "It is important to be believable in a role, and there are certain parts that you do best when you are young. In five years, I think, I will be more suited to dramatic roles."

Music was always an integral part of Bartoli's life. Both her parents sang in the Rome Opera Chorus, and because they could not afford a baby sitter, Cecilia, her younger sister, and her older brother were taken to the opera every night when the elder Bartolis were performing. Backstage became their nursery.

"My baby sitters," she says, "were Verdi, Mascagni, and Rossini! I remember especially the summer, when the opera moved outdoors to the Baths of Caracalla. My brother and I crawled all over the scenery for *Aida*. It was our playground."

At first she wanted to be a dancer and for a while studied flamenco. It

# "IF MUSIC IS TRULY THE UNIVERSAL LANGUAGE, THESE MAY BE ITS MOST ELOQUENT SPEAKERS."

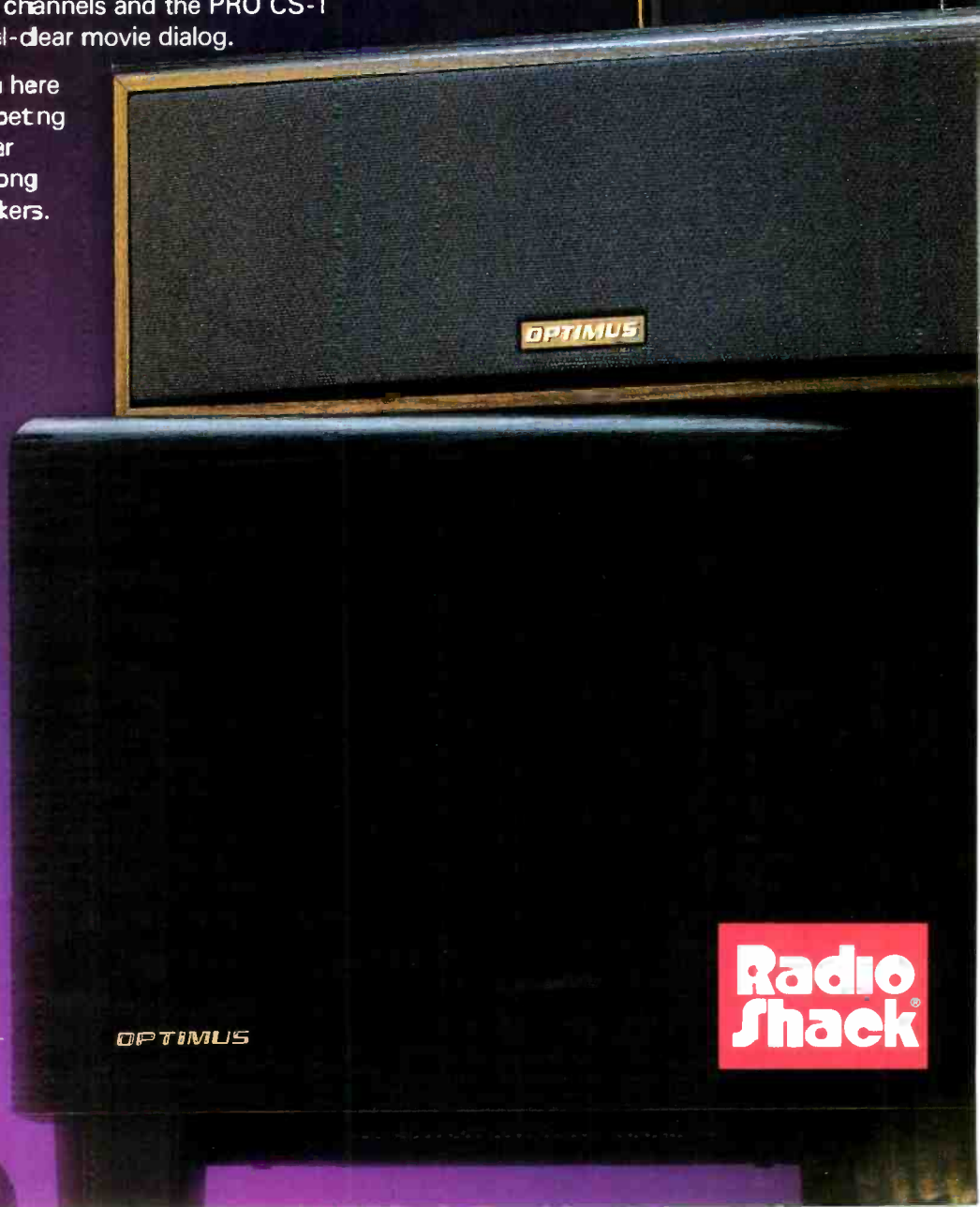
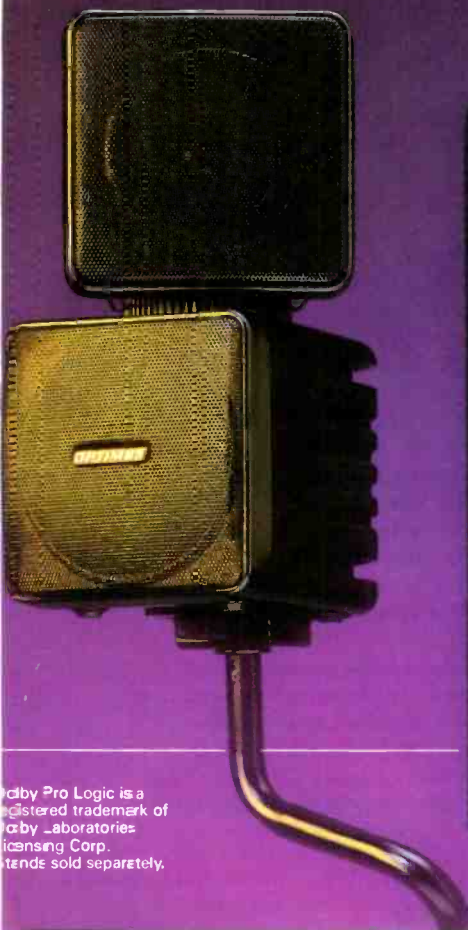
Introducing the new line of surround-sound speakers by Optimus, the name for performance and value in audio. Place the powerful 100-watt subwoofer out of sight and feel the high-impact bass of music and movies throughout your room. Listen as a seamless blend of midrange and highs flows from the swivel-directable satellites.

To convey the very best from Dolby Pro Logic® equipment, add a second pair of satellites for rear channels and the PRO CS-1 center-channel speaker for crystal-clear movie dialog.

Remarkably, the system shown here is priced hundreds less than competing brands and it's backed by a 5-year limited warranty. Hear it today, along with the full line of Optimus speakers.

Optimus: Sound Value in Audio.  
Exclusively at Radio Shack.

CIRCLE NO. 46 ON READER SERVICE CARD



**Radio  
Shack®**

Dolby Pro Logic is a registered trademark of Dolby Laboratories Licensing Corp. Dolby Pro Logic is sold separately.

was when she was sixteen that she began to study singing seriously; this was only three years before her operatic debut as Rosina in Rome. Before that she had only sung pop music around the house. It was her mother who began training her voice, and she remains Bartoli's only teacher.

In the beginning, Bartoli says, her voice was very limited in range; it now rises seamlessly over two octaves to an easy high C and beyond. It has taken on more weight and color since she began, though where it will go in the years ahead is anyone's guess, including hers.

"At first my mother forbade me even to sing a simple song. We worked on just one note at a time. I know many singers begin with something like *Se Tu M'Ami (If You Love Me)*, but my mother told me that is a very difficult song if you sing it correctly—with purity, meaning, nuance, and line. 'This you will not do,' she said, 'until you know how to sing correctly.'

"What she taught me was that the most important part of singing was to have the same sound, the same color, in all registers. She worked very hard on the *passaggio*, where the voice goes from one register to the next. She believes, and she is right, that managing the *passaggio* is the most difficult thing in singing."

Despite her secure, spontaneous way of performing, Bartoli maintains, "Not everything is easy for me. Dora-bella, for example, was a big challenge. When a role is just here [touching her throat], it is not easy. But when it is here and here [touching her throat and her heart], like Rosina, it is very easy.

"What is the most difficult for me are my concerts, because there I sing so many different types of music. But my concerts are what I love best. They are the most important part of my career. I have just done a new record with the marvelous pianist András Schiff—music of Haydn and Mozart and the only songs Schubert and Beethoven wrote in Italian. I would love to sing in German, but it scares me. I know my limits.

"I could never be as idiomatic in German as a great artist such as Christa Ludwig. You see, I care about words and being understood. Words are the key to a performance, and this frightens me when it comes to German songs. But I have just started working on Ravel and Berlioz songs

## Selected Bartoli Recordings

### MOZART:

*Arias*. Vienna Chamber Orchestra, Fischer. LONDON 430 513.

### MOZART:

*Così Fan Tutte*. Chicago Symphony, Barenboim. ERATO 45475.

### PERGOLESI:

*Stabat Mater*. Montreal Sinfonietta, Dutoit. LONDON 436 209.

### ROSSINI:

*Arias*. Vienna Volksoper, Patanè. LONDON 425 430.

### ROSSINI:

*The Barber of Seville*. Bologna Teatro Comunale, Patanè. LONDON 425 520.

### ROSSINI:

*The Barber of Seville*. Stuttgart Radio Symphony, Ferro. RCA VICTOR 61217 (VHS and laserdisc).

### ROSSINI:

*La Cenerentola*. Bologna Teatro Comunale, Chailly. LONDON 436 902 (October 1993 release).

### ROSSINI HEROINES.

Teatro la Fenice Chorus and orchestra, Marin. LONDON 436 075.

### CECILIA BARTOLI: A PORTRAIT.

LONDON 071 241 (VHS and laserdisc).

### IF YOU LOVE ME.

Eighteenth-century Italian songs. György Fischer (piano). LONDON 436 267.

### ITALIAN SONGS

by Haydn, Mozart, Beethoven, and Schubert. András Schiff (piano). LONDON 440 297 (October 1993 release).

in French, and I would like to add some Fauré as well."

What about nerves? Do they exist for her?

"Oh yes," she sighs. "They are always there before a performance. But nerves can be good. They produce the adrenalin that can make a performance exciting.

"And if you think I am always happy, come to a rehearsal and you will see that I am not. If something happens I don't like, I am not so good, not so nice. Cecilia is a prima donna when she has to fight for the music. Also, I worry a lot. In fact, if I don't worry, it bothers me. Then I worry because I'm not worried!"

When she's not singing, Bartoli studies repertory and indulges herself in movies, theater, sun, and food. "For me," she has said, "food is almost sexual. The most difficult thing when I am traveling is to be without a good bowl of pasta or a good cup of cappuccino."

Will there be room for marriage and children in her life?

"I don't know, though I hope so. It is so hard to balance a career with a family. I sometimes think it is impossible. But I don't want to think of myself without a family, with just a dog for company when I stop singing."

When I suggested that she should marry either a conductor or a millionaire, there was another volley of laughter. "Oh, give me the millionaire. Marriage with a musician is always a battle, I think. Perhaps a millionaire who likes music is the answer!"

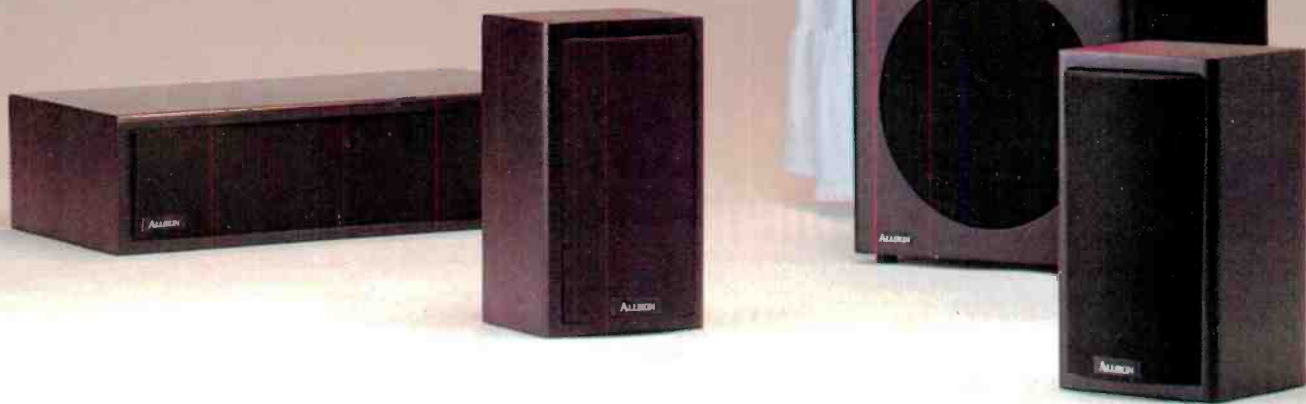
What has fame meant to her?

"Shoes, lots of shoes! And an Alfa-Romeo. I don't like fur coats, and I don't want more jewelry, unless it is a gift from that millionaire! I think I would like soon to have a nice farm in the country, perhaps in Tuscany, with lots of animals and near the sea."

As anyone who has heard her can testify, Cecilia Bartoli is not only a major artist but a breath of fresh air, a fine antidote for the sterile kind of vocal performance that too often passes for singing these days. Small wonder the cry "Brava Cecilia!" is being heard loudly across the land. □

*John Ardoin is music critic of the Dallas Morning News and author of The Callas Legacy (Scribner's) and The Furtwängler Record, which is scheduled to be published next summer by the Amadeus Press.*

It's the  
*little*  
things  
that  
keep  
you  
home.



## ALLISON ACOUSTICS

Home Theater Audio.  
For Yours.

470 Business Hwy. 150  
Danville, KY 40422  
Tel: (606) 236-8298  
Fax: (606) 236-7476

CIRCLE NO. 52 ON READER SERVICE CARD

# THREE \$500 A/V RECEIVERS

**A**udio/video receivers come in a wide range of prices, and perhaps the most interesting category right now is the one represented by the Onkyo, Pioneer, and Yamaha models tested for this comparison. Much below \$500, the constraints imposed by the sheer number of functions necessary in a Dolby Pro Logic A/V receiver—a stereo FM tuner, a surround-sound decoder, and at least five channels of power amplification—can severely limit the number of features or (more usually) the receiver's performance. At higher prices, the number of features tends to grow

rapidly, if often not usefully, and the question typically is not so much of performance as of convenience and flexibility.

An A/V receiver designer works hardest when designing a model in the \$500 range. This is the range where truly adequate amounts of amplifier power can be balanced against the performance and complexity of the surround-sound circuitry and the inclusion of various convenience features. And it is the range where such tradeoffs can show up most clearly.

The receivers we chose to test happen to illustrate these points very well. As you can see from "Features" on page 85, they are almost evenly matched in their functionality. For instance, all come with infrared remote controls and have one video-monitor output, connections and switching for two sets of main speakers, a headphone output, and so forth. Even large apparent differences in features often won't prove to be significant in actual use. For example, with "only" thirty radio presets in the Pioneer receiver you can program one out of every three available FM stations. Many—but not all—of the lab test results (see the measurements tables on pages 86 and 88) are equivalently similar or irrelevantly dissimilar.

So far, these three receivers may seem to be created equal, but their equality is unequally distributed. Their designers have opted for slightly

How do these "budget"  
Pro Logic surround  
receivers measure up?

PHOTOS BY DAN WAGNER

BY DAVID RANADA



## ONKYO TX-SV515PRO (\$530)



## PIONEER VSX-502 (\$520)



## YAMAHA RX-V470 (\$499)



different mixes of features, performance, and operating convenience, playing these factors off each other to slightly different effect in each model. You can't tell that from a cursory glance at either lab results or lists of features. But if you roll up your sleeves and put the receivers to work in a system, as we did, you'll quickly discover each one's personality.

### Onkyo TX-SV515PRO

Despite the number of buttons on the front panel, Onkyo's TX-SV515PRO is fairly easy to use. That's because many of those buttons are devoted to tuner functions (such as numerical frequency selection and categorizing and memorizing station presets) and have a clear, nearly self-explanatory logic to them. The only feature that might be tricky to use at first is the ability to select separate sources for listening and recording, which is complicated by the number of different sources that can be selected. The TX-SV515PRO can also be used in a dual-zone mode, in which the surround-channel amplifiers drive a pair of remote stereo speakers. This scheme enables not only separate volume control of the remote speakers, but also selection of a different source from the one playing in the main room. You lose surround sound in the main room when the dual-zone mode is activated, however.



Onkyo's Dolby Pro Logic circuitry comes with the standard complement of outputs and level-adjustment features (although there's no mono output for driving a subwoofer). The digital indications of center- and surround-channel level were accurate within 1 dB from +16 dB (the highest setting) to -16 dB, enough range for almost anybody.

When it comes to music-enhancement modes, the Onkyo really has only one, called Hall. Tests showed that it operates by generating a series of about nine delayed "reflections" through the surround speakers, each reflection approximately 7.4 dB lower than the preceding one. The delay-time control, which has a span of 15 to 30 milliseconds (in 5-millisecond increments) for the single delay in Dolby Pro Logic operation, in this case serves to set the interval between the multiple delays.



In some ways, Onkyo's Hall mode is similar to the first delay-line ambience-enhancement systems from AudioPulse and ADS, which also generated simple reflection patterns. The austerity of such schemes has always had its good and bad sides, and this one is no exception. On the positive side, because none of the added reflections is sent through the front speakers it is difficult to make pop music sound too spacy, even with the delay time set to the maximum. On the down side, the Hall mode is really beneficial only for jazz, classical music, and pop recordings that contain substantial amounts of reverberation.

Back-panel layout is clear and simple, with the inputs and outputs horizontally arrayed across the span and with video connections directly above their related audio ones. Together these characteristics make for easier cable hookup by feel alone, especially after the receiver has been installed. The binding-post connectors for the main speakers take either stripped cable ends or banana plugs (single or dual). Supplied accessories include simple AM and FM antennas, a special cable that enables the receiver's remote to control compatible Onkyo components, and the remote handset. The remote itself is commendably self-explanatory and simple to use. It includes switching for the main speakers, which is always helpful in checking whether the surround-sound decoder or the music-enhancement mode is operating properly.

In many ways, Onkyo's TX-SV515PRO was the best performer sonically. We detected no anomalous behavior in any operating mode. Noise was low, output power was on the high side (though with not much dynamic headroom), and Pro Logic operation was fine in terms of stability and accuracy of sound steering in our standard movie-clip torture tests. In the lab tests, the flatness of the Pro Logic frequency responses was unusually good. In all, the TX-SV515PRO is a solid performer with middle-of-the-road features.

### Pioneer VSX-502

Flashier in features, the Pioneer VSX-502 has capabilities not shared by either of the other models. Especially noteworthy are its provisions for selecting playback video and audio signals separately, memorizing settings of the button-controlled bass and treble controls, memorizing volume settings for individual source selections, and decoding in Dolby 3 Ste-

FEATURES			
	<b>ONKYO TX-SV515PRO \$530</b>	<b>PIONEER VSX-502 \$520</b>	<b>YAMAHA RX-V470 \$499</b>
<b>Music surround modes</b> (not Pro Logic)	1	2*	4**
<b>AM/FM presets</b>	40	30	40
<b>Remote-control speaker switching</b>	yes	no	no
<b>Provisions for multiroom remote control</b>	optional	optional	no
<b>A/V inputs</b> (including videodisc)	1	2	1
<b>VCR record/play connections</b>	2	2	1
<b>TV-monitor outputs</b>	1	1	1
<b>Audio line-level inputs</b> (including CD)	1	1	1
<b>Audio-recorder connections</b>	2	2	1
<b>AC convenience outlets</b>	2	3	2
<b>Mono line-level output</b>	no	yes	no
<b>Surround-channel line-level outputs</b>	no	yes	no
<b>Speaker connectors</b>			
main/remote	binding-post	snap-grip	snap-grip
center	snap-grip	snap-grip	snap-grip
surround	snap-grip	snap-grip	snap-grip
<b>Dimensions</b> (inches)			
width	18	16 $\frac{3}{4}$	17 $\frac{1}{4}$
height	6 $\frac{3}{4}$	6 $\frac{3}{4}$	5 $\frac{1}{4}$
depth	15 $\frac{3}{4}$	16	11 $\frac{1}{2}$
<b>Weight</b> (pounds)	30	21 $\frac{1}{4}$	15 $\frac{3}{4}$

All three models have a Dolby Pro Logic surround-sound decoder, a sleep timer, connections and switching for two sets of main loudspeakers, and an infrared remote-control handset.  
\* Has a simulated stereo mode for mono sources. \*\* Has an enhanced Pro Logic mode as well.

reo—the standard method for reproducing surround-encoded material through a system with a center speaker but no surround speakers. Like the Onkyo receiver, the Pioneer VSX-502 has a dual-zone feature that enables independent operation of a remote speaker pair by driving them separately with what are normally the surround-channel amplifiers.

I also liked the tiny front-panel Reset button, a sort of last resort (seldom necessary, one hopes) when the receiver freezes up because of "external influences such as static electricity or lightning," as the manual puts it. Most components require you to turn them off for a while to recover from such overstimulation.

Among the music-enhancement modes are Simulated Stereo, which generates some interchannel cross-feeding and phase shift; Simulated Surround, which feeds some of the results of stereo simulation into the digital delay line to "make you feel as if you were in a more expanded space"; and Studio, which seems to be essentially the old DynaQuad circuit from the early 1970's (the left-minus-

right signal fed to the surround speakers without any delay).

Unfortunately, I found the Simulated Stereo and Simulated Surround modes practically useless. Background noise increased noticeably when either was activated, and the frequency response of the cross-feeding circuit was such that the sound became annoyingly midrangy. Best stick to the Studio mode for music enhancement. That old scheme has always been dependable, if not adjustable or spectacular in its results.



The remote control supplied with the VSX-502 was one of the more bewildering ones I have encountered. In addition to a stripped-down set of receiver controls, it has basic function buttons for a CD player, laserdisc player, TV, cassette deck, and VCR, all in a handset with only thirty-six buttons. (No word from the manual as to what brands of auxiliary equip-

## LABORATORY MEASUREMENTS

(Julian Hirsch, Hirsch-Houck Labs)

TUNER SECTION	ONKYO TX-SV515PRO	PIONEER VSX-502	YAMAHA RX-V470
<b>50-dB quieting sensitivity</b>			
mono	15 dBf	16 dBf	13 dBf
stereo	37 dBf	38.5 dBf	42 dBf
<b>Signal-to-noise ratio (at 65 dBf)</b>			
mono	79.5 dB	80 dB	78 dB
stereo	73.2 dB	73 dB	70 dB
<b>Distortion (THD + N at 65 dBf)</b>			
mono	0.145%	0.26%	0.135%
stereo	0.12%	N/A*	0.43%
<b>Capture ratio (at 65 dBf)</b>	1 dB	1.1 dB	2.5 dB
<b>AM rejection</b>	63 dB	57 dB	62 dB
<b>Selectivity</b>			
alternate-channel	68 dB	73 dB	70 dB
adjacent-channel	10.5 dB	9.5 dB	10 dB
<b>Pilot-carrier leakage</b>			
19-kHz	-70 dB	-35 dB	-47 dB
38-kHz	-74 dB	-45 dB	-50 dB
<b>Hum</b>	-75 dB	-72 dB	-78 dB
<b>Channel separation (1 kHz)</b>	51.5 dB	42 dB	49 dB
<b>Frequency response</b>			
FM, 30 Hz to 15 kHz	+1.5, -0.0 dB	+1.1, -0.0 dB	+0.0, -3.7 dB
AM (bandwidth varies)	+0.7, -6.0 dB 73 Hz to 2.7 kHz	+0.7, -6.0 dB 90 Hz to 2.5 kHz	+1.7, -3.0 dB 60 Hz to 2 kHz
<b>AMPLIFIER SECTION</b>	<b>ONKYO</b>	<b>PIONEER</b>	<b>YAMAHA</b>
<b>Frequency response</b> (20 Hz to 20 kHz)	±0.3 dB	+0.0, -0.5 dB	+0.2, -1.0 dB
<b>1-kHz output or clipping</b>			
8 ohms	101 watts	165 watts	63 watts
4 ohms	83 watts	222 watts	83 watts
<b>Clipping headroom (referred to rated output, 8-ohm load)</b>	1.0 dB	2.2 dB	1.0 dB
<b>Dynamic power output</b>			
8 ohms	120 watts	182 watts	138 watts
4 ohms	200 watts	275 watts	128 watts
2 ohms	138 watts	400 watts	156 watts
<b>Dynamic headroom (referred to rated output, 8-ohm load)</b>	1.76 dB	2.6 dB	4.4 dB
<b>Distortion (at rated power)</b>	0.03	0.08%	0.0075%
<b>Sensitivity (for 1 watt output into 8 ohms)</b>			
CD	21 mV	15 mV	23 mV
phono	0.35 mV	0.24 mV	0.72 mV
<b>A-weighted noise</b> (referred to 1 watt output)			
CD	-82.6	-77.5 dB	-86 dB
phono	-75.8	-77.5 dB	-79 dB
<b>Phono section</b>			
input overload (at 1 kHz)	121 mV	122 mV	98 mV
input impedance	44 kilohms, 60 pF	50 kilohms, 160 pF	45 kilohms, 195 pF
equalization error	+0.8 dB, -0.0 dB	+0.2, -0.5 dB	+0.0, -1.0 dB
<b>Tone-control range</b>			
100 Hz	±8 dB	±9 dB	±7.5 dB
10 kHz	±9 dB	+7.5, -8.5 dB	±8 dB

Notes: All tuner figures are for FM only except frequency response. All amplifier figures are for main front channels only.  
\*Stereo distortion masked by multiplex carrier.

ment can be controlled—presumably only Pioneer's.)

All the receiver-oriented buttons worked fine, but several of them have two different functions determined by the infrared equivalent of a typewriter or computer shift key, here a switch sliding between AUDIO and VIDEO positions. To balance channel outputs in a Dolby Pro Logic setup, for example, you have to keep sliding that switch back and forth while making adjustments with the single pair of plus and minus buttons. That wouldn't be half so bad if the labeling on the handset weren't so vague about which label belongs to which button with which shift setting. Don't expect to figure this remote out quickly. I'd have gladly given up all ability to control other components with this handset to have had a separate button for every vital receiver function.

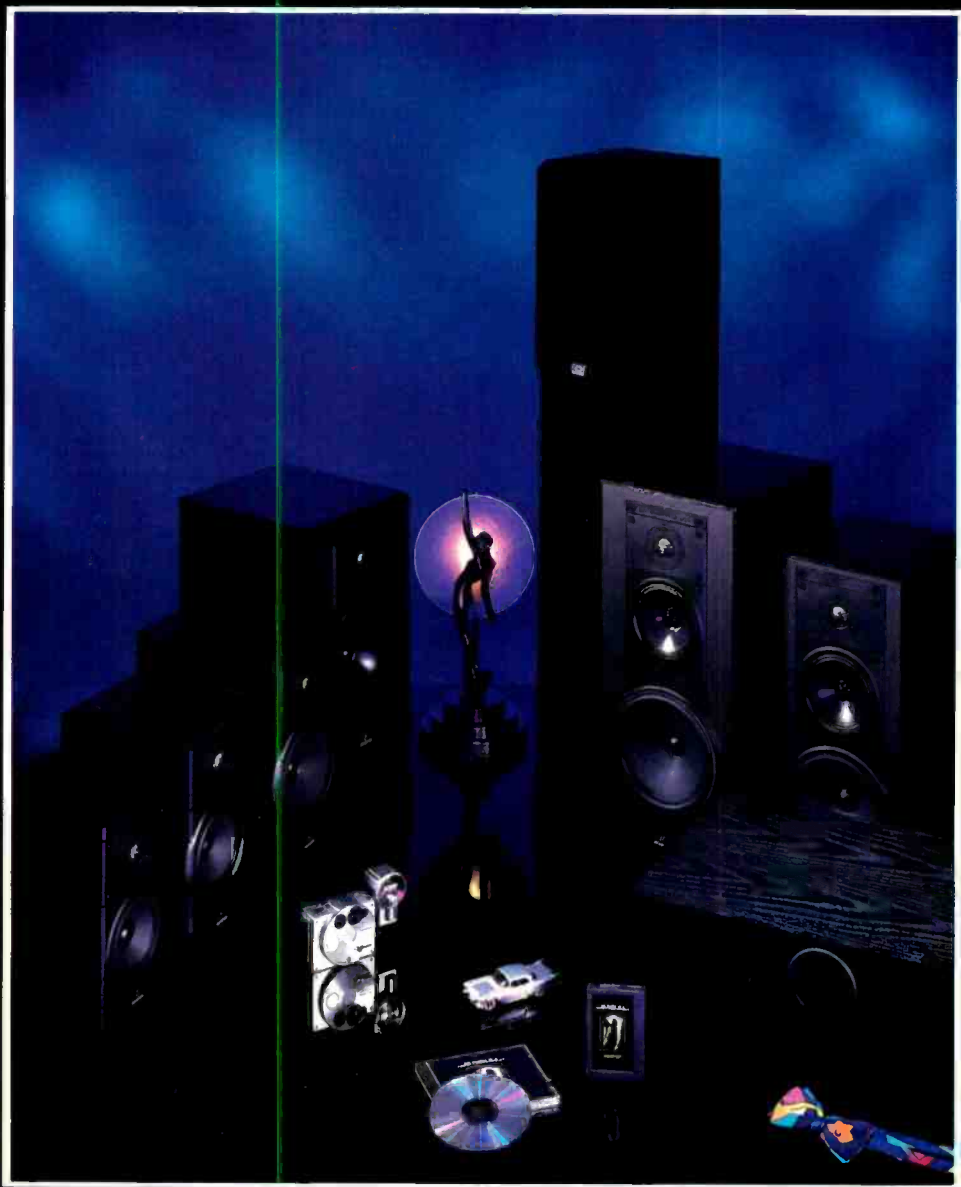
The lab results show that the VSX-502 was the powerhouse of the three models tested, delivering more than 4 dB greater continuous output than either of the others into 4-ohm loads. Its dynamic headroom was also quite respectable. But there was a problem at the other end of the dynamic range: Even without Dolby Pro Logic or any other signal processing switched in, the VSX-502's noise level was great enough to be clearly audible in a moderately quiet listening room. Even more obvious was the hissy 10-dB worsening of the noise level when we switched in either Simulated Surround or Simulated Stereo. Noise in Pro Logic mode was about 10 dB higher than in the other two receivers, but because movie soundtracks tend to be somewhat noise-prone themselves, that difference was less apparent in use than on the test bench. The Pioneer's Pro Logic steering performance seemed to be fine.

Stereo FM pilot-carrier leakage was also on the high side, and we would have preferred a horizontal arrangement of the back-panel connections rather than a vertical one, but these are minor matters. The main question you face with the VSX-502 is whether its substantial power advantage over the other two receivers (especially into low impedances) is worth the sacrifice in signal-to-noise ratio, which, with music at least, is likely to be more noticeable most of the time than differences in maximum output power.

### Yamaha RX-V470

To my eyes, the RX-V470 is the best looking of these three receivers. It is certainly much the smallest, and that,

# PURE PERFORMANCE



The premise of pure classic design is an uncompromising marriage of technology, style, looks and performance.

The pinnacle of such a blend is Celestion's new range of affordable bookshelf and floor-standing speakers.

Designed to suit the budget or more sophisticated music system, the range is enhanced by the new Celestion 1, a

masterpiece of loudspeaker engineering, the Celestion 15, a tall, slim yet immensely powerful floor standing column and the Celestion CS 135, an exceptional subwoofer designed to provide a deep yet subtle extended bass to the Celestion 1, 3, and 5 speakers.

Performance, technology and style in one unique range.

Only from Celestion.

1 3 5 7 9 11 15 CS135

## CELESTION

Voice: (508) 429-6706 • Fax: (508) 429-2426

CIRCLE NO. 17 ON READER SERVICE CARD

The designers  
 have opted  
 for slightly  
 different  
 mixes of  
 performance,  
 features, and  
 convenience.



## DOLBY PRO LOGIC MEASUREMENTS

	ONKYO TX-SV515PRO	PIONEER VSX-502	YAMAHA RX-V470
<b>A-weighted noise</b>			
main front channels	-82.0 dB	-71.9 dB	-86.8 dB
center channel	-81.3 dB	-76.7 dB	-83.2 dB
surround channel	-81.2 dB	-72.8 dB	-83.1 dB
<b>Frequency response</b>			
main front channels	20 Hz to 20 kHz +0.31, -0.70 dB	20 Hz to 20 kHz +0.15, -0.47 dB	25 Hz to 13.5 kHz +0.00, -1.00 dB
center channel	20 Hz to 20 kHz +0.07, -0.53 dB	20 Hz to 17 kHz +0.00, -1.00 dB	20 Hz to 14.7 kHz +0.00, -1.00 dB
surround channel	20 Hz to 7.2 kHz +0, -3 dB	22 Hz to 6.7 kHz +0, -3 dB	33 Hz to 6.8 kHz +0, -3 dB

*All Dolby Pro Logic data are referred to volume and channel-balance settings that produce a 1-watt output from the specified channel with a 1-volt signal level at 1 kHz with the Pro Logic circuit set to "wideband" operation.*

combined with its refreshing lack of front-panel button clutter, makes for a less imposing, more "friendly" feel. After the heft of the other two receivers, the RX-V470's light weight is immediately striking. The difference stems primarily from its smaller power transformer, which in turn indicates that it is a lower-powered receiver than the other two. This is visible in the lab results for 1-kHz output at clipping. But don't concentrate too much on this measurement. A more important one is actually the dynamic power output, which at 138 watts into 8 ohms indicates that the RX-V470 is capable of playing music peaks quite loud enough for most purposes with speakers of typical efficiency (for example, it can generate peaks of 111 dB sound-pressure level at 1 meter with speakers rated at 90-dB sensitivity).

The RX-V470 has slightly fewer basic features than the other models, but the main sacrifices, only one VCR and one audio recorder hookup, aren't significant unless you plan to hook up more than one of each of those components. The remote control is okay. Although the buttons are all the same size and arrayed in too regular a pattern, the markings are clear and fairly legible even under dim lighting conditions. And there is a logical pattern to the button layout that helps in memorizing the functions.

I sorely missed a couple of functions on the handset: level setting for the center and surround speakers. Although you ordinarily have to make a front/center/surround balance adjustment only when you replace any of the speakers or make substantial changes in speaker positions or room acous-

tics, it is always best to make the level-matching judgments from the prime listening position. With the RX-V470 you need a partner, or a sound-level meter, to listen while you turn the front-panel center and "rear" level knobs. (Yamaha definitely recommends putting the surround speakers at the rear rather than on the sides of the listening room.)

More significant, especially given the receiver's four music-enhancement modes, is the remote's lack of control over the surround-speaker level and the amount of enhancement signal fed to the front channels. For best results with any of the music-enhancement modes (which add different complex clusters of delay-generated "reflections" to the front and rear surround channels when activated), you should have control over the level of the synthesized reflections, their front-to-rear balance, and the delay until the first reflection is generated. The Yamaha remote has only the last of those controls, making the most creative and sonically apt use of the music modes just about impossible without a lot of scurrying back and forth between the receiver and the primary listening position.

Nevertheless, the mode settings we wound up with after carefully performing the Dolby Pro Logic setup procedure were good, if not ideal. At times, the echoes that the music modes added to the front-speaker sound made the front image too spacy or distant. Such a result can be alleviated simply by turning the Front Effect control down or all the way off.

Each music-enhancement mode produced a slightly different effect,



Initiative. Teamwork. Determination.

These are the qualities 9 out of 10 employers look for in the people they hire, according to a national survey. These same employers say that one of the best

**Today's employers want people who can think fast on their feet.**

places to develop these qualities is in the Army.

Whether you're leading

a fire team or driving a tank, you'll learn how to make decisions, work with others, and solve problems—abilities that today's employers are looking for. So when it's your first day on the job, you'll already know how to hit the ground running. To find out more about how the Army can get your career—and your life—moving, call [1-800-USA-ARMY](tel:1-800-USA-ARMY). **ARMY. BE ALL YOU CAN BE.**

and the effects often worked well with musical genres other than those implied by their names: Concert Video, Mono Movie, Rock, and Hall. I'd encourage experimentation with different modes and delay times. The slight "cognitive dissonance" caused by placing the surround speakers at the rear can be cured by putting them where they should be, on the sides, and letting the music-mode reflections fall where they may. When we tried that, the sonic results weren't bad at all. I found the "enhanced" Dolby Pro Logic mode—which adds reflections to simulate the acoustics of a large movie theater—distracting and unnecessary, as I've always found similar settings on other models. You're better off sticking with straight Pro Logic for surround-encoded soundtracks and using the music modes where appropriate for standard two-channel stereo recordings.

Aside from the "missing" controls on the remote, the RX-V470 is very easy to use, and its multiple surround options provide great flexibility in shaping the sound field. And, though not the powerhouse of the group, it delivers adequate output, especially for small or medium-size listening rooms.

**B**y now it should be clear how the design tradeoffs shake out among these products. The Onkyo TX-SV515PRO combines relatively high power with a good array of input connections and fine surround performance, but it has only one rather staid, safe, and unexciting music-enhancement mode. The Yamaha RX-V470's more complex digital circuitry provides four well-crafted music modes (the best selection in this group of receivers), which can make for interesting musical experimentation, but the power available is modest, and the remote is under-equipped to take full advantage of the processing circuitry. I'd recommend the RX-V470 for those who are primarily interested in listening to music but occasionally want to hear an episode of *Saturday Night Live* or a rented movie in surround sound. Pioneer's well-appointed and truly high-powered VSX-502 is noisier than we'd like in this age of the CD, but if your main interest is hearing movie soundtracks played loud, it could be a good choice. □

## USING DOLBY PRO LOGIC

Most regular readers of STEREO REVIEW already know the basics of using a Dolby Pro Logic decoder for reproducing Dolby Surround soundtracks. Just follow these simple guidelines:

- If possible, use a center-channel speaker for maximum clarity and solid dialogue placement at the screen.
- Place the surround speakers above and to the sides of your prime listening position rather than in back of it. (Despite the nomenclature often adopted in manuals, equipment labeling, and promotional literature, the sound of the "rear" channels is supposed to come primarily from the sides, as it does in a movie theater).
- Balance loudspeaker levels very carefully—even to the extent of employing a sound-level meter (Radio Shack has one for \$31.95, catalog number 33-2050)—using the test-signal generator required in all Dolby Pro Logic devices. You can make a great difference in the overall sonic impression of a soundtrack by very slight adjustments in the front/center/surround balance.

There is another point that has not been emphasized enough and that our lab tests have revealed as a potential problem: Dolby Pro Logic circuits are susceptible to overload. In itself, that's no cause for great alarm. All circuits, if driven hard enough, will overload. The important point is that you can do nothing about a Pro Logic circuit's overload point by changing any of the normal front-panel settings. Neither the overall volume control nor the individual level controls for the center and surround speakers have any effect on the Pro Logic overload point, because those controls all come after the decoder in the signal path.

In general, Pro Logic overload points are set high enough so that the full output of a laserdisc player (approximately 2 volts) will not strain the system. But you should never insert into the signal path between a laserdisc player and a Dolby Pro Logic circuit any device that changes the level of even part of the signal. Equalizers in

particular are best switched out or placed somewhere later in the signal chain. The manual for Pioneer's VSX-502 can speak for them all when it clearly states that "Dolby Surround will not operate correctly if the signal passes through a graphic equalizer." VCR and TV-receiver audio outputs are usually lower in level than those of laserdisc players. But even though overload potential would be less of a consideration with such components, the same restriction applies to them, too, since the directional enhancement that Pro Logic is designed to provide can be thrown off by the response changes introduced by equalizers.

One last point: The use of the word "digital" with regard to Dolby Pro Logic decoders has become a little too loose lately. Of the three receivers reviewed here, only one, the Yamaha RX-V470, actually incorporates what might truly be called a digital Pro Logic circuit—one in which the signal steering to the various channels is controlled by numerical calculation. The other two receivers use good analog circuitry for signal steering in conjunction with delta-modulation digital delay lines for the required surround-channel delay and their music-enhancement modes.

Even the Yamaha Pro Logic system, although more fully digital than the others covered here, doesn't seem to use CD-type 16-bit PCM analog-to-digital conversion in its delay circuit. Lab tests have indicated that fewer than 16 bits are used in a "floating-point" conversion system, and that was evident in the rise and fall of the surround-channel noise levels as the input signal changed level. And Yamaha's Pro Logic steering is accomplished not by adding and subtracting signals in digital form but by mixing them in analog form through digitally controlled attenuation circuits. The use of the word "digital" to describe this circuitry is technically correct, then, but it does not mean what you might ordinarily expect. —D.R.



# At one time you understood how this worked.



**FIVE BLOCKS MADE A COTTAGE**, ten a castle, and a hundred your own private empire. With Linn components, it's just that simple. You can start out with the system that's right for you today and, using our building-block approach, improve and expand your system over time in affordable steps. Some steps will improve the performance of your system, others will expand your system throughout your home, but each and every step has one thing in common. It delivers more music.

**PEOPLE NEED MUSIC.** Music is important. Exploring the world of music in the comfort of your own home is therapeutic. It will help you relax, stimulate your imagination, change your mood, and provide entertainment and pleasure for your whole family.

**1-800-LINN HI-FI**  
*music for life*<sup>TM</sup>

**A SOUND INVESTMENT.** At our innovative factory in Scotland, we produce the most advanced and best sounding hi-fi. Skilled and dedicated people and our unique single-station-build philosophy ensure a standard of construction and reliability simply not possible on a production line. And, with your Linn retailer on hand to provide assistance long after your initial purchase,

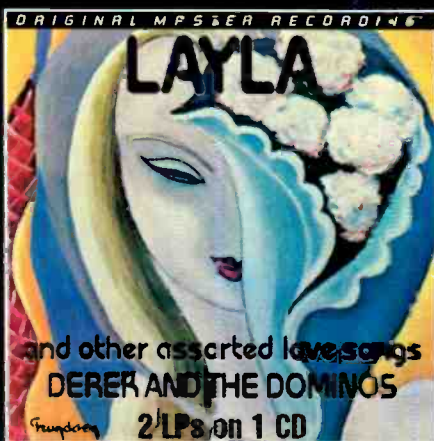
you can expect your hi-fi to last a lifetime. People who love music have built our business, so we look after them. **MUSIC FOR YOUR LIFE.** To learn more about Linn Hi-Fi and the many ways in which Linn can make music a more important part of *your* life, phone Audiophile Systems, Ltd., our U.S. distributor, at 1-800-546-6443.

ORIGINAL MASTER RECORDING™

**ULTRADISC II™**



UDCD 584



**NEW RELEASE UDCD 585**

The definitive version of this 1971 classic transferred from the original analog masters onto one disc! Package includes expanded booklet with additional photos and updated notes by Executive Producer Tom Dowd.



UDCD 583



UDCD 580



**NEW RELEASE UDCD 587**

A world event that has gone on to be the biggest selling classical recording ever! A monumental summit of the greatest voices in a spectacular concert.



UDCD 581

# NATURE'S ENCORE

It takes time to make music sound its absolute best, an art Mobile Fidelity Sound Lab has been perfecting for the past 15 years. Beginning with the original master tape, we combine our proprietary mastering technique with the dedication, time and unwavering attention to detail that define a true original. **ULTRADISC II.** The original limited edition, 24-karat gold audiophile compact disc.



For a free color catalog, call 800-423-5759



CIRCLE NO. 38 ON READER SERVICE CARD



# BEST OF THE MONTH REVIEWS

STEREO REVIEW'S  
CRITICS CHOOSE  
THE OUTSTANDING  
CURRENT RELEASES

## John Hiatt's Pith and Vinegar

John Hiatt's detractors have their points: Sometimes he does a hell of a lot of thrashing around before he gets to the meat of things, musically and lyrically. And then there's his singing—you have to *cultivate* the sound of a dying black man, especially if your legs are whiter than duck down. But Hiatt usually comes through in the clutch, something you need to hear his new album, "Perfectly Good Guitar," only once to know.

This is a slight album compared with some of his others—there is nothing as get-down-and-greasy as *Memphis in the Meantime*, nor as devastating as *Icy Blue Heart*. But there is *Loving a Hurricane*, about the spoils of falling for a natural disaster of a human, where churning guitars swell over a steady, rub-it-in beat. And there's *Angel*, a woman's head-spinning realization that somebody important just stopped calling her endearing names. There's also *Buffalo River Home*, with the lines, "Now there's only two things in life / But I forget what they are / It seems we're either hanging on a moonbeam's coattails / Or wishing on stars."

Hiatt shines brightest while exploring lost dreams (*Blue Telescope*), and at moments when everything blows up in your face or, as on *The Wreck of the Barbie*, when you want to blow off somebody's face. That song, one of Hiatt's angry, narrative vignettes, lacks the heart that beats at the center of his other like-minded tunes, just as *Perfectly Good Guitar*, his protest against rock stars smashing their instruments, seems mild while calling for well-placed barbs. But Hiatt still knows how to get pithy in a sneakily seductive way—how to administer the medicine before you ever see the needle. After that, he can thrash around all he wants. *Alanna Nash*

### JOHN HIATT

#### Perfectly Good Guitar

*Something Wild*; *Loving a Hurricane*; *Hold Me Tight*; *Blue Telescope*; *The Wreck of the Barbie*; *Old Habits*; *Angel*; *Buffalo River Home*; *Perfectly Good Guitar*; *Straight Outta Time*; *Permanent Hurt*; *Cross My Fingers*  
A&M 0135 (53 min)



## A Worthy "Pathétique" for Tchaikovsky's Centenary

This fall we observe the hundredth anniversary of the death of Tchaikovsky, which followed the première of his last and greatest symphony, No. 6, the "Pathétique," by a little more than a week. Last spring the Bournemouth Symphony Orchestra celebrated the hundredth anniversary of its first concert. A new Virgin Classics CD of the Tchaikovsky Sixth and his *Romeo and Juliet* by the Bournemouth Symphony under Andrew Litton brings together all three of these centenaries—though no such intent is indicated in the labeling, and the stunning performances surely need not be received in that context to be enjoyed.

It was perhaps surprising that Virgin decided on Bournemouth for something as competitive as a full-price Tchaikovsky cycle when Litton took over there in 1988, at the age of twenty-nine. But the cycle has proved to be a good deal more than respectable, with a particularly strong account of the *Manfred* Symphony and possibly the most fetching "Little Russian" (the Symphony No. 2) since Igor Markevitch's. The cycle has now reached its conclusion with what may be the all-around most persuasive true-digital recordings to date of both the "Pathétique" and *Romeo*.

That's a strong claim, but returning to this disc frequently has only deepened my initial enthusiasm for it. These performances *sing*, and they lack nothing in the way of drama. Litton's tempos in the

symphony are unhurried, his instincts for the shaping of a phrase unerring. He lets the big tune in the first movement roll itself out at what seems to be its own self-determined pace; the accents that give shape to it, but tend to get lost in so many of today's readings, are in place without calling undue attention to themselves. Every facet of Tchaikovsky's ingenious design and imaginative coloring registers in full, again without gratuitous spotlighting or in any way impeding the superbly maintained momentum. The third movement is neither headlong nor unduly restrained, but unswerving in its cumulative impact, and the remarkable nobility and genuineness of the final adagio are drawn from the music's own emotional core.

No less apparent is Litton's ability to get the orchestra to respond at the very top of its form. *Romeo and Juliet*, sensibly placed *before* the symphony on this sumptuously recorded disc, has never been more compelling, or more downright gorgeous. It all adds up to a conspicuous enrichment of the Tchaikovsky discography as well as Litton's own—and quite a mark to shoot for when he succeeds Eduardo Mata as music director of the Dallas Symphony Orchestra next year. *Richard Freed*

**TCHAIKOVSKY:** *Romeo and Juliet*;  
*Symphony No. 6 ("Pathétique")*  
Bournemouth Symphony Orchestra. Litton  
VIRGIN 59239 (67 min)



Andrew Litton

MATHEW FORD/MIL FALCONE



Michael Tilson Thomas

## Oh, Those Latin Dances!

The New World Symphony was founded in 1988 by the conductor Michael Tilson Thomas as a kind of training or apprentice orchestra for young professionals. Its youthfulness and its location in Miami make it a logical vehicle for a program of exuberant Latin American music on a new Argo CD. The material, from Mexico, Cuba, and Argentina, includes Carlos Chávez's delicate *Sinfonia India* and Silvestre Revueltas's pagan *Sensemaya*, both evoking Mexico's pre-Columbian culture; the Cuban composer Amadeo Roldán's brash, jazzy scores for the theater (a suite from *La Rebambaramba*) and for an all-percussion ensemble (*Ritmica V*); impressions of Cuban dance

music by Alejandro Garcia Caturla and Aaron Copland (*Danzón Cubano*); and, from Argentina, music from Alberto Ginastera's early ballet, *Estancia*, and one of the last creations of the great modern tanguero (tango artist) Astor Piazzolla, whose deliciously symphonic *Tangazo* gives the album its name.

Much of this material is not new; these works are, in fact, classics of Latin American music, mostly dating from the 1930's and 1940's. But the composers—most of them audaciously talented and several having died tragically young—brought fresh ideas into the concert hall, and a lot of their music is as fresh-sounding as ever, particularly in these jump-up performances and recordings.

DAVID FAREL/THE CARSON OFFICE

# AMERICA'S MOST POWERFUL SPEAKER COMES FROM HOPE, ARKANSAS.



## INTRODUCING KLIPSCH POWERED SUBWOOFERS.

In the past few months, millions of our fellow Americans have been introduced to the little town of Hope, Arkansas. But as anyone who knows anything about audio will tell you, great speakers have been coming out of Hope for nearly fifty years. For 1993, Klipsch inaugurates four new powered subwoofers that set the industry standard with state of the art technology.

Our new powered subwoofers are engineered with the same high efficiency and low distortion you've come to expect from our loudspeakers. In addition, they give you the extended bass, high output capability and wide dynamic range you need to transcend passive listening into a truly powerful sound experience.

Visit your authorized Klipsch dealer for a demonstration of the powered subwoofers that will transform your home audio system into true Klipsch home theater.



 **Klipsch**  
The Legend Continues...

Manufacturing Facilities: P.O. Box 688 • Hope, Arkansas, U.S.A. 71801-0688 • (501) 777-6751 • FAX (501) 777-6753  
Sales and Administration Offices: 8900 Keystone Crossing, Suite 1200 • Indianapolis, Indiana U.S.A. 46240 • (317) 574-3866 • FAX (317) 574-3870

# BEST OF THE MONTH

It would be a mistake to think of the New World Symphony as merely a student orchestra. Under Thomas's direction this band stirs up an excitement reminiscent of the old days at the New York Philharmonic with Leonard Bernstein—who, by the way, played most of this music and recorded some of it. Thomas can certainly hold up his baton even against such memories, and he, of course, has it all in modern digital sound.

*Eric Salzman*

## TANGAZO—Music of Latin America

Chávez: *Sinfonia India*. Copland: *Danzón Cubano*. Roldán: *Suite from "La Rebamburamba"*; *Ritmica V. Revueltas: Sensemayá*. Caturra: *Three Cuban Dances*. Piazzolla: *Tangazo*. Ginastera: *Dances from "Estancia."*  
New World Symphony, Thomas  
ARGO 436 737 (74 min)

## Paul Westerberg Takes It Easy

It's taken a while, but former Replacements leader Paul Westerberg has landed on his feet in the wake of the band's fractious, highly public disassembly. His new "14 Songs" is as artless and honest as its title, just a guy sitting around singing some songs he wrote. No Major Statements, no Next Big Thing. No grand slams, really, just a home run or two, a string of solid base hits, and a few grounders that don't leave the infield.

Like Ray Davies, to whom he bears more than a passing resemblance (physically and artistically), Westerberg writes about everyday things without pretense, taking comfort in the ordinary and passing on wisdom in small doses. Perhaps consequently, if anything rings a little hollow here it's rockers like *Silver Naked Ladies* and *Something Is Me*, which aim for a rambunctious 'Mats/Faces devil-may-care feeling but sound a mite forced. By contrast, Westerberg cruises along just fine on *Someone I Once Knew* (with its wonderful vernacular line, "Sit your butt down") and *Dice Behind Your Shades*, vintage Westerberg that rocks at an amiable gait, is solidly constructed but loose enough to swing freely, and has lyrics that are funny and wise.

Westerberg is in the mood for reflecting and reminiscing here, letting down his emotional guard and coming up with



winners like *First Glimmer*, filled with images of Indian summer, bicycles, and first love; *Runaway Wind*, a gorgeously sung tune that's full of resolve ("On your mark, here I am / I'm your spark, runaway wind"); and *Black Eyed Susan*, a kitchen-table demo that's got a compelling, spring-like mood to it. Thematically, Westerberg has been moving toward a calmer, more centered persona for several albums now, and in this one he makes a plea for quiet not once but twice: on *A Few Minutes of Silence* and the album closer, *Down Love* ("I'd love to turn you way, way down . . . / If I could only find your volume knob"). On "14 Songs" you can hear him drown out the noise and static and tune in to himself.

*Parke Puterbaugh*

## PAUL WESTERBERG

### 14 Songs

*Knockin' on Mine; First Glimmer; World Class Fad; Runaway Wind; Dice Behind Your Shades; Even Here We Are; Silver Naked Ladies; A Few Minutes of Silence; Someone I Once Knew; Black Eyed Susan; Things; Something Is Me; Mannequin Shop; Down Love*  
SIRE/REPRISE 45255 (49 min)

## NOW ON CD

### Popular

- **THE DAVE CLARK FIVE:** *History of the Dave Clark Five*. HOLLYWOOD 61482 (two CD's). First CD appearance of fifty songs by the British Invasion group that had more hits than anyone besides the Beatles.
- **GAME THEORY:** *The Big Shot Chronicles*. ALIAS AO46. *Real Nightime*. ALIAS AO47. Long out-of-print albums, from 1985 and 1986, by the influential, too-smart-for-their-own-good pop rockers, both produced by Mitch Easter.
- **THE NEW COLONY SIX:** *At the River's Edge*. SUNDAZED 11016. Twenty-two previously unavailable tracks by the garage-band kings of Chicago in the 1960's, including singles and cuts from their "Breakthrough" and "Colonization" albums.
- **SUN RA:** *Somewhere Else*. ROUNDER 3036. The 1989 album by the late, and very legendary, cosmic-jazz pioneer, with guest star Don Cherry on pocket trumpet.

### Classical

- **BARTÓK:** *Piano Concertos Nos. 1 and 3*. Barenboim, Boulez. EMI 54770. "... tremendously effective performances of works generally whopped to death by overeager pianists and big-sound conductors" (April 1970).
- **MUSSORGSKY-RAVEL:** *Pictures at an Exhibition*. **RESPIGNI:** *Pines of Rome; Fountains of Rome*. Reiner. RCA 61401. Fritz Reiner and his Chicago Symphony recorded at Orchestra Hall in the late Fifties.
- **SHOSTAKOVICH:** *Symphony No. 5*. **STRAVINSKY:** *The Rite of Spring*. Maazel. TELARC 82001. Despite "some reservations about the musical interpretation . . . the recording makes a tremendous effect" (January 1981).
- **SHOWPIECES FOR ORCHESTRA.** Golschmann; Abravanel. VANGUARD 5010. Russian sparklers by Khachaturian (the *Gayne* ballet suite and its famous *Sabre Dance*), Kabalevsky, Ippolitov-Ivanov, and Glière.



# The magazine that knocks you on your ear

## TESTED: DENON'S IN-DASH CHANGER CAR STEREO REVIEW

CLARION'S  
CAL1000

HEADING IN  
THE RIGHT  
DIRECTION

Awesome  
Sound on  
A Budget

Are High-End  
Cables Worth  
The Money?



It used to be simple. You had a car. It came with a radio. You listened. Period. Now you've got options. So many options, it's easy to get blown away just trying to find components that fit together—and fit your budget too. So what do you do when it's time to upgrade your car stereo?

### Tune in to CAR STEREO REVIEW!

Whether you like your sounds big and boomy or tight and well controlled... whether you own a Ferrari or a Hyundai, CAR STEREO REVIEW lets you drive away with a system that's custom built for the way you like to listen. You'll get head-to-head comparisons of CDs, players and changers, cassette decks, tuners, amplifiers, crossovers, speakers, equalizers, security systems, cellular phones, and more, in every price range. Plus, every issue brings you complete test reports. Users

evaluations. Reviews of the hottest, state-of-the-art equipment. A do-it-yourself course on installation. And there's a bonus: the most complete, up-to-date buyer's guide available anywhere in the world. So, if you're ready to treat your ears to great sound at a price that's right for you, check out CAR STEREO REVIEW.

**ACT NOW AND SAVE OVER 50%**

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—including the annual buyer's guide) for just \$8.97. That's a full 55% off the annual newsstand cost! And if CAR STEREO REVIEW doesn't knock you on your ear every time, we'll send you a full refund for all unmailed issues. That's a promise! So don't delay. Make tracks by entering your subscription term at the best possible price for the best possible audio system at the best possible price for the best possible audio system to CAR STEREO REVIEW. Do it today!

If the  
attached card  
is missing, please write:  
Car Stereo Review,

P.O. Box 57316, Boulder, CO 80322-7316

Canadian orders add \$7.00 per year (includes 7% GST);  
foreign orders: add \$7 per year; payment in US funds must accompany order.  
Please allow 30 to 60 days for delivery of first issue.

# POPULAR MUSIC



**NEW RECORDINGS REVIEWED  
BY CHRIS ALBERTSON,  
FRANCIS DAVIS, PHYL GARLAND,  
RON GIVENS, ROY HEMMING,  
ALANNA NASH,  
PARKE PUTERBAUGH, AND  
STEVE SIMELS**

**JEFF BECK AND  
THE BIG TOWN PLAYBOYS**

**Crazy Legs**  
EPIC 53562 (41 min)

**Performance: Lifeless**  
**Recording: Period-perfect**

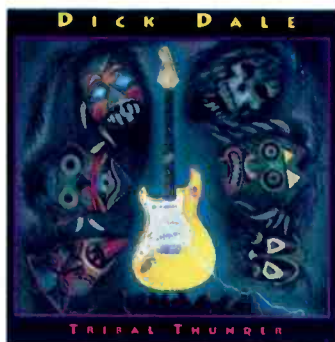
Jeff Beck is arguably the greatest living rock guitarist, but for whatever reasons—lack of ambition, disillusion with the form—he hasn't made a particularly interesting record in what seems like ages. This new one, although entertaining in a low-key way, is no exception. A tribute to Fifties rocker Gene Vincent—or, more specifically, to Vincent's pioneering lead guitarist, Cliff Gallup—it features Beck and friends performing ultra-authentic covers of Vincent numbers ranging from the well known (*Lotta Lovin'*) to the obscure (*Who Slapped John?*). As you might expect, it all sounds fine—Beck has Gallup's twang-bar swagger down cold, of course—but it's essentially a TV-movie version of the real thing, all but indistinguishable from any of those early-Eighties rockabilly revival records—Levi and the Rockats, anyone?—that got coughed up in the halcyon days of the New Wave. A disappointment. **S.S.**

**DICK DALE**

**Tribal Thunder**  
HIGHTONE 8046 (48 min)

**Performance: Salty**  
**Recording: Good**

The surf has come in again! Dick Dale, the first man to twang and reverb his guitar into a surfing frenzy, has returned with an



album that sounds as if he's tripped back to 1961. On tune after tune, he produces the shivering, larger-than-life guitar runs that made him a Southern California god. Maybe a few of these songs don't quite grab the way his early stuff did, but Dick Dale can still catch a riff and ride it all the way home. **R.G.**

**TERENCE TRENT D'ARBY**

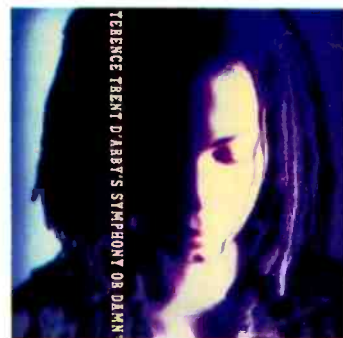
**Symphony or Damn**  
COLUMBIA 53616 (65 min)

**Performance: Audacious soul symphony**  
**Recording: Excellent**

Welcome home, Terence Trent D'Arby, all is forgiven. Critically and commercially deep-sixed after an initial bout of success for all the messianic hubris he subsequently displayed, D'Arby has bounced back with a third album that glistens and sizzles in a high-energy display of soul and passion. True to its title, it plays through like a soul symphony, one song

blending into another in a heady swirl of carthy sweat and tears and sweet, orchestrated idylls—a classic dichotomy of spirit and flesh that moves artists like Prince and D'Arby to the heights of expression.

"Symphony or Damn" opens with a great pun ("Welcome to my monastery," chants D'Arby, ushering the listener into a hermetic world where emotions are played out with a feverish intensity) and closes with the singer counseling compassion in a more reflective mode (*Let Her Down Easy*). In between he brings to life a gallery of pieces that illuminate the stages in a love affair as a kind of extended biological metaphor. His energy level is ferocious—witness the gravelly soul delivery and animal fury of his guitar playing on *She Kissed Me* or the jittery funk and shouted importuning on *Baby Let Me Share My Love*. The other side of these sanguine soul tantrums is the more mannerly temperament of *Delicate*, the

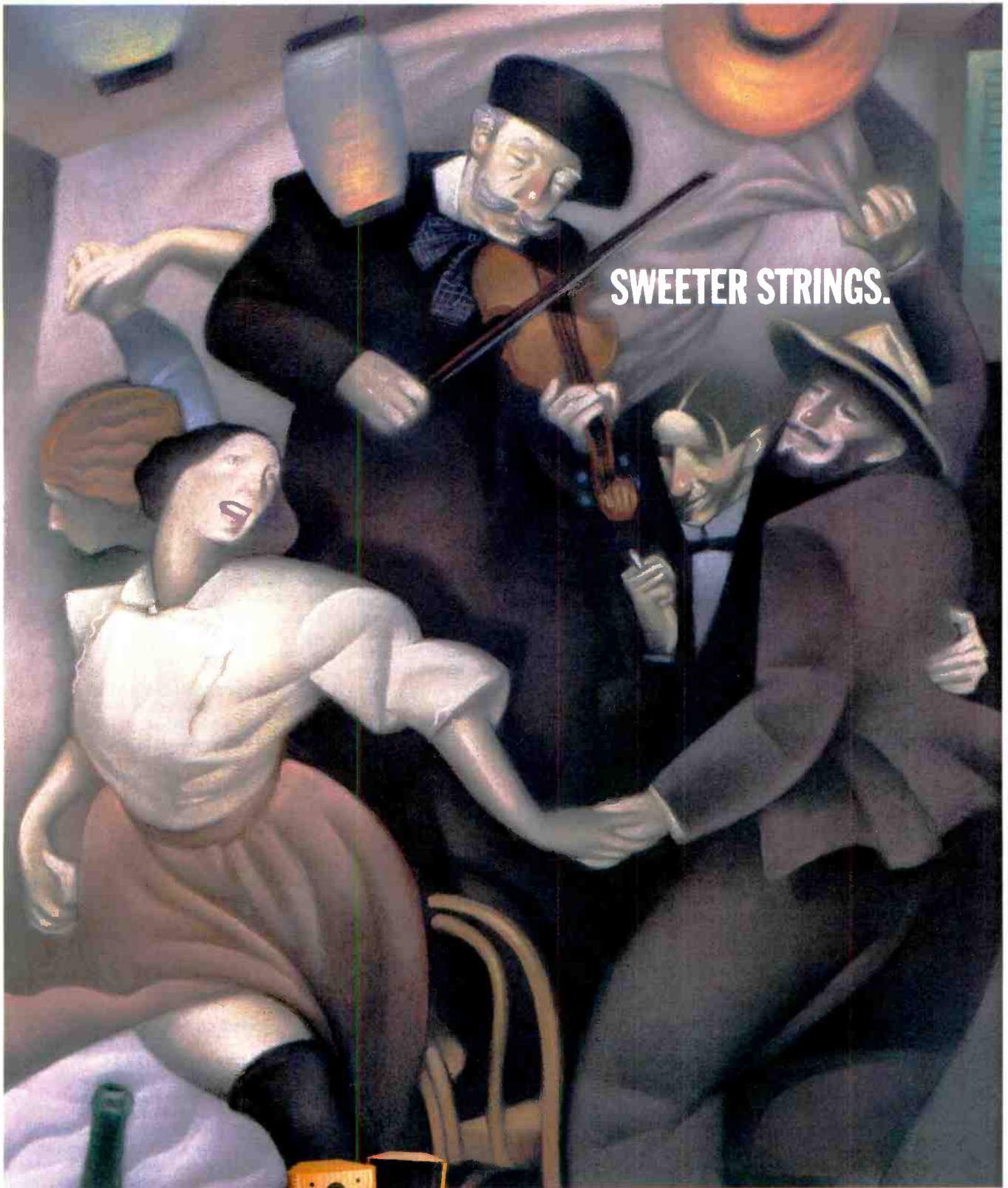


## SUPPORT YOUR LOCAL DINOSAUR

Post-*Jurassic Park*, dinosaurs are suddenly everywhere, even on CD. To avoid potential confusion, here's a handy side-by-side comparison of two of today's most famous dinosaurs and their respective new albums.



NAME	BARNEY	PETE TOWNSHEND
ARTIST PROFILE	Kiddie-TV dinosaur; made of purple cloth	Classic-rock dinosaur; got old before he died
ALBUM TITLE	"Barney's Favorites—Vol. 1"	"Psychoderelict"
ALBUM MESSAGE	Caring means sharing	Life stinks
MUSICAL STYLE	Minimalist sing-along	Seventies arena-rock
AUDIENCE	Preschoolers, heavily tranquilized parents	VH-1 viewers, heavily tranquilized teenagers
MULTIMEDIA TIE-INS	Best-selling videos	The Who's <i>Tommy</i> on Broadway
RELEVANT QUOTE	"I love you, you love me, we're a happy family"	"The important thing for the aging rocker is to avoid the appearance of dignity"



SWEETER STRINGS.

Sweeter, smoother strings are within the domain of only the very finest loudspeakers. Strings are reproduced flawlessly by the Infinity Kappa Series, which employs all the most advanced technologies: Emit-R™ Planar Tweeters,



Polydome™ Mid-ranges, IMG™ Woofers and the Control Q System.™

All of this advanced technology is deliciously housed in a choice of elegant oak or black genuine wood veneer cabinetry.

If sweeter strings are music to your ears, the Infinity Kappa Series are an absolute rhapsody.

 **Infinity**®

AS FAR AS YOU CAN HEAR.

© A Harman International Inc., Company. Call (800) 765-5556 for the Infinity dealer nearest you. In Canada, call (416) 294-4833. H. Roy Gray, Ltd.

CIRCLE NO. 21 ON READER SERVICE CARD

sunny bubblegum-pop of *Penelope Please*, and the detailed, declamatory singing of *Are You Happy?*, so reminiscent of Marvin Gaye circa "What's Going On?" D'Arby both honors his mentors and stakes out his own territory on "Symphony or Damn," and he all but one-ups Prince at his own baroque soul-pop game. Not to be missed. *P.P.*



#### BILLY IDOL

##### Cyberpunk

CHRYSALIS 26000 (72 min)

Performance: Future shock

Recording: Hi-tech

I have seen the future of rock and roll, and his name is Billy Idol. That statement is meant quite literally. Idol has seized the technological bull by the horns and put it to use in a programmatic way to comment on the hazards of the present and horizons of the future. "Cyberpunk" is ambitious and boundary-breaking in the manner of Todd Rundgren's "No World Order," with which it stands allied as a futurist broadside.

"Cyberpunk" addresses modern-day anomic, urban violence, environmental decay, the epidemic lust for greed and power, helpless capitulation to drugs and escapism, and, finally, faith that a democratizing wave of computerized knowledge will help redeem and unify humankind. It's pretty heady stuff, and that narrowly telescoped summary hardly does justice to Idol's synthesis of computer cool and rock-and-roll heat. He is onto something, and though the album may wander on for too long or stumble into New Age homilies (*Adam in Chains*), it's a trip that makes a lot of fascinating passages. Scattered among the cosmic debris are some great club tunes and rockers, notably *Shock to the System* (the most electrifying song about the L.A. riots yet written) and *Concrete Kingdom* (an anthem for dancing in the ruins). But the album's real impact is cumulative, a trip for the ears and (most important) the brain. *P.P.*

#### FREEDY JOHNSTON

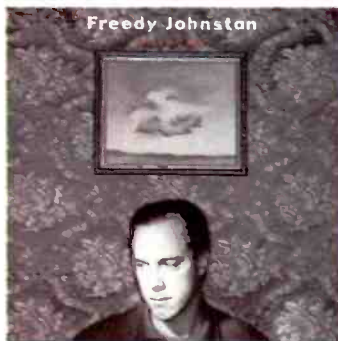
##### Unlucky

BAR/NONE 028 (21 min)

Performance: Mesmerizing

Recording: Good

Freedy Johnston's second album, "Can You Fly," was a surprise hit of 1992, an independent-label wonder that revealed Johnston's extraordinary talent for melding Sixties Brit-pop, Seventies R&B, and the kind of common-sense realism and intense dreaminess that could only come from a boy from Kansas who grew up, as Johnston did, watching people exterminate prairie dogs by pouring gasoline



down their holes. Now comes "Unlucky," a five-song EP (six if you count the two versions of *The Lucky One*) that's both seductive and transporting. Like its predecessor it is hard to categorize other than to say that Johnston's high, earnest tenor imparts its own sweet style and seeks its own path. Post-punk, neo-country, Hollies-esque—they all apply, and none really fits. Most of these songs try to make order out of events always slightly out of kilter and out of grasp. Often, they begin as lightweight pop but take unexpected melodic turns, especially to minor chords, that impart a different dimension to the lyrics than they'd have simply laid out on the page. Two songs, *Death of Stars* and *For a Lost Key*, meld into each other in a kind of Beatles/British-pop symbiosis, while *Caroline* takes a different tack altogether, hearkening to country music's perennial *The Wildwood Flower*. The biggest surprise: a reworking of *The Wichita Lineman*

## Tom Russell Is Listening . . .



What CD's has the acclaimed singer/songwriter been spinning lately?

#### LUCINDA WILLIAMS

##### Sweet Old World

CHAMELEON 61351

"A great-sounding record, and she's one of the few original singer/songwriters to emerge in the last ten years."

#### DJIVAN GASPARYAN

##### I Will Not Be Sad in This World

OPAL/WARNER BROS. 25885

"Duduk [flute] music from Armenia that's played along with a dam [a drone instrument]. I find it almost prayerful . . . it's good music to work against if I'm writing."

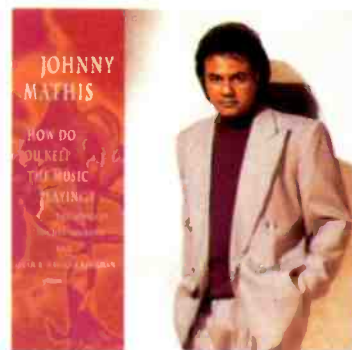
#### BUCK OWENS

##### Together Again/My Heart Skips a Beat

TOSHIBA/EMI 6656 (Japanese import)

"From the days when country music had a heart . . . West Coast-hillbilly jukebox music that'll rip the top of your head off."

that reads volumes into Glen Campbell's sappy Sixties version and makes the fabled wire-worker a hip, existential hero. Get hold of this one at any cost. *A.N.*



#### JOHNNY MATHIS

##### How Do You Keep the Music Playing?

SONY 53204 (54 min)

Performance: Sulky silky

Recording: Very good

Johnny Mathis skillfully avoids overstepping the fine line between pathos and bathos as he weaves his way vocally through Marilyn and Alan Bergman's broodingly sentimental lyrics for eleven of Michel Legrand's most haunting melodies. The alternately gentle and feverishly lush arrangements are by Legrand himself, who is at the piano for some and conducts the rest. All in all, a good match of singer and songs. *R.H.*

#### STEVE MILLER BAND

##### Wide River

POLYDOR 519 441 (53 min)

Performance: Serene

Recording: Very good

What can you say about another Steve Miller Band album after twenty-five years, even if it is Miller's first since 1988 and the first for a new label? You can say that he affects a Roy Orbison look these days, and that the songs are tuneful and pleasant, the singing as balmy as a palm-tree afternoon, and the playing just as you remembered it—which means either catchy, white-guy blues-pop or derivative, boring-as-hell noodling. You'll probably opt for the latter. *A.N.*

#### ROBERT PLANT

##### Fate of Nations

ES PARANZA 92264 (59 min)

#### COVERDALE-PAGE

GEFFEN 24487 (61 min)

Performances: Led Zepplin redux

Recordings: Very good

Personally, I prefer Robert Plant's choice of collaborators to Jimmy Page's in this not-really battle of the ex-bandmates. On his new solo album, Plant has opted for a pair of guitarists (most notably Francis Gunnery of the criminally overlooked band *It Bites*), while Jimmy Page is now working with vocalist David Coverdale, a bald copyist of Plant. The result is that "Coverdale-Page" is a Led Zepplin rehash, even though it's seasoned up to the 11th degree and put together with more clear-eyed attention than Page has shown since Zep's demise. An amazingly lifelike replication, it raises the question of whether it



should actually be stocked in a music shop or Madame Tussaud's Wax Museum. Still, there's kicks to be had doing the *Bron-Y-Aur* stomp to numbers like *Shake My Tree* and *Feeling Hot*, and "Coverdale-Page" may well be the next best thing to having been there.

While Page approaches the Zeppelin legacy like a sonic photo realist, Plant tries to tap into the creative spark that ignited the band. Backing away from the *au courant* sampling frenzy that typified his last few records, Plant returns to something more organic on "Fate of Nations." Apparently inspired by a slew of Sixties West Coast bands whose records he's been revisiting of late, Plant and company ride an unexpectedly dreamy groove to nirvana. Pillow waves of sound bolster such ethereal creations as *Come into My Life*, *29 Palms*, and the soulful, mellow invocation *Great Spirit*. He even covers Tim Hardin's *If I Were a Carpenter*, a song he used to perform in a band that predated Led Zeppelin.

Hmm . . . can a Page/Plant reunion really be that far beyond the realm of possibility after all these years? *P.P.*

**PORNO FOR PYROS**

WARNER BROS. 45228 (40 min)

Performance: Grating  
Recording: Good

**P**orno for Pyros is the Van Halen of the alternative-music scene: fronted by an obnoxious, posturing nincompoop; self-in-

volved, flippant, and tattooed, with a perpetual smirk: fixated upon juvenile jerk-off fantasies: compiling a musical identity out of what has become a stockpile of clichés retrieved from the respective "alternative" and "mainstream" rock bins. And while Perry Farrell, the erstwhile Jane's Addiction frontman, has a knack for heretical platitudes and a flair for shock value, the novelty swiftly wears thin. "Ever since the riots / All I really wanted / Was a black girlfriend," he sings in his smarmy, offhand way in the specious *Black Girlfriend*. In the title song, which is also about the L. A. riots, Farrell is driven to masturbation by the televised carnage and sees the whole sordid bloodletting as a kind of mass sexual release. The songs all sound like backstage jams to which Farrell has appended his clouded stream-of-consciousness, and the details of this libertine's daily existence are about as interesting as the parade of fetishists whose confessions foul the TV talk shows. *P.P.*

**TOM RUSSELL**

*Box of Visions*

PHILO 1158 (50 min)

Performance: Raymond Carver lives  
Recording: Very good

**T**om Russell, who specializes in literate songs about Americans at the breaking point, has enjoyed a high profile lately with well-received albums he made with Katy Moffatt and Barrence Whitfield. Still, he's found

time to write what may be his most consistent record. Russell excels at novelistic detail and setting, and in poetic description of mundane events ("the eyelids of morning, they flutter a warning"). But his greatest gift is in humanizing political situations and social class struggles. He does it best here on the folkish *Manzanar*, in which an elderly Japanese man reflects on his time in an American interment camp during World War II, and on *Waterloo*, a bleak portrait of an unemployed factory worker in Iowa—wrist-slitting depression set to a Bo Diddley-style beat. Think of "Box of Visions" as *Roger and Me* turned inward. *A.N.*

**CHRIS SMITHER**

*Happier Blue*

FLYING FISH 70622 (51 min)

Performance: Virtuoso  
Recording: Very good

**F**or the uninitiated, Chris Smither is an acoustic-guitar wizard with a streak of sadness that stretches from the equator to the North Pole and back again, with stops in New Orleans for brief and doomed glimpses of joy. Imagine Doc Watson twenty years younger as a New Age mystic, shrouded in mystery. A hip Louisiana poet with a trademark blue guitar, Smither is capable of all the lightning-fast, single-note flat-picking and squeeze-fingering of the Delta-blues style, as well as the most delicate of chord-and-strum, finger-pick interplay. Mostly, Smither is an emotional tour



**SHOCKINGLY DEEP BASS.** Add our SUB-712 powered subwoofer to your system and you'll be struck by the impact of its low end. Call 1-800-878-TIME.

DCM Loudspeakers

CIRCLE NO. 23 ON READER SERVICE CARD

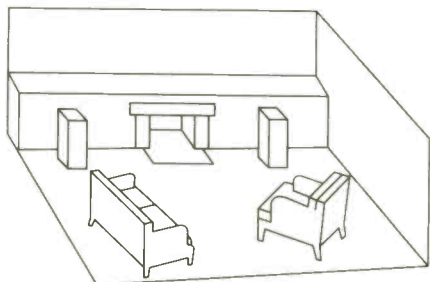
# RDL

ACOUSTICS

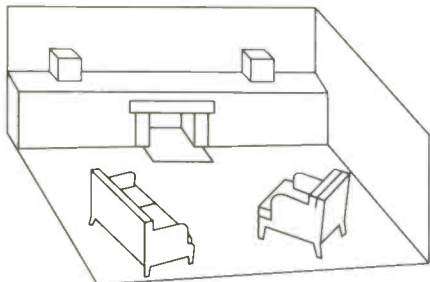
ROOM  
DESIGNED  
LOUDSPEAKERS

## dilemma

Your speakers sound best in these positions:



But this is where you want to put them:



## solution

RDL has designed four variations of the same superb loudspeaker system, each with our unique pulsating-dome tweeter, and each optimized for a different placement — including the two shown above. Only RDL makes this choice possible.

### FACTORY-DIRECT SALES

For your free direct-sale catalog of RDL speakers and systems, call 1-800-227-0390 or Fax 1-800-227-9047 or ON-LINE (BBS) 1-800-227-0391

RDL ACOUSTICS

26 Pearl Street No. 15, Bellingham, MA 02019

## POPULAR MUSIC

guide, his voice soaked in deep, dark, incontrovertible misery, a blues so filled with pain that not even the sensual sax, optimistic strings, or get-along bass that accompany him here (his first album with full backing in more than a dozen years) can hope to lift him from his doldrums. This is no pretense. Not when you can write a song like *The Devil's Real*, or claim Roly Salley's *Killing the Blues*, a song of palpable, wrenching despair, as your own. Smither is already a cult titan. Just wait 'til the rest of 'em hear this.

A.N.

### ROD STEWART

**Unplugged . . . and Seated**  
WARNER BROS. 45289 (70 min)

Performance: Warm  
Recording: Balanced

Old rock-and-roll soldiers never die, they just make "Unplugged" specials for MTV. Rod Stewart's "Unplugged . . . and Seated" ranks with McCartney's and Clapton's in terms of obeisance to the basic premise (going acoustic), and in the way that less turns out to be a whole lot more. The album is an unbridled joy, especially if you're partial to Stewart's work prior to his transatlantic crossing. Songs three through seven constitute a mini-set drawn from his breathlessly wonderful early albums. With Ron Wood on hand to strum and slide, even old *Maggie May* seems as spry as she ever did. Tunes of a more recent vintage are kept to a well-selected minimum, and Stewart's heartfelt return to roots is a dewy-eyed homecoming for performer and audience alike.

P.P.

## TRACK RECORDS

### Rod Stewart

Since his early-Sixties incarnation as lead singer of Steampacket, Rod Stewart has made scads of records—some brilliant, some godawful. Here are a few of both.



#### Beck-Ola

EPIC 47411

With the Jeff Beck Group (1969), including astounding versions of Elvis's *All Shook Up* and the Yardbirds' *Shapes of Things*.

#### Every Picture Tells a Story

MERCURY 822385

Still his solo peak (1971), featuring *Maggie May* and the ineffably gorgeous *Mandolin Wind*.

#### Blondes Have More Fun

WARNER BROS. 3261

From 1978, the sound of self-parody (*Do Ya Think I'm Sexy?*) setting in, apparently for good.

#### Absolutely Live

WARNER BROS. 23743

Bloated, utterly redundant 1983 contractual-obligation concert set.



JEFFREY BENDER/VIRGIN RECORDS

Tina Turner: soundtrack for survival

### BARBRA STREISAND

**Back to Broadway**  
COLUMBIA 44189 (51 min)

Performance: A mixed bag  
Recording: Generally good

Like the line she sang as Dolly Levi in the movie version of *Hello, Dolly*, La Streisand is back where she belongs—singing Broadway songs. That doesn't mean she scores with all twelve of the selections included this time around. There's a little too much effort expended in trying to be distinctive on *Some Enchanted Evening* from *South Pacific* and *The Man I Love*, originally from *Lady, Be Good!*, songs that aren't improved by her strained Streisandizations. But she's right on target with *Everybody Says Don't* from Sondheim's *Anyone Can Whistle*, *I've Never Been in Love Before* from *Guys and Dolls*, *Speak Low* from *One Touch of Venus*, and two attractive new songs from the Broadway-bound *Sunset Boulevard*. A duet with Michael Crawford on *The Music of the Night* from *Phantom of the Opera* comes off better than a pretentious medley with Johnny Mathis of *I Have a Love* and *One Hand, One Heart* from *West Side Story*. On the whole, though, Streisand shows there are still few who can equal her passion and electricity in projecting the best of Broadway.

R.H.

### TINA TURNER

**What's Love Got to Do with It**  
VIRGIN 88189 (52 min)

Performance: Not getting older, getting . . .  
Recording: Excellent

This soundtrack to the better-than-run-of-the-mill Tina Turner bio-pic is memorable for two reasons. First, no matter how well you know these powerful songs from Turner's Ike and Tina days (*Proud Mary*, *Nutbush City Limits*), all newly recorded, there's nothing to prepare you for how much a little age, wisdom,

STEWART PHOTO: MICHAEL OCHS ARCHIVES

# The Ultimate CD, Tape & Video Catalog

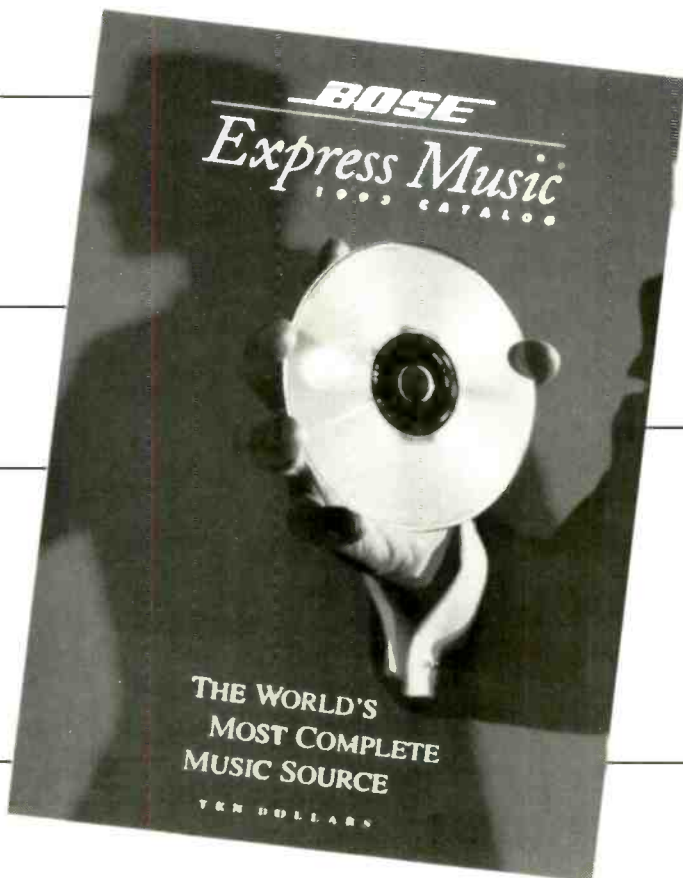
ANY CD IN  
THIS ISSUE OF  
STEREO REVIEW, \$13.99\*\*

**VIRTUALLY  
EVERY TITLE  
IN PRINT!**

**MAJOR LABELS –  
AND OVER 1,000  
INDEPENDENTS**  
Including Chesky,  
Telarc and Nimbus!

**EVERY STYLE  
OF MUSIC**  
288 pages of Rock,  
Classical, Jazz, Blues,  
Nashville, Opera,  
World Music.

**THIS IS NOT  
A CLUB!**  
No unrequested  
shipments of CDs  
or tapes.



**FREE MUSIC  
UPDATES**  
for active Bose®  
music buyers  
featuring bestsellers,  
new releases,  
recommendations,  
samplers and more.

**ONLY \$6 —  
completely refunded  
with 1st purchase  
from catalog\*.**

**COMPETITIVE  
PRICES**  
And special notice  
of sales. Plus, our  
catalog coupons  
let you save on  
future orders.

**BOSE**  
*Express Music*®

Knowledgeable operators standing by.

**1-800-451-BOSE**

Outside of U.S. and Canada: 1-508-879-1916 x2008

## Subscription/Mail Order Form

**YES!** Please send me the current Bose® Express Music®  
catalog for just **\$6.00**, refundable on your first order from  
the catalog\*. (Additional \$8.00 S&H charge for orders outside U.S.  
except APO/FPO.)  
\*Some restrictions.

**PLEASE SEND ME THE ATTACHED LIST OF  
CDs** (include artist, title and quantity of CDs). I'm  
enclosing \$13.99/CD + \$3.95 S&H per total order. (Ad-  
ditional S&H charge for international orders.) \*\*Offer valid for CDs  
priced below \$17.00 only.

Check\*  VISA  MC  AMEX  Discover

Credit Card No.

Exp.

\*International orders – Credit Card only.

Name

Address

City

State  Zip

**BOSE EXPRESS MUSIC**

The Mountain, Framingham, MA 01701-9323  
1-800-451-BOSE • Fax: 508-875-0604

KEY: SR106

# QUICK FIXES

## Laura Branigan

### Over My Heart

ATLANTIC 82489 (54 min)

The dance beats are more muffled than in Branigan's *Gloria* days, but otherwise this collection of tinkling, synth-pop ditties offers nothing new besides the singer's eerie vocal resemblance to Carly Simon on *How Can I Help You to Say Goodbye*. Frankly, it all sounds like the kind of dreck that plays over the closing credits of a buddy-cop movie released straight to cable. **S.S.**

## Rosemary Clooney

### Do You Miss New York?

CONCORD JAZZ 4537 (48 min)

Rosemary Clooney remains one of the three or four best singers straddling traditional pop and jazz, but her voice is so innately sunny that sometimes you can't believe her when she sings downbeat lyrics. Fortunately, most of the songs here fit her just fine, especially *It's Only a Paper Moon*, done as an easy-swinging duet with John Pizzarelli. And her backing sextet—including tenor saxophonist Scott Hamilton—has room to shine as well. **R.H.**

## Julian Cope

### Jehovah Kill

ISLAND 514 052 (70 min)

In which Cope proselytizes, at weary length, about his pet concerns—Druidism, female Earth Goddess energy, Judeo-Christian spiritual vapidity, and so on. Pools of energy coalesce at various spots, but otherwise this is a swan dive into the weird that tests even a fan's patience. **P.P.**



## Michael Fracasso

### Love and Trust

DEJADISC 3205 (48 min)

Michael Fracasso has an authentic, instantly memorable American voice, like a more wistful Roy Orbison or a less self-important Marty Balin, and at its best his songwriting has the melodic charm and artful simplicity of vintage Buddy Holly. Pick hit: *Thing About You*. Great opening line: "Her politics were unattractive." An auspicious debut. **S.S.**

## Brian Gari

### Songs for Future Musicals

ORIGINAL CAST 9218 (42 min)

Brian Gari is one of the rare non-Limey writers to have had a musical on Broadway

recently (1987's *Late Night Comic*). He thus deserves our respect and gratitude, as does this bunch of songs—by turns clever, catchy, and touching—from some of his as-yet-unproduced shows. Of course, Gari sings like a composer, but I'm loath on principal to criticize anybody who also has the wit to record a heartfelt (if un-p.c.) paean to porn diva Kym Wilde. **S.S.**

## Bernard Herrmann

### Film Scores/From Citizen Kane to Taxi Driver

MILAN 35643 (70 min)

Conducted by Herrmann's contemporary and friend Elmer Bernstein, this smartly programmed tribute features some of the composer's most evocative movie music, including excerpts from *The Devil and Daniel Webster*, *Psycho*, *Vertigo*, *The Man Who Knew Too Much*, and the surprisingly Ravelian *Fahrenheit 451*. Great stuff, beautifully recorded. **S.S.**



## Toni Price

### Swim Away

DISCOVERY/ANTONES 77003 (45 min)

This big-voiced Austin singer offers the *de rigueur* Texas musical mix (country, blues-rock, R&B), aided by superior songs from Thieves leader Gwil Owen and impressive work by Joe Ely guitar-whiz David Grissom. Very tasty, like Bonnie Raitt without the I'm-a-Survivor affectations. **S.S.**

## Jules Shear

### Horse of a Different Color/The Jules Shear Collection (1976-1989)

RAZOR & TIE 2017 (56 min)

Jules Shear has written a bunch of deserved hit songs for other people over the years, so it's a mystery why his own albums have never really clicked. Or perhaps not, because as this retrospective makes clear, Shear's nasal whine nearly always misrepresents his material. If you doubt it check out the original version of *If She Knew What She Wants*, which is so irritating that you'll wonder how the Bangles ever tumbled to its underlying gorgeousness. **S.S.**

## Shonen Knife

### Let's Knife

VIRGIN 86638 (53 min)

Fans—including Kurt Cobain of Nirvana—truly believe that these three Japanese women, who combine ludicrously simple flotsam from pop culture with punky-garage guitar rock, are geniuses. Me, I can't help wondering if in the larger world of international artistic exchange they're a revenge on us for our exportation of Jerry Lewis. **R.G.**

and hard-won experience can transform them into near-anthems of survival, as well as truly great rock, pop, and soul. And second, this is as much an aural history of Turner's extraordinary career and reincarnation as it is a soundtrack, though as a capsule of the true scope of her musical life it's inadequate. Three new songs are included, the standout of which is Bryan Adams and R. J. Lange's *Why Must We Wait Until Tonight*, a sultry snake-charmer about sexual healing and lust beyond pure physical attraction. In her lower register here, Turner sounds like half woman, half feral animal. Oh, that's right—she is. **A.N.**

## U2

### Zooropa

ISLAND 518 047 (51 min)

Performance: Offhand

Recording: Okay

"Zooropa" is not great U2, but it may be the most important thing they've done in ages, albeit for extramusical reasons. Recorded between March and May of 1993, what it recalls most (not stylistically, of course) is the Rolling Stones' "December's Children," or any other Sixties record thrown together by a band on the run. Which is to say it's a revolutionary anachronism in music-biz terms—an album made and sold for no other reason than to document what's on the band's collective mind this very moment.

True, that turns out to be not much. The songs here are the sketchiest of fragments, essentially excuses for the band and conceptual accomplice Brian Eno to overlay the usual trendy noises in accordance with the usual critical theories. To be fair, though, it sometimes works. *Babyface*, for example, comes off appealingly as half soul-plaint, half children's tune, while the uncharacteristically witty *Some Days Are Better Than Others* almost passes for U2 à la *Chinoise*.

Still, about the best you can say for this music is that it conspicuously lacks the histrionic gestures and moral posturing that in the past have made the band alternately inspiring and annoying. But then the music isn't really the point here. What's cool about "Zooropa" is that it's a calculated affront to current industry practice, to the system by which bands make albums conforming to demographic studies and marketing plans rather than their own musical vision. And what will be really interesting is if some other comparably successful group responds to the album's implicit challenge. Hey—it could happen. **S.S.**

## U2: a shock to the system?



JAZZ **REVIEWS****JOHN COLTRANE****The Last Giant**

RHINO 71255 (two CD's, 128 min)

**Performance: Great Trane ride****Recording: Very good**

Let's hope that John Coltrane was not the "Last Giant," as this two-disc reissue implies. However, twenty-six years after his death, he appears to be just that, the last in an illustrious line of artists who gave jazz a new direction. Since 1967, others have sought to forge new paths, but the so-called avant-garde of the Sixties and Seventies was mostly a strained attempt at breaking away from convention. Coltrane's style, which continues to generate disciples, evolved gradually, and this collection illustrates that.

The set begins with a 1946 private recording made while Coltrane was in the Navy, jumps to a previously unreleased 1951 broadcast with Dizzy Gillespie's sextet, and moves through the Fifties via another Gillespie track, a 1952 Nashville recording by Gay Crosse and His Good Humor Six, an unissued Johnny Hodges selection, a Prestige side by the Miles Davis Quintet, and some of Coltrane's early efforts as a leader. Then it's on to the Sixties and a number of tracks that demonstrate the saxophonist's seeming reluctance to bring selections to an end. If you are a Coltrane fan, the remainder of the collection probably includes some of your favorites, not to mention two different versions of *My Favorite Things*.

This set is part of Rhino's Atlantic Jazz Gallery series, but the producers have broadened its scope by licensing material from other labels, including two of Atlantic's former rivals, Prestige and Riverside. The accompanying booklet is attractive, well illustrated, and packed with fifty pages of information plus brief essays by Coltrane devotees Amiri Baraka, Ira Gitler, Ed Bradley (of *60 Minutes*), and Lewis Porter. Throw in technical excellence and you have a Coltrane box that should please any lover of modern jazz. C.A.

**MULGREW MILLER****Hand in Hand**

NOVUS 63153 (62 min)

**Performance: Miller's best****Recording: Fine**

Mulgrew Miller has made a series of fine albums for the Landmark label, but he's never sounded better than on his Novus debut,

"Hand in Hand," for which he has surrounded himself with as fine a group of sidemen as he's ever had. Actually, "sidemen" is an inappropriate tag for the likes of trumpeter Eddie Henderson and saxophonist Joe Henderson (who appear on five of the nine tracks), or saxophonist Kenny Garrett, vibist Steve Nelson, bassist Christian McBride, and drummer Lewis Nash. With the exception of Donald Brown's *Waltz for Monk*—which has an engaging, muted trumpet solo by Henderson and a very un-Monkish statement from Miller—the program consists of the pianist's own compositions. He is an interesting writer with a flair for short, catchy melodic phrases, and his music seems to bring out the best in his fellow musicians. If this is an indication of what's in store for Miller at Novus, we should all wish him a long stay at his new label. C.A.

**SERGIO SALVATORE**

GRP 9720 (54 min)

**Performance: Splendid****Recording: Very good**

Sergio Salvatore has one advantage over fellow pianists like, say, McCoy Tyner or Oscar Peterson: he is barely twelve. That automatically gives him the special allowance reserved for child artists or performers who are otherwise "handicapped." That said, Salvatore's debut album reveals an approach to jazz—both as composer and player—that belies his youth and is as mature as anything we might expect to hear from someone two or three times his age. This young man is impressive throughout, whether going it alone, as on the extraordinary reading of *Like Someone in Love*, cooking hard or softly simmering with saxophonist Bob Mintzer, vibraphonist Dave Samuels, and drummer Danny Gottlieb, or engaging his father, Luciano Salvatore, in a piano duet. By playing up his tender age, I suppose I've undermined my objectivity, but Sergio Salvatore's performances would be equally impressive at *any* age. Remember that name. C.A.

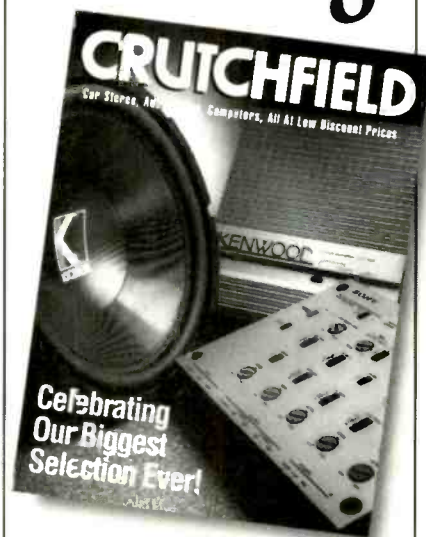
**HORACE SILVER****It's Got to Be Funky**

COLUMBIA 53812 (76 min)

**Performance: Brassy, too****Recording: Excellent**

Back in his Blue Note days a few decades ago, Horace Silver practically wrote the book on how to sound funky and finger-snapping hip. Now he's on Columbia, looking younger than ever and making youthful music with a six-piece brass section including guest horn players Red Holloway, Branford Marsalis, and Eddie Harris, a solid rhythm section, and his own distinguished piano. Wisely, the sixty-five-year-old Silver does not try to recapture past glories by reworking such tried-and-true hit material as *Se or Blues*, *The Preacher*, or *Opus De Funk*. He does include *Song for My Father*, which has one of four slightly dated vocals by Andy Bey (a name from Silver's past). But these Dave Lambert-like songs are dotted and underlined by the leader's excellent brass arrangements and wrapped ever-so-neatly in funk. There are also superb reed solos by Holloway, Harris, and Marsalis, plus a healthy sprinkling of Silver's piano. It all adds up to another enjoyable Silver serving. C.A.

# FREE Stereo Catalog



Remember when shopping for a stereo was fun? So do we. Get our catalog and get excited again!

- ▶ Hundreds of components
- ▶ Dozens of top brands
- ▶ Packed with buying tips
- ▶ Low discount prices
- ▶ Computers and video, too
- ▶ It's free! Call now. You'll be glad you did.

## Call Now!

### 1-800-955-9009

or mail this coupon

Name \_\_\_\_\_  
 Address \_\_\_\_\_ Apt # \_\_\_\_\_  
 City \_\_\_\_\_  
 State \_\_\_\_\_ Zip \_\_\_\_\_

## CRUTCHFIELD®

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



### Receivers



**Technics SA-GX650 A/V Stereo Receiver**  
 •125 watts per channel •Dolby Pro Logic Surround •Preprogrammed/learning remote  
 •2 video and 4 audio inputs •Digital tuner with 30 presets

**CALL**  
 (TEC SAGX650)

<b>Sherwood RA-1140</b> •25 watts/channel, surround sound	<b>\$89<sup>95</sup></b>
<b>JVC RX-206</b> •40 watts/channel, remote	<b>\$149<sup>95</sup></b>
<b>Technics SA-GX130</b> •70 watts/channel, remote	<b>\$179<sup>95</sup></b>
<b>Teac AG-V1020</b> •100 watts/channel, remote	<b>\$219<sup>95</sup></b>
<b>AudioSource CD Receiver</b> •30 Watt/Ch. Receiver, 6-CD changer	<b>\$249<sup>95</sup></b>
<b>Sherwood RV-6010R</b> •105 watts/channel, Dolby Pro Logic	<b>\$299<sup>95</sup></b>

### Receivers



**JVC RX-309 Remote Stereo Receiver**  
 •100 watts per channel •A/V remote with power on/off •AM/FM tuner with 40 presets  
 •4-speaker surround •Motor-driven volume control with LED meter •CompuLink system

Our Low Price **\$199<sup>95</sup>** (JVC RX309)

<b>Sherwood RX-4010R</b> •65 watts/channel, matrix surround	<b>\$169<sup>95</sup></b>
<b>Teac AG-620</b> •50 watts/channel, matrix surround	<b>\$169<sup>95</sup></b>
<b>Teac AG-V3020</b> •100 watts/channel, Dolby Pro Logic	<b>\$349<sup>95</sup></b>
<b>JVC RX-809V</b> •120 watts/channel, Dolby Pro Logic	<b>CALL</b>
<b>Technics SA-GX350</b> •100 Watts/Channel, Dolby Pro Logic	<b>CALL</b>
<b>Technics SA-GX550</b> •110 watts/channel, Dolby Pro Logic	<b>CALL</b>

### AudioSource Components



**AudioSource TNR One AM/FM Tuner**  
 •Digital quartz phase-lock loop tuning for absolute accuracy •20 station memory

Our Low Price **\$199<sup>95</sup>** (ASO TNR ONE)

**AudioSource PRE One Stereo Preamplifier**  
 •6 digitally switched inputs •2 main outputs  
 •Moving coil head amp •2-way tape dubbing

Our Low Price **\$229<sup>95</sup>** (ASO PRE ONE)

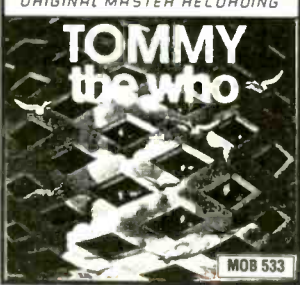
**AudioSource AMP One Power Amplifier**  
 •60-watts/channel •Bridged power output of 170-watts mono •Left/ right output controls

Our Low Price **\$249<sup>95</sup>** (ASO AMP ONE)

## This Month's

### Mobile Fidelity CD Specials

ORIGINAL MASTER RECORDING

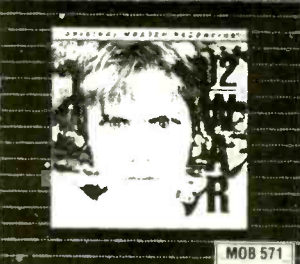


**TOMMY the who**

MOB 533

**\$29<sup>99</sup>** 2-CD Set

ORIGINAL MASTER RECORDING



**Alicia Keys**

MOB 571

**\$24<sup>99</sup>** Per CD

### Compact Disc Players



**RCA CD-1051M Compact Disc Player**  
 •Mid-size •9-key remote control •2-digit LED display •2x oversampling •Dual 16-bit D/A converters •20 program memory •1 year parts & labor warranty

Our Low Price **\$99<sup>95</sup>** (RCA CD1051M)

<b>Technics SL-PG340</b> •MASH 1-bit D/A, 20 track programming	<b>\$134<sup>95</sup></b>
<b>Sherwood CDC-5010R</b> 5-Disc Carousel CD Changer, 1-bit, remote	<b>\$189<sup>95</sup></b>
<b>Technics SL-PDB47</b> •5-Disc CD Changer, rotary remote	<b>\$219<sup>95</sup></b>
<b>Yamaha CDC-96</b> •5-disc CD Changer, remote	<b>\$229<sup>95</sup></b>
<b>JVC XLM409</b> •6+1 CD Changer, 8 x oversampling, remote	<b>CALL</b>
<b>Technics SL-PD947</b> •5-Disc CD Changer, pitch control, remote	<b>CALL</b>

### Compact Disc Players



**Technics SL-PD647 Rotary Compact Disc Changer**  
 •5 disc rotary front-loading design •1-bit MASH D/A converter •32-track random access programming •Repeat & sequential play

Our Low Price **\$199<sup>95</sup>** (TEC SLPD647)

<b>JVC XLV-151</b> •1-bit, 8X oversampling	<b>\$114<sup>95</sup></b>
<b>Technics SL-PG440</b> •1-bit MASH D/A, remote	<b>\$149<sup>95</sup></b>
<b>JVC XLF-106</b> •5-Disc CD Changer, rotary, 1-bit	<b>\$169<sup>95</sup></b>
<b>Aiwa DX-NR370M</b> •3-Disc CD Changer, 1-bit, remote	<b>\$199<sup>95</sup></b>
<b>JVC XLM-705</b> •6-Disc Changer •1-single play, magazine memo	<b>\$249<sup>95</sup></b>
<b>Teac AD-400</b> •CD Player/Cassette Combination	<b>\$249<sup>95</sup></b>

### Equalizers



**Teac EQA-110 10-Band Graphic Equalizer**  
 •Plus/minus 12 dB range •Illuminated slide controls •Switchable EQ active/defeat •Tape monitor •Peak program level meter •Black finish

Our Low Price **\$69<sup>95</sup>** (TEA EQA110)

<b>AudioSource EQ-8/II</b> •Equalizer, 10 bands/channel	<b>\$99<sup>95</sup></b>
<b>Teac EQA-220</b> •Equalizer, 10 bands/channel	<b>\$99<sup>95</sup></b>
<b>AudioSource EQ-11</b> •Graphic Equalizer, 10-bands/channel	<b>\$129<sup>95</sup></b>
<b>Technics SH-GE70</b> •7-bands/channel, 12 memory presets	<b>\$149<sup>95</sup></b>
<b>AudioSource EQ-12</b> •10 band Equalizer/Analyzer with mic	<b>\$219<sup>95</sup></b>
<b>AudioSource EQ-10</b> •Graphic Equalizer/Analyzer, pink-noise	<b>\$299<sup>95</sup></b>

### Loudspeakers



**Yamaha NSA-635 3-Way Speaker System**  
 •Acoustic suspension design •8 inch woofer  
 •Ferro-fluid cooled midrange & dome tweeter  
 •Power rating: 10-140 watts •8 ohm impedance

Our Low Price **\$99<sup>95</sup>/pair** (YAM NSA635)

<b>Pinnacle PN5+/Oak</b> •Compact Speakers, 2 way, diaduct	Pair <b>\$129<sup>95</sup></b>
<b>Design Acoustics PS55</b> •2-way, 5.25" woofer	Pair <b>\$129<sup>95</sup></b>
<b>Technics SB-LX7</b> •3-way, bass reflex, 12" woofer	Pair <b>\$149<sup>95</sup></b>
<b>JBL 3800</b> •3-way, floor standing, 8" woofer	Pair <b>\$299<sup>95</sup></b>
<b>Bose 301 Series III</b> •Direct/Reflecting Speakers, 2-way	Pair <b>\$318<sup>00</sup></b>
<b>Cerwin-Vega AT12</b> •3-way, 12" woofer	Pair <b>\$399<sup>95</sup></b>

### Loudspeakers

Highly Acclaimed



**Advent A-1052 25th Anniversary Speakers**  
 •The legendary Large Advent updated with new ferro-fluid tweeter •Genuine walnut veneer •Famous 10" woofer •3-position balance switch •100 watts •8 ohms

Our Low Price **\$259<sup>95</sup>/pair** (ADV A1052)

<b>Yamaha NSA-525</b> •2-way, 6" woofer, black ash	Pair <b>\$79<sup>95</sup></b>
<b>Technics SB-LX5</b> •3-way, 10" woofer	Pair <b>\$119<sup>95</sup></b>
<b>Recoton W-400</b> •Wireless Speaker System	Pair <b>\$159<sup>95</sup></b>
<b>Design Acoustics PSSW</b> •Subwoofer, 10" passive	Each <b>\$219<sup>95</sup></b>
<b>Pinnacle PN8+/Oak</b> •2-Way, 8" woofer, diaduct	Pair <b>\$249<sup>95</sup></b>
<b>JBL 4312BK</b> •3-Way Pro Studio Monitors	Pair <b>\$599<sup>95</sup></b>

### Loudspeakers



**Bose Acoustimass-5 Series II Speaker System**  
 •2-cube speaker arrays provide direct & reflected sound in an ultra-compact size  
 •Acoustimass module provides deep bass

Our Low Price **\$749<sup>00</sup>** (BOS AMSII)

<b>Pinnacle PN2+</b> •2-way Mini, 4" woofer, diaduct port	Pair <b>\$99<sup>95</sup></b>
<b>Technics SB-LX3</b> •2-way, 10" woofer	Pair <b>\$99<sup>95</sup></b>
<b>Bose 101</b> •Mini Speakers, indoor/outdoor	Pair <b>\$149<sup>95</sup></b>
<b>Atlantic Technology Pattern 100</b> •3-pc Powered System	<b>\$279<sup>95</sup></b>
<b>Cerwin Vega AT-15</b> •3-way, 15" woofer, 400 watts	Pair <b>\$599<sup>95</sup></b>
<b>JBL LX600</b> •3-way, 10" woofer, black	Pair <b>\$599<sup>95</sup></b>

### Available at \$24.99 per CD :

- Traffic:  
*Mr. Fantasy* ..... MOB 572
- Aretha Franklin:  
*I Never Loved A Man* ... MOB 574
- Moody Blues:  
*In Search Of The Lost Chord* ..... MOB 576
- Albert King:  
*Born Under A Bad Sign* MOB 577
- Manhattan Transfer:  
*Extensions* ..... MOB 578
- Steve Winwood:  
*Arc Of A Diver* ..... MOB 579
- Def Leppard:  
*Hysteria* ..... MOB 580
- Pink Floyd:  
*Dark Side Of The Moon* MOB 517
- Police:  
*Synchronicity* ..... MOB 515

CALL US TOLL FREE FOR ITEMS NOT LISTED IN THIS AD

SE HABLA ESPANOL



ORDER TOLL FREE 24 HOURS A DAY 7 DAYS A WEEK **1-800-221-8180**

Outside U.S.A. Call: 1-718-417-3737

J&R Music World, Dept. SR1093, 59-50 Queens-Midtown Expressway, Maspeth, Queens, NY 11378  
 FAX 718-497-1791





**Super Specials!**

**Sony Mastersound Specials**

FRIDAY NIGHT IN SAN FRANCISCO

COL 53926

**\$22.99** Per CD

JAMES TAYLOR

COL 53787

**\$22.99** Per CD

- Available at \$22.99 per CD:
- Boston: Boston ..... COL 52856
  - Aerosmith: Toys In The Attic ..... COL 52857
  - Billy Joel: 52nd Street ..... COL 52858
  - Bruce Springsteen: Born To Run ..... COL 52859
  - Dave Brubeck: Time Out ..... COL 52860
  - Miles Davis: Kind Of Blue ..... COL 52861
  - Bob Dylan: Blonde On Blonde ..... COL 53016
  - Broadway Cast: West Side Story ..... COL 53152
  - Janis Joplin: Pearl ..... COL 53441

**Audio Systems**

**Aiwa NSX-3300 Mini Component System**

- 30 watts per channel •Super T-Bass & BBE
- Vocal fader for karaoke mode •AM/FM tuner with 32 presets •Double auto-reverse cassette
- 30-track programmable CD •3-way speakers

Our Low Price **\$399.95** (AIW NSX3300)

**Panasonic SC-T095** •Shelf System, dual cassette, turntable ..... **\$129.95**

**Aiwa LCX-01** •Mini System, CD, Auto-Rev Cassette ..... **\$349.95**

**JVC MX-77** •Mini, CD Changer, dual cassette ..... **\$499.95**

**Denon D-60** •Compact, CD, dual auto-rev cassette, remote ..... **\$699.95**

**JVC MXS-2** •Mini System, CD, dual cassette, ..... **CALL**

**JVC MXC9S** •Compact, CD Changer, Dual cassette ..... **CALL**

**Audio Systems**

**JVC MX-44 Mini Audio System**

- 25 watts per channel •Full function remote
- 32 track programmable CD player •Digital tuner with 40 presets •Cassette deck with Dolby B •2-way bass reflex speakers

Our Low Price **\$399.95** (JVC MX44)

**Craig HS1001** •Mini System, CD, Cassette ..... **\$109.95**

**Casio MS-102CD** •Micro System, CD, Cassette, remote ..... **\$149.95**

**Aiwa NSX-3500** •Mini, 3-CD changer, dual reverse cassette ..... **\$499.95**

**Aiwa NSX-D707** •Mini System, 3-CD Changer, Dual Cassette, remote ..... **\$599.95**

**Technics SC-CH555** •Mini, 3-CD Changer, Dual auto-rev Cassette ..... **CALL**

**Technics SC-S2450** •Rack, 130 watts/scr, 5-disc CD Changer, Dual Cassette ..... **CALL**

**Turntables/Cartridges**

**Shure V-15 Type V-MR Deluxe Micro Ridge Phono Cartridge**

- Micro ridge stylus tip •Excellent trackability
- Dynamic stabilizer •Side-guard stylus protection •Duo-point alignment gauge •Top rated design

Our Low Price **\$129.95** (SHU V15-MR)

**Audio Technica AT-331LP** •Universal Mount Cartridge, line-contact ..... **\$39.95**

**Stanton 680EL** •DJ Pro Standard Mount Cartridge, extra stylus ..... **\$59.95**

**Technics SL-BD20** •Turntable, belt-drive, semi-automatic ..... **\$99.95**

**Gemini XL-BD10** •Semi-Auto Turntable, belt, pitch ..... **\$99.95**

**Technics SL-QD33K** •Fully Auto Quartz Turntable ..... **\$174.95**

**Gemini XL-1800QII** •Pro Turntable, manual, pitch ..... **\$299.95**

**Cassette Decks**

**Technics RS-TR232 Auto-Reverse Dual Cassette Deck**

- Dolby B & C noise reduction •Dolby HX-Pro headroom extension •Full-logic solenoid feather-touch transports
- Electronic tape counter •Cue & review •High speed dubbing

Our Low Price **\$159.95** (TEC RSTR232)

**Teac V-370** •Dolby B, auto-tape select ..... **\$74.95**

**JVC TDW-106** •Dual Cassette, Dolby B ..... **\$99.95**

**Technics RS-TR333** •Dual Cassette, auto-rev, Dolby B/CMX-Pro ..... **\$189.95**

**Aiwa ADF-810** •3 head, Dolby B/C/HX-Pro, remote ..... **\$269.95**

**Teac W-6000R** •Dual Auto-Reverse, Dolby B/C/HX-Pro ..... **\$429.95**

**Aiwa XKS-9000** •4-motors, Dolby SB/B/C/HX-Pro ..... **\$699.95**

**Cassette Decks**

**JVC TDW309 Dual Cassette Deck**

- Dual auto-reverse •Deck 1, play, Deck 2, play & record •Dolby B, C & HX-Pro •Pitch control & mic mixing •Full logic silent mechanism •Music scan for up to 99 selections

Our Low Price **\$199.95** (JVC TDW309)

**Teac V-510** •Dolby B/C, HX-Pro, fine bias ..... **\$119.95**

**Sherwood DD-2010C** •Double Cassette Deck, Dolby B/C ..... **\$124.95**

**Teac W-700R** •Dual Auto-reverse Cassette, Dolby B/C/HX-Pro ..... **\$189.95**

**Technics RS-TR535** •Dual Auto-Rev, Dolby B/C, HX-Pro ..... **CALL**

**Technics RS-TR777** •Dual Auto-Rev, Dolby B/C, HX-Pro, fine bias ..... **CALL**

**Technics RS-TR979** •Dual Auto-Rev, Dolby B/C, HX-Pro, line bias ..... **CALL**

**Disco Equipment**

**Gemini PMX-1000 DJ Preamp/Mixer**

- 2-phon/4-line & 1-microphone inputs •Bass & treble controls •Auto mute talkover
- Adjustable & removable crossfader controls •DJ booth output •Cueing

Our Low Price **\$159.95** (GMI PMX1000)

**Gemini MB-415** •3-Way Speakers, 15" woofer ..... Each **\$179.95**

**Audio Technica AM200** •DJ Mixer, sound effects generator ..... **\$179.95**

**Gemini PMX-2000** •DJ Mixer, 7-band/eq EQ, voice synthesizer ..... **\$219.95**

**Gemini PVX-160** •Power Amp, 135 watts/channel ..... **\$349.95**

**Stanton CD33** •Dual CD Player, pitch control ..... **CALL**

**NESS Disco Lights** •For Complete Selection ..... **CALL**

**Audiophile Headphones**

**Beyerdynamic DT-100 Professional Monitoring Headphones**

- Provides the accuracy demanded by recording engineers & critical audiophiles •Excellent isolation, high sound pressure levels, wide dynamic range & frequency response
- Comfortable soft ear cushions

Our Low Price **\$199.95** (BEY DT100)

**Audio Technica ATHM3X** •Closed Back, digital series ..... **\$24.95**

**Koss Pro4AA** •Closed ear, for home/pro use ..... **\$59.95**

**Sennheiser HD-450II** •Open Air, digital-ready ..... **\$79.95**

**Koss JCK/200** •Kordless Stereophones, w/transmitter ..... **\$89.95**

**AKG K240M** •Studio Reference Headphones, circum-aural ..... **\$89.95**

**AKG K240DF** •Calibrated Studio Reference Headphones ..... **\$109.95**

**Sony Headphones**

**Sony MDR-V505 Digital Monitor Series Headphones**

- Full-size earpads provide excellent isolation •Lightweight for greater comfort •Folding headband •Litz cord for minimal signal loss •Response: 10-25,000 Hz •Gold-plated UniMatch® plug

Our Low Price **\$39.95** (SON MDRV505)

**Sony MDR-V100** •Studio Monitor, supra-aural ..... **\$19.95**

**Sony MDR-CD50** •Digital Reference, circum-aural ..... **\$29.95**

**Sony MDR-V200** •Studio Monitor, Closed, folding ..... **\$39.95**

**Sony MDR-CD350** •Digital Reference, circum-aural ..... **\$49.95**

**Sony MDR-V400** •Digital Series, Closed ear ..... **\$59.95**

**Sony MDR-V600** •Studio Monitor, reversible earpads, folding ..... **\$69.95**

**Audio/Video Accessories & Tape**

**AudioSource LLC3 3 in 1 Utility Disc**

- An easy to use, narrated test disc, especially useful for owners of Dolby Pro Logic Surround systems
- 2-precision brushes gently clean the laser lens

Our Low Price **\$19.95** (ASO LLC3)

**TDK P120HS** •8mm Video Tapes, metal particle ..... each **\$3.79**

**Maxell XLIIS-100** •High Bias Audio Cassettes ..... 2-Pack **\$5.49**

**TDK T120STD** •Standard VHS Tapes ..... 3-Pack **\$5.95**

**Maxell R-120DM** •DAT Recording Tape ..... each **\$6.95**

**Discwasher VHS** •VHS Head Cleaner, non-abrasive ..... **\$7.95**

**Creative Point CD200T** •200 CD-Tower, swivel base ..... **\$24.95**

**PROTECT YOUR INVESTMENT**  
With J&R's Extended Warranty Program...Ask For Details!

**For More Savings, Please Turn To Next Page** ➔

**TO ORDER BY MAIL:**  
SEND MONEY ORDER, CERTIFIED OR CASHIER'S CHECK, MASTERCARD, VISA, AMERICAN EXPRESS OR DISCOVER CARD (Include Interbank No. expiration date and signature) To: J&R MUSIC WORLD, DEPT. SR1093, 59-50 QUEENS-MIDTOWN EXPRESSWAY, MASPETH, QUEENS, NY 11378. Personal and business checks must clear our Authorization Center before processing. Shipping, handling & insurance charge is 5% of total order with a \$4.95 minimum for orders up to \$500; add 4% for orders over \$500 to \$1000; add 3% for orders over \$1000. For heavy/oversized items or shipments by air, please call for information. DO NOT SEND CASH. Sorry, no COD's. NY residents, please add sales tax.  
**ORDERS SUBJECT TO VERIFICATION AND ACCEPTANCE. NOT RESPONSIBLE FOR TYPOGRAPHICAL OR PICTORIAL ERRORS**  
ALL MERCHANDISE SHIPPED BRAND NEW, FACTORY FRESH, AND 100% GUARANTEED. Copyright 1993 J&R Music World





**Video Recorders**



**Panasonic PV-4301**  
**4-Head VHS Video Recorder**  
 •Program Director remote control •Easy-to-read English/Spanish on-screen menu •181 channel cable-compatible tuner •All channel auto set •Digital auto tracking •Auto daylight savings time

Our Low Price **\$229<sup>95</sup>** (PAN PV4301)

**JVC HR-DX42**  
 •VHS, 4 heads, digital tracking **\$239<sup>95</sup>**

**Panasonic PV-4351**  
 •VHS Hi-Fi Stereo, 4 heads **\$299<sup>95</sup>**

**JVC HR-D990**  
 •VHS Hi-Fi Stereo, 4-heads, jog/shuttle **\$369<sup>95</sup>**

**Aiwa HV-MG360**  
 •Multi-System VHS Recorder, dual volt. remote **\$499<sup>95</sup>**

**Sony SLV-400**  
 •VHS Recorder, 4-heads **CALL**

**Go Video GV-3060X**  
 •Hi-Fi Stereo Dual Deck VHS Recorder **CALL**

**Video Recorders**



**JVC HR-DX62**  
**HiFi Stereo VCR**  
 •4-head system with noiseless stills & slow motion •Hyper bass system •Digital AV tracking •Bilingual on-screen menu •Auto head cleaner •Dual audio outputs •181 channel cable-ready

Our Low Price **\$349<sup>95</sup>** (JVC HRDX62)

**Panasonic PV-2301**  
 •VHS Recorder, on-screen, remote **\$199<sup>95</sup>**

**Samsung VR-8702**  
 •VHS Hi-Fi Recorder, 4-head, on-screen **\$259<sup>95</sup>**

**JVC HR-D820U**  
 •4 head VHS Recorder, jog/shuttle **\$259<sup>95</sup>**

**General Electric VG-4217**  
 •Hi-Fi Stereo VHS Recorder **\$259<sup>95</sup>**

**Toshiba M648**  
 •Hi-Fi Stereo VHS Recorder, 4-heads **\$329<sup>95</sup>**

**Sony SLV-750HF**  
 •Hi-Fi Stereo VHS, 4-head, VCR+ built-in **CALL**

**Television/Video**



**JVC HRP1**  
**Portable HiFi VCR with 3" Color Monitor**  
 •Smallest portable VCR able to play full-size VHS cassettes •Built-in speaker & dual headphone jacks •LCD monitor •4 head system •Includes remote, AC adapter/charger & carrying case

Our Low Price **\$499<sup>95</sup>** (JVC HRP1)

**Samsung TN3157M**  
 •13" Color TV, rotary **\$149<sup>95</sup>**

**Panasonic PV-M2023**  
 •VHS Recorder/20" TV Combo **\$499<sup>95</sup>**

**Sony GVS-50**  
 •8mm Video Walkman, 4' active matrix **CALL**

**Sony KV-13TR28**  
 •13" Color TV, A/V window on-screen remote **CALL**

**Sony KV-20TS29**  
 •20" Stereo Color TV, on-screen, remote **CALL**

**Sony KV-27TS32**  
 •27" Stereo Color Monitor **CALL**

**This Month's**

**New On VHS**



**Last Of The Mohicans**  
**\$19<sup>95</sup>**

**Your Choice \$16<sup>95</sup>**

**A League Of Their Own**  
**Far & Away (P/S or LTX)**  
**Death Becomes Her**  
**Honeymoon In Vegas**  
**Barton Fink**  
**My Own Private Idaho**  
**Raising Cain**  
**Sneakers**

**Camcorders**



**Sony CCD-TR61**  
**8mm Hi-Fi Stereo Camcorder**  
 •10:1 variable speed power zoom •Built-in wide-angle lens •1-lux sensitivity •4-mode programmable auto exposure •Full-range inner focus system

**CALL** (SON CCDTR61)

**Sharp VLL-72**  
 •VHS Camcorder, 12X, 1-lux **\$649<sup>95</sup>**

**Panasonic PV-800**  
 •VHS Camcorder, 12:1 power zoom, 2-lux **\$659<sup>95</sup>**

**JVC GRA-X55**  
 •VHS-C Camcorder, 10:1 zoom, 1-lux **CALL**

**Sony CCD-FX520**  
 •6mm Camcorder, 12:1 variable power zoom **CALL**

**Panasonic PV-43**  
 •VHS-C Camcorder, 20X digital zoom **CALL**

**Sony CCD-TR31**  
 •6mm Handycam, 10:1 zoom, 1-lux **CALL**

**Video Accessories/Editors**



**Everquest V2010**  
**Clearimage™ Video Stabilizer**  
 •Digitally defeats Macrovision caused distortion •Ultra-compact •Operates on one 9-volt battery (included)

Our Low Price **\$49<sup>95</sup>** (EVE V2010)

**Vidpro CX-40U**  
 •Cordless Halogen Video Light **\$59<sup>95</sup>**

**Go Video CRP02**  
 •Cable Ready Plus **\$99<sup>95</sup>**

**National Captioning VR-100**  
 •Caption Decoder, converts to words on screen **\$129<sup>95</sup>**

**Sima Video Ed/It™ 4**  
 •Special Effects Editor **\$249<sup>95</sup>**

**Videoics TM1**  
 •Video Titmaker, broadcast quality **\$399<sup>95</sup>**

**JVC JX-S900**  
 •Remote Audio/Video Selector **\$549<sup>95</sup>**

**Speaker/TV Mounts & Stands**



**Now Available!** **OMNIMOUNT SYSTEMS**

**Omnimount Systems Speaker Brackets**  
 •Universal wall mount for compact speakers (up to 8 lbs.) with rear insert or mounting capability •Includes all mounting hardware and drill bit •Black finish

Our Low Price **\$59<sup>95</sup>** (OMN 25RSTUMK-BK)

**Plateau L-1000**  
 •Speaker Stands, 5'25" tall, black, pair **\$17<sup>95</sup>**

**Target BT1**  
 •Tilt/swivel Speaker Wall Bracket, pair **\$29<sup>95</sup>**

**Quick Lok A300**  
 •Microphone Stand with boom attachment **\$34<sup>95</sup>**

**Altra TV-2100**  
 •TV/Video Cabinet, black **\$79<sup>95</sup>**

**Lucasey HMS1724-BK**  
 •TV Wall Mount, holds 75 lbs., black **\$99<sup>95</sup>**

**Plateau MA4**  
 •Audio Rack, all metal, 4-shelves, black **\$149<sup>95</sup>**

**Remote Controls**



**Terk IR45**  
**Leapfrog Remote Extender System**  
 •Extend the operating range of your remote control up to 150 feet •Dual converter system changes signal from infrared to RF & back so that you can enjoy full remote capability throughout your home

Our Low Price **\$69<sup>95</sup>** (TRK IR45)

**Memorex VR3**  
 •Preprogrammed remote for 3 video units **\$12<sup>95</sup>**

**Sony RM-V10**  
 •Preprogrammed remote for 3 video units **\$19<sup>95</sup>**

**Gemstar VCR Plus +**  
 •VCR Instant Programmer **\$39<sup>95</sup>**

**One -For-All URC-6885**  
 •VCR Pro 4, Preprogrammed remote **\$69<sup>95</sup>**

**Memorex CP8-Turbo**  
 •Universal remote control, 156 commands **\$79<sup>95</sup>**

**Recoton V900SX**  
 •Wireless Video Sender **\$79<sup>95</sup>**

**TV/AM/FM Antennas**



**Terk TV20**  
**Indoor Amplified TV/Video Antenna**  
 •Receive more stations with less noise & "ghosting" •Utilizes 2 tuned receiving elements & built-in filter •Only needs slight rotation for best reception •Low-noise, high-gain amplifier

Our Low Price **\$79<sup>95</sup>** (TRK TV20)

**Terk 9300**  
 •Amplified FM Antenna, to 25dB gain **\$19<sup>95</sup>**

**Terk AF3000**  
 •Amplified AM/FM Antenna **\$34<sup>95</sup>**

**Parsec ARC**  
 •AM/FM Electronic Antenna, frequency select **\$49<sup>95</sup>**

**Recoton TV600**  
 •VHF/UHF/FM Power Wave Antenna **\$69<sup>95</sup>**

**Terk AF-9925**  
 •Hi AM/FM Amplified Antenna, 42 db gain **\$79<sup>95</sup>**

**Audio Prism 7500**  
 •Passive FM, 7-ft 2-inch half-wave antenna **\$179<sup>95</sup>**

**Cameras**



**Polaroid Captiva**  
**SLR/Instant Camera**  
 •First Polaroid compact camera to use instant film •Built-in picture viewing & storage chamber •Folding design •Bright parallax-free view finding •Self timer •Out of film warning •State-of-the-art 112/107mm lens •Uses Polaroid Captiva95 film

Our Low Price **\$139<sup>95</sup>** (POL CAPTIVA)

**Olympus Trip10**  
 •Compact 35mm Camera, built-in flash **\$49<sup>95</sup>**

**Minolta Freedom AF35**  
 •35mm Auto-focus Camera **\$89<sup>95</sup>**

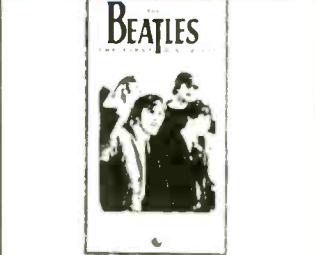
**Fuji Discovery 190 Zoom**  
 •35-55mm Zoom Lens Camera **\$129<sup>95</sup>**

**Nikon Lite Touch**  
 •Ultra-Compact 35mm, auto focus/exposure **\$149<sup>95</sup>**

**Olympus Stylus Zoom**  
 •35mm Compact Camera, 35-70mm 2x zoom lens **\$199<sup>95</sup>**

**Nikon N-5005 Kit**  
 •Single Lens Reflex Camera, 35-70mm lens **CALL**

**Music On VHS**



**Beatles: First US Visit**  
**\$19<sup>95</sup>**

**Your Choice \$16<sup>95</sup>**

**Beatles:**  
**A Hard Day's Night**  
**Help**  
**Magical Mystery Tour**  
**Tangerine Dream:**  
**Three Phase**  
**Space Music**  
**The Who:**  
**The Kids Are Alright**

**For More Savings, Please Turn To Previous Page**

**SE HABLE ESPANOL**



**ORDER TOLL FREE 24 HOURS A DAY 7 DAYS A WEEK**  
**1-800-221-8180**  
 J&R Music World, Dept. SR1093, 59-50 Queens-Midtown Expressway, Maspeth, Queens, NY11378  
**FAX 718-497-1791**

Outside U.S.A. Call:  
 1-718-417-3737







**Super Specials!**

**New On Laser Disc**

WIDESCREEN COLLECTOR'S EDITION

**STAR WARS TRILOGY**

THE DEFINITIVE COLLECTION

**Star Wars Trilogy**

**\$199<sup>95</sup>**

- Also Available:
- Alive (LTX) .....\$34<sup>95</sup>
  - Bad Lieutenant .....\$29<sup>95</sup>
  - Beauty & The Beast (CLV) .....\$26<sup>95</sup>
  - Benny & Joon .....\$29<sup>95</sup>
  - The Crying Game (LTX) .....\$29<sup>95</sup>
  - A Few Good Men .....\$34<sup>95</sup>
  - Malcolm X(LTX) .....\$29<sup>95</sup>
  - Nemesis (LTX) .....\$29<sup>95</sup>
  - No Where To Run .....\$29<sup>95</sup>
  - Scent of A Woman (P/S or LTX) .....\$34<sup>95</sup>
  - Unforgiven(LTX) .....\$34<sup>95</sup>

**Music On Laser Disc**



**World According To John Coltrane**

**\$34<sup>95</sup>**

- Also Available:
- The Who: Kids Are Alright .....\$24<sup>95</sup>
  - Tangerine Dream: Three Phase .....\$24<sup>95</sup>
  - Neil Young: Unplugged .....\$24<sup>95</sup>
  - Joe Jackson: Laughter & Lust .....\$29<sup>95</sup>
  - Kiss: Confidential .....\$29<sup>95</sup>

**Digital Recorders**

**Sony TCD-D7 DAT Walkman Player/Recorder**

•Long play mode for up to 4 hours of recording & playback •Anti-shock mechanism •High speed AMS search •Digital coaxial & optical input & output •Carrying case supplied

Our Low Price **\$599<sup>95</sup>** (SON TCCD7)

**Aiwa AMD-100 MiniDisc Recorder/Player**

•Digital recording & playback •Quick random access with 10-key operation •Mic input •Shock proof memory •Table of Contents edit function •21-selection memory •Includes AC adaptor, case, Ni-Cad batteries, headphones & optical cords

Our Low Price **\$649<sup>95</sup>** (AIW AMD100)

**Portable CD Players**



**Technics SL-XP700 Ultra-Thin Rechargeable Portable CD Player**

•8x oversampling •18-bit digital filter •24-track programmable •Backlit LCD display •Includes remote, rechargeable batteries & carrying case

Our Low Price **\$149<sup>95</sup>** (TEC SLXP700)

- Sony D-121** .....\$119<sup>95</sup>  
•1-bit, 22-track programming, with headphones
- Sony D-223** .....\$169<sup>95</sup>  
•1-bit, rechargeable, headphones, remote
- Panasonic SL-S441** .....\$189<sup>95</sup>  
•Portable/Car unit, rechargeable, includes car adaptors
- Sony D-113CR** .....\$199<sup>95</sup>  
•1-bit, credit-card sized remote, rechargeable
- Panasonic SL-S551C** .....\$229<sup>95</sup>  
•Portable/Car, Digital signal processing, 1-bit
- Sony D-822K** .....\$249<sup>95</sup>  
•Car Discman, 1-bit, remote

**Personal Stereo**



**Sony WM-FX45 Walkman Radio/Cassette**

•Digital AM/FM tuner with 10 presets •Auto-reverse cassette with Dolby B •Mega Bass •Anti-rolling mechanism •Clock/alarm •Includes headphones & belt clip

Our Low Price **\$89<sup>95</sup>** (SON WMFX45)

- Panasonic RQ-V54** .....\$29<sup>95</sup>  
•AM/FM/Cassette
- Sony WM-FX22** .....\$39<sup>95</sup>  
•AM/FM/Cassette, rechargeable, anti-rolling
- Aiwa HS-TX320** .....\$49<sup>95</sup>  
•AM/FM digital tuner/Cassette
- Aiwa HS-TX410** .....\$59<sup>95</sup>  
•AM/FM digital tuner/Auto-reverse Cassette
- Sony WM-FX41** .....\$69<sup>95</sup>  
•AM/FM/Auto-Reverse Cassette Walkman
- Panasonic RQ-V190** .....\$79<sup>95</sup>  
•AM/FM digital tuner, auto-reverse Cassette

**Portable Stereo**



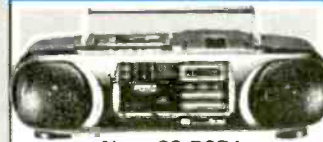
**Sony CFS-200 AM/FM Cassette Portable Stereo**

•Records from AM/FM tuner or from built-in microphone •Full auto shut-off •2-way speakers •AC/DC power supply

Our Low Price **\$39<sup>95</sup>** (SON CFS200)

- Casio CP400** .....\$44<sup>95</sup>  
•AM/FM/Dual: Cassette, surround sound
- Panasonic RX-FS410** .....\$49<sup>95</sup>  
•AM/FM/Cassette Stereo
- Panasonic RX-CS710** .....\$59<sup>95</sup>  
•AM/FM/Cassette, 3 pc stereo
- Sony CFS-1030** .....\$69<sup>95</sup>  
•AM/FM/Cassette Stereo, 3-pc, EQ
- JVC RC-135** .....\$79<sup>95</sup>  
•AM/FM digital tuner, Cassette recorder
- Aiwa CA-W51** .....\$89<sup>95</sup>  
•AM/FM/dual cassette, EQ, mix mixing

**CD Portable Stereo**



**Aiwa CS-DSR1 Radio/Cassette/CD Portable Stereo**

•Digital tuning with 24 station presets •CD features 20-track programming •110/220 volt for worldwide operation •2 x 4" speakers •6 watts output

Our Low Price **\$99<sup>95</sup>** (AIW CSOSR1)

- Sony CFD-10** .....\$119<sup>95</sup>  
•AM/FM/CD, 34-track programming
- Sharp WQ-CD220** .....\$129<sup>95</sup>  
•AM/FM/CD/Dual Cassette, X-Bass
- Sony CFD-440** .....\$149<sup>95</sup>  
•AM/FM/CD/Cassette, Detachable 2-way speakers
- JVC RC-X250** .....\$159<sup>95</sup>  
•AM/FM/Cassette/CD, remote
- Panasonic RX-DS202** .....\$189<sup>95</sup>  
•AM/FM/Auto-reverse Cassette/CD
- Panasonic RX-DT610** .....\$229<sup>95</sup>  
•AM/FM/Dual Cassette/CD, digital tuner, 3 pc

**Electronic Keyboards**



**Casio S-1 Song Star Karaoke**

•Dual cassette with continuous play •AM/FM •5-band graphic equalizer •Echo & balance controls •2-mic jacks •Includes mic & holder for singing along •AC/DC

Our Low Price **\$99<sup>95</sup>** (CAS S1)

- Yamaha PSS-50** .....\$39<sup>95</sup>  
•Porta-Sound, Mid-sized, 32-keys
- Yamaha PSS-11** .....\$59<sup>95</sup>  
•32 mid-size keys, auto harmony & sustain
- Casio CA-110** .....\$89<sup>95</sup>  
•Full-size, 49-keys, 100 instrument sounds
- Casio CT-638** .....\$149<sup>95</sup>  
•61-key full-size, tone bank
- Yamaha PSR-150** .....\$199<sup>95</sup>  
•61-full size keys, stereo, 12 note polyphonic
- Casio CT-700** .....\$249<sup>95</sup>  
•Piano Sound, 61-keys

**Electronic Reference**



**Psion Series 3 Pocket-Sized 256K Computer**

•Built-in Microsoft Word compatible software including word processor & outline •Database •Time & Personal management •Auto dialing •Graphics •Multi tasking •240 x 80 high contrast screen •2 disk drives

Our Low Price **\$299<sup>95</sup>** (PSN SER100150)

- Seiko TR-3000** .....\$49<sup>95</sup>  
•Deluxe European 4-Language Translator
- Sharp EL-6250** .....\$49<sup>95</sup>  
•Databank/auto-dialer, 400 names/numbers
- Casio SF-4600** .....\$59<sup>95</sup>  
•Databank/Phone Directory, 64K
- Franklin LM-6000** .....\$179<sup>95</sup>  
•Speaking Language Master
- Sony DD-1EX** .....\$199<sup>95</sup>  
•Discman Electronic Book Player
- Sharp OZ-9600 II** .....\$479<sup>95</sup>  
•Graphic Wizard, 512K

**Telephones & Accessories**



**AT&T 9100 900MHz Cordless Telephone**

•10-channel, best channel auto search •16-bit digital security code •4.5 hr. continuous talk time •Volume control on handset •Redial, hold, mute, & flash •10 # programmable presets •Fully digital link between handset & base

Our Low Price **\$249<sup>95</sup>** (ATT 9100Z)

- Cidco SN30** .....\$49<sup>95</sup>  
•Call ID, 30# memory, displays number/date/time
- Southwestern Bell 1710** .....\$69<sup>95</sup>  
•Freedom Phone 10-channel Cordless Phone
- Panasonic KX-T2100** .....\$69<sup>95</sup>  
•Answering Machine, dual microcassette
- Panasonic KX-T3910** .....\$119<sup>95</sup>  
•Cordless Phone, 10-channel
- AT&T 1343** .....\$129<sup>95</sup>  
•Digital Answering System, 26 min recording time
- Sony SPP-A20** .....\$149<sup>95</sup>  
•10-Channel Cordless Phone & Answering System

**J&R Catalogues**



For FREE Catalogue, Please Check:  
 Audio/Video/Music     Computers  
 Or Call Toll-Free 1-800-221-8180

Write To:  
**J&R Music World**  
 Department SR1093  
 59-50 Queens-Midtown Expressway  
 Maspeth, NY 11378

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**PROTECT YOUR INVESTMENT With J&R's Extended Warranty Program...Ask For Details! CALL US TOLL FREE FOR ITEMS NOT LISTED IN THIS AD**

**TO ORDER BY MAIL:**  
 SEND MONEY ORDER, CERTIFIED OR CASHIER'S CHECK, MASTERCARD, VISA, AMERICAN EXPRESS or DISCOVER CARD (Include Interbank No. expiration date and signature) To: J&R MUSIC WORLD, DEPT. SR1093, 59-50 QUEENS MIDTOWN EXPRESSWAY, MASPETH, QUEENS, NY 11378. Personal and business checks must clear our Authorization Center before processing. Shipping, handling & insurance charge is 5% of total order with a \$4.95 minimum for orders up to \$500; add 4% for orders over \$500 to \$1000; add 3% for orders over \$1000. For heavy/oversized items of shipments by air, please call for information. DO NOT SEND CASH. Sorry, no COD's. NY residents, please add sales tax. ORDERS SUBJECT TO VERIFICATION AND ACCEPTANCE. NOT RESPONSIBLE FOR TYPOGRAPHICAL OR PICTORIAL ERRORS. ALL MERCHANDISE SHIPPED BRAND NEW, FACTORY FRESH, AND 100% GUARANTEED. Copyright 1993 J&R Music World



CIRCLE NO. 35 ON READER SERVICE CARD

# CLASSICAL MUSIC



**NEW RECORDINGS  
REVIEWED BY  
ROBERT ACKART,  
RICHARD FREED, DAVID  
HALL, GEORGE JELLINEK,  
ERIC SALZMAN, AND  
DAVID PATRICK STEARNS**

**BEETHOVEN: Violin Concerto; Romances**  
Kremer (violin); Chamber Orchestra of Europe.  
Harnoncourt

TELDEC 74881 (57 min)

**Performance: Noble, but . . .  
Recording: Excellent**

In his earlier recording of the Beethoven Violin Concerto, with Neville Marriner on Philips, Gidon Kremer played a cadenza composed for him by Alfred Schnittke that clashed jarringly with the work itself. This time his even finer collaboration with Nikolaus Harnoncourt is spoiled by a cadenza Kremer himself arranged from the one Beethoven wrote for his piano arrangement of the concerto—introducing an offstage piano for a still more incongruous effect. It's a shame, for this is otherwise a noble presentation of the work,



The violinist Gidon Kremer

and the two Violin Romances have never sounded better; Teldec has recorded it all beautifully. I hope that Kremer—a superb musician who obviously thinks deeply about the Beethoven concerto—will someday get around to recording this work without mood-breaking distractions. *R.F.*

**BRAHMS: Symphony No. 1  
DVOŘÁK: Othello**

Cleveland Orchestra. Ashkenazy  
LONDON 436 289 (62 min)

**Performance: Fleet  
Recording: Full-bodied**

Vladimir Ashkenazy is to record all four Brahms symphonies in Cleveland, with a Dvořák piece filling out each disc. His performance here of the First, with a good, solid start, fleet tempos, and fine momentum

throughout, is the sort of thing that would be more than satisfying in the course of a concert, particularly with such fine orchestral playing (captured in rich, full-bodied sound). Considering the other recordings available, however, this new entry, for all its virtues, is not terribly competitive. While I would find Ashkenazy's fluent, straightforward account easier to live with than the tiresome pulling and tugging to which this symphony is all too often subjected, there *is* a bit more drama in the score than he cares to bring out. Curiously, he finds every spot of drama in Dvořák's seldom heard (if no longer seldom recorded) *Othello*. *R.F.*

**BRUCKNER: Symphony No. 7**

Berlin Philharmonic, Barenboim  
TELDEC 77118 (71 min)

**Performance: Luxuriant  
Recording: Very good**

**BRUCKNER: Symphony No. 7**

NDR Symphony, Wand  
RCA VICTOR 61398 (65 min)

**Performance: The purist view  
Recording: Good**

Daniel Barenboim's current Bruckner cycle, handsomely recorded at Berlin's Deutsches Schauspielhaus, has brought us impressive versions of the valedictory Ninth and the formidable Fifth, notable both for his command of the big lines and for the superb orchestral execution. Those standards are upheld splendidly in the Seventh, but his interpretive choices may raise a few eyebrows.

The serene opening melody of the first movement here achieves an almost *Tristan*-esque voluptuousness in its little swells of phrase. The sublime slow movement boasts some of the most gorgeous string tone this side of the Philadelphia Orchestra under Stokowski or Ormandy, and, as might be expected, the mighty climax includes all the percussive embellishments (cymbals, timpani, triangle) that the composer added reluctantly for the 1884 world premiere under Artur Nikisch. The finale is a curiously stop-and-go affair, with heavy underlining of the recitative episodes. The gear-shifting suggests that Barenboim adopted Nikisch's "conductor's markings."

Heard immediately following Barenboim's, Günter Wand's live recording from Hamburg's Musikhalle seems painfully austere: absolutely straightforward, chastely classic in phrasing from start to finish. His pacing for the slow movement is a full 3 minutes faster than Barenboim's, yet it doesn't seem rushed, and, like Bruno Walter (Sony) and Herbert Blomstedt (Denon), he feels no need for added percussion at its climax. No complaints about the scherzo, and the finale reaches its triumphant goal swiftly and without hesitation.



Choosing between these two fine but polar-opposite interpretations is a matter of taste—some like it hot, some don't. They're both well recorded, too, with spacious sound, though Teldec's recording has just a shade more presence than RCA's. *D.H.*

**GOULD: Fall River Legend—Suite  
THOMPSON: Symphony No. 1**

New Zealand Symphony, Sedares  
KOCH 3-7182 (52 min)

**Performance: Excellent  
Recording: Excellent**

Morton Gould's complete 1947 score for Agnes de Mille's ballet *Fall River Legend*—based on the 1892 Lizzie Borden murder case—is available on an Albany Records CD, but this is the first digital recording of the six-movement suite he later extracted (CD reissues of two analog recordings, one conducted by the composer and one by Howard Hanson, have also appeared). Focusing less on the story of the ballet than on the social milieu of Fall River in the 1890's, the suite adds up to a set of highly stylized dances—bittersweet with menacing undertones—decked out with Gould's brilliantly effective instrumentation. The New Zealand Symphony under James Sedares turns in a highly capable performance, beautifully recorded.

Randall Thompson's 1929 First Symphony, composed during his sojourn in Italy as a Rome Prize laureate, started as a baritone-and-orchestra setting of one of the odes of Horace but finally turned into an amiable free-form symphony in three movements with organ playing a curious supporting role. The best part is the nocturne-like slow movement, and again we have an excellent performance and recording. A better example of Thompson as symphonist, however, is his Second, also recorded for Koch (along with his Third) by the New Zealand Symphony, then under the direction of the late Andrew Schenck. But if you want Thompson at his best, turn to his beautifully fashioned choral works. *D.H.*

# RAO'S HOMEMADE™

**"It's THE sauce"™**

**From the Famous New York City Restaurant That's Frequented  
by Celebrities and Stars (who wait 4-6 months for a reservation!)**

*"It's the toughest reservation in the U.S.A." NY Magazine*

◆ **All Natural** ◆ **No Cholesterol** ◆ **No Preservatives**

Pure Olive Oil  
Fresh Basil  
Fresh Onions  
Fresh Garlic

**Compare our  
ingredients to  
all other brands**



Made from  
the sweetest  
most expensive  
Tomatoes  
in the World—  
imported from the  
San Marzano region  
of Italy

Calories – 60 per 4oz.  
Serving (½ cup)  
Cholesterol – 0  
Sat. Fat – 1 gram

**PLACE YOUR ORDER**



**1-800-HOMEMADE**

**Turns Ordinary Pasta at Home into a Gourmet Meal  
and you don't need a reservation!**

Use this handy order form

SEND CHECK, MONEY  
ORDER OR CREDIT CARD  
INFORMATION TO:

**RAO'S SPECIALITY FOODS**

P.O. BOX E

BABYLON, NY 11702

\* SHIPPED VIA UPS

NO P.O. BOXES PLEASE!

Please allow 4 to 6 weeks  
for delivery

Please ship the following order:

\_\_\_\_\_ x 3 JARS @ \$24.85 Total enclosed \$ \_\_\_\_\_  
includes shipping and handling HFM-17

Name \_\_\_\_\_

Street Address\* \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Daytime Phone \_\_\_\_\_

Credit Card AMEX  VISA  MC

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

**Special  
Offer**

THREE (3) 32oz Jars  
(each feeds 5)  
SHIPPED DIRECT  
TO YOUR HOME

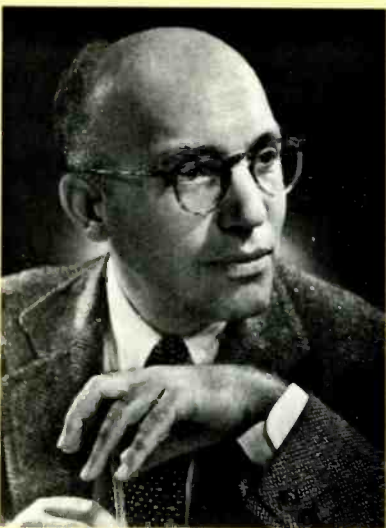
**Only \$24<sup>85</sup>**

# "Lost in the Stars"

The conventional wisdom depicts Kurt Weill (1900-1950) as a relentless German radical and innovator concerned with issues of social justice and operatic reform who heard the corrupting siren song of Broadway and turned into an early Andrew Lloyd Webber.

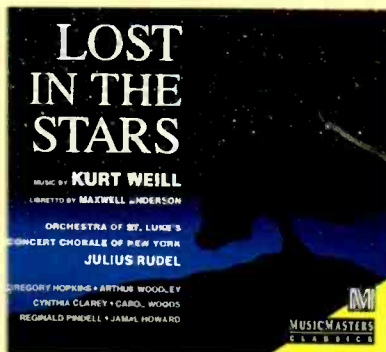
As is often the case, the conventional wisdom is wrong. Weill continued to innovate and to be concerned with artistic and social reform throughout his American career, from the anti-war *Johnny Johnson* (1936) to *Lost in the Stars* (1949), a Broadway musical in the form of a choral play about racial injustice in South Africa.

The material of *Lost in the Stars*—which has now received its first recording since the original-cast album—is taken from *Cry, the Beloved Country*, a famous (or once-famous) novel by the South African writer Alan Paton about the tragic relations between a black family and a white family in South Africa in the 1940's. For Weill and his librettist, Maxwell Anderson, it was a not very subtle parable about the American racial scene as well. The racial story is personified in the sympathetic characters of the preacher Stephan Kumalo (played on Broadway by Todd Duncan, who was Gersin-



Kurt Weill

win's original Porgy) and the white landowner James Jarvis. Most of the best-known numbers are solos: *Trouble Man*, *Stay Well*, and, of course, the title song (for the preacher and the chorus). But in many ways the heart of the work is in the ensembles—*Train to Johannesburg*, *The Search* by Kumalo for his missing son, *Murder in Parkwood* and the



subsequent *Fear* chorus, *Cry, the Beloved Country*, and the final scenes of Act II—which help to set the stage as well as comment on the action, giving it an epic/tragic dimension.

Julius Rudel, the former artistic director of the New York City Opera, has a long history with Weill's music. He first produced and directed *Lost in the Stars* in 1958, initiating its second life in the opera house. He assembled an excellent operatic cast for the new recording, including Arthur Woodley as Stephen Kumalo, Cynthia Clarey as his son's girl friend, Irina, and Gregory Hopkins as the chorus leader, a major singing role. The orchestra (using Weill's original scoring, which does not include violins) and the chorus give a capable reading under Rudel's leadership.

I, for one, am happy to have this recording, but it must be said that it is, in fact, a bit lost in the stars. The playing is solid but unstylish in the way that good musicians, capably led, turn out work without enough rehearsal. The recorded sound is an ugly show-style close-up; that can work in a strong, dramatic reading, but here it only serves to emphasize the dryness and lack of dramatic depth in the performance. This is a rare example of a music-theater recording that did not emanate from a stage production, and the lack of a stage director's hand is evident in the awkwardness of the spoken lines and the general blandness of the dramatic interpretation.

In a decade or so, when we have really come to terms with Weill's German and American legacy, someone will do it better. For now, this recording fills a big gap in an adequate if not inspired manner. E.S.

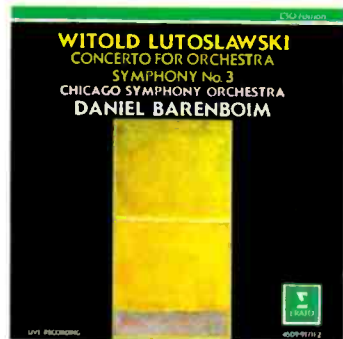
**WEILL:** *Lost in the Stars*  
Soloists; Concert Chorale of New York  
Orchestra of St. Luke's, Rudel  
MUSICMASTERS 67100 (72 min)

**HARBISON:** *Simple Daylight*; Words from Paterson; Piano Quintet  
Sylvan, Upshaw, Kalish; Boston Symphony Chamber Players  
NONESUCH 79189 (66 min)  
Performance: Excellent  
Recording: Fine

If you know of John Harbison mainly through his most popular piece, the mystical *Mirabal Songs*, he would seem to be a New Age Ned Rorem, using a predominantly tonal language with not-so-tonal techniques adding a rhetorical spice. But the song cycle *Simple Daylight*, with its dissonant expressions of revenge, illustrates his ever-increasing range as a composer. The most effective song is *Your Name*, in which a fairly innocuous musical idea grows into something monstrous during the span of a minute and a half. It's a frighteningly keen example of romantic obsession. The soprano Dawn Upshaw seems an odd choice to sing such a piece, but she must enjoy upsetting her wholesome image.

The prize of the CD, however, is *Words from Paterson*, which sets two extended passages from William Carlos Williams's lengthy free-verse poem *Paterson*. Harbison has such sympathy for the poem that the music and words seem inseparable. Scored for a wind-dominated chamber ensemble and a baritone, here Sanford Sylvan at his considerable best, the piece matches Williams's spiraling imagery with an apparently inexhaustible variety of exotic instrumental textures.

Harbison remains an uneven composer, though, as evidenced by his Piano Quintet, an exasperating work in which engaging and mundane ideas are found side by side. He also seems to lack a gift for melody, which isn't missed much in his songs because of how he externalizes the poetry's images but is sorely needed in more abstract pieces. D.P.S.



**LUTOSLAWSKI:** *Concerto for Orchestra; Symphony No. 3*  
Chicago Symphony, Barenboim  
ERATO 91711 (58 min)  
Performance: Probing  
Recording: Excellent for live

Why Witold Lutoslawski's *Concerto for Orchestra* isn't as popular as Bartók's piece of the same name, even though it's championed by a number of major conductors, is one of the great mysteries of the music world. Christoph von Dohnányi paired the two pieces on the same CD a few years back. Daniel Barenboim's excellent new version pairs it with an equally fine reading of another one of Lutoslawski's major orchestral works, the *Symphony No. 3*. The result is an extreme-

ly attractive disc that could definitely win him new admirers.

Though the performances don't necessarily surpass all others available, they have the obvious advantage of letting us hear the sleek, virtuosic Chicago Symphony Orchestra in a live recording. And Barenboim turns out to be a thoughtful interpreter, with the Furtwänglerian side of his musical personality definitely held in check: His tempos are brisk, and his manner is rhythmically pointed. Though Lutoslawski's own performances often maintain an aura of mystery, Barenboim looks past the flashier effects to achieve something more integrated and cogent. The Third Symphony in particular can seem like a series of isolated moments, especially in performances by Georg Solti, who conducted the work's premiere, also with the Chicago Symphony. But while Barenboim's reading may lack some superficial excitement, it has a narrative logic that's far more important to understanding and enjoying the music. *D.P.S.*

**MOZART: Songs; Keyboard Works**

Baird; Tilney  
DORIAN 90173 (67 min)

Performance: Natural  
Recording: Excellent

An entire compact disc of Mozart songs is difficult to sustain. Most of them don't seriously push the technical boundaries of amateur performers, resulting in a somewhat narrow range, and only a few of the poems



fired Mozart's imagination. The soprano Julianne Baird's remarkably easy and natural performances here suggest that the less artifice in performing these modest songs, the more clearly they reveal what they have to offer.

Though Baird obviously has a keen understanding of the words and the emotions behind them, her characterizations are discreet. One of the most listenable singers who follow authentic performance practice, she has little vibrato, which intensifies her refreshing directness. She is well supported by Colin Tilney's outgoing accompaniment on fortepiano, and the formal monotony of the songs is broken by his solo performances of Mozart's Variations in B-flat Major, K. 500, and Minuet in D Major, K. 355. Considering the minor miracles these performers work on Mozart's

songs, I hope they go on to record the songs of Schubert and the other Romantics. *D.P.S.*

**RESPIGHI: Pines of Rome; Fountains of Rome; Roman Festivals**

London Philharmonic, Rizzi  
TELDEC 76263 (68 min)

Performance: Exquisite playing  
Recording: Huge dynamic range

Ah, Respighi! What could be more perfectly realized than these panoramic, overripe, Mussolini's-eye views of the grandeur that was Rome, especially in these sensitive performances and recordings with their tremendous dynamic range and exquisite, highly detailed playing. Carlo Rizzi and the London Philharmonic can almost make you believe (what generations of concertgoers have always believed) that this is great music. *Roman Festivals (Feste Romane)* emerges as the best of the three tone poems—even stronger than the long-popular *Pines*. This is exactly the sort of program music that I used to imagine writing when, as a sub-teen, I first thought of becoming a "serious" composer; it is a kind of prodigal adolescent dream of great music.

And what's wrong with that? Every invention, every setting is perfect in and of itself, but nothing adds up. These musical picture-postcards have everything neatly in place, every effect perfectly calculated, but nothing deeper is ever revealed. In any case, whatever you think of the music, it is impossible to imagine better performances and recordings. *E.S.*

**SAVE MONEY, TIME AND FREIGHT ON FAMOUS BRAND STEREO EQUIPMENT**

**illinois audio**  
2124 E. Dundee Rd. • Palatine, IL 60067

(800) 621-8042 (708) 934-9669

HOURS: Monday thru Friday 9-7  
Saturday 9-6  
Sunday 12-5



LOUDSPEAKERS	CASSETTE DECKS	RECEIVERS	CD PLAYERS
<b>JBL LX 500 3-Way Bookshelf Speakers</b> • 1" pure titanium dome high frequency transducer • 5" high polymer laminate midrange transducer • 8" high polymer laminate low frequency transducer List \$640.00 pair <b>SALE \$399.00</b>	<b>AIWA AMD-100 Portable Recordable Mini Disc System</b> • Digital record, playback versatility • Quick random access 2-10 key operation/Shock proof memory <b>CALL FOR PRICE</b>	<b>TECHNICS SA-GX65C AV STEREO RECEIVER</b> • 3x100 watt • 2x45 rear • Home Theater Mode • Dolby Pro Logic • Surround Sound List \$529.95 <b>\$375.00</b>	<b>TECHNICS SLPD 947 ROTARY COMPACT DISC CHANGER</b> • Front loading, 5 disc rotary • MASH 1 bit DAC system • Pitch control List \$269.95 <b>\$199.95</b>
<b>DESIGN ACOUSTICS PS-CV</b> Video shielded List 119.95 <b>SALE \$69.95</b>	<b>TEAC V-1010 3HD B/C/HX Pro. Multi-volt</b> List 460.00 <b>SALE \$269.95</b>	<b>TECHNICS SA-GX 350</b> 3x50 Home Theater, 2x20 rear, Dolby Pro Logic, Surround Sound List 299.00 <b>SALE \$230.00</b>	<b>SHERWOOD CDC 5010</b> Front loading carousel, One bit D/A, 8x oversampling List 340.00 <b>SALE \$179.95</b>
<b>YAMAHA NSA 635</b> 8" 3 way system List 175.00 <b>SALE \$90.00</b>	<b>TECHNICS RSTR-232</b> Dolby B/C/HX Pro. Deck #1 auto-rev List 199.95 <b>SALE \$159.95</b>	<b>PHILIPS FR 930</b> 65 W stereo receiver w/Dolby Pro Logic w/full function A/V remote List 429.00 <b>SALE \$277.00</b>	<b>PANASONIC SLPD 365</b> 5 Disc CD changer List 199.95 <b>SALE \$149.95</b>
<b>AR M3</b> Holographic 3 way bookshelf/floor system List 399.00 <b>SALE \$220.00</b>	<b>AIWA ADF810</b> 3 HD deck, Dolby B/C/HX Pro List 260.00 <b>CALL</b>	<b>SHERWOOD RV-6010RS</b> Pro Logic Learning remote Top-Rated List 699.00 <b>SALE \$349.00</b>	<b>PHILIPS CDC 935</b> Top rated, 8 bit stream, Remote List 300.00 <b>CALL FOR PRICE</b>
<b>AUDIO SOURCE VS-TWO</b> 30 watt cent. chan. List 159.95 <b>SALE \$99.95</b>	<b>JVC TD-W309</b> Twin auto reverse, Dolby B/C/HX Pro, B/C/NR, Pitch control List 260.00 <b>SALE \$177.00</b>	<b>VIDEO</b>	<b>JVC XLF 207</b> 5 Disc Carousel, Remote List 300.00 <b>SALE \$199.95</b>
<b>PORTABLES</b>	<b>AUTOMOTIVE</b>	<b>SHARP 4 HD HIFI</b> \$260.00 <b>JVC HRV604</b> \$350.00 <b>JVC HRS-4900</b> CALL <b>SONY SLV-750HF</b> CALL <b>SONY MDP 455</b> CALL <b>PANASONIC LX900</b> \$760.00	<b>TECHNICS SL-PS840</b> MASH 1 bit Center mech optical output List 429.95 <b>CALL</b>
<b>PANASONIC SLS-330</b> \$118.00 <b>SONY D 822K</b> \$199.00 <b>JVC RC-Q20</b> \$159.00 <b>SONY CFD758</b> CALL <b>JVC PCXT 5</b> \$289.00 <b>PANASONIC RXDT-707</b> CALL	<b>SHERWOOD XC-6810</b> Rem. AM/FM/CD List 399.95 <b>SALE \$249.95</b>	<b>AIWA NSX-3300</b> \$328.00 <b>PANASONIC SC-DH44</b> \$310.00 <b>SONY MHC 1750</b> CALL <b>JVC MXC 5</b> \$575.00 <b>TECHNICS SC-CD455</b> \$460.00 <b>JVC MXC 9S</b> \$899.00	

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.



# SIXTH AVENUE ELECTRONICS<sup>SM</sup>

We're reinventing the electronics store.

## Mail Order

### 800 394-6283

OPEN 6 DAYS A WEEK  
MON-FRI 9AM-7PM • SAT 10-6  
FOR INFO CALL 201 467-0100

**NEXT DAY DELIVERY AVAILABLE**  
ASK SALESPERSON FOR DETAILS

### SUBWOOFERS



**VELODYNE**  
F-1000  
• 80 Watt Subwoofer  
• 10" Woofer **\$669**  
M.S.R.P. \$895

PRICES EACH  
DESIGN ACOUSTICS PS-SW Subwoofer 249  
CELESTION CS-135 Subwoofer 229  
JBL POWERED Subwoofer IN STOCK  
MUSEATEX SW12 Subwoofer 999  
NHT SW2P Powered Subwoofer CALL  
VELODYNE ULD12 Subwoofer CALL

### CENTER CHANNEL SPEAKERS



**DESIGN ACOUSTICS**  
PS-CV  
• 75 Watt 2-Way Center Channel Speaker • Bass-Reflex Design • 5 1/4" Woofer • 3/4" Tweeter **\$79**  
M.S.R.P. \$120

PRICES EACH  
BOSE VS-100 79  
POLK AUDIO CS-100 119  
ACOUSTIC RESEARCH MC.1 IN STOCK  
DESIGN ACOUSTICS PS-24 129  
NHT SUPER ZERC CALL  
PINNACLE PN-53 59

### TELEVISIONS



**MITSUBISHI**  
CS-35AXI  
• 35" Stereo TV W/PI • On Screen Menu  
• Remote **\$1549**  
M.S.R.P. \$2100  
MITSUBISHI CS27EX1 599  
MITSUBISHI CS-20SX1 349  
RCA P52755ST CALL  
SHARPVISION FULL LINE IN STOCK  
TOSHIBA CF35C60 2 TUNER P-I-P

### CAMCORDERS



**SHARP** VL-E30U  
• 8MM Viewcam • 3" LCD Color View Screen Menu  
• 8X Zoom • Flying Erase Head  
• Remote Control **\$999**

CANON UC1 8MM 599  
JVC GRAX55J VHS-C CALL  
CANON L1 TOP OF THE LINE CALL  
RCA PR0865 8MM 499  
SHARP VL-L2U VHS SLIMCAM 549

**AUTHORIZED DEALER FOR...**

- Nakamichi Mobile Sound
- ALLISON
- ADVENT
- BOSE
- PIONEER
- CELESTION
- DAHLQUIST
- DCI DESIGN ACOUSTICS
- HITACHI AUDIO
- Hafler
- harman/kardon
- SHARP
- Parasound
- NHT
- JBL
- AR ACUSTIC RESEARCH
- PHILIPS
- TEAC
- SANSUI
- RCA
- TOSHIBA
- Quasar
- Museatex
- Sherwood
- FISHER
- COUNTERPOINT
- FUJI
- OLYMPUS
- PENTAX
- YASHICA
- Canon
- MINOLTA
- AT&T
- brother.
- CASIO
- BLAUPUNKT
- ALTEC LANSING
- SONY TAPE
- PHONICS
- ETC.

### MINI SYSTEMS



**BOSE** LIFESTYLE 5 MUSIC SYSTEM  
• Built-in AM/FM CD Player  
• 200 Watt Acoustimass Speakers • Remote Control that works through walls **\$1399**

AIWA NSX-3500 499  
DENON D-80 CALL  
JVC MX-C5 CALL  
JVC MX-44 399  
KENWOOD UD351M 649  
KENWOOD UD-500M 769

### TURNTABLES



**THORENS**  
TD-180  
• 3 Speed • 33 1/3, 45, 78 Speeds • Belt Drive System  
• Pivoted-Tc Stylus Distance 9 1/8" • Auto Cue **\$349**  
M.S.R.P. \$400

DUAL CS-431 199  
DUAL CS-750 3 SPEED  
JVC ALA-151 99  
THORENS TD-290 369  
FULL LINE OF CARTRIDGES IN STOCK

### VCR'S



**MITSUBISHI**  
HS-U56P  
• 4 Head HI FI Stereo VHS Recorder • On Screen Programming • Jog Shuttle Remote Control **\$389**  
M.S.R.P. \$595

JVC HRS-6800U TOP OF LINE S-VHS  
MITSUBISHI HSU-59 4 Head Hi-Fi 469  
SHARP VCH-870U 4 Head Hi-Fi 249  
TOSHIBA M-758 4 Head Hi-Fi 449



**AKAI** VSX-400  
• Multi System VCR • On Screen Program • Remote Control  
• 110/220 Volts  
• 50-60 Cycle **\$349**  
M.S.R.P. \$395

**WE CARRY A LARGE SELECTION OF 110/220V, 50-60 Cycle MULTI SYSTEM TV'S, VCR'S & PAL CAMCORDERS**

## HIGH END CAR STEREO SPECIALISTS



**MB QUART** QM218CX  
• 80 Watt Universal 2-Way Component System • Two 6 1/2" Woofers  
• Two 3/4" Tweeters **\$289**  
M.S.R.P. \$349

ADS PQ 202 340 Watt Power Amp 549  
ADS 320S 2-Way Component System 399  
AUDIO EOX 13 Band Eq. With Crossover 259  
CONTROL EPICENTER Base Synthesizer 159  
BEL 6455T Laser Radar Detector CALL  
BLAUPUNKT BMA5350B 5 Ch 350 Watt AMP 479  
BLAUPUNKT COCA02 10 CD Changer 299



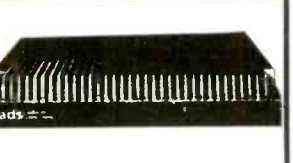
**TOSHIBA** TX-103  
• Detachable Face AM/FM Cassette • 18 AM/FM Presets  
• 25W X 2 Channel Max • Auto Memory **\$99**  
• Automatic Stop

BLAUPUNKT ZL693DVC 6 1/2" Speaker 159  
BLAUPUNKT ZL653DVC 6 1/2" Speaker 139  
BLAUPUNKT ASPEN AM/FM CD Player 299  
CELESTION AD12 12" Subwoofer 300 WATT 199  
CELESTION AP10 10" Subwoofer 99  
CODE ALARM 101SX Security System 80  
JBL 1500GT 15" Subwoofer 1000 Watt 259



**KENWOOD** KDC-7000  
• Detachable Face AM/FM CD Player • 1 Bit DAC  
• Scan Search  
• Seek Presets **\$369**  
M.S.R.P. \$470

JBL GT0400 2 X 200W Power Amp 399  
JBL GT622 6 1/2" Coaxial 99  
KENWOOD KRC-560 AM/FM Detachable 249  
KENWOOD KRC-660 AM/FM Detachable 299  
KENWOOD KDC-7000 AM/FM Detachable CD 329  
KENWOOD KDC601 10 CD Changer 339  
KICKER C-12A Competition 12" Woofer 129



**ADS** PH 15.2  
6 Channel • 330 Watt Power Amplifier  
• High Current High Power **\$529**

MB QUART QM-214 4 2 Way Component System 199  
MB QUART QM-160KX 6 1/2" Coaxial 199  
MB QUART QM-215CX 2 Way Speaker System 269  
ORION XTR-12 12" Subwoofer 800 Watts 99  
POLK AUDIO MM3065 6 1/2" 2 Way Component System 179  
TOSHIBA TX-902 AM/FM CD PLAYER 179  
WHISTLER 1170 Tri-Band Radar W/ Laser 199

**WE WILL BEAT ANY ADVERTISED PRICE**  
WE WILL "BEAT" OUR COMPETITORS BEST ADVERTISED PRICE On Identical Items Excluding Display Models and One of a Kind Merchandise.

New York Retail  
**1030 6th Ave**  
New York, NY 10018  
BETWEEN 38<sup>TH</sup> & 39<sup>TH</sup> STREET OPEN 7 DAYS  
MONDAY-SATURDAY 9-6:30 • SUNDAY 11-5

New Jersey Retail  
**331 Route 4 West**  
Paramus, NJ 07652  
OPEN 6 DAYS A WEEK  
MONDAY - SATURDAY 10-9

New Jersey Retail  
**22 Route 22 West**  
Springfield, NJ 07081  
OPEN 7 DAYS • SUNDAY 11-6  
MONDAY-SATURDAY 10-9

We Welcome VISA, MASTERCARD, AMERICAN EXPRESS & DISCOVER. Next Day Service Available. Registered Trademark Dolby Laboratories Licensing Corporation. Not Responsible For Typographical Errors. Pictures are for Illustration Only. Prices Valid Thru 11/1/93.

# Stereo Review

## SUBSCRIBER SERVICE

Place  
label  
here

**MOVING?** Please give us 8 weeks advance notice. Attach label with your old address, and write in new address below.

**RENEWING?** Check box below and attach label with corrections marked, if any.

**SUBSCRIBING?** Check box and fill in coupon. For gift subscriptions attach a separate sheet.

Send Stereo Review for  
1 year at \$15.94

New subscription  Renewal  
 Payment enclosed  Bill me  
Canadian orders add \$8 per year.  
Foreign orders add \$8 per year.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP \_\_\_\_\_

**1(303) 447-9330**

**STEREO REVIEW**

P.O. Box 55627  
BOULDER, CO 80322

## CLASSICAL MUSIC

### ROSSINI: *Il Barbiere di Siviglia* (*The Barber of Seville*)

Battle, Domingo, Lopardo, Raimondi, others;  
Chamber Orchestra of Europe, Abbado  
DEUTSCHE GRAMMOPHON 435 753  
(two CD's, 154 min)

Performance: Ebullient

Recording: Particularly fine

Everybody seems to be having a good time on this recording. The conductor, Claudio Abbado, seems to be thoroughly enjoying himself, so zestful is the masterly performance. The Chamber Orchestra of Europe plays Rossini's bubbly score with accuracy and style, and the singers contribute effectively, for the most part, to the delightful goings-on. The recording itself is especially well engineered.

The casting of the two principal roles, Figaro and Rosina, seems at first somewhat strange. One might consider the tenor Plácido Domingo's undertaking the high-baritone rôle of Figaro at this juncture in his career something of an ego trip. Yet he has recently been working on the lower end of his voice and has repeatedly proven, both on records and in performance, his ability to distinguish himself in diverse repertory. Here he makes a vocally fluent and dramatically appealing Figaro.

Kathleen Battle's pure and silvery voice is well suited to a soprano Rosina (the role was written for Rossini's favorite voice, the mezzo-soprano), and she copes agilely with the roulades and cadenzas, tastefully eschewing unnecessary high notes and creating a thoroughly attractive heroine. In addition to "Una voce poco fa" and the Lesson Scene, she offers "Ah se è ver," a rare selection in performance today because it was written for a particular singer.

## TALES FROM THE VAULTS



RCA Victor is celebrating the classical guitarist Julian Bream's sixtieth birthday with a twenty-eight-disc set on its mid-price Gold Seal label. The "Julian Bream Edition—The Ultimate Guitar Collection" (61583) contains over 30 hours of music spanning six centuries, from Renaissance lute pieces to works Bream commissioned from the twentieth-century composers Britten, Walton, Henze, and Arnold. If you're daunted by the thought of buying an "ultimate" collection, recordings of the basic guitar repertory are available on a single budget CD, "Julian Bream Edition Highlights" (61848).

Count Almaviva's seldom-heard Act II aria, "Cessa di resistere," is also included. As the Count, Frank Lopardo presents a somewhat stalwart aristocrat. His singing, while acceptable, is not especially nuanced or polished. Even with his organ-like notes gone, Ruggero Raimondi makes an effective Basilio, charmingly bungling and infectiously funny. Lucio Gallo's Bartolo is praiseworthy for his sharp delineation of character, comic bluster, and head-spinning speed in the patter sections of "A un dottor della mia sorte" and throughout the ensemble numbers. The rest of the cast are commendable, especially Gabriela Sima, whose singing of Berta's aria is capital. While this may not be the best *Barber* available, it certainly catches the opera's spirit. R.A.

### SCHUBERT: *Symphony No. 5; Symphony No. 8 (completed by Newbould); Rosamunde excerpts*

Orchestra of the Age of Enlightenment,  
Mackerras

VIRGIN 59273 (74 min)

Performance: Workmanlike

Recording: Attractive, neat sound

Would you believe Schubert's Symphony No. 8 in B Minor, the "Finished"? Charles Mackerras and this fine early-instrument orchestra manage that remarkable feat thanks to the efforts of Brian Newbould, who completed and orchestrated Schubert's own sketch for the third movement and proposed that the Entr'acte No. 1—in B Minor—from Schubert's incidental music for *Rosamunde* is the originally intended finale. Just to hedge the bet, the entr'acte is followed here by the *Rosamunde* Ballet No. 2, so you can listen to it either as the finale of the symphony or the opening of the *Rosamunde* music.

Has the unfinished indeed been finished? The scherzo section of the third movement works fine, and its trio (mostly by Newbould) is almost more Schubertian than Schubert. The *Rosamunde* music is in the right key for the finale and has the right sound, but the shape is wrong. It comes off as dramatic not symphonic music, and, in this version at least, it does not do what finales are supposed to do—carry us down to the finish line. Without that, the "Unfinished" stays stubbornly unfinished. If Schubert ever actually intended this music to go with the symphony, he must have been delighted to find a more appropriate use for it in the theater.

Did I mention the Symphony No. 5? There is nothing controversial about it. I wish I could say these are superb performances, but they must, I'm afraid, be relegated to that old dustbin marked "workmanlike." Not bad, mind you, but, aside from the beautiful playing, neatly and clearly recorded, there are no great revelations. E.S.

### TCHAIKOVSKY: *String Sextet, "Souvenir de Florence"; Serenade for Strings*

Orchestre d'Auvergne, Kantorow  
DENON 75026 (62 min)

Performance: Sensitive

Recording: Lovely

Tchaikovsky's D Minor String Sextet, Op. 70, subtitled *Souvenir de Florence*, is a late work, appearing in the composer's catalog just before *The Nutcracker*. By no means a negligible score, it has gained currency in recent





the pleasing ambience of the small French church where it was recorded. *D.H.*

**VAUGHAN WILLIAMS: A London Symphony (No. 2); Norfolk Rhapsody No. 1; Fantasia on a Theme by Thomas Tallis**  
Philharmonia Orchestra, Slatkin  
RCA VICTOR 61193 (70 min)

**VAUGHAN WILLIAMS: Symphonies Nos. 8 and 9; Flourish for Glorious John**  
Philharmonia Orchestra, Slatkin  
RCA VICTOR 61196 (63 min)  
Performances: Good to excellent  
Recordings: Good

Leonard Slatkin's reading of *A London Symphony* is somewhat unsettling. The fast tempos he adopts for the main body of the opening movement and for the outer sections of the nocturnal scherzo seem to evoke the hectic London of today rather than that of 1913, when the music was written. The slow sections come off effectively—the first-movement introduction, the whole of the fog-drenched slow movement, and the epilogue of the finale with its glorious concluding "sunrise" chord—but the "social protest" music constituting the main body of the finale is surprisingly low-voltage.

The performance of the early *Norfolk Rhapsody* is nicely turned, and that of the *Tallis Fantasia* is splendid—it's especially well recorded, too, conveying the varied acoustic perspectives of the separate string bodies and

the solo players. This definitely supplants Slatkin's 1982 St. Louis recording of the fantasia on Telarc.

Slatkin seems thoroughly at home with the works on the second disc, which Vaughan Williams composed in his middle eighties, offering a first recording of the handsomely scored *Flourish for Glorious John* (the conductor John Barbirolli) by way of opener. In the Eighth, the most extroverted of his symphonies, the composer gives us a mercurial set of



"Variations in Search of a Theme" as an opening movement, a pert scherzo for winds alone, a cavatina for strings, and a toccata finale using literally all the 'phones and 'spiels available to an orchestral percussion section in 1958. Slatkin gives a fine account of the work

years by way of string-orchestra performances, as on the present disc. A sweeping waltz measure gets the music off to a spirited start. The lovely slow movement, a song without words in the composer's best manner, is followed by a plaintive *trepak* with a lively central episode, and the dance finale is complete with a "big" tune.

The sextet certainly makes a fine companion for the better-known C Major String Serenade, composed at the same time as the *1812 Overture*. Tchaikovsky envisioned a large body of strings, but the music works just as well played by a chamber orchestra, especially one with the combination of elegance and vitality offered by conductor Jean-Jacques Kantorow and his Orchestre d'Auvergne. The famous waltz is a special delight. The CD has

# AUTHORIZED

166 HAMBURG TPKE. WAYNE NEW JERSEY

1-800-937-3537

Call Now For Your Best Delivered Legitimate Price! Convenient Fax # 201-633-1476

## HOME THEATER SYSTEMS



### Home Theater

reproduction requires a Large Screen TV, Pro Logic Receiver, 4 Satellite Speakers, 1 Center channel Speaker, Sub-woofer, and a Hi Fi VCR. The System can be further enhanced with a Laser Combo Player and DAT Deck for the highest quality Audio and sharpest Video reproduction.

- 35" 55" 16 X 9 Cinema Wide TV's... Now Shipping!
- 50" Dolby Pro Logic Rear Projection TV... \$1999
- 35" MTS Stereo TV w/ Surround Sound... \$1199
- 31" Stereo TV w/ Picture In Picture... \$799

## HI FI RECEIVERS



- Dolby Pro Logic® 80 watts per channel, multi-room capacity.....\$279
- Dolby Pro Logic® 100 watts per channel, multi-room capacity.....\$349
- Dolby Pro Logic® 125 watts per channel, .005% THD, multi-room/multi-source "to enjoy 2 different program sources in 2 rooms" 5 speaker outputs: A, B subroom, rear & center.....\$669
- Multi room remote sensor kit.....\$59

## CAMCORDERS



- 3 CCD CHIP CAMCORDER.....\$2400
- HI 8mm, EIS Stabilizer, & 8x1 Zoom.....\$899
- Your Choice 8mm & VHS-C Palm Size.....\$499

### JOB & SHUTTLE



- VCR'S**
- Toshiba 4 HD HIFI VHS & Flying erase head..\$299
- Super Beta, w/slowmotion playback.....\$329
- 8mm recorder/playback.....\$339

## SPEAKER SYSTEMS

We carry a full line of Pinnacle And Advent Speaker Systems!  
Ask about the satellite & surround systems.....Call  
4 pc sys, shielded, 1 center channel speaker, 1 left & 1 right speaker & subwoofer.....Call  
6 pc sys, shielded, 1 center channel speaker, 2 front speakers, 2 rear speakers & subwoofer.....\$549  
Dual Satellite & Subwoofer SPKRS.....\$299  
AV 100w Center Channel Speaker.....\$79  
Low Prices on patented BOSE Acoustamass speakers call

BOSE  
PINNACLE  
ADVENT

## CD & COMBO PLAYERS



- Karaoke Players.....CALL
- CD player, 18 disc/3 magazine multi play 1 bit DLC & plus flow.....\$299
- CD Laser Disc Combo, 5 CDs, or 1/8 inch or 1 12-inch laser disc, w/special effects, optical output & auto reverse.....\$749

## CASSETTE DECKS

- Dual Deck w/6:1 Multi Cassette, Auto Reverse, Dolby B/C & Hx Pro.....\$269
- DCC/DAT Cassette Decks, Plays & Records with CD Clarity.....Starting at \$299

## CAR STEREO SYSTEMS



- AM/FM Cassette, DIN Noise Reduction, pull-out, 8 watts/channel.....\$129
- AM/FM Cassette, pull-out, 25 watts per channel.....\$149
- AM/FM Cassette, 25 watts/channel, detachable face.....\$159
- Remote 6 CD Changer, w/laser dig output.....\$259
- Power Amps:**  
220 Watts.....\$119 400 Watts.....\$199

## BOOKSHELF AUDIO



### MINI SYSTEMS

- Single Disc, 16watts/channel, AM/FM, Dual Cassette/w remote.....\$259
- AM/FM, Dual Cassette, High powered, 6-CDs, and Subwoofer.....\$399

# FACTORY AUTHORIZED

Lowest Price  
Best Selection

Your #1  
Audio/Video Connection

# 800-542-SAV<sub>2</sub>8<sub>3</sub>7

## CAR AUDIO WAREHOUSE CLEARANCE SALE

### AMPLIFIERS

Clarion 100E069 5-Band equalizer/booster  
Harlier MSE200 2-ch car amplifier 20W total MOSFET  
Harlier MSE100 2-ch car amplifier 100W total MOSFET  
Harlier MSE44 35Wch car amplifier (2 amp) MOSFET  
MEI DA7220 50W x 2 130W mono car amp  
Soundstream MC140X 4/3/2 ch amp w/built-in crossover  
Soundstream MC140X 4/3/2 ch amp w/crossover  
Rockford Punch 75 75W car power amplifier MOSFET  
Soundstream D60N1 30W x 2 car power amplifier  
Soundstream D100N1 50W x 2 car power amplifier  
Soundstream D200N1 100W x 2 car power amplifier  
AUS PQ8 4-ch car power amplifier 80W total POWER  
AUS PQ10.2 40W x 4 car power amp bridgeable  
Sherwood XA1240Q 120W x 2 car power amplifier  
Precision Power PPA200 50W x 4 car power amplifier

### STEREOS

Charion 7770 Detch lace remote AM/FM CD w/CD control  
Charion 8204R AM/FM cassette 20 watts compact chassis  
Charion 5780CD Detch lace 120 watts AM/FM CD 8XDS  
Denon DCR7290 AM/FM cassette CD changer cont. DBNR  
Denon DCR8770 AM/FM CD removable cassette input  
JVC KSR150 Detch lace AM/FM cassette DNR MS CD control  
JVC KSR180 Detch lace AM/FM cassette DNR MS CD control  
JVC XLG2700 AM/FM CD player removable hi power  
JVC XLG3700 AM/FM cassette w/changer control  
JVC KSR68 Flip down detch lace AM/FM cassette w/CD control  
JVC KSR68 Flip down detch lace AM/FM cassette w/CD control  
Passasonic CDP38 Detch lace AM/FM CD hi power  
Passasonic CDR75 Detch lace AM/FM cassette QSP built-in  
Passasonic CR75 Detch lace AM/FM cassette QSP built-in  
**NEW! NOW AVAILABLE... POWER CAR AUDIO**

### SPEAKERS

Classic 5 1/4" 2-way flush mount plate speaker  
Reference 5 1/4" 2-way component system  
'93 Grand Prix Award winning 6 x 9" speaker  
4-Way 6" x 9" car speakers 160W  
5" x 7" 2-way car stereo speakers  
3-Way 6" x 9" car speakers 275W  
4-Way 6" x 9" car speakers  
6.5" graphite coaxial speakers  
10" earthshaking subwoofer  
10" long throw subwoofers  
8" long throw subwoofers  
Full range speaker box w/12" woofers  
12" subwoofers for the car  
5 1/4" 2-way component system  
6 1/2" marine speakers for boats

### SPEAKER BOXES NOW AVAILABLE

**MSX**

**Bazooka Bass Tubes**  
Full Line Of Tubes Available  
T62 • T82 • T102 • T16 • T18  
T62 • T62A • T82A • T102A  
New Models Also Available

**Sound City Sub Boxes**  
New Bandpass subwoofer enclosure for the most incredible bass you've ever heard! Available in 8", 10", & 12" boxes

**CALL FOR PRICES**

## HOME THEATER

### Home Theater System

Dolby Pro Logic System includes:  
-SS4 Dolby Pro Logic surround sound processor  
-VS One video shielded center channel full range speaker  
-LS-TenVa surround sound speakers

**ADD TO YOUR EXISTING SYSTEM**

**Home Theater 4001**

**Make Your Receiver Into A Home Theater System**

**CALL**

## VIDEO WAREHOUSE CLEARANCE SALE

### VCRs

Sharp VCH660 HiFi stereo VCR, 4-hd digital tracking  
Panasonic PV4362 4-head HiFi stereo VCR  
JVC HR56800U S-VHS VCR with remote control  
JVC HRV606U VHS HiFi VCR with log shuttle & VCR+  
Hitachi VT7372A 4-head HiFi VCR with VCR+  
Hitachi VT462A VHS HiFi stereo 5-head flying erase head  
Mitsubishi NSU55 4-head, flying erase head HiFi VCR

### LASER DISC PLAYERS

Panasonic LX600 Laser disc w/audio reverse & remote  
Panasonic LX900 Laser disc w/100 shuttle, digital FX  
Brand Name Laser disc player with remote  
Denon LDA3100 Laser disc/combo-player log/shuttle  
Philips COV400 Multi-laser disc player S-video out  
Mitsubishi MY6021 Combi-laser disc player

### CAMCORDERS

Panasonic PV43 4-hd VHS-C camcorder 20X dig zoom  
Panasonic PV503 VHS-C camcorder 10:1 power zoom  
JVC GR521 S-VHS-C camcorder HiFi stereo digital effects  
JVC GR435 VHS-C camcorder 17X CCD 10:1 zoom 2 lux  
JVC GR455 VHS-C camcorder synchro edit & light  
Sharp VL30A 8mm ViewCam Hi8 w/4" LCD monitor  
Sharp VL1000 ViewCam Hi8 w/4" LCD monitor  
Canon VCL33 Hi8 cam flying erase head, 4-hd, 12X zoom

### SWITCHERS & CONTROLLERS

JVC JX5V55 Audio/video editor/editor mixer w/pics/tales  
JVC JX5900 Audio/video switcher w/S-video  
Panasonic JWAJES Digital AV mixer w/special effects  
Videoconics Digital video processor and color corrector  
Videoconics TM1 Video filmmaker character generator  
Videoconics full function video editor w/graphics special FX

### TELEVISIONS

Philips 13S250C1 13" MTS stereo TV with remote control  
Sharp ZGCS3900 20" stereo TV with universal remote  
Hitachi 27DYS27 27" color TV with cable ready tuner  
Panasonic CT1931X20 GA00 Superficial 31" with P-I-P  
JVC NV556X4 55" 16:9 wide screen projection TV  
Hitachi 46UX128 46" Ultratravision w/950 line H resolution  
JVC CT13CL 13" TV on-screen menu, cable ready w/remote  
Sharp XY101 Cling mount LCD projector  
Sharp XY120 NEW LCD video projector  
Panasonic PVM2073 20" Combination TV/VCR w/remote  
Hitachi 50UX148 50" Ultratravision projection TV  
Hitachi 20YR 20" combination TV/VCR (Black or White)

**CALL FOR BEST PRICES**

**AUDIO • VIDEO TAPES...CALL FOR BEST PRICES**



**THX HOME THEATER**

**COME VISIT OUR LATEST STATE OF THE ART THX HOME THEATER ROOMS**

Featuring: MAD • Lexicon • Rane • Technics  
• Kenwood • B&W • Boston Acoustics • M&K  
• JBL • Altec Lansing • Soundstream • Triad Speakers

SOME BRANDS AVAILABLE IN STORE ONLY

**IN-WALL SPEAKERS**

AIS 750 IL 0.8k 8" 3-way reference in-wall  
AIS CA005 6" 2-way in-wall "Best Seller"  
Advent A1042 6 1/2" 2-way in-wall speaker  
B&W CMW5 2-Way...Legendary B&W Sound  
JBL S-4 6 1/4" 2-way w/titanium dome tweeter  
Luzan SA05 8" 2-way Outstanding value  
Advent A1034 2-Way with wood trim  
Niles SCW1 60W in-wall volume control  
Niles SP1 100W speaker selector (4 pair)  
Niles 75 5 1/4" 2-way in-wall speaker

**HOME THEATER**

**THX**

**LUCA SFILM**

...CALL FOR OTHER MODELS NOT LISTED

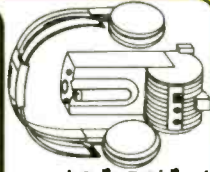
## CANTON LIQUIDATION SALE

**Exp 70 Oak** 3-Way bass reflex lower speaker **Orig \$1500 \$769**  
**Kent 830 Oak** 2-Way bass reflex speaker system **Orig \$1200 \$489**  
**Pier 940 Mah** Tuned port 2-Way w/6.5" driver **Orig \$1800 \$729**  
**Plex 3** 2-Way mini-speaker **Orig \$350/pr**  
**Plex C** Passive 12" subwoofer **Orig \$600/ea**  
**Exp 80** 3-Way bass reflex speakers **SALE \$1199**  
**COMBI Sub** Combo sub/satellite system **Orig \$1100**  
**SALE \$499**

**CANTON SUPER SPECIAL**  
 AV-500 2-Way bass reflex shielded center  
 channel speaker 1" tweeter 2 x 1.5" woofers  
**CALL**

## HEADPHONES

**JVC HA090** Closed ear digital stereo headphones **\$89**  
**Sony MDRY500** Studio sound stereo headphones **\$69**  
**Boyer Dynamics DT511** Open design circumaural phones **CALL**  
**JVC HA W55** High quality cordless headphones **\$119**  
**Koss Portapro** Adjustable headband, digital ready **\$39.99**  
**RCA WHPTD1** 3-Way Lightweight cordless RF phones **\$139**  
**Sennheiser HD540H** Stereo headphones w/alum voice coil **CALL**  
**Sterling TE-400** Closed design digital phones w/minime vcl **\$199**  
**AKG Full Line K260 • K270 • K280 • And More** **CALL**



## ATLANTIC TECHNOLOGY

**Pattern 100**  
**Powered 3-piece speaker system**  
 • 3 channels of amplification  
 • 3 line level, 1 high level inputs  
 • Rotating dual-enclosure satellites  
 • Patented bass contouring circuit  
 • Dual 6-1/2" woofers  
**Orig \$549**

**150HT Home Theater System Available**  
**153C • 151LR • 154SR • 152PBM**

**NOW ONLY \$249**

# HOME AUDIO WAREHOUSE SALE

### STEREO COMPONENTS

**Phillips FR940** 75W x 3 Dolby Pro Logic Surround Receiver **CALL**  
**Luxman RV371** Dolby Pro Logic AV Tuning Receiver **\$799**  
**Brand Name** 5-Channel Pro Logic Receiver w/remote **\$399**  
**JVC RX1905VTM** 120W/ch in stereo; Dolby Pro Logic **CALL**  
**Brand Name** 3 x 75W Dolby Pro Logic receiver **\$399**  
**Technics SACX650** 100W x 3 Center/Right/Left **CALL**  
**Hatler SE100** Preamp/limiter **\$199**  
**Brand Name** 135W/ch 19" Rack mountable amp. **Orig \$900**  
**Luxman LV105U** 80W/ch hybrid tube amp **Orig \$1200**  
**Orig \$499**  
**AV14** 70W/ch receiver (no remote) **Orig \$1200**  
**Dennon DTP2500** Digital preamp with remote **Orig \$1000**  
**Luxman TP1150** Remote preamp/tuner • 2-Zone **Orig \$400**  
**Orig \$399**  
**Luxman R361** 100W/ch AV receiver w/remote **Orig \$1100**  
**Orig \$479**  
**MAD 7235PE** 25W/ch receiver (factory reconditioned) **\$449**  
**Luxman F116** Dolby Pro Logic surround processor **\$399**

### COMPONENTS

**Alwa ADF810** 3-head cassette deck with remote **CALL**  
**NEW**  
**Alwa XMS9000** Dolby S cassette deck **LOW**  
**Philips FC910** Dual cassette deck w/Dolby BX Pro **\$469**  
**Brand Name DAT** Remote controlled Digital Audio Tape **\$699**  
**Brand Name Portable DAT** Compact DAT recorder **\$699**  
**Brand Name** Digital Compact Cassette recorder **SALE**  
**Philips FC930** Dolby Auto reverse Dolby B/C NR **LOW**  
**Philips CQC9358K** Rated #1 Consumer CD carousel **\$299**  
**Sherwood RV6010R** Dolby Pro Logic Receiver **CALL**  
**JVC RX1609** 70W x 3 Dolby Pro Logic receiver **LOW**  
**JVC XT1050** Superhighline CD player Rated #1 **\$499**  
**Brand Name** Digital -10 - Analog converter **CALL**  
**Technics SLP0827** 5-Disc CD carousel, with remote **LOW**  
**Panasonic RXD1707** Portable AM/FM/CD/cass **CALL**  
**MAD 5325** Factory reconditioned CD player **LOW**

## BBE ARS

**Sonic Maximizer \$199**  
 ARS helps to restore the sparkle and clarity and add warmth and natural musicality to digitally recorded material, old LP's and tapes.

## FREE

**FREE**  
 With Purchase  
**Signal EP300**  
 Stereo studio **Orig \$89**  
 headphones

## MINI SYSTEMS

**JVC UX43** **Orig \$500**  
 • Remote controlled micro system  
 • Fully programmable CD player  
 • Cassette/AM/FM tuner & 2-way spkrs  
**SALE \$279**  
**Alwa NSX3500** 30W/ch AM/FM/Cass/CD **\$459**  
**Dennon D60** CD/Cass/AM/FM tuner remote mini system **CALL**  
**JVC MACT7** Multi-disc • dual cass AM/FM tuner hi amped **\$579**  
**Panasonic SCCH35** single disc 50W • AM/FM/Cass w/remote **\$439**  
**Technics SCCH55** 3-disc changer 70W mini with remote **CALL**



## HUGHES LIQUIDATION SALE

**Hughes AK-500**  
 • Basically, a stereo enhancement system that simulates 3D/Full Surround Sound as a 3D mix...Astounding  
**SAVE OVER 50% OFF**  
**Orig \$199**  
**NOW ONLY \$99**



## SPECIAL

**JVC ALA95BK Turntable**  
 • Auto arm return **Orig \$139**  
 • Belt drive design **Now Only**  
 • Cartridge included **\$49**  
 • No Dust cover



To Order Our Free Stereo Catalog  
**Call 1-800-GET HIFI**  
 Or Write:  
 Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Sound City  
 P.O. Box 23 S. Kinnelon, NJ 07405

**Bang & Olufsen THORENS** **LUXMAN** **CANTON** **HAFER**  
**AudioSource Pinnacle** **SHARP VISION**  
**Phase Linear** **SONY** **MITSUBISHI**  
**SOUNDSTREAM** **ONKYO** **Panasonic**  
**HITACHI** **KENWOOD** **Technics** **DENON**

**NAD** **HUGHES** **MINOLTA** **BBE**  
**AKG** **NHT** **PIONEER** **brother**  
**JVC** **lexicon**  
**TERK** **zymbol** **Atlantic**

**a/d/s** **aiwa**  
**AKG** **NHT** **PIONEER** **brother**  
**JVC** **lexicon**  
**TERK** **zymbol** **Atlantic**

## RETAIL STORE INFO

**Meatdown Shopping Center**  
 Rt 23, Kinnelon NJ 07405  
**Call 201-838-3444**  
**Mon-Fri 9-9 • Sat 9-6**

## MAIL ORDER CALLS

To Order By Phone:  
**1-800-542-7283**  
 To Order By Fax:  
**1-201-838-2516**  
 Or Send Check, Cashiers Check or Money Order



## WE ACCEPT

**Mail Order Hours:**  
**Mon - Fri 9-9 Sat 9-6**

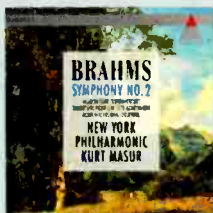
## CUSTOMER SERVICE

Please Have Your Invoice Number Ready.  
**1-201-838-2653**  
 For Returns or Claims  
**Monday - Friday 9-5**

Factory Authorized for all brands we sell • Not responsible for typographical errors • NO returns on video or car stereo products • 10 day defect exchange from date of receipt (except on video products) • All returns must be made within 10 days of receipt of merchandise & are subject to a restocking fee • Items must be in original condition and packaging • Shipping and handling not refundable

# QUICK FIXES

**BACH:** *Brandenburg Concertos Nos. 4-6*  
Boston Baroque, Pearlman  
TELARC 80354 (52 min)  
This is one of the best authentic-instrument recordings of the last three "Brandenburg" Concertos (the same performers have also recorded the first three), and Telarc has outdone itself in the engineering. The sound of the harpsichord and recorders has an almost tactile immediacy, and the strands of counterpoint have rarely been rendered more clearly. *D.P.S.*



**BRAHMS:** *Symphony No. 2; Academic Festival Overture*  
New York Philharmonic, Masur  
TELDEC 77291 (49 min)  
The attraction here resides more in the unusually refined playing of the New York Philharmonic under Kurt Masur's baton—in the middle movements especially—than in any unusual interpretive insights. The *Academic Festival Overture* gets a brisk, no-nonsense treatment, with little exuberance. Good honest sonics. *D.H.*



**DEBUSSY:** *Preludes, Book 2*  
**MILHAUD:** *Saudades do Brasil*  
Antonio Barbosa (piano)  
CONNOISSEUR SOCIETY 4190 (59 min)  
The Brazilian pianist Antonio Barbosa plays Debussy with a vivid sense of color and an aggressive rhythmic snap, showing how tough and extroverted his music can be. Approached this way, the preludes seem perfectly at home with Milhaud's twelve little reminiscences of Brazil, which can't compare in terms of quality but are typically full of extroverted charm. *D.P.S.*

**LISZT:** *Sonata in B Minor; Paraphrases of Verdi's "Aida" and "Rigoletto"; Vallée d'Obermann*  
Emanuel Ax (piano)  
SONY 48484 (59 min)  
Liszt might be the last composer one would associate with Emanuel Ax, but he brings a

fresh, thoughtful focus to these works. There are exquisite, soft-lit revelations in *Vallée d'Obermann*, and he finds poetry beneath the glitter in the three Verdi "paraphrases" (two are on different bits from *Aida*). His emphasis on the meditative qualities of the sonata, though, plays down its dramatic gestures and thus its wonderful contrasts. Thought-provoking nonetheless, and beautifully recorded. *R.F.*

**RAVEL:** *Daphnis et Chloé*  
London Symphony, Nagano  
ERATO 91712  
Another triumph for the Japanese-American conductor Kent Nagano—a first-rate version of the complete *Daphnis* ballet score for a major French label with a major English orchestra. Ravel was certainly influenced by Eastern art, so it is perhaps not farfetched to describe this low-key but seductive performance as made out of the most highly refined orchestral brush strokes, all beautifully captured on the wide-range CD. *E.S.*

**SCHUBERT:** *Violin Sonatas*  
Oleg, Paraskivesco  
DENON 75027 (73 min)  
Schubert's four violin sonatas (the three called "sonatinas," Op. 137, and the one called "Duo," Op. 162) fill a CD as if by design, and Raphaël Oleg (violin) and Théodor Paraskivesco (piano) respond to the music as if by instinct, with both elegance and affection. With the advantage of Denon's handsome sound, this is as appealing a presentation of these works as any now available. *R.F.*

**WAGNER:** *The Compact "Ring"*  
Soloists; Metropolitan Opera Orchestra, Levine  
DEUTSCHE GRAMMOPHON 437 825 (77 min)  
The complete *Ring* cycle, which requires fifteen CD's, cannot really be "highlighted" on only one. Nonetheless, DG has succeeded in creating an effective *sampling* of its riches in ten selections. While the Metropolitan Opera Orchestra and its conductor, James Levine, are the real stars here, praise is also due the commanding Wotan of James Morris, the imposing Sieglinde of Jessye Norman, and the menacing Alberich of Ekkehard Wlaschiha, as well as the fine performances by others in the Met's ensemble. The recorded sound is superlative. *G.J.*

**YOLANDA KONDONASSIS**  
*Scintillation*  
TELARC 80361 (58 min)  
Light, luscious, Impressionistic and Neoclassical music by Debussy and Ravel makes up this delightful program, along with dollops of Grandjany, Salzedo, and Gershwin. The harpist Yolanda Kondonassis is supported by flute, clarinet, and strings, and the resulting performance should lift your spirits. It's especially good for late-night listening. The recording quality is excellent. *William Livingstone*

as a whole, and he has the Philharmonia winds at the top of their form in the scherzo.

The ruminative Ninth Symphony also features unusual scoring, including the mellow-toned flugelhorn—normally associated with brass bands—and three saxophones. The tonal palette is darkly burnished, and the tempos are predominantly on the slow side except for the marvelously sardonic scherzo, where at one point the saxophones are meant to sound, as the composer put it, "like demented cats." Achieving just the right amalgam of massive sonority and genuine momentum in this music is a formidable challenge. While I would have liked a shade more weight in the scherzo, for the most part Slatkin does very well.

The sound on both of these discs, recorded at EMI's Abbey Road Studio 1, is good, with ample acoustical elbow room, but Slatkin's earlier recordings of Vaughan Williams's Symphonies Nos. 5 and 6 at Watford Town Hall have better string presence. *D.H.*

## Collection



**LUBA ORGONASOVA**  
*Favourite Soprano Arias by Bellini, Donizetti, Verdi, and Puccini*  
Czecho-Slovak Radio Symphony, Humburg  
NAXOS 8.550605 (58 min)  
**Performance: Outstanding**  
**Recording: Good**

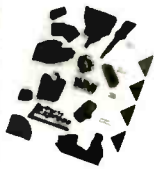
Here is an unexpected and delightful discovery. Luba Orgonasova, a native of Bratislava, has already appeared in Vienna and Salzburg, but except for her participation in earlier Naxos releases, she appears to be unknown in America. She has a lovely tone in this recital, clearly articulated and finely tuned. Her singing is accurate and technically assured, soaring confidently up to several E-flats, often the hard way—by a legato slur instead of a special attack. The chromatic runs in "Quia voce" from Bellini's *I Puritani* are all in place, and the Mad Scene from Donizetti's *Lucia*, though somewhat restrained emotionally, is perfectly controlled. To the Puccini arias—which are sensibly alternated with the bravura pieces—she brings lovely diminutos (*Turandot*), sensitive portamentos (*Gianni Schicchi*), and a youthful, spontaneous delivery (*La Rondine*).

The conductor Will Humburg leads briskly but not unfeelingly. Naxos may be faulted for not including texts and for tolerating sub-par notes; it's a budget label, though, so one should not be overcritical. *G.J.*





# SPEAKER CATALOG



Parts Express is a full-line distributor of electronic parts and accessories, geared toward the consumer electronics industry, and the technical hobbyist. Stocking an extensive line of speaker drivers and accessories for home and car. Call for your free 172 page catalog today.

**Parts Express**  
340 E. First St.  
Dayton, Ohio 45402

**1-800-338-0531**

RIGHTEN FOAM EDGES? LOWEST PRICES, BEST WARRANTY. Speaker reconing. DIY foam kits. Visa/MC/Discover. SIMPLY SPEAKERS: 1-800-767-4041.

SPEAKERS, SATELLITES/SUBWOOFERS. SAVE \$ ON QUALITY SYSTEMS WITH FOCAL, PEERLESS DRIVERS, COLORADO AUDIO. (303) 221-2940.

SPEAKER REPAIR. ALL BRANDS RECONING, & SURROUNDS (BOSE!). PERKINS ELECTRONICS. (800) 769-9599, RT 1 BOX 219, HOUGHTON, MI 49931.

STATE OF THE ART CROSSOVER NETWORKS. UPGRADE AND IMPROVE OLD SPEAKER SYSTEMS. FREE DESIGN GUIDE. ALLPASS TECHNOLOGY, INC. PO BOX 453, AMITYVILLE, NY 11701. (516) 598-1320.

## CABLE TV

**CABLE TV CONVERTERS/DESCRAMBLERS.** Guaranteed lowest prices in U.S., Jerrold, Hamlin, Zenith—many others! Lowest dealer prices! Orders shipped within 24 hours! MasterCard—Visa—C.O.D. accepted. For Free catalog, orders and information, call (800) 345-8927. Pacific Cable Co., Inc., 7325 1/2 Reseda Blvd., Dept. 1392, Reseda, CA 91335.

**CABLE T.V. CONVERTERS.** Jerrold®, Zenith, Pioneer, Oak, Scientific Atlanta, And Many More! 12 Years Experience Gives Us The ADVANTAGE. Visa/MC, Amex, COD. ADVANTAGE ELECTRONICS, INC., 1-800-952-3916; 1125 RIVERWOOD DR., BURNSVILLE, MN 55337.

**WHY RENT?  
SAVE! SAVE!**

## CABLE TV DESCRAMBLERS

JERROLD • OAK • HAMLIN • ZENITH  
PIONEER • SCIENTIFIC ATLANTA

**READY-TO-SHIP!**

6 MONTH WARRANTY! ABSOLUTELY  
LOWEST WHOLESALE / RETAIL PRICES!

MASTER CARD • VISA • AMEX • C.O.D.

**FREE COLOR CATALOG!**

**1 (800) 950-9145**



1470 OLD COUNTRY ROAD, STE-315  
PLAINVIEW, NY 11803  
NO NY SALES - SR

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.

## NEW PRODUCTS

Eliminate Unsightly & Dangerous Speaker Cable Runs. Speaker Wall Plates for In-Wall Wiring. (2) Terminal Plate-\$5.95 (4) Terminal Plate-\$7.95 (8) Terminal Plate-\$9.95. Wall Boxes & Cable Available. Contemporary Design, Rochester, N.Y. 14626. ORDER/INFO (800)723-1622. FAX (716)289-6926.

Millions of your prime prospects can be found in the industry leading titles of Hachette Filipacchi Magazines, Inc.

To place a classified ad, simply call toll-free and reserve your space today!

**1-800-445-6066 (9am-5pm EST)**  
In Canada: 1-212-767-5750

## TIPS FOR MAIL ORDER PURCHASERS

It is impossible for us to verify all of the claims of advertisers, including product availability and existence of warranties. Therefore, the following information is provided for your protection.

1. Confirm price and merchandise information with the seller, including brand, model, color or finish, accessories and rebates included in the price.
2. Understand the seller's return and refund-policy, including the allowable return period and who pays the postage for returned merchandise.
3. Understand the product's warranty. Is there a manufacturer's warranty, and if so, is it from a U.S. or foreign manufacturer? Does the seller itself offer a warranty? In either case, what is covered by warranty, how long is the warranty period, where will the product be serviced, what do you have to do, and will the product be repaired or replaced? You may want to receive a copy of the written warranty before placing your order.
4. Keep a copy of all transactions, including cancelled checks, receipts and correspondence. For phone orders, make a note of the order including merchandise ordered, price, order date, expected delivery date and salesperson's name.
5. If the merchandise is not shipped within the promised time or if no time was promised, 30 days of receipt of the order, you generally have the right to cancel the order and get a refund.
6. Merchandise substitution without your express prior consent is not allowed.
7. If you have a problem with your order or the merchandise, write a letter to the seller with all the pertinent information and keep a copy.
8. If you are unable to obtain satisfaction from the seller, contact the consumer protection agency in the seller's state or your local Post Office.

If, after following the above guidelines, you experience a problem with a mail order advertiser that you are unable to resolve, please let us know. Write to the Associate Publisher of STEREO REVIEW Magazine, Tony Catalano. Be sure to include copies of all correspondence.

## Stereo Review

# RETAIL MART

**OK!** SO WE'RE  
A NAME  
DROPPER!

Authorized Dealers For...

**JVC**

**Panasonic**

**MITSUBISHI**  
International Corporation  
ELECTRONICS

**Canon**

**BOSE**

**SONY**

**Ph. Tell** WALL  
BRACKETS

**BEACH SALES** (Sorry No Catalogs)  
80 VFW Parkway  
Revere, MA 02151

In Business for 50 Years  
**1-800-562-9020**



**Steve Says:**

"The Best Products, The Best Advice -  
Making Customers Happy Since 1948"

AUTHORIZED DEALER FOR:

ADS / Advent	Jamo / JBL / JVC
Aiwa	Mission NAD
Acoustic Research	Panasonic
Altec Lansing	Parasound
Atlantic Technology	Pioneer
Apature	Polk Audio
Bang & Olufsen	Proton / Revox
Beyerdynamics	Sony ES
Carver	Sony Video
Celestion / Denon	Surround Sound, Inc.
Dual / Flatline Cable	Technics THX
Harmon Kardon	Terk / Thorens
Infinity / Luxman	All with manufacturers' warranty

**ROYAL**

**PLUS...**

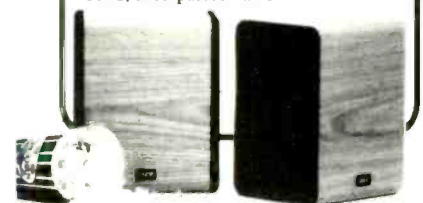
48 Main Street, Andover, MA 01810  
**(508) 688-6364**



**Encore II  
Dipole  
Surround**

For the ultimate home theater, the ambient sound should be realistic and fill your room yet never give a clue where the speakers are!

We've refined the design of the dipole surround speaker for 50-100% less than competing systems! Superb sound and build, unsurpassed value!



**Audio Concepts, Inc.**

901 South 4<sup>th</sup> St.,  
Voice (608) 784-4570

Since 1977  
La Crosse, WI 54601  
Fax: (608) 784-6367

Ask for a free catalog on our full line of loudspeakers

Stereo Review

RETAIL MART

SEE US LAST

WE WILL BEAT ANY PRICE

PRINTED IN THIS MAGAZINE ON HOME & CAR STEREO\*

The SOUND Approach

6067 Jericho Tpke., Commack, NY 11725 Full Mfrs. Warranty / Auth. Dealers Only\*

FACTORY AUTHORIZED DEALER

(800) 368-2344

Friendly People & Expert Advice Information Call 1-908-780-6600 ABC 1-800-354-1324 Many Makes & Models Priced too Low To Print

RECEIVERS

Carver\* HR895 Call Denon AVR3000 Call H.Kardon\* AVR30 New HK3600 Call JVC RX809 .395 Kenwood KRV7050 .315 NAD\* 7100X Call Nakamichi\* Receiver 1... Call Onkyo\* SV909pro... In SV717pro... Stock Pioneer VSX-D1SI... Call VSX-512S... Call Sony STR-D1011 Call Yamaha\* RXV1070 Call RXV870 Call

CD PLAYERS

Carver\* SD/A490... Call H.Kardon\* TL8500... Best HD7525... Price JVC XLZ1050... Top XLM509... Rated Nakamichi\* MB2 Call MB3 Call Onkyo DX-C606... Call 706... Call Pioneer CLD D502... Call PD-DM902... Call Philips CD950P... Call Sony CDP C735... Call CDP C601ES... Call Yamaha\* CDC 635 .225 CDC 735 Call CDC 735 Call

CAR STEREO

Alpine\* 7517 .295 3547 .185 Autotek 7054BTS... Top 7150BTS... Rated Bazooka\* T-62A .189 T-82A Call Boston\* Pro6.2 Call 797 145 Collins Bass Boxes... Are #1 Clarion New Models... Call 3680 .225 Coustic AMP 460... 199 Eclipse\* ECD 412 Call EOS 2000... Call Infinity\* FS-600... Call 693Kappa... Call Kenwood KDC7000... 325 Kicker\* Compiton 12... Call 75Wx2... 179 Phase Linear PLS 1200... 99 PLS 234... 349 Pioneer DEH-880... 370 KEH-M8500... 380 Polk\* MM3065... Call MM 6920... 105 PPI\* A300... New A404... Call Rock.Fogate\* 12" Punch... 95 Punch 100... 349 NAD\* 1600 Call Sony CDX-5460... Call CDX-U6260... Call Soundstream\* MC245... Call

SPEAKERS

Advent All Models... Call AR M6... Great Bose\* AM-51... Lowest 901 Classic... Price Dalquist All Models... Call Infinity Reference 3... 295 Reference 6... Call JBL L.S... New Klipsch\* Mary Models... Call Paradigm\* 5seil... Call 7seil... Call SB Polk\* LS 70... New RM3000... Call Pinnacle\* PNB+... 265

CASSETTES

Nakamichi\* Call Yamaha\* For Denon\* Your H.Kardon... Best Pioneer Price!

SEPARATES

Adcom\* GTP500L... Call GFA555L... Call Carver\* TFM35... All CT17... Stock Halfer\* 9270 Call 9300 Call H.Kardon\* PT2300 Call PA2200 New NAD\* 1600 Call 2700THX Call Yamaha\* DSPA1000... Call DSPE200 For

ABC 116 Craig Rd. Englishtown NJ 07726

All Products are New USA Merchandise covered by the Manufacturer's Warranty. \*ABC's exclusive limited warranty non authorized stores and are backed by our 180 Day Money Back Guarantee

Custom Car Installation

Where Audio-Video Connect

Total Home Installation

USA MEDIA JUNCTION

100% SATISFACTION GUARANTEED

30 Day Money-Back Guarantee Defectives Gladly Exchanged

CD-PLAYERS

- ONKYO DXC 210 ..... 288  
CARVER SDA 360 ..... 333  
HAR KAR TL 8500 ..... 399  
JVC XLF 207 ..... 199  
JVC XLM 509 ..... 247  
JVC DIGI XLZ 1050 ..... CALL  
KENWOOD DP 2050 ..... 156  
KENWOOD DP 6650 ..... 216  
PHILIPS CD 920 ..... 157  
PHILIPS CD 935 ..... 256  
PHILIPS CD 950 ..... CALL  
PIONEER PDM 702 ..... 198  
PIONEER PDM 902 ..... 279  
PIONEER PDT M3 ..... 337  
SONY CDP C435 ..... 208  
SONY CDP C910 ..... 324  
MUSEATEX CD TRANS. CALL  
YAMAHA CDC 635 ..... 248

RECEIVERS

- JVC RX 709 ..... 327  
PIONEER VSX D602S ..... 469  
CARVER HR 742 ..... 498  
DENON AVR 2000 ..... 646  
HAR KAR HK 3600 ..... CALL  
HAR KAR AVR 30 ..... 795  
JVC RX 509 ..... 246  
KENWOOD KRV-8050 ..... 416  
ONKYO TXSV 515 ..... 427  
PIONEER VSX 452 ..... 248  
PIONEER VSX D902S ..... 753  
SONY STR D1011 ..... 398  
SONY STR D2090 ..... 672  
SHERWOOD RV6010R ..... CALL  
TECHNICS SAGX 550 ..... 319  
YAMAHA RXV 670 ..... 596

SPEAKERS

- BOSE AM 5 II SYSTEM CALL  
ADVENT HERITAGE ..... 458  
AR M2 ..... 217  
AR M 4.5 ..... 525  
BIC V52 ..... 134  
BIC V12 POWERED SUB ..... 158  
BOSTON HD 5 ..... 126  
CAMBER LS7 ..... 398  
DES. ACOUST.PS CV ..... 89  
HAR KAR TWENTY ..... 497  
JAMO SW300 SYSTEM ..... 544  
JBL L 7 ..... CALL  
NHT 1.1 ..... 299  
NHT SW 2 PWD ..... CALL  
PARADIGM TITAN ..... 169  
PINNACLE PN 5+ ..... 147  
PINNACLE PN 8+ ..... CALL  
YAMAHA SAT/SUB ..... CALL  
B+W ..... ALL MODELS  
POWERED SUB WOOFERS IN WALL SPEAKERS  
SPEAKERS PRICED IN PAIRS SYSTEMS ARE COMPLETE

The Best Service • Best Prices Best Guarantee • Best Selection and The Best Brands in Stock

Amps CAR STEREO Speakers

- PIONEER DEH 780 ..... 357  
JBL 1500 GTI ..... 217



- ALPINE 3547 ..... 193  
AUTOTEK 7100BTS ..... 237  
CLARION 1700RT ..... 158  
JBL GTQ 200 ..... 248  
JVC KSRX 750 ..... 187  
KENWOOD KRC 660 ..... 297  
KENWOOD KDC C601 ..... CALL  
PIONEER M-6 ..... 299  
PIONEER KEHM8500 ..... 398  
SONY XRU 330 ..... 263  
SONY CDX 5260 ..... 297  
SONY CDX U303 ..... 309  
HIFONICS VULCAN ..... 251  
HIFONICS GEMINI ..... 456  
ROCKFORD FG 040 ..... 245  
ROCKFORD FG 200 ..... 498  
BAZOOKA T102 ..... 167  
BAZOOKA T82A ..... 256  
JBL GT 621 ..... 104  
JBL GT 963 ..... 68  
JBL T-06 ..... 88  
INFINITY RS6903 ..... 145  
BOSTON PRO 5.2 ..... 298  
POLK MM 3065 ..... 295  
KENWOOD KFC 6963 ..... 77  
KENWOOD KFC 1374 ..... 65  
PIONEER TSA 6940 ..... 64  
PIONEER TSA 1680 ..... 97  
THE BEST IN QUALITY AND COMPETITION CAR STEREO

Trained experts to help select, match & integrate components

TAPE DECKS

- TEAC V1010 3HD ..... 327  
AIWA ADF 810 ..... CALL  
JVC TDW 309 ..... 176  
KENWOOD KXW 8050 ..... 229  
PIONEER CTW 502R ..... 173  
PHILIPS DCC 900 ..... 646  
SONY TCK 611S ..... 268  
MANY MORE IN STOCK

THE FINEST IN HIGH-FIDELITY

We Will Beat Any Advertised Price In This Publication Prompt Delivery On The Finest Audio and Video Components

Home Theatre • Dolby® Surround Laser Disc • Powered Subwoofers DAT • Separates • Interconnect

VIDEO ■ TV ■ LASER



- HITACHI 27X18 ..... 569  
HITACHI 31KX6B ..... 898  
JVC AV27BM4 ..... 566  
JVC NV 558XR ..... CALL  
SONY KV27TS32 ..... 588  
SONY KV27EXR25 ..... 697  
SONY KV32XBR95S ..... CALL  
TOSHIBA 27 C30 ..... 447  
TOSHIBA 35 C60 ..... LOW PRICE  
HITACHI VTF 361A ..... 351  
JVC HRJ 600 ..... 356  
SONY SLV 700 ..... 367  
TOSHIBA M 649 ..... LOW PRICE!  
TOSHIBA M 759 ..... 399  
PANASONIC LX 900 ..... 846  
PIONEER CLDM 301 ..... 407  
PIONEER CLD D702 ..... 756  
SONY MDP 455 ..... 419  
SONY MDP 600 ..... 598  
MITSUBISHI 3520 ..... CALL

SYSTEMS

- AIWA NSX 3500 ..... 429  
JVC MXS 4 ..... 443  
JVC MXC 7 ..... 678  
KENWOOD UD 351M ..... 588  
KENWOOD UD 700M ..... 898  
PIONEER CCS 370 ..... 489  
SONY MHC 510 ..... 366  
SONY MHC C90 ..... 793

Custom wiring & in-wall projects CABLING & ACCESSORIES

THE FINEST IN AUDIO GEAR

The Best Prices With The Best Customer Support!

We are devoted to 100% Customer Satisfaction Fully Authorized with Manufacturers Warranty

MON-FRI 10-8 • SAT. 10-5

Returns may be subject to a restocking fee • Shipping & handling non-refundable - ask salesperson for details

100% Satisfaction Guarantee - Everyday !

NEW ADDRESS: 9 Whippany Road C-3 • Whippany, NJ 07981 • MON-FRI 10-8 SAT. 10-5

1-800-USA-1002

STORE: 201-227-9002

WE ACCEPT ALL MAJOR CREDIT CARDS

INFO: 800-872-1002

This publication is available in microform from UMI.

800-521-0600 toll-free  
313-761-4700 collect from Alaska and Michigan  
800-343-5299 toll-free from Canada




Custom  
Car  
Installation

Where Audio-Video Connect



Total  
Home  
Installation


# USA MEDIA JUNCTION


**100% SATISFACTION GUARANTEED****30 Day Money-Back Guarantee**  
Defectives Gladly Exchanged**CD-PLAYERS**

ONKYO DXC 210	288
	
CARVER SDA 360	333
HAR KAR TL 8500	399
JVC XLF 207	199
JVC XLM 509	247
JVC DIGI XLZ 1050	CALL
KENWOOD DP 2050	156
KENWOOD DP 6650	216
PHILIPS CD 920	157
PHILIPS CDC 935	256
PHILIPS CD 950	CALL
PIONEER PDM 702	198
PIONEER PDM 902	279
PIONEER PDT M3	337
SONY CDP C435	208
SONY CDP C910	324
MUSEATEX CD TRANS	CALL
YAMAHA CDC 635	248



**RECEIVERS**

JVC RX 709	327	PIONEER VSX D602S	469
			
CARVER HR 742	498	PIONEER VSX 452	248
DENON AVR 2000	646	PIONEER VSX D902S	753
HAR KAR HK 3600	CALL	SONY STR D1011	398
HAR KAR AVR 30	795	SONY STR D2090	672
JVC RX 509	246	SHERWOOD RV6010R	CALL
KENWOOD KRV-8050	416	TECHNICS SAGX 550	319
ONKYO TXSV 515	427	YAMAHA RXV 670	596

**SPEAKERS**


BOSE AM 5 II SYSTEM	CALL
	
ADVENT HERITAGE	458
AR M2	217
AR M 4.5	525
BIC V52	134
BIC V12 PDPOWERED SUB	548
BOSTON HD 5	126
CAMBER LS7	398
DES. ACOUST. PS DV	89
HAR KAR TWENTY	497
JAMO SW300 SYS' EM	544
JBL L 7	CALL
NHT 1.1	299
NHT SW 2 PWD	CALL
PARADIM TITAN	169
PINNACLE PN 5	147
PINNACLE PN 8	CALL
POLK M 3	163
YAMAHA SAT/SUB	CALL

**The Best Service • Best Prices**  
**Best Guarantee • Best Selection**  
**and The Best Brands in Stock****Amps CAR STEREO Speakers**

PIONEER DEH 780	357	JBL 1500 GI1	217
			
ALPINE 3547	193	ROCKFORD FG 040	245
AUTOTEK 7100BTS	237	ROCKFORD FG 200	498
CLARION 1700RT	158	BAZOOKA T102	167
JBL GTQ 200	248	BAZOOKA T82A	256
JVC KSRX 750	187	JBL GT 621	64
KENWOOD KRC 660	297	JBL GT 963	108
KENWOOD KDC C601	CALL	JBL T-06	88
PIONEER M-6	299	INFINITY RS6903	145
PIONEER KEHM8500	398	BOSTON PRD 5.2	298
SONY XRU 330	263	POLK MM 3065	295
SONY CDX 5260	297	KENWOOD KFC 6963	77
SONY CDX U303	309	KENWOOD KFC 1374	65
HIFONICS VULCAN	251	PIONEER TSA 6940	64
HIFONICS GEMINI	456	PIONEER TSA 1680	97

THE BEST IN QUALITY AND COMPETITION CAR STEREO

**Home Theatre • Dolby® Surround**  
**Laser Disc • Powered Subwoofers**  
**DAT • Separates • Interconnect****VIDEO ■ TV ■ LASER**

	HITACHI 27AX1B	569	JVC HRJ 600	356
HITACHI 31KX6B	898	SONY SLV 700	367	
JVC AV27BM4	566	TOSHIBA M 649	LOW PRICE!	
JVC NV 55BXR	CALL	TOSHIBA M 759	399	
SONY KV27TS32	588	PANASONIC LX 900	846	
SONY KV27EXR25	697	PIONEER CLDM 301	407	
SONY KV32XR95S	CALL	PIONEER CLD D702	756	
TOSHIBA 27 C30	447	SONY MDP 455	419	
TOSHIBA 35 C66	LOW PRICE	SONY MDP 600	598	
HITACHI VTF 361A	351	MITSUBISHI 3520	CALL	

**SYSTEMS**

AIWA NSX 3500	429
JVC MXS 4	443
JVC MXC 7	678
KENWOOD UD 351M	588
KENWOOD UD 700M	898
PIONEER CCS 370	489
SONY MHC 510	366
SONY MHC C90	793

**Custom wiring & in-wall projects**  
CABLING & ACCESSORIES**THE FINEST IN AUDIO GEAR**ALPINE  
BOSTON ACOUSTICS  
CELESTION  
DENON  
LUXMAN  
PARASOUND  
POLK AUDIO  
VELODYNENOT AUTHORIZED BUT  
THESE FINE PRODUCTS  
ARE COVERED STRICTLY  
BY USA'S WARRANTY

MON-FRI 10-8 • SAT. 10-5

**THE FINEST IN HIGH-FIDELITY**BOSE  
CARVER  
HARMAN KARDON  
HAFLER  
KENWOOD  
MITSUBISHI  
NHT  
ONKYO  
YAMAHANOT AUTHORIZED BUT  
WITH FULL MANUFACTURER  
USA WARRANTY

Returns may be subject to a restocking fee • Shipping &amp; handling non-refundable • ask salesperson for details

**THE SOUND APPROACH**  
AUTHORIZED  
DEALERS FOR:

- ADS
- ADVENT
- ALPHASONIK
- BAZOOKA
- BOSE
- CARVER
- DENON
- INFINITY
- KENWOOD
- NILES
- ONKYO
- PIONEER
- ROCKFORD
- SONANCE
- SONY ES
- AND MANY MORE

SEE US FOR BEST PRICE

**THE SOUND APPROACH****800-368-2344**

6067 JERICHO TPKE., COMMACK, N.Y. 11725

Millions of your prime prospects can be found in the industry leading titles of Hachette Filipacchi Magazines, Inc.

To place a classified ad, simply call toll-free and reserve your space today!



**1-800-445-6066 (9am-5pm EST)**  
In Canada: 1-212-767-5750**NO BULL....****1-800-NO-BULL-93**

(800-662-8559) • INFO 1-908-566-7100

**VISIT US LAST WITH YOUR BEST LEGIT DEAL & WE WILL BEAT IT!!!****AUTO****HOME**

AUDIOVOR*	HORNET*	ADVENT*	NHT*
ALTEC	HIFONICS	AWA*	NILES*
ALPHASONIC	INFINITY*	ATLANTIC TECHNOLOGY*	ONKYO
ALPINE	JBL*	BOSE*	PHILIPS*
AUTOTEK*	JVC*	CARVER	PIONEER*
BAZOOKA	KENWOOD	CERWIN VEGA*	LASER KARAOKE*
BLAUPUNKT*	MONSTER CABLE*	DESIGN ACOUSTICS*	PINNACLE*
CERWIN VEGA*	PYLE*	DENON	RCA*
CODE ALARM	PIONEER*	INFINITY*	SONANCE*
EXCALIBUR*	POLK	JBL*	SONY*
	PRECISION POWER	KENWOOD	TECHNICS*
			YAMAHA*

**ALL CAR AUDIO & HOME THEATRE**

	
ALL CAR AUDIO & ALARMS	RECEIVERS CASSETTES COMPACT DISC'S LASER PLAYERS MINI SYSTEMS
PRE-FAB BOXES	
CAR STEREO'S CAR ALARMS SPEAKERS LCD PROJ. T.V.'s (All Sizes)	

WE ARE CUSTOM DESIGN SYSTEMS SPECIALISTS

**ELECTROWORKS, INC.**100 HWY. 34-MATAWAN, NJ 07747  
545 HWY. 18-E. BRUNSWICK, NJ 08816  
FAX 1-908-566-8234MASTERCARD • VISA • DISCOVER • AMEX • C.O.D  
\*FACTORY AUTHORIZED WITH FULL MANUFACTURERS WARRANTY ON ALL PRODUCTS\* ALL OTHERS CARRY ELECTROWORKS EXCLUSIVE WARRANTY**100% Satisfaction Guarantee - Everyday!**

NEW ADDRESS: 9 Whippany Road C-3 • Whippany, NJ 07981 • MON-FRI 10-8 SAT. 10-5

**1-800-USA-1002**

STORE: 201-227-9002

WE ACCEPT ALL MAJOR CREDIT CARDS

INFO: 800-872-1002

**StereoReview**  
**RETAIL MART**

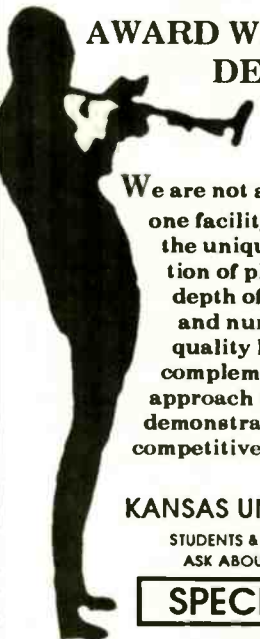
**the SoundSeller**  
For the Musical Difference  
Authorized Dealer For:

- NAD
- GRADO
- PROAC
- APATURE
- PROTON
- CWD
- STAX
- SANUS
- M & K
- KEF
- ONKYO
- SONY
- ADCOM
- THORENS
- TARGET
- CARVER
- LEXICON
- ATLANTIC TECHNOLOGY
- NAKAMICHI
- AUDIOCONTROL
- CELESTION
- DAHLQUIST
- NILES AUDIO
- NITTY GRITTY
- SOUNDSTREAM
- HARMAN KARDON
- MONSTER CABLE
- ALTEC LANSING
- ROCKFORD/FOSGATE
- POLK AUDIO

2808 Cahill Road, P.O. Box 224  
Marinette, WI 54143  
1-800-826-0520 (715) 735-9002

**CLASSIFIED ADVERTISERS:** You can reach millions of prime prospects for your mail order products or services through low-cost Marketplace Classified advertising.  
To place an ad, or for further information including rates, ad styles, sizes and multi-title discounts, call Toll-Free  
**(800) 445-6066** 9am-5pm EST

**Straight Talk....**  
106 Brands Available!  
AUTHORIZED DEALER




**AWARD WINNING DEALER**  
for 34 YEARS

We are not aware of any one facility that has the unique combination of physical size, depth of inventory, and number of quality lines to complement our approach to display, demonstration and competitive pricing.

**KANSAS UNIVERSITY**  
STUDENTS & ALUMNI  
ASK ABOUT OUR  
**SPECIALS**

Mon-Thur: 10am-8pm, Fri & Sat: 10am-6pm

**KIEF'S**  
AUDIO/VIDEO  
913-842-1811  
24TH & IOWA Lawrence, KS 66046



**CAMBRIDGE MASSACHUSETTS**  
AUTHORIZED DEALER FOR:

- JVC
- LEXICON
- MARANTZ
- M & K
- NAD
- NILES
- PARADIGM
- PS AUDIO
- SONY
- SONY ES
- SUMIKO
- THORENS

AR  
ALCHEMY  
APATURE  
BOSE  
GRADO  
HAFLER

**(617) 547-2727**

Q AUDIO  
95 Vassar Street  
Cambridge, MA 02139

M-F 10:00-7:00  
SAT. 10:00-6:00

WE LOVE TRADE-INS.  
Please bring us your old gear.

Reach proven mail order buyers — they turn to us when they are looking for purchasing information and advice. Advertise your products and services in a low-cost environment that sells.  
Millions of your prime prospects can be found in the industry leading titles of Hachette Filipacchi Magazines, Inc.  
To place a classified ad, simply call toll-free and reserve your space today!

**1-800-445-6066** (9am-5pm EST)  
In Canada: 1-212-767-5750

**Copies of articles from this publication are now available from UMI Article Clearinghouse.**

The UMI Article Clearinghouse offers articles from more than 11,000 copyright-cleared periodicals in a wide range of subjects. You can place your orders electronically, as well as by phone, mail, and telefacsimile. For more information, please complete and mail this coupon to UMI Article Clearinghouse, 300 North Zeeb Road, Box 11, Ann Arbor, MI 48106 USA. Or call toll-free for an immediate response: 800-521-0600. From Alaska and Michigan call collect 313-761-4700. From Canada, call toll-free 800-343-5299.

YES! I'd like to know more about UMI Article Clearinghouse.

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Company/Institution \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Telephone (\_\_\_\_) \_\_\_\_\_

**U·M·I**  
A Bell & Howell Company  
300 North Zeeb Road, Ann Arbor, MI 48106 USA

**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



**AUTHORIZED DEALER:** AKG • ATLANTIC TECH • AUDIBLE ILLUSIONS • AUDIOQUEST  
AUDIO ALCHEMY • AUDIO CONTROL • BEYER DYNAMIC • BOSE • CAL AUDIO LABS • CARVER  
CELESTION • CLEARFIELD • COUNTERPOINT • CWD • DAHLQUIST • DCM • FOSGATE • GENESIS  
GRADO SIGNATURE • HAFLER • HARMAN KARDON • HUGHES • INFINITY • JAMO • JBL • IEX.CO.  
MAGNUM/DYNALAB • McCORMACK • MERIDIAN • MUSE • NAD • NESTOROVIC • NHT • NILES  
ONKYO • PARASOUND • PHILIPS • PIONEER • POWER WEDGE • PROTON • PROAC • PS AUDIO  
PSB • ROOMTUNE • SONANCE • SONY • STAX • TARGET • THORENS • TICE • VELODYNE • VPI

# Speaker World



## Who we are...

**S**PEAKER WORLD IS A TEAM OF AUDIO experts with years of experience. Our warehouse is stocked with the absolute finest home theatre, surround sound, in-wall and mobile speakers.

Our goal is to help our customers re-create the most pleasurable listening environments their budgets can provide.

After hours, on our free time, our employees evaluate the most recent releases from the major manufacturers. This way our recommendations don't just come from a spec-sheet...but from first hand experience.



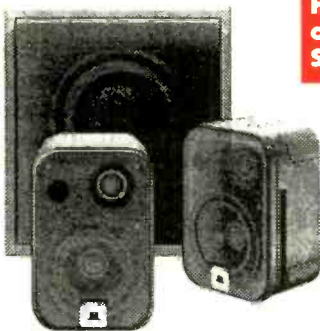
## We really can save you a fortune...

**W**E DON'T JUST SELL TOP OF THE LINE equipment... we sell it at discount. We understand what it means to purchase the components of your dreams and how disappointing it can be if you have no money left for tapes or discs.

**Our prices are as good or better than any merchant in this publication - everyday.**  
No money lost on over-priced, indifferent, retailers. Just top-shelf, factory-fresh speaker components at low cost.

**Huge Selection of IN-WALL Speakers**

**Ask About Our FREE Delivery**



## We're talking total selection...

**F**ROM THUNDERING SUB-WOOFERS to precise acoustic-static towers, we have the speakers you've always wanted. Call our toll-free number and get connected with a virtually limitless selection of quality loudspeakers.

**30-Day 'Satisfaction-Guaranteed' Trial Period**

# Save 10-60%

ON THE WORLD'S MOST FAMOUS SPEAKERS



## 800-44-WIRED



535 Tabor Road, Morris Plains, New Jersey 07950  
Phone: 201-984-5200 • Fax: 201-538-2578

YOUR COMPLETE SATISFACTION GUARANTEED

- CUSTOM DESIGNS ■ WIRING & INSTALLATIONS ■ HOME THEATRE SYSTEMS ■
  - HIGH QUALITY INTERCONNECT & SPEAKER WIRE ■ PLUGS ■ ADAPTERS ■ PINS ■
  - DOLBY PRO-LOGIC ■ 5-CHANNEL SURROUND SOUND ■ REMOTE SYSTEMS ■
- WE GLADLY ACCEPT • VISA • MASTERCARD • AMERICAN EXPRESS • DISCOVER

## Index to Advertisers

Reader Service No.	Advertiser	Page Number
1	Adcom.....	2-3
—	Allison Acoustics.....	81
—	American Express.....	26, 27
—	Apple Computer.....	41-48
—	Atlantic Technology.....	104a, b
—	Audiophile Systems.....	91
—	BMG CD Club.....	16a, b
—	Bose.....	8, 31
—	Bose Express.....	103
9	Boston Acoustics.....	19
6	Cambridge Sound Works.....	51, 52-53, 55, 57, 59, 60, 61
—	Camel.....	C3
17	Celestion.....	87
—	Columbia House CD Club.....	32a, b
—	Columbia House Laser Club.....	13
—	Crutchfield.....	105
23	DCM.....	101
15	Definitive Technology.....	22, 23, 25
22	Denon.....	9
27	Digital Phase.....	C4
—	Drum Tobacco.....	80a, b, 81
—	Electronic Wholesalers.....	117
28	Fisher.....	20, 21
—	Illinois Audio.....	113
22	Infinity.....	6
21	Infinity.....	99
—	Jack Daniel's.....	28
35	J&R Music World.....	106-109
—	JVC.....	35, 37
24	Klipsch.....	95
—	Linn Hi-Fi.....	91
—	Marlboro.....	15
38	Mobile Fidelity.....	92
—	Noise Cancellation Technologies.....	8
40	Panasonic.....	5
—	Pioneer.....	68
—	Polk Audio.....	10-11, 74-75
46	Radio Shack.....	79
—	Rao's.....	111
—	RDL.....	102
—	6th Avenue Electronics.....	114-115
—	Sony.....	C2, 1, 38-39
—	Sound City.....	118-119
—	U.S. Army.....	89
—	Yamaha.....	76

October



# THE HIGH END

BY RALPH HODGES

## Repercussions

Hollywood has been calling, and it has not been to offer me a role in the forthcoming *Indiana Jones and the Shoe Closet of Imelda Marcos*. It has been to administer a semi-severe drubbing for incautious remarks made in "Movie Sound at Home," the August installment of this column. Actually, I had expected this sort of response and was looking forward to it. The remarks I attributed to John Kellogg of Dolby Labs were certainly destined to be inflammatory. Let me share with you the artillery fire that has been coming my way.

Practically the first words out of the mouth of Tomlinson Holman, the technical director of Lucasfilm and the TH of THX, were, "They're not going to do that with *Jurassic Park*." Just what "that" is I'll get to in a moment. First, I'd like to refer to a paper Holman recently prepared for a technical conference in Europe, dealing in detail with the vagaries of getting a soundtrack to sound the same in different rooms. One of its central assertions is that, in typical domestic listening rooms and with the loudspeakers typically found in them, audio is not, as I had stated, a *near-field* experience (some authorities prefer the term "direct field") but a *reverberant-field* one.

Actually, even that is not the full story. In the example he cites, Holman finds that the experience is reverberant-field for most of the spectrum, but, because of the narrowing directivity patterns of most loudspeakers at high frequencies, it becomes near-field above about 8 kHz. Such is not so much the case in the normal mixing/monitoring situation, where efforts are usually made to provide near-field listening over as much of the spectrum as possible, and hence we have one up-front reason your listening experience diverges from the filmmaker's listening experience. Also, we have a strong argument for

the use of controlled-directivity loudspeakers in home settings, which tend to reduce this discrepancy and to minimize early reflections.

Now for *Jurassic Park*. In the August column I used the video mixing for the film *1492*, as described by Dolby's John Kellogg, as a springboard for a discussion of video mixing procedures in general. Holman is emphatic that what Kellogg described to me—principally, remixing from the six-track 70mm masters in a space smaller than a normal dubbing stage, equalization, and dynamic-range compression—is in no way typical practice, and he says that the top five post-production transfer houses in Los Angeles agree with him. He is especially adamant about high-frequency equalization, which he says is almost never employed.

To quote Holman, "Transfers usually proceed along the lines we've seen in many audiophile releases: 'No equalization, filtering, limiting, or compression was used for this soundtrack.'" So does that mean the soundtrack you take home is identical to the one played at the theater? Maybe not.

when concerns were raised about the quality of the  $L_T/R_T$  [left-total, right-total] mag master, better elements were sought. Since the 70mm master was not mixed with the same constraints as the optical  $L_T/R_T$  master, it provided greater dynamics and more bass than ideal for home video. These were adjusted exactly as explained in your article . . ." Nothing about high frequencies here, however.

Well, it begins to look as if there are some grounds for agreement between what looked to be very contrary views, although dispute clearly remains on the matter of "adjustments" and how common they actually might be. But there is something I must take a hit for: the statement that home speakers were used for the *1492* mix. The thing is, I didn't say it. Someone between me and the printing press said it. [Editing error. Sorry. —Ed.] What I said was that something more akin to home speakers was used—reportedly moderate-size JBL studio monitors, which are more like home speakers than theater ones.

Holman's main concern, I think, is avoiding the impression that great ef-

**Your home video soundtrack may be better than the Bijou's, even when it came from the same mix.**

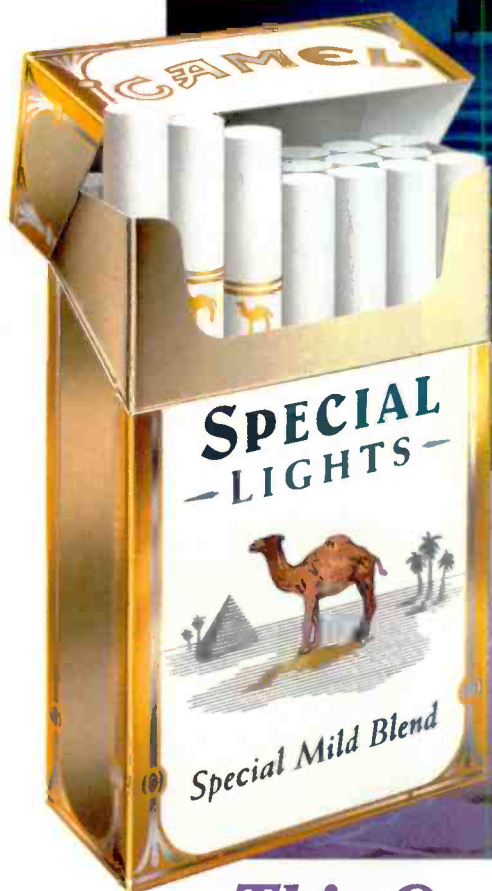
"On more recent titles, a separate video master *is* [emphasis added] sometimes made because the soundtrack headroom of, say, laserdisc, is so much greater than that of optical soundtracks [for theater exhibition], and there is no point in limiting the headroom of a wide-dynamic-range medium to the capabilities of a narrow-dynamic-range one." The thrust here, as I read it, is that your home soundtrack may actually be *better* than the Bijou's, even when it originated from the same mix.

Now let's have a look at what Dolby's Roger Dressler has to say: "The example given by Mr. Kellogg for *1492* is not an isolated event, but

forts are not made to insure that various versions of the soundtrack A/B well with each other. He insists that ". . . for the most part, on most titles, the existing Dolby Stereo or Ultra Stereo print masters are used directly for video," and "it is incumbent on you to represent correctly what is the transfer technique used for the vast majority of films." Fine. I will undertake that mission readily, with no evasions. But where there is room for debate, and there seems to be much here, debate there will be.

Holman will have more to say, and Dr. Floyd Toole at Harman International wants to enter the fray. You'll be hearing from him next month. □

# SPECIAL LIGHTS



*This One's Something Special*

*by Joe*

SURGEON GENERAL'S WARNING: Quitting Smoking  
Now Greatly Reduces Serious Risks to Your Health.

© 1993 R.J. REYNOLDS TOBACCO CO.

17 mg. "tar", 0.8 mg. nicotine av. per cigarette by FTC method.

# THE YEARS AND EARS OF EXPERIENCE ARE TAKING NOTE

The veterans of the audio industry. They've heard it all. And here's what they're saying after hearing DIGITAL PHASE...



*"Truly remarkable bass because of the Acousta-Reed technology. Midrange and treble as good as any I have ever heard."*

Dee B. Hall  
College Hi-Fi Audio  
Chattanooga, TN

*"The best performance and value in the marketplace today, period."*

Maurice Paulsen  
Crown International  
Elkhart, IN

*"A technical and sonic standout."*

Dave Working  
Pacific Coast Audio/Video  
Corona Del Mar, CA

*"Smoothest, most natural midrange ever heard in a system of up to four times its price range. Solid bass with superior transient response."*

Tom Hayward  
National Sound & Video  
Norcross, GA.

*"I'm amazed. Never heard anything like it. Astounding sound out of that cabinet."*

Lee Lyon, President  
Nicholson's Stereo  
Nashville, TN  
Upon hearing the new  
DIGITAL PHASE AP.5

*"Thunderous Bass."*

Bruce Pringle  
Boss Audio/Video  
Florida

You'll hear more from DIGITAL PHASE. Call 615-894-5075 for your nearest DIGITAL PHASE dealer.

 **Digital Phase**<sup>™</sup>  
ACOUSTA-REED BASS<sup>™</sup>

2841 Hickory Valley Road  
Chattanooga, TN 37421



Pictured, the DIGITAL PHASE AP-1, one of five DIGITAL PHASE systems featuring the patented ACOUSTA-REED<sup>™</sup> technology.