

Stereo Review

US \$2.95 • UK £1.95 • CANADA \$3.50 • FEBRUARY 1993

1993 BUYING GUIDE ISSUE

Features, Specs, and Prices of CD Players, Receivers, Amplifiers, Speakers, and More

STEREO REVIEW

35

35TH ANNIVERSARY

**AWARDS:
THE BEST
RECORDINGS
OF THE YEAR**

**UPGRADING
TO HOME
THEATER: A
PRACTICAL
GUIDE**

**TESTED
Technics DCC
Deck,
JBL Speaker,
Forté Ereamp,
And More**



#BXBDHMY***** 5-DIGIT 40242
#BCH8900Y091 9#430492 1J
APR 94
MR DAVID S BUCHANAN
8900 YELLOW MOOD PL #D502
LOUISVILLE KY 40242-7772





The only CD changers that take 3 ads to explain.

Order your music by catalog.

If you believe an orderly CD library is the sign of an orderly mind, Pioneer® makes a full line of CD changers just for you. Pioneer invented the six-CD magazine to be as ingenious at storing CDs as it is at playing them.



So you can catalog by artist, style—however you like—to make your CDs easy to find. Which is something you'll really appreciate with our extra-long-playing TM-2 Jukebox. Just plug in three magazines, and you can enjoy a phenomenal 18 hours of music.

Meanwhile, the Pioneer PD-M901's



new Digital Signal Processor can recreate the pristine acoustics of a church or the intimacy of a jazz club—choose any of six different environments.

So now, whatever your mood, the music is made to order.

PIONEER®
The Art of Entertainment

©1992 Pioneer Electronics (USA) Inc., Long Beach, CA.

Now available for moving and storage.

Once you put together a combination of CDs you like, you never have to leave them behind. Because the same six-CD magazines that Pioneer changers play at home are compatible with all our car multi-play changers. In fact, all Pioneer CD changers are



compatible, including those in our contemporary component systems.

Besides, the Pioneer six-CD magazine makes a handy, protective carrying case to take six hours of music with you wherever you go.

Which means, no matter how much you have to move around in a



day, or how many times the scene changes, at least you can count on one thing. The music will be great.

PIONEER®
The Art of Entertainment

©1992 Pioneer Electronics (USA) Inc., Long Beach, CA.

The Pioneer synchronized dubbing team.

There's more than one way to listen to music. And only Pioneer has multi-play changers for both CDs and cassettes.

For example, just press the CD Synchro button,



and the Pioneer PD-M901 six-CD changer automatically works in concert with our CT-WM70R six-cassette changer. A remarkable feat of coordination that lets you dub six CDs onto six cassettes, parts of CDs onto parts of cassettes, or any variation in between. Whichever variation you choose, our exclusive Automatic



Digital Level Controller eliminates jumps or drops in volume for a consistent sound from CD to CD.

For more information, call 1-800-PIONEER. Because it would take a lot more than three ads to explain everything Pioneer changers can do for you.

PIONEER®
The Art of Entertainment

©1992 Pioneer Electronics (USA) Inc., Long Beach, CA.

PREPARE FOR THE MOMENT OF TRUTH

It took seven continuous years of design work to make it happen. In the end, it took a whole new approach to sound reproduction. But, at last, the moment of truth has arrived.

It's called DIGITAL PHASE. It's a family of loudspeaker systems without compromise.

Gone is the trade-off between low bass extension and upper bass transients. At the heart and soul of these new systems is the patented Acousta-Reed™ technology.

By coupling a small bass driver with an elaborate network of acoustic reeds, DIGITAL PHASE brings bass accuracy and definition to a level never before realized.

Say good-bye to high-frequency harshness.

DIGITAL PHASE brings you an uncommon sweetness throughout the musical spectrum.

The secret is a one-piece dome tweeter of spun titanium. Ferro fluid dampened, resting in a butyl surround. Driven by a powerful neodymium motor.

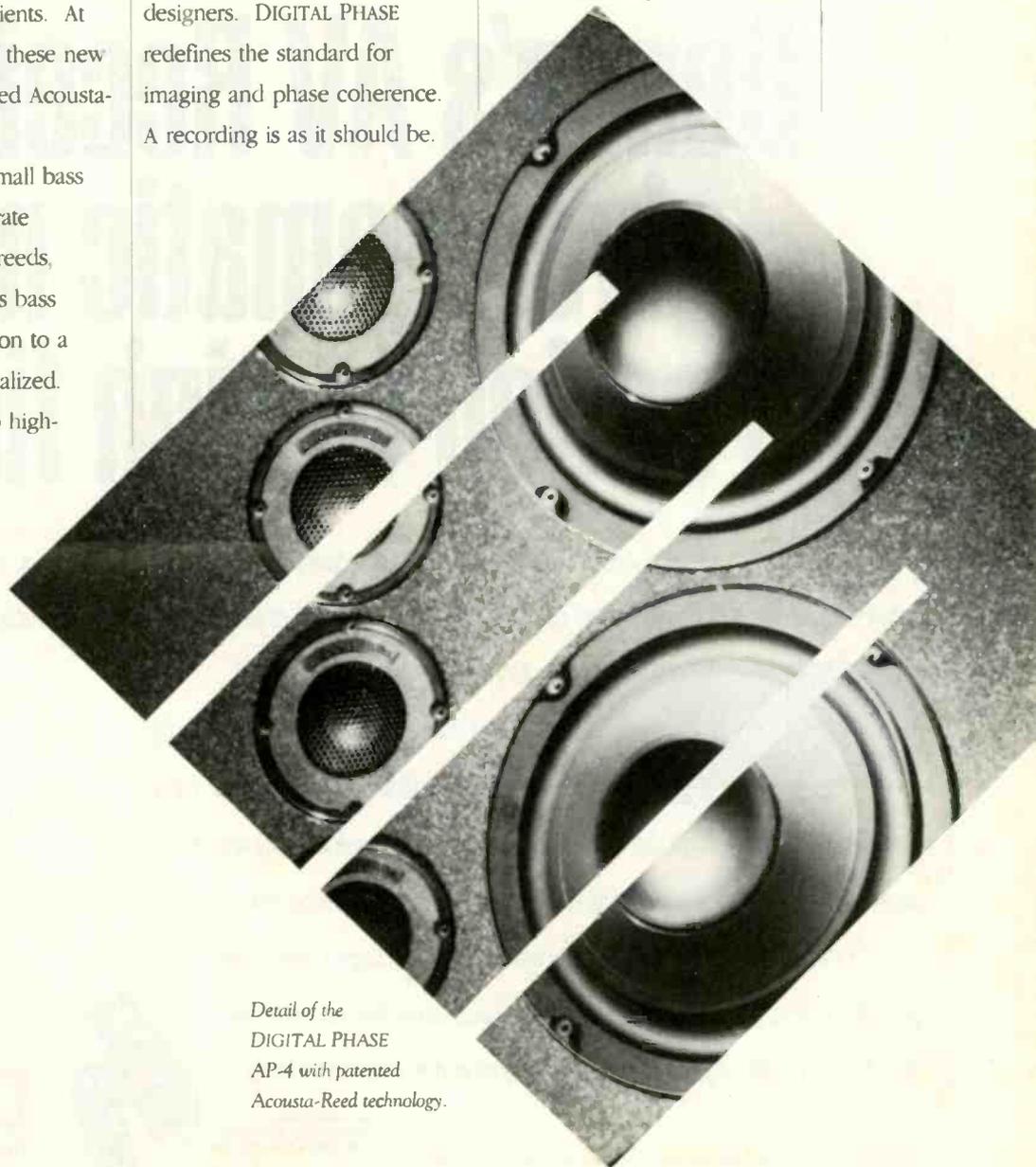
Welcome the combination of focus and dimensionality that has for so long eluded speaker designers. DIGITAL PHASE redefines the standard for imaging and phase coherence. A recording is as it should be.

So lifelike you feel you can reach out and touch the music as it touches you.

But hear it all for yourself. Call (615) 894-5075 for your nearest DIGITAL PHASE dealer. Then prepare for the moment of truth.

Digital Phase[™]
ACOUSTA-REED™ BASS™

2841 Hickory Valley Road
Chattanooga, TN 37421



*Detail of the
DIGITAL PHASE
AP-4 with patented
Acousta-Reed technology.*

For over eighty years Denon has
lived the definition of high fidelity—
producing sound faithful to the



original. Whether recording
and pressing
records or Compact

Discs; making the world's first commercial digital recording; building professional recording and broadcast
equipment or producing the CD Players ranked Number One in Consumer Satisfaction (*Verity Research, 1991*)
the Denon name has been synonymous with high fidelity.



AVR-3000 AV SURROUND RECEIVER



Denon's AV Receivers give dramatic new direction to high fidelity.

By digitally controlling signal placement, Denon has redefined high fidelity for Audio Video Surround
Sound—*accurate sound that is more faithful to the director's vision of the cinematic experience than any other*



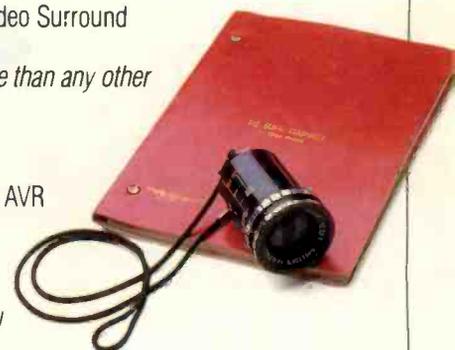
AVR-2000 AV SURROUND RECEIVER

AV Receivers in the field.

Unlike so many so-called AV products, Denon AVR
Receivers deliver audiophile signal quality

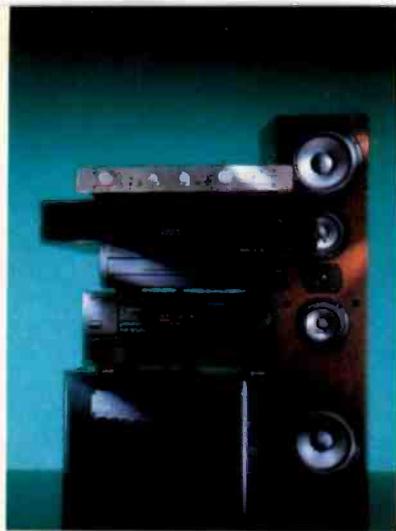
(wide dynamic range, high signal-to-noise, outstanding phase linearity and immeasurably low
distortion) and address what the others overlook: low level steering, rear channel fidelity and precise digital delay.

Through the application of highly advanced Digital Signal Processing (DSP), Denon enables you to tailor the sound first to
your listening room and then to vary the acoustics to recreate new environments. After all, before you can create sounds
that differ from the original, first you must be able to recreate the original.



RC-159 UNIVERSAL
PROGRAMMABLE AND RC-160
SIMPLIFIED AVR REMOTE CONTROLS

DENON
The first name in digital audio.



Cover

The Counterpoint Solid 8 preamplifier, NAD Model 505 CD changer, Denon AVR-3000 audio/video receiver, Altec Lansing PSW-10 powered subwoofer, and Acoustic Research Classic 26 loudspeaker are among the hundreds of components described in the Equipment Buying Guide beginning on page 53.

Photograph by Roberto Brosan

Stereo Review

INCORPORATING HIGH FIDELITY®



EQUIPMENT

BULLETIN 4

UP FRONT 6

LETTERS 8

NEW PRODUCTS 14

AUDIO Q&A 18

POPULAR MUSIC 119

CLASSICAL MUSIC 128

THE HIGH END 144

Equipment Test Reports 22

Technics RS-DC10 DCC Recorder, page 22

JBL HP520 Loudspeaker System, page 28

KLH Premier 81 Loudspeaker System, page 30

Forté F44 Preamplifier, page 32

35th Anniversary Special: Audio's Top Ten 35

The most important developments of the past thirty-five years • by *Julian Hirsch*

A Sensible Guide to Upgrading 44

From two-speaker stereo to a surround-sound home theater • by *Peter W. Mitchell*

Equipment Buying Guide 53

Features, specs, and prices of hundreds of hi-fi components • by *Bob Ankosko, José Garcia, and staff*

Receivers, page 54

Amplifiers, page 60

Compact Disc Players, page 81

Tuners, page 89

Speakers, page 92

Directory of Manufacturers, page 111



COPYRIGHT © 1992 BY HACHETTE MAGAZINES, INC. All rights reserved. Stereo Review, February 1993, Volume 58, Number 2. Stereo Review (ISSN 0039-1220) is published monthly by Hachette Magazines, Inc. at 1633 Broadway, New York, NY 10019; telephone (212) 767-6000. Also publishers of Car Stereo Review, Sound & Image, and Stereo Buyers' Guide. One-year subscription rate for the United States and its possessions, \$13.94; Canada, \$21.94 (includes 7% GST. GST registration number 126018209); all other countries, \$21.94; cash orders only, payable in U.S. currency. Second-class postage paid at New York, NY 10001, and at additional mailing offices. Printed in the U.S.A. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. 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) 447-9330. PERMISSIONS: Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to: The Editor, Stereo Review, Hachette Magazines, Inc., 1633 Broadway, New York, NY 10019. BACK ISSUES are available. Write to Stereo Review—Back Issues, P.O. Box 7085, Brick, NJ 08723. Enclose a check for the cover price of each issue you want plus \$1.75 each for shipping and handling. EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care, but the publisher assumes no responsibility for return or safety of unsolicited art, photos, or manuscripts.



MUSIC

Special CD Offer 13

Legacy Rocks!

Record of the Year Awards 41

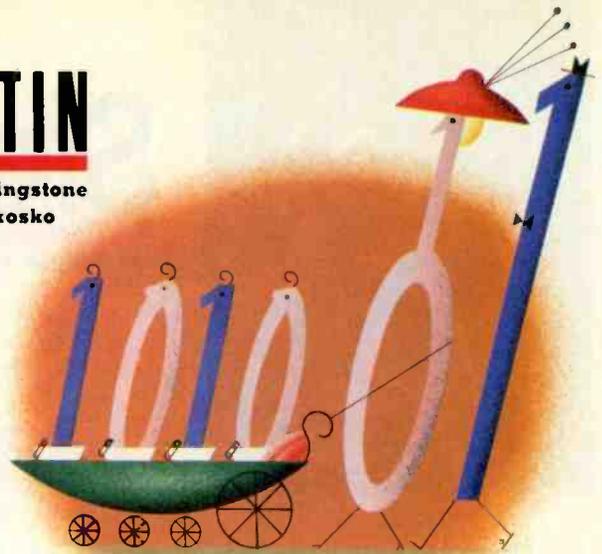
The best of the past year

Best Recordings of the Month 115

Neil Young,
Leonard Bernstein's Final Concert,
Dada, Puccini's *Tosca*

BULLETIN

by William Livingstone
and Bob Ankosko



And the Winners Are . . .

The Verity Group, a California-based market-research firm specializing in consumer electronics, has announced the recipients of its 1992 Verity Award for Excellence in Customer Satisfaction. According to Verity, more than 25,000 U.S. consumers were asked to indicate their level of satisfaction with products in twenty-one categories, including home and car audio.

The top-rated brands in those categories were: Sony for boombox portables and personal stereo, Denon for home CD players, Yamaha for home receivers, Kenwood for home tape decks and one-brand rack systems, and Alpine for car stereo equipment. Interestingly, Verity concluded that customer satisfaction is more a function of who sold the product rather than the product itself.

Music on the Tube

PBS gives good variety this month with *America's Singing Sweethearts: Nelson Eddy and Jeanette MacDonald* (February 12), *Austin City Limits* with guests Lyle Lovett and Dr. John (February 13), the Tony Award-winning Broadway revue *Black and Blue* (February 17), a tribute to Miles Davis (February 19), and Shirley Horn's *Here's to Life* (February 21), among other shows. Check local program listings.

And don't forget to tune in to the Recording Academy's thirty-fifth annual Grammy Awards presentation on CBS-TV on February 24.

Road Alert

Adcom is planning to introduce a high-end line of fan-cooled car amplifiers this spring, marking its debut in the car arena. Five models are in the works, each of which supports balanced inputs. . . . Ford is expanding the availability of

its DSP option in 1993 to include the Taurus, Crown Victoria, Explorer, Mercury Sable, Lincoln Town Car, and Lincoln Continental. The processor, which simulates the acoustical characteristics of six venues—including a concert hall and a cathedral—is a \$250 dealer-installed option. . . . Meanwhile, the car stereo company Orion Industries is launching a new home audio division named Solus, whose first products will be in-wall speakers priced between \$200 and \$400 each.

Watch This Space

Entries are still being accepted for STEREO REVIEW's Ninth Annual Rodrigues Cartoon Caption Contest announced in our January issue. . . . Other contests we are tracking include Anthem! America's competition for a song suitable to replace the *Star Spangled Banner* as the U.S. national anthem. The winner is to be announced in March. Prize: \$1 million. . . . In February or March we expect to learn who has won the World's Worst Guitar Playing Contest conducted by House of Guitars in Rochester, New York. Prizes include a round trip to Rochester, a deal with Mirror Records, and a one-way bus ticket to Canada. . . . And Miami funnyman Dave Barry is conducting a Bad Song Survey in two categories (Worst Overall Song and Worst Lyrics). High on his test poll list are *Copacabana* by Barry Manilow, *Me and You and a Dog Named Boo* by Lobo, and *Feelings* by various weenies.

Music in the Mailbox

The Elvis Presley stamp (showing a young King) went on sale in U.S. post offices on January 8. Three hundred million of them are being printed, and that should provide enough Elvis sightings for any fan. Other stamps in 1993 will honor the Broadway shows *My Fair Lady*, *Oklahoma*, and *Porgy and Bess* and such diverse performers as the Carter Family, Patsy Cline, Buddy Holly, Otis Redding, and Richie Valens.

Legal Copies

The Audio Home Recording Act of 1992 was signed into law by outgoing President Bush, clarifying much-debated copyright issues. The law will exempt consumers from copyright lawsuits over digital and analog audio recordings made for private, noncommercial use, and it facilitates consumer access to advanced digital audio recording technologies. The new law provides for payment of modest royalties to music creators and copyright owners and requires the inclusion of the Serial Copying Management System (SCMS) in all consumer digital audio recorders to limit multigenerational digital audio copying (that is, making copies of copies).

Leading the efforts to get this law passed were the Senate's Copyright Subcommittee Chairman Dennis DeConcini (D., Arizona), the House Judiciary Committee Chairman Jack Brooks (D., Texas), and others. Gary Shapiro, group vice president of the Consumer Electronics Group of the Electronic Industries Association, pointed out that

passage of the Audio Home Recording Act signals the arrival in retail stores of two digital audio recording formats for consumers: The Digital Compact Cassette (DCC) and the MiniDisc (MD). Shapiro said the music industry and the electronics industry had worked together for fourteen months so that consumers could record digitally at home.

Free CD!

Cedille Records, a new classical label based in Chicago, is offering a free sampler CD to the public. "Savor the Sounds of Cedille Records" includes tracks from the company's first twelve recordings by Dmitry Paperno (piano), David Schrader (organ, harpsichord), Kim Scholes (cello), Ramon Salvatore (piano), Easley Blackwood (piano), and the Rembrandt Chamber Players. Spoken introductions by Mel Zellman, of WFMT-FM Chicago, do not overlap with the music, which is by Bach, Blackwood, Brahms, Medtner, Mendelssohn, Padre Antonio Soler, and others. A Cedille catalog comes with every sampler.

To obtain a free copy of the CD sampler simply write to Cedille Records, Sampler Offer, 1250 W. Grace St., Suite 3F, Chicago, IL 60613-2865. Cedille even pays the postage! Allow up to four weeks for delivery. A generous number of samplers have been pressed, but the offer is good only while supplies last, so write for yours today.

SONY

ARE YOU READY FOR THE LATEST IN PERSONAL MUSIC TECHNOLOGY?

It's the MiniDisc.

The first digital, recordable, instantly accessible, virtually unshockable personal music format.

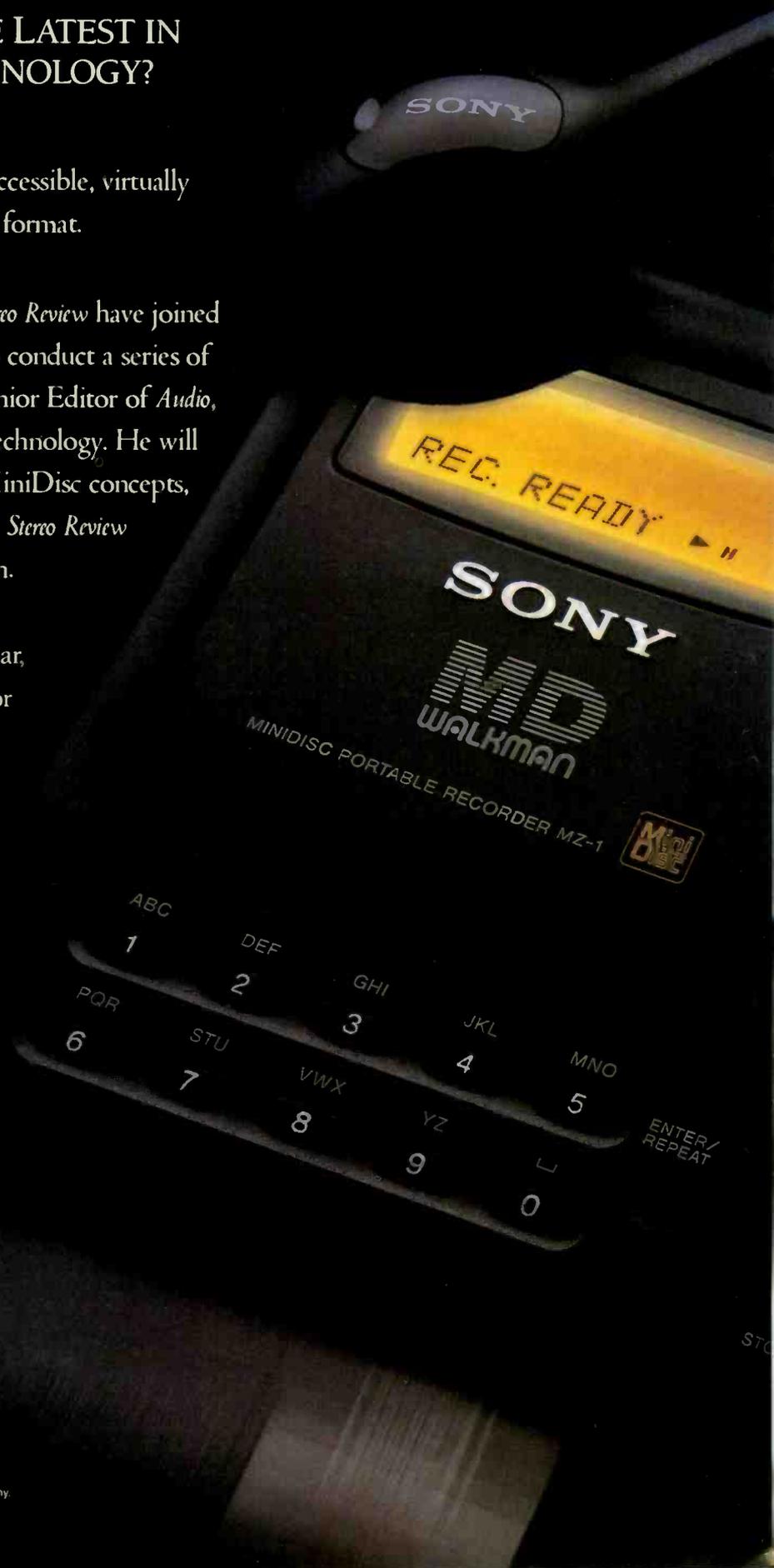
To tell you more about it, *Audio* and *Stereo Review* have joined with Sony and leading audio dealers to conduct a series of informative seminars. Len Feldman, Senior Editor of *Audio*, will review the fundamentals of this technology. He will also demonstrate some of the new MiniDisc concepts, using special tests developed by *Stereo Review* editor Ken Pohlmann.

To learn more about this free seminar, simply contact 1-609-655-7860 for the exact time and location. And soon you'll be able to experience MiniDisc for yourself.

LIST OF DATES:

Boston	February 1
Hartford	February 2
New York	February 3
Miami	February 4
Detroit	March 1
Chicago	March 2
Minneapolis	March 3
Houston	March 4
Denver	March 8
Seattle	March 9
San Francisco	March 10
Los Angeles	March 11

AUDIO
Stereo Review



Stereo Review®

Vice President, Editor in Chief
LOUISE BOUNDAS

Executive Editor
MICHAEL RIGGS

Art Director
SUE LLEWELLYN

Director, Hirsch-Houck Laboratories
JULIAN HIRSCH

Senior Editor
BOB ANKOSKO

Managing Editor
DAVID STEIN

Popular Music Editor Classical Music Editor
STEVE SIMELS ROBERT RIPPS

Associate Art Director
MINDY OSWALD

Associate Editor Assistant Editor
MARYANN SALTZER JAE SEGARRA

Editorial Assistants
BARBARA AIKEN, JOSE GARCIA

Editor at Large
WILLIAM LIVINGSTONE

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

Vice President, Group Publisher
NICHOLAS MATARAZZO

Consumer Electronics Group Advertising

VP/Associate Publisher
Tony Catalano

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

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

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

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

Regional Account Manager, West Coast:
Paula Mayerl, (213) 954-4830

Sales Assistant: Nikki Parker

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

Assistant to the Publisher: Nadine L. Goody
Operations Manager: Sylvia Correa

Advertising Coordinator: Linda Neuweller
Sales Assistant: Yvonne Telesford
Classified Advertising: (800) 445-6066

Production Manager: Vicki L. Feinmel

Production Director: Patti Burns

Business Manager: Christine Maillot

General Manager: Greg Roperti



Stereo Review is published
by Hachette Magazines, Inc.

Chairman: Daniel Filipacchi
President, CEO, and COO: David J. Pecker
Executive VP and Editorial Director: Jean-Louis Ginibre
Senior VP, Director of Corporate Marketing: Paul DuCharme
Senior VP, Director of Corporate Sales,
Hachette Magazine Network: Jay Burzon
VP, Director of Strategic Planning, Advertising,
& Circulation: Patrice Lislefield
VP, Chief Financial Officer: Paul De Benedictis
VP, Corporate Communications: Jolie Cross Doyle
VP, General Counsel: Catherine Flickinger
VP, Manufacturing & Distribution: Anthony Romano
VP, Circulation: Leon Rosenfield



UP FRONT

Taking Stock

1958 was a pretty good year. The first Grammy Awards ceremony was held in Los Angeles. John Lennon, Paul McCartney, and George Harrison began playing together in Liverpool. Michael Jackson was born in Gary, Indiana. Van Cliburn won the International Tchaikovsky Competition in Moscow. Columbia Records introduced the first stereo long-playing record, Ray Conniff's 'S Awful Nice'. And in February this magazine was launched as *HiFi & Music Review*.

STEREO REVIEW has changed more than its name, of course, since that first issue thirty-five years ago. As Julian Hirsch points out in "Audio's Top Ten" (which starts, not entirely coincidentally, on page 35), we have seen enormous technological gain during this period, so the equipment we write about is different. Many of the companies whose products are listed in the "1993 Equipment Buying Guide" starting on page 53 (and that is a coincidence) are considerably younger than STEREO REVIEW. Some of 1958's advertisers are prominent in our pages today: Acoustic Research, Altec Lansing, JBL, Klipsch, McIntosh. Others are gone: Bogen, Garrard, H.H. Scott, Pilot. The magazine looks different, too, with much more color photography and contemporary graphics.

But some things have not changed very much. In his introductory column in February 1958, the founding publisher, Oliver Read, asked, "Why another hi-fi magazine?" His answer, which I've condensed here, is essentially as valid on this thirty-fifth birthday as it was when STEREO REVIEW was born.

"The reader of a magazine about music and high-fidelity reproduction wants stated in language he can understand the answers to the following: What has this record, this FM tuner, this amplifier, this piece of music, this new hi-fi accessory, this

performing artist, or this recording technique got to offer me as an interested listener? How can I make use of my existing home listening facilities to best advantage and with the least possible inroad on my financial budget?

"Can any of us as music lovers or audio enthusiasts name magazines that have consistently come up with accurate, informative, stimulating answers to those questions? Because we are convinced that vast improvements can be accomplished in this area for a really widespread readership, we now offer our long-term answer to the challenge.

"We are sure that those who have achieved their start with 'hi-fi' have sensed through this experience that there are new worlds of adventure awaiting in the sonic world, that new arts of sound reproduction have come into being. What has grown out of this basic initial experience for hundreds of thousands of families throughout America can be summed up in these terms: 1. More people than ever before have become aware of the whole world of sound in its artistic manifestation. 2. More of us than ever before are growing in ability to discriminate on the basis of actual listening experience and collateral reading. 3. More of us than ever before are developing understanding and practical know-how of what high-fidelity equipment can contribute in terms of 1 and 2.

"Every aspect of *HiFi & Music Review* has been conceived with the aim of helping you, our readers, develop further your awareness, taste, and know-how along these lines, and to enhance your enjoyment of high-fidelity listening in all its variety and richness."

Every aspect of STEREO REVIEW is still conceived with that aim.

Louise Boundas

Louise Boundas
Editor in Chief

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



The newest and even more affordable Bose® Lifestyle® music system, with:

- Powered Acoustimass® 3 speaker system.
Virtually Invisible® cube speakers – lifelike sound and added placement flexibility.
Bose patented Acoustimass bass module (not shown) – deep bass with no audible distortion.
- Lifestyle® music center with advanced technology remote control.
System design – 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® system

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 budget.

We invite you to visit your Bose dealer and compare our Lifestyle® music systems to larger, more expensive conventional stereos. For more information, and names of Bose dealers near you, call toll-free:

1-800-444-BOSE Ext. 218

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

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

LETTERS

Here Comes DCC

I have been looking for equipment to bridge the gap between the outdated analog tape-recording gear that I have and the many CD's that my children have. Your November 1992 article on the new Digital Compact Cassette (DCC) and the Philips DCC900 leaves some questions unanswered.

Can the Philips or other DCC decks also record analog sources, such as LP records or analog tapes? If so, is the recording onto a blank analog tape or onto a blank DCC tape? What is the quality of the reproduction? If it is as good as a moderately priced analog tape deck, then it's worth the extra bucks to get a DCC and have the best of possible worlds (somewhat).

Finally, I propose a big round of applause for Julian Hirsch, whose incisive comments and articles have been so enjoyable over the years. When I read your "Time Delay" columns showing covers from thirty, twenty, and ten years ago, I remember how much help he has been in explaining audio concepts. My first autoreverse tape deck, four-channel receiver, and CD purchases were easier because of him, and I was able to avoid the Elcassette. Memories are made of this.

JIM URBAN
Fullerton, CA

Yes, you can record from analog sources onto a DCC cassette. The result will be a digital recording that should sound identical to the original source.

In reference to the DCC deck tested in November, if the PASC system does not record components of the sound that are not audible, how will Dolby Surround, Dolby Pro Logic, and ambience-enhancement systems extract the out-of-phase information from PASC-encoded recordings to recreate the center and rear channels, since it's not audible for the most part? I recommend using a DCC (or MiniDisc) deck to record a known movie soundtrack with large amounts of information in the surround channel, then doing listening tests with the surround speakers only. That will show the ability of PASC to accurately reproduce the information required in surround systems. All of the audio/video market is moving toward surround sound. If PASC (or the ATRAC system used in MD) does not preserve the parts of the signal required for surround, these new formats are doomed.

JOHN A. SORTIE
Newport News, VA

The center channel in a Dolby Surround soundtrack consists of information that has the same amplitude and phase in both channels, so it is the strictly mono part of the signal, not the out-of-phase difference component. But you are correct that the difference component is crucial for reconstructing the surround channel. It is also responsible for establishing the left-to-right stereo image, however, so if the recording sys-

tem maintains ordinary stereo without degradation (which PASC certainly does), there is not likely to be a severe deterioration of surround performance, either. On the other hand, we have heard data-reduction systems through which the sound was fine in full stereo but exhibited artifacts if we listened just to the difference component. Consequently, we will be examining this question more carefully in future listening evaluations of PASC and ATRAC.

David Ranada's November article on DCC recorders makes no mention of microphone inputs. Will the new units have this capability?

ENIO OLANDER
Marquette, MI

That is entirely up to individual manufacturers. We expect there will be some recorders on the



The Philips DCC900 recorder

market with microphone inputs, but given that demand for them on cassette decks has been low, probably not very many.

Credit Where Due

I have seen various companies claim that they were the first to introduce a certain audio product. For instance, I've seen claims by Sony that it introduced the first CD player, by Philips that it invented the CD, the laserdisc, and the audio cassette, and by Magnavox that it invented the CD. Please tell me who really invented and introduced the first audio cassette and CD players.

JUSTIN MCKINLEY
Greensburg, IN

It happens in your particular example that all the claims are true. Philips invented the audio cassette, the laserdisc, and the compact disc. Philips signed Sony on as co-developer for the CD system, and the first CD player actually to reach the market was the Sony CDP-101. Magnavox is a Philips brand, as are Marantz and Sylvania, so they can all stand under the same umbrella with regard to who invented what.

Switching Accommodations

With all the new formats coming out—DAT, DCC, MiniDisc, etc.—why aren't the manufacturers of receivers and preamps providing adequate audio inputs on their gear? In fact, sometimes it seems they're going the

other way and providing fewer audio inputs than ever. Few products have external-processor loops, and many have only one tape loop. The video inputs are more than adequate on some units, but audio seems to be getting short shrift. How come?

MARLIN D. SCHNEIDER
Madison, WI

Cost and lack of demand. Bear in mind that DCC and MiniDisc are very new, and there are some high-end receivers and preamplifiers that provide a lot of switching flexibility. In general, however, we agree that few current receivers or preamps provide all the digital audio, analog audio, and video switching necessary to accommodate an elaborate and thoroughly modern A/V system. We also think the situation will improve over the next couple of years.

Benny Carter

My father and I were lucky enough to attend one of Benny Carter's New Brunswick concerts last February, so I particularly enjoyed Chris Albertson's December review of that concert's recording, "Harlem Renaissance." A truly first-class artist gave a magnificent performance of old favorites plus two major new compositions. Carter has been playing, arranging, composing, and recording for more than fifty years and is still creating interesting and vital jazz well into his eighties.

MusicMasters should also be commended for the booklet enclosed with these discs, which includes more in-depth information on the musicians and the music than most other booklets do.

SCOTT WALTON
West Trenton, NJ

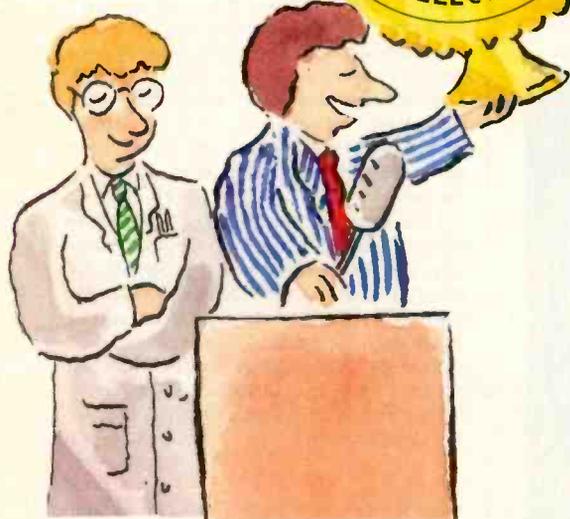
Onkyo's Ambience Enhancement

I had eagerly awaited the test report on the Onkyo TX-SV909PRO receiver that appeared in your November issue, but it barely mentions one unusual feature that I think might be important. The TX-SV909PRO is the only receiver I have seen that has, in addition to the normal Dolby Pro Logic channels, front left and right enhance channels. If my understanding is correct, even in THX movie theaters, when the screen is very wide (to show 70mm movies) additional left and right enhance channels are added to the sound system.

I was very interested in how this would work in a home setup, and I had hoped that a test report would answer some of my questions. I am a firm believer that the best surround sound is achieved when the front three speakers are identical, so that their sounds are perfectly matched. In my home theater, my front-channel speakers are fairly expensive, and I would not want to buy two more of these speakers for the front-enhance channels. Also, these channels receive only 30 watts of power each. Would a less costly pair of speakers used for the front-enhance channels improve the over-



“We wish to thank Mom; our 3rd grade music teacher; the members of the Academy..”



The Multi-Channel GFA-2535: yet another award-winning amplifier from Adcom.

A pattern appears to be taking shape here: Adcom introduces a new power amplifier, Adcom wins an award. The GFA-535, GFA-555, GFA-555II, GFA-565, and now the GFA-2535 — every single one has earned the immediate praise and plaudits of the industry's most respected authorities...perhaps because Adcom packs more performance and innovative technology into its amplifiers than you'll find in components that cost twice as much or more.

The innovative GFA-2535 is a worthy new standard-bearer. The GFA-2535 is really two GFA-535's in one case, with the flexibility to drive three or four channels. With individual level controls for precise control of each amp's volume, it's the ideal foundation for an authentic, ultra-realistic surround-sound theater system, or for a multi-room or multi-speaker audio system.

The Versatility of 3 Channels or 4.

A single switch on the GFA-2535's rear panel lets you select 4-channel operation, or bridge two of the channels for a 3-channel configuration. In the 3-channel mode, the GFA-2535 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 powered stage with sound so real, you can practically touch it.

For audio applications, the GFA-2535 in the 4-channel mode acts as a pair of 60 watts-per-channel amps to drive two sets of speakers. With two of the channels bridged, it delivers 60 watts each to a pair of satellites, and 200 watts to a single subwoofer for an incredible display of musical strength so real, you definitely 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®

details you can hear

all sound? Or would I be better off not using the additional enhancement channels? Is this feature best used only in a large listening room? I am also curious as to where the decoder gets the information that it sends to these channels.

RONALD S. PRUITT
Hyattsville, MD

The front-enhance channels are useful primarily in the TX-SV909PRO's DSP-based ambience-enhancement modes for music playback. Dolby Surround soundtracks have only four channels: front left, front center, front right, and surround (usually reproduced through two side or rear

speakers). This is the format used for 35mm films and all home-video movie releases. The Dolby format for 70mm film prints is somewhat different in that it provides six discrete channels instead of four matrixed down to two. The extra channels can be used to feed extra front speakers, but this is irrelevant to home playback.

In the receiver's ambience-enhancement modes, the front-enhance speakers can be used to simulate reflections off the front or side walls of a concert hall. The necessary signals are derived from the main left and right stereo signals by means of multiple delays and equalization. The speakers used for this purpose need

not be identical to your main speakers, but, as usual, the best results will be achieved when all the speakers are very similar in tonal balance, especially through the midrange.

S.S., Older and Wiser

I have been reading STEREO REVIEW since my college days in the late Seventies and have been a regular subscriber for at least twelve years. I have always enjoyed and even looked forward to reading the record reviews of one Steve Simels. Though I don't always agree with him, I find his comments and criticisms extremely entertaining and more often than not quite accurate. He is the only music critic I've read anywhere whose taste in music I can consistently identify with. Only my limited budget has kept me from acquiring all of the many recordings he has recommended over the years.

I had always assumed by his world-weary musings, subtle (?) cultural/political commentary, and comprehensive knowledge of rock history that Steve was a somewhat older fellow, approaching middle age like many of everyone's rock heroes. I was surprised upon reading the "Time Delay" feature in the December issue to find out that he and I are about the same age! Or was that some kind of a joke, Mr. Child Prodigy?

DOUG MITCHELL
Lindsey, OH

Steve Simels admits: Okay, okay, it was a joke!

"Digital Sound"

During the last few years I have noticed audio manufacturers claiming to have "digital headphones" or "digital portable stereos" with "digital sound." Obviously, in order to hear the audio program, the digital signal has to be changed into an analog one. Why do companies claim "digital sound" when it is really analog?

JON WRIGHT
Layton, UT

Manufacturers understandably want to describe their products in ways that make them sound appealing. Since the advent of digital recording and the compact disc, the word "digital" has become increasingly associated in people's minds with the idea of good sound. Much of the source material listened to is digital, so suddenly everything is "digital." We agree that this often doesn't make much literal sense, but, hey, that's advertising. Remember those TV commercials for Obsession perfume?

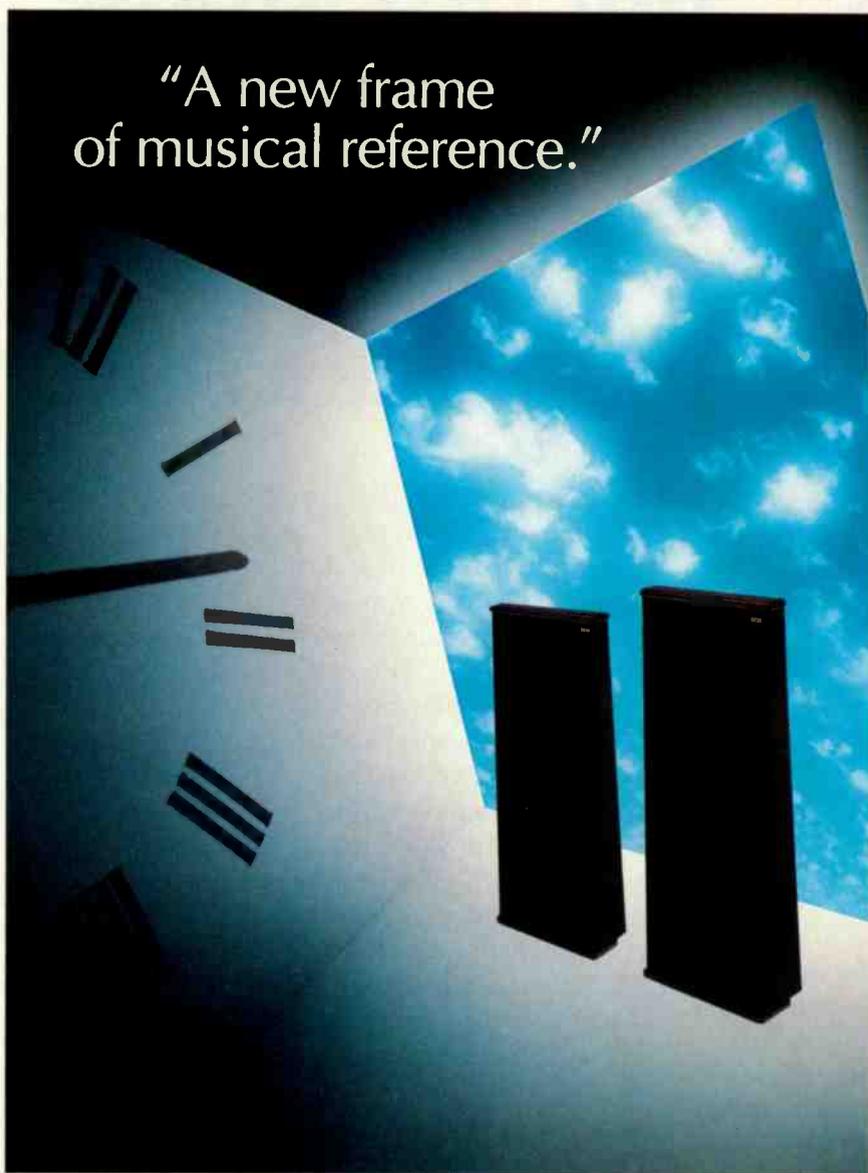
Home-Taping Economics

I tape many excellent CD's from FM broadcasts. So far I have 565 tapes with at least 1,695 works on them. If I had bought the CD's, this would have cost more than \$13,000! On Maxell XLII-S tape it cost me \$1,700—a vast difference.

ERIC F. TURKEL
Pomona, CA

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.

"A new frame
of musical reference."



For everyone who enjoys the impact, immediacy and dimensions of live music, there are TimeFrames™. To preview the critically acclaimed

TF-600s, and the full line of DCM TimeFrame™, TimeWindow™ and Monitor Series™ speakers, please call 1-800-878-TIME.

DCM
Loudspeakers

NOW DIGITAL SOUND FITS IN A CASSETTE BOX.



INTRODUCING DCC. THE DIGITAL COMPACT CASSETTE.



Presenting the Digital Compact Cassette, a breakthrough in both digital and cassette technology. Brought to you by Philips, the same people who invented the compact disc.

Pre-recorded DCC cassettes give you precise, crystal clear reproduction of every kind of music with zero noise and zero hiss. That's because the tape inside is all digital. Outside, DCC cassettes are sleek, streamlined and come complete with their own lyric booklet.

In addition, DCC decks are specially designed to play analog tapes as well as digital. That means you can keep the cassettes you have now, and keep listening to them. So whether it's a favorite old tape from years ago, or your favorite new DCC cassette, you can have it both ways.

What's more, you'll be able to enjoy DCC cassettes at home or on the go. Look for portable DCC players at your local retailer soon.

The incredible sound quality of digital audio combined with the unsurpassed convenience of a cassette. That's what DCC stands for. 

All of these artists and hundreds more are now available on DCC: Bon Jovi • Boyz II Men • Jose Carreras • Cathy Dennis • Placido Domingo • Extreme • Shirley Horn • I Musici • Herbert von Karajan • Yevgeny Kissin • Bob Marley • Luciano Pavarotti • Lionel Richie • Shakespear's Sister • U2 • Suzanne Vega • Vanessa Williams

Your music will never be the same.

DCC. HOW TO HEAR THE FUTURE WITHOUT GIVING UP THE PAST.

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 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 S & LS SERIES
FROM THE SPEAKER SPECIALISTS OF**

polk audio
The Speaker Specialists®

5601 Metro Drive
Baltimore, MD 21215

For your nearest Polk Audio
Dealer, call 1-800-992-2520.
In Canada call 1-416-847-8888.



SPECIAL CD OFFER

Legacy Rocks!

YES! Legacy rocks, and it rolls, and with its great reissues of important recordings from the past Legacy preserves and renews America's heritage of popular music. To see just how well the company does that get our special CD sampler drawn from Legacy's newly launched series "Rock Artifacts." Send in the coupon below with a mere \$3, and it's yours.

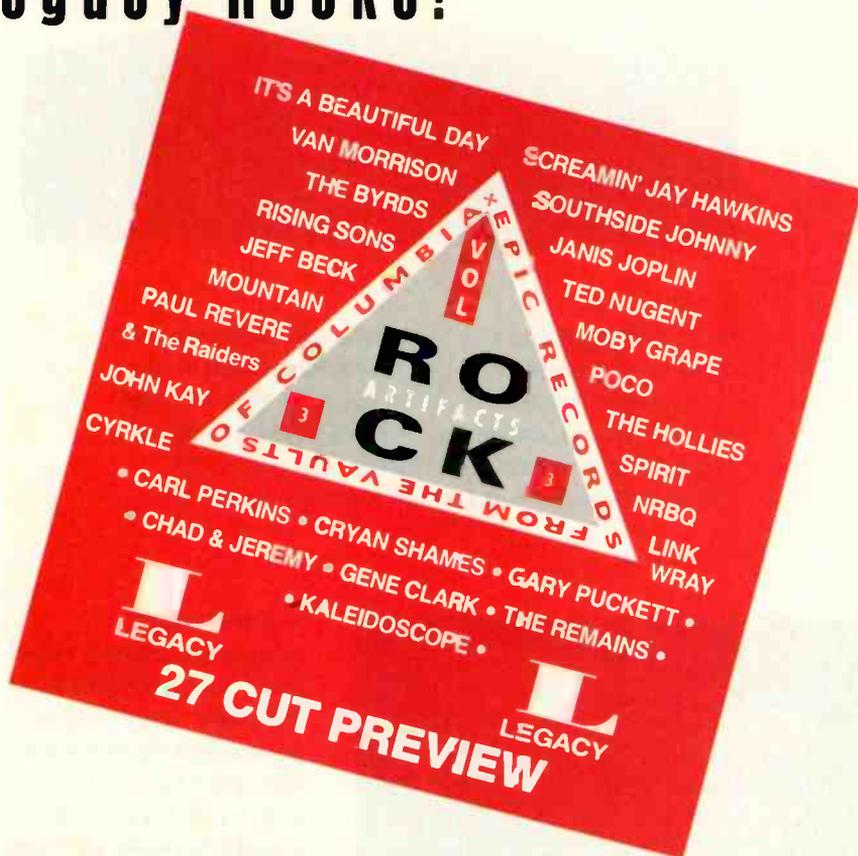
Legacy's "Rock Artifacts" sampler is the latest in STEREO REVIEW's program of special CD offers designed to help our readers expand their musical horizons at minimal cost. During 1993, the magazine's thirty-fifth anniversary year, we have a few goodies planned for you, and for this month, our actual birthday issue, we asked Legacy to come up with something that would suggest the importance of our musical history and would really be special. We think that with this sampler they've outdone themselves. It's pretty spectacular. History in school was never like this.

First of all, the CD contains twenty-seven selections that add up to a total playing time approaching 75 minutes. The contents are too long to list, but the gems include: Screamin' Jay Hawkins's *I Put a Spell on You*, Paul Revere & the Raiders' *Steppin' Out*, the Cyrkle's *Turn Down Day*, the Byrds' *So You Want to Be a Rock 'n' Roll Star*, Van Morrison's *Brown Eyed Girl*, Spirit's *I Got a Line on You*, and Jeff Beck's *Shapes of Things*.

So you see they're not just kidding around. There are also cuts by Carl Perkins, Link Wray, Chad & Jeremy, Kaleidoscope, Moby Grape, Poco, NRBQ, Janis Joplin, the Hollies, and many others. There's really a lot of cool stuff here, and much of it has been unavailable for years.

Our principal rock critic and popular music editor, Steve Simels, says, "It's a really remarkable package. It contains familiar and unfamiliar material coming from just about every rock genre from the Fifties on—heavy metal, country, folk, blues, r&b, Top 40, psychedelia, everything. I have spent my entire adult life getting review copies free, but I would pay full price for this collection."

The sampler is actually a preview of things to come in Legacy's "Rock



Artifacts" series, which is drawn from the legendary vaults of Columbia and Epic Records, and some of the cuts are from planned collections that have not yet been released.

Since its first issue in February 1958, STEREO REVIEW (then *HiFi & Music Review*) has taken American popular music seriously. For the editors it is gratifying to see how much music of the last three and a half

decades is still vital and interesting today. Technically Legacy's engineers have treated this music with the respect and affection it deserves.

For us the "Rock Artifacts" sampler is like a wonderful birthday present to the magazine. For you it should be, at the least, a permanent addition to your CD collection. So send in your check or money order with the coupon today and rock on!

LEGACY'S "ROCK ARTIFACTS" PREVIEW

For STEREO REVIEW readers only

Send coupon and check or money order for \$3.00 made payable to Legacy to:
LEGACY, P.O. Box 179, West New York, NJ 07093

NAME (please print) _____

ADDRESS _____
(STREET AND NUMBER)

(CITY) _____ (STATE) _____ (ZIP) _____

New Jersey residents add 6% sales tax (18c). Outside the United States send a US\$7 postal money order. Allow four to six weeks for delivery. Offer void after May 1, 1993.

NEW PRODUCTS



▲ NAD

The Model 2700THX, NAD's second Home-THX-certified power amplifier, is rated to deliver 150 watts per channel into 8 ohms and can be bridged to 400 watts mono. The amp boasts 4 dB

of dynamic headroom and is said to be stable into loads of 1 ohm or less. Price: \$829. NAD, Dept. SR, 633 Granite Ct., Pickering, Ontario, Canada L1W 3K1.

• Circle 120 on reader service card

▼ PARASOUND

Each of the three models in Parasound's CS/T in-wall speaker series teams a 1-inch titanium-dome tweeter with a woofer. The CS/T-280 (pictured, \$465 a pair) packs an 8-inch woofer, the CS/T-265 (\$345 a pair) a 6½-inch woofer, and the CS/T-255 (\$249 a pair) a 5¼-inch woofer. Retrofit mounting brackets and grilles are included. Parasound, Dept. SR, 950 Battery St., San Francisco, CA 94111.

• Circle 121 on reader service card



◀ DAHLQUIST

Dahlquist has updated its Phased Array speaker line with the DQ-16 "mini tower" (\$750 a pair) and the redesigned DQ-6ci bookshelf model (\$600 a pair), both of which feature an acoustically aligned 6-inch woofer and 7/8-inch aluminum-dome tweeter. The 38-inch-tall DQ-16 is rated down to 38 Hz and the 22½-inch-tall DQ-6ci down to 50 Hz. For both, sensitivity is given as 89 dB and impedance as 6 ohms. Dahlquist, Dept. SR, 601 Old Willets Path, Hauppauge, NY 11788.

• Circle 122 on reader service card



▶ CARVER

Carver's C-20v preamplifier is designed to be the brains behind a home theater system. It features a DSP-enhanced Dolby Pro Logic decoder with seven surround/ambience modes, including "movie surround" and

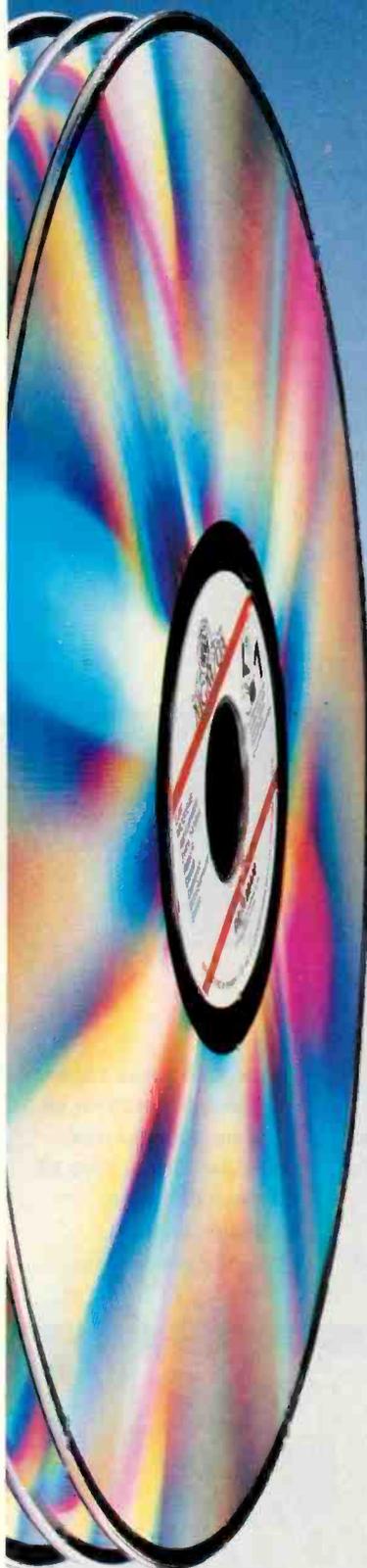
two "hall" settings, a bass-boost circuit for bass-shy program material, and adjustable rear-channel delay time. Five video inputs are on tap. Price: \$900. Carver, Dept. SR, P.O. Box 1237, Lynnwood, WA 98046.



OWN YOUR FAVORITE MOVIES ON LASERDISC.

3 LASERDISCS \$1 EACH.

SEE DETAILS BELOW.



Dances with Wolves*
0805200

Salman Returns
1029909

Star Trek VI:
The Undiscovered Country*
1001007

Star Wars*
0056408

The Empire Strikes Back*
0091009

Return of the Jedi*
0354704

HOOK	★	0854307	FORBIDDEN PLANET	★	0844407
THE ADDAMS FAMILY	★	1000900	FRIED GREEN TOMATOES		1005404
BUGSY	★	0853408	HEARTS OF DARKNESS: A FILMMAKER'S APOCALYPSE		1002500
THE SOUND OF MUSIC	★	0003905	BLUE VELVET	★	0515007
BACKDRAFT	★	0559005	SUPERMAN: THE MOVIE	★	0001305
ALIEN		0000208	SUPERMAN II		0601500
ALIENS		0360909	HARD TO KILL		0953505
THE ABYSS	★	0881102	BORN ON THE FOURTH OF JULY	★	0489104
DIE HARD	★	0367607	FIELD OF DREAMS		0920306
DIE HARD 2	★	0041806	PRESUMED INNOCENT	★	096210X
GHOST	★	0826008	RDOA WARRIOR		060280L
E.T. THE EXTRA-TERRESTRIAL	★	0681106	CHINATOWN	★	0202507
THE SILENCE OF THE LAMBS		0805309	BIRD ON A WIRE	★	0497304
BATMAN (1989)	★	0642504	BEVERLY HILLS COP		020530L
THE GODFATHER		0000802	BEVERLY HILLS COP II		0431904
THE GODFATHER: PART III		0842302	HENRY V (1990)	★	0040308
BACK TO THE FUTURE	★	0211409	HENRY & JUNE	★	049930M
BACK TO THE FUTURE PART II	★	0921304	THE GRIFFERS		038300D
BACK TO THE FUTURE PART II	★	0497008	BUGS BUNNY CLASSICS		0297705
PREDATOR	★	0364901	CONAN THE BARBARIAN	★	0220509
PREDATOR 2	★	0104307	THE EMPIRE OF THE SUN	★	0633206
ROBIN HOOD: PRINCE OF THIEVES	★	0976803	DANGEROUS LIAISONS	★	0638700
HOMIE ALONE	★	0104208	REVERSAL OF FORTUNE		0969709
SCARFACE (1983)		0216804	ALWAYS	★	0921502
GOODFELLAS	★	0969808	DIRTY HARRY		0601708
THE BLUES BROTHERS		0211706	MEMPHIS BELLE	★	0983502
DUNE		0211102	BIG		0367409
KINDERGARTEN COP		0523407	NEW JACK CITY		0971507
LETHAL WEAPON		0630806	FATAL ATTRACTION		0439307
LETHAL WEAPON 2	★	0642702	CHARIOTS OF FIRE		0601401
NATIONAL LAMPOON'S ANIMAL HOUSE		0211508	ALL DOGS GO TO HEAVEN		0289702
THE MAN WHO WOULD BE KING	★	0085803	48 HRS.		0202200
THE HUNT FOR RED OCTOBER	★	0825000	HAMLET (1990)	★	0970808
THE BIBLE	★	0074708	BLACK RAIN	★	0911701
JAWS		0100008	BODY HEAT		0602003
EDWARD SCISSORHANDS		0104604	THE ANDROMEDA STRAIN	★	0216200
THE AFRICAN QUEEN		0051102	CLASS ACTION		0298:07
BEETLEJUICE		0633008	CASABLANCA		0050708
AMERICAN GRAFFITI		0211300	A BRIDGE TOO FAR	★	0061705
HARRY CONNICK, JR.: SINGIN' & SWINGIN'		0968107	DOUBLE INDEMNITY		0210_04
STAR TREK: THE MOTION PICTURE	★	0203505	CADDYSHACK		0602300
STAR TREK II: THE WRATH OF KHAN	★	0201301	IT'S A WONDERFUL LIFE (45TH ANNIVERSARY ED.)		0392908
STAR TREK III: THE SEARCH FOR SPOCK	★	0201608	THE LAST BOY SCOUT	★	0779008
STAR TREK IV: THE VOYAGE HOME	★	0430603	THE NAKED GUN 2½: THE SMELL OF FEAR	★	0842609
STAR TREK V: THE FINAL FRONTIER	★	0448605	PATTON		0786703
THE PRINCE OF TIDES	★	0847103	OTHER PEOPLE'S MONEY	★	0392704
WAYNE'S WORLD	★	0853705	MOBSTERS		033:303
THE COMMITMENTS		0691303	HOT SHOTS		0029108
			AIRPLANE II: THE SEQUEL		0204107
			THE FRENCH CONNECTION		0004200
			NORTH BY NORTHWEST	★	0844209
			2001: A SPACE ODYSSEY	★	0844308
			THE WIZARD OF OZ		0001404

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 your credit card and our toll-free number.

Call 24 hours a day:

1-800-538-2233 Dept. 39C

Columbia House Laserdisc Club

Dept. 39C 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: Discover
- MasterCard Diners Club AMEX VISA

Acct. No. _____

Expiration Date _____

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

COLUMBIA HOUSE
LASERDISC CLUB

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

NEW PRODUCTS



▲ ADCOM

The GCD-600 is a five-disc version of Adcom's GCD-575 CD player, featuring a Class A analog output stage and a drawer-type carousel that enables four discs to be changed while another is playing. Highlights include fixed

and variable analog outputs, a coaxial digital output, and a remote control with volume control. Price: \$600. Adcom, Dept. SR, 11 Elkins Rd., East Brunswick, NJ 08816.

• Circle 127 on reader service card

▶ SONY

Sony's MDP-455 combi-player features a special circuit that eliminates dropouts caused by marred videodiscs, a "memory-play" button to resume play where you left off, and memory indexing for quick access to CD passages or video scenes. Price: \$599. Sony, Dept. SR, 1 Sony Dr., Park Ridge, NJ 07656-8003.

• Circle 129 on reader service card



▲ VIDEO ACOUSTICS

The Video Acoustics home theater lineup includes two bookshelf speakers, each with an 8-inch woofer and tweeter (VA-1400BK, \$599 a pair), a center-channel speaker with a tweeter and two angled woofers (VA-1300BK, \$349), a surround speaker with

four tweeters and two woofers (VA-1200BK, \$499), and a bass module with two 8-inch woofers (VA-1500BK, \$599). Video Acoustics/Thomson Consumer Electronics, Dept. SR, P.O. Box 1976, Indianapolis, IN 46206.

• Circle 130 on reader service card

▶ SNELL

Snell's Type B *minor* uses a pair of 5¼-inch midranges, one above and one below a 1-inch titanium-dome tweeter, to produce a "more coherent sound source"—the same driver configuration is used in the original Type B. The 48½-inch-tall speaker also employs a 12-inch woofer that is said to play down to 20 Hz and a rear-firing ¾-inch tweeter. Several wood-veneer finishes are available. Price: \$3,390 a pair. Snell Acoustics, Dept. SR, 143 Essex St., Haverhill, MA 01832.

• Circle 128 on reader service card

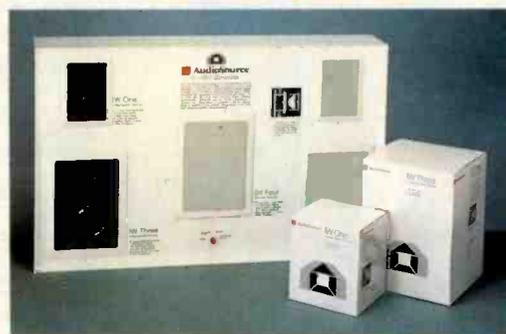


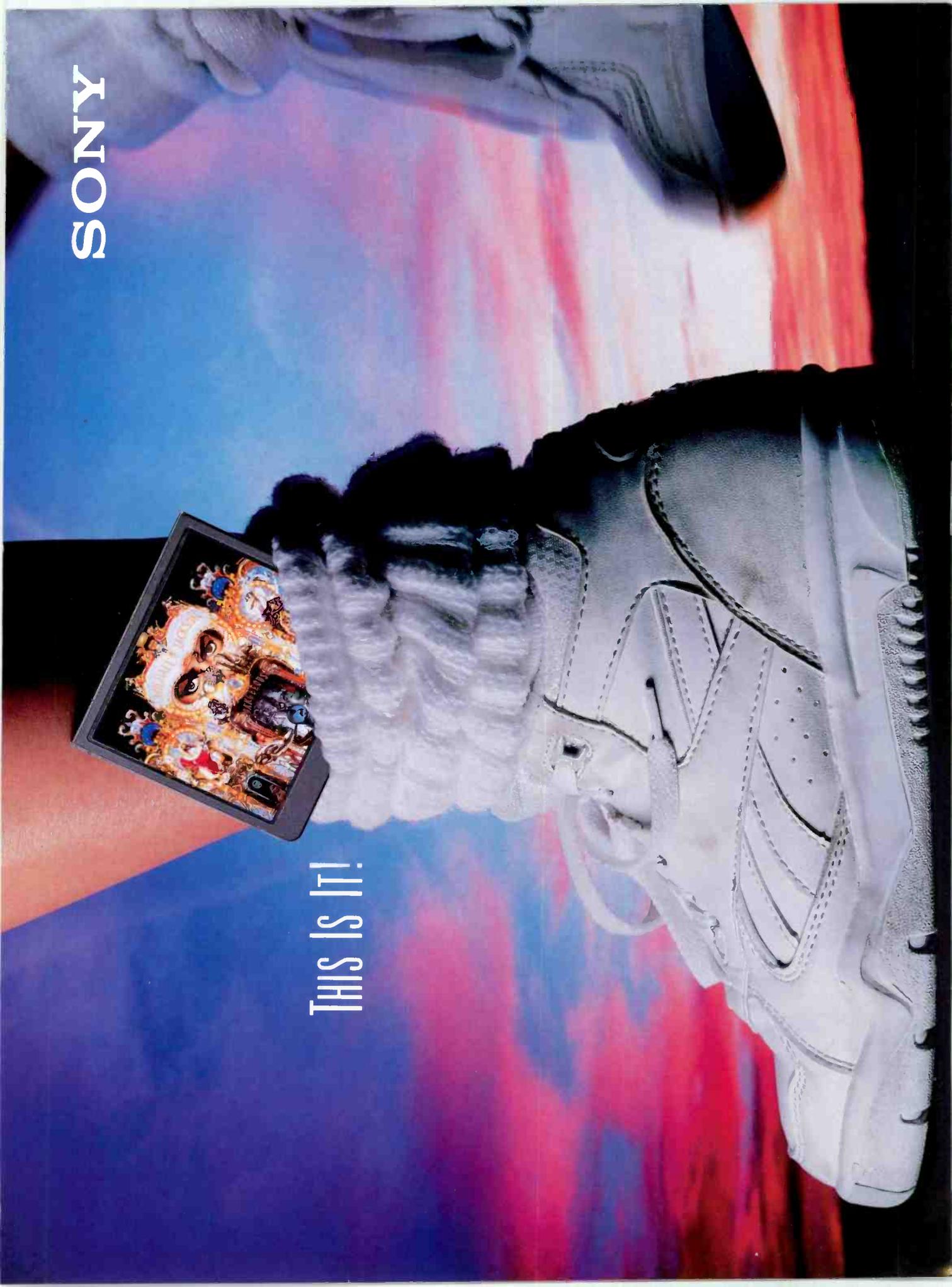
▼ AUDIOSOURCE

AudioSource's first in-wall speaker series includes the IW One (5¼-inch woofer and ½-inch tweeter, \$130 a pair), the IW Two (6½-inch woofer and 1-inch tweeter, \$200 a pair), the IW Three (8-inch woofer and 1-inch

tweeter, \$250 a pair), and the IW Four subwoofer, which has one 8-inch dual-voice-coil woofer (\$150). AudioSource, Dept. SR, 1327 North Carolan Ave., Burlingame, CA 94010.

• Circle 131 on reader service card





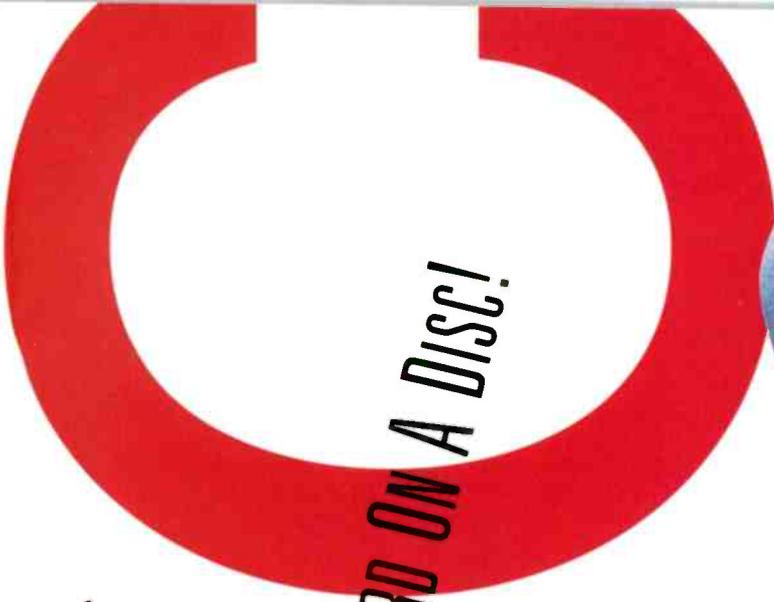
THIS IS IT!

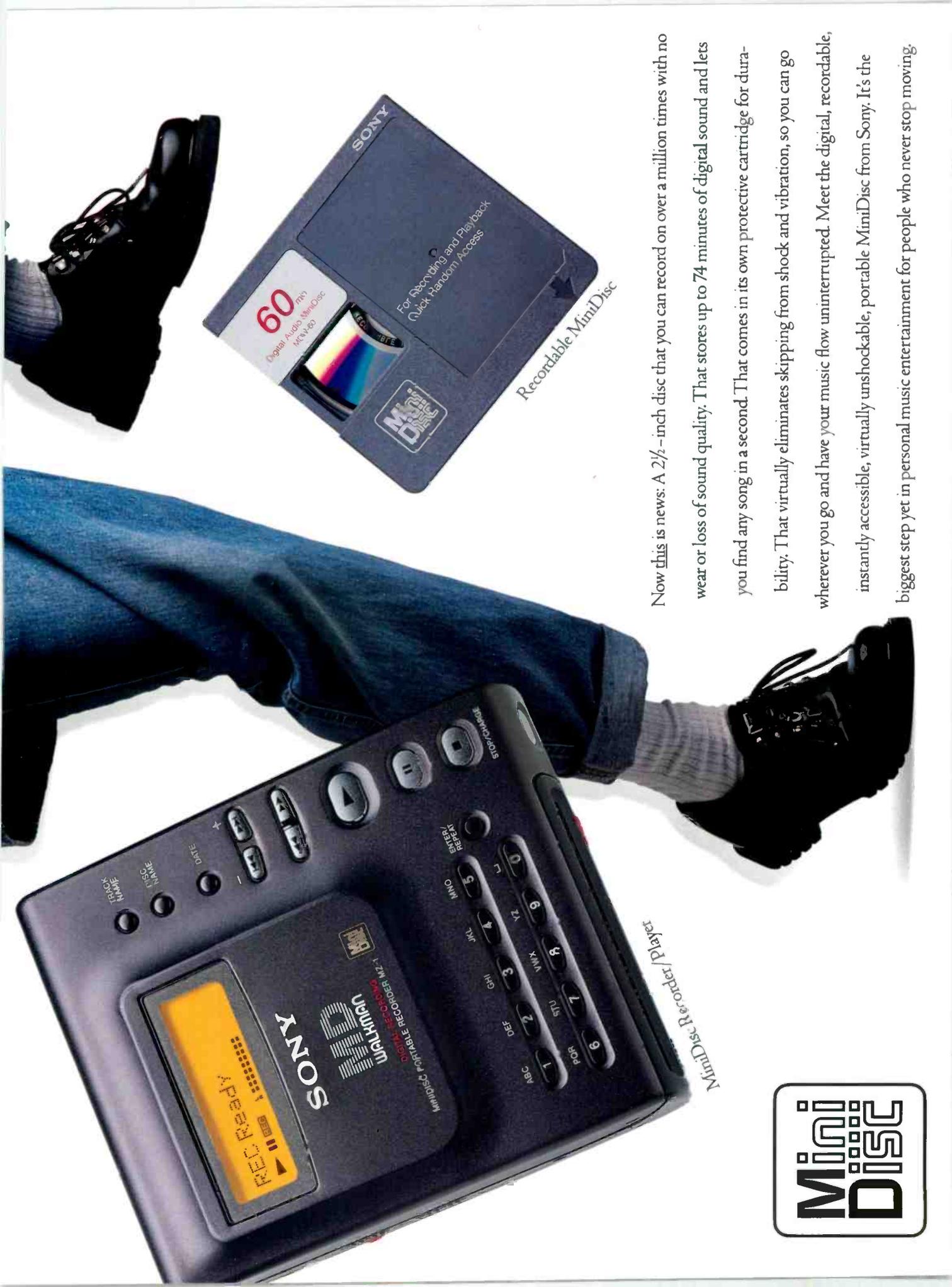
SONY



I CAN RECORD ON A DISC!

I CAN RECORD ON A DISC!





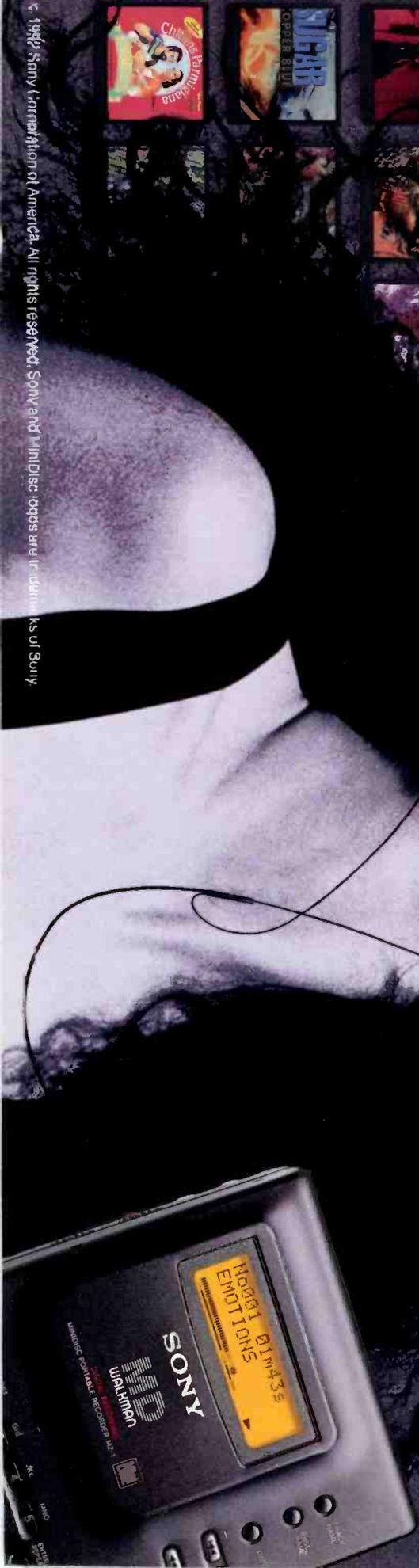
Now this is news: A 2½-inch disc that you can record on over a million times with no wear or loss of sound quality. That stores up to 74 minutes of digital sound and lets you find any song in a second. That comes in its own protective cartridge for durability. That virtually eliminates skipping from shock and vibration, so you can go wherever you go and have your music flow uninterrupted. Meet the digital, recordable, instantly accessible, virtually unshockable, portable MiniDisc from Sony. It's the biggest step yet in personal music entertainment for people who never stop moving.



SONY

YOU'LL LOVE HOW MUCH YOU CAN HEAR.

Many titles from your favorite recording artists are already out on MiniDisc. Get into Sony MiniDisc. It's a revolutionary new way to play. (And record.)



© 1998 Sony Corporation of America. All rights reserved. SONY and MiniDisc logos are trademarks of Sony.

NEW PRODUCTS



▶ PSB

The PSB 500 (\$499 a pair) is one of four new moderately priced speakers from PSB. It teams an 8-inch woofer with a 3/4-inch tweeter in a 23-inch-tall cabinet; the SP-5 stands are optional. The other models are the compact PSB 300 (\$299 a pair), the bookshelf PSB 400 (\$399 a pair), and the tower-style PSB 800 (\$799 a pair). PSB International, Dept. SR, 633 Granite Ct., Pickering, Ontario, Canada L1W 3K1.

• Circle 133 on reader service card



▲ SSI PRODUCTS

A multimedia port that provides a link for home computers is the highlight of SSI's System 5000 A/V processor. Other features include a Dolby Pro Logic decoder, a bridgeable amplifier rated to deliver 25 watts per channel, a front-panel camcorder input, S-video inputs and outputs, and independent center- and surround-channel volume controls. Price: \$399. SSI Products, Dept. SR, 11836 Clark St., Arcadia, CA 91006.

• Circle 132 on reader service card



◀ M&K

M&K's MX-5000THX powered subwoofer features two 12-inch woofers in a push-pull configuration, which is said to improve clarity by eliminating even-order harmonic distortion, and a 400-watt amplifier. Frequency response is rated as 18 to 125 Hz. Price: \$2,195. Miller & Kreisel Sound, Dept. SR, 10391 Jefferson Blvd., Culver City, CA 90232.

• Circle 134 on reader service card



◀ COAST

The CDB-12N Compact Disc Wallet from Coast features a lifetime warranty. It holds twelve CD's, each in its own fabric sleeve, and has a soft nylon exterior that is water-resistant. Price: \$16. Coast Manufacturing, Dept. SR, 200 Corporate Blvd. So., Yonkers, NY 10701.

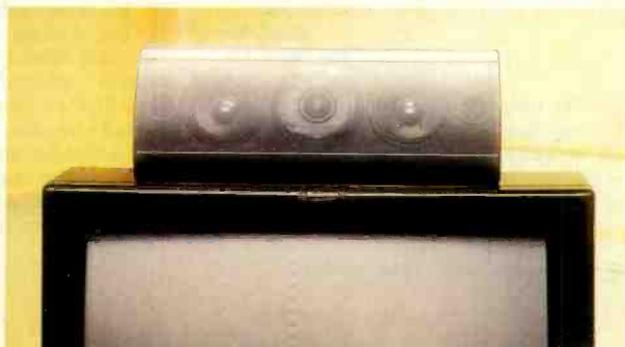
• Circle 135 on reader service card

▼ JAMO

Jamo's Center 100 is designed to be placed atop a TV or VCR in a home-theater system that has provisions for a center-channel speaker. The Center 100 is magnetically shielded and features two 4-inch woofers and a

1-inch tweeter. Frequency range is rated as 80 to 20,000 Hz. Dimensions are 15 3/4 x 6 1/2 x 4 3/4 inches. Price: \$189. Jamo, Dept. SR, 425 Huehl Rd., Bldg. 8, Northbrook, IL 60062.

• Circle 136 on reader service card



AUDIO Q & A

BY IAN G. MASTERS

Speaker Matching

Q *The main speakers I intend to buy for my home theater system have a rated sensitivity of between 93 and 97 dB. So far I've not been able to find center or surround speakers that match that figure. Is it possible to put together a five-channel surround-sound system with mismatched speakers?* DARHYL LACY Lemongrove, CA

A Very high sensitivity figures like the ones you quote are usually given for large speakers, so unless you're prepared to have five huge boxes in your listening room, you can forget about having all your speakers match perfectly in terms of output. Fortunately, that's a fairly minor concern. For one thing, sensitivity is really important only if you don't have adequate amplifier power. If your auxiliary channels—center and surround—aren't loud enough compared to the main channels, just turn the main channels down a notch.

What you should be concerned about is not that the various speakers in your system put out similar levels—you can always adjust that—but that they sound alike in terms of tonal balance. That's *much* harder to achieve!

LP Cleaning

Q *As vinyl discs have become scarcer, it has become impossible to buy record-cleaning fluid. Can you recommend a safe and effective homemade substitute?*

GERARD A. LEMIEUX
Westford, MA

A Several record cleaners—the best known is from Discwasher—are still available, although you may have to search a bit harder to find them than in vinyl's heyday. Most of what they do can be accomplished with distilled water; avoid tap water, though, as it may leave mineral residue on the surface. Any liquid should be used sparingly, however. Except for really filthy records, a dry cleaning with a carbon-fiber record brush before every play should suffice.

Dual-Concentric vs. Two-Way

Q *In searching for autosound speakers, I have encountered both "two-way" and "dual-concentric" speakers. What's the difference, and is one superior to the other?*

PERRY VU
Van Nuys, CA

A The various parts of the audio spectrum impose different requirements on a speaker. Radiating high frequencies over a wide angle requires a small-diameter driver, whereas low frequencies normally require the services of a larger driver to move the necessary

air mass. The most rudimentary speakers use a single cone of intermediate size that can handle highs and lows equally well (or equally badly, if you choose to look at it that way). As cone diameter is increased for better bass, treble may be compromised, so some models include a second, smaller radiator attached to the center of the main diaphragm to assist in high-frequency dispersion. Such dual-concentric speakers are still full-range devices, the relationship between the two parts being totally mechanical.

For high-quality applications, true two-way (or three-way) systems are almost always used, in which the drivers are both mechanically and electrically separate (although they may be mounted on the same frame, sometimes concentrically). An electrical crossover network is used to direct the appropriate parts of the signal to the different drivers.

Biamping at Home

Q *I enjoy the sound produced by the biamped system in my car and would like to recreate it at home. Since my listening room doesn't suffer from the problems of mobile audio—road sounds, engine noise, etc.—is biamplification even necessary?*

ALEX H. PIERRE
Philadelphia, PA

A Biamplication—the technique of using separate power amplifiers for the low- and high-frequency drivers that make up a speaker system—is popular in cars, where the speakers that handle the different parts of the spectrum are often scattered about the interior. It often increases overall power-handling capacity as well. But biamplication (or triamplication) does not normally impart any distinctive sonic character to a system unless it is done badly. By all means consider biamplication for your home system, but don't expect it to duplicate the sound in your car just because of the multiple amplifiers.

Hot Receiver

Q *After operating for a long time, my receiver builds up a lot of heat, mainly because my equalizer sits on top of it, preventing the heat's dispersal. The receiver's manual doesn't mention this problem. Is it likely to hurt my equipment?*

CHRIS PEARSON
Boca Raton, FL

A It's never a good idea to block the ventilation of an amplifier, and the heat buildup might shorten its life somewhat. I would be more concerned about the equalizer, however. Hot air produced by the receiver is probably traveling *through* the upper component, and this might cause some of its parts to malfunction or change electrical characteristics over time. At the very least, you can expect that dust rising with the hot air will

Definitive Technology Authorized Dealers

AK: Hoitt's; Fairbanks* Pyramid; Anchorage.
AL: Campbell's AV; Huntsville; Likis Audio; Birmingham.
AR: Leisure Electronics; Little Rock.
AZ: Jerry's Audio Video; Phoenix, Tucson.
CA: Audio Concepts; Long Beach; San Gabriel* Creative Stereo; Sta. Barbara; Ventura* Pacific Coast AV; Corona del Mar* Paradyme; Sacramento* Performance Audio; San Francisco* Sound Co.; Escondido, San Diego* Sound Goods; Campbell, Min. View* Systems Design; Beverly Hills, Redondo Beach* Wilson AV; Woodland Hills.
CO: Listen Up; Denver, Boulder, Colorado Springs.
CT: Al Franklin's; Hartford; Carston's AV; Danbury* Robert's Music; New London* Sound Playground; Newington, Orange, Norwich.
DC: Suburbs* Audio Associates.
DE: Sound Studio; Dover, Newark, Wilmington.
FL: Absolute Sound; Winter Park* Audio Ctr.; Ft. Lauderdale* Audio Video; Tallahassee* Hoyts; Jacksonville* Sound Ideas; Gainesville* Sound Insight; Ft. Pierce* Stereotypes; Daytona* Stereo World; Ft. Myers, Naples* Stuart AV; Stuart.
GA: Audio Warehouse; Savannah* Stereo Shop; Martinez* Stereo Video Systems; Marietta (Atlanta).
HI: Maui Audio Center; Kahului.
IA: Audio Logic; Des Moines* Hawkeye AV; Iowa City.
ID: Good Ear; Boise.
IL: Absolute Audio Video; Rockford* August Systems; Champaign* Mills Recording; Chicago* Simply Stereo; Hoffman Estates, Orland Pk., Villa Pk.* Stereo Studio; Palatine* Select Sound; Naperville* Sterling Elect.; Sterling.
IN: Ovation Audio; Clarksville, Indianapolis.
KS: Advance Audio; Wichita* Audio Junction; Junction City.
KY: Ovation Audio; Lexington, Louisville.
LA: Alterman Audio; New Orleans, Metairie.
MA: O'Coins; Worcester (Boston; see Nashua, NH).
MD: Audio Assoc.; Annapolis, Laurel, Rockville* Cumberland Elec.; Cumberland* Gramophone; Balt., Ellicott City* Soundscape; Balt.* Sound Studio; Salisbury.
ME: Cookin'; Portland.
MI: Listening Room; Midland, Saginaw* Pecar's; Detroit* Troy* Sound North; Iron Mountain.
MN: Audio Perfection; Minneapolis.
MO: Independence Audio Video; Independence (K.C.)* Sound Central; St. Louis.
NC: Audio Video Systems; Charlotte* Stereo Sound; Durham, Greensboro, Raleigh, Winston Salem.
ND: Pacific Sound; Bismarck.
NE: Custom Electronics; Omaha, Lincoln.
NH: Cookin'; Nashua, Manchester, Newington, Salem, S. Nashua.
NJ: Sound Waves; Northfield* Sassafra; Cherry Hill* Woodbridge Stereo; W. Caldwell, W. Longbranch, Woodbridge.
NM: West Coast Sound; Albuquerque, Las Cruces, Sta. Fe.
NV: Upper Ear; Las Vegas.
NY: Audio Breakthrough; Manhasset* Audio Den; Lakewood* Audio Expressions; Newburgh* Clark Music; Syracuse* Electronic Workshop; Manhattan* Hart Electronics; Vestal* Innovative Audio; Brooklyn* Listening Room; Scarsdale* Rowe Camera; Rochester* Sound Mt. Kisco, Yorktown Hts.* Speaker Shop; Amherst, Buffalo.
OH: Audio Craft; Akron, Cleveland, Mayfield Hts., Westlake, Toledo* Audio Etc.; Fairborn (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: Audio Warehouse; Hilton Head* Dashboard Stereo; Charleston* Stereo Video; Greenville* Upstairs Audio; Columbia.
TN: Hi Fi Buys; Nashville* Lindsey Ward; Knoxville* Modern Music; Memphis* Sound Room; Johnson City.
TX: Audio Tech; Temple, Waco* Audio Video; College Station* Brock AV; Beaumont* Bunkley's Sd. Systems; Abilene* Bjorn's; San Antonio* Harold's Electronics; Odessa, Midland* Home Entertainment; Dallas, Houston.
UT: AudioWorks; Salt Lake City* Stokes Bros.; Logan.
VA: Audio Associates; Arlington, Fairfax, Manassas* Audiometrics; Roanoke* Digital Sound; Virginia Beach* Ear Food; Winchester* Stereotypes; Charlottesville.
VT: City Stereo; Burlington.
WA: Evergreen Audio; Silverdale* 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* Music; Stratford* Sight & Sound; Prince Georges B.C.* Sound Advice; Calgary.

“Definitive Technology Has Hit the Bull’s Eye.”

— Julian Hirsch, *Stereo Review*

*Experience the Miracle of Bipolar Technology
with Definitive’s Revolutionary BP10 & 20!*

“Truly Outstanding”

— *Stereo Review*

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

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



BP20 - \$799 ea.

BP10 - \$550 ea.

position convenience for superb musical reproduction so real that it has been called, “a sonic miracle!”

The Ultimate Home Theatre
Combine the BP10s, BP20s or DR7s with our C1 ultra center channel and BP2 bipolar satellite/surround speakers for the ultimate in home theatre sound.

Visit your nearest Definitive dealer and experience the dramatic sonic superiority of these truly extraordinary loudspeakers.

Definitive Technology[®]

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

Command Performance.



Introducing the new Adcom GTP-500 II Tuner/Preamplifier.

Only a few years ago, Adcom announced the dawn of a new era by introducing its GTP-500 tuner/preamplifier. Together with any of Adcom's critically acclaimed power amplifiers, this unique audio product has given thousands of cost-minded, serious music lovers a quality alternative far superior to the common receiver. The new, evolutionary GTP-500 II offers a meaningful expansion of convenient features and sonic performance.

Full Command Of Your Music System

Control your system's power on/off, select pre-programmed FM and AM stations, scan the FM dial, adjust volume level and select different sources... all with Adcom's wireless remote controller. With optional Adcom remote sensors and additional loudspeakers, you can also enjoy your Adcom music system in other rooms throughout your home.

For total music system integration, the GTP-500 II remote sensors will also receive and retransmit commands to a majority of remotely controlled components, regardless of brand. This remarkable design gives you full command of your entire music system throughout your home and offers the ultimate flexibility of integrating the remote features of components manufactured by others.

Value Measured By Performance

The overall performance of the new GTP-500 II is demonstrably superior through its evolutionary design

and the use of state-of-the-art component parts.

Adcom's unique, low-impedance RIAA compensation provides lower noise and distortion in the phono input stage. To further reduce noise and distortion in all stages, all switching devices are buffered.

Long term adherence to circuit design objectives is accomplished by utilizing 1% Roederstein resistors in all critical applications as well as a new low-loss, printed circuit board.

Through a careful balance of sensitivity and selectivity, the GTP-500 II optimizes FM performance whether you're in an urban or rural area. Design parameters, including an improved IF stage, have been optimized to translate into lower distortion. In fact, the quality of FM stereo reproduction through the GTP-500 II is as good as the broadcast itself.

More Sound, Less Money

Adcom stereo components have established a reputation for sounding superior to components costing two and three times as much. The new GTP-500 II promises to keep faith with this tradition of more sound for less money.

Its ability to command your entire music system by remote control, and its exceptional sonic performance are why so many experts consider the GTP-500 II to be Adcom's command performance.

ADCOM[®]
details you can hear

eventually penetrate and interfere with the controls of the equipment on top. That can be a particularly disruptive problem in a graphic equalizer.

Enclosure Sizes

Q *Speaker designs seem to have changed dramatically over the years. Huge and very expensive speakers used to be considered necessary, but now I see we're back to enclosures smaller than a book! Still, I find that speakers—tiny satellites and 15-inch jobs alike—sound pretty much the same to me in dealers' listening rooms. How can they suddenly get all this great sound from such small boxes?*

MAC MCGUIRE
San Diego, CA

A In an ideal world, all speakers would sound alike: perfect. So far, nobody's figured out exactly what speaker perfection is, or how to measure it, but it is encouraging that there are no longer quite as many wild variations in sonic character from speaker to speaker as there once were. In theory, there's no reason you can't attain excellent, neutral performance from almost any reasonable speaker configuration.

Nevertheless, speakers continue to come in a wide range of packages, and each has its advantages. Large enclosures are often capable of generating prodigious amounts of low-frequency energy with relatively little amplifier power, but they can be obtrusive visually and difficult to locate for optimum sound in terms of both tonal balance and stereo imaging. The "book size" speakers you mention can be placed practically anywhere, so imaging is rarely a problem, but they are almost always deficient in bass and must be supplemented by at least one separate bass module. Although this arrangement may be much more flexible in terms of positioning, it may not add up to much saving in overall size.

Gold CD's

Q *Do compact discs that use 24-karat gold instead of aluminum differ in any measurable way from ordinary CD's? At about twice the price, are the gold CD's twice as good?*

SCOT CERULLO
Naples, FL

A In terms of audio performance, gold has no inherent advantage over the more common aluminum as a digital storage medium, although you can expect a company that charges such a hefty premium for a CD to take a measure of extra care during the manufacturing process. (And some, such as Mobile Fidelity, work very hard to get the best possible sound from the original tape masters, which can make a big difference.) The main reason gold is used is that aluminum, if exposed to air, oxidizes and develops a cloudy surface that ultimately becomes unreadable to a CD player's laser. Gold doesn't oxidize and therefore remains reflective even if the disc is damaged in a way that exposes the metallic data layer to the elements. Whether this is worth the extra price is questionable; few people, even those with large collections, have ever seen an oxidized CD. □

NORDICFLEX Gold

NOW IT TAKES ONLY 12 WEEKS TO GET FROM "BEFORE" TO "AFTER"

BEFORE 	Don — Age 27	AFTER 										
	<table border="0"> <tr> <td>Before</td> <td>After</td> </tr> <tr> <td>Body weight: 194 lbs.</td> <td>Body weight: 175 lbs.</td> </tr> <tr> <td>% Body fat: 11.5%</td> <td>% Body fat: 6%</td> </tr> <tr> <td>Waist: 33 inches</td> <td>Waist: 31 inches</td> </tr> <tr> <td>Arms: 12.5 inches</td> <td>Arms: 15.5 inches</td> </tr> <tr> <td>Chest: 40.5 inches</td> <td>Chest: 44.5 inches</td> </tr> </table>		Before	After	Body weight: 194 lbs.	Body weight: 175 lbs.	% Body fat: 11.5%	% Body fat: 6%	Waist: 33 inches	Waist: 31 inches	Arms: 12.5 inches	Arms: 15.5 inches
Before	After											
Body weight: 194 lbs.	Body weight: 175 lbs.											
% Body fat: 11.5%	% Body fat: 6%											
Waist: 33 inches	Waist: 31 inches											
Arms: 12.5 inches	Arms: 15.5 inches											
Chest: 40.5 inches	Chest: 44.5 inches											

YOU GET RESULTS FASTER.
The patented isokinetic resistance of NordicFlex Gold™ is so effective, you can build muscle 70% faster than ordinary strength trainers. You can see impressive results like Don did in only 12 weeks!

YOU GET A FASTER WORKOUT.
The patented isokinetic resistance of NordicFlex Gold automatically adjusts to your strength level for a fast, effective workout.

30-day in-home trial Best of all... it's from NordicTrack!

© 1992 NordicTrack, Inc., A CML Company
All rights reserved.

Since there are no awkward rubber bands or weights, your changeover time between exercises is up to 40% faster than other systems!

Plus, the NordicFlex World Class™ Edition offers additional features to enhance your workout including the electronic performance monitor.

FREE Video and Brochure

Call: 1-800-445-2360 Ext. 1K1B3

or write: NordicTrack, Dept. 1K1B3
104 Peavey Road, Chaska, MN 55318

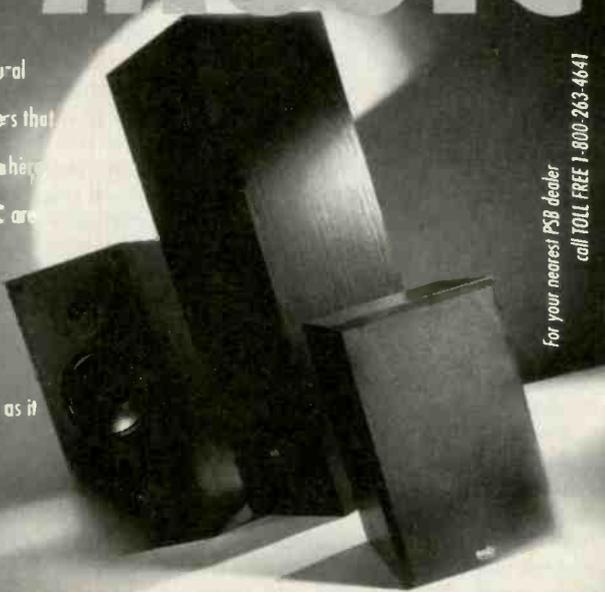
Send me a free brochure Also a free VHS videotape

Name _____
Street _____
City _____ State _____ Zip _____
Phone () _____

CIRCLE NO. 33 ON READER SERVICE CARD

NOTHING BUT THE MUSIC

Paul Barton, a concert violinist, and a world-renowned speaker designer and founder of PSB, is a firm believer in natural sound. He shudders at speakers that color musicians' notes. Show him the PSB 300, 500 and 800 are part of an affordably priced line of high-performance speakers which allow you to listen to the music naturally - as it was intended to be heard.



For your nearest PSB dealer call TOLL FREE 1-800-263-4641



PSB - A UNIQUE VOICE IN THE CROWD.

CIRCLE NO. 37 ON READER SERVICE CARD

TEST REPORTS



Technics RS-DC10 DCC Recorder

KEN C. POHLMANN
HAMMER LABORATORIES

THE Technics RS-DC10 is the third Digital Compact Cassette recorder to cross our test bench since November, preceded by the Philips DCC900 and Optimus DCT-2000. The DCC format is thus already supported by European, American, and Japanese manufacturers. Whereas the Optimus recorder has a distinctive character of its own, however, the RS-DC10's front panel clearly shows its affinity to the Philips DCC900. Except for a button or two, they appear outwardly identical. This pooling of resources should come as no surprise, since Philips and Matsushita (parent company of Technics) co-developed the DCC system.

The RS-DC10's front panel is clean and crisp, with the merging of analog cassette, CD, and DAT control features that defines the new DCC format. Primary transport controls are aligned along the center bottom of the front panel. The forward and back-

ward skip buttons fast-wind DCC tapes to the next start marker (typically the beginning of a song or movement); with analog cassettes, the skip buttons take you to the next selection by sensing the silence between tracks. On prerecorded DCC tapes, you can find the track you want by using the skip buttons to browse through the track titles listed in the tape's table of contents (which the deck reads automatically when you load a DCC), even when the tape isn't running.

Most of the other transport controls—stop, pause, play, fast-forward,

rewind—are basically conventional in their operation, though a few of them have slight twists. Pushing fast-forward or rewind during playback, for example, will put the deck into a fast wind until you release the button. The repeat button will repeat an entire tape or, for DCC recordings only, a single track. If you press play when the deck is already in play mode, it will wind back to the beginning of the current track and start over, and if you hit stop during recording the tape continues on for a moment while the deck marks the spot for easy location when you want to record more on the tape. To find that place again, you just press the Append button; the deck will then search the tape for the marker and put itself in record-standby mode, ready to roll. To record a tape from the beginning you normally would use the Record Auto button, which writes a lead-in marker and then puts the deck in standby mode.

There is, in fact, a whole cluster of buttons dedicated to manipulating tape markers for sophisticated control over tape playback (strictly optional—you don't absolutely need any of them to make the deck play or record).

Dimensions

17 inches wide, 4½ inches high,
13½ inches deep

Price
\$1,000

Manufacturer

Technics, Dept. SR, One Panasonic Way,
Secaucus, NJ 07094



If there are 18 drivers in every 901® speaker system, why aren't any of them woofers or tweeters?

Think of the thrill you get from hearing your favorite music at a live performance.

That thrill comes from hearing all the notes, clearly and without distortion. And that's the sensation you get when you listen to a Bose® 901 speaker system.

The fact is, the low notes you hear at a live performance require considerable movement of air to reproduce in your living room. Which, in conventional speakers, is left to the woofer. While the midrange notes and highs are left to the midrange drivers and the tweeter.

But the 901 system is designed with 18 full-range drivers, instead of separate woofers, midranges, and tweeters.

Why? Because Bose engineers made the laws of physics work for them and designed a single 4 1/2" driver that acts like all three. Only with better results.

For instance, to deliver bass equal to the 901, a conventional woofer would have to be 18" across and have a 10 pound magnet. Yet it still wouldn't do the same job.

And, to reproduce a sound pattern even close to what Bose Direct/Reflecting®

speaker technology delivers, it would take another dozen midranges and tweeters. And it still wouldn't come close enough.

But by working together with an active equalizer and an Acoustic Matrix™ enclosure, the drivers in the 901 act like much larger speakers, but with better manners.

So you get plenty of deep bass. But you don't hear any distortion. You get reflected and direct sound at all frequencies. Similar to a live performance. And you get it all from the 18 full-range drivers in every Bose 901 speaker system.



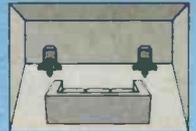
The Bose 901 Direct/Reflecting® Speaker System

The 901 speaker system is the best sounding speaker Bose makes. And the most highly acclaimed speaker in the world, regardless of size or price.

Why? Because it sounds so much like a live performance, where you hear mostly reflected sound. Conventional speakers produce mostly direct sound, so they cannot achieve the realism of a live performance.



Live Performance



Conventional Speakers



Bose 901 Direct/Reflecting® Speaker System

Bose Direct/Reflecting® speaker technology delivers a balance of reflected and direct sound. Combined with other proprietary technologies (such as active equalization, an Acoustic Matrix™ enclosure, and HVC drivers), this gives you sound very much like that of a live performance.

But nothing is as convincing as hearing the 901 yourself. Listen to it at your Bose dealer. Then, to hear what the 901 can really do, take a pair home.

To read more about the Bose 901, ask for an informative brochure, and names of Bose dealers near you. Call toll free:

1-800-444-BOSE, Ext. 221

Engineered to be the closest you can get to the sound of a live performance without leaving home.

BOSE®
Better sound through research™

TEST REPORTS

MEASUREMENTS

Record/playback measurements were made through the analog inputs, playback measurements at the analog outputs. Measurements listed are for the worse of the two channels.

Fast-wind time (C-90/DCC-90) 140 seconds Speed error

analog -1.54%
digital below measurement limit

Wow-and-flutter (IEC peak-weighted)

analog 0.21%
digital below measurement limit

Line input for indicated 0 dB 220 mV

Line output for indicated 0 dB 1.91 volts

DIGITAL PLAYBACK

Frequency response
+0.02, -0 dB, 16 to 20,000 Hz

Channel separation
1,000 Hz 98.1 dB
10,000 Hz 89.2 dB

Signal-to-noise ratio
A-weighted 101.4 dB
unweighted 95.3 dB

Distortion (THD + N at 1,000 Hz) 0.0038%

Linearity error (at -90 dB) +1.3 dB

DIGITAL RECORD/PLAYBACK

Frequency response
+0, -0.01 dB, 16 to 20,000 Hz

Channel separation
1,000 Hz 85.4 dB
10,000 Hz 66.5 dB

Signal-to-noise ratio
A-weighted 91.7 dB
unweighted 89.5 dB

Distortion (THD + N at 1,000 Hz) 0.0048%

Linearity error (at -90 dB) +0.2 dB

ANALOG PLAYBACK

Frequency response
±1.2 dB, 32 to 18,000 Hz

Channel separation
1,000 Hz 33.6 dB
10,000 Hz 31.7 dB

Signal-to-noise ratio
no noise reduction (A-weighted) 57.9 dB
no noise reduction (unweighted) 55.1 dB

Dolby B (unweighted) 58.9 dB

Dolby C (unweighted) 61.9 dB

Distortion (THD + N at 1,000 Hz) 1.16%

Pushing the Start Marker Auto button causes the deck to automatically record a start marker wherever it encounters a 3-second blank space on the tape (you can use the record-mute button to create such blanks if you need to). The Start Marker Write button enables you to insert start markers manually wherever you like. The Next Marker Write button creates a marker that tells the deck to fast-forward to the end of the tape, switch direction, and start playback from the other side, whereas the Reverse Marker Write button creates a marker that makes the deck reverse immediately. The Erase Marker button removes markers, and the Start Marker Renumber button cleans up an edited tape (after markers have been added or erased) by renumbering all start markers in sequential order.

Analog-input recording levels are adjusted with a large knob, balance between the channels with a smaller knob. Of course, no level controls are needed when using the digital inputs. A three position input selector gives you a choice of analog, coaxial digital, and optical digital inputs. The deck automatically senses the three standard sampling rates (32, 44.1, and 48 kHz) for incoming digital signals and adjusts itself to accommodate them. The sampling rate used for analog inputs is 44.1 kHz. And for playback of analog cassettes, you can select Dolby B, Dolby C, or no noise reduction. The RS-DC10 also has a timer button for use with an external timer and a headphone jack with volume control.

A number of small buttons are used to operate the blue fluorescent display. When prerecorded DCC tapes are played, the Text button switches the display between album title, artist name, track title, and total number of tracks and time. (Text information is not available for user-recorded DCC tapes or analog cassettes.) For DCC tapes, track number and elapsed time within the current track normally appear. The counter button switches the display between elapsed track time, elapsed tape time, remaining time on a side, total time remaining on a tape, and a simple tape counter. Curiously, only the tape counter display works when analog tapes are played (we don't see why elapsed time couldn't have been made available as well), so the counter button has no function when playing them back.

In addition to text information and time and tape counters, the fluorescent display flashes status messages when appropriate ("no cassette," for example), and there are indicators for play and record modes, repeat modes, tape direction, tape travel, sampling frequency, input type, copy prohibit, and Dolby setting, as well as various marker modes. There are also bargraphs for left and right channel signal level. They display levels during both

**The RS-DC10 comes with
a nice, juicy sales
incentive: your choice
of ten free
prerecorded DCC tapes.**

recording and playback. The bargraph scales change value depending on whether digital or analog tapes are used: -50 dB to 0 dB for DCC and -40 dB to +10 dB for analog tape.

The RS-DC10's back panel provides the expected connector complement: pairs of phono jacks for fixed line-level analog output, variable line-level analog output, line-level analog input, and coaxial digital input and output, plus a pair of Toslink connectors for optical digital in and out.

As with all consumer digital recorders, the RS-DC10 contains Serial Copy Management System (SCMS) circuitry. You can record digitally from CD (or any other digital source, including another DCC), but the DCC dub itself is coded to prevent any second-generation digital copying. You can make as many direct digital copies of the original as you like, however, and there is no restriction on copying via the analog inputs. Digital copiers will be delighted to know that the RS-DC10 automatically records track numbers from CD, DAT, or DCC sources when making a digital copy (the Auto Start Marker button enables this).

A look inside the RS-DC10 revealed very tidy construction and a parts complement that is quite consolidated

NEW FROM THE WORLD-RENOWNED



FREE MAGAZINE

FREE CD With nothing more to buy, ever!

- Exclusive Magazine
- Exclusive CD
- Plus FREE CD buying service

Good News For Serious Lovers Of Classical Music!
The BBC announces this generous free offer to introduce its new, critically acclaimed service to American audiences.

A One-Of-A-Kind Concept Unlike Any Before!
Neither a club nor a "sampler" service, this program brings you...

1. The BBC Music Magazine.

With its broad scope and lively approach, this beautiful new magazine has enormous appeal for long-time collectors as well as to those just developing an interest in classical music. It covers all aspects of classical music – live, broadcast, and recorded – in equal depth. Over 100 luxurious pages of photographs, features and columns... plus over 100 new CDs reviewed and rated each month. Indubitably, a complete guide to classical music!

2. An Exclusive Full-Length CD.

With every issue of the BBC Music Magazine you will also receive each month, a full-length Compact Disc that is not available anywhere else... an entire featured work (not a compilation of short

excerpts) recorded to the highest quality classical standards – most often performed by the internationally recognized BBC orchestras. Handsomely packaged in a jewel case... not in a paper sleeve.

3. A Personal CD Buying Service.

You may order CDs reviewed in the BBC Music Magazine through the BBC Classical Music Service, if you wish. A convenient way to shop but never an obligation.

Add New Excitement To Your Collection!

The monthly CDs alone will add the cachet of exclusive, superbly recorded special performances to an already well-balanced collection. For the beginning classical library, they become the nucleus to build around. And the BBC Music Magazine's reviews and ratings of the latest CDs, and its features and columns will greatly enhance your

knowledge and appreciation for classical music.

Satisfaction Guaranteed!

Simply phone toll-free or fill out the coupon for your free copy of the BBC Music Magazine and free CD. Listen to the CD and read the magazine, if not satisfied for any reason, return them with no further obligation.

© 1993 Warner Music Enterprises



GUARANTEED PRICE PROTECTION.

As a charter member, you will always be guaranteed the low price of \$2.98 plus shipping and handling every month, for as long as you remain an active member in the program.

'BBC' and the BBC logotype are trade marks of the British Broadcasting Corporation and are used under license.

For charter membership, call toll-free

1-800-257-1100
Dept. KBZ or mail the coupon.

A COMPLETE MONTHLY GUIDE TO CLASSICAL MUSIC



Mail to: BBC Classical Music Service
Box 61099, Tampa, FL 33661-1099

Please send my FREE copy of *BBC Music Magazine* plus my FREE CD. Bill me for just shipping and handling. Thereafter, I will receive the *BBC Music Magazine* and an exclusive CD every month. As a charter member, I will always be guaranteed the low monthly price of \$2.98 plus shipping and handling for as long as I remain an active member in the program.

I have no obligation to buy anything ever and I may cancel at any time.

Check here if you prefer your monthly recordings on cassette.

KBZ

G1

Name _____ (please print)

Address _____ Apt. # _____

City _____ State _____ Zip _____

()
Phone _____

Have you bought anything by mail 1 Last 6 months 2 Never

We reserve the right to ask for additional information, reject any application, or cancel any membership. Limited to new members; one per family. Local tax, if any, will be added.

TEST REPORTS

for a first-generation product. Philips Bitstream 1-bit analog-to-digital (A/D) and digital-to-analog (D/A) converters are employed, along with four PASC encoder/decoder chips. After A/D conversion (if necessary), the encoder divides the input signal into thirty-two subbands, each 750 Hz wide, calculates the average signal level in each band, applies a masking-estimation algorithm, and allocates bits to the parts of the signal that require coding. The decoder rejoins the bands and restores the data to linear PCM format for processing by the D/A converters.

The transport employs two DC motors for the capstan and reels; a third motor is dedicated to the tape drawer. The multitrack thin-film tape head flips over when the tape changes directions. There are two azimuth locking pins (ALP's) to hold the tape taut against the head and its fixed azimuth tape guide (FATG) slots to maintain correct tape alignment. As with all DCC decks, there is no erase head since recording is accomplished by writing new data directly over the old. It is important to note, by the way, that head demagnetizers and conventional cleaning cassettes should not be used on DCC heads.

The RS-DC10's twenty-nine-key wireless remote duplicates the front-panel buttons for transport control, side switching, repeat, text and counter manipulation, and so on, as well as drawer open/close for those who want to try to load cassettes from across the room. More usefully, it also adds output volume up/down, ten-key direct track access (for prerecorded DCC tapes only), and a music-scan feature to audition the first few seconds of each track.

The RS-DC10 also comes with a nice, juicy sales incentive: free software. While the deck will play back your existing analog cassettes and enables you to record your own DCC cassettes, Technics figures you will also be anxious to start a library of prerecorded DCC tapes. To help establish your new collection, Technics is offering ten free prerecorded DCC tapes with the purchase of an RS-DC10—your choice from a variety of titles on four different record labels, mailed directly to you.

The RS-DC10 measured very well on the test bench, exhibiting extremely flat DCC playback response, very low noise and distortion, and excellent

low-level D/A linearity. And its record/playback measurements rivaled those of a DAT recorder—again, very flat frequency response combined with low noise, distortion, and converter nonlinearity. In fact, the errors in the A/D and D/A converters apparently canceled somewhat, yielding better linearity for a complete trip through the recorder than for playback only. Analog playback measurements were respectable, but not as good as those of a topnotch analog-only cassette deck. Wow and flutter, in particular, were rather high. Another weakness of the transport is its fast-wind speed, which makes track access rather slow, at least compared with CD, MD, and DAT.

**The RS-DC10 proved
that DCC can deliver
sound virtually
indistinguishable from
that of CD.**

Moving from the test bench to the listening room, I first put the RS-DC10 through its paces, checking its various features. Everything was in order, including the very nifty convenience of browsing through the track-title index, choosing a track, and hitting play to make the RS-DC10 find and play it. DCC's smart sensing enables the deck to find the shortest distance to a track, flipping sides as required, which cuts down on the waits imposed by the relatively slow tape spooling.

On the other hand, I am disappointed by the distinctions between prerecorded and user-recorded DCC tapes imposed by the DCC format. Prerecorded tapes have various perks, such as track-title indexes, that you can't put on a tape yourself or copy from a prerecorded DCC tape. These limitations, which were imposed to mollify record companies, lead to confusion for the end user, particularly when controls do different things depending on whether you are playing a prerecorded or user-recorded tape. For ex-

ample, the RS-DC10's remote control permits direct track access for prerecorded tapes, but not for user-recorded ones. Frustrating.

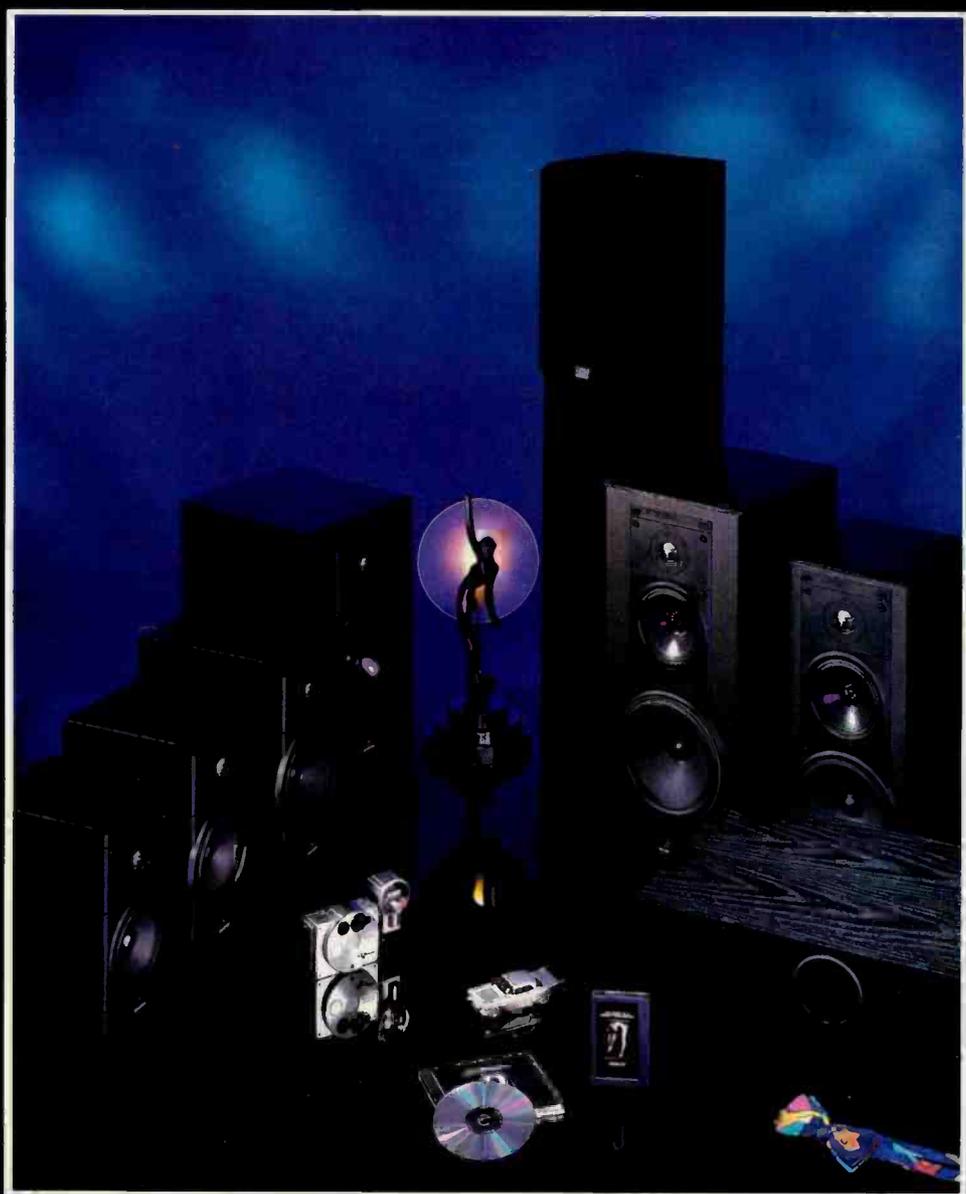
To check the RS-DC10's susceptibility to head clogging, particularly from playback of analog tapes, I loaded an analog cassette, punched in continuous-loop playback, and let the machine cycle through the cassette for 48 hours. At the end of the test, although the tape drawer had a good sprinkle of shedded oxide at the bottom, the cassette played back without fault, as did DCC tapes. Incidentally, a number of people have asked me about the two square recesses on each side of DCC shells: They will be used to load tapes in future DCC changers.

Finally, I did some critical listening—a more crucial step for a deck built around a perceptual coder, such as DCC's PASC system, than for CD players and DAT recorders, which use straight linear pulse-code modulation (PCM). With linear coding, you can be more confident of the correlation between measurements and sonic performance than you can with perceptual coding, which is designed to exploit the masking of one sound by another in human hearing, devoting storage capacity to sounds presumed to be audible while ignoring those thought to be inaudible. Depending on the sophistication of the perceptual-coding system used, sound quality may be better or worse than the measurements might suggest.

After enjoying my small library of prerecorded DCC tapes, as well as a few digitally copied tapes, I was well satisfied with the RS-DC10's sound quality. There is no question in my mind that DCC's PASC encoding scheme can provide fidelity that is virtually indistinguishable from that of compact discs, and the RS-DC10 again proved the point. Both classical and pop prerecorded tapes sounded great, and after trying for some time to distinguish by ear between my digitally copied tapes and the original CD's, I finally gave up and simply succumbed to the outstanding DCC sound.

The RS-DC10 thoroughly validates the philosophy behind DCC, that a snazzy new digital recording format can peacefully coexist in the same box with a long established analog format. It's an amazing feat, and the RS-DC10 is a terrific example of this new breed of audio component. □

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

TEST REPORTS



JBL HP520 Loudspeaker System

JULIAN HIRSCH
HIRSCH-HOUCK LABORATORIES

JBL says that its HP series of loudspeakers is designed to bring many of the features of the company's professional theater and monitor speakers to home systems at affordable prices. The HP520, the larger of the two models currently available, is a floor-standing four-way system with five drivers. Its attractively finished seven-sided columnar cabinet has no parallel exterior surfaces; even the top resembles an upward-facing parabolic cone, although it is normally covered by a decorative black glass insert.

The bass frequencies are generated

by what JBL calls a Double Chamber Bandpass (DCB) system, consisting of two internally mounted 8½-inch drivers located about midway up the col-

Dimensions

14¼ inches wide, 38 inches high,
and 12¼ inches deep

Finish

Black ash hardwood veneer

Price

\$795 each

Manufacturer

JBL, Inc., Dept. SR, 240 Crossways Park
W., Woodbury, NY 11797

umn. The dual woofers, which face each other on a baffle plate that divides the interior of the enclosure, are driven out of phase, effectively operating as a single piston. The two-chamber internal volume forms a tuned system that concentrates the bass energy in the range below 120 Hz while cutting off sharply above it. The woofer system radiates into the room from the top of the cabinet through a slot about 1¼ inches high that extends completely around the periphery. The curvature of the cabinet's conical plastic top presumably is designed to provide a smooth acoustic transition from the interior of the cabinet to the external room volume.

The other drivers are located conventionally on the upper half of the cabinet's front panel. The upper bass and lower midrange, from 120 to 1,200 Hz, is radiated by a 6½-inch driver. Above it, in a separate sealed sub-enclosure, is a 5-inch midrange driver that operates up to 4,000 Hz, where there is a crossover to a 1-inch titanium-dome tweeter, placed at the top of the speaker panel. The panel itself is covered with rubber foam to minimize diffraction at the boundary between each driver and the panel, which could distort the system's radiation pattern. A removable black cloth grille covers the entire front of the cabinet, and the black glass insert for the top of the cabinet further enhances its appearance and utility.

The input connectors (insulated five-way binding posts on ¾-inch centers) and a three-position room-compensation switch are located in a recess in the bottom of the cabinet. The switch adjusts the balance of the lower frequencies to compensate for the placement of the system near a corner, against a wall, or away from any wall. The cabinet is fitted with rubber feet, and spikes are provided for optional installation.

JBL's specifications for the HP520 include a 4-ohm nominal impedance, a frequency range of 34 to 27,000 Hz, and a maximum recommended amplifier power of 200 watts. Its rated sensitivity is 90 dB. The system weighs about 55 pounds.

The HP520's raw (unsmoothed) room response varied less than ±3.5 dB from about 60 Hz to our upper measurement limit of 20,000 Hz. It was difficult to measure the bass response with close microphone spacing

PHOTO: JOCK P. LEUNG

TEST REPORTS

below 100 Hz or so, since it radiated around the full periphery of the cabinet, and the results could not readily be combined with room measurements in any meaningful way. The closest we could come to making our usual smoothed room-response measurement yielded a very good ± 2 -dB envelope from 110 to 10,000 Hz. A quasi-anechoic MLS response measurement, valid above approximately 300 Hz, yielded a very similar curve: ± 2 dB from 400 to 16,000 Hz, rising to +4 dB at 20,000 Hz (relative to the average output from 1,000 to 10,000 Hz).

The tweeter's horizontal directivity, measured with one-third-octave noise, was typical of 1-inch dome radiators. At 45 degrees off-axis, the output (relative to the on-axis response) fell to -3 dB around 7,000 Hz, -5 dB at 10,000 Hz, and -12 dB at 20,000 Hz. Although our room-response measurements stop at 20,000 Hz, they showed increasing output from 10,000 to 20,000 Hz, where it equaled the highest level recorded at any lower frequency.

The system's impedance was unusual in having three peaks below 100 Hz, at 28, 50, and 90 Hz. Within that range, the impedance varied between 6 and 11 ohms. Above 100 Hz, the curve was more conventional, swinging from a minimum of 3.4 ohms at 120 Hz to a maximum of 11.8 ohms at 3,000 Hz. Over most of the audio band, the impedance remained well above the rated 4 ohms.

The HP520's measured sensitivity was unusually high, with the system producing a 94.5-dB sound pressure level (SPL) at 1 meter on the tweeter axis with a 2.83-volt input. Bass distortion, with an input of 1.7 volts (corresponding to a 90-dB SPL), was about 1 percent from 50 to 120 Hz, rising at lower frequencies to 5.5 percent at 30 Hz. The upper-bass driver also produced low distortion, about 0.6 percent from 120 to 750 Hz and about 0.8 percent at the 1,200-Hz crossover to the midrange driver. The latter, whose cone excursions were small, generated less than 1 percent distortion throughout its operating frequency range and less than 0.4 percent from about 1,300 to 2,400 Hz. The group delay in the tweeter's range varied about 100 microseconds overall.

The HP520's woofers were able to

absorb a single-cycle sine-wave input of about 600 watts at 100 Hz before their cones reached their mechanical limits of movement. At 1,000 and 10,000 Hz, the driving amplifier ran out of power at about 850 watts before the speaker showed any signs of distress.

For all our testing and listening, the HP520 speakers were placed about 3 to 4 feet from the walls behind and beside them, and the room-compensation switch was set appropriately at its "0 dB" (maximum bass) position. We did not install the spikes, which would

The HP520's low-frequency output remained clean and palpably strong all the way down to the 30-Hz region.

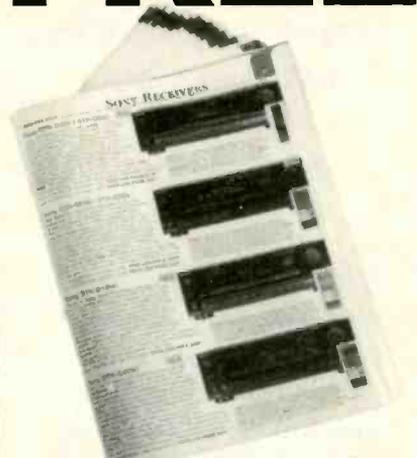
have complicated moving the speakers about.

The HP520's sounded every bit as good as the measurements would imply (*better*, actually, because their very solid low bass was far superior to what our measurements could confirm). Despite a total absence of the upper-bass heaviness that mars the sound of so many loudspeakers, the low-frequency output remained clean and palpably strong down to the 30-Hz region.

Stereo imaging was likewise excellent, with a better-than-average illusion of depth behind the speakers as well as a seamless soundstage between them. The sound was totally integrated at all times, with never a hint it was coming from five separate drivers in each speaker cabinet.

The JBL HP520 ranks as a worthy competitor in what is today the mid-price bracket for good loudspeakers. Like any good speaker, its sound is "right" from first hearing and tends to be even more satisfactory with extended listening.

FREE



STEREO CATALOG

- Sony
Pioneer
Kenwood
Mitsubishi
Panasonic
JVC
NHT
Bose
Adveat
Infinity
EPI
AT&T
X-10
Blaupunkt
Alphasonik
Kicker
Pyle
- > The catalog you've always wished you could find—over 150 pages of full color photos, complete descriptions, exclusive comparison charts and "no jargon" explanations of features and functions.
 - > Low discount prices on the latest in home audio, car stereo, video and home theater, telephones and computers.
 - > Full service, no-pressure buying and technical help. Everything covered by a 30-day Total Satisfaction Guarantee.

**Call now or send this coupon
for your free Crutchfield
audio/video/computer catalog
800-955-9005**

Name _____

Address _____

Apt. # _____

City _____

State _____

Zip _____

CRUTCHFIELD

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

Woofers, watts, pixels, tweeters, home theater?

Confused?

With today's rapidly changing technology, it's easy to get confused. Superstores tout low prices, but what about answering your questions and helping you choose components that work with what you already own?

PARA can help!

PARA is a nationwide organization of independent specialty audio/video stores dedicated to providing expert advice, quality products, and world-class customer service. We make sense of the latest technologies and help you see and hear the differences between the many brands we recommend.

The personal touch!

We care more about your long term satisfaction than just making a one-time sale. We are audio/video professionals who love music. And, we offer the best values in home entertainment. At a PARA retailer, it won't cost extra to buy what's right for you and your family.

para

Professional
Audio/Video
Retailers
Association

Rediscover the joy of music!
To locate a PARA dealer near you,
call (708) 268-1500.

TEST REPORTS



KLH Premier 81 Speaker System

JULIAN HIRSCH
HIRSCH-HOUCK LABORATORIES

IN the 1960's, KLH was one of the best-known names in the high-fidelity world. KLH loudspeakers earned a reputation for exceptional sound at affordable prices, and the name was also associated with the first high-fidelity portables and the first home tape recorder (open-reel) with Dolby B noise reduction.

Since 1980, the company's ownership has changed a couple of times, and for a number of years the KLH name almost disappeared from view in the hi-fi speaker market. Recently, however, a revitalized KLH has announced a series of home loudspeakers that promise a combination of value and performance not unlike that of the early KLH products.

KLH says its Premier Series is designed to provide the essential qualities of more costly speakers at affordable prices. The Premier 81, one of two bookshelf models in the line, is a vented two-way system with an 8-inch woofer crossing over at 1,300 Hz to a 1-inch soft-dome tweeter. The woofer has a 1.5-inch high-temperature voice coil and a polymer-fiber cone. The tweeter voice coil is wound on a Kapton form and cooled by ferrofluid.

The KLH 81 is finished on all sides and weighs a solid 22 pounds. The front edges are beveled, and the drivers are mounted flush with the front panel. The bass port is on the rear, as are the recessed gold-plated five-way binding-post connectors. A removable black cloth grille, on a wooden frame, is retained by plastic snaps.

We mounted the KLH 81 speakers on 26-inch stands, about 8 feet apart and 3 feet in front of a wall. Their averaged room response was very flat and smooth, especially above 300 Hz, where room-boundary effects were negligible. The output varied only ± 2.5 dB from 100 to 20,000 Hz. The combined woofer and port response spliced easily to the room response,

Dimensions

10 $\frac{1}{2}$ inches wide, 16 $\frac{1}{2}$ inches high, and
11 $\frac{1}{4}$ inches deep

Finish

Oak-grain vinyl

Price

\$299 a pair

Manufacturer

KLH, Dept. SR, 11131 Dora St.,
P.O. Box 1085, Sun Valley, CA 91352

TEST REPORTS

resulting in a composite frequency response of +5, -2 dB from 30 to 20,000 Hz. (The maximum output occurred between 60 and 70 Hz). Although close-miked woofer measurements can give a misleading impression of a speaker's true bass capabilities, listening tests established that the KLH 81 could deliver useful, reasonably clean output as low as 32 Hz.

A quasi-anechoic MLS measurement of the axial frequency response showed an output variation akin to that obtained in the room measurement: ± 2.5 dB from 1,500 to 20,000 Hz, with a maximum of +3.5 dB at 1,200 Hz and a gentle decline to -2 dB at 300 Hz. A ground-plane MLS measurement at 3 meters (which eliminated early floor reflections) gave generally similar results, with an overall variation of ± 4 dB from 300 to 20,000 Hz.

The tweeter's horizontal dispersion was typical of 1-inch dome radiators, with the response curves on-axis and 45 degrees off-axis beginning to diverge above 6,000 Hz; off-axis output was down 5 dB at 10,000 Hz and 14 dB at 20,000 Hz. Group delay varied less than 50 microseconds from 4,000 to 20,000 Hz, with an increase to 1.25 milliseconds at 50 Hz.

The KLH 81's impedance reached its low of just over 5 ohms at 150 Hz. It peaked at about 22 ohms at 25 and 75 Hz and to 15 ohms at 800 Hz. The speaker's impedance averaged between 10 and 15 ohms over most of the audio range.

The system's sensitivity measured 90 dB sound-pressure level (SPL) at 1 meter with a 2.83-volt pink-noise input. At that level, the woofer distortion was a uniform 0.7 to 0.9 percent from 80 to 1,300 Hz, increasing to 2 percent at 50 Hz and 7 percent at 20 Hz. The woofer cone reached its suspension limits at 100 Hz with a single-cycle input of 510 watts into its 7.5-ohm impedance at that frequency.

The KLH Premier 81 speakers sounded about as good as they measured, which is to say very good indeed. Their output was as smooth and extended as that of many speakers selling for several times their modest price, with only a slight upper-bass warmth to distinguish them from some speakers we have tested that cost in the range of \$1,000 to \$1,500 a pair.

It came as a pleasant surprise to find that the KLH 81's single 8-inch woofer was actually capable of reaching into

the bottom musical octave. A 31.5-Hz sine wave from a test CD produced a room-filling output, clearly consisting mostly of the fundamental frequency. Though not as powerful as the bass we have heard from larger systems, it was *real* bass (this was also verified by our woofer distortion measurements).

When you combine these qualities with a handsomely finished cabinet and a modest price, it is clear that the KLH Premier 81 does honor to its heritage. It is a very worthy competitor for the several high-quality small speakers we have tested in recent months.

IN THIS RELIGION, IT'S OKAY TO EXPRESS BASS DESIRES.



Brethren: witness ProSeries Subwoofers - the best way to add kick to any car system. There's the 8-inch 8.0LF, our small, powerful wonder. The 10-inch 10.0LF, which outperforms most other 15-inch subs. And the mighty 12-inch 12.0LF, that handles 700 watts, peak. Feel free to covet.

SATISFY MY BASS DESIRES.

Name: _____
Address: _____
City: _____ State: _____ ZIP: _____
Car make: _____ Model: _____ Year: _____



Send \$5 to Boston Acoustics, Dept. CSR-7, 70 Broadway, Lynnfield, MA 01940. In return, you'll get information on Boston subs. Plus a very cool CD. "The Boston Bass Disc" with music specially chosen to test subwoofer performance. All of your desires will then be satisfied. Well, almost.

Allow eight weeks for delivery. Offer good through June, 1993 or while supplies last.

BostonAcoustics
CAR SOUND IS OUR RELIGION.

TEST REPORTS



Forté F44 Preamplifier

JULIAN HIRSCH
HIRSCH-HOUCK LABORATORIES

THE Forté F44 is a basic stereo preamplifier combining sophisticated circuit design with exceptional ease and convenience of operation. A true product of audio's digital era, it has six sets of line-level inputs but no phono jacks, though it does provide for such additions as an outboard phono preamp.

Operating convenience has not been overlooked in the design of the F44. Its infrared remote control covers all the normal operating functions, including input selection, volume adjustment, and muting, and there is a Standby button for use with future Forté components such as a video switcher (a Data Bus connector for that purpose is on the back of the preamplifier). The front-panel control knobs are turned by internal motors when operated from the remote, in total silence and with no switching transients. A major advantage of this system is avoidance of the dynamic-range limitations and distortion typical of voltage-controlled solid-state attenuators. The white bars on the control knobs clearly show their settings even at a moderate distance.

The F44's inputs are designated as CD, Video, Tuner, High Level 1 and 2 (for other high-level sources), and Tape. A separate Record switch connects the signal at any of the inputs, independently of the one selected for listening, to the tape-recording outputs. In its off position this switch completely isolates the tape outputs from the input signals. The Record switch is not duplicated on the remote control.

The Forté F44 has no power switch. It is designed to be energized permanently once installed, and since it consumes only a few watts of power and runs perfectly cool, this is quite practical. The selected input signal goes

Dimensions

17 inches wide, 2½ inches high,
9½ inches deep

Price

\$1,250

Manufacturer

Forté Audio, Dept. SR,
7325 Roseville Rd.,
Sacramento, CA 95842

through the volume control before being amplified, insuring against unwittingly overloading a low-level stage. The F44's cascode Class A amplifiers are direct-coupled.

An unusual feature of the Forté F44 is its provision for balanced inputs. In addition to the standard unbalanced inputs and two sets of output jacks, the rear apron contains balanced jacks for the CD inputs and a pair of balanced output jacks. The balanced outputs are not normally functional, but the user's manual explains how to switch jumper blocks on the main circuit board to replace the standard CD inputs with their balanced equivalents, which can provide better interference rejection than the standard unbalanced connection.

The Forté F44 has a relatively low input-impedance rating of 12,000 ohms unbalanced and 4,400 ohms balanced. Its output impedance is specified as 100 ohms unbalanced, 200 ohms balanced. Frequency response is rated as flat to DC (0 Hz) and down by 1 dB at 200,000 Hz. Distortion is specified as 0.005 percent from DC to 20,000 Hz at 3 volts output into a 10,000-ohm load, and noise is rated at lower than -100 dB relative to 0.5 volt.

In our measurements, the Forté F44's frequency response was flat

PHOTO: JOCK P. LEUNG



The Best Music Offer in America!

8 Classical
COMPACT DISCS
FOR THE PRICE OF $1\frac{1}{2}$
WITH NOTHING MORE TO BUY... EVER!



The Labels! The Artists! The Savings!

ALL YOURS FROM THE **NEW** BMG CLASSICAL MUSIC SERVICE.

Bloch, Schelomo; Bruch, Kol Nidrei • Ofra Harnoy, cello. (RCA) 10846

Beethoven, Missa Solemnis • Soloists. Monteverdi Choir. English Baroque Soloists/Gardiner Winner! Gramophone Record of the Year, 1991(Archiv) 00048

Pavarotti Songbook
 The great tenor sings Volare, Torna a Surriento, 'O sole mio, more. (London) 25275
Chopin, 24 Préludes • Ivo Pogorelich, piano. "First class." - Gramophone (DG) 25266

Paganini, Violin Concerto No. 1 • Also Saint-Saëns, Con. No. 3. Gil Shaham. Philharmonia/Sinopoli. (DG) 00186

Granados, Goyescas • Alicia deLarocha, piano. (RCA) 34565

The Very Best of the Boston Pops
 John Williams conducts. (Philips) 15319

Pavarotti In Hyde Park • (London) 40230
Dvorák, Slavonic Dances (Complete) • Cleveland/Dohnányi. (London) 25490

Hanson, Symphonies Nos. 5 & 7 • Seattle Sym. Orch./Gerard Schwarz. (Delos) 00111

Mozart, Concerto for Flute & Harp • Nancy Allen, harp. Susan Palma, flute. Orpheus Chamber Orchestra (DG) 00095

Mozart, Requiem, K. 626 • Bernstein conducts. McLaughlin; Ewing; Hadley; Hauptmann. (DG) 35231

Brahms, Piano Concerto No. 2 • Alfred Brendel. Berlin/Abbado (Philips) 74371

Maria Graf: A French Harp Recital • Fauré, more. (Philips) 25103

Beethoven, "Moonlight" and "Pastorale" Piano Sonatas • Also Sonata No. 13. Maurizio Pollini, piano (DG) 00096

Prokofiev, Alexander Nevsky, Op. 78 • Lieutenants Kijé. Montréal Sym./Dutoit. (London) 25097

Saint-Saëns & Lalo, Cello Concertos • Bruch, Kol Nidrei. Halmovitz, cello. CSO/Levine. (DG) 25383

Sibelius, String Quartet "Voces Intimae" • Also Grieg, String Quartet. Guarneri String Quartet. (Philips) 00104

Pieces of Africa • Kronos Quartet performs with African musicians. (Nonesuch) 10472

The Bach Album • Kathleen Battle, soprano; Itzhak Perlman, violin. A *Billboard* bestseller! (DG) 73670

Watts: Chopin Recital • Watts' first recording in 3 years! Etudes, Nocturnes, more. (EMI Classics) 25390

Górecki, Symphony No. 3 • London Sinfonieta/Zinman (Nonesuch) 00110

Beethoven, Symphony No. 9 "Ode To Freedom" • Bernstein conducts, Live in Berlin, Christmas Day, 1989. (DG) 84239

Wieniawski, Violin Concertos 1 & 2 • Also Sarasate, Gypsy Airs. Gil Shaham, violin. (DG) 00185

Brahms, Piano Concerto No. 1 • Alfred Brendel, piano. Berlin PO/Abbado/Philips) 53907

Perlman: Mozart, Violin Sonatas Daniel Barenboim, piano. (DG) 15024

Carreras, Domingo, Pavarotti In Concert Mehta conducts. (London) 35078

Brahms, Liebeslieder-Walzes • Monteverdi Choir/Gardiner. (Philips) 25498

Mozart, Mass In C Minor "Great" • Bavarian Radio/Bernstein. (DG) 33464

Haydn, Mass "In Time of War" • Solists. Bavarian Radio Orch. & Chorus/Bernstein. (Philips) 00103

Bartoli: Mozart Arias • Andrés Schöff, piano. (London) 34783

Red, White & Brass • Canadian Brass with members of the N.Y. Phil. & Boston Symphony. (Philips) 25298

Schubert, Duos For Violin & Piano • Gidon Kremer, violin; Valery Afanassiev, piano. (DG) 74203

Pavarotti: Amore • Luciano's latest release! Features 17 Italian songs & arias. (London) 74149

Rachmaninov, Sym. No. 2 • Orch. de Paris/Bychkov. (Philips) 25309

Tchaikovsky, 1812 Overture • Plus Borodin, Polovtsian Dances, more. Gothenberg Symphony/Neeme Järvi (DG) 00060

Guitarra Española • Music of Albeniz, Granados, Tárrega, Turina, Bacarisse & Yepes. Narciso Yepes, guitar. (DG) 00063

Beethoven, Cello Sonatas • Misha Mailyk, cello. Martha Argerich, piano. (DG) 00058

1492: Music For The Age Of Discovery • Waverly Consort. (Angel) 15591

Dvorák, "American" Quartet • Smetana, "From My Life." Berg Quartet, "Live." (Angel) 25221

Mozart, Symphonies 40 & 41
 Vienna Philharmonic/Levine. (DG) 25497

Shostakovich, Piano Trio No. 2
 Beaux Arts Trio (Philips) 00191

Messiaen, Turangalila-Symphonie
 Bastille Orchestra/Chung (DG) 73941

Mussorgsky, Pictures At An Exhibition • Night On Bald Mountain. Philadelphia Orch./Muti. (Philips) 93885

Beethoven & Schumann Variations
 Alfred Brendel, piano. "Recommended." - Fanfare (Philips) 63939

Shaking The Blues Away • The Coffee Club Orchestra/Fisher with Garrison Keillor. (Angel) 25213

Glass, The Screens • New works by Glass with an African twist. (Point) 14871

Grieg & Schumann, Piano Concertos • Zimerman, Berlin Phil./Karajan (DG) 00055

Galway: The Wind Beneath My Wings • Send in the Clowns, Come to My Garden, more! (RCA) 93731

Brahms, Sym. No. 2 • Boston Sym./Haltink. (Philips) 00056

Corigliano, Symphony No. 1
 Chicago/Barenboim. (Erato) 63294

Mozart, Piano Concertos Nos. 23 & 24 • Alicia deLarocha, piano. Sir Colin Davis conducts. (RCA) 63755

Rachmaninov, 2 Suites for 2 Pianos
 Also, Symphonic Dances. Argerich & Rabinovitch, piano. (Teldec) 00109

Dvorák, "New World" Symphony
 Cleveland Orchestra/Dohnányi. (London) 15065

Holst, The Planets • New York Philharmonic/Mehta. (Teldec) 51994

Chieftains: The Bells Of Dublin
 With Jackson Browne, Elvis Costello, Marianne Faithful, Nanci Griffith, Rickie Lee Jones, others. (RCA) 10943

Shostakovich, Symphony No. 5
 Berlin Phil./Bychkov. (Philips) 15454

Segovia Plays Bach • 3 Pieces For Lute, Chaconne, more. (MCA) 63600

Horowitz In Moscow • A Grammy® Winner! Scarlatti, Mozart, Scriabin, Schubert, Liszt, Chopin, Schumann, others. (DG) 25264

Segovia: 5 Centuries of Spanish Guitar • Granados, Sor, Torroba. (MCA) 54277

Bach, Organ Concertos • Simon Preston (Archiv) 00057

Handel, Water Music
 English Concert/Pinnock. (Archiv) 15306

Hitchcock, Master Of Mayhem
 Music from Psycho, Rear Window, more. (Pro Arte) 10477



INSTANT
50% off
BONUS DISCOUNTS!

You qualify instantly for 50% off discounts with your first regular-club-price purchase.

Buy 1 at full price, your next choice is HALF PRICE!

Other clubs ask you to buy 6 (or more!) at full price before you get savings like this!

Great Selection, Service, and Savings! Start Now! Complete and Mail Today!

ENROLL ME IMMEDIATELY! Send the 4 FREE CDs I've chosen. Under the terms of this offer, I agree to buy 1 recording at half the regular Club price in one year. Then I can choose 3 more FREE! (I'll pay shipping and handling.) That's 8 for half the price of 1...with nothing more to buy...ever!

QUICK! Send me 4 FREE selections.

(Write numbers here.)

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

Address Apt.

City State Zip

Telephone, please (Area Code)

Signature X

We reserve the right to request additional information or reject any application. Limited to new members. TRADEMARKS USED IN THIS ADVT ARE THE PROPERTY OF VARIOUS TRADEMARK OWNERS. Dog and horn are trademarks of General Electric Company, U.S.A. Photocopies of this coupon are acceptable.

BMG Classical Music Service: 6550 E 30th Street Indianapolis, IN 46219-1194

BMG™ BMG Music. ©1992 BMG Direct Marketing, Inc.

CBD2A

CP

BMG
CLASSICAL
MUSIC SERVICE

**HERE'S ALL YOU DO
TO ENROLL.**

Choose any 4 CDs listed in this ad. They will be sent to you FREE. Take up to a year to buy 1 more at half the regular Club price (\$14.98 and up). Then choose 3 more FREE. That's how you get 8 selections for the price of one half with nothing more to buy ever. Shipping and handling charges are added to all shipments.

**AMERICA'S NEWEST CLASSICAL
MUSIC GUIDE — ENCORE.**

IT'S YOURS FREE!

The choices in classical music are vast. Thousands of recordings are released every year. So, whether you are starting a new collection or adding to an old one, you'll welcome the expert advice found only in *ENCORE*, BMG's international guide to the best in classical music. You'll receive a FREE copy about every 3 weeks, up to 19 times a year. Every issue highlights a Featured Selection and offers hundreds of additional recordings. Do nothing and you'll automatically receive the Featured Selection.

If you prefer any of the other recordings, or none at all, simply return the card that comes with *ENCORE* by the date specified. You'll always have 10 days to decide. If you ever have less than 10 days, you may return the Featured Selection at our expense.

You have no further obligation after you buy 1 recording at half the regular Club price in one year. To cancel, just write us. Stay with us and, year after year, you'll enjoy America's best classical music at great savings.

FREE 10-DAY TRIAL:

If, after 10 days, you are not satisfied with your 4 FREE selections, return them. There's no further obligation.

Bartók, Violin Con. No 2 • Anne-Sophie Mutter, violin. BSO/Ozawa. (DG) 43994
Respighi, Ancient Airs & Dances • Dorati. (Mercury Living Presence) 35538
Elgar, "Enigma" Variations • BBC Sym./Andrew Davis. (Teldec) 74168
Copland, Appalachian Spring Bernstein. (DG) 15456
Dmitri Hворostovsky: Dark Eyes • Ossipov Balalaika Orch. (Philips) 43958
Grieg, Holberg Suite • Also Tchaikovsky, Serenade. Orpheus Chamber Orchestra (DG) 34802
Guitarra Española • Music of Mudarra, Narváez, Sanz, Soler & Sor. Narciso Yepes, guitar. (DG) 00065
Bizet, Symphony In C • Orchestre de L'Opéra de Lyon/Gardiner. (Erato) 64405
Mozart, "Dissonant" Quartet • Guarneri String Quartet (Philips) 00094
Franck & Debussy, Violin Sonatas • Joshua Bell, violin. Jean-Yves Thibaudet, piano. (London) 00067
Ashkenazy In Moscow Beethoven, Piano Concerto No. 3, more. (MCA) 54421
Grieg, Peer Gynt Suites • Also Nielsen, Aladdin Suite, more. San Francisco SO/Blomstedt. (London) 00074
Sibelius, Symphony No. 2 New York Philharmonic/Mehta. (Teldec) 10820
Liszt, Piano Concertos 1 & 2 • Krystian Zimerman, piano. (DG) 05620
Bach, Italian Concerto • Rousset, harpsichord. (L'Oiseau-Lyre) 00189
Meditations For A Quiet Night • Lyrical selections by Elgar, Pachelbel, more. (Nimbus) 20800
Bach, Brandenburg Concertos Nos. 1, 2, & 3 • Philharmonia Virtuosi/Kapp. (ESS.A.Y) 34782
Bach, Brandenburg Concertos Nos. 4, 5, & 6 • Philharmonia Virtuosi/Kapp. (ESS.A.Y) 24770
Gounod, Petite Suite • Also Sym. No. 1; Bizet, L'Arlésienne - Incidental Music in the original version. St. Paul CO/Christopher Hogwood (London) 00188
British Music For Brass • The Philip Jones Brass Ensemble. (London) 00081
Screamers (Circus Marches) Eastman Wind Ensemble/Fennell. Also March Time. (Mercury Living Presence) 25362
Dvorák, Slavonic Dances • Katia and Marielle Labèque, piano duet. (Philips) 00091
Suppé, Overtures • Detroit SO/Paul Pary. (Mercury Living Presence) 00088
The Sound of Music • Film soundtrack with Julie Andrews and Christopher Plummer. (RCA) 00046
Franck, Symphony In D Minor • D'Indy, Sym. on a French Mountain Air. Thibaudet, piano. Montréal/Dutolt. (London) 05622
Butterworth, Parry, Bridge A Billboard bestseller! English String Orchestra/Boughton. (Nimbus) 10591
Vivaldi, The Four Seasons • Nigel Kennedy, violin. (Angel) 43419

Spirituals In Concert • Battle and Norman, sopranos. (DG) 25254
Rodgers & Hammerstein, Opening Nights • Hollywood Bowl Orchestra/John Mauceri (Philips) 00190
Copland, Symphony No. 3 N.Y. Philharmonic/Bernstein. Fanfare For The Common Man. (DG) 15387
Piston, The Incredible Flutist • Barber, Capricorn Concerto, more. Hanson conducts. (Mercury Living Presence) 25193
Bernstein, Jubilee Games • Del Tredici, Taitoo; more. N.Y. & Israel Phil./Bernstein. (DG) 45402
Debussy, Images • Montréal Sym. Orch./Dutoit (London) 00072
Tchaikovsky, Sym. No. 6 "Pathétique" • Romeo & Juliet. Montréal/Dutoit. (London) 25092
Ravel, Boléro • Daphnis, Suite No. 2, more. Cleveland/Dohnányi. (Teldec) 25380
Hanson, Sym. No. 4 "Requiem" Seattle/Schwarz. (Delos) 05626
Dvorák, Cello Concerto • Du Pré. cello. CSO/Barenboim. (Angel) 15555
Essential Opera • Opera favorites with Pavarotti, Sutherland, Freni, Carreras, others. (London) 72889
Bruckner, Symphony No. 3 "Wagner" Symphony Staatskapelle Dresden/Giuseppe Sinopoli. (DG) 00182
Copland, El Salón México Clarinet Concerto. N.Y. Philharmonic/Bernstein. "Essential." - Fanfare (DG) 83588
Mozart, Wind Serenades, K. 375 & K. 388 • Orpheus Chamber Orch. (DG) 15273
Barber, The Lovers • Chicago Symphony/Schenck. Also Prayers of Kierkegaard. (Koch) 33840
Prokofiev, Symphony No. 5; Meeting Of The Volga & Don • Philadelphia Orch./Mutl. (Philips) 35145
Kennedy; Sibelius & Tchaikovsky Violin Concertos • "A very romantic view of the Tchaikovsky." Classic CD (EMI Classics) 10741
British & American Band Classics • Fennell cond. Holst, Jacob, Walton, more. (Mercury Living Presence) 25361
Horowitz The Poet • First release material includes Schumann, Kinderszenen & Schubert, Sonata in B-flat. (DG) 25258
Mahler, Symphony No. 5 N.Y. Philharmonic/Mehta. "The best-played Mahler Fifth on record." - Musical America (Teldec) 63874
Mozart, Symphonies Nos. 38 & 39 • English Baroque Soloists/John Eliot Gardiner (Philips) 00092
The Essential Canadian Brass • Strauss, Zarathustra Fanfare; Vivaldi, Concerto in C For 2 Trumpets, more. (Philips) 35043
18th Century Oboe Sonatas • Heinz Holliger, Oboe. (Philips) 00089



BMG
CLASSICAL
MUSIC SERVICE



**NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES**

BUSINESS REPLY MAIL

FIRST CLASS PERMIT No. 5071 INDIANAPOLIS, IN

POSTAGE WILL BE PAID BY ADDRESSEE:

BMG CLASSICAL MUSIC SERVICE
P.O. BOX 91103
INDIANAPOLIS IN 46209-9360

Weber, Clarinet Concertos • Andrew & Neville Marriner. (Philips) 00194
Tchaikovsky, Symphony No. 5 Leipzig Gewandhaus Orchestra/Masur. (Teldec) 64629
Kissin: Schubert, Wanderer Fantasy • Plus Hungarian Rhapsody, Liszt, more by Brahms. (DG) 25256
Zamfir, Dances of Romance • Brahms, Hungarian Dance No. 1, more. (Philips) 00192
Mahler, Symphony No. 4 Concertgebouw Orchestra, Amsterdam/Bernstein. (DG) 15526
Tchaikovsky Gala In Leningrad With Itzhak Perlman, Jessye Norman, Yo-Yo Ma, more. (RCA) 11144
Beethoven, Symphonies Nos. 5 & 6 Berlin Philharmonic/Karajan. (DG) 15443
Debussy, Études • Mitsuko Uchida, piano. "One of the world's great keyboard artists." - *Newsweek* (Philips) 15551
Cliburn: My Favorite Encores Chopin, "Revolutionary" Etude; Rachmaninov, Etude Tableau; Debussy, more. (RCA) 34777
Water Music Of The Impressionists Ravel, Debussy, Griffes & Liszt. Carol Rosenberger, piano. (Delos) 35365
Simple Gifts • Frederica von Stade and the Mormon Tabernacle Choir in traditional favorites. (London) 00087
Strauss, Ein Heldenleben, Till Eulenspiegel • Chicago Symphony/Barenboim. (Erato) 53662
Balalaika Favorites • Ossipov State Folk Orch. (Mercury Living Presence) 25354
Mozart, Symphony No. 40; Clarinet Concerto • Hanover Band/Goodman. (Nimbus) 10815

TEST REPORTS

within ± 0.01 dB from 20 to 20,000 Hz, going to +0.04 dB at 10 Hz and to -0.75 dB at 200,000 Hz. Its maximum output level was one of the highest we have measured from a preamplifier. Driving an EIA standard load of 10,000 ohms in parallel with a 1,000-pF capacitance, the F44 delivered slightly more than 11 volts from 20 to 20,000 Hz at 0.5 percent distortion (the onset of clipping).

The crosstalk between inputs was -77 dB from 20 to 100 Hz and increased at higher frequencies, to -40 dB at 20,000 Hz, because of capacitive coupling between the input-selector switch contacts, and perhaps the circuit-board traces as well. We used the CD input for this test, and the closest contacts to its switch terminals were those of the Video inputs. The other inputs had somewhat less high-frequency crosstalk from the CD inputs, typically about -72 dB at 1,000 Hz and -50 dB at 20,000 Hz. The crosstalk between channels of the same input was a constant, and far more than adequate, -81 dB from 20 to 20,000 Hz.

Distortion was very low, even compared with the F44's impressive speci-

MEASUREMENTS

Output at clipping (1,000 Hz).....	>11 volts
Frequency response (20 to 20,000 Hz)	± 0.01 dB
Distortion (THD + N at 1,000 Hz).....	0.002%
Noise (A-weighted, referred to 0.5-volt output).....	-94 dB
Sensitivity (for 0.5-volt output).....	55 mV

fications. Up to 8.5 volts output, it was about 0.0025 percent. At a 5-volt output, far more than will be needed to drive any power amplifier fully, distortion was 0.002 percent from 20 to 1,000 Hz, rising slightly to 0.0032 percent at 10,000 Hz and 0.008 percent at 20,000 Hz. All these distortion levels are inaudible.

The Forté F44's performance was as effortless and ideal in a music system as it was on the test bench. It is hard to imagine how anyone could find it wanting in any respect, except possibly in the lack of a built-in phono preamplifier. For many people, in this digital age, that should not present any problems.

The controls were silky smooth in their operation, and there was absolutely no trace of switching transients when we changed inputs. Personally, I do not believe that a component of the caliber of the Forté F44 could possibly have a distinctive sound character (a high-performance preamplifier cer-

tainly *should* be sonically neutral), and it did not in our listening tests.

The Forté F44, priced just above high-quality mass-market components, represents a solid value. If you don't need features that it lacks, it is hard to see how it could be surpassed in its price class. □

Rule Breaker?

After all, the woofer faces down. The tweeter is mounted below the mid-range. The cabinet has five sides. Does this new DA900 break the rules?

No way! Instead of conventional thinking, the DA900 uses the rules of acoustics in fresh new ways to create better sound in any room, for any kind of music.

Deep, powerful bass. Crystal-clear highs. And pin-point imaging that reveals the full texture of music. Plus, the slim shape and video-shielded drivers of the DA900 are ideal for the most elegant home video theater. That's the promise and the reality of the new DA900.

Hear the unique DA900 at your Design Acoustics dealer. Write or call (800) 933-9022 today for complete information.

New DA900 3-Way Loudspeaker System

DA DESIGN
ACOUSTICS
An Audio-Technica Company

1225 Commerce Drive
Stow, OH 44224
(216) 686-2600





*I don't
drive it
all the time.
Periodically,
I stop
to
eat.*

Cutlass Supreme International Series

*200-horsepower, 24-valve, Twin Dual Cam V6. Four-wheel anti-lock disc brakes. Power-adjustable bucket seats.
Four-wheel independent suspension. Analog instrumentation. Why would you ever get out? Call 1-800-242-OLDS.*

C U T L A S S S U P R E M E

 **OLDSMOBILE**

THE POWER OF INTELLIGENT ENGINEERING

©1992 GM Corp. All rights reserved.
Buckle Up, America

CIRCLE NO. 46 ON READER SERVICE CARD

STEREO REVIEW
35
35TH ANNIVERSARY

AUDIO'S TOP TEN

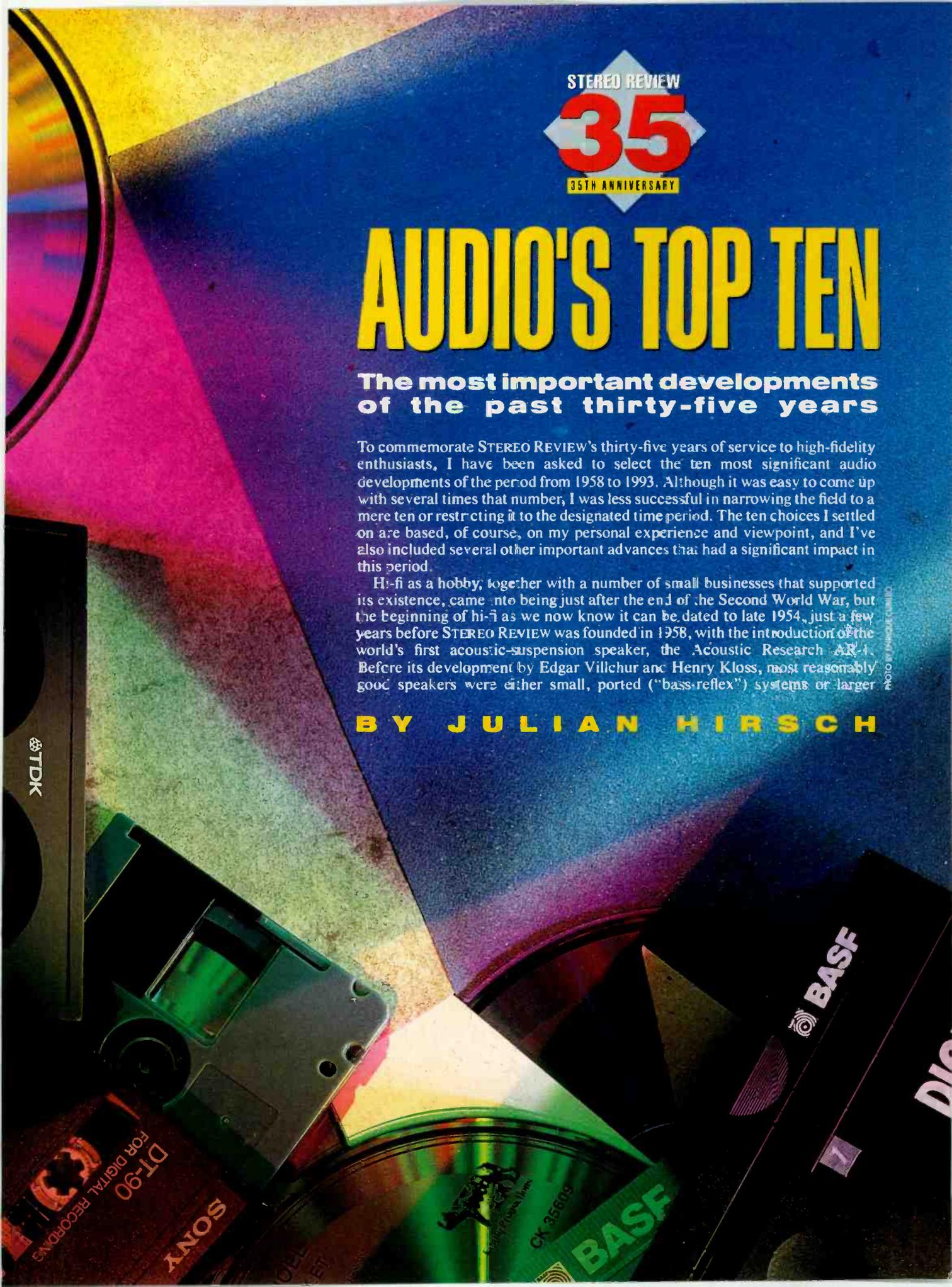
The most important developments of the past thirty-five years

To commemorate STEREO REVIEW's thirty-five years of service to high-fidelity enthusiasts, I have been asked to select the ten most significant audio developments of the period from 1958 to 1993. Although it was easy to come up with several times that number, I was less successful in narrowing the field to a mere ten or restricting it to the designated time period. The ten choices I settled on are based, of course, on my personal experience and viewpoint, and I've also included several other important advances that had a significant impact in this period.

Hi-fi as a hobby, together with a number of small businesses that supported its existence, came into being just after the end of the Second World War, but the beginning of hi-fi as we now know it can be dated to late 1954, just a few years before STEREO REVIEW was founded in 1958, with the introduction of the world's first acoustic-suspension speaker, the Acoustic Research AR-1. Before its development by Edgar Villchur and Henry Kloss, most reasonably good speakers were either small, ported ("bass-reflex") systems or larger

PHOTO BY J. HIRSCH FOR STEREO REVIEW

BY JULIAN HIRSCH



STEREO REVIEW
35
35TH ANNIVERSARY

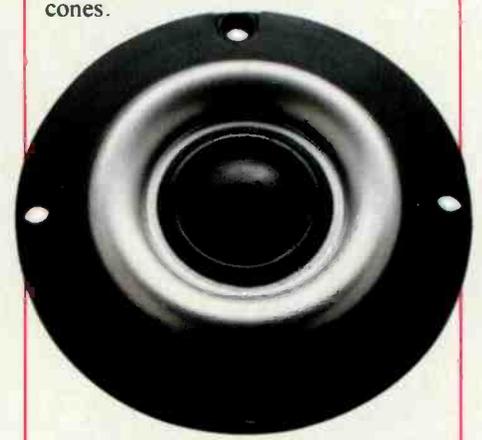
**An important
milestone for hi-fi was
the development of the
stereo long-
playing record in the
late 1950's.**

models in sealed cabinets. A useful output in the low bass (say, under 50 Hz) was obtainable only from large, expensive speakers and was often accompanied by rather large amounts of distortion.

1 THE MODERN LOUDSPEAKER

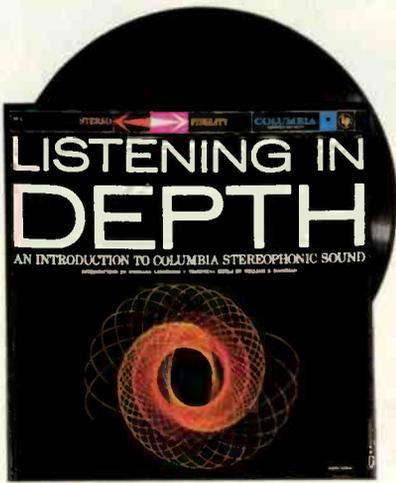
Villchur's "bookshelf"-size acoustic-suspension speaker design extended the bass range to 30 Hz or lower, with markedly reduced distortion, an affordable price (though \$185 was a considerable sum in 1954), and a surprisingly small cabinet. It came at just the right time. When stereo appeared a few years later, the need for two speakers sounded the death knell of many larger units of comparable quality. Acoustic-suspension speakers from AR and others made stereo practical in millions of homes.

Only slightly less significant was Villchur's introduction of the dome tweeter, in the AR-3 system, circa 1960. The wide dispersion and smooth, extended response of the AR-3's high-frequency and midrange domes made it one of the pace-setting loudspeakers of its day. In today's high-fidelity speakers, dome tweeters have almost completely superseded cones.



But there has been perhaps an even more overwhelming influence on the quality of modern loudspeakers. More than twenty years ago, A. N. Thiele and Richard Small of the University of Sydney, Australia, outlined methods for defining the behavior of loudspeakers in vented enclosures that enabled engineers, for the first time, to design such speakers to achieve almost any desired performance at low frequencies. With the wide availability of computers, the *Thiele-Small parameters*, derived from the equations Thiele

and Small developed, have been responsible in good measure for the overall high standard achieved by today's vented speakers, in sharp contrast to the uninformed trial-and-error procedures used in earlier times.



2 THE STEREO LONG-PLAYING RECORD

Back again in the late 1950's came another milestone for hi-fi with the development of the *stereo long-playing record*. Before that time, stereo recordings had been obtainable only on ¼-inch open-reel tape, whose quality was reasonably good but which left much to be desired in respect to convenience, cost, and availability.

Several mutually incompatible stereo disc recording and playback systems had been proposed and demonstrated—with varying degrees of success. Eventually the Westrex 45/45-degree system, which assigned the two walls of the V-shaped groove to the left and right channels, emerged as the winner, in part because of its compatibility with mono record players.

3 TRANSISTORS AND INTEGRATED CIRCUITS

In the 1960's, *transistors*, which had been invented in the late 1940's, began to replace vacuum tubes in high-fidelity tuners and amplifiers. Although they offered undeniable advantages in size, weight, heat generation, and power consumption, the early audio components using transistors were unreliable and often exhibited poor distortion characteristics. For years these components were considered by some audiophiles to be inherently inferior to ones using tubes. Eventually the problems were overcome with improvements in transistors and the cir-

cuits using them. Transistors later evolved into integrated-circuit "chips," or IC's, each containing from several dozen to several hundred thousand transistors and other circuit components. IC's are essential to the operation of all digital audio components, not to mention the microcomputers that control them. Today's solid-state components perform superbly and have satisfied all but a handful of stalwart enthusiasts, some of whom are willing to pay large sums for vacuum-tube equipment, which they still believe to deliver superior sound.

4 STEREO FM BROADCASTING

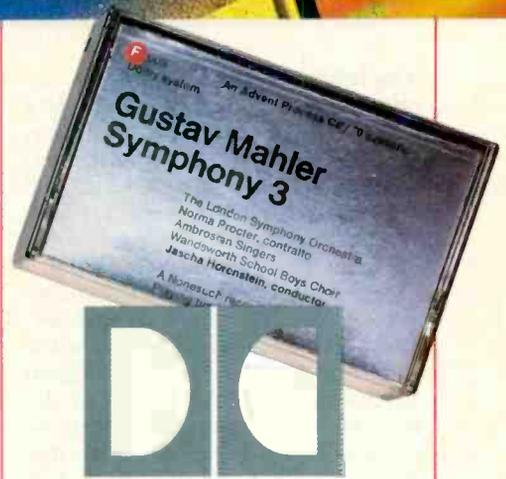
The next major development in audio media was *stereo FM* broadcasting. As with the stereo LP, several competing systems were proposed, each with its own benefits and drawbacks. Compatibility was again an issue: Listeners with mono or stereo tuners had to enjoy listenable programs from either mono or stereo broadcasts. In 1961, after extensive field trials, the winner was the system proposed by General Electric and Zenith, which is now the one in worldwide use.

When Philips introduced the *compact cassette* in 1960, it was intended strictly as a "lo-fi" monophonic recording and playback medium for voice and other limited-range applications. With the existing technology, a narrow tape moving at 1½ inches per second could not be expected to reach much above the range of voice frequencies.

5 THE COMPACT CASSETTE

Or so it was thought. As tape manufacturers improved coating formulations (Du Pont's work with chromium dioxide, for example) and head design dramatically advanced, the lowly cassette was on its way to being a major part of the hi-fi scene. It took a few years for stereo cassette machines to become serious contenders in the high-fidelity world, but by 1971 several of them appeared in *STEREO REVIEW's* annual *Stereo Buyers' Guide*. By the middle of the 1980's, prerecorded cassette sales had surpassed sales of LP records.

There were two other important factors in the cassette's success. The first was the introduction of *Dolby noise reduction*, a hiss-suppression tech-



6 DOLBY NOISE REDUCTION

nique essential to getting cassette noise levels low enough to be considered high fidelity. Dolby A, the first Dolby system, was employed in the late Sixties in professional recording studios. Consumer products—such as Dolby add-on units for open-reel recorders, cassette decks with built-in Dolby processors, and, eventually, prerecorded tapes—used the simpler Dolby B process. Since then the more effective Dolby C and Dolby S processes have become available, although the availability of digital recording diminishes their impact on today's market.

7 HEADPHONE PORTABLES

The other major element in the cassette's stupendous success was the introduction, in 1979, of a small, portable, high-quality stereo cassette player



with lightweight headphones that was originally called the Soundabout. In a few months its manufacturer, Sony, renamed it the *Walkman*, and the personal portable tape player went on to conquer the world and make the prerecorded cassette the dominant music medium.

A primary factor in the Walkman's success was the stereo headphone. These had been available since the early 1960's and were perhaps a logical development with the coming of stereo. But stereo headphones had to be invented by somebody, and that somebody was John Koss, whose first "Sterephone" appeared about 1960. Stereo headphones now span a broad price and performance range, from less than \$5 to thousands for advanced electrostatic models.



Around the time that the cassette started establishing itself, in the early 1970's, four-channel, or "quadraphonic," sound for the home appeared on the scene. Hampered by a number of mutually incompatible recording and decoding systems for four-channel programs, a lack of consensus regarding what the techniques were intended to achieve, and, frankly, rather mediocre sonic performance, "quad" foundered after a few years, un-mourned by the audiophile world.

8 AMBIENCE ENHANCEMENT AND SURROUND SOUND

But from the ashes of quad arose the concept of *ambience enhancement*. Recognizing the impossibility of recreating a believable musical environ-

ment in a living room from only two frontally placed speakers, some companies produced accessories that created multiple delayed signals from the stereo program and reproduced them through speakers placed toward the back of the room. AudioPulse, Sound Concepts, and ADS were three of the early proponents of these delay techniques. These components were expensive and had to be used with discretion to be really effective, but they created an awareness of the importance of ambient sound to realistic sound reproduction and opened the way to today's more sophisticated surround and ambience-enhancement systems.

Receiving far more attention than strict ambience enhancement in today's world of the home theater is the related concept of surround sound. This has gotten a big boost from the movies, thanks to Dolby's de facto standardization of studio surround-encoding systems and its domination of home surround decoding methods, all of which, ironically, use techniques originally invented for quad.

9 THE COMPACT DISC

In late 1982 the first of the *consumer digital audio media* appeared: the compact disc. The audio world would never be the same. CD's offered unprecedented durability, essentially unrestricted frequency response and dynamic range, and greatly improved access and cueing capability. In just a few short years, the vinyl LP record was obsolete and millions of households had CD players, the format's appeal extending far beyond the narrow limits of audio hobbyists. The applications of CD technology to information storage, computing, and education, to name a few areas, seem limitless.

At this writing, rotary-head digital audio tape (R-DAT, or just DAT) has evolved into a semiprofessional tool rather than a consumer product, largely because of political squabbles over its introduction into this country. But two new digital media are now being introduced, with the aim of bringing advanced digital audio technology to an even wider segment of the public. Both the Digital Compact Cassette (DCC) and the MiniDisc (MD) are being touted as replacements for the venerable analog cassette, and one or both of them may turn out to be the big events of this audio decade.



10 DIGITAL SIGNAL PROCESSING

Making both of these new systems possible is *digital signal processing* (DSP), the modern audio miracle worker. Yamaha's DSP-1, the first consumer-oriented DSP unit to come to market, appeared in 1988. It has been followed by numerous DSP-based components from a variety of companies, some of which go beyond the ambience-enhancement functions of that "early" device to provide such capabilities as dynamic-range processing and equalization. DSP is now poised to journey into what may be audio's final frontier: the control of room acoustics and speaker/room interactions. The next thirty-five years in audio are going to be interesting. □



SONY



LISTEN TO YOUR HEAD.

The new Sony Studio

Monitor Series Headphones.

Experience the amazing

quality of studio sound.

Your head will thank you for it.

Proof Positive, Rock And Roll Is Here To Stay.

Who says "there are no guarantees in life"?

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



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

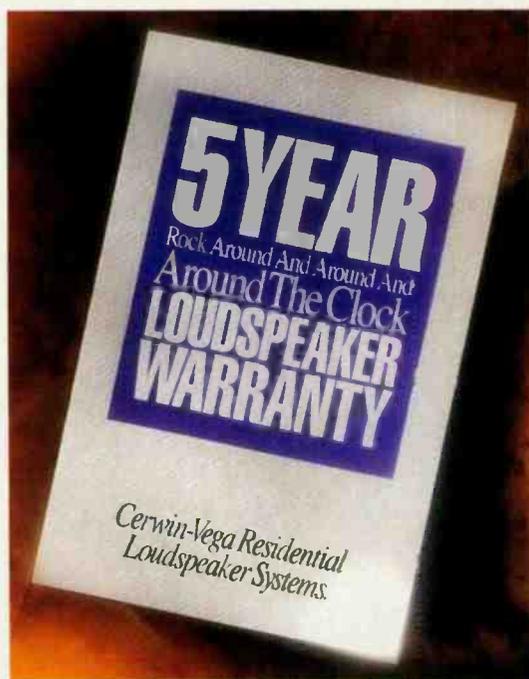
policy. A full 5 year warranty on every one of our residential

loudspeakers. Now admittedly, this isn't in keeping with the trend toward a throwaway society, but planned

obsolescence has never been part of our plan.

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

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



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

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

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

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

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

All of which has resulted in loudspeakers

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



Cerwin-Vega!

February is known for many important annual events—Valentine's Day, Abraham Lincoln's birthday, George Washington's birthday, Alice Cooper's birthday . . . and, of course, STEREO REVIEW'S Record of the Year Awards. This is the month our editors and critics announce (as they have for over two decades) their choices for the top twelve albums of the year just past, both pop and classical. You'll find our selections on the next two pages, along with an additional twenty-four releases cited as honorable mentions.

As always, the winners were chosen on the basis of musical interest, quality of performance, and sonic excellence. 1992 was not totally business as usual, however. On the pop side, for example, we're pleased that all the winners, with the exception of the perennially brilliant Lou Reed, and most of the runners-up are first-timers who've never been nominated before. And on the classical side, we're excited that the winners range from a basic repertory standard like the Tchaikovsky Fifth to a cutting-edge contemporary piece like Polish composer Henryk Górecki's Third Symphony (the former in a superb, previously lost-in-the-vaults 1963 performance, the latter only just becoming well known in the West). Also, we're happy to salute two special achievements remarkable even in this era of the Boxed Set—Mosaic's monumental eighteen-CD reissue of the work of the Nat King Cole Trio, and Verve's splendid ten-CD Billie Holiday anthology.

From where we sit, of course, what all these albums seem to say is that 1992 was a very good year for recorded music. We hope you agree.

—Steve Simels and Robert Ripps

STEREO REVIEW'S

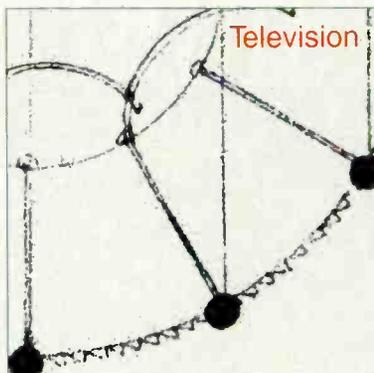
RECORD OF THE YEAR AWARDS

FOR 1992



LOU REED
Magic and Loss

SIRE. "Here's another brilliant Lou Reed album—so what's new?"



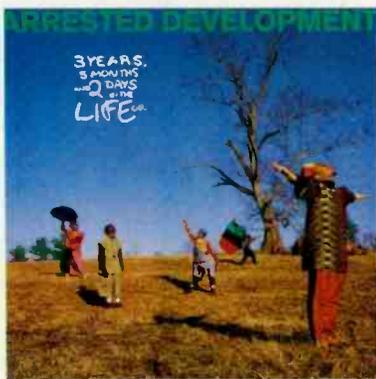
TELEVISION

CAPITOL. "Marvel that it ever occurred to anyone to play music of such strange, surpassing beauty."



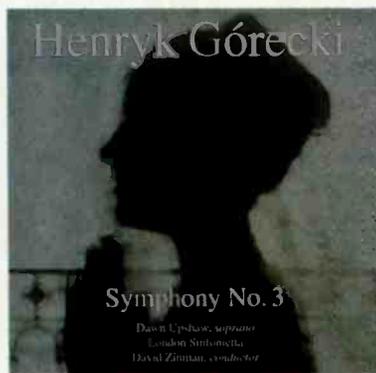
BEETHOVEN
Symphonies Nos. 1-9

Charlotte Margiono, Birgit Remmert, Rudolf Schasching, Robert Holl, Arnold Schoenberg Choir, Chamber Orchestra of Europe, Nikolaus Harnoncourt conducting. TELDEC. "Just about everything seems uncontrivedly right."



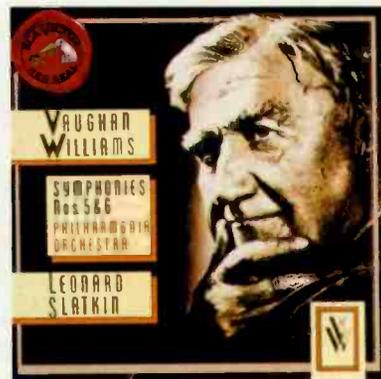
ARRESTED DEVELOPMENT
3 Years, 5 Months and 2 Days

In the Life of . . .
CHRYSALIS. "The most inventive rap album of 1992."



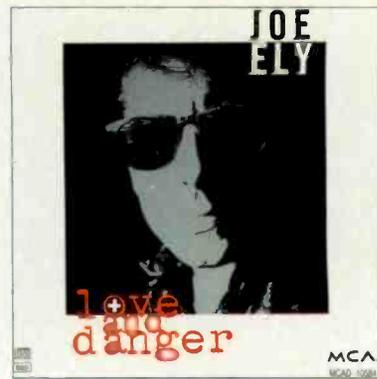
GÓRĘCKI
Symphony No. 3

Dawn Upshaw, soprano
London Sinfonietta, David Zinman, conductor
ELEKTRA NONESUCH. "Among the most gratifying cultural discoveries since the fall of the Iron Curtain."



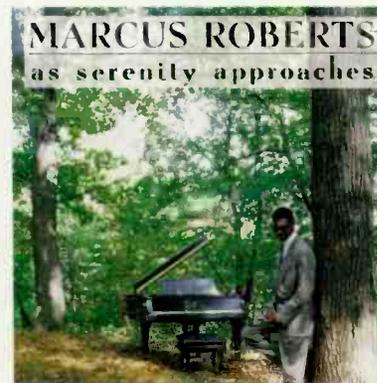
VAUGHAN WILLIAMS
Symphonies Nos. 5 and 6

Philharmonia Orchestra, Leonard Slatkin conducting. RCA VICTOR. "In a word, don't pass this one by."



JOE ELY
Love and Danger

MCA. "A home-grown talent so huge they ought to name a national park after him."



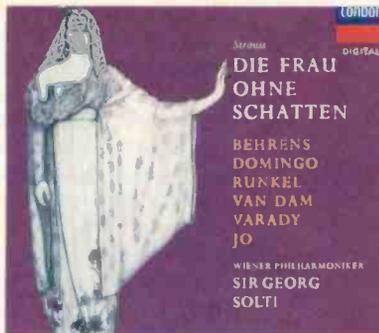
MARCUS ROBERTS
As Serenity Approaches

NOVUS. "If you think old-fashioned, two-fisted piano playing is a thing of the past, Marcus Roberts has a surprise for you."



LYLE LOVETT
Joshua Judges Ruth

MCA. "The finest songwriter working in any pop genre right now."



STRAUSS

Die Frau ohne Schatten

Julia Varady, Placido Domingo, Hildegard Behrens, José Van Dam, Reinhild Runkel, Vienna State Opera Chorus, Vienna Philharmonic, Georg Solti conducting. LONDON. "Captures more thrills than any of its predecessors."



MOZART

Le Nozze di Figaro

Kiri Te Kanawa, Thomas Hampson, Dawn Upshaw, Ferruccio Furlanetto, Anne Sophie van Otter, Metropolitan Opera Chorus and Orchestra, James Levine conducting. DEUTSCHE GRAMMOPHON. "One of the best recent versions of this peerless opera."



TCHAIKOVSKY

Romeo and Juliet; Symphony No. 5; Piano Concerto No. 1

John Ogdon, London Symphony, Pierre Monteux conducting. VANGUARD. "A wonderfully satisfying record . . . a minor miracle."

HONORABLE MENTION

DAN BAIRD

Love Songs for the Hearing Impaired
DEF AMERICAN.

CECILIA BARTOLI

Rossini Heroines
Chorus and Orchestra of Teatro Fenice, Venice,
Ion Marin cond. LONDON.

BRAHMS

Sextets; Theme and Variations in D Minor
Stern, Lin, Laredo, Tree, Ma, Robinson,
Ax. SONY.

A. DAVIS

X, the Life and Times of Malcolm X
Soloists, Episteme, Orchestra of St. Luke's,
William Henry Curry cond. GRAMAVISION.

IRIS DeMENT

Infamous Angel
PHILO.

DVOŘÁK

**Piano Concerto
JANAČEK**

Concertino; Capriccio
Rudolf Firkušný, Czech Philharmonic, Vaclav
Neumann cond. RCA VICTOR.

GOUNOD

Faust
Soloists, Chorus and Orchestra of Capitele de
Toulouse, Michel Plasson cond. EMI.

GARLAND JEFFREYS

Don't Call Me Buckwheat
RCA.

KRONOS QUARTET

Pieces of Africa
NONESUCH.

LUNA²

Lunapark
ELEKTRA.

MAHLER

Symphony No. 4
Barbara Hendricks, Los Angeles Philharmonic,
Esa-Pekka Salonen cond. SONY.

MESSIAEN

Turangalila
Orchestre de la Bastille, Myung Whun Chung
cond. DEUTSCHE GRAMMOPHON.

BILL MORRISSEY

Inside
PHILO.

MOZART

The Magic Flute
Soloists, Schutz Choir, London Classical
Players, Roger Norrington cond. EMI.

R.E.M.

Automatic for the People
WARNER BROS.

KEITH RICHARDS

Main Offender
VIRGIN.

RIMSKY-KORSAKOV

The Golden Cockerel
Soloists, Chorus and Orchestra of the
Bolshoi Theater, Moscow, Yvgeny Svetlanov
cond. MCA.

SHOSTAKOVICH

24 Preludes and Fugues
Keith Jarrett (piano). ECM.

SONIC YOUTH

Dirty
DGC.

STRAUSS

Salome
Soloists, Deutsche Oper Berlin Orchestra,
Giuseppe Sinopoli cond. DEUTSCHE
GRAMMOPHON.

JAMES TAYLOR

New Moon Shine
COLUMBIA.

LUCINDA WILLIAMS

Sweet Old World
CHAMELEON.

XTC

Nonsuch
Geffen.

TRISHA YEARWOOD

Hearts in Armor
MCA.

SPECIAL ACHIEVEMENT

BILLIE HOLIDAY

The Complete Verve Recordings
VERVE.

NAT KING COLE

The Complete Capitol Recordings of
the Nat King Cole Trio
MO.SAIC.



BY PETER W. MITCHELL

A

SENSIBLE

GUIDE

TO

UPGRADING

**From two-speaker
stereo to a
surround-sound home
theater**

When this magazine was founded 35 years ago, the transition from monophonic sound reproduction to the two-channel stereo sound we enjoy and take for granted today had just begun. Now we are embarked on another, similar transition to greater spatial realism. It seems pretty clear that five-channel surround sound, already the worldwide standard for movie-theater audio, will eventually become the norm for entertainment audio in the home and car as well (see "Our Five-Channel Future," page 50). Sooner or later, most of us will upgrade to a five-channel playback system, so you may as well begin the transition now. The challenge is to make that transition a positive one, adding surround spaciousness without sacrificing the quality of your present stereo sound or having to cope with mismatched components or wasting money on products that will quickly become obsolete.

One of the most important issues to keep in mind is that the five speakers in a surround system should have very similar tonal quality. If the center speaker doesn't match the sound of the left and right front speakers, imaging and clarity will be impaired. And if the front and surround speakers differ in timbre, because of inherent differences in response or because of inappropriate room placement, spaciousness and realism may suffer. So if cost and space are not obstacles, the ideal solution may be to buy a matched set of five speakers for surround sound and use your present speakers only for straight two-channel listening.

In a large house you might put the two systems in separate, acoustically isolated rooms. Then you could listen to records in the music room while your spouse enjoys surround sound in the TV room. Alternatively, you could have your old two-speaker stereo and a system of five matched speakers for surround in the same room, switching from one system to the other according to what you are playing. This is not as crazy as it may seem: Several com-

panies, including Atlantic Technology, Ohm Acoustics, Bose, and Boston Acoustics make complete surround systems consisting of five tiny satellites and a subwoofer, which are nearly invisible once installed. You would connect your video sources to the surround processor and continue to use your stereo system for music as before. But people who have experimented with this dual-system approach typically graduate to a single system for all listening.

So in this article we will discuss the process of upgrading from two-speaker stereo to a five-channel surround theater. Depending on your budget, you may prefer to upgrade in small, easily affordable steps. This has the advantage that you will educate your ears as you go, gaining experience that will help you to make wiser shopping

choices. Upgrading in stages may thus yield a better final result than buying everything at once.

Stage 1: Passive Surround Decoding

All current recordings sold for home playback (including those with Dolby Surround encoding) are in two-channel form. While we normally think of a stereo signal as consisting of left and right channels, it can also be analyzed as a mono signal (L + R) and a "stereo difference" signal (L - R). The difference component contains left-to-right imaging and ambience in a stereo signal, as well as the surround information in a Dolby Surround recording.

Consequently, the easiest way to extract the surround portion of a stereo signal is to bridge a pair of speakers located toward the back of the

PHOTO BY DAN WAGNER, TABLES BY LEE'S STUDIO GALLERY



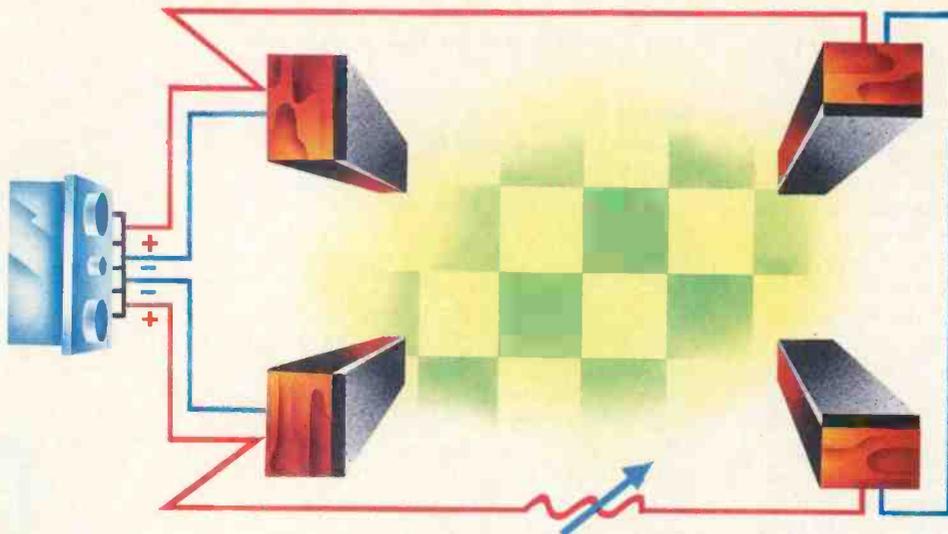


Figure 1. A crude ambience-extraction system can be assembled just by wiring a pair of side or rear speakers as shown above (the volume control in the line is useful but not essential).

room between your amplifier or receiver's left and right "hot" (positive) speaker terminals. Thus wired, the rear speakers will reproduce the L - R difference signal. This arrangement brings out hidden spaciousness in recorded music and also performs crude Dolby Surround decoding. To accomplish this, simply connect one wire from the red + terminal of your right-front speaker to the + terminal of your right-rear speaker, and run a similar wire along the left side of the room from left-front + to left-rear +. Using a third wire across the back of the room, connect the black - terminals of the surround speakers together.

What surround speakers can you use? For guidance, see "Choosing Speakers for Surround Sound" in the September 1992 issue. In a nutshell, the most important ingredient is a smooth midrange sound that resembles the timbre of your main stereo speakers. No matter what you choose, plan to experiment with the location and orientation of the surround speakers, with the aim of achieving two objectives. (1) The surround sound must not fire directly at you but must arrive from many directions after reflecting off the walls and ceiling. (2) A portion of the surround sound must arrive at your head from the sides. As a rule, it also is wise to avoid putting the surround speakers in corners, unless they have weak upper-bass response and need the reinforcement provided by corner placement.

In a rectangular room most people

install stereo speakers along one of the short walls, firing down the room's longer dimension. But when you add surround decoding the back or side speakers may be much closer to you than the front speakers, so that their sound arrives at your head first. Consider re-arranging the room so that your main speakers fire across the shorter dimension and the surround speakers are at the ends of the room, farther away from you.

If that is not practical, you can make the reproduced ambience more realistically diffuse by aiming the surround speakers upward or away from you, spraying their sound off the ceiling and side walls. Even so they may be too loud. The wiring diagram (Figure 1) shows how a simple 25-ohm potentiometer (available from Radio Shack or other electronic-parts stores) serves as a surround volume control. A convenient alternative approach is to buy a Dynaco QD Series II processor (\$80); this passive surround decoder includes a volume control, a surround-off switch, and clearly labeled speaker connections, including an L + R connection for a center speaker.

Now that you have a volume control for the surround speakers, it is time to learn its proper setting. When you first install surround speakers there is a temptation to play them too loud, producing a dramatic (but artificial) impression of large-hall spaciousness. This effect soon grows tiring. Most of the time the surround speakers should not be audible as discrete sound

sources. Their role is to enhance the realism of the soundstage produced by your main stereo speakers. Their most noticeable effect should be the abrupt loss you feel when you switch them off and hear the sound field collapse into the front wall.

Stage 2: Connect TV Sound to Your Stereo

We shouldn't need to discuss this point at all, but a surprising number of people have installed a stereo system and a TV set in the same room but continue to listen to the TV through its own speakers. Since about ten years ago all major video sources (laserdiscs, hi-fi videocassettes, and broadcast TV) have contained wide-range stereo sound. In my experience each of these sources gains dramatically from the use of subwoofers and surround decoding. If you are still using an old TV set that lacks MTS stereo decoding, simply use a hi-fi VCR as a tuner and feed its audio line-out signals to your stereo amplifier. The quality of its sound may amaze you.

TV speakers are adequate for news, but even the larger amplifiers and speakers in new stereo TV sets can't do full justice to music and movie-style special effects. You don't listen to CD's and audio tapes through your TV speakers; why listen to movies through them?

You do need to make sure that the TV screen is located midway between your stereo speakers, so that voices will be centered on the visual image.

Remember the first time you heard a CD? It sounded so good, you hoped the music would never stop.

Which is the whole idea behind the CD changer.

Unfortunately most companies, in their rush to produce one, neglected to isolate the disc that's playing from the changer platform. A big mistake. (Not as big as the Hubble telescope, but pretty darn serious.)

One that transfers internal and external vibrations to the playing disc. Creates resonance. Distorts the sound. And defeats a primary reason for buying a CD player in the first place.

Fortunately Yamaha avoided this common problem by developing an entire line of CD

changers that are virtually vibration-free. A pretty amazing feat in itself.

How they do it is something called PlayXchange. A unique



Yamaha's PlayXchange System. The only carousel mechanism that doesn't transmit vibration to the playing disc. An important feature that permits four discs to be changed without disturbing the one playing.

And because you're supposed to spend your time listening to your CDs and not the machine that plays them, Yamaha's developed a new changing mechanism that's exceptionally quiet, quick and reliable.

But you can't judge a superior CD player merely by its changing mechanism. What makes the difference between a good player and a great one has to do with attention to details.

Take Yamaha's new CDC-835 for example. With Yamaha's S-Bit Plus Technology, twin balanced D/A converters and Class A amplification at every stage, the CDC-835 outperforms most single disc CD players on the market.

S-Bit Plus

Its fluorescent display can be dimmed or set to automatically shut off during playback, eliminating any chance of interference.

And the CDC-835 is equally impressive in the convenience department.

Its TOC Memory memorizes the contents on each disc, speeding up access to specific songs, especially during random disc-to-disc play.

And to give your favorite kind of music even more presence,

there's a built-in equalizer with five digital presets.

In fact, the CDC-835 can remember your favorite songs on up to 100 discs and play them back in any sequence. It even remembers EQ settings.

Then there's 5-Disc Tape Edit. A useful recording feature that arranges the tracks you select so they fit neatly on two sides of your tape.

By now, if you're not quite sold on the CDC-835, you only have two options. You can drop by your nearest Yamaha dealer and let your ears make up your mind.

Or you can buy another changer. Which when you stop to think about it, would be a total shock to your system.



The CDC-835. The only changer with a five-mode digital equalizer

YAMAHA



©1992 Yamaha Electronics Corporation USA · P.O. Box 6660, Buena Park, CA 90622



Or buy one of Yamaha's new CD changers.

design which not only isolates the playing disc from the loading tray, providing vibration-free playback, but also allows you to change four CDs without disturbing the fifth one that's playing.

Call 1-800-368-8883 for the Yamaha dealer nearest you.

And to minimize image-disturbing reflections of sound off the TV cabinet, the fronts of the speakers should project slightly forward of the screen. If your speakers are mounted on the wall now, try taking them down and putting them on stands three feet forward from the wall; this placement may yield a more precise and spacious stereo image.

It is easy to recommend that you should run a connecting cable from the audio line-out jacks of each video source to a spare line-level input on your stereo amplifier or receiver. It is not so easy to do if those inputs are already being used by your music sources (CD player, tape deck, and so forth). Eventually you may want to invest in an A/V receiver or control center that has enough inputs for everything. For now you can use an inexpensive add-on input selector—a simple switchbox with several sets of RCA phono-jack inputs and one set of outputs to feed the selected signal to the AUX input of your amplifier. Such products are available from DB Systems, Radio Shack, and others. Radio Shack's \$25 four-input audio/video selector, for example, switches line-level audio and video together.

Your audio wiring choices may be affected by your video options. With a recent TV set that has switching for multiple A/V sources, you can connect the VCR and laserdisc player to the TV and simply feed the selected sound from the TV's audio line-out jacks to your amplifier's auxiliary input. For this to work, you must use line-level connections from each source to the TV. (The 75-ohm antenna-cable output from a VCR or laserdisc player carries only mono sound with the picture.)

Stage 3: Dolby Decoding and a Surround Amplifier

Passive decoding is an efficient way to get started with surround sound, and it can work remarkably well in a wide room. But it has important limitations. In most rooms the surround speakers are only a few feet away from you, causing their sound to arrive at your ears at about the same time as the sound from your front speakers, or perhaps even sooner. This early arrival causes your brain to focus on the surround speakers as discrete sound sources.

To avoid this, most surround decoders (including basic Dolby Surround models) contain a delay circuit that retards the rear signal by 15 to 30 milliseconds, long enough for your

**The goal is to obtain
an impression of
ambience that is
uniform in all
directions, without
the surround
speakers standing out
as discrete sources.**

brain to lock onto the stereo image formed by the front speakers. Thanks to what is known as the Haas, or precedence, effect, delayed surround sound is perceived as an enhancement of the frontal sound rather than as a separate source.

Consequently, the most cost-effective upgrade from passive surround extraction is a Dolby Surround decoder. A basic Dolby Surround processor performs L-R difference-signal extraction, delay, and Dolby B noise reduction to reduce hiss and correct the timbre of the surround sound. Though designed mainly for Dolby-encoded movie and TV soundtracks, Dolby Surround decoders can also extract hidden spaciousness in unencoded stereo recordings.

A Dolby Surround decoder operates with line-level signals, so it must be used with an amplifier to drive the surround speakers. Any small amplifier will do—preferably an integrated amp whose tone controls can be used to adjust the tonal balance of the surround speakers for a better match to the sound of your front speakers. But unless you already have a spare amp or buy one secondhand at very low cost, obtaining the decoder and amp separately will not be cost-effective. It's cheaper to buy an inexpensive surround amplifier with Dolby Surround circuits already built in. Such products, rated at about 10 watts per channel, are available for less than \$150. Select one with a straight stereo mode that bypasses the Dolby pro-

cessing, so that the amp can be used with a high-performance decoder in the future (or simply serve as a general-purpose amplifier).

Ten watts is likely to be enough power for the surround speakers unless you play the system very loud. If you decide you can spend more than \$200 and get more amplifier power, select a decoder/amp equipped with Dolby Pro Logic. Pro Logic IC's add little to the cost but provide more accurate localization of both on-screen and off-screen sounds.

Stage 4: Better Surround Speakers?

Despite what I said earlier about the problems caused by using speakers with mismatched timbre, your first surround speakers probably were not selected with great care. Now that you are using actual Dolby Surround decoding, you should re-examine your choices.

Before you spend money, invest some time experimenting with the placement and aiming of your surround speakers. Although often called "rear" speakers, much of their sound should reach you from the sides. That may involve mounting them high on the side walls, hanging them from the ceiling, or putting them behind you but aimed outward to bounce their sound off the side walls. I can't tell you what will work best; it will depend on the size and shape of your room as well as on the radiation pattern of your speakers. The goal is to obtain an impression of ambience that is uniform in all directions, without noticing the surround speakers as discrete sound sources.

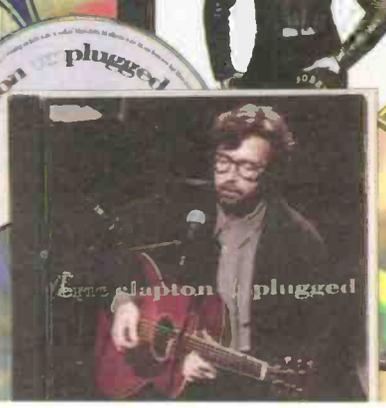
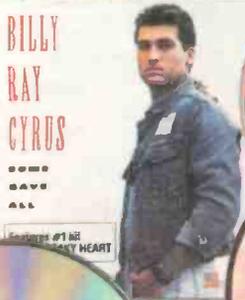
When you think your system is working as well as it can, go to a store and listen to a system of four or five matched speakers from a single manufacturer, possibly a Home THX system. You may have to go to several stores to find a system that is set up really well. For the most valid comparison, bring from home a laserdisc or tape whose sound you have heard many times. If the matched systems in stores do not sound obviously better than what you have heard at home, you can be happy knowing that your system sounds as good as it does.

Do systems of matched speakers have a smooth and natural spaciousness that you have not heard at home? If so, and if this difference matters to you, consider upgrading to a more accurately matched system. In order of decreasing cost your options are: (1) replace your front and rear speakers with a new matched set; (2) replace

COLUMBIA HOUSE BRINGS YOU...
DISCS, DISCS, DISCS, DISCS!

8 CDs FOR 1¢

PLUS A CHANCE TO GET ONE MORE CD—FREE!



R.E.M.—Automatic For The People, Drive; more. (Wamer Bros.) 448-522

Billy Ray Cyrus—Some Gave All, Achy Breaky Heart; more. (Mercury) 441-451

En Vogue—Funky Divas, Giving Him Something He Can Feel; plus more. (eastwest) 435-750

Michael Bolton—Timeless (The Classics), Yesterday; and more. (Columbia) 445-494

Eric Clapton—Unplugged, Layla; more. (Reprise/Duck) 446-187

Bobby Brown—Bobby, Lumpin' Around; more. (MCA) 445-403

Bob Dylan—Good As I Been To You (Columbia) 449-454

Great White—Psycho City (Capitol) 447-565

Travis Tritt—T-R-O-U-B-L-E (Wamer Bros.) 445-767

Public Enemy—Greatest Misses (Columbia) 445-478

Mary J. Blige—What's The 411? (Uptown/MCA) 445-197

Michael Bolton—Time, Love & Tenderness (Columbia) 415-711



Phil Collins—Serious Hits...Live (Atlantic) 448-944

Alan Jackson—A Lot About Livin' (Arista) 447-458

Neil Diamond—The Grt. Hits (Columbia) 439-778/399-774

Ugly Kid Joe—America's Least Wanted (Mercury) 445-379

INXS—Welcome To Wherever You Are (Atlantic) 445-023

Elton John—The One (MCA) 442-772

Freddie Jackson—Time For Love (Capitol) 445-262

Stevie B—Healing (Epic) 439-638

Stan Getz/Kenny Barron—People Time (Verve) 434-597/394-593

Soundgarden—Badmotorfinger (A&M) 428-250

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

Various Artists—East Coast Family, Vol.1 (Motown) 444-646

Firehouse—Hold Your Fire (Epic) 439-448

"Wayne's World" (Sndtrk.) (Reprise) 434-498

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

Color Me Badd—C.M.B. (Giant/Reprise) 426-916

George Thorogood And The Destroyers—The Baddest Of The Bad (Hits) (EMI) 444-505

Faith No More—Angel Dust (Reprise/Slash) 439-307

Michael Jackson—Dangerous (Epic) 433-920

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

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

Megadeth—Countdown To Extinction (Capitol) 444-489

The B-52's—Good Stuff (Reprise) 439-281

CeCe Peniston—Finally (A&M) 433-805

Ministry (Wamer Bros./Sire) 433-748

Rod Stewart—Downtown Train/Selections From The Storyteller Anthology (Wamer Bros.) 425-322

Barbra Streisand—Highlights From "Just For The Record" (Columbia) 444-372

DAS EFX—Dead Serious (eastwest) 438-630

Tina Turner—Simply The Best (Capitol) 433-342

R. Kelly & Public Announcement—Born Into The 90's (Jive) 433-250

Garth Brooks—No Fences (Liberty) 411-587

Hi-Five—Keep On Goin' On (Jive) 444-331

Beastie Boys—Check Your Head (Capitol) 438-499

Richard Marx—Rush Street (Capitol) 433-110

James Brown—CD Of JB (Polydor) 425-025

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

Warrant—Dog Eat Dog (Columbia) 444-091

David Bowie—David Live (Rykodisc) 438-218/398-214

Hammer—Too Legit To Quit (Capitol) 433-094

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

AC/DC—The Razors' Edge (ATCO) 410-662

Sonic Youth—Dirty (Geffen) 444-083

John Secada (SBK) 438-184

Enya—Shepherd Moons (Reprise) 431-718

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

Extreme—Pomograffiti (A&M) 409-003

Ricky Van Shelton—Greatest Hits Plus (Columbia) 444-067

Celine Dion (Epic) 436-782

Tevin Campbell—T.E.V.I.N. (Owest/Wamer Bros.) 431-585

The Very Best Of The Righteous Brothers—Unchained Melody (Verve) 423-772

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

Trisha Yearwood—Hearts In Armor (MCA Nashville) 444-042

Bruce Springsteen—Lucky Town (Columbia) 436-600

Stephen Wolf—Bom To Be Wild (MCA) 430-678/390-674

The Moody Blues—Grt. Hits (Polydor) 423-756

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

"Mo' Money"—Orig. Sndtrk. (Perspective/A&M) 443-739

Bruce Springsteen—Human Touch (Columbia) 436-592

Allman Brothers Band—A Decade Of Hits 1969-79 (Polydor) 430-439

Eric Clapton—Time Pieces (Polydor) 423-467

Janet Jackson—Rhythm Nation 1814 (A&M) 388-918

Temple Of The Dog (A&M) 442-780

Sophie B. Hawkins—Tongues & Tails (Columbia) 436-402

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

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

Aerosmith—Pump (Geffen) 388-009

Marty Stuart—This One's Gonna Hurt You (MCA) 442-418

Indigo Girls—Rites Of Passage (Epic) 436-394

Brooks & Dunn—Brand New Man (Arista) 429-969

Natalie Cole—Unforgettable (Elektra) 422-279

Don Henley—The End Of The Innocence (Geffen) 383-802

E P M D—Business Never Personal (Ral/Def Jam/Chaos) 442-244

Best Of Count Basie (Roulette Jazz) 435-990

Bryan Adams—Waking Up The Neighbours (A&M) 429-779

Frank Sinatra—The Capitol Collector's Series (Capitol) 421-651

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

Lionel Richie—Back To Front (Motown) 441-063

Steely Dan—Gold—Grt. Hits (MCA) 435-693

Tom Cochrane—Mad Mad World (Capitol) 435-685

Paula Abdul—Spellbound (Virgin) 420-257

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

Mary Chapin Carpenter—Come On, Come On (Columbia) 440-560

k. d. lang—Ingenue (Wamer Bros./Sire) 435-404

Spin Doctors—Pocket Full Of Kryptonite (Epic/Assoc.) 428-482

Toad The Wet Sprocket—Fear (Columbia) 428-466

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

Lyle Lovett—Joshua Judges Ruth (MCA) 440-479

Melissa Etheridge—Never Enough (Island) 435-180

Wilson Phillips—Shadows And Light (SBK) 440-271

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

Jethro Tull—Aqualung (Chrysalis) 345-157



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

MORE SELECTIONS



Genesis—We Can't Dance. Title Cut plus many more. (Atlantic) 448-936

Mariah Carey—MTV Unplugged. I'll Be There; more. (Columbia) 441-790

Garth Brooks—Ropin' The Wind. The River; plus more. (Liberty) 428-862

Pearl Jam—Ten. Jeremy: Even Flow, Alive; and more. (Epic/Assoc.) 428-433

ANY 8 CDs FOR A PENNY AND A CHANCE TO GET ONE MORE CD—FREE!

See details below.

Guns N' Roses—Use Your Illusion I (Geffen) **442-087**

Guns N' Roses—Use Your Illusion II (Geffen) **442-038**

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

Jackson Browne—The Pretender (Asylum) **292-243**



Marky Mark and The Funky Bunch—You Gotta Believe (Interscope) **447-771**

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



Extreme—III Sides To Every Story (A&M) **447-540**

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

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

Patsy Cline—Grt. Hits (MCA) **365-924**

Metallica—Kill 'Em All (Elektra) **363-812**

George Michael—Faith (Columbia) **362-228**

Guns N' Roses—Appetite For Destruction (Geffen) **359-984**

ZZ Top—Grt. Hits (Warner Bros.) **438-010**

Arrested Development—3 Years, 5 Months & 2 Days (Chrysalis) **436-204**

Bonnie Raitt—Nick Of Time (Capitol) **381-087**

Grateful Dead—Skeletons From The Closet (Warner Bros.) **378-406**

Best Of The Doors (Elektra) **357-616/397-612**

U2—The Joshua Tree (Island) **354-449**

Aretha Franklin—30 Greatest Hits (Atlantic) **350-793/390-799**

Van Morrison—Moondance (Warner Bros.) **349-803**

The Police—Every Breath You Take—The Singles (A&M) **348-318**

The Beach Boys—Made In The U.S.A. (Capitol) **346-445**

John Lennon—Live In New York City (Capitol) **342-774**

Bad Company—10 From 6 (Atlantic) **341-313**

Jimmy Buffett—Songs You Know By Heart (MCA) **339-911**

Bob Marley & The Wailers—Legend (Tuff Gong/Island) **337-857**

Billy Joel—Grt. Hits, Vols. 1 & 2 (Columbia) **336-396/396-390**

Dire Straits—Brothers In Arms (Warner Bros.) **336-222**

The Best Of Kansas (CBS Assoc.) **327-742**

The Charlie Daniels Band—A Decade Of Hits (Epic) **321-067**

Wynonna Judd—Wynonna (MCA/Curb) **435-909**

TLC—Oooooohhh... (LaFace) **434-621**

Bela Fleck & The Flecktones—Ufo Tufo (Warner Bros.) **445-809**

Larry Carlton—Kid Gloves (GRP) **445-569**

Branford Marsalis—I Heard You Twice The First Time (Columbia) **445-460**

The Rippingtons—Weekend In Monaco (GRP) **445-296**

Pat Metheny—Secret Story (Geffen) **444-422**

Najee—Just An Illusion (EMI) **442-251**

Spyro Gyra—Three Wishes (GRP) **440-990**

Tom Scott—Born Again (GRP) **440-636**

GRP All-Star Big Band (GRP) **440-503**

Wynton Marsalis—Septet—Blue Interlude (Columbia) **439-463**

Motown's 25 #1 Hits From 25 Years (Motown) **319-996/399-998**

Michael Jackson—Thriller (Epic) **318-089**

Stevie Wonder's Orig. Musiquarium I (Tama) **314-997/394-999**

U2—Achtung Baby (Island) **431-213**

Jodeci—Forever My Lady (MCA) **430-959**

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

REO Speedwagon—Hi Infidelity (Epic) **306-449**

Al Jarreau—Heaven And Earth (Reprise) **439-240**

Bob James & Earl Klugh—Cool (Warner Bros.) **439-232**

Miles Davis—Doo-Bop (Warner Bros.) **439-224**

Shirley Horn—Here's To Life (Verve) **439-190**

David Sanborn—Up-front (Elektra) **438-994**

George Howard—Do I Ever Cross Your Mind (GRP) **438-564**

Diane Schuur—In Tribute (Elektra) **436-097**

Grover Washington, Jr.—Next Exit (Columbia) **435-396**

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

Fourplay (James, Ritzenour, East & Mason) (Warner Bros.) **428-334**

Electric Light Orch.—ELO's Greatest Hits (Jet) **300-095**

Best Of Carly Simon, Vol. 1 (Elektra) **291-856**

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

Best Of The Doobies (Warner Bros.) **291-278**

Steve Miller Band—Grt. Hits 1974-78 (Capitol) **290-171**

Red Hot Chili Peppers—Blood Sugar Sex Magik (Warner Bros.) **428-367**

Helmet—Meantime (Interscope) **449-686**

Trey Lorenz (Epic) **449-108**

Bad Company—Here Comes Trouble (ATCO) **446-203**

The Rembrandts—Untitled (ATCO) **446-195**

Eagles—Grt. Hits, 1971-75 (Asylum) **287-003**

Eagles—Hotel California (Asylum) **286-948**

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

Loggins & Messina—The Best Of Friends (Columbia) **269-605**

Boston (Epic) **269-209**

Peter Dinklage—Frampton Comes Alive! (A&M) **262-311/392-316**

Jim Croce—Photographs & Memories: Grt. Hits (Saja) **246-868**

Santana's Grt. Hits (Columbia) **244-459**

Janis Joplin's Grt. Hits (Columbia) **231-670**

Simon & Garfunkel's Greatest Hits (Columbia) **219-477**

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

Smokey Robinson & The Miracles—Anthology (Motown) **336-057/396-051**

Joe Cocker's Grt. Hits (A&M) **320-911**

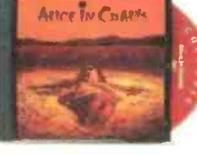
Bonnie Raitt—Luck Of The Draw (Capitol) **423-186**

Boyz II Men—Cooley-highharmony (Motown) **424-754**

The Best Of Southside Johnny (Epic/Lagacy) **444-760**

Cher—Love Hurts (Geffen) **443-036**

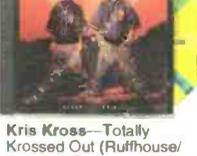
Deep Purple—Machine Head (Warner Bros.) **291-484**



Alice In Chains—Dirty (Columbia) **445-833**

Yanni—Dare To Dream (Private Music) **435-271**

Rolling Stones—Flashpoint (Rolling Stones Records) **418-715**



Kris Kross—Totally Krossed Out (Ruffhouse/Columbia) **435-743**

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

Traffic—The Low Spark Of High Heeled Boys (Island) **351-924**

HOT NEW JAZZ

Bela Fleck & The Flecktones—Ufo Tufo (Warner Bros.) **445-809**

Larry Carlton—Kid Gloves (GRP) **445-569**

Branford Marsalis—I Heard You Twice The First Time (Columbia) **445-460**

The Rippingtons—Weekend In Monaco (GRP) **445-296**

Pat Metheny—Secret Story (Geffen) **444-422**

Najee—Just An Illusion (EMI) **442-251**

Spyro Gyra—Three Wishes (GRP) **440-990**

Tom Scott—Born Again (GRP) **440-636**

GRP All-Star Big Band (GRP) **440-503**

Wynton Marsalis—Septet—Blue Interlude (Columbia) **439-463**

Al Jarreau—Heaven And Earth (Reprise) **439-240**

Bob James & Earl Klugh—Cool (Warner Bros.) **439-232**

Miles Davis—Doo-Bop (Warner Bros.) **439-224**

Shirley Horn—Here's To Life (Verve) **439-190**

David Sanborn—Up-front (Elektra) **438-994**

George Howard—Do I Ever Cross Your Mind (GRP) **438-564**

Diane Schuur—In Tribute (Elektra) **436-097**

Grover Washington, Jr.—Next Exit (Columbia) **435-396**

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

Fourplay (James, Ritzenour, East & Mason) (Warner Bros.) **428-334**

Electric Light Orch.—ELO's Greatest Hits (Jet) **300-095**

Best Of Carly Simon, Vol. 1 (Elektra) **291-856**

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

Best Of The Doobies (Warner Bros.) **291-278**

Steve Miller Band—Grt. Hits 1974-78 (Capitol) **290-171**

© 1993, The Columbia House Company

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

Please accept my membership application under the terms outlined in this advertisement. I am enclosing check or money order for \$1.86 (that's 1¢ for the 8 CDs indicated here, plus \$1.85 for shipping and handling). I agree to buy six selections, at regular Club prices, in the next three years—and may cancel membership anytime after doing so.

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

- Hard Rock Soft Rock Modern Rock Light Sounds Rap
 Van Halen, Michael Bolton, The Cure, Neil Diamond, L.L. Cool J,
 ZZ Top, Mariah Carey, Morrissey, James Taylor, Public Enemy
- Heavy Metal R&B/Soul Easy Listening Jazz Dance Pop
 Megadeth, Luther Vandross, Frank Sinatra, Pat Metheny, C&C Music Factory,
 Ozzy Osbourne, Boyz II Men, Ray Conniff, G. Washington, Jr. En Vogue
- Country: Travis Tritt, Wynonna Judd Classical: V. Horowitz, J. Rampal

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

Address _____ Apt. _____

City _____

State _____ Zip _____

Do you have a VCR? (04) Yes No
 Do you have a credit card? (03) Yes No **501/593**

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

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

•
•
•
•
•
•
•
•

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

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

MZE-8F-RN

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

- **Just mail the coupon** together with check or money order for \$1.86 (that's 1¢ for your first 8 CDs, plus \$1.85 for shipping and handling).
- **You agree** to buy just six more selections in the next three years, at regular Club prices: currently \$12.98 to \$15.98—and you may cancel membership at any time after doing so. (A shipping and handling charge, will be added to each shipment.)
- **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 for a full refund and no further obligation.
- **Extra Bonus Offer:** you may take one additional CD right now at the super-low price of only \$6.95—and you are then entitled to take an extra CD as a bonus FREE! And you'll receive your discounted CD and your bonus CD with your 8 introductory selections—a total of 10 CDs in all!
- **If the application is missing, write to:** Columbia House, 1400 N. Fruitridge Ave, Terre Haute, IN 47811-1129.

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

only your surround speakers with new models that sound like your front speakers; or (3) connect an equalizer in the rear-signal path to make your surround speakers sound more like your front speakers. If you decide to invest in new surround speakers, consider models that have a special radiation pattern tailored for surround use—such as THX-style side-wall speakers with a quasi-bipolar pattern or the novel Video Acoustics surround speaker that mounts on the rear wall but fires sideways and upward.

Stage 5: Getting Down

Strictly speaking, bass response is not related to surround sound. But both are part of the appeal of state-of-the-art playback for music and video. It's no accident that high-performance Dolby Surround decoders usually have dedicated subwoofer outputs: Today's movies have more intense lows than most music.

At a recent Audio Engineering Society convention in San Francisco, where designers discussed future all-digital surround encoders, a Dolby engineer described why the new SR-D movie-soundtrack format has not just five but "5.1" channels (the ".1" refers to a narrow-band subwoofer channel). Given that human hearing is less sensitive in the bass than at midrange frequencies, measured sound levels must be higher in the bass in order to sound equally loud—which producers want. Allocating the most intense lows to a separate deep-bass channel enables the SR-D format to accommodate the remaining channels with no loss of dynamic range. You probably won't play the soundtrack of *Terminator 2* at the same lease-breaking levels a theater would—if only because doing so might actually violate your lease. But if your stereo speakers don't have extended low-frequency response, consider adding a subwoofer or two.

You may also want to consider surround speakers large enough for good bass response, especially if you don't use a subwoofer. Although the strongest lows are always in the front, recent movies and TV shows may also have significant bass in the surround channel. In theory, bass below 100 Hz is supposed to be rolled off in the surround track when the signal is encoded for Dolby Surround playback, but producers have been bending this rule, putting "ambient" bass in all channels to intensify the impression that you are in the middle of the action. For example, Figure 2 shows the spec-

The cost of adding a high-performance surround processor is usually less when the processor is built into an amplifier than when it is bought separately.

trum of the front and surround channels of *Backdraft*, measured from a laserdisc. The surround channel is a few decibels softer—which is why you typically need only about one-fourth as much power for the back as for the front—but both curves show strong bass down to 30 Hz. So while small speakers are easier to conceal, there may be genuine sonic benefits to surround speakers with full-size woofers.

Stage 6: A High-Performance Decoder

A basic Dolby Surround unit provides spacious reproduction of Dolby-encoded programs and also extracts ambience from many non-encoded signals. But for the finest surround sound you should graduate to a more

specialized decoder. These can be classified into three types:

(1) *Pro Logic* processors are Dolby Surround decoders that incorporate what are known as steering-logic circuits to achieve more precise directional effects. They are mainly used with movie and TV soundtracks. Some Pro Logic decoders have other special features, such as automatic input balancing (to correct soundtrack errors). *Home THX* processors are Pro Logic decoders too, with additional enhancements designed to make your home video theater sound more like a real theater.

(2) *Ambience-synthesis* processors contain digital signal-processing (DSP) circuits that generate multiple delayed and equalized versions of the input signal resembling the actual reflection patterns in a concert hall or cathedral. This type of processing is useful primarily for music reproduction.

(3) *Ambisonic* decoders provide an alternative form of surround decoding, different from Dolby Surround, used with certain (mainly British) music recordings.

Many surround decoders, fortunately, include two or more types of processing that can be used with the same four-speaker array that you have been using for basic Dolby Surround. Pro Logic decoders, for example, usually have a "phantom center" mode that works with the customary arrangement of two stereo speakers in front. (You can add a center speaker later for even more precise imaging and dialogue clarity.) Some DSP concert-hall processors (Yamaha's, for example) have an optional six-speaker mode, using a pair of "proscenium" speakers near the ceiling above your main speakers, producing even great-

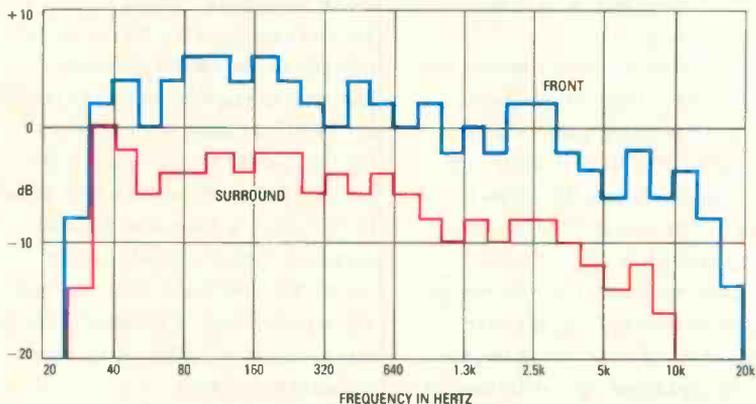


Figure 2. These frequency spectra from *Backdraft* show how movie producers sometimes ignore Dolby guidelines, putting substantial bass energy in the surround channel as well as the front.

CHART BY PAMELA JABER TAUSS

OUR FIVE-CHANNEL FUTURE

Home audio is finally moving from the relatively flat perspective of two-speaker stereo to the greater realism and three-dimensionality of multispeaker surround sound. Nearly every modern movie contains a Dolby Stereo (Dolby Surround) soundtrack with surround effects. The surround encoding is preserved in that soundtrack when you watch the movie at home, regardless of its medium—laserdisc, hi-fi videotape, or stereo broadcast or cable TV. And a growing number of made-for-TV programs, from football games to Arsenio Hall to *Northern Exposure*, are surround-encoded with crowd noise, music, and off-screen sounds. Plans have been made to include surround sound in media as diverse as CD-I, CD-ROM, and Nintendo video games.

Because of the commercial failure of quadrasonic records during the 1970's, record companies have been cautious about revisiting surround encoding. But its appeal is undeniable—especially for large-scale music that was recorded in a concert hall or cathedral. Hundreds of CD's on the Nimbus label have been made with Ambisonic encoding, while a number of Pro Arte discs are encoded for Dolby Surround using the compatible Shure/Museatex HTS system. Dolby Surround encoding is also featured in Telarc's recent "Switched-on Bach" and in dozens of BMG/RCA CD's and cassettes. And many ordinary stereo recordings contain hidden ambience whose reproduction via surround speakers generates a remarkably spacious and lifelike impression.

Pop records seldom contain concert-hall ambience, but surround decoding may reveal other interesting spatial effects. Performers such as Sting, Madonna, and Julian Lennon have used the Q-Sound process in their records to broaden the soundstage of stereo playback, while others have experimented with the Roland Sound Space system. These and other methods of "trans-aural" processing can produce a soundstage much wider than the spacing of your stereo speakers, and surround decoders transform some of these recorded effects into wrap-around sound.

The technical foundations have already been laid for the next generation in audio. After extensive studies of aural perception, standards organizations around the world have agreed that the ideal playback system for both music and movie sound is a "three plus two" array—three channels across the front plus two channels of surround sound. This arrangement is well known because it is the speaker layout for Dolby Pro Logic decoding of matrixed two-channel Dolby Stereo soundtracks.

It is also the basis of two new five-channel digital recording formats, Dolby AC-3 and Musicam-Surround. Each provides five full-bandwidth discrete channels (left front, center front, right front, left surround, and right surround), using low-bit-rate digital coding techniques similar to those used in DCC and MiniDisc. AC-3 coding is used in the new SR-D system of film sound. This "Dolby Digital" format was introduced last year in several popular movies. Dozens of theaters are set up for SR-D playback now, and SR-D equipment will be installed in hundreds more this year. And five-channel SR-D soundtracks will come home when digital VCR's and laserdiscs arrive on the scene later in this decade. The corresponding Dolby playback IC's will provide both AC-3 decoding for discrete digital soundtracks and Pro Logic decoding for the analog-matrix Dolby Stereo soundtracks now available on home video.

Musicam, a compressed-digital coding format developed in Europe, has been selected by digital-radio developers on both sides of the Atlantic. Musicam-Surround, an extension created for possible use in HDTV or future music recording formats, records discrete five-channel surround with sound quality similar to that of Dolby AC-3. But Musicam-Surround employs a special "compatible-code" format that conventional Musicam IC's will decode into straight two-channel stereo in digital radios and portable players not equipped for surround.

Any way you look at it, two-channel stereo is headed for the history books. The future is five-channel.

er realism than ordinary four-speaker surround.

Just as with basic decoders, the cost of adding a high-performance processor is less when it is built into an amplifier than when you buy the processor separately. So before you go shopping for a new decoder, think about your amplifier choices. Is the room becoming cluttered? In addition to your original stereo system and video components you already have a surround decoder/amplifier, an A/V selector, and perhaps a subwoofer and an amp to drive it. Before long you may need yet another amp for a center channel or other surround speakers.

Now might be the best time to consolidate some of these functions into a single product. You could trade in your old stereo amplifier and buy a comprehensive A/V receiver that includes decoders and five or more amplifier channels. If you prefer to keep your present stereo components, you can select a multichannel amplifier with built-in A/V switching, Pro Logic decoding, and three to six channels of power. Some multichannel amps permit "bridging" certain channels in pairs to double or triple the power. (The subwoofer and center speaker typically require high power, while surround speakers need less.)

Stage 7: The Center Speaker

You may continue to use a Pro Logic decoder forever in phantom-center mode with two front speakers, if you are satisfied with its imaging. This is okay as long as the system is normally used by just one person at a time. If your chair is equidistant from both speakers, dialogue will be properly centered on the TV screen. But when you have multiple listeners, those who are seated off-center will hear dialogue and action noises coming from the air near one speaker rather than from the screen—a loss of realism that may impair their enjoyment of the show.

A center speaker, located above or below the screen, brings on-screen sounds back where they belong. It may also improve the intelligibility of dialogue in complex scenes, even for a centered listener. A center speaker whose timbre accurately matches that of your left and right speakers is the final refinement of a Pro Logic surround installation.

Now that you have satisfying wall-to-wall sound, movies may sound better at home than in your local cineplex, and the sound of recorded music may start to rival that of the real thing. □

THE POWER AND THE GLORY!



WHAT DOES IT TAKE TO BUILD a high-end speaker in the digital age?

It's not easy. Today's finest speakers must be able to reproduce not just the subtle detail of music but also its size - be it a grand symphony, intimate jazz or progressive rock. Even few expensive speakers are up to the task.

But, with the STUDIO MONITOR, PARADIGM has done the impossible... captured high-end speaker performance for an almost impossible \$1,899/pair.*

Designing this fine audiophile speaker takes a lot of determination and extensive resources - better design execution with better materials.

And premium materials are used throughout. From diecast aluminum chassis, used in all drive units, to the astonishing tweeter, with its pure-aluminum-dome, to the midrange with a mineral-filled polypropylene core and ferrofluid cooling, to bass drivers with mineral-filled polypropylene cones, 1 1/2" voice coils and massive 40 oz. magnets, to advanced enclosure design and seamless dividing networks.

The results are staggering! The STUDIO MONITOR is articulate and transparent, yet also very dynamic!

YOU WON'T FIND PARADIGM everywhere. Speakers this good require the expertise of a qualified audio specialist. So, before you buy any high-end speaker, visit your AUTHORIZED PARADIGM DEALER... and listen to the power and the glory of the STUDIO MONITOR.

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

Sound & Vision

Critic's
Choice Award

HI-FI
GRAND PRIX
AWARD
from
AudioVid

For Dealer Location



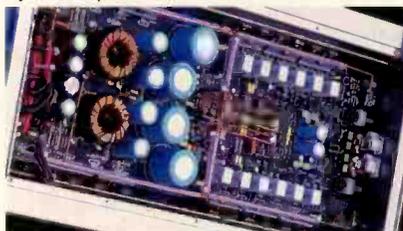
Call 1-800-346-8774

Paradigm®

Design Excellence

Coustic introduces an innovative series of Design Reference automotive power amplifiers, creatively designed and handcrafted in the U.S.A.

The Design Reference amplifiers' unique HEXFET® PWM (Pulse Width Modulated) power supply utilizes ultra high-speed switching diodes and an oversized 10,000 uF capacitor per channel, bypassed with polystyrene film capacitors to provide an amazingly stable, continuous current while maintaining constant rail voltages even under heavy dynamic loads. The result is very refined sound quality with the dynamic power we all strive for!



Solid Core Acoustic Technology (SCAT)

Once confined exclusively to high end home and studio components, Design Reference amplifiers make available an all discrete, class "A", balanced input circuitry for the first time in the automobile. This circuit is ideal for the noisy environment because of its high noise rejection and low transient distortion characteristics.

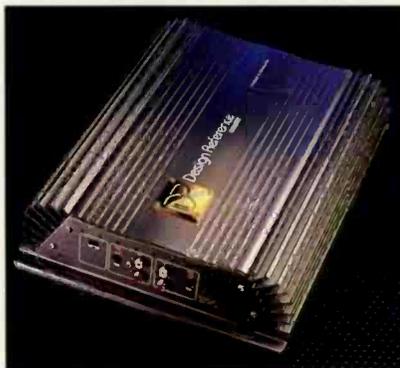
All Design Reference amplifiers have an exclusive, patented "Hysteresis Distortion" cancelling circuit built-in. Hysteresis distortion, caused by nonlinearities inherent in all electronic components, is what makes even the most well-designed amplifiers sound hard and unmusical. This patented circuitry simply creates a model of the input signal's inherent distortion and then cancels it electronically, leaving the original signal untouched and with unsurpassed sonic quality.

A unique Solid Core Acoustic Technology (SCAT) internal wiring scheme is used throughout to preserve the sonic purity and integrity of the audio signal. Calibrated with precision, solid core wire reduces the "skin" and "modulation" effects caused by the interactions of multi-stranded wire, thus minimizing sonic degradation. A very thin layer of low absorption enamel coating and air is used to insulate the solid core wire, avoiding unwanted

non-linear dielectric absorption. SCAT exhibits distortion free transmission characteristics, superior phase coherency and sonic accuracy resulting in superb musical clarity with tremendous bass response.

The output section features a new unconventional, completely symmetrical design using all N-channel HEXFET® transistors. The advantage of this design is superb linearity and reliability without the need for matching N- and P-channel devices. With the FET's high thermal efficiency, SOA protection circuitry (which produces distortion) is not required. FETs retain a high input impedance even under heavy loads, and are therefore able to deliver high peak output currents without placing heavy demands on their drive circuits. FET devices offer excellent high frequency response characteristics and are praised by audiophiles for their open, smooth, and detailed sound quality.

To ensure maximum fidelity, a total of 4 FETs, carefully hand selected and matched, are used for each channel even though only one is required, allowing all transistors to operate in their most linear region. This, combined with low feedback, results in very little transient distortion at high current, yielding superior definition and smoothness even at very low impedances.

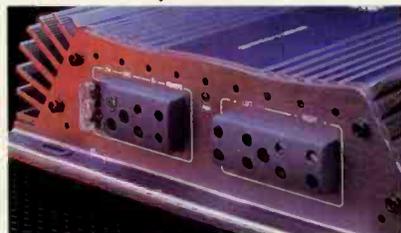


AMP-505DR

An exclusive "energy management system" is built in to electronically map and review the entire active circuitry during power on/off. Once stabilized, the system will then open the audio signal path, eliminating the annoying and potentially dangerous "popping" or "thumping" normally associated with system power on/off. It also monitors the circuitry for any indication of a

thermal condition that could damage the system. If indicated, the system will briefly cut or mute the audio signal, rather than shutting down the amplifier, preventing a surge that could damage other system components.

All Design Reference amplifiers have individual sensitivity adjustment and peak level indicators for each stereo channel which makes system balance virtually distortion free.



Custom molded terminal blocks

Computer aided design of heat sink and end plates ensures maximum heat dissipation and very efficient thermal convection with functional ergonomics. Custom molded speaker and power terminal block promotes high performance and simple installation.

The high-quality construction of these Design Reference amplifiers allows them to drive systems accurately and with sufficient headroom to meet the critical demands of contemporary recordings. All components used are carefully selected to ensure quality, reliability and performance — Mil-Spec glass epoxy printed circuit board with heavy-duty copper-clad traces, power supply capacitors by Cornell-Dubilier or Philips, WIMA or Roederstein bypass capacitors, HEXFET® by International Rectifier, 1% metal film resistors, and gold-plated RCA connectors.

Design Reference amplifiers include the AMP-505DR (2 x 50 watts), the AMP-510DR (2 x 100 watts) and the AMP-514DR (4 x 50 watts).

Coustic's serious dedication to quality and performance assures that Design Reference amplifiers will set new standards for excellence.



COUSTIC®

4260 Charter Street
Vernon, CA 90058-2596, USA
Phone: 213-582-2832
Fax: 213-582-4328

EQUIPMENT BUYING GUIDE

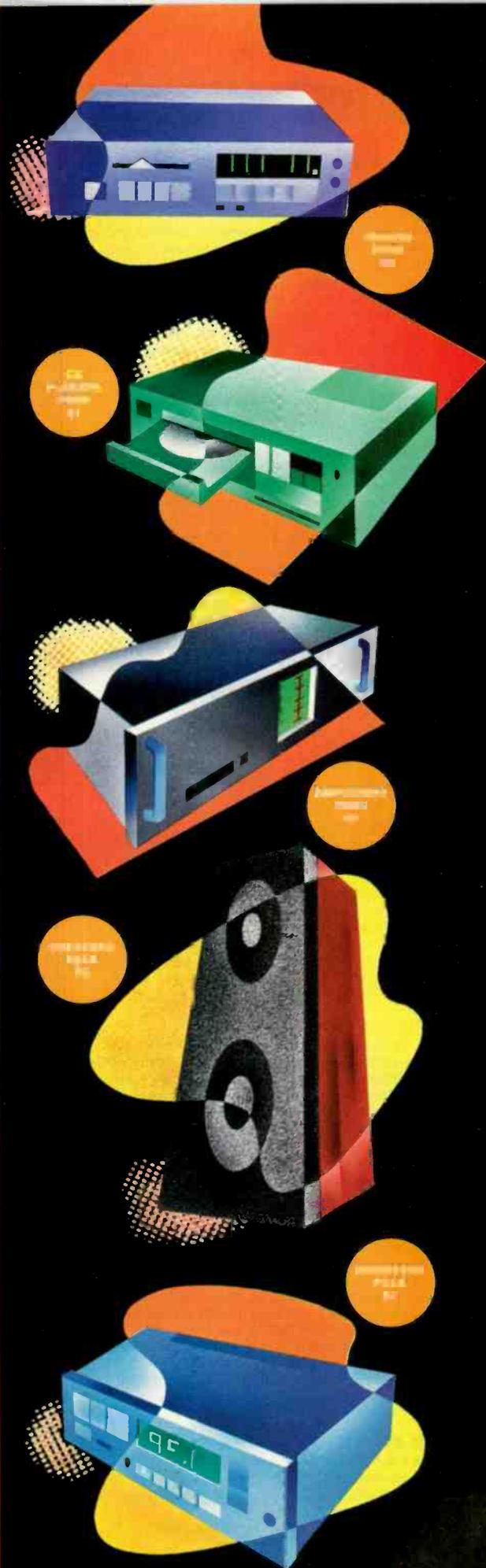
SHOPPING for hi-fi equipment in the Nineties is a mixed affair. What was once strictly an audio-only expedition now has the potential of becoming an exciting journey into the world of home theater—a world that brings audio and video together through receivers with Dolby Pro Logic surround decoding, speakers that help recreate the cinema experience at home, and combi-players that “combine” a CD player and a videodisc player into one neat package. (Don’t worry—there are still plenty of “traditional” components to choose from, too.)

Whether you’re just starting out or upgrading, our buying guide is a good starting point, providing specifications, features, and prices for a wide range of components. In the next fifty pages, you’ll find a sampling of models in the key categories of equipment from companies whose products are widely distributed. (Tape decks and blank tape will be covered in a future issue.) If a particular model or brand does not appear, that does not reflect on its quality.

All information was provided by the manufacturers, and the prices given are suggested retail; actual selling prices vary. For more information, contact the manufacturers (see the directory on page 111) or their authorized dealers. Happy hunting.

—Bob Ankosko

1993



RECEIVERS

BANG & OLUFSEN

Beomaster 7000 50-W/ch Receiver
2 channels. Integrates with Beosystem 7000. Features multiroom capability; frequency-synthesis tuning. 20 AM/FM presets; clock/timer with battery backup; Beolink 7000 remote control. Radio Data System decoder for 10-character station labeling optional. 50 W x 2 rms into 8 ohms with 0.09% THD. S/N 78 dBA phono, 80 dBA line. FM: 50-dB quieting sens 40 dBf; S/N 70 dB and THD 0.2% stereo; cap ratio 1.7 dB; adj-ch sel 10 dB; alt-ch sel 70 dB. Polished-aluminum or white finish. 16½ x 3 x 12¼ in \$3,000

Beomaster 4500 20-W/ch Receiver
2 channels. Integrates with Beosystem 4500. Features multiroom capability; digital tuning. 20 AM/FM presets; programmable volume and tone levels; Beolink 1000 remote control. 20 W x 2 rms into 8 ohms with 0.1% THD. S/N 77 dB. FM: 50-dB quieting sens 19 dBf mono, 40 dBf stereo; FR 20-15,000 Hz ±1 dB; S/N 70 dB stereo; cap ratio 1.7 dB; ch sep 40 dB. Polished aluminum finish with white trim. Wall-mount brackets optional. 24¾ x 2¼ x 9¾ in \$1,200

CARRERA

CR-2530 30-W/ch Receiver
2 channels. Features headphone jack with volume control. 30 W x 2. FR 20-20,000 Hz; THD 0.25%. FM: cap ratio 1.7 dB; alt-ch sel 58 dB. 13 lb \$200

CARVER

The following feature Sonic Holography circuitry for ambience enhancement and proprietary multipath-suppression circuitry.

HR-895 365-W A/V Receiver
5 channels with Dolby Pro Logic decoder. Features multiroom capability. 7 audio inputs; 4 composite-video inputs; 3 S-video inputs; front-panel composite/S-video A/V input; headphone jack. 4 surround modes; 30 AM/FM presets; programmable remote control. Includes infrared receiver and second remote control. 110 W x 2 (front) + 75 x 1 (center) + 35 x 2 (rear), all rms into 8 ohms. FM: cap ratio 2 dB; AM rej 65 dB; alt-ch sel 70 dB; ch sep 45 dB \$1,200

HR-772 140-W/ch Receiver
2 channels. Features source-direct switch; motor-driven volume control. 5 audio inputs; 2 video inputs; 1 video output; 2 tape-monitor loops; line-level outputs; headphone jack. 5-band EQ; 20 AM/FM presets; remote control. 140 W x 2 into 8 ohms or 150 x 2 into 4 ohms. FM: cap ratio 1.5 dB; AM rej 65 dB; alt-ch sel 72 dB; ch sep 46 dB and THD 0.15% at 1,000 Hz; S/N 70 dB stereo. 19 x 5½ x 18 in \$850

HR-732 60-W/ch Receiver
2 channels. Features motor-driven volume control. 6 audio inputs; 3 video inputs; 2 video outputs; headphone jack. 30 AM/FM presets with scan; auto/manual tuning; signal-strength indicator; A/B speaker switching; bass, treble, and balance controls; 2 AC outlets; remote control. 60 W x 2 into 8 ohms or 100 x 2 into 4 ohms from 20-20,000 Hz with 0.09% THD; 120 x 2 into 2 ohms. S/N 100 dBA amp, 80 dBA MM. FM: cap ratio 2.2 dB; AM rej 62 dB; alt-ch sel 65 dB; ch sep 45 dB. 19 x 5¼ x 15½ in \$500

DENON

AVR-3000 400-W A/V Receiver
5 channels with Dolby Pro Logic decoder and DSP. Features 5 discrete amps; optical Class A



circuitry for front and center channels; 3-pole-equivalent tuner front end; videodisc- and CD-direct modes. 9 audio inputs; 5 video inputs; 4 S-video inputs; 10 audio outputs; 3 video outputs; 3 S-video outputs; 2 center-channel outputs. 4 Dolby modes; wide-screen, live, mono-movie, classic, rock, church, jazz, stadium, and matrix-surround DSP modes; bass boost; dialog-enhancing EQ; auto input balance for Dolby Pro Logic; adjustable delay and room-size parameters; 16 AM/FM presets; basic-function and programmable remote controls. 110 W x 3 (front, center) + 35 x 2 (rear), all into 8 ohms \$1,300

AVR-2000. As above, 80 W x 3 (front, center) + 25 x 2 (rear). Without bass boost, dialog-enhancing EQ, or basic-function remote control. 6 audio inputs; 3 video inputs; 2 S-video inputs; 2 video outputs; 2 S-video outputs \$850

DRA-1035R 130-W/ch Receiver

2 channels. Features optical Class A amplifier circuitry; source-direct switch. 7 audio and 3 video inputs; MM/MC phono input; pre-out/main-in loops; connector for RC-615 multiroom system. Video switching capability; simulated-ste-



Carver HR-772

reo circuit; switchable wide/narrow FM IF bandwidth; 40 AM/FM presets; last-station memory; seek, preset-scan, and manual-step tuning; programmable remote control. 130 W x 2 into 8 ohms from 20-20,000 Hz with 0.015% THD. S/N 92 dB MM, 75 dB MC, 103 dB line. FM: 50-dB quieting sens 37.3 dBf stereo; cap ratio 1.3 dB; S/N 82 dBA stereo; THD 0.06% stereo \$1,000

DRA-545R 60-W/ch Receiver

2 channels. Features discrete amplifiers; 3-pole-equivalent tuner front end; electronic source switching; bass-EQ circuit; motor-driven volume control. MM phono input; 2 video inputs; 2 video outputs; line-level outputs. 16 AM/FM presets; auto-seek and manual-step tuning; last-station memory; variable loudness control; last-function memory; IS-system remote control. 60 W x 2 into 8 ohms from 20-20,000 Hz with 0.05% THD. S/N 78 dB MM, 95 dB line. FM: 50-dB quieting sens 38.5 dBf stereo; cap ratio 1.5 dB \$350

DRA-345R. As above, without video section. 45 W x 2 into 8 ohms from 20-20,000 Hz with 0.05% THD \$280

DUAL

CR-5950RC 70-W/ch Receiver
2 channels. Features Class A amplification; digital quartz-synthesis tuning; brushed metal housing; motor-driven volume control. 6 inputs including phono; gold-plated phono and CD inputs. 16 AM/FM presets; FM-stereo muting; auto/manual station scan; bass, treble, balance, and loudness controls; remote control. 70 W x 2 cont avg into 8 ohms at 1,000 Hz or 130 x 2 into 4 ohms. S/N 75 dB phono, 95 dB line. Black anodized finish \$620

FISHER

RS646 300-W A/V Receiver
5 channels with Dolby Pro Logic decoder. Features Class A-II circuitry; motor-driven volume control. 5 audio and 3 A/V inputs; S-video inputs; front-panel A/V input; headphone jack. Normal/phantom center-channel modes; 7-band graphic EQ; input-balance control; 30 AM/FM presets; direct station access; A/B speaker switching; timer; remote control. 120 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.05% THD (front) + 20 x 3 at 1,000 Hz (center, rear). FM: 50-dB quieting sens 42.1 dBf stereo; cap ratio 1.5 dB. 17¾ x 5¼ x 13¾ in; 22 lb \$500

RS636 240-W A/V Receiver

4 channels with Dolby Surround decoder. Features motor-driven volume control. 5 audio and 2 A/V inputs; 2 audio and 2 A/V outputs. 7-band graphic EQ; input balance control; video dubbing capability; 30 AM/FM presets; timer; remote control. 100 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.05% THD (front) + 20 x 2 rms (rear). FM: 50-dB quieting sens 42 dBf stereo; cap ratio 1.5 dB; alt-ch sel 55 dB. 17¾ x 5¼ x 13¾ in; 22 lb \$400

RS616 50-W/ch Receiver

2 channels. Features quartz-synthesis tuner. 6 audio and 2 video inputs; headphone jack. 5-band graphic EQ; remote muting and loudness; FL display; remote control. 50 W x 2 into 8 ohms from 20-20,000 Hz with 0.05% THD. FM: 50-dB quieting sens 42.1 dBf stereo; cap ratio 1.5 dB; alt-ch sel 55 dB. 17¼ x 4¾ x 13¾ in \$300

HARMAN KARDON

AVR30 190-W A/V Receiver
5 channels with Dolby Pro Logic decoder and DSP. 4 audio inputs; 4 video inputs; 2 VCR-monitor loops; 2 tape-monitor loops. 4 room-size settings; 5 effects levels; 12-way dubbing matrix; simulcast capability; memory presets for surround and DSP settings; 16 AM/FM presets; on-screen displays; remote control. 50 W x 3 into 6 ohms from 20-20,000 Hz with 0.09% THD (front, center) + 20 x 2 into 4 ohms from 100-10,000 Hz with 0.3% THD (rear) or 60 x 2 into 6 ohms from 20-20,000 Hz with 0.09% THD \$1,049

HK3600 75-W/ch Receiver

2 channels. Motor-driven volume control. 7 inputs/outputs including subwoofer output; two tape- and video-monitor loops. Interactive video switching; 7-way tape-copy selector; 16 AM/FM presets; seek tuning; separate volume control for subwoofer; loudness, mono, and subsonic-filter switches; remote control. 75 W x 2 into 8 ohms from 20-20,000 Hz with 0.09% THD. S/N 78 dBA phono, 98 dBA line. FM: 50-dB quieting sens 37.2 dBf stereo; cap ratio 1 dB; adj-ch sel 5 dB; alt-ch sel 70 dB. 17¾ x 4¾ x 13¾ in; 18.8 lb \$799

HK3500. As above, without interactive video switching or subsonic filter. 50 W x 2 into 8 ohms with 0.09% THD. Cap ratio 1.5 dB; adj-ch sel 10 dB; alt-ch sel 75 dB. 16.4 lb \$549

HK3400. As HK3500, 6 inputs. 35 W x 2 into 8 ohms from 20-20,000 Hz with 0.09% THD. 14.9 lb \$429

HK3300. As HK3400, without remote control or motor-driven volume control. 25 W x 2 into 8 ohms with 0.09% THD. 13.5 lb \$319

JVC

The following feature CompuLink presets to store and recall 3 sets of volume, balance, EQ, surround, loudness, and ambience settings for each program source and tuner preset.



RX-905VTN 370-W A/V Receiver

5 channels with Dolby Pro Logic decoder and DSP. Features Super A amp circuitry for Class A sonic characteristics and Class B efficiency characteristics. 3 video inputs; 2 S-video terminals; video-monitor output; connectors for 2 speaker pairs; subwoofer output; headphone jack. Hall, pavilion, stadium, and live-club digital ambience modes; 7-band graphic EQ with 5 programmable and 5 factory presets; 40 AM/FM presets with labeling; adjustable digital delay; on-screen displays; programmable remote control. 120 W x 2 with 0.007% THD (front) + 70 x 1 (center) + 30 x 2 (rear) with 0.7% THD, all rms into 8 ohms; 360 x 2 into 2 ohms. FR 20-20,000 Hz ± 0.5 dB phono, 5-50,000 Hz +0, -1 dB line \$1,100

RX-807VTN 345-W A/V Receiver

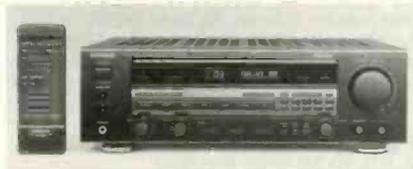
5 channels with Dolby Pro Logic decoder. Features Super A amp circuitry for Class A sonic characteristics and Class B efficiency characteristics. 2 video inputs; connectors for 2 speaker pairs; headphone jack. 7-band graphic EQ with 5 programmable and 5 factory presets; 40 AM/FM presets with labeling for 20 stations; adjustable digital delay; programmable remote control. 120 W x 2 (front) + 65 x 1 (center) + 20 x 2 (rear) with 0.007% THD, all rms into 8 ohms; 200 x 2 into 4 ohms. FR 20-20,000 Hz ± 0.5 dB phono, 5-50,000 Hz +0, -1 dB line \$640

RX-707VTN 290-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features Super A amp circuitry for Class A sonic characteristics and Class B efficiency characteristics. 2 video inputs; connectors for 2 speaker pairs; headphone jack. 7-band graphic EQ with 5 programmable and 5 factory presets; 40 AM/FM presets with labeling for 20 stations; adjustable digital delay; A/V remote control. 100 W x 2 with 0.007% THD (front) + 50 x 1 (center) + 20 x 2 (rear) with 0.7% THD, all rms into 8 ohms; 200 x 2 into 4 ohms. FR 20-20,000 Hz ± 0.5 dB phono, 5-50,000 Hz +0, -1 dB line \$520

RX-507VTN 200-W A/V Receiver

3 channels with Dolby Pro Logic decoder. Line-level center-channel output; 2 video inputs; connectors for 2 speaker pairs; headphone jack. 7-band graphic EQ with 5 programmable and 5 factory presets; 40 AM/FM presets with labeling for 20 stations; adjustable digital delay; A/V remote control. 80 W x 2 rms into 8 ohms with 0.007% THD (front) + 40 x 1 rms into 8 ohms with



Kenwood KR-V7040

0.7% THD (center). FR 20-20,000 Hz ± 0.5 dB phono, 10-30,000 Hz ± 1 dB line \$390

KENWOOD

KR-V9030 265-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features Dolby Time Link digital-delay system; multiroom capability; discrete amp circuitry; CD-direct switch; two power supplies. 4 audio inputs; MM phono input; 3 video inputs including 1 S-video; 3 video outputs including 1 S-video; line-level rear-channel output. 6 surround

modes; Dolby 3 Stereo mode; 6 surround-parameter presets; adjustable digital delay; Dolby test-tone generator; 30 AM/FM presets with scan; direct station access; video dubbing capability; 3 switched AC outlets; programmable remote control. 130 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.03% THD or 75 x 3 (front, center) + 20 x 2 (rear) into 8 ohms at 1,000 Hz with 0.9% THD. FM: S/N 74 dB and THD 0.2% at 1,000 Hz stereo; AM rej 65 dB; ch sep 50 dB at 1,000 Hz; cap ratio 2 dB. AM: S/N 50 dB. 17 $\frac{1}{4}$ x 6 $\frac{1}{2}$ x 16 $\frac{1}{2}$ in; 32.1 lb \$980

KR-V7040 225-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features Dolby Time Link digital-delay system; CD- and source-direct switches; motor-driven volume control. 4 audio inputs; MM phono input; 2 video inputs; 2 video outputs; connectors for 2 speaker pairs. Dolby 3 Stereo mode; 4 surround user presets; normal, wide, and phantom center-channel modes; adjustable digital delay; 20 AM/FM presets with labeling; direct station access; video dubbing capability; system remote control. 100 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.06% THD or 65 x 3 (front, center) + 15 x 2 (rear) rms into 8 ohms at 1,000 Hz with 0.9% THD. FM: S/N 73 dB and THD 0.5% at 1,000 Hz stereo; ch sep 40 dB at 1,000 Hz. AM: S/N 50 dB. 17 $\frac{1}{4}$ x 5 $\frac{3}{4}$ x 15 $\frac{1}{4}$ in; 26.5 lb \$500

KR-V6040 250-W A/V Receiver

4 channels with Dolby Surround decoder. Features Dolby Time Link digital-delay system; CD-direct switch; motor-driven volume control. 4 audio inputs; MM phono input; 2 video inputs; 2 video outputs; connectors for 2 speaker pairs. Dolby 3 Stereo mode; 4 surround user presets; adjustable digital delay; 10 AM/20 FM presets with labeling; direct station access; video dubbing capability; system remote control. 100 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.06% THD or 110 x 2 rms with 0.06% THD (front) + 15 x 2 rms with 0.9% THD (rear) into 8 ohms. FM: S/N 73 dB and THD 0.5% at 1,000 Hz stereo; ch sep 40 dB at 1,000 Hz. AM: S/N 50 dB. 17 $\frac{1}{4}$ x 5 $\frac{3}{4}$ x 15 $\frac{1}{4}$ in; 22 lb \$400

KR-V5040 80-W/ch Receiver

2 channels. Features discrete amp circuitry; separate power transformers for audio and control sections; CD-direct switch; motor-driven volume control. 3 audio inputs; MM phono input; connectors for 2 speaker pairs. 10 AM/20 FM presets with scan; direct station access; A/B speaker switching; switchable loudness; system remote control. 80 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.09% THD. FM: THD 0.5% and S/N 73 dB at 1,000 Hz stereo; ch sep 45 dB at 1,000 Hz. AM: S/N 50 dB. 17 $\frac{1}{4}$ x 5 $\frac{3}{4}$ x 13 $\frac{1}{4}$ in; 18.7 lb \$300

LUXMAN

The following feature multiroom capability.

RV-371 295-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features voltage-driven amplification; Duo-Beta feedback loop; star topology. 11 A/V inputs; front-panel S-video A/V input; headphone jack. 4 simulated-surround modes; variable digital delay; video dubbing capability; separate A/V rec-out selectors. 70 W x 2 with 0.04% THD (front) + 55 x 1 with 0.04% THD (center) + 50 x 2 with 0.05% THD (rear), cont avg into 8 ohms .. \$1,500

R-361 100-W/ch Receiver

2 channels. Features voltage-driven amplification; Duo-Beta feedback loop; star topology. 11 A/V inputs; front-panel S-video A/V input; fixed line-level output; headphone jack. Video dubbing capability; separate A/V rec-out selectors; one-touch CD-to-tape dubbing with compatible equipment. 100 W x 2 cont avg into 8 ohms with 0.04% THD \$1,100

R-351 55-W/ch Receiver

2 channels. Features voltage-driven amplification; Duo-Beta feedback loop; star topology. Fixed line-level outputs. Two-way dubbing capability; 8-position rec-out selector; one-touch CD-to-tape dubbing with compatible equipment. 55 W x 2 cont avg into 8 ohms with 0.05% THD. FM: 50-dB quieting sens 14 dBf mono, 38 dBf stereo; cap ratio 1.5 dB; alt-ch sel 65 dB. 17 $\frac{1}{4}$ x 5 x 14 $\frac{1}{2}$ in; 19.2 lb \$650

MARANTZ

SR-92 365-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features motor-driven volume control; multiroom capability. 4 video inputs including front-panel composite/S-video A/V input; S-video and composite-video inputs and outputs; line-level subwoofer output; banana-plug connectors for 9 speakers; pre-out/main-in loops for each channel; 2 antenna inputs. Hall, matrix, and simulated-stereo surround modes with adjustable digital delay; 30 AM/FM presets with wide/narrow IF memory and 2-week battery-free backup; direct station access; programmable remote control. 110 W x 2 from 20-20,000 Hz (front) + 75 x 1 from 40-20,000 Hz (center) + 35 x 2 from 40-20,000 Hz (rear), all rms into 8 ohms. S/N 75 dB MM, 82 dB line. FM: cap ratio 1 dB; THD 0.5% and S/N 68 dB stereo at 1,000 Hz; alt-ch sel 60 dB wide, 70 dB narrow. Gold finish with matching side panels. 17 $\frac{1}{4}$ x 5 $\frac{3}{4}$ x 15 in; 34 lb \$1,099

SR-82 285-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features multiroom capability; motor-driven volume control. 7 audio inputs; 4 composite-video inputs; 2 S-video inputs; front-panel S-video input; coaxial CATV input; 2 antenna inputs; pre-out/main-in loops; subwoofer output with 70-Hz 12-dB/oct crossover; RC-5 interface for remote compatibility with Marantz components. Hall- and matrix-surround and simulated-stereo modes; 30 AM/FM presets, each with memory for alphanumeric label, IF-bandwidth setting, and antenna input; auto preset store; programmable remote control. 75 W x 3 (front, center) + 30 x 2 (rear) into 8 ohms. 17 $\frac{1}{4}$ x 5 $\frac{3}{4}$ x 15 in \$849

McINTOSH

MAC 4300V 100-W/ch Receiver

2 channels. Features SLL tuning system; DMOS-FET FM amp tuner; J-FET AM section; MPX filter; anti-clipping circuitry. 2 tape-monitor loops; 2 infrared-sensor inputs for multiroom control. 5-band EQ; loudness control; 6 AM/FM presets; signal-strength indicator; remote control. 100 W x 2 cont avg into 8 or 4 ohms. FR 20-20,000 Hz +0, -0.5 dB; THD 0.02%; S/N 80 dBA phono, 90 dBA line. FM: 50-dB quieting sens 37 dBf stereo; cap ratio 1.5 dB; S/N 75 dB stereo. 18 $\frac{1}{2}$ x 6 $\frac{1}{2}$ x 14 in; 34.5 lb \$2,995

MAC 4280 75-W/ch Receiver

2 channels. Features anti-clipping circuitry; MPX filter. 3-band EQ; 5 AM/FM presets; station scan; signal-strength indicator. 75 W x 2 cont avg into 8 ohms. FR 20-20,000 Hz +0, -0.5 dB; THD

RECEIVERS

0.03%; S/N 100 dB. FM: THD 0.1%; S/N 75 dB stereo. 18¼ x 5¼ x 15½ in; 25 lb \$1,995

MITSUBISHI

HTS-300 400-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features Dolby Time Link digital-delay system; high-cut filters; video processor with comb-filter, Y/C combiner, and wide-band amplifier. 11 rear-panel and 2 front-panel inputs; front-, center-, and rear-channel line-level outputs; subwoofer, multiroom, monitor, 3 record, and 3 S-video record outputs; headphone jack. Stadium, club, and theater surround modes; 16 AM/FM presets; programmable multiroom remote control. 100 W x 2 (front) + 100 x 1 (center) + 50 x 2 (rear), all rms into 8 ohms with 1% THD. 16¼ x 6¼ x 16½ in; 39 lb \$1,699

M-R8010 300-W A/V Receiver

4 channels with Dolby Pro Logic decoder. Features subsonic and high-cut filters; auto calculation of room-delay setting; stereo blend; motor-driven volume control. Phono input and 6 A/V inputs; 2 S-video inputs; center-channel, subwoofer, surround, and monitor outputs; headphone jack. Stadium, club, and theater surround modes; 16 AM/FM presets; programmable remote control. 125 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.05% THD (front) + 25 x 2 into 8 ohms from 50-10,000 Hz with 0.5% THD (rear). S/N 80 dB \$1,399

NAD

The following feature extended-dynamic-power circuitry and soft-clipping circuitry to prevent speaker-damaging distortion.

Model 705 40-W/ch Receiver

2 channels. Features dual-gate MOSFET PLL tuner design; infrasonic filtering in phono stage; IF-count circuitry. 7 line-level inputs; 2 tape-monitor loops; buffered multiroom output; 5-way binding posts. Independent listen/rec capability; loudness and tone controls; 39 AM/FM presets; remote control. 40 W x 2 cont avg into 8 ohms from 20-20,000 Hz ±0.5 dB with 0.03% THD. S/N 76 dBA phono, 90 dBA line; dynamic headroom



Onkyo TX-SV909PRO

3.5 dB. FM: 50-dB quieting sens 35 dBf stereo; cap ratio 1.8 dB; alt-ch sel 60 dB \$499

Model 701 25-W/ch Receiver

2 channels. Features infrared-repeater input for multiroom applications; switchable phono/line-level input. 20 AM/FM presets; remote control. 25 watts x 2 \$349

Model 7225PE 20-W/ch Receiver

2 channels. Features infrasonic filter. Gold-plated phono inputs; 5-way speaker binding posts; pre-out/main-in loops. Bass EQ; imp selector. 20 W x 2 cont avg into 8 ohms from 20-20,000 Hz +0.5, -1 dB with 0.03% THD. S/N 75 dBA MC, 85 dBA line; dynamic headroom 4 dB. FM: 50-dB quieting sens 37 dBf stereo; cap ratio 1.5 dB; alt-ch sel 58 dB. 16½ x 3¼ x 10¼ in; 12 lb \$299



NAKAMICHI

The following, except AV-1 and AV-2, feature multiroom capability with inputs for up to 3 infrared repeaters.

AV-1 310-W A/V Receiver

5 channels with digital Dolby Pro Logic decoder and DSP. Full-range mono line-level output; 3 composite/S-video inputs; composite/S-video video-monitor output; pre-out/main-in loops. 3 DSP modes; adjustable delay time and mode; 4 user presets with alphanumeric labeling; 30 AM/FM presets with alphanumeric labeling; programmable remote control. 100 W x 2 into 8 ohms from 20-20,000 Hz (front) + 50 x 1 into 8 ohms at 1,000 Hz (center) + 30 x 2 into 8 ohms at 1,000 Hz (rear), all with 0.1% THD \$1,200

AV-2. As above, 70 W x 2 (front) + 35 x 1 (center) + 20 x 2 (rear). No S-video connectors; remote control not programmable \$850

RE-1 80-W/ch Receiver

2 channels. Features isolated-ground topology; multiregulated power supply; video buffer amp; PLL tuner with dual-gate MOSFET, ceramic resonator multiplex section, and isolation buffer at output. 3 video inputs; 2 video outputs; pre-out/main-in loops. 10 AM/FM presets; A/B speaker switching; remote control. 80 W x 2 into 8 ohms. FR 20-20,000 Hz +0, -0.5 dB; THD 0.1%; S/N 100 dB. FM: 50-dB quieting sens 37.5 dBf stereo. 17 x 4 x 14½ in; 24 lb \$799

RE-2 55-W/ch Receiver

2 channels. Features isolated-ground topology; multiregulated power supply; PLL tuner with dual-gate MOSFET and isolation buffer at output. Pre-out/main-in loops. 10 AM/FM presets; A/B speaker switching; remote control. 55 W x 2 into 8 ohms. FR 20-20,000 Hz +0, -0.5 dB; THD 0.1%; S/N 100 dB. FM: 50-dB quieting sensitivity 38.5 dBf stereo; capture ratio 2 dB. 17 x 4 x 14½ in \$599

ONKYO

TX-SV909PRO 450-W A/V Receiver

7 channels with digital Dolby Pro Logic decoder. Features 3 power transformers; motor-driven volume control. 5 audio inputs; 6 S-video inputs; fiber-optic digital input; 5 audio outputs; 3 S-video outputs; line-level front, rear, center-channel, front-enhance, and subwoofer outputs. Ambisonic surround decoder; 8 surround modes; 40 AM/FM presets; 6 preset groups with scan; direct station access; A/V and audio-only rec selectors; video dubbing capability; source-direct switch; on-screen displays; sleep timer; programmable remote control. 110 W x 2 rms into 8 ohms, 260 x 2 max into 3 ohms, or 110 x 3 (front, center) + 30 x 2 (rear) + 30 x 2 (front enhance) \$1,800

TX-SV70PRO 315-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features Dolby 3 Stereo mode. 6 audio and 4 video inputs; front-panel A/V input; line-level front, rear, center-channel, and subwoofer outputs; 5-way binding posts; headphone jack. Hall and matrix surround modes; adjustable digital delay; on-screen displays; 30 AM/FM presets; 6 preset groups; direct station access; FM-mute and tuning-level switches; sleep timer; programmable remote control. 90 W x 2 rms or 85 x 3 rms (front, center) + 30 x 2 (rear) \$850

TX-SV303PRO 184-W A/V Receiver

4 channels with Dolby Pro Logic decoder. Features motor-driven volume control. 6 audio inputs; 2 video inputs; rear and center-channel line-level outputs. Hall surround mode; adjustable digital delay; 40 AM/FM presets with battery-free backup; 6 preset groups with scan; direct station access; video dubbing capability; remote control. 80 W x 2 rms + 12 x 2 into 8 ohms or 155 x 2 into 3 ohms \$500

TX-905 144-W Receiver

4 channels. Features auto tuner reception-optimization system to select mode, high-blend, and sens; motor-driven volume control. 6 audio inputs; 2 video inputs. 40 AM/FM presets with battery-free backup; 6 preset groups with scan; direct station access; video dubbing capability; rec-out selector; source-direct switch; sleep timer; remote control. 60 W x 2 rms + 12 x 2 into 8 ohms or 130 x 2 max into 3 ohms \$400

OPTIMUS, BY RADIO SHACK

STAV-3250 220-W A/V Receiver

4 channels with Dolby Surround decoder. Features digital-synthesis tuner. 3 A/V inputs; front-panel A/V input; 2 audio inputs including phono; 2 tape-monitor loops; video-monitor output. Concert-hall and stadium modes; 5-band graphic EQ; 30 AM/FM presets with labeling; video and audio dubbing; alphanumeric display. 100 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.05% THD (front) + 10 x 2 rms into 8 ohms at 1,000 Hz with 0.5% THD (rear). S/N 82 dB phono, 94 dB line; THD 0.008% at 1,000 Hz, 80 W. FM: S/N 77 dB; cap ratio 1.5 dB; THD 0.14% stereo; image rej 80 dB; IF rej 90 dB \$450

STAV-3160 245-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features digital-synthesis tuner. 3 audio inputs including phono; 2 A/V inputs; video-monitor output. Dolby 3 Stereo mode; concert-hall sound field; 30 AM/FM presets with labeling; video dubbing capability. 100 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.05% THD (front) + 15 x 3 rms into 8 ohms at 1,000 Hz with 0.5% THD (center, rear). S/N 82 dB phono, 94 dB line; THD 0.008% at 1,000 Hz. FM: S/N 77 dB; cap ratio 1.5 dB; THD 0.14% stereo; image rej 80 dB; IF rej 60 dB \$400

STA-2170 100-W/ch Receiver

2 channels. 3 line-level inputs; MM phono input. 8 AM/16 FM presets; loudness, FM mono/mute, and tape-monitor controls. FR 20-20,000 Hz ±1 dB; S/N 82 dB phono, 95 dB line. FM: cap ratio 2 dB; IF rej 85 dB; THD 0.4%; ch sep 45 dB at 1,000 Hz. 4½ x 17¼ x 13½ in \$300

PARASOUND

R/DR-50 50-W/ch Receiver

2 channels. Features FMX digital tuner; discrete high-current output. 6 inputs. 16 AM/FM presets; scan/manual tuning; remote control. 50 W x 2. FR 10-40,000 Hz; dynamic headroom 1.5 dB; THD 0.2%; S/N 90 dB. 19 x 3½ x 12½ in \$435

PHILIPS

The following feature Philips's ESI bus for communication among 900 Series components, 30 AM/FM presets, and direct station access.

FR-940 240-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features dual-room capability; auto cooling fan; electronic speaker switching. 8 audio and 4 video

The World's Most Complete Music Source

ANY CD IN THIS ISSUE OF STEREO REVIEW, \$13.99*

VIRTUALLY EVERY TITLE IN PRINT!

MAJOR LABELS – AND OVER 1,000 INDEPENDENTS

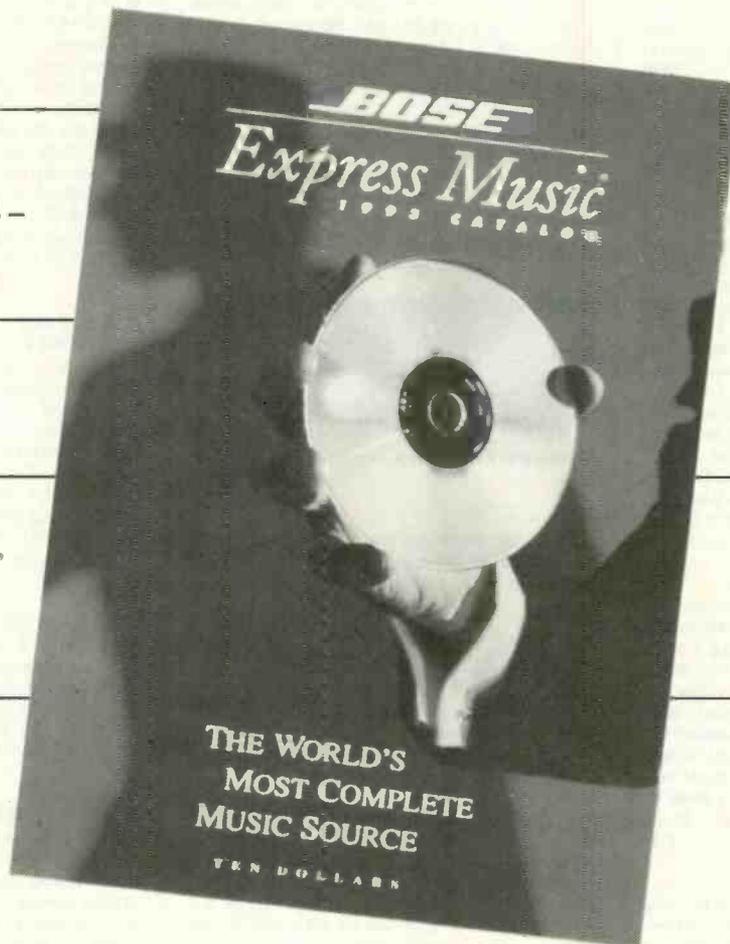
Including Chesdy, Discovery and Nimbus!

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

We'll keep you current all year with updates featuring best-sellers, new releases, samplers, recommendations and more.

ONLY \$6 — completely refunded with 1st purchase.

COMPETITIVE PRICES

And special notice of sales. Plus, our catalog coupons let you save on future orders.

*Offer valid for CDs priced below \$17.00 only.

Subscription/Mail Order Form

YES, send me the current Bose® Express Music® CD, Tape and Video catalog plus *free* updates for just **\$6.00/YR** — completely refunded with my first order from the catalog. (Additional \$6.00 S&H charge for orders outside U.S. except APO/FPO.)

PLEASE SEND ME the attached list of recordings (include artist, title, format [CA or CD] and quantity). I'm enclosing \$13.99/CD + \$3.95 S&H per total order. Additional 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.

BOSE EXPRESS MUSIC

The Mountain, Framingham, MA 01701-9323 Fax: 508-875-0604

For fastest service: **Knowledgeable operators standing by.**

1-800-451-BOSE

Outside of U.S. and Canada: 1-508-879-1916 x2008

Name

Address

City

State Zip

BOSE

Express Music

SR02

RECEIVERS

inputs; 2 digital inputs; 2 audio and 2 video outputs; 1 digital output. EQ presets; 5 surround modes; 4 digital-delay settings; video dubbing; remote control. 100 W x 2 (front) + 20 x 1 (center) + 10 x 2 (rear), all into 8 ohms ... \$480

FR-930 170-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features dual-room capability; electronic speaker switching. 7 audio and 3 video inputs; 2 audio and 2 video outputs. EQ presets; 5 surround modes; 4 digital-delay settings; video dubbing; remote control. 65 W x 2 (front) + 20 x 1 (center) + 10 x 2 (rear), all into 8 ohms ... \$430

PIONEER

Models with auto source control feature one-touch power-on and auto recall of 2 source components' previous operating parameters.

VSX-D901S 395-W A/V Receiver

5 channels with Dolby Pro Logic decoder and DSP. Features multiroom/multisource capability; source-direct switch. 6 video and 5 audio inputs including phono; pre-out/main-in loops; front-panel composite/S-video A/V input; 4 S-video inputs and 3 S-video outputs including 2 VCR loops and front-panel input; 2 video-monitor outputs; subwoofer output; headphone jack. Jazz, dance, church, hall, and theater ambience presets; 30 AM/FM presets with labeling; direct station access; programmable SR-system remote control. 125 W x 2 into 8 ohms from 20-20,000 Hz with 0.005% THD (front) + 55 x 1 into 8 ohms at 1,000 Hz with 0.05% THD (center) + 45 x 2 into 8 ohms (rear) ... \$1,140

VSX-D701S 275-W A/V Receiver

5 channels with Dolby Pro Logic decoder and DSP. Features Dolby Time Link digital-delay system; multiroom capability. 5 video and 4 audio inputs including phono; front-panel A/V input; video-monitor output; 2 audio and 2 video outputs; line-level output for each channel. Jazz, dance, church, hall, theater, and simulated-surround ambience presets; 30 AM/FM presets with labeling; programmable SR-system remote control. 110 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.05% THD or 65 x 3 (front, center) + 40 x 2 (rear) into 8 ohms ... \$785

VSX-511S 235-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features Dolby Time Link digital-delay system; multiroom capability; quartz-synthesis tuning. 4 video and 4 audio inputs including MM phono; video-monitor output; 2 audio and 2 video outputs; headphone jack. Dolby 3 Stereo, studio/simulated surround, and simulated-stereo modes; auto source control; video dubbing; 30 AM/FM presets; programmable SR-system remote control. 100 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.05% THD or 65 x 3 (front, center) + 20 x 2 (rear) into 8 ohms ... \$575

VSX-451 225-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features Dolby Time Link digital-delay system; multiroom capability. 4 audio and 3 video inputs; center-channel output; 2 audio outputs; 2 video outputs; 1 video-monitor output; headphone jack. Dolby 3 Stereo, studio/simulated surround, and simulated-stereo modes. 30 AM/FM presets; SR-system remote control. 80 W x 2 cont avg into 8 ohms with 0.5% THD (front) + 25 x 1 (center) + 20 x 2 (rear) ... \$435

VSX-401 240-W A/V Receiver

4 channels with Dolby Surround decoder. Features discrete output transistors; multiroom ca-



pability; motor-driven volume control. 3 audio inputs including phono; 2 video inputs; 1 audio and 2 video outputs; 1 video-monitor output; headphone jack. Studio/simulated surround modes; simulated-stereo mode; adjustable digital delay; 30 AM/FM presets with scan; direct station access; 7-band graphic EQ; SR-system remote control. 100 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.05% THD (front) + 20 x 2 into 8 ohms at 1,000 Hz with 0.8% THD (rear) ... \$395

SX-311R 70-W/ch Receiver

2 channels. 5 audio inputs including phono; headphone jack. 30 AM/FM presets with scan; direct station access; 5-band graphic EQ; SR-system remote control. 70 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.8% THD or 145 x 2 into



Sherwood RV-6010RS

2 ohms. FM: 50-dB quieting sens 38.6 dBf stereo; S/N 70 dB at 85 dBf stereo; alt-ch sel 50 dB at 400 Hz. 16 $\frac{1}{2}$ x 5 $\frac{1}{2}$ x 11 $\frac{1}{2}$ in; 15 lb ... \$285

Elite Series

All models feature SR-system remote-control compatibility.

VSX-95 370-W A/V Receiver

5 channels with Dolby Pro Logic decoder and DSP. Features 5 discrete amplifiers; multiroom/source capability; copper-plated chassis. 6 video and 5 audio inputs; 4 S-video inputs and 3 S-video outputs including 2 VCR loops; pre-out/main-in loops for each channel; gold-plated terminals. Jazz, dance, church, hall, and theater ambience presets; simulated-stereo mode; adjustable digital delay; 30 AM/FM presets; FL display; programmable remote control. 125 W x 2 into 8 ohms from 20-20,000 Hz with 0.005% THD (front) + 40 x 3 (center, rear) ... \$1,350

VSX-52 190-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features multiroom capability; Dolby Time Link digital-delay system. 4 audio and 4 video inputs; line-level output for each channel; headphone jack; gold-plated terminals. Simulated/studio surround, simulated-stereo, and Dolby 3 Stereo modes; adjustable digital delay; video dubbing; 30 AM/FM presets with labeling; direct station access; SR-system remote control. 100 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.05% THD or 50 x 3 (front, center) + 20 x 2 (rear) ... \$750

PROTON

AV-646 60-W/ch Receiver

2 channels. Features Apex Aural Exciter to enhance vocal clarity; quartz-PLL tuner with Schott II circuitry and NR; motor-driven volume control. Line-level output; headphone jack. 9 AM/18 FM presets; remote control. 60 W x 2 cont avg into 8 ohms. FM: AM rej 65 dB; cap ratio 1 dB. 18 $\frac{1}{2}$ x 4 $\frac{1}{2}$ x 15 $\frac{1}{2}$ in; 30 lb ... \$900

AV-445 50-W/ch Receiver

2 channels. Features PLL four-gang GASFET tuner. Line-level outputs; tape-monitor loop. Rotary tuning; tone controls; loudness switch; 8 AM/16 FM presets; mono/stereo switch; remote control. 50 W x 2 into 8 ohms. FR 20-20,000 Hz \pm 0.2 dB; THD 0.02%; S/N 100 dBA line; FM: AM rej 63 dB; cap ratio 1.5 dB at 45 dBf ... \$400

ROTEL

RX950AX 50-W/ch Receiver

2 channels. 5 inputs; headphone jack. Auto/manual tuning; mono switch; tone defeat; remote control. 50 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.03% THD. FM: 50-dB quieting sens 14.8 dBf mono, 37.2 dBf stereo; S/N 80 dB mono, 75 dB stereo; THD (at 65 dBf and 1,000 Hz) 0.07% mono, 0.25% stereo; cap ratio 1 dB; alt-ch sel 60 dB. 17 $\frac{1}{2}$ x 4 $\frac{1}{2}$ x 13 $\frac{1}{2}$ in ... \$600

RX940AX. As above. 40 W x 2 cont avg into 8 ohms from 20-20,000 Hz 0.03% THD. Alt-ch sel 63 dB. 17 $\frac{1}{2}$ x 3 $\frac{1}{2}$ x 13 $\frac{1}{2}$ in ... \$400

SANSUI

RZ-9500AV 300-W A/V Receiver

5 channels with Dolby Pro Logic decoder and DSP. Features quartz-PLL digital-synthesis tuner. 4 audio and 3 video inputs; rear and center line-level outputs; speaker-level inputs; tape-monitor loop. 3 surround modes; 4 surround presets; adjustable digital delay; test-tone generator; source-direct switch; 30 AM/FM presets; preset scan; manual tuning; programmable remote control. 100 W x 2 (front) + 40 x 1 (center) + 30 x 2 (rear), all cont avg into 8 ohms with 0.02% THD ... \$749

RZ-5500AVII 70-W/ch Receiver

2 channels. 4 speaker terminals. Bass boost; variable loudness; direct station access; 30 AM/FM presets; remote control. 70 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.05% THD. S/N 73 dB phono, 90 dB line. FM: 50-dB quieting sens 38.2 dBf stereo. 17 x 5 x 13 $\frac{1}{2}$ in; 21 lb ... \$429

SHERWOOD

RV-6010RS 276-W A/V Receiver

5 channels with Dolby Pro Logic decoder. Features Analog Devices surround decoder; motor-driven volume control. 5 audio and 3 video inputs including phono; front-panel composite-video A/V input; pre-out/main-in loops; 2 main speaker outputs; Sherwood Digi-Link multiroom connections. Theater and stadium sound fields; Dolby 3 Stereo mode; source-direct switch; loudness switch; tone controls; 30 AM/FM presets; programmable remote control. 105 W x 2 (front) + 30 x 1 (center) + 18 x 2 (rear), all into 8 ohms with 0.03% THD. FR 20-20,000 Hz \pm 0.5 dB phono, 1-100,000 Hz +0, -1.5 dB line; S/N 77 dB phono, 100 dB line ... \$500

RV-5010R 200-W A/V Receiver

4 channels with Dolby Surround decoder. 4 audio inputs; 3 video inputs including 1 on front panel; pre-out/main-in loops. Theater and stadium sound fields; independent video switching; 30 AM/FM presets; video dubbing; sleep timer; remote control. 85 W x 2 + 15 x 2 into ohms with 0.05% THD. FM: 50-dB quieting sens 37.5 dBf stereo ... \$300

SONY

All models, except the ES Series, feature a digital-synthesis tuner with 30 AM/FM presets and a selectable dynamic bass boost.

RECEIVERS

STR-D2090 285-W A/V Receiver

5 channels with digital Dolby Pro Logic decoder and DSP. Features 2-room capability; digital 3-band parametric EQ with ± 10 -dB boost/cut; digital dynamic-range-compressor/expander. 6 audio inputs; 3 A/V inputs including one on front panel; 2 video-monitor outputs; tape-monitor loop; line-level center-channel output. Church, jazz, live, disco, theater, stadium, opera, and 2 hall ambience presets; 10 user ambience presets; programmable remote control. 120 W x 2 into 8 ohms with 0.04% THD or 75 x 3 into 8 ohms with 0.8% THD (front, center) + 30 x 2 into 8 ohms with 0.8% THD (rear) \$1,000

STR-D1090. As above, without 2-room capability, compressor/expander, line-level center-channel output, or on-screen displays. Remote control not programmable \$630

STR-D990 245-W A/V Receiver

5 channels with Dolby Pro Logic decoder. 5 audio inputs; 3 A/V inputs including 1 on front panel; 1 video-monitor output; 2 center-channel outputs; tape-monitor loop. Hall, live, disco, theater, and simulated ambience presets; 7 user-defined ambience presets; variable delay time; sound-field memory for tuner presets; remote control. 100 W x 2 into 8 ohms with 0.1% THD or 65 x 3 into 8 ohms with 0.1% THD (front, center) + 25 x 2 into 8 ohms at 1,000 Hz with 0.8% THD (rear). FM: 50-dB quieting sens 38.3 dBf stereo; cap ratio 1.2 dB \$480

STR-D790. As above, 80 W x 2 into 8 ohms with 0.1% THD (front) + 20 x 3 into 8 ohms at 1,000 Hz with 0.8% THD (center, rear) \$380

ES Series

The following feature Class A circuitry, separate transformers for audio and control functions, a source-direct switch, and two AC outlets.

STR-GX99ES 285-W A/V Receiver

4 channels with digital Dolby Pro Logic decoder and DSP. Features multiroom capability; variable digital delay from 15-30 ms. 5 audio inputs; 3 A/V inputs including 1 on front panel; line-level center- and rear-channel outputs; tape-monitor loop; 2 video-monitor outputs; 2 center-channel outputs. Icon- and window-based on-screen displays; 20 user/factory ambience presets including opera, church, stadium, live, jazz, disco, theater, and 2 hall; digital 3-band parametric EQ; digital dynamic-range compressor/expander; programmable remote control. 120 W x 2 into 8 ohms from 20-20,000 Hz with 0.08% THD or 75 x 3 (front, center) + 60 x 1 (rear) \$1,000

STR-GX69ES 300-W A/V Receiver

4 channels with Dolby Pro Logic decoder. Features 3-position digital delay; source-direct switch. 5 audio and 2 A/V inputs; main-amp inputs for front channels; video-monitor output; line-level center- and rear-channel outputs; 2 center-channel speaker outputs; signal-processor and tape-monitor loops. Hall and simulated surround modes; programmable remote control. 100 W x 2 into 4/8 ohms from 20-20,000 Hz with 0.08% THD (front) + 50 x 2 into 8 ohms at 1,000 Hz with 0.8% THD (center, rear). S/N 85 dB phono, 86 dB line. 17 x 5 1/4 x 14 1/4 in; 30 lb. \$700

STR-GX59ES. As above, 80 W x 2 into 4/8 ohms with 0.08% THD (front) + 30 x 2 into 8 ohms (center, rear). Without main-amp inputs or surround modes. Remote control not programmable. 28 lb \$600

TEAC

AG-V1200 230-W A/V Receiver

4 channels with Dolby Surround decoder. Features quartz-PLL tuner. Surround input-level cali-



bration; hall and theater surround modes; 30 AM/FM presets; tone and variable-loudness controls; remote control. 100 W x 2 (front) + 15 x 2 (rear), all cont avg into 8 ohms with 0.08% THD. S/N 73 dB mono, 40 dB stereo. FM: cap ratio 1.5 dB; altch sel 65 dB \$450

AG-V1020 200-W/ch Receiver

2 channels. Features discrete design; quartz-PLL tuner. 2 A/V inputs; 1 A/V output; headphone jack. 30 AM/FM presets; preset scan; remote control. 100 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.08% THD. S/N: 70 dB phono, 94 dB line. FM: AM rej 60 dB; cap ratio 1.5 dB; image rej 55 dB; THD (at 1,000 Hz) 0.2% mono, 0.4% stereo; S/N 75 dB mono, 70 dB stereo. 17 1/4 x 5 1/4 x 13 1/4 in; 23 lb \$380

TECHNICS

SA-GX910 370-W Digital A/V Receiver

5 channels with Dolby Pro Logic decoder and DSP. Features 1-bit MASH D/A converter; quartz-synthesis digital-encoded rotary tuning; Class A amp circuitry; cooling fan. 2 fiber-optic inputs; 5 audio and 4 video inputs; 3 S-video inputs; front-panel A/V input; 1 fiber-optic output; pre-out/main-in loops. Hall, stadium, and club surround modes; Dolby 3 Stereo mode; 4-band parametric EQ with 3 fixed and 3 user presets; 15-band spectrum analyzer; normal and phantom center-channel modes; adjustable digital delay (15-30 ms); 30 AM/FM presets; programmable remote control with LCD. 125 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.008% THD (front) + 60 x 1 from 100-15,000 Hz into 8 ohms with 0.8% THD (center) + 30 x 2 into 8 ohms at 1,000 Hz with 0.8% THD (rear). S/N 70 dBA \$1,000

SA-GX730 370-W A/V Receiver

5 channels with Dolby Pro Logic decoder and DSP. Features quartz-synthesis digital-encoded rotary tuning; Class A amp circuitry; cooling fan. 5 audio and 4 video inputs; front-panel A/V input; pre-out/main-in loops. Hall, stadium, and club surround modes; Dolby 3 Stereo mode; 4-band parametric EQ with 3 fixed and 3 user presets; 15-band spectrum analyzer; normal and phantom center-channel modes; adjustable digital delay



Yamaha RX-V1050

(15-30 ms); 30 AM/FM presets; remote control. 125 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.008% THD (front) + 60 x 1 from 100-15,000 Hz with 0.8% THD (center) + 30 x 2 into 8 ohms at 1,000 Hz with 0.8% THD (rear) \$750

SA-GX530 245-W A/V Receiver

4 channels with Dolby Pro Logic decoder and DSP. Features quartz-synthesis digital-encoded rotary tuning; Class A amp circuitry; cooling fan. 4 audio and 2 video inputs. Hall, stadium, and club surround modes; Dolby 3 Stereo mode; 4-band parametric EQ with 3 fixed and 3 user

presets; 15-band spectrum analyzer; normal and phantom center-channel modes; 30 AM/FM presets; remote control. 110 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.05% THD (front) + 15 x 1 at 1,000 Hz with 0.8% THD (center) + 10 x 1 into 8 ohms with 0.8% THD (rear) \$450

VECTOR RESEARCH

VRX-5200R 50-W/ch Receiver

2 channels. Features 8 discrete output transistors; quartz-synthesis tuning. Pre-out/main-in loops; video-monitor output; A/V-processor loop. Matrix surround; 20 AM/FM presets; scan tuning; 2 AC outlets; separate FM mute and mono; video signal routing. THD 0.07%; FR 10-50,000 Hz \$370

VRX-3600R 40-W/ch A/V Receiver

2 channels. Features 8 discrete output transistors; quartz-synthesis tuning. Pre-out/main-in loops; video-monitor output; A/V-processor loop. Matrix surround; 20 random AM/FM presets; auto scan; 2 AC outlets; separate FM mute and mono; video signal routing. 40 W x 2 into 8 ohms. THD 0.08%; FR 10-50,000 Hz \$320

YAMAHA

RX-V1050 390-W A/V Receiver

5 channels with digital Dolby Pro Logic decoder and DSP. Features direct-PLL IF count tuning; auto input balance. 8 audio and 4 video inputs; 3 S-video inputs; subwoofer output with low-pass filter; pre-out/main-in loops for main channels; line-level outputs for rear and center channels; switchable center-channel outputs for 2 speakers. 4 DSP modes; digital test-tone generator for Dolby Pro Logic; 40 AM/FM presets; programmable RS-system remote control. 110 W x 3 (left, right, center) into 8 ohms from 20-20,000 Hz with 0.015% THD + 30 x 2 (rear) at 1,000 Hz with 0.08% THD \$1,199

RX-V850. As above, no S-video inputs. 7 audio inputs; 3 video inputs. 80 W x 3 (left, right, center) into 8 ohms + 25 x 2 (rear) \$799

RX-950 120-W/ch Receiver

2 channels. Features Class A amplification; direct-PLL IF count synthesis tuning; motor-driven input selector. 5 audio and 2 video inputs; 2 line-level outputs for multiroom systems; pre-out/main-in loops; 5-way binding posts. 40 AM/FM presets; remote control. 120 W x 2 cont avg into 8 ohms with 0.015% THD or 340 x 2 dynamic into 2 ohms \$899

RX-750. As above, without multiroom outputs. Class AB amplification. 80 W x 2 cont avg into 8 ohms with 0.015% THD or 200 x 2 dynamic into 2 ohms \$529

RX-V660 205-W A/V Receiver

5 channels with digital Dolby Pro Logic decoder and DSP. Features PLL IF count tuning; auto input balance. 7 audio and 3 video inputs; 2 tape-monitor loops; line-level center-channel output; pre-out/main-in loops for front channels. 4 DSP modes; 40 AM/FM presets; RS-system remote control. 65 W x 2 (front) into 8 ohms from 20-20,000 Hz with 0.02% THD + 25 x 3 (center, rear) into 8 ohms with 0.08% THD \$649

RX-550 60-W/ch Receiver

2 channels. Features direct PLL IF count synthesis tuning; motor-driven input selector. 6 audio inputs; 5-way binding posts. 40 AM/FM presets; signal-strength meter; defeatable tone, balance, and loudness controls; rec-out selector; A/B speaker switching; sleep timer; remote control. 60 W x 2 cont avg into 8 ohms with 0.015% THD \$399

AMPLIFIERS

POWER AMPLIFIERS

ACOUSTIC RESEARCH

Limited \$250 250-W/ch Amplifier

2 channels. Features XLR and RCA connectors. 250 W x 2 into 8 ohms. 50 lb. \$2,900
Limited \$100. As above, 100 W x 2 ... \$1,800

ACURUS

A250 250-W/ch Amplifier

2 channels. Features Class A circuitry; bipolar-transistor output stage; glass-epoxy circuit board. 250 W x 2 into 8 ohms or 350 x 2 into 4 ohms. \$895
A100. As above, 100 W x 2 ... \$595

ADCOM

GFA-585 250-W Mono Amplifier

1 channel. Features 20 discrete transistors in output stage. 250 W x 1 into 8 ohms or 400 x 1 into 4 ohms. THD 0.002%; FR 20-20,000 Hz; damping factor 600. Black. \$1,200

GFA-565 300-W Mono Amplifier

1 channel. Features 20 discrete transistors in output stage. 300 W x 1 into 8 ohms, 450 x 1 into 4 ohms, or 850 x 1 into 2 ohms. S/N 106 dBA; dynamic headroom 1.6 dB into 4 ohms; input imp 50-700 ohms; input sens 2.15 V; damping factor 1,000 into 8 ohms. Black. 17 x 8 1/4 x 11 1/2 in; 45 lb. \$900

GFA-555II 200-W/ch Amplifier

2 channels. Features 1-ohm stability; low-negative-feedback design; constant damping factor; toroidal transformer; direct-coupled circuitry. 200 W x 2 into 8 ohms or 350 x 2 into 4 ohms. THD 0.04%; damping factor 800. \$850

GFA-545II 100-W/ch Amplifier

2 channels. Features 1-ohm stability; low-negative-feedback design; constant damping factor; toroidal transformer; direct-coupled circuitry. 100 W x 2 into 8 ohms or 150 x 2 into 4 ohms. THD 0.04%. 17 x 5 1/2 x 12 1/2 in; 25 lb. \$550

GFA-535II 60-W/ch Amplifier

2 channels. Features 1-ohm stability; low-negative-feedback design; constant damping factor; direct-coupled design; separate power transformers for each channel. 2 sets of speaker outputs. 60 W x 2 into 8 ohms or 100 x 2 into 4 ohms. THD 0.04%. 17 x 3 1/4 x 12 1/2 in. \$350

AMC

Model 2445 180-W Amplifier

4 channels. 45 W x 4 into 4 ohms or 100 x 2 into 8 ohms. FR 20-20,000 Hz ± 0.2 dB; THD 0.04%; S/N 100 dBA at 1 W; input imp 20 kilohms; damping factor 100. \$400

ARAGON

Palladium Mono 100-W/ch Amplifier

1 channel. Features Class A DC-coupled circuitry; dual-differential balanced design; matched output transistors. 100 W x 1 into 8 ohms, 600 x 1 into 4 ohms, or 800 x 1 into 2 ohms. 19 x 6 1/2 x 14 in; 65 lb. \$2,000

Model 4004 MkII 200-W/ch Amplifier

2 channels. Features dual-mono design; 2 power supplies; 2 toroidal transformers; quad-array transistor; Monster Cable output wiring. Gold-plated connectors. 200 W x 2 into 8 ohms, 400 x 2



into 4 ohms, or 700 x 2 into 2 ohms. S/N 120 dB; damping factor 200. 19 x 6 1/2 x 14 in. \$1,850
Model 2004. As above, 100 W x 2 into 8 ohms, 200 x 2 into 4 ohms, or 350 x 2 into 2 ohms. 44 lb. \$1,395

ARCAM

Delta 120 100-W/ch Amplifier

2 channels. Features dual-mono design; separate power supplies and toroidal transformers; bridgeable. Outputs for 2 speaker pairs. 100 W x 2 into 8 ohms, 150 x 2 into 4 ohms, or 300 x 1 into 8 ohms. \$1,100

AUDIO BY VAN ALSTINE

FET-Valve 500 250-W/ch Tube Amplifier

2 channels. Features hybrid vacuum tube and Class A MOSFET trans-imp circuitry. 250 W x 2 into 8 ohms. THD 0.01%. 17 x 7 1/2 x 14 1/2 in; 38 lb. \$1,995

Omega II 400 200-W/ch Amplifier

2 channels. Features active feedback design. 200 W x 2 into 8 ohms. Slew rate 500 V/s; THD 0.005%. 17 x 7 1/2 x 14 1/2 in; 45 lb. \$1,295

AUDIO DESIGN ASSOCIATES

MPA-500 2,000-W Amplifier

5 channels. Designed for home-theater applications. Features THX certification; separate chassis for power supply; fan cooling. 400 W x 5, 5 1/4 x 19 x 16 1/2 in (each chassis). \$5,900

MPA-6 700-W Amplifier

6 channels. Designed for home-theater applications. Features variable 20-200 Hz subwoofer crossover. Subwoofer output with level control;



B&K Components ST-202

5-way binding posts. Variable input sens and LED power indicators for each channel. 90 W x 5 + 250 x 1 (subwoofer). 5 1/4 x 19 x 16 1/2 in; 32 lb. \$1,595

PF-250 100-W/ch Amplifier

2 channels. Features MOSFET circuitry; 2-ohm stability; toroidal transformer; fan cooling. 20-segment LED power meter. 100 W x 2 into 8 ohms from 20-20,000 Hz with 0.07% THD, 160 x 2 into 4 ohms, or 240 x 2 into 2 ohms. S/N 95 dB; slew rate 15 V/ μ s. 19 x 5 1/4 x 16 1/2 in; 37 lb. \$1,495

AUDIO RESEARCH

D400 200-W/ch Amplifier

2 channels. Features Class AB design; dual-mono design; 40 multiple-emitter transistors in direct-coupled output stage; all hand-soldered

connections; separate transformers for input and output stages; 600-joule power supply; amplifier and speaker protection circuitry; 5 computer-designed polymer damping feet. Balanced XLR inputs; normal and inverted single-ended RCA inputs; brass output connectors. 200 W x 2 into 8 ohms or 400 x 2 into 4 ohms. Input sens 1.91 V rms; input imp 150 kilohms normal/inverted, 300 kilohms balanced; slew rate 50 V/ μ s; peak current 60 amperes/ch. 3-yr warranty. 19 x 9 x 17 1/4 in; 73 lb. \$4,995

D240 MkII 120-W/ch Amplifier

2 channels. Direct-coupled output stage with 12 high-current multiple-emitter transistors per channel; thermal-overload and DC current-sensing protection circuitry; 180-joule power supply. Normal and inverted RCA inputs; XLR connectors; gold-plated proprietary binding posts. 120 W x 2 into 8 ohms or 240 x 2 into 4 ohms. Input sens 1.6 V rms; input imp 150 kilohms normal/inverted, 300 kilohms balanced; negative feedback 7.7 dB; slew rate 50 V/ μ s. 19 x 5 1/4 x 11 1/2 in; 38 lb. \$2,995

AUDIOSOURCE

Amp One 60-W/ch Amplifier

2 channels. MOSFET circuitry; toroidal power transformer; soft-clipping output circuitry. Dual analog power-output meters; L/R output level controls. 60 W x 2 cont avg into 8 ohms or 170 x 1 max into 8 ohms. FR 20-20,000 Hz; THD 0.04%. \$300

AUDIRE

Tenendo 200-W/ch Amplifier

2 channels. Features dual-mono, Class AB design; modular construction; rail fuses; current sensing devices. Balanced XLR inputs. Combination circuit breaker/power switch for each channel. 200 W x 2 into 8 ohms. FR 2-100,000 Hz - 1 dB; IM 0.01%; slew rate 50 V/ μ s; damping factor 700. 19 x 7 x 10 in; 50 lb. \$1,750

Forte 125-W/ch Amplifier

2 channels. Features dual-mono design; bipolar transistors. 125 W x 2 into 8 ohms from 20-20,000 Hz with 0.05% THD. Hum & noise - 105 dB; IM 0.008%; slew rate 50 V/ μ s; damping factor 350 at 1,000 Hz. 19 x 5 1/4 x 10 in; 41 lb. \$1,050

Crescendo 75-W/ch Amplifier

2 channels. Features bipolar transistors. 75 W x 2 into 8 ohms from 20-20,000 Hz with 0.05% THD. Hum & noise - 100 dB; IM 0.01%; slew rate 45 V/ μ s; damping factor 300. 19 x 5 1/4 x 9 in; 22 lb. \$495
 MOSFET version. \$535

B & K COMPONENTS

Video-5 Sonata 525-W Amplifier

5 channels. For surround or multiroom applications. Gold-plated input/output connectors. Level controls. 105 W x 5. FR 5-45,000 Hz ± 3 dB; S/N 90 dB; dynamic headroom 0.9 dB; slew rate 20 V/ μ s; THD 0.09% at 1,000 Hz. 17 x 6 x 17 1/4 in; 40 lb. \$1,298

VMR-6 360-W Amplifier

6 channels. For surround or multiroom applications. Gold-plated inputs/output connectors. Level controls. 60 W x 6. FR 5-45,000 Hz ± 3 dB; S/N 94 dB; dynamic headroom 0.9 dB. 17 x 5 1/4 x 17 in; 27 lb. \$898

ST-202 Plus 200-W/ch Amplifier

2 channels. Balanced inputs. 200 W x 2 into 8 ohms. THD 0.09%; FR 5-45,000 Hz; S/N 95 dB;

AMPLIFIERS

slew rate 14 V/ μ s; dynamic headroom 1.1 dB. 17 x 5 1/4 x 17 in; 32 lb \$798

ST-140 105-W/ch Amplifier

2 channels. Features Class A design up to MOSFET output stage. Balanced inputs. 105 W x 2 into 8 ohms or 150 x 2 into 4 ohms. THD 0.09%; FR 5-45,000 Hz; S/N 95 dB; slew rate 14 V/ μ s; dynamic headroom 1.4 dB. 17 x 5 1/4 x 17 in; 25 lb ... \$548

BEDINI

BA-903 250-W/ch Amplifier

2 channels. Solid-state design. 250 W x 2 cont avg into 8 ohms with 0.15% THD or 500 x 2 cont avg into 4 ohms. IM 1%; FR 20-20,000 Hz; S/N 105 dB; dynamic headroom 3 dB; damping factor 500; slew rate 55 V/ μ s. 19 x 7 1/2 x 18 1/4 in; 66 lb \$3,250

BA-901. As above, 120 W x 2 cont avg into 8 ohms with 0.15% THD or 240 x 2 cont avg into 4 ohms. 19 x 5 1/4 x 14 1/2 in; 33 lb \$1,750

BEL

Model 2002 100-W/ch Amplifier

2 channels. Features dual-mono construction; two Class A amplifiers per channel; independent power supplies for each channel. Balanced outputs. Temperature, frequency, output, and load indicators for each amp section. 100 W x 2 cont avg into 8 ohms or 200 x 1 into 4 ohms. Input imp 22 kilohms; high-level sens 1.4 V; gain 26 dB; bandwidth 3-250,000 Hz with input filter. 19 x 7 1/4 x 14 1/4 in; 52 lb \$4,395

Model 1001P 400-W Mono Amplifier

1 channel. Features Class A design; temperature-stabilizing circuitry; fault-sensing system. Balanced output. Balanced input optional. 400 W x 1 into 1 ohm. Input imp 13.5 ohms; high-level sens 1 V; FR 5-200,000 Hz. 17 1/4 x 7 1/4 x 12 3/4 in; 28 lb \$2,195

Model 1001 MkII 50-W/ch Amplifier

2 channels. Features Class A design; fault-sensing system. Balanced output; balanced input optional. 50 W x 2 cont avg into 8 ohms, 100 x 2 into 4 ohms, or 200 x 1. 17 1/4 x 7 1/4 x 12 3/4 in; 28 lb \$1,995

BERNING

EA-2101 100-W/ch Tube Amplifier

2 channels. Features triode vacuum tubes; regulated power supply; voltage protection; 4 output transformer windings/channel. 100 W x 2 cont avg. FR 10-60,000 Hz \pm 1.5 dB; THD 2% into 8 ohms; S/N 100 dB. 19 x 5 1/4 x 19 in; 40 lb . . \$4,290

BGW SYSTEMS

Model 750G Series 300-W/ch Amplifier

2 channels. Features discrete circuitry; low-feedback design; solid-state DC speaker protection; magnetic circuit breaker; precision-stepped attenuators; switchable subsonic filters. Active-balanced inputs; XLR and 1/4-in inputs; 5-way binding posts. Dynamic range LED display; status, modulation, and clip indicators. 300 W x 2 into 8 ohms, 450 x 2 into 4 ohms, or 900 x 1 into 8 ohms. FR 3-85,000 Hz \pm 3 dB, 20-20,000 Hz \pm 0.2 dB; IM 0.03%; slew rate 20 V/ μ s stereo; damping factor 400. Gold and black finish. 19 x 7 x 12 1/4 in; 55 lb \$1,849

Model 350A Series 200-W/ch Amplifier

2 channels. Features discrete circuitry; low-feedback design; solid-state DC speaker protection. Active-balanced inputs; XLR and 1/4-in inputs; 5-



way binding posts. Dynamic range LED display and status indicators; modulation and clip indicators; switchable subsonic filters. 200 W x 2 into 8 ohms, 325 x 2 into 4 ohms, or 600 x 1 into 8 ohms. FR 20-20,000 Hz \pm 0.2 dB; IM 0.03%; slew rate 20 V/ μ s stereo; damping factor 400. Gold and black finish. 19 x 5 1/4 x 10 1/2 in; 34 lb \$1,349

Model 200 100-W/ch Amplifier

2 channels. Features short-current protection. XLR and 1/4-in input connectors; active-balanced inputs; 5-way binding posts. Clipping LED indicators; magnetic circuit breaker/power switch. 100



Carver TFM-35

W x 2 into 8 ohms or 200 x 1 into 16 ohms. FR 1-85,000 Hz \pm 3 dB, 20-20,000 Hz \pm 0.25 dB; IM 0.02%; damping factor 400. 19 x 1 3/4 x 11 in; 14 lb \$999

BOULDER

Boulder 500 150-W/ch Amplifier

2 channels. Features 2-stage amplification; toroidal power transformer; shielded power cord; short-circuit, DC-offset, and thermal protection. LED indicators; recessed controls; output-level controls. 150 W x 2 into 8 ohms, 250 x 2 into 4 ohms, or 500 x 1 into 8 ohms. THD 0.005%; slew rate 70 V/ μ s mono, 35 V/ μ s stereo; imp 10,000 ohms; peak current 50 amperes. 17 x 5 1/4 x 15 1/2 in; 51 lb \$4,999

Boulder 102AE 100-W/ch Amplifier

2 channels. Features 2-stage design; discrete circuitry; toroidal power transformer. Gold-plated connectors. Voltage and current clipping indicators. 100 W x 2 into 8 ohms \$2,249

BRYSTON

The following amplifiers feature a 20-year parts-and-labor warranty.

Model 4B NRB 250-W/ch Amplifier

2 channels. Features dual power supplies with multiple filter capacitors; 2,496-sq-in heat sink; soft-start circuitry; input buffer. Balanced-XLR and unbalanced-RCA inputs. 250 W x 2 into 8 ohms from 20-20,000 Hz with 0.01% THD. Slew rate 60 V/ μ s; power bandwidth 1-100,000 Hz; IM 0.008%; damping factor 500 at 20 Hz, 8 ohms; input sens 1.25 V; input imp 50 kilohms. 19 x 5 1/4 x 15 1/2 in; 42 lb \$2,295

Model 3B NRB. Similar to above, 100 W x 2 into 8 ohms \$1,395

Model 2B NRB. Similar to 4B NRB, 50 W x 2 into 8 ohms \$750

Model 7B NRB 500-W Mono Amplifier

1 channel. Features toroidal transformers; soft-start circuitry; 2,496-sq-in heat sink. Gold-plated balanced-XLR and unbalanced-RCA inputs. Series/parallel switch. 500 W x 1 from 20-20,000 Hz with 0.01% THD. Slew rate 60 V/ μ s parallel, 120 V/ μ s bridged; power bandwidth 1-100,000 Hz; damping factor 300 at 20,000 Hz, 8 ohms; input

sens 1 V; input imp 50 kilohms. 19 x 5 1/4 x 15 1/2 in; 42 lb \$2,195

CAMBRIDGE AUDIO

A100 110-W/ch Power Amplifier

2 channels. Features dual-mono design; two oversized toroidal transformers coupled with 4 large reservoir capacitors; high-pass filter input. Gold-plated inputs; 5-way binding posts. 110 W x 2 into 8 ohms, FR 3-82,000 Hz \pm 3 dB; THD + noise 0.01% at 50% rated power; S/N 100 dBA. 17 x 3 3/4 x 12 1/2 in; 21.6 lb \$700

A70. As above, 60 W x 2. 13.8 lb \$500

CARVER

TFM-75 750-W/ch Amplifier

2 channels. Features dual-mono solid-state design with 2 separate AC power cords; fully regulated power supply; amplifier and speaker overload protection circuitry; fan cooling. 2 analog power meters; clipping indicators; variable L/R input sens control. 750 W x 2 into 8 ohms or 1,000 x 2 into 4 ohms from 20-20,000 Hz with 0.1% THD; 1,300 x 2 into 2 ohms. S/N 100 dBA; peak current 40 amperes. 19 x 5 1/4 x 13 in \$2,000

Silver 9-t MkII 550-W Mono Amplifier

1 channel. Features solid-state design with transfer function modified for vacuum-tube sound characteristics; fully regulated high-current high-voltage power supply; speaker and amplifier overload protection circuitry. Black finish. 550 W x 1 into 8 ohms or 900 x 1 into 4 ohms from 20-20,000 Hz with 0.5% THD; 1,000 x 1 into 2 ohms. FR 20-20,000 Hz; S/N 100 dBA. 11 1/2 x 6 1/4 x 15 1/2 in; 23 lb \$1,200

TFM-55 380-W/ch Amplifier

2 channels. Features solid-state design with transfer function modified for vacuum-tube sound characteristics; regulated power supply; amplifier and speaker overload protection. Two analog power meters; variable L/R input sens controls. 380 W x 2 into 8 ohms or 600 x 2 into 4 ohms with 0.5% THD; 1,200 x 1. S/N 101 dBA. 19 x 4 1/2 x 14 in \$1,000

TFM-35. As above, 250 W x 2 into 8 ohms or 350 x 2 into 4 ohms; 700 x 1. S/N 98 dBA. 19 x 4 1/2 x 14 1/2 in \$700

AV-634 240-W Amplifier

4 channels. Designed for multiroom, surround, or subwoofer/satellite applications. Features 18-dB/oct active crossover at 80, 100, or 150 Hz; input sens controls for all channels. 60 W x 4 or 60 x 2 + 150 x 1 into 8 ohms or 100 x 4 into 4 ohms from 20-20,000 Hz with 0.15% THD. 19 x 3 3/4 x 11 1/2 in \$600

CELLO

Due: 350-W/ch Amplifier

2 channels. 350 W x 2 cont avg into 8 ohms. 23 1/2 x 12 x 17 1/4 in; 95 lb \$7,500

Encore 60-W Mono Amplifier

1 channel. Dual-choke power supply; nickel-plated copper heat sinks. 60 W x 1 ... \$6,000/pr

CLASSÉ AUDIO

Classé Twenty-Five 250-W/ch Amplifier

2 channels. Features polystyrene and polypropylene capacitors; toroidal transformer. Balanced and single-ended inputs. 250 W x 2 or 1,000 x 1 into 8 ohms. FR 20-20,000 Hz \pm 1 dB; S/N 100 dB; THD 0.1%. 19 x 20 1/4 x 8 in ... \$3,995

Classé Fifteen. As above, 175 W x 2 or 700 x 1

into 8 ohms. 19 x 17¼ x 7¼ in \$2,995
Classé Ten. As above. 125 W x 2 or 400 x 1 into 8 ohms. 19 x 16 x 6½ in \$1,995
Classé Seventy. As above. 75 W x 2 into 8 ohms or 150 x 2 into 4 ohms. 19 x 11¼ x 4¼ in \$1,095

CONRAD-JOHNSON

Evolution 2000 200-W/ch Tube Amplifier
 2 channels. Hybrid design with tube driver stage and MOSFET output; zero feedback. 200 W x 2. 125 lb \$4,995

MV125 125-W/ch Amplifier

2 channels. Features low-imp power supplies and polystyrene capacitors. LED bias indicators. 125 W x 2 cont avg into 8 ohms. S/N 94 dB. 19 x 9 x 20½ in; 90 lb \$2,995

MF200 200-W/ch Amplifier

2 channels. MOSFET output stage; JFET input stage; low-feedback design; polypropylene and polystyrene capacitors. 200 W x 2 cont avg. FR 20-20,000 Hz; THD 1% into 8 ohms; S/N 98 dB. 19 x 8¼ x 12¾ in; 59 lb \$1,995
MF80. As above. 80 W x 2 \$1,395

COUNTERPOINT

SA-220 220-W/ch Tube Amplifier

2 channels. Features hybrid design with vacuum-tube input and MOSFET output; protection circuitry outside signal path; 1,000-V transformer; 1-ohm stability. 220 W x 2 into 8 ohms or 700 x 1. FR 1.2-200,000 Hz; THD 0.02%; S/N 84 dB. 19 x 6¼ x 19 in; 69 lb \$2,995

SA-100 100-W/ch Tube Amplifier

2 channels. Features hybrid design with tube input, MOSFET output; 1,000-V transformer. 100 W x 2 into 8 ohms. FR 5-100,000 Hz; THD 1%; S/N 92 dB; dynamic headroom 3 dB. 19 x 4½ x 12¾ in; 28 lb \$1,495

Solid-1 100-W/ch Amplifier

2 channels. Features FET signal path; 2-ohm stability. 100 W x 2 into 8 ohms. Dynamic headroom 3 dB. 19 x 4½ x 12¾ in; 18 lb \$1,195

CROWN INTERNATIONAL

Macro Reference 760-W/ch Amplifier

2 channels. Features grounded bridge circuitry; full output-protection circuitry; regulated cooling system. Selectable range/output-level meter; 2 input sensitivities: bridged-mono and parallel-mono modes; distortion, protection, and signal-presence indicators; level control. 760 W x 2 into 8 ohms, 1,160 x 2 into 4 ohms, or 1,500 x 2 into 2 ohms. FR 20-20,000 Hz ± 0.1 dB; S/N 115 dB; damping factor 20,000. 19 x 7 x 16 in; 56.5 lb \$3,995

PS-400 190-W/ch Amplifier

2 channels. Features Class AB/B design; low-frequency protection; ground-isolation jumper; bridged-mono mode. Level controls; distortion and signal-presence indicators. 190 W x 2 into 8 ohms. 330 x 2 into 4 ohms, or 660 x 1 into 8 ohms. FR 0-20,000 Hz ± 0.1 dB; THD 0.05%; slew rate 16 V/ μ s; damping factor 400; S/N 112 dB. 19 x 7 x 10¼ in; 55 lb \$1,195

PS-200. As above. 100 W x 2 into 8 ohms. 170 x 2 into 4 ohms, or 345 x 1 into 8 ohms. 19 x 5¼ x 10¼ in; 25 lb \$995

DB SYSTEMS

DB-6A 40-W/ch Amplifier

2 channels. Features 1-ohm load stability; 12-dB/



oct infrasonic filter; clipping LEDs; electronic clamp. 40 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.003% THD. FR 20-40,000 Hz $+0, -1$ dB; input sens 1 V; input imp 50 kilohms; S/N 112 dB at 1 V; slew rate 15 V/ μ s; damping factor 400 from 20-1,000 Hz. 16 x 4¾ x 12¼ in \$795

DENON

POA-3000RC 250-W/ch Amplifier

2 channels. Features bridgeable dual-mono design; optically-coupled Class A MOSFET circuit-



Fosgate-Audionics Model 4100

ry; toroidal transformer. Balanced-XLR and unbalanced-RCA inputs. Self-diagnostic circuit with LEDs; input-level controls; speaker selector; power meters. 250 W x 2 or 500 x 1 into 8 ohms from 20-20,000 Hz with 0.05% THD. FR 1-100,000 Hz at 1 W; THD 0.005% at -3 dB; S/N 121 dB \$4,000

POA-5000 400-W Amplifier

6 channels. Designed for use with the AVP-5000 AV preamplifier. Features optically-coupled Class A circuitry; toroidal power transformer; separate power supply for each channel pair; bridgeable to 5, 4, or 3 channels. Remote power-switching from Denon preamps. 100 W x 2 + 50 x 2 + 50 x 2, all into 8 ohms from 20-20,000 Hz. FR 1-150,000 Hz at 1 W; THD 0.02%; S/N 118 dB \$1,500

POA-2800 200-W/ch Amplifier

2 channels. Features optically-coupled Class A MOSFET circuitry; dual power supplies with toroidal transformers. Phono inputs. Remote power-switching from Denon preamps; A/B speaker switching. 200 W x 2 into 8 ohms from 20-20,000 Hz with 0.01% THD. FR 1-150,000 Hz at 1 W; THD 0.002% at -3 dB; S/N 123 dB \$800

DYNACO

Stereo 70 Series II 35-W/ch Tube Amp

2 channels. Features EL34/6CA7 output tubes; 1% metal-film resistors; poly-composition capacitors; 6GH8A driver tubes. Gold-plated RCA inputs and 5-way binding posts. Front-panel user-adjustable LED biasing system; flat open-loop gain; 3-wire grounded power cord. 35 W x 2 cont avg into 4, 8, or 16 ohms. FR 20-20,000 Hz ± 0.5 dB; THD 0.25%; IM 1%; damping factor 15. Black finish. 3-yr parts-and-labor warranty. 13 x 7 x 9½ in; 35 lb \$995

FORTÉ

F6 200-W/ch Amplifier

2 channels. Features bipolar output transistors; FET/bipolar front end; Class A/AB gain stages;

glass-epoxy circuit boards; toroidal power transformer. Gold-plated inputs and outputs. 200 W x 2 into 8 ohms with 0.1% THD. Slew rate 50 V/ μ s; current capability 16 amperes cont, 50 amperes max into 0.1 ohm. 17 x 6¼ x 9¼ in; 33 lb. \$1,590
F5. As above, high-bias Class A/AB output stage. 100 W x 2 into 8 ohms from 0-20,000 Hz with 0.1% THD; output imp 0.04 ohm; current capability 10 amperes cont, 30 amperes max into 0.1 ohm. 17 x 5 x 9¼ in; 26 lb \$990

FT-1 485-W Amplifier

5 channels. Features bipolar output transistors; FET input stage. 125 W x 3 + 55 x 2, all into 8 ohms from 20-20,000 Hz with 0.15% THD. FR 3-50,000 Hz ± 1 dB \$1,490

FOSGATE-AUDIONICS

Model 4100 240-W Amplifier

4 channels. Designed for surround applications. Bridgeable to 3 channels. 60 W x 4 into 8 ohms or 100 x 4 into 4 ohms from 20-20,000 Hz with 0.05% THD; 225 x 2 into 8 ohms or 300 x 2 into 4 ohms with 0.1% THD \$949

M-60 MkII 35-W Mono Amplifier

1 channel. Designed for center-channel amplification in surround systems. Features fully complementary discrete circuit design. Input-level control. 35 W x 1 into 8 ohms or 60 x 1 into 4 ohms with 0.2% THD. FR 20-20,000 Hz ± 1 dB. 8½ x 2¼ x 7½ in; 6 lb \$219

GOLDMUND

Mimesis 8.2 175-W Mono Amplifier

1 channel. Features mechanical grounding platform to reduce vibration; 2 toroidal transformers with 4 separate power supplies; oscillation and DC offset protection; asymmetrical and symmetrical inputs; 2 power keys for protection against accidental power off. 175 W x 1 rms into 8, 4, or 2 ohms. FR 0-150,000 Hz ± 1 dB; S/N 105 dB from 0.01-1,000,000 Hz; slew rate 100 V/ μ s. 19 x 6 x 19 in; 88.4 lb \$9,990

Mimesis 8.5. Stereo version of above with 1 power key. 200 W x 2 rms into 8 ohms. 111 lb \$5,400

Mimesis 6.8 80-W/ch Amplifier

2 channels. Features mechanical grounding platform to reduce vibration; proprietary self-compensating symmetrical circuitry; protection circuits. 80 W x 2. S/N 80 dB; slew rate 100 V/ μ s. 19 x 3 x 13¼ in; 27.6 lb \$3,800

HAFLER

Transnova 9500S 250-W/ch Amplifier

2 channels. Features 16 MOSFET output devices; four 20,000- μ F 100-V storage capacitors. 250 W x 2 or 750 x 1 into 8 ohms, 375 x 2 into 4 ohms. THD 0.1%; S/N 100 dB; slew rate 150 V/ μ s; damping factor 1,000 at 1,000 Hz. Rack mountable; silver. 19 x 5¼ x 12½ in; 50 lb \$1,900

Transnova 9300S 150-W/ch Amplifier

2 channels. Features 12 MOSFET output devices; four 15,000- μ F 75-V storage capacitors. 150 W x 2 or 450 x 1 into 8 ohms, 225 x 2 into 4 ohms. THD 0.07%; S/N 100 dB; slew rate 150 V/ μ s; damping factor 800 at 1,000 Hz. Rack mountable; silver. 19 x 3½ x 12½ in; 36 lb \$1,300

Model 9270S 135-W/ch Amplifier

2 channels. Features 12 MOSFET output devices; J-FET double-differential front end; double-sided glass circuit boards; twin-core transformers. Level controls. 135 W x 2 or 400 x 1 into 8 ohms,

Turn Your Stereo Into An All-Out Dolby Surround Pro-Logic System.

NEW FROM CAMBRIDGE SOUNDWORKS

Our new PL100 Dolby Pro Logic decoder with 3-channel amplifier; magnetically shielded Center Channel speaker; The Surround II dipole radiating surround speakers. Factory-direct price, \$799.



Until now, adding Dolby Surround to a stereo system has been complex and expensive. Add-on decoders were inadequate, costly, and often required separate amplifiers. We've changed all that with our affordable, high performance Pro Logic Add-On Systems.

Both systems are centered around our new PL100—a Dolby Pro Logic decoder with three channels of amplification (40 watts to the center channel, 15 watts to the surround channels) and a wireless remote. Its built-in signal generator enables precise balancing of the left, center, right and surround speakers. The signal delay applied to the surround channel is selectable for room size. Other controls include master volume, rear

\$799 Dolby Pro Logic Add-On System.

The center channel speaker in our \$799 Dolby Pro Logic Add-On System is our new magnetically shielded Center Channel (see ad on following page). The rear/side speakers are a pair of The Surround™ II. Unlike any other surround speaker in its price range, The Surround II uses advanced dipole radiator technology. Properly mounted on the side walls of a listening room, their high frequency drivers direct out-of-phase sound signals towards the front and rear of the room. The sound then reflects off the surfaces in the room, finally reaching listeners from all directions, "surrounding" them with sound.

Because the drivers are out of phase with each other, they create a null area directly in front of the speakers, so listeners can't pinpoint the source of the sound. The result is surround sound the way it was meant to be heard.

\$999 Dolby Pro Logic Add-On System.

Our \$999 Dolby Pro Logic Add-On System combines

the PL100 with our new low-profile Center Channel Plus speaker and our highly acclaimed surround speaker, The Surround. Center Channel Plus is a magnetically shielded

speaker with four 3" long-throw woofers and a ring radiator tweeter. Because of its wide, low profile (25" wide, 4" high, 6½" deep), it is ideal for placement directly on top of, or, with optional support unit, *beneath* a TV. The frequency range of the outer pair of 3" woofers is intentionally limited to maintain proper dispersion. We don't know of any speaker, at any price, that outperforms Center Channel Plus.

The surround speakers in this system are The Surround, a dipole radiating speaker with higher volume level capability than The Surround II. We feel The Surround is one of the very best surround speakers made, despite the fact that it costs hundreds less than competing models.

So if you already own a fine stereo system, TV and VCR, why not create an all-out home theater with one of our Dolby Pro Logic Add-On Systems?

1-800-FOR-HIFI

We Know How
To Make Loudspeakers.

CAMBRIDGE SOUNDWORKS

154 California St., Suite 102F, 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. The Surround is a trademark of Cambridge SoundWorks. Dolby, Dolby Surround and Pro Logic are trademarks of Dolby Laboratories Licensing Corporation. Prices and specifications subject to change without notice.

CIRCLE NO. 6 ON READER SERVICE CARD



Our new PL100 Dolby Pro Logic decoder with 3-channel amplifier; low profile Center Channel Plus speaker; The Surround dipole radiating surround speakers. Factory-direct price, \$999.

and center level, and a Phantom mode enabling the use of the PL100 without a center speaker. Purchased separately, the factory-direct price of the PL100 is \$399.

AMPLIFIERS

200 x 2 into 4 ohms. THD 0.05%; S/N 100 dB; slew rate 50 V/ μ s; damping factor 300 at 1,000 Hz. Rack mountable; silver. 19 x 3 1/2 x 12 1/2 in; 35 lb \$850

Model 9130S 65-W/ch Amplifier

2 channels. Features self-limiting MOSFET output. Level controls. 65 W x 2 or 150 x 1 into 8 ohms; 75 x 2 into 4 ohms. THD 0.008%; S/N 100 dB; damping factor 100 at 1,000 Hz. 19 x 3 1/2 x 9 in; 20 lb \$450

HARMAN KARDON

PA2400 170-W/ch Amplifier

2 channels. Features discrete circuitry; 120-ampere current capability. Bridgeable. 170 W x 2 into 4 or 8 ohms \$999

PA2200. As above, 70-ampere current capability. 100 W x 2 into 4 or 8 ohms \$569

PA2100. As above, 40-ampere current capability. 65 W x 2 into 4 or 8 ohms \$429

HEYBROOK

P-3 100-W/ch Amplifier

2 channels. Features toroidal transformer capable of 30-ampere output; aluminum chassis. 100 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.05% THD. S/N 60 dB; instantaneous peak current \pm 30 amperes \$1,398

HTG

SPA-100 100-W/ch Amplifier

2 channels. Low-feedback, DC-coupled design. 2 sets of binding posts; biwire terminals. 100 W x 2 into 8 ohms. FR 20-40,000 Hz; THD 0.05%; sens 1 V; S/N 95 dB; slew rate 50 V/ μ s; input imp 20 kilohms. 17 x 5 x 9 in; 23 lb \$849

SPA-65. As above, 50 W x 2 \$595

JRM

Power Tower 540-W Amplifier

4 channels. Features complementary symmetry all-cascade Class AB design; no voltage or current limiting; high-temperature, DC-clip, and power-up/fail protection. 200 W x 2 + 70 x 2 into 8 ohms, 350 x 2 + 175 x 2 into 4 ohms, or 500 x 2 + 250 x 2 into 2 ohms. FR 0.6-75,000 Hz; THD 0.02%; S/N 102 dB; slew rate 100 V/ μ s. 24 1/2 x 16 x 14 1/2 in; 65 lb \$3,300

KINERGETICS

KBA-75 Platinum Series 75-W/ch Amp

2 channels. Features Class A operation; dual-mono construction; 1,000-VA power supply; mul-



Linn Klout

iple high-power output transistors; servo-controlled DC output; low-imp drive capability. 75 W x 2 into 8 ohms, 150 x 2 into 4 ohms, or 300 x 2 into 2 ohms. Slew rate 65 V/ μ s. 19 x 15 1/2 x 17 in \$1,995



KBA-505 525-W Amplifier

6 channels. Designed for surround applications. Features 1,100-W toroidal transformer; high-current output transistors; CompuSound circuitry to match any Kinergetics subwoofer. Subwoofer level control. 75 W x 5 + 150 x 1 into 8 ohms \$1,995

KRELL

KSA-250 250-W/ch Amplifier

2 channels. Features DC coupling; Class A circuitry; self-adjusting bias; DC offset. Balanced and single-ended inputs. 250 W x 2 into 8 ohms or 2,000 x 2 into 1 ohm \$6,700

KST-100 100-W/ch Amplifier

2 channels. Features DC coupling; Class A/B circuitry; balanced and single ended input. 100 W x 2 into 8 ohms or 400 x 1 into 8 ohms \$2,950

KSA-5 5-W/ch Headphone Amplifier

2 channels. Features Class A circuitry. 2 locking headphone outputs; XLR connector; 5-way binding posts. 5 W x 2 into 8 ohms \$1,500

LINN

Klout 80-W/ch Amplifier

2 channels. Features screened transformer; housing made of one-piece solid-aluminum extrusion. Biwire/triwire terminals. 80 W x 2. 24.2 lb \$3,695

LK100 50-W/ch Power Amplifier

2 channels. Features overcurrent and thermal protection; internal heat sink. Biwire/triwire terminals. 50 W x 2 into 8 ohms. 0.5% distortion \$1,095

LUXMAN

M-117 200-W/ch Amplifier

2 channels. Features dual-FET-per-ch input stage. Gold-plated binding posts and inputs; variable and fixed inputs. 200 W x 2 into 8 ohms, 550 x 2 into 4 ohms, 820 x 2 into 2 ohms, or 700 x 1. THD 0.03% at rated power; S/N 120 dB; slew rate 20 V/ μ s. 17 1/4 x 6 1/2 x 17 1/2 in; 52 lb \$1,250

M-111 100-W Amplifier

4 channels. Features voltage-driven amplification; Duo-Beta feedback; star topology. 4-way binding posts. Rear-panel bridging switches for ch 1-2 and 3-4; input-level controls. 25 W x 4 cont avg into 8 ohms or 75 x 2 into 8 ohms. THD 0.05%; S/N 112 dB; IM 0.02%; slew rate 12 V/ μ s \$400

MARANTZ

SM-80 120-W/ch Amplifier

2 channels. Features THX certification; split-mono power transformer; separate DC power supplies and amplifier stages for each channel; Class A input and driver stages; Class AB output stage. 120 W x 2 into 8 ohms with 0.02% THD, 175 x 2 into 4 ohms with 0.04% THD, 350 x 1 rms into 8 ohms, or 800 x 1 into 2 ohms. Slew rate 150 V/ μ s; damping factor 200 into 8 ohms; S/N 121 dBA. Gold finish with die-cast-alloy side panels. 17 1/4 x 6 x 14 1/2 lb; 37 lb \$700

MA-500 120-W Mono Amplifier

1 channel. Features pending THX certification. 1 gold-plated RCA input; 1 gold-plated RCA in-

verted output to allow bridging of multiple units; 2 banana-plug speaker terminals; remote compatibility with Marantz components. 120 W x 1 into 8 ohms with 0.09% THD. Black finish. 3 3/8 x 3 1/2 x 13 1/2 in \$299

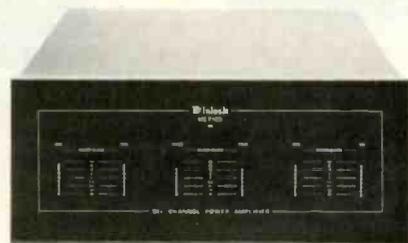
MARK LEVINSON

Model 27.5 100-W/ch Amplifier

2 channels. Features dual-mono construction; 729-VA toroidal transformer to each ch; separate power supplies; audio signals processed through two Class A cascaded voltage-gain stages and 3 current-gain stages; cascaded differential input stage; Class AB output stage. 100 W x 2 into 8 ohms, 200 x 2 into 4 ohms, or 350 x 2 into 2 ohms. Sens 141 mV; voltage gain 26 dB. 19 x 8 3/8 x 18 in; 85 lb \$4,995

Model 29 50-W/ch Amplifier

2 channels. Features dual-mono construction; 320-VA toroidal transformer in each ch; separate power supplies; audio signals processed through two Class A cascaded voltage-gain stages and 3 current-gain stages; cascaded differential input stage; Class AB output stage. 50 W x 2 into 8 ohms, 100 x 2 into 4 ohms, or 175 x 2 into 2 ohms.



McIntosh MC-7106

Sens 141 mV; voltage gain 26 dB. 17 1/2 x 6 1/2 x 14 1/2 in; 60 lb \$2,995

MCCORMACK

Power Drive DNA-1 150-W/ch Amplifier

2 channels. Features hybrid JFET/MOSFET/bipolar circuitry; DC-servo control; Class A/AB mode; separate front-end and main power supplies; Distributed Node Current Reservoir delivers power to each local output device; global feedback; 885-VA transformer for power supply with electrostatic shielding. Two units may be converted into bridged mono pair. 150 W x 2 into 8 ohms. FR 1-250,000 Hz; S/N 90 dB; THD 0.01%; sens 1.2 V rms; current output 50 amperes max. 19 x 7 x 16 in; 55 lb \$1,995

McINTOSH

MC-7300 300-W/ch Amplifier

2 channels. Features anti-clipping circuitry; output autoformer; power-on muting. Power output meters. 300 W x 2 cont avg into 8, 4, or 2 ohms or 600 x 1 into 16, 8, or 4 ohms from 20-20,000 Hz with 0.005% THD. S/N 80 dBA; damping factor 40; dynamic headroom 1.9 dB; input sens 1.4 or 2.5 V. 16 1/4 x 5 3/4 x 15 1/2 in; 79 lb \$3,195

MC-7106 600-W Amplifier

6 channels. Designed for multiroom and surround applications. Features THX certification; anti-clipping circuitry; sentry circuitry to prevent overload; thermal and DC output protection; 2 bridgeable channel pairs. LED power-level indicators for each channel. 100 W x 6, 100 x 4 + 300



NEW FROM CAMBRIDGE SOUNDWORKS

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

We're pleased to announce two new 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 very important 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 (8 1/8" x 5 1/4" 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.

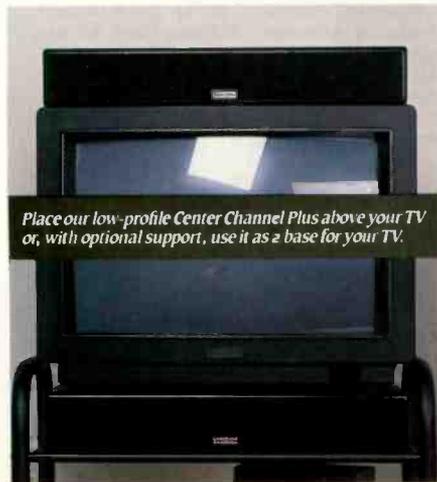
Center Channel is well shielded magnetically so that it can be placed very close to your TV without causing video interference. Acoustically identical to our Ensemble satellite speakers, it's ideal for center channel use in a Pro Logic system. The factory-direct price of Center Channel is \$149.

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, 6 1/2" 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.



1-800-FOR-HIFI

We Know How
To Make Loudspeakers.

CAMBRIDGE SOUNDWORKS

154 California St., Suite 102F, 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

AMPLIFIERS

x 1, or 100 x 2 + 300 x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.005% THD; 150 x 6 into 4 ohms. S/N 95 dB; damping factor 200; dynamic headroom 1.7 dB; input sens 1.4 or 2.5 V. 17½ x 7¼ x 17½ in; 48 lb. \$2,795

MC-7150 150-W/ch Amplifier

2 channels. Features anti-clipping circuitry; output autoformer; protection circuitry; power-on muting. Power-output meters. 150 W x 2 cont avg into 8, 4, or 2 ohms from 20-20,000 Hz with 0.005% THD. S/N 88 dBA; damping factor 40; dynamic headroom 1.8 dB; input sens 1.4 or 2.5 V. 16¼ x 5¼ x 15¼ in; 58 lb. \$2,295

MC-7100(W) 100-W/ch Amplifier

2 channels. Features anti-clipping circuitry; DC output and thermal protection; toroidal power transformer; power-on muting. 100 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.005% THD. S/N 88 dBA; damping factor 200; dynamic headroom 1.7 dB; input sens 1.4 or 2.5 V. 17½ x 3¾ x 14½ in; 24 lb. \$995

MELOS

Triode 200 ST Plus Deluxe 200-W/ch Tube Amp

2 channels. Features Class AB operation to 50 W; balanced input. 200 W x 2 into 8 ohms with 0.2% THD. FR 20-30,000 Hz; sens 1.5 V; dynamic headroom 3 dB; input imp 100 kilohms. 82 lb. \$3,495

Triode 200 ST Plus. As above, Class AB operation to 25 W. No balanced inputs. 79 lb. \$2,995

SHA-1 3-W/ch Tube Headphone Amplifier

Vacuum tube-drive differential DC Class A amp designed to drive headphones. Doubles as line-level preamp with two inputs and one line-level output. Features zero feedback amplification; direct coupling; imp-matched output stage circuitry; toroidal transformer; regulated power supplies; Tiffany connectors. 3 W x 2 into 8 ohms with 0.2% THD. Sens 100 mV; output 9 V max line; input imp 100 kilohms. 20 lb. \$1,095

MERIDIAN

Model 605 150-W Mono Amplifier

1 channel. Features Class AB direct-coupled discrete design; MOSFET output devices; extruded aluminum case and heatsink. Balanced XLR input; direct-coupled, unbalanced RCA input; gold-plated 5-way binding posts. 150 W x 1 into 8 ohms. FR 0.4-20,000 Hz +0, -0.5 dB; S/N -95.5 dB (full gain). 12¼ x 4 x 12 in; 22.1 lb. \$3,500/pr

Model 205 100-W Mono Amplifier

1 channel. Features Class AA design; toroidal high-current power supply; fully complementary



NAD Model 906

circuit design; music-sense circuit turns on amp when signal is detected. 100 W x 1 into 8 ohms. 6¾ x 4 x 12½ in; 13.2 lb. \$1,790/pr

MOBILE FIDELITY

UltraAmp 100-W/ch Amplifier

2 channels. Features dual-mono Class A design;



printed circuit board; independently regulated power supplies; 3 power transformers; hand-selected transistors; silver-coated conductive wires; DC coupling; RF filtering. 100 W x 2 into 8 ohms or 150 x 2 into 4 ohms. FR 2-100,000 Hz ± 1 dB; gain 30 dB; THD 0.02%; S/N 90 dB. 18 x 5½ x 16½ in; 30 lb. \$1,295

MOTIF

MS2001 200-W/ch Amplifier

2 channels. Features MOSFET output stage; polystyrene capacitors. 200 W x 2 into 8 ohms. THD 1%; FR 20-20,000 Hz ± 0.1 dB; S/N 100 dB; input imp 100 kilohms. 19 x 7 x 18½ in; 63 lb. \$4,395

MS1001. As above, 100 W x 2. \$3,295

MTX SOUND CRAFTSMEN

A5002 250-W/ch Amplifier

2 channels. Features Class H Vari-Proportional circuitry; 2-ohm load capability; crowbar output protection without current limiting. 20 LED indicators per channel; front-panel switching for 2 speaker pairs; clipping indicators; input-level controls. 250 W x 2 into 8 ohms or 375 x 2 cont avg into 4 ohms with 0.09% THD. S/N 105 dB; slew rate 50 V/μs; dynamic headroom 2 dB. \$949

A400 205-W/ch Amplifier

2 channels. Features MOSFET design; phase control regulation; thermal and overload protection; direct coupling; anti-surge turn-on delay. 205 W x 2 into 8 ohms from 20-20,000 Hz with 0.05% THD or 300 x 2 into 4 ohms. S/N 105 dB. \$760

Pro-Power Three. As above, without level controls or LED meters. \$749

PCR800 205-W/ch Amplifier

2 channels. Phase-control-regulated MOSFET design. 205 x 2 cont avg into 8 ohms with 0.05% THD. S/N 105 dB. 8¼ x 5 x 12 in; 18 lb. \$499

Pro-Power. As above, 300 W x 2 into 4 ohms or 450 x 2 into 2 ohms. \$579

A200 125-W/ch Amplifier

2 channels. Features MOSFET design; thermal and overload protection; direct coupling; no current limiting. Clipping indicators. 125 W x 2 into 8 ohms from 20-20,000 Hz with 0.05% THD or 190 x 2 into 4 ohms. FR 20-20,000 Hz ± 0.1 dB; S/N 105 dB. 17 x 5¼ x 10¾ in. \$470

A100. As above, without clipping indicators. 60 W x 2 into 8 ohms. 17 x 1¾ x 10¾ in. \$350

MUSEATEX

Melior AS-10 100-W/ch Amplifier

2 channels. Features Class AB design; static fan heat sink; thermal overload, DC offset, and short-circuit protection; solid-state switching. 5-way binding posts. 100 W x 2 cont avg into 8 ohms or 150 x 2 into 4 ohms. FR 1-100,000 Hz; slew rate 75 V/μs; damping factor 100. 14¾ x 3 x 15¼ in; 26 lb. \$1,999

NAD

Model 2700THX 150-W/ch Amplifier

2 channels. Features THX certification; infrasonic and ultrasonic filtering. Imp selector; overload indicators. Rack handles optional. 150 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.03% THD or 400 x 1 into 8 or 4 ohms. S/N 100

dBA; damping factor 120 at 50 Hz; dynamic headroom 4 dB. 17¼ x 5 x 15¼ in; 29 lb. \$829

Model 906 180-W Amplifier

6 channels. Designed for multiroom and surround applications. Features 3 discrete, independent, high-current power supplies; 2-ohm drive capability. 3 buffered line-level outputs. 30 W x 6 cont avg into 8 ohms from 20-20,000 Hz with 0.05% THD. 30 x 4 + 90 x 1, 30 x 2 + 90 x 2, or 90 x 3 into 8 ohms. S/N 85 dBA; damping factor 100 at 50 Hz; dynamic headroom 2 dB. 16½ x 4¼ x 14½ in. \$649

Model 902 30-W/ch Amplifier

2 channels. Features high-current power supply; 2-ohm drive capability; variable input sens. 30 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.05% THD or 90 x 1 into 8 ohms. S/N 85 dBA; damping factor 100 at 50 Hz; dynamic headroom 2 dB. 16½ x 3¾ x 10¾ in. \$249

NAIM

NAP 250 70-W/ch Amplifier

2 channels. Features toroidal transformers; 4 regulated power supplies each rated at 40 V and 15 amperes; thermal protection; fan cooling. 70 W x 2 cont into 8 ohms. Input imp 22 kilohms; FR 3-40,000 Hz ± 3 dB. \$3,295

NAP 180 60-W/ch Amplifier

2 channels. Features 430-VA toroidal transformer; 4 smoothing capacitors. 60 W x 2 cont into 8 ohms. Input imp 22 kilohms; FR 5-40,000 Hz ± 3 dB. 16¼ x 3 x 11¾ in. \$2,095

NAP 140 45-W/ch Amplifier

2 channels. Features dual power supply rectification; 2 smoothing capacitors for each channel; thermal protection. 45 W x 2 cont into 8 ohms. Input imp 22 kilohms; FR 5-40,000 Hz ± 3 dB. \$1,495

NAKAMICHI

PA-7AII 225-W/ch Amplifier

2 channels. Stasis topology; two internal amps for high- and low-imp sources; 700-W toroidal power transformer; bridge rectifiers; electrolytic filters. 225 W x 2 cont avg into 8 ohms with 0.05% THD. Frequency response 20-20,000 Hz +0, -0.2 dB; S/N 120 dB; damping factor 60; dynamic headroom 1.7 dB. 17¼ x 7¾ x 16¾ in; 62.7 lb. \$2,195

PA-5AII. As above, 150 W x 2. \$1,550

NHT

MA-1 80-W Mono Amplifier

1 channel. Designed to power center-channel speaker or subwoofer. Features Class AB design; defeatable low-pass filter at 50, 100, or 200 Hz; built-in high-pass filter; variable gain. 80 watts x 1 into 8 ohms. Slew rate 12 V/μs; dynamic headroom 2 dB; input impedance 50 kilohms. \$300

OCM TECHNOLOGY

Model 200 100-W/ch Amplifier

2 channels. Features Class AB MOSFET output circuitry with temperature-independent biasing; 1,000-VA, shielded, toroidal power transformer; electrolytic capacitors. Gold-plated unbalanced stereo RCA inputs; balanced mono XLR input; 5-way binding posts. 100 W x 2 into 8 ohms, 200 x 2 into 4 ohms, or 400 x 1 into 8 ohms. THD 0.25%; FR 0.2-100,000 Hz ± 3 dB. \$1,995

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 new 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,

NEW FROM CAMBRIDGE SOUNDWORKS



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.

1-800-FOR-HIFI

We Know How
To Make Loudspeakers.

CAMBRIDGE SOUNDWORKS

154 California St., Suite 102F, 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

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

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

And Then There Were Two.

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



The real difference is in the subwoofer.

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

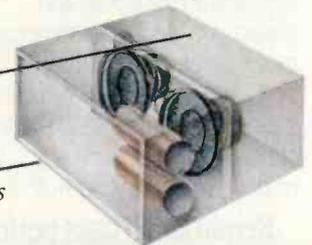
The Same Satellite Speakers.

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

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

True acoustic suspension, sealed subwoofer cavity.

Cavity acts as acoustic band-pass filter.



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



many larger and more expensive speakers."

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



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

The Same Overall Sound.

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

The Same Attention To Detail.

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

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

The Same Factory-Direct Savings.

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

The Same 30-Day Total Satisfaction Guarantee.

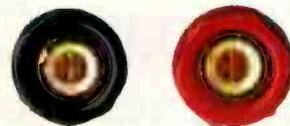
Choosing a loudspeaker after a brief listen at a dealer's showroom is like deciding on a car after one quick trip around the block. So we make it possible to audition our speakers the *right way*—



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

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

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



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

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

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

How To Order.

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

CALL 1-800-FOR-HIFI

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

We Know How To
Make Loudspeakers.

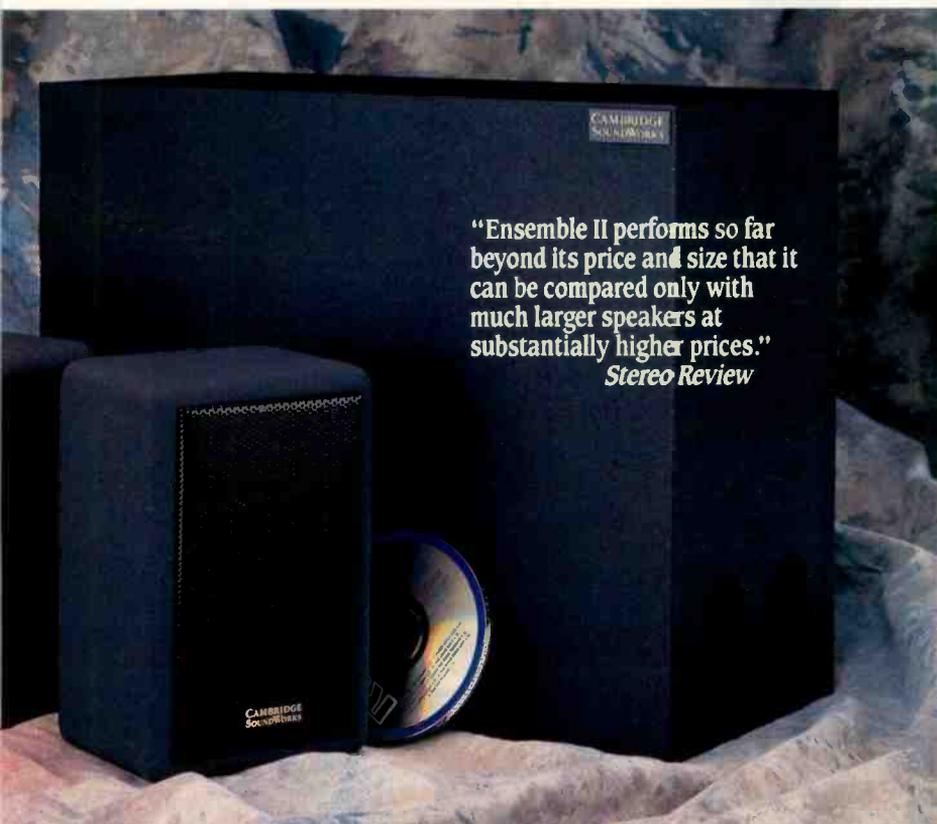
CAMBRIDGE SOUNDWORKS

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

CIRCLE NO. 6 ON READER SERVICE CARD

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

Stereo Review



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!

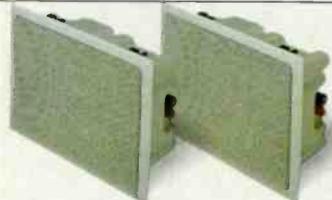


High performance dipole radiating surround speakers.

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 \$599.



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 102F, 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

CIRCLE NO. 6 ON READER SERVICE CARD

ONKYO

Integra M-588F 200-W/ch Amplifier

2 channels. Features balanced dual-mono design; low-imp drive capability; discrete outputs; optically-isolated output; overload protection. XLR and RCA inputs. 2 optically-isolated power meters with auto meter-range selection. 200 W x 2 rms into 8 ohms or 750 x 2 max into 2 ohms \$2,000

Integra M-504 165-W/ch Amplifier

2 channels. Features high-current dual-mono design; low-imp drive capability; discrete outputs; linear switching. 4-way speaker selector. 165 W x 2 rms into 8 ohms or 530 x 2 max into 2 ohms.



Onkyo Integra M-588F

THD 0.003%; S/N 120 dB; damping factor 140. 18¼ x 7¼ x 16½ in; 46 lb \$830

Integra M-502 140-W/ch Amplifier

2 channels. Features dual-mono design; low-imp drive capability; discrete outputs; linear switching. 140 W x 2 rms into 8 ohms or 425 x 2 max into 2 ohms. THD 0.005%; S/N 120 dB; damping factor 140. 17¼ x 7¼ x 16½ in; 41 lb \$650

PARASOUND

HCA-1206 720-W Amplifier

6 channels; bridgeable to 5 or 4 channels. Features THX certification; high-current discrete circuitry; FETs; toroidal transformer. 5-way binding posts. Level controls. 120 W x 6 or 280 x 2 + 120 x 2. FR 8-90,000 Hz; THD 0.01%; IM 0.05%; S/N 104 dB. 19 x 7 x 16 in \$1,535

HCA-1200 200-W/ch Amplifier

2 channels. Features high-current design; discrete circuitry; toroidal transformer; 60-MHz output transistor; 57-ampere peak current. 5-way binding posts; gold-plated inputs. Level controls. 200 W x 2 rms into 8 ohms or 600 x 1 rms. FR 8-90,000 Hz; THD 0.08% \$845

HCA-8001 100-W/ch Amplifier

2 channels. Features high-current design; discrete circuitry. Gold-plated RCA inputs; 5-way binding posts; headphone jack. Level controls; rear-panel bridging switch. 100 W x 2 cont into 8 ohms, 150 x 2 into 4 ohms, or 260 x 1 into 4 ohms. FR 20-20,000 Hz ± 0.5 dB; THD 0.1%; S/N 104 dB; damping factor 120. 17¼ x 3¼ x 11¼ in ... \$425

PIONEER

Elite M-91 200-W/ch Amplifier

2 channels. Features direct signal paths; 130-W output transistors; honeycomb heat sink and insulators. CD- and line-direct inputs with level controls; two pairs of speaker outputs. A/B speaker switching. 200 W x 2 cont avg into 8 ohms from 20-20,000 Hz with THD 0.003%. FR 20-20,000 Hz +0, -0.1 dB; S/N 125 dB. 18 x 6½ x 17 in \$1,400

Elite M-72 200-W Amplifier

4 channels. Features semiconductor non-linear-ity cancellation; direct signal paths. 2 inputs;

AMPLIFIERS



headphone jack. 2 input-level controls. 50 W x 4 cont avg into 8 ohms from 20-20,000 Hz with 0.02% THD or 100 x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.009% THD. FR 5-150,000 Hz +0, -3 dB; S/N (2-ch mode) 120 dB. 18 x 6½ x 16¼ in; 47.6 lb \$1,000

PS AUDIO

PS 200 Delta 200-W/ch Amplifier

2 channels. Features dual-mono design; sixteen 5,000-µF filter capacitors in power supply; 1,200-W transformer. 200 W x 2 into 8 ohms or 375 x 2 into 4 ohms. THD 0.1%; slew rate 150 V/µs. 17 x 6 x 17 in; 65 lb \$1,895

PS 100 Delta 120-W/ch Amplifier

2 channels. Features dual-mono design; twelve 5,000-µF filter capacitors in power supply. 120 W x 2 into 8 ohms or 200 x 2 into 4 ohms. THD 0.1%; slew rate 150 V/µs \$1,295

PSE

Studio V 120-W Mono Amplifier

1 channel. Features Class A/AB design; bipolar transistors; toroidal transformer; independent regulated supplies for each stage; auto mute; OFC wiring; thermal, DC-offset, and short-circuit protection. XLR-balanced and RCA-unbalanced inputs. 5-yr warranty. 120 W x 1 into 8 ohms with 1% THD. Slew rate 200 V/µs; S/N 97 dB into 8 ohms at 1 W. Wood and black acrylic finishes \$1,995/pr

Studio IV. As above, 2 channels. 100 W x 2 into 8 ohms with 1% THD. Slew rate 100 V/µs. \$1,095

QUAD

Model 606 140-W/ch Amplifier

2 channels. Combines Class A operation with Class B. Features feed-forward error correction; current-regulated power supply. 140 W x 2. THD 0.01% at 1,000 Hz; FR 20-20,000 Hz +0, -0.25 dB. 12¼ x 5½ x 9½ in; 27 lb \$1,495

Model 306 60-W/ch Amplifier

2 channels. Combines Class A operation with Class B. Features feed-forward error correction; current-regulated power supply. 60 W x 2. THD 0.01% at 1,000 Hz; FR 20-20,000 Hz +0, -0.25 dB. 12¼ x 2¼ x 8¼ in; 11 lb \$795

QUICKSILVER

Model 135 135-W Mono Tube Amplifier

1 channel. Features hand wiring; six EL34, one 12AU7, and one 12FQ7 tubes. Meter and bias controls. 135 W x 1 into 4/8 ohms from 20-20,000 Hz. 70 lb \$3,250

Silver. As above with matched pair KT88, 12AX7, 12BH7, 5AR4 tubes. 90 W cont x 1 into 4/8 ohms from 20-20,000 Hz. 9¼ x 6 x 15¼ in; 37 lb \$1,150

ROTEL

RB990BX 200-W/ch Amplifier

2 channels. Features power transformers with separate rectifiers and filter capacitors. 200 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.03% THD. FR 4-100,000 Hz +0.5 dB, -3 dB; S/N 120 dB (IHF A); damping factor 1,000 into 8 ohms from 20-20,000 Hz. 17¼ x 4¼ x 14¼ in; 32.5 lb \$1,100

RB960BX 60-W/ch Amplifier

2 channels. Features dual power transformers with separate rectifiers and filter capacitors. 60 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.03% THD or 180 x 1 cont avg into 8 ohms. FR 15-100,000 Hz +0, -1 dB; S/N 116 dB (IHF A); damping factor 280 into 8 ohms from 20-20,000 Hz \$370

JEFF ROWLAND

Model 8 250-W/ch Amplifier

2 channels. Features FET front-end circuitry; bipolar outputs; no negative feedback. Unbalanced-RCA and balanced-XLR inputs. Selectable 26/32-dB gain; input mute and phase switches. 250 W x 2 cont avg into 8 ohms, 400 x 2 into 4 ohms, or 600 x 2 into 2 ohms. THD 0.02% at 1,000 Hz; slew rate 100 V/µs; damping factor 250; S/N 120 dB \$8,800

SONANCE

Sonamp 260 60-W/ch Amplifier

2 channels. Features discrete circuitry; short-circuit protection; 2-ohm stability. RCA line-level output; 5-way binding posts. Input level controls; defeatable remote-turn-on lead; status indicator lights. 60 W x 2 cont avg into 8 ohms. 16¼ x 3¼ x 12¼ in \$349

SONOGRAPHE

SA150 120-W/ch Amplifier

2 channels. Features MOSFET output stage. 120 W x 2 into 8 ohms. 17 x 5¼ x 13 in \$995

SONY

TA-N80ES 200-W/ch Amplifier

2 channels. Features discrete output transistors in triple push-pull configuration; anodized heat sinks; 520-VA power transformer; resin-cast power-supply capacitors; 2 protection circuits. Fixed and variable inputs; balanced XLR inputs. A/B speaker switching; variable L/R input sens. 200 W x 2 cont into 8 ohms with 0.004% THD, 270 x 2 cont into 4 ohms with 0.006% THD, or 580 x 1 into 8 ohms with 0.007% THD. Dynamic headroom 2.8 dB at 4 ohms; damping factor 100 into 8 ohms at 1,000 Hz. 18¼ x 7¼ x 17¼ in; 52.9 lb \$1,200

TA-N55ES 110-W/ch Amplifier

2 channels. Features discrete output transistors in push-pull configuration; resin-cast power-supply capacitors; 2 protection circuits. Fixed and variable inputs. 110 W x 2 cont into 8 ohms with 0.004% THD, 150 x 2 cont into 4 ohms with 0.006% THD, or 300 x 1 into 8 ohms with 0.007% THD. Dynamic headroom 2.8 dB; damping factor 100. 18¼ x 6 x 14½ in \$500

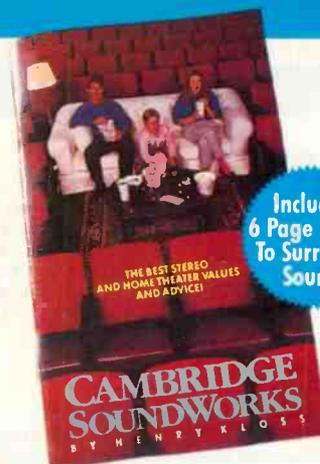
SOUNDSTREAM

DA-1 THX 200-W/ch Amplifier

2 channels. Features dual-mono design; discrete Darlingston transistor circuitry. Dual overload indicators. 200 W x 2 into 8 ohms, 300 x 2 into 4 ohms, or 400 x 2 into 2 ohms. FR 20-20,000 Hz ±0.01 dB; bandwidth 2-100,000 Hz; slew rate 35 V/µs; S/N 110 dB; dynamic headroom 3 dB. 5¼ x 17 x 14 in; 35 lb \$1,195

SA-100 50-W/ch Amplifier

2 channels. Features hideaway design for multi-room applications; 1-ohm stability. Remote speaker switching via RSS-2 selector. 50 W x 2 into 4 ohms, 90 x 2 into 2 ohms, or 180 x 1 into 4 ohms \$399



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 102F, 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

AMPLIFIERS

SPECTRASCAN

BPA-101B 100-W/ch Amplifier

2 channels. Features proprietary multiple feedback loops; DC coupling with regulated power supply; protection circuitry. 100 W x 2 into 8 ohms, 350 x 1 into 8 ohms, or 174 x 2 into 4 ohms. THD 0.07%; S/N 98 dB; slew rate 40 V/ μ s; damping factor 200. 19 x 5 $\frac{1}{4}$ x 14 in; 40 lb \$1,895

SUMO

Andromeda II 240-W/ch Amplifier

2 channels. Features Class AB MOSFET design; fully balanced path from input to output; pure Class A operation except for Class AB output stage. 240 W x 2 into 8 ohms or 400 x 2 into 4 ohms. THD 0.05% into 8 ohms, 0.1% into 4 ohms; rise time 2 μ s; slew rate 115 V/ μ s; damping factor 500. 19 x 7 x 16 $\frac{1}{4}$ in; 55 lb \$1,599

Polaris II 120-W/ch Amplifier

2 channels. Features Class AB MOSFET design; proprietary MOSFET linearization circuit; pure Class A gain stage. 120 W x 2 or 350 x 1 into 8 ohms. 50 amperes peak/ch; THD 0.05% into 8 ohms, 0.1% into 4 ohms; rise time 2 μ s; damping factor 500. 19 x 5 $\frac{1}{4}$ x 10 in; 35 lb \$799

Ulysses 60-W/ch Amplifier

2 channels. Class AB MOSFET design; proprietary Class A gain stage. 60 W x 2 or 180 x 1 into 8 ohms. FR 20-20,000 Hz; THD 0.05%; input imp 47 kilohms; damping factor 500; slew rate 85 V/ μ s; rise time 2 μ s. 19 x 3 $\frac{1}{2}$ x 13 in; 25 lb \$579

SUPERPHON

SA-120 60-W/ch Amplifier

2 channels. Features symmetrical circuitry in dual-mono configuration; high slew-rate differential Class A gain circuit; 40,000- μ F storage capacitance; OFC Teflon-insulated wiring. Gold-plated RCA connectors; 5-way binding posts. 60 W x 2. 17 x 4 $\frac{1}{4}$ x 12 $\frac{1}{2}$ in; 18 lb \$499

THRESHOLD

S/450e Stasis 200-W/ch Amplifier

2 channels. Features single 1,200-toroidal transformer; 31,000- μ F front-end decoupling/ch; 22 high-speed 250-W output devices/ch. 200 W x 2 into 8 ohms with 0.1% THD. 19 x 8 $\frac{3}{4}$ x 17 $\frac{1}{4}$ in; 79 lb \$5,200

SA/6e Stasis 125-W Mono Amplifier

1 channel. Features Class A operation; single 800-W toroidal transformer; 1,900- μ F front-end



Spectrascan BPA-101B

decoupling; 28 high-speed 250-W output devices. 125 W x 1 into 8 ohms with 0.1% THD. 19 x 8 $\frac{3}{4}$ x 13 $\frac{1}{4}$ in; 56 lb \$3,950

S/350e Stasis 150-W/ch Amplifier

2 channels. Features single 800-W toroidal transformer; 950- μ F front-end decoupling/ch; 14 high-speed 250-W output devices/ch. 150 W x 2 into 8 ohms with 0.1% THD \$3,490



YAMAHA

MX-830 170-W/ch Amplifier

2 channels. Banana-plug outputs. A/B/C speaker switching; independent L/R level controls; clipping indicators. 170 W x 2 into 8 ohms or 600 x 1 dynamic into 1 ohm. THD 0.003% \$699

MX-460 80-W/ch Amplifier

2 channels. Features symmetrical input-to-output design; direct ground-sensing circuit; dual extruded heat sinks. 5-way binding posts. A/B speaker switching; independent L/R level controls. 80 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.012% THD. S/N 123 dB. 17 $\frac{1}{8}$ x 5 $\frac{1}{8}$ x 15 $\frac{1}{8}$ in; 25 lb \$349

MX-35 80-W Amplifier

4 channels. Features independent level controls. 20 W x 4 with 0.07% THD or 40 x 2 with 0.05% THD, all into 8 ohms from 20-20,000 Hz ... \$299

PREAMPLIFIERS

ACURUS

L10 Preamplifier

6 inputs; 2 outputs; gold-plated connectors. Features discrete Class A circuitry; polypropylene capacitors; silver-to-silver switch contacts; glass-epoxy circuit board; 1% metal-film resistors. 17 x 3 x 9 in \$595

ADCOM

GFP-565 Preamplifier

5 line-level inputs; 1 MM/MC phono input; 3 outputs including 1 direct-coupled output; signal-processor loop. Features Class A circuitry; 1% Roederstein metal-film resistors and metallized-film capacitors; separate headphone amplifier. Rec-out selector; loudness control. FR 5-90,000 Hz \pm 0.5 dB; THD 0.009% phono, 0.0025% line; S/N 95 dBA phono, 100 dBA line; ch sep 75 dB at 1,000 Hz. Black. 17 x 3 x 11 $\frac{1}{8}$ in; 11 lb ... \$800

GTP-500II Preamplifier/Tuner

4 line-level inputs; MM phono input; AC- and DC-coupled outputs. Features 1% Roederstein resistors; quartz-referenced digital-synthesis tuning; high-blend circuit. Auto up/down scan; 8 AM/FM presets; 5-LED signal-strength display; remote control. Remote sensor for multiroom applications optional. FR 5-65,000 Hz \pm 0.5 dB; S/N 85 dBA phono; IM 0.0015%. FM: THD 0.09% at 1,000 Hz stereo; S/N 75 dB stereo; ch sep 52 dB at 1,000 Hz. 17 x 3 $\frac{1}{4}$ x 12 $\frac{1}{4}$ in; 16 lb \$600

GFP-555II Preamplifier

5 line-level inputs; MM and MC phono inputs; AC- and DC-coupled outputs; bypass output; signal-processor loop. Features 1% Roederstein resistors and film capacitors throughout; switchable phono input capacitance and gain; separate headphone amp. Tape dubbing; rec-out selector. FR 5-85,000 Hz \pm 0.5 dB; S/N 90 dBA phono, 100 dBA line; THD 0.02% phono, 0.003% line. 17 x 3 x 11 $\frac{1}{8}$ in; 11.5 lb \$500

GTP-400 Preamplifier/Tuner

MM/MC phono input. Features Class A phono stages. 8 AM/FM presets; rec-out selector; tone control. THD 0.01%; IM 0.005%; FR 20-20,000 Hz

\pm 0.1 dB; S/N 80 dB phono, 95 dB line. FM: 50-dB quieting sens 13.5 dBf mono, 37 dBf stereo; cap ratio 1.7 dB; S/N 80 dB mono, 75 dB stereo. 17 x 3 $\frac{1}{4}$ x 12 $\frac{1}{4}$ in; 15 lb \$399

ARAGON

Aurum Preamplifier

Features Class A circuitry; dual-mono design; Teflon dielectric wiring; Penny and Giles volume control. 19 x 3 $\frac{1}{2}$ x 14 in \$1,750

Model 18K Preamplifier

6 inputs; 2 outputs; gold-plated connectors. Features Class A circuitry; dual-mono DC power supply. 19 x 3 x 11 in \$995

ARCAM

Delta 110 Digital Preamplifier

1 coaxial and 1 fiber-optic digital inputs; 5 analog inputs; MC/MM phono inputs; 2 tape-monitor loops; headphone jack. Features 1-bit D/A converter; standby mode. Separate listen and record; switching for 2 speaker pairs; mono switch; balance control; remote control \$1,500
Delta 110S. As above, without digital inputs. One additional analog input \$1,100

AUDIO ALCHEMY

PCM Preamplifier

Features silver rotary source and mode switches; plastic rotary attenuator \$399

AUDIO BY VAN ALSTINE

FET-Valve Tube Preamplifier

Phono inputs; 2 tape-monitor loops; 3 line-level inputs; selectable signal-processor loop; headphone jack. Features hybrid vacuum tube/MOSFET design; voltage and current-overload protection; toroidal transformer; regulated power supplies \$1,195

Transcendence Two Preamplifier

2 tape-monitor loops; switchable processor loop; headphone jack. Features solid-state design with current-source FET input pairs; Class A current-source pre-drivers; hybrid current amplifiers in feedback loop; regulated power supply. Defeatable tone controls \$895

Super Pas Four Omega Tube Preamplifier

Gold-plated phono input; 5 gold-plated line-level inputs; 2 tape-monitor loops; headphone jack. Features straight-line vacuum-tube voltage gain circuits followed by solid-state current drivers; toroidal transformer; regulated power supplies; 240-V operation. Black anodized faceplate \$845 Kit \$595

AUDIO RESEARCH

SP-14 Tube Preamplifier

7 inputs including phono; 4 outputs; 2 tape loops. Features hybrid tube/solid-state design; regulated power supplies. Separate gain and attenuation controls; separate input and record-out selectors; bypass switch for balance and mode controls; mute switch; 2-way tape dubbing; 3 AC outlets. Frequency response 30-40,000 Hz \pm 0.3 dB phono, 5-50,000 Hz \pm 0.5 dB line; distortion 0.01% at 2 V rms. Anodized black front panel and knobs optional. 19 x 5 $\frac{1}{4}$ x 10 $\frac{1}{4}$ in; 12 lb \$2,995

SP-9 MkII. As above, without record-out selector, attenuation control, bypass switch, 2-way tape dubbing, or AC outlets \$1,995

AMPLIFIERS

LS2 Tube Preamplifier

6 line-level inputs; two XLR balanced outputs; one single-ended RCA output; defeatable tape outputs. Features hybrid tube/solid-state Class A design; two regulated power supplies with transformer feeding active-feedback circuit; four-section 41-detent attenuator; gold-contact input selector switch; source-direct switch. Auto/manual muting. FR 1-100,000 Hz ± 0.5 dB; distortion 0.01% at 2 V rms; overall gain 18 dB. 19 x 5 1/4 x 10 1/4 in; 13 lb \$2,495
LS2B. As above, one balanced input \$2,995

LS3 Preamplifier

5 line-level inputs; 2 single-ended outputs. Features design for shortest signal paths and minimal



Audio Research LS2

point-to-point wiring; DC-coupled inputs; 2 regulated power supplies; aircraft-grade power-on, mute, monitor-source, and source-direct switches. Rotary gain, balance, input selector, and stereo/mono controls. FR 2-100,000 Hz ± 0.5 dB; distortion 0.01% at 2 V rms; overall gain 18 dB. 19 x 5 1/4 x 10 1/4 in; 11 lb \$1,495
LS3B. As above, with one XLR balanced output \$1,995

AUDIRE

Diffet 3 Preamplifier

MM phono input. Features discrete circuitry; FET design; regulated power supply. MC phono input optional. FR 5-100,000 Hz; THD 0.005%; S/N 94 dB. 19 x 2 1/4 x 7 in; 7 lb \$990

Legato Preamplifier

MM phono input; 5 line-level inputs; 2 tape loops; two outputs. Features regulated power supply; subsonic filter. FR 0-100,000 Hz +0, -0.25 dB; S/N 90 dB. 19 x 1 3/4 x 7 in; 6 lb \$440

B & K COMPONENTS

Sonata MC-101 Preamplifier

6 inputs; 2 tape loops; balanced outputs. Features selectable MM/MC head amp; discrete DC-coupled circuit topology. Rec selector; high-cut filter; tone controls. S/N 72 dB; FR 1-150,000 Hz; THD 0.02%. 17 x 3 1/2 x 12 in; 22 lb \$798

CS-117 Preamplifier

4 line-level inputs; 1 switchable phono/line-level input; 2 line-level outputs; 1 balanced output; 1 tape loop. Features selectable passive mode; tone controls. FR 1-100,000 Hz; S/N 89 dB; THD 0.02%; sens 2.7 mV. 17 x 2 1/2 x 9 in; 10 lb \$398
CS-115. As above, no tone controls \$348

BERNING

TF-12-B Tube Preamplifier

MM/MC phono input; 5 line-level inputs; balanced outputs. Features dual-mono differential-tube design; digitally controlled switching matrix in 1-dB steps over 80-dB range for volume and balance; high-frequency resonant power supply. LED dot-matrix level meters; remote control. FR 5-100,000 Hz ± 3 dB; gain 32 dB line; sens 0.38 mV for 0.5-V output at 1,000 Hz MM, 32 mV line \$3,795



BOULDER

L3AE Preamplifier

5 line-level inputs; MM/MC phono input; 3-pin outputs; quasi-balanced outputs; 1 tape loop; gold-plated connectors. THD 0.0025% from 20-20,000 Hz; max voltage gain 59 dB MM, 79 dB MC. 17 x 3 3/4 x 15 3/4 in; 13 lb \$1,499

Modular Preamp Components

Each module has gold-plated connectors and measures 1 1/4 x 3 1/2 x 4 1/4 in.

Boulder Ultimate Preamplifier

MS01, MS11, MS21, and MS32 mounted in one dual frame and two single frames \$5,299

Boulder Complete Preamplifier

MS01, MS10, MS21, and MS32 mounted in one quad frame \$3,199

MS32 Output Controller Module

Buffered inputs. Stereo/mono and polarity switches; -20 dB mute; volume and balance controls \$1,439

MS11 Phono Preamp Module

Performs RIAA EQ and gain adjust. MC and MM inputs; balanced and unbalanced outputs. Triple-F switchable Bessel 3-pole low-cut filter at 10, 20, or 30 Hz. Input for low-level MC with 20-dB gain optional. THD 0.0025% \$1,099
MS10. As above, without Bessel filter \$939

MS01 Power Supply. Powers 4 modules \$659

MS21 Selector Switch Module. For phono and 5 line-level inputs. Features tape-dubbing capability \$589

SSMC Solid-State MC Input Module. Bridging design with 20-dB gain \$499

SSBO Solid-State Balanced-Output Module. Inverts stages for balanced output \$329

Preamplifier Housings

MF04. Mainframe for 4 preamp modules. Full-rack size with removable ears \$249

MF02. Mainframe for 2 preamp modules. Half-rack size \$199

MF01. Mainframe for 1 preamp module \$179

MS00. Blank panel for unused slots \$79

BRYSTON

The following feature a 20-year warranty covering parts and labor.

Model 12B Preamplifier

MC phono input; 5 line-level inputs; line-level output; 2 tape and processor loops; headphone jack. Source switch; tape monitoring; mute control. FR 20-20,000 Hz; THD 0.005%; high-level sens 50 mV. MC gain 16.5 or 22.5 dB; FR 5-30,000 Hz ± 0.5 dB. 19 x 1 3/4 x 8 in; 10 lb \$1,995

BP4.2 Preamplifier

2 balanced inputs and 1 balanced output. FR 22-20,000 Hz ± 0.05 dB; sens 50 mV \$1,095

Model .5B Preamplifier

Phono input; 3 line-level inputs; 1 tape and 1 processor loop. Features two-stage phono section; CD input protected by volume control; no internal wiring; components plug directly into boards. FR 22-20,000 Hz; max output 15 V; THD 0.005%; high-level sens 50 mV; S/N 80 dBA phono, 95 dBA line. 19 x 1 3/4 x 8 in; 7 lb \$795

CAMBRIDGE AUDIO

C100 Preamplifier

Gold-plated MM and MC phono inputs; 2 tape-monitor loops. Features toroidal power transformer; rec-defeat circuit. FR 5-130,000 Hz; S/N 75 dB MC, 80 dB MM, 94 dB line; input sens 0.5 mV MC, 4.5 mV MM, 300 mV line. 17 x 3 3/4 x 12 1/2 in; 9.9 lb \$700

C70 Preamplifier

Gold-plated MM and MC phono inputs; tape-monitor loop; dual active and passive outputs. Features toroidal power transformer; passive EQ in RIAA stage. Defeatable passive tone controls. FR 10-140,000 Hz; S/N 75 dB MC, 80 dB MM, 95 dB line; input sens 0.5 mV MC, 4.5 mV MM, 300 mV line \$500

CARVER

Models with Sonic Holography use proprietary circuitry to enhance sound-stage ambience. ACCD is a multipath rejection circuit.

C-19 Tube Preamplifier

7 inputs including MM phono, MC phono, and CD-direct; 2 signal-processor loops; 2 tape-monitor loops with dubbing capability; one main output with solid-state transfer characteristic; one main output with vacuum-tube transfer characteristic; headphone jack. Features four 6DJ8 vacuum tubes; infrasonic filter. L/R tone controls with variable turnover; adjustable gain; mono/stereo and absolute-phase switches; 6 AC outlets. FR 10-20,000 Hz +0, -0.3 dB; THD 0.25%; S/N 86 dB MM, 82 dB MC \$1,200

CT-17 A/V Preamplifier/Tuner

7 audio inputs including CD-direct; 2 video inputs with dubbing capability; 2 tape-monitor loops; signal-processor loop; video monitor output; headphone jack; remote infrared sensor input for 2-zone multiroom applications. Features Dolby Pro Logic decoder; Sonic Holography; ACCD; high-cut filter; motor-driven volume control. 3-band EQ; 20 AM/FM presets with scan;



Bryston Model 12B

selectable ambience delay; signal-strength indicator; 4 AC outlets; remote control with rear-channel level control. FR 20-20,000 Hz ± 1 dB; THD 0.008%; S/N 80 dB MM. FM: IHF sens 14.3 dB; cap ratio 1.9 dB; AM rej 62 dB; alt-ch sel 72 dB; ch sep 46 dB \$800

C-16 Preamplifier

8 inputs including MM and MC phono; 2 signal-processor loops; 2 tape-monitor loops with dubbing capability; 2 main outputs; headphone jack. Features Sonic Holography; L/R tone controls with variable turnover; infrasonic-filter, mono/stereo, and absolute-phase switches; 6 AC outlets. FR 10-20,000 Hz +0, -0.3 dB; THD 0.01%; S/N 84 dB MM, 88 dB MC \$650

CT-6 Preamplifier/Tuner

6 audio inputs; 2 tape-monitor loops with dubbing capability; headphone jack. Features Sonic Holography; ACCD; motor-driven volume control. 20 AM/FM presets with scan; auto/manual tuning; FM-mono switch; bass, treble, balance, and loudness controls; 3-level signal-strength indicator; 4 AC outlets; remote control. FR 20-20,000 Hz ± 1 dB; THD 0.008%; S/N 78 dBA MM. FM: IHF sens 14.3 dB; cap ratio 1.9 dB; AM rej

AMPLIFIERS

62 dB; alt-ch sel 72 dB; ch sep 46 dB and THD 0.25% at 1,000 Hz; S/N 74 dB stereo \$580

CT-3 A/V Preamp/Tuner

6 audio inputs; 3 video inputs; 2 video outputs; pre-out/main-in loops; switchable cable/antenna inputs. Features Sonic Holography; ACCD; motor-driven volume control. 30 AM/FM presets with scan; auto/manual tuning; signal-strength indicator; bass, treble, and balance controls; sleep timer; 2 AC outlets; remote control. FR 20-20,000 Hz ± 1 dB. FM: cap ratio 2.2 dB; AM rej 62 dB; alt-ch sel 65 dB; ch sep 45 dB and THD 0.2% at 1,000 Hz; S/N 78 dB stereo \$450

CELLO

Encore Preamp

8 single-ended line-level inputs; 2 line-level outputs; buffered tape outputs; 2 tape-monitor loops; phono input. Features 36-, 46-, or 60-dB gain; choke-input power supply; phase switch \$8,000

The Palette Preamp

5 unbalanced inputs; 2 unbalanced fixed-level outputs; 2 unbalanced and 1 balanced outputs; 2 tape-monitor loops. Features external power supply; 6 tone controls. FR 20-20,000 Hz ± 0.2 dB; THD 0.005%; max output 9 V \$6,500

Audio Suite

Modular system built around an open-architecture mainframe that accepts up to 10 slide-in vertical modules (sampling listed below). Can control multiroom and multimedia systems.

P101. MC phono input	\$3,800
P301. Output	\$3,800
Master Supply. 120 V	\$3,000
P201. CD input	\$2,800
P100. MM phono input	\$2,250
Mainframe Chassis	\$2,000
B301. Output	\$2,000
P200. Tape input	\$1,700
P200. CD input	\$1,700
P200. Tuner input	\$1,700
B100. MM phono input	\$1,700
B100. MC phono input	\$1,700

CLASSÉ AUDIO

Classé Six Preamp

MM/MC phono, balanced, and 5 line-level inputs; balanced, single-ended, and buffered tape outputs. Features polystyrene and polypropylene capacitors. Input, mode, and bypass selectors; tape-monitor and mute switches. FR 20-20,000 Hz ± 0.1 dB; S/N 95 dB line, 85 dB phono; THD 0.1%. Satin black and soft shadow silver. 19 x 14 $\frac{1}{4}$ x 6 in. \$3,295

Classé Five. As Classé Six, 24-V output. \$2,295
Classé Four. As Classé Five, without bypass selector. Output 20 V. 19 x 12 $\frac{3}{4}$ x 3 $\frac{1}{2}$ in. \$1,595

CONRAD-JOHNSON

PV11 Tube Preamp

2 tape loops. Features cathode follower outputs and solid-state voltage regulator designed for minimal AC impedance; regulated filament power supplies; audio circuits with 1% tolerance; mil-spec deposited tin-oxide resistors; polystyrene capacitors; volume control tracks within 0.5 dB; auto turn-on/off mute. FR 2-100,000 Hz; THD 0.5%; hum and noise 72 dB below 10 mV input phono, 84 dB below 2.5 V output line; max output 40 V rms; output imp 200 ohms. 16 x 3 $\frac{3}{4}$ x 10 in; 15 lb \$1,895



PF1 Preamp

1 phono and 4 line-level inputs. All-FET design with distortion canceling circuit; polypropylene and polystyrene audio circuitry; power-supply capacitors; metal-film resistors. FR 2-75,000 Hz ± 0 , -3 dB; THD 0.1%; max output 10 V; line gain 21 dB; phono gain 40 dB. 19 x 3 $\frac{1}{2}$ x 12 $\frac{1}{2}$ in; 15.5 lb \$1,395

PV10a Tube Preamp

1 phono and 5 line-level inputs; 1 tape-monitor loop. Features zero-feedback circuits in both line and phono stages; 2 triode amps separated by passive RIAA EQ network; 5 vacuum tubes; discrete regulated power supply with polypropylene and polystyrene capacitors. Balance-bypass switch. THD 0.01%; hum and noise (20-20,000 Hz) 72 dB below 10 mV input phono, 84 dB below 2.5 V output line; output imp 500 ohms. 16 x 11 x 3 $\frac{3}{4}$ in \$995

COUNTERPOINT

SA-5000 Tube Preamp

MC and MM phono inputs; 5 line-level inputs. Features hybrid tube/solid-state design; separate-chassis regulated tube power supply; absolute-phase control; adjustable phono gain; buffered output. FR 4-60,000 Hz ± 0.1 dB; THD 0.01%. 19 x 4 $\frac{1}{2}$ x 12 $\frac{1}{2}$ in; 39 lb \$3,595
SA-3000. As above. FR 8-40,000 Hz ± 0.1 dB; 22 lb \$1,995

Soild-8 Preamp

6 line-level inputs; 2 tape loops. Features FET design. FR 1-500,000 Hz ± 1 dB; THD 0.03%; S/N 87 dB. 19 x 2 $\frac{1}{4}$ x 10 in; 14 lb \$995

CROWN INTERNATIONAL

PSL-2 Preamp

Phono input. Features subsonic filter; loudness circuit; auto mute protect. Defeatable tone controls; overload, rumble, and signal-presence indicators; tape dubbing; adjustable phono gain. FR 10-50,000 Hz ± 0.25 dB; THD 0.009%; S/N 103 dB; input sens 250 mV; output level 2.5 V. 19 x 1 $\frac{1}{4}$ x 11 $\frac{1}{2}$ in; 11 lb \$795

DB SYSTEMS

All models include the outboard DB-2A power supply, which features a double-shielded transformer for AC line isolation.

DB-1A Preamp

Features 20- and 36-Hz low-cut filters; 5,000- and 10,000-Hz high-cut filters. THD $\pm 0.0008\%$ from 20-20,000 Hz; IM 0.001%; FR 10-40,000 Hz ± 0.07 dB phono, 2-50,000 Hz ± 0 , -1 dB line; S/N 89 dBA phono, 90 dBA line; output imp 1 kilohm; max output voltage 6 V into 10 kilohms/3,000 pF; input sens (for 1 V output) 2 mV into 50,000 ohms/100 pF (phono), 120 mV into 50 kilohms (line). 5-yr warranty. 8 $\frac{1}{2}$ x 3 $\frac{1}{4}$ x 7 in. \$535

DB-1B. As above, with reduced crosstalk, gold-plated jacks, and 80-dB Alps tracking volume control. S/N 94 dB line. Solid-oak cabinet with hand-rubbed tung-oil finish. 12 x 3 $\frac{3}{4}$ x 7 in \$740

DB-1A-HL. As DB-1A, no phono stage, 5 line-level inputs. Features Alps 80-dB tracking volume control. FR 1-250,000 Hz ± 3 dB; S/N 92 dB; THD 0.0006%; sens 120 mV line \$535

DENNESEN

JC-90 Mono Preamp

MC phono input; balanced output. Features polarity inverter. THD 0.005%; S/N 100 dB MM, overload 500 mV \$2,500

DENON

PRA-2000RG Preamp

MM/MC phono input; 8 unbalanced inputs; 1 balanced input; 3 unbalanced outputs; 1 balanced output. Features FET and MOSFET circuitry; relay-type input switching. Rec-out selector. THD 0.005% at 1 V; S/N 105 dBA line, 90 dBA MM, 80 dBA MC; max output 10 V rms \$3,000

AVP-5000 Digital A/V Preamp

4 fiber-optic and 2 coaxial digital inputs; 4 video inputs; composite and S-video inputs; 11 analog inputs; 1 fiber-optic digital output; 6 video outputs; 8 variable-level and 4 fixed-level analog outputs. Features 2 digital ICs for preamp, sound-field processing, Dolby Pro Logic, and surround-sound functions; 2 Lambda ladder-type and 4 AI hybrid multi/1-bit D/A converters driving analog volume control and preamp outputs; dual Sigma-Delta A/D converters; 3-band parametric EQ; signal compression and expansion. Adjustable delay time (0-180 ms) and reverb in surround and sound-field modes; programmable remote control \$2,500

PRA-1500 A/V Preamp

2 video inputs; MM/MC phono inputs; 2 tape loops; balanced output; 1 video output; mono wideband and subwoofer outputs. Features unity-gain interface; source-direct mode. IS-system remote control \$500

DYNACO

PAS-3 Series II Tube Preamp

4 line-level inputs; MM phono input; 2 tape loops; signal-processor loop. Tape-dubbing capability; mono switch. FR 20-20,000 Hz ± 0.25 dB; THD 0.005% at 1,000 Hz; max output 10 V; high-level gain 20 dB; output imp 50 ohms. Black acrylic or polished-chrome faceplate \$650

FORTÉ

F44 Preamp

6 line-level inputs; tape-monitor loop; 1 unbalanced and 2 balanced outputs; gold-plated connectors. Features dual-channel, noninverting FET design; matched gain devices enhanced with discrete pure Class A biasing; active constant-current sourcing; glass-epoxy circuit boards. Separate listen and rec selectors; balance control; remote control. Input imp 12 kilohms; output imp 100 ohms; THD 0.05% from 0-20,000 Hz at 3 V out; S/N 100 dB \$1,095
 Optional MM/MC phono stage \$300

GOLDMUND

Mimesis 7.1 Preamp

1 phono input; 3 line-level inputs; 2 tape loops. Self-adjusting MC phono input. Phase and muting switches. FR 0-850,000 Hz ± 3 dB; S/N 95 dB; ch sep 90 dB. 19 x 1 $\frac{1}{4}$ x 13 in; 13.2 lb \$5,500

HAFLE

Model 915S Preamp

5 line-level inputs; MM/MC phono input; 1 tape loop; headphone jack. Features Class A J-FET topology; large filter capacitance. THD 0.02%; S/N 100 dB. Rack mountable; silver. 7-yr warranty. 19 x 1 $\frac{1}{4}$ x 7 $\frac{1}{2}$ in; 8 lb \$750

AMPLIFIERS

Model 945S Preamplifier/Tuner

5 line-level inputs; 2 tape loops; 1 A/V output; headphone jack. Features Class A JFET line amplifiers; MPX filters. Defeatable tone controls; double-balanced mixer; 18 tuner presets. THD 0.02%; S/N 100 dB; sens 6.5 dBf mono, 12 dBf stereo. Rack mountable; silver. 7-yr warranty. 19 x 2½ x 10½ in; 10 lb \$650

HARMAN KARDON

Citation25 Preamplifier

Headphone jack. Features discrete circuitry; high-cut and subsonic filters. Interactive A/V switching; tone-defeat and mono switches; selectable bass and treble center frequencies; remote control \$899

PT2300 A/V Preamplifier/Tuner

5 inputs including 2 A/V inputs and 2 VCR/tape monitors; 1 subwoofer and 2 line-level outputs. Features digital quartz-locked tuner. 7-way dubbing matrix; 16 AM/FM presets; remote control \$529

HEYBROOK

C-3 Preamplifier

MM, MC, tape, and 5 line-level inputs. Features overload protection; rear-panel power switch. FR 10-50,000 Hz ± 3 dB; sens 160 mV line. 17 x 3 x 13 in; 8 lb \$798

HTG

DCC-1 Digital A/V Preamplifier

7 analog inputs including video; 1 fiber-optic, 1 coaxial, and 1 fiber-optic/coaxial digital inputs; AES/EBU input; S-video terminals. Features 8x oversampling, 18-bit D/A converter; upgradable digital section; video switching and dubbing capabilities; switchable gain stage; rec-out selector \$1,195
ACC-1. As above, without digital stage .. \$895

JRM

JRM Preamplifier

MC and MM phono inputs; 4 line-level inputs. Features 2-stage RIAA EQ with ±0.1 dB conformity; 18-dB subsonic filter; 10 W x 2 headphone amp. Separate input select for main, rec, and out. FR 0-50,000 Hz +0, -1 dB; THD 0.001%; S/N 76 dB MC, 87 dB MM; slew rate 20 V/μs. 19 x 2¼ x 8½ in \$675

KINERGETICS

KPA-2 Preamplifier

Balanced outputs; isolated processor loop. Features discrete Class A circuitry; outboard power supply. Independent audio and video switching \$1,295

KRELL

KBL Preamplifier

2 balanced and 4 single-ended inputs; 2 tape loops; balanced and single-ended outputs. Features DC coupling; Class A circuitry; external dual-mono power supply \$4,500

KSL Preamplifier

2 balanced and 3 single-ended inputs; 1 tape loop; balanced and single-ended outputs. Features Class A circuitry. Phono stage optional \$2,500

KPE Preamplifier

Features discrete circuitry; MC/MM phono stage;



external power supply; selectable gain and phono loading \$850

LINN

Kairn Preamplifier

7 inputs; 3 line-level outputs. Remote-control operation; front-panel controls. 13 x 3½ x 13 in; 10 lb \$2,795

LK1 Preamplifier

MM, MC, and 4 line-level inputs. Features micro-processor-controlled design with independently adjustable input-level matching. Keyboard lock-out; remote control \$1,295

LUXMAN

TP-117 Dual Preamplifier/Tuner

Signal-processor loop; CD-direct input. Dual preamps in one chassis for independent source selection and volume control for two sets of



Marantz AV-500

components. Features AM/FM tuner with computerized tuning. 20 AM/FM station presets with auto-seek tuning; FM fine tuning in 25,000-Hz steps; video switching with buffer amplifiers; remote control. FR 20-20,000 Hz ± 0.5 dB; THD 0.006%; S/N 86 dB phono, 96 dB line. FM: 50-dB quieting sens 38 dBf stereo; cap ratio 1.5 dB; alt-ch sel 68 dB. AM: S/N 50 dB. 17¼ x 4¼ x 13 in; 11.4 lb \$1,250

TP-114 Preamplifier/Tuner

Fixed line-level outputs; phono input; remote-control output. 20 AM/FM presets; auto seek; preset scan; FM fine tuning; local/remote sensor selector; auto phono/aux input switching; remote control. FR 20-20,000 Hz ± 0.5 dB phono, 5-160,000 Hz ± 3 dB line; S/N 78 dBA phono, 95 dBA line; THD 0.008% at 1 V output. FM: 50-dB quieting sens 14.8 dBf mono, 38 dBf stereo; cap ratio 1.5 dB; alt-ch sel 65 dB \$330

MARANTZ

AV-500 A/V Preamplifier

8 gold-plated RCA audio inputs; 4 gold-plated RCA video inputs; 4 S-video inputs; front-panel composite/S-video A/V input; 4 gold-plated RCA audio outputs; 3 gold-plated RCA video outputs; 3 S-video outputs; 3 gold-plated RCA line-level outputs for front, center, and surround. Features Dolby Pro Logic decoder; auto input balance; motor-driven volume control. Matrix, movie-surround, 3-ch logic, and 2 concert-hall surround modes; adjustable digital delay; movable digital color PIP for 2 video sources; switchable 3-, 5-, or 7-dB bass boost at 70 Hz; remote control. Black finish. 17¼ x 3¾ x 13½ in \$899

SC-80 Preamplifier

MM/MC phono input; 4 line-level inputs; normal and phase-inverted outputs; 2 tape-monitor

loops; signal-processor loop. Features Class A design; all-discrete primary signal path; balanced output coupling via impedance-matching transformers; source-direct switch; motor-driven volume control. Defeatable narrow-Q bass and treble controls; rec-out selector; remote control. FR 20-20,000 Hz ± 0.2 dB phono, 10-40,000 Hz ± 0.1 dB line; S/N 75 dB MC, 91 dB MM, 95 dB line; THD 0.015% line. Gold finish with die-cast alloy side panels. 17¼ x 4¼ x 14¼ in \$699

MARK LEVINSON

Model 28 Preamplifier

7 inputs, including 2 gold-plated XLR balanced inputs; 5 single-ended inputs; 1 selectable phono/line input; balanced and unbalanced main outputs; single-ended outputs for 2 tape decks. Features dual-mono construction; low and high-gain phono modules each with 2 gain settings; separate power supply. Output imp 10 ohms; single-ended line gain 0, 6, 12, or 18 dB; balanced line gain 6, 12, 18, or 24 dB. Preamp: 17½ x 2¼ x 10¼ in. Power supply: 8½ x 2¼ x 13½ in \$3,495

MCCORMACK

Line-Drive GEN-2 Preamplifier

5 line-level inputs and 2 tape loops; 1 passive and 1 buffered main outputs wired in parallel for biampification. Front-panel input selector with mute, volume, and balance controls. FR 0-200,000 Hz +0, -3 dB; THD 0.0001%; input imp 15 kilohms; output imp variable for passive output, 200 ohms for buffered output; ch sep 80 dB. 19 x 3½ x 11½ in; 9 lb \$995

McINTOSH

C-39 A/V Preamplifier

5 line-level and 1 phono/line-level input; 6 A/V inputs; front-panel A/V input; processor loop; balanced main outputs; 13 serial data ports; control connectors for 2 CD players, tuner, and SCR switcher. Compatible with CR-10 multiroom system and HC-1 controller. Features Dolby Pro Logic decoder with delay and calibration controls; 2-zone control; variable loudness and tone controls; muting; switched AC outlets. FR 20-20,000 Hz +0, -0.5 dB; THD 0.002%; S/N 90 dB phono, 105 dB line. 17½ x 7¼ x 15½ in .. \$2,795

C-38 A/V Preamplifier

6 line-level, 1 A/V, and 1 phono/line-level inputs; 2 processor loops; balanced outputs; 9 serial data ports; control connectors for 2 CD players and 1 tuner. Compatible with CR-10 multiroom system and HC-1 controller. Features digital logic ICs; electromagnetic switching. 2-zone control; variable loudness and tone controls; muting; switched AC outlets. FR 20-20,000 Hz +0, -0.5 dB; THD 0.002%; S/N 90 dBA phono, 105 dBA line. 17½ x 5¼ x 15½ in; 23 lb \$1,995

C-36 A/V Preamplifier

6 line-level, 1 phono, and 1 video inputs; dual processor loops; gold-plated inputs and outputs; AC-switched outputs. Features digital logic ICs. Separate listen and rec switching; variable loudness and tone controls; power-on muting. FR 20-20,000 Hz +0, -0.5 dB; THD 0.002%; S/N 90 dB phono; 105 dB line. 17½ x 5¼ x 15½ in; 18 lb \$1,595

MELOS

MA-111B Preamplifier

MC, MM phono inputs; 1 tape loop. Features heavy-aluminum chassis and external toroidal power supply. FR 2-300,000 Hz ± 1 dB; THD

AMPLIFIERS

0.09%; sens 80 mV; S/N 70 dB MM, 65 dB MC; max output 30 V \$1,395
MA-110B. As above, no phono stage \$1,199

MERIDIAN

Model 603 Digital Preamplifier

2 coaxial and 2 fiber-optic digital inputs; 3 analog inputs. Features 2-chassis design with digital audio, computer control circuits, and power supplies in 1 box, D/A converters and analog audio circuitry in other; 1-bit PDM D/A converters; auto 32- or 48-kHz sampling-rate selection; passive differential analog filtering; 8 regulated power supplies. 64-step volume control; remote control. S/N 106 dBA \$2,500

Model 201 Preamplifier

6 MM/MC inputs; 2 tape-monitor loops. Can be externally controlled as part of Meridian multi-room system. Features dubbing capability; source monitoring. 64-step volume control; user-programmable mute level and volume offset between sources; remote control \$1,090

MOBILE FIDELITY

UltraAmp Preamplifier

6 line-level inputs and 3 line-level outputs including 2 tape loops. Features dual-mono design; separate buffer stage for tape outputs; separate power transformers and ground planes for each channel; conductive plastic potentiometers; fully discrete signal path with hand-selected transistors; double regulation for power supplies; silver-plated high conductivity switches. Phono stage optional. FR 2-150,000 Hz \pm 3 dB; THD 0.02%; S/N 90 dB. 18 x 3 1/2 x 10 in \$1,295

MOTIF

MP11 Preamplifier

4 line-level outputs; MM/MC phono input. Features all-FET design; RIAA EQ plus gain for MM and MC cartridges. FR 2-75,000 Hz +0, -3 dB; max output 10 V; THD 0.1%; gain 21 dB. 19 x 3 1/2 x 12 in; 15 lb \$2,395

MTX SOUNDCRAFTSMEN

Pro-Control 422 A/V Preamplifier/EQ

3 audio inputs including phono; 3 A/V inputs; 2 tape-monitor loops; signal-processor loop. Features independent listening and tape recording in



Onkyo Integra P-388F

multiroom applications; subsonic filter; differential/comparator output balancing. Defeatable tone controls; 10-band EQ with \pm 15-dB boost/cut range. FR 20-20,000 Hz \pm 0.1 dB; THD 0.005%; S/N 116 dB, 97 dB phono. Rack-mount front panel. 19 x 5 1/4 x 10 1/2 in \$849

P100 Preamplifier

5 audio inputs including phono; tape-monitor loop; headphone jack. Features C-MOS switching. 1 switched and 1 unswitched AC outlets. FR 20-20,000 Hz \pm 0.5 dB; THD 0.008%; S/N 100 dBA. 17 x 1 1/4 x 10 1/2 in \$360



MUSEATEX

Melior DCC-1 Digital Preamplifier

4 fiber-optic/coaxial digital inputs; 2 tape-monitor loops; processor loop; analog outputs. C-Lock jitter elimination circuitry; programmable LCD interface; remote control. 5-yr warranty. FR 1-20,000 Hz; THD 0.03%; S/N 105 dB \$2,349

Melior AVC-1 A/V Preamplifier

4 audio inputs; 4 A/V inputs including 2 S-video; processor loop; balanced outputs. Programmable LCD interface; remote control. FR 1-100,000 Hz; THD 0.25%; S/N 95 dB audio \$2,299

Melior ACC-1 Preamplifier

8 inputs; 4 tape-monitor loops; processor loop; balanced outputs. Programmable LCD interface; remote control. FR 1-100,000 Hz; THD 0.25%; S/N 95 dB. 22 lb \$1,949

NAD

Model 106 Monitor Series Preamplifier

5 line-level inputs; switchable MC/MM input; gold-plated inputs and outputs; XLR balanced outputs. Features discrete phono preamp stage; power-on muting. Defeatable tone controls; discrete headphone amp. FR 20-20,000 Hz \pm 0.2 dB; THD 0.01%; S/N 76 dBA MC/MM, 96 dBA line. 16 x 3 1/4 x 10 1/2 in; 8 lb \$549

Model 1600 Monitor Series Preamp/Tuner

4 line-level and 1 video inputs; MC/MM phono input; gold-plated phono and CD inputs; signal-processor loop. Features FM blend; infrasonic filter. 14 AM/FM presets; bass EQ; 2-way tape dubbing; defeatable tone controls; remote control. Rack mountable. FR 20-20,000 Hz \pm 0.3 dB; THD 0.01%; S/N 75 dBA phono, 100 dBA line. FM: cap ratio 1.6 dB; alt-chn sel 68 dB \$449

Model 1000 Monitor Series A/V Preamp

4 line-level and 1 video inputs; phono input; gold-plated phono and CD inputs; signal-processor loop; balanced output. Features bass EQ; switchable infrasonic filter. 2-way tape dubbing; defeatable tone controls; headphone amp. Rack mountable. FR 20-20,000 Hz \pm 0.2 dB; THD 0.01%; S/N 76 dBA phono, 96 dBA line. 17 1/4 x 3 1/4 x 10 1/2 in; 8 lb \$299

NAIM

NAC 72 Preamplifier

4 line-level inputs. Power supplied externally from Naim power amps with preamp supply or Naim Hi-Cap preamp supply. Features matched and time-aligned filter. Mute/monitor switch. Input sens 75 mV at 100 kilohms line; output imp 47 ohms; overload margin 40 dB. 11 1/4 x 3 x 8 in \$1,455

NAC 62 Preamplifier

4 line-level inputs. Power supplied externally from Naim power amps with preamp supply or Naim Hi-Cap preamp supply. Mute/monitor switch. Input sens 75 mV at 100 kilohms line; overload margin 40 dB. 11 1/4 x 3 x 8 in \$965

NAKAMICHI

CA-7A Digital Preamplifier

6 line-level inputs; MC and MM phono inputs; 2 main-speaker outputs. Features separate digital

and analog sections; isolated ground technology; multiroom remote control with RS-7 infrared sensor. FR 1-100,000 Hz +0, -3 dB; THD 0.002%; S/N 94 dBA. 17 1/4 x 3 1/4 x 12 1/4 in; 15.3 lb \$2,750

CA-5AII Preamplifier

5 line-level inputs; MC and MM phono inputs; gold-plated inputs and outputs. Features bipolar transistors; low-noise FETs; multiregulated isolated-ground power supply. Tape-dubbing capability; balance and tone controls. FR 1-100,000 Hz +0, -3 dB; THD 0.002%; S/N 95 dBA. 17 1/4 x 2 1/2 x 11 1/4 in; 11.3 lb \$1,150

OCM TECHNOLOGY

Model 55 Preamplifier

1 line-level input; 4 unbalanced, 2 main (1 balanced, 1 unbalanced), and 2 tape outputs; gold-plated RCA connectors. Features direct-coupled design with DC-servo loop; silver-plated copper wiring. Dual monitoring capability. Input imp 50 kilohms; FR 20-20,000 Hz \pm 0.1 dB; gain 20 dB; THD 0.05%. Anodized black-aluminum faceplate \$1,395

ONKYO

Integra P-388F Preamplifier

9 audio inputs; MM/MC phono inputs; balanced CD input; 2 tape loops; balanced outputs. Features multistage balanced circuit design; transformer designed to prohibit electromagnetic interference; motor-driven volume control. Rec selector; remote control \$1,200

Integra P-304 Preamplifier

8 inputs including MM/MC phono. Features all-discrete signal path; signal in-phase filters; FET MM/MC phono input. Two rec-out selectors; direct tone controls; side panels. FR 0.8-170,000 Hz +0, -3 dB; THD 0.0005% line; S/N 92 dB MM. 18 1/4 x 4 x 15 1/2 in; 17 lb \$530

P-301 A/V Preamplifier

7 audio and 2 video inputs. Features multiroom capability; motor-driven volume control. Selective tone control; video dubbing; source-direct switch. FR 15-30,000 Hz \pm 1 dB; THD 0.009% line; S/N 92 dB MM. 17 1/4 x 4 3/4 x 12 1/4 in; 9 lb \$270

OWL

Owl 1 Phono Preamplifier

Provides selectable RIAA equalization with adjustable rolloffs and turnover frequencies. Designed for vintage recordings. Features adjustable high-frequency and rumble filters; playback of normal/"hill & dale" recordings without rewiring phono cartridge. Phono and line-level inputs. Individual LR monitoring \$349

PARASOUND

P/FR-2000 Preamplifier

Processor loop. Features fully balanced circuitry; separate power supplies; C-MOS signal path and switching. Polarity inversion switch; remote control. FR 10-100,000 Hz; THD 0.005%; S/N 90 dB phono. 19 x 3 1/2 x 12 1/2 in \$1,185

C/PT1100 Preamplifier/Tuner

Gold-plated inputs and outputs. Features FMX decoder; Class A FET design. Infrared repeater for multiroom applications; separate level controls for 2 zones; variable loudness contour; remote control. FR 10-80,000 Hz; THD 0.005%; S/N 92 dB. 19 x 3 1/2 x 12 1/2 in \$595

AMPLIFIERS

P/HP-750II Preamplifier

Phono and line-level inputs. Features C-MOS switching for inputs, tape; high- and low-pass filters. Variable loudness contour; tape dubbing. FR 5-65,000 Hz; THD 0.006%; S/N 92 dB; phono overload 200 mV. 17¼ x 3¼ x 9½ in; 10 lb. \$299

PIONEER

Elite Series

C-91 A/V Preamplifier

5 audio inputs including 2 tape-monitor loops and one MM/MC phono input; 5 video inputs including 3 VCR loops; 3 S-video inputs; 3 S-video outputs; gold-plated terminals. Features video enhancer; motor-driven volume control. Rec-out selector; tape dubbing capability; programmable remote control. THD 0.002% from 20-20,000 Hz; FR 20-20,000 Hz ± 0.2 dB MM, 20-20,000 Hz ± 0.3 dB MC, 1-150,000 Hz ± 0 , -3 dB line. 18 x 5¼ x 15¾ in; 22.8 lb. \$1,300

C-72 A/V Preamplifier

5 audio inputs; 5 composite/S-video inputs including front-panel A/V input; gold-plated terminals. Features multiroom capability. A/V-rec selector; video dubbing capability; programmable remote control. THD 0.002% from 20-20,000 Hz; FR 20-20,000 Hz ± 0.2 dB MM, 20-20,000 Hz ± 0.3 dB MC, 1-150,000 Hz ± 0 , -3 dB line. 18 x 6½ x 16½ in; 24.9 lb. \$850

PS AUDIO

PS 5.6 Preamplifier

MC/MM inputs; gold-plated connectors. PS 6.1 line stage and PS Phono Link phono stage in single chassis. Features military-grade glass-epoxy circuit board; multiple-regulation diode-isolated power supply; passive phono EQ. Straight-wire and bypass switches. FR 20-20,000 Hz ± 0.1 dB; THD 0.1%; S/N 74 dB MC, 85 dB MM, 100 dB line. 17 x 2½ x 9 in; 14 lb. \$895

Model 6.1 Preamplifier

6 inputs and 4 outputs; gold-plated connectors. Features active or straight-wire/passive operation; defeatable balance and tape-monitor circuits. Frequency response 20-20,000 Hz ± 0.1 dB; THD 0.1%; S/N 100 dB. 17 x 2½ x 9 in; 14 lb. \$695

P S E

Studio SL Preamplifier

6 inputs; switchable MM/MC input; XLR-balanced and RCA main outputs. Features discrete FET Class A design; separate discrete phono and line power supplies; metal-film resistors; absolute-phase reverse; auto mute. Volume and balance controls. Rack mount optional. 5-yr warranty. FR 30-16,000 Hz ± 0.25 dB phono, 1-60,000 Hz ± 0.25 % line; output imp 330 ohms; gain 48 dB MM, 32 dB MC, 20 dB line. 18 x 1¼ x 8½ in; 6 lb. \$950

QUAD

The following feature a tilt control that adjusts FR slope in seven 1-dB steps.

Quad 66 Preamplifier

7 inputs. Features high-frequency filter with 5,000- or 7,000-Hz rolloff; bass control with rolloffs at 50 and 200 Hz; remote control. FR 30-20,000 Hz ± 0.5 dB phono, 20-20,000 Hz ± 0.2 dB line; THD 0.05%; sens (phono) 3 mV with options of 1 mV or 200 μ V, S/N 75 dB; sens (aux 1/aux 2) 300 mV, S/N 93/99 dB; sens (CD) 300 mV, S/N 99 dB; sens (tuner) 100 mV, S/N 93 dB. 12¼ x 3¼ x 10 in; 7.5 lb. \$1,649



Quad 34 Preamplifier

4 inputs. 3 push-button filters; bass control. Distortion 0.5%; residual noise -105 dBA. \$849

QUICKSILVER AUDIO

Quicksilver Tube Preamplifier

Output imp 12.5 ohms; bandwidth 0-650,000 Hz; distortion 0.001%. \$1,795

ROTEL

RTC950AX Preamplifier/Tuner

6 inputs including MM/MC phono; processor loop; 2 main outputs; headphone jack. Bass and treble



Spectrascan LCA-10-MC

controls; tone defeat; tuner presets; auto/manual tuning; remote control. FM: usable sens 10.8 dBf; S/N 75 dB at 65 dBf stereo; THD 0.25% at 65 dBf and 1,000 Hz stereo; 50-dB quieting sens 37.2 dBf stereo; cap ratio 1 dB; alt-ch sel 70 dB. Preamp: FR 20-20,000 Hz ± 0.2 dB phono, 4-100,000 Hz ± 0 , -3 dB line; THD 0.004%; S/N 80 dB phono, 100 dB line. 17¾ x 3¾ x 13¾ in; 12.1 lb. \$600

RC980BX Preamplifier

8 inputs including MM/MC phono; headphone jack. Features high-frequency passive and low-frequency active EQ; direct signal paths. CD-direct switch. THD 0.004%; FR 20-20,000 Hz ± 0.2 dB phono, 4-100,000 Hz ± 0.5 , -3 dB line; S/N 85 dB MM, 70 dB MC, 100 dB line. 17¾ x 2¼ x 12¼ in; 9 lb. \$500

RC960BX Preamplifier

8 inputs including MM/MC phono; headphone jack. Features direct signal paths. Defeatable tone controls; separate bass and treble controls; tone defeat/mono switch. THD 0.004%; FR 40-20,000 Hz ± 0.2 dB phono, 4-100,000 Hz -3 dB line; S/N 80 dB MM, 70 dB MC, 100 dB line. 17¾ x 2¾ x 11¼ in; 6.6 lb. \$300

JEFF ROWLAND

Consummate Preamplifier

3 balanced and 3 unbalanced inputs; balanced and unbalanced outputs. Features Class A FET design; separate power supply with dual toroidal transformer; AC power-line filter. Microprocessor-controlled volume and switching; selectable gain; remote control. Bandwidth 0.05-160,000 Hz +3 dB; THD 0.008%; input imp 600 ohms, 10 kilohms, or 100 kilohms; output imp 300 or 600 ohms. 15 x 5½ x 13¼ in; 28 lb. \$5,950

Consummate Phono Stage. For above. Features balanced and unbalanced inputs and outputs; selectable gain. Output imp 150 or 300 ohms; bandwidth 0.15-250,000 Hz +3 dB; S/N 80 dB; THD 0.02%. 15 x 2¾ x 13¼ in; 10 lb. \$2,800

Consummate Phono Stage II. Single-ended input and output for above. Selectable gain. Bandwidth 0.15-220,000 Hz +3 dB; S/N 80 dB; THD 0.04%. 7½ x 2¾ x 13¼ in; 3 lb. \$950

Coherence One Series II Preamplifier

MM/MC phono input; 3 line-level inputs; tape-monitor loop. Solid-state FET design with power supply. Split-passive RIAA EQ; phase reversal and full muting; separate L/R level controls. Phono: bandwidth 0.15-220,000 Hz +3 dB; gain 61 dB; THD 0.025%. Line: gain 19 dB; bandwidth 0.06-650,000 Hz +3 dB; THD 0.01%. 19 x 3¼ x 12½ in; 29 lb. \$4,600

Consonance Preamplifier

1 phono and 5 unbalanced inputs; balanced and unbalanced outputs. Features microprocessor-controlled volume and switching; remote control. Line: bandwidth 0.08-160,000 Hz +3 dB; THD 0.012%; input imp 600 ohms, 10 kilohms, or 100 kilohms; output imp 300 or 600 ohms; selectable gain. Phono: bandwidth 0.15-220,000 Hz +3 dB; THD 0.04%. 15 x 2¾ x 13¼ in; 14 lb. \$3,700

SONOGRAPHE

SC22 Preamplifier

6 line-level inputs. Features FET design with polypropylene and polystyrene capacitors for all audio circuits; discrete power-supply regulation. FR 5-100,000 Hz ± 0.5 dB; max output 10 V; THD 0.1%. 17 x 12¼ x 2½ in. \$695

SONY

TA-E2000ESD Digital A/V Preamplifier

7 A/V inputs including 3 S-video inputs, 3 VCR-monitor loops, and 1 front-panel S-video input; 5 audio inputs including phono; 1 coaxial and 2 fiber-optic digital inputs; fiber-optic digital output; 2 subwoofer and 2 center-channel outputs. Features DSP with pulse A/D conversion, 1-bit D/A conversion, 45-bit digital filter, and auto sampling-rate switching; Dolby Pro Logic decoder. 10 factory and 10 user sound-field presets; 10 adjustable sound-field parameters; digital 3-band parametric EQ with 91 center frequencies, 16 slopes, and ± 12 -dB boost/cut in 0.1-dB increments; independent EQs for front, center, and rear channels; digital dynamic-range compression/expansion; programmable A/V remote control. FR 10-20,000 Hz ± 0.1 dB line; THD 0.004% at 1,000 Hz. Simulated-wood side panels. 18½ x 6 x 14¼ in; 18.8 lb. \$1,200

TA-E80ES Preamplifier

7 audio inputs including MM/MC phono; balanced XLR analog inputs and outputs; signal-processor loop. Features glass-epoxy circuit boards; dual-mono design; source-direct switch. Selectable phono load imp; rec-out selector; remote control. FR 20-20,000 Hz ± 0.2 dB phono; 3-300,000 Hz ± 0 , -3 dB line; S/N 83 dB MC, 95 dB MM, 105 dB line; THD 0.001%. Simulated-wood side panels. 15½ x 5¼ x 14½ in; 28.6 lb. \$900

SOUNDSTREAM

C-1 MkII A/V Preamplifier

4 line-level inputs; 1 phono/aux input; 3 video inputs. Features dual-mono Class A circuitry; discrete component signal path; separate power supply for audio; digital switching circuitry to link Soundstream components. A/V dubbing capability; rec-out selector; programmable remote control. FR 20-20,000 Hz ± 0.1 dB; THD 0.05%; S/N 100 dB; input imp 30 kilohms; input sens 100 mV for 0.5 V output. \$1,195

SPECTRASCAN

LCA-10-MC Preamplifier

MM/MC input; 6 inputs; 2 line-level outputs. Features input buffer amp; dual head amps; toroidal

AMPLIFIERS

power transformer. Switchable input capacitance for MM input; separate source and record switches; low-noise MC head amp. FR 3-250,000 Hz; THD 0.05% from 20-20,000 Hz line; S/N 100 dB; sens 100 mV for 1 V output. 19 x 3 1/4 x 9 1/2 in; 17 lb \$1,969
Without head amps \$1,569

SUMO

Diana Preamplifier

6 inputs; balanced XLR inputs/outputs. Features 2-chassis design with two 40-VA transformers and 4 high-voltage regulation stages; DC-coupled design; 1% metal-film resistors. FR 20-20,000 Hz ± 0.1 dB; THD 0.008%; S/N 100 dB; output imp 50 ohms \$1,399

Athena II Preamplifier

Gold-plated balanced inputs/outputs. Features fully complementary, Class A discrete line stage; all 1% metal-film resistors; polystyrene bypass capacitors; separate power supplies for each channel; 50 V peak-to-peak output voltage swing. Separate record and select functions; laser-trimmed volume potentiometer; CD-direct switch; tape monitor. FR 0.2-300,000 Hz +0, -3 dB; THD 0.005% at 3 V rms; S/N 100 dB line, 3 V rms output \$699
Bitstream D/A-converter card \$500
Plug-in MM/MC phono card \$150

SUPERPHON

SP-100 Preamplifier

5 inputs; 1 tape loop; gold-plated RCA connectors. Features power regulation through 2-stage dual-mono shunt regulators; zero-gain, zero-feedback, direct-coupled, imp conversion line-stage; panel controls with silver regulators. Volume and balance controls. THD 0.0018%; S/N 95 dBA \$399

THRESHOLD

Model FET Ten/e Preamplifier

1 unbalanced/balanced input and output; 5 line-level inputs; 2 tape loops. Features high-level noninverting FET design; external power supply; parallel input JFETs; secondary gain stages with cascaded MOSFETs to suppress voltage fluctuations; military-grade glass-epoxy circuit boards with gold-over-nickel-over-copper-plated paths; gold-plated connectors with Teflon insulation; metal-film and wire-wound resistors used throughout. Controls for program-source selector, record-signal routing, and monitor-signal selection. Bandwidth 0-125,000 Hz; THD 0.01%; crosstalk 75 dB; noise -110 dBA referenced to 1 V input. 19 x 1 1/4 x 11 in \$3,200

Model FET Nine/e Preamplifier

3 line-level inputs; MM/MC phono input; 2 tape loops. Features noninverting FET design; external power supply; military-grade glass-epoxy circuit board with gold-over-nickel-over-copper-plated paths; gold-plated connectors with Teflon insulation; metal-film and wire-wound resistors used throughout. FR 0-125,000 Hz at -3 dB; THD 0.01% at 3 V rms 20-20,000 Hz into 10,000-ohm load; input imp 25 kilohms line. 19 x 1 1/4 x 11 in \$2,250
Without phono stage \$1,990

YAMAHA

CX-1000U Digital A/V Preamplifier

4 coaxial and fiber-optic digital inputs; 4 video inputs; MM/MC phono input; 1 fiber-optic and 2 coaxial outputs; 5 audio outputs; 2 video out-



puts. Features 8x oversampling digital filter; dual D/A converters; auto sampling-rate selection. Continuously variable loudness control; 6-position MM/MC selector; source-direct switch; 12-position rec-out selector; simultaneous recording capability for 2 VCRs; audio mute; RS-system-compatible remote control. 28 lb \$1,199

CX-830 A/V Preamplifier

8 audio and 3 video inputs; switchable MC/MM phono input; gold-plated inputs; 4 audio and 2 video outputs. Features continuously variable loudness control; defeatable tone controls; source-direct switch; rec-out selector; switchable subsonic filter; programmable RS-system remote control. 12 lb \$699

CX-630. As above, 6 audio and 2 video inputs; rec-out selector. Features simultaneous recording capability for 2 VCRs. 11 lb \$449

INTEGRATED AMPLIFIERS

ACURUS

DIA-100 100-W/ch Integrated Amplifier

2 channels. Features direct-input design with single gain stage. 6 inputs. Volume, balance, and switching controls. 100 W x 2 into 8 ohms or 150 W x 2 into 4 ohms. 17 x 3 1/2 x 8 in \$995

AMC

CVT 3030 30-W/ch Tube Integrated Amp

2 channels. Features Class A design; two EL34 vacuum tubes/ch; seven 240-V MOSFET devices/ch; fixed-bias output tubes; no relay or switch contacts between output transformer and speaker terminals. 1 phono and 6 line-level inputs; tape loop; gold-plated speaker terminals. Tone defeat. 30 W x 2 from 50-20,000 Hz with 1% THD. S/N 80 dBA at 1 W \$900

ARCAM

Delta 90.2 70-W/ch Integrated Amplifier

2 channels. Features toroidal power transformer; aluminum chassis. MC/MM phono inputs; 2 tape-monitor loops; 2 pairs of speaker outputs. Separate listen and rec; defeatable tone controls;



Creek Model 6060

mono switch. 70 W x 2 into 8 ohms. THD 0.02% at 1,000 Hz. 17 x 3 1/2 x 11 1/2 in; 18 lb \$849

Alpha 3 40-W/ch Integrated Amplifier

2 channels. Features toroidal power transformer; aluminum chassis. MC/MM phono inputs; video input; tape-monitor loop; 2 pairs of speaker out-

puts; headphone jack. Defeatable tone and balance controls. 40 W x 2 into 8 ohms. FR 20-20,000 Hz; THD 0.02% at 1,000 Hz \$399

CAMBRIDGE AUDIO

P70 60-W/ch Integrated Amplifier

2 channels. Features toroidal transformers with tuned reservoir capacitors. 5 inputs; MC and MM gold-plated phono inputs; 5-way binding posts. Defeatable passive tone controls. 60 W x 2 into 8 ohms. FR 3-82,000 Hz ± 3 dB; THD 0.01% at 50% rated power; S/N 68 dBA MC, 80 dBA MM, 100 dBA line. 17 x 3 1/4 x 13 in; 14 lb \$600

CARVER

CM-1090 100-W/ch Integrated Amplifier

2 channels. Features Sonic Holography ambience-enhancement circuitry; motor-driven volume control. 7 audio inputs; CD-direct input; 2 tape-monitor loops with dubbing capability; pre-out/main-in loops. Matrix surround mode; 3-band EQ; A/B speaker switching; balance control; analog power meters; 4 AC outlets; remote control. 100 W x 2 into 8 ohms or 140 W x 2 into 4 ohms from 20-20,000 Hz with 0.1% THD \$600

CREEK

Model 6060 60-W/ch Integrated Amplifier

2 channels. MM/MC phono inputs; 3 line-level inputs and outputs; 2 tape-monitor loops; pre-out/main-in loops. Tape dubbing; active/passive tone controls; A/B speaker switching. 60 W x 2 or 200 x 1 \$1,095

Model 4140/S2 40-W/ch Integrated Amp

2 channels. MM/MC phono input; 2 line-level inputs; tape-monitor loop. 40 W x 2 into 8 ohms \$600

Model 4040/S3. As above, no MC stage. 30 W x 2 \$500

DENON

AVC-3030 400-W A/V Integrated Amp

5 channels with Dolby Pro Logic decoder and DSP. Features 5 discrete amps; 3 front amps with optically-coupled Class A circuitry. 5 video inputs; 5 S-video inputs; 10 audio inputs; 3 video outputs; 3 S-video outputs; 13 audio outputs. 4 Dolby modes; wide-screen, live, mono-movie, classic, rock, church, jazz, stadium, and matrix ambience presets; bass boost; cinema sound equalizer; adjustable delay and room size; auto input balance for Dolby Pro Logic; videodisc and CD-direct modes; programmable remote control with 5 command-sequence keys. 110 W x 2 (front) + 110 x 1 (center) + 35 x 2 (rear), all into 8 ohms \$1,300

PMA-1080R 105-W/ch Integrated Amp

2 channels. Features optically-coupled Class A circuitry; complementary topology; toroidal transformer. MM/MC phono input; line-level outputs. Separate input and rec-out selectors; last-function memory; remote control; Denon IS remote-control compatibility. 105 W x 2 into 8 ohms from 20-20,000 Hz. THD 0.005%; FR 1-250,000 Hz; S/N 94 dB MM, 76 dB MC, 110 dB line \$650

PMA-880R 75-W/ch Integrated Amplifier

2 channels. Features optical Class A circuitry; complementary topology; toroidal transformer. MM/MC phono input; line-level outputs. Separate input and rec-out selectors; last-function memory; remote control; Denon IS remote-control compatibility. 75 W x 2 into 8 ohms from 20-

AMPLIFIERS

20,000 Hz. THD 0.02%; FR 4-100,000 Hz; S/N 94 dB MM, 76 dB MC, 110 dB line \$450

HARMAN KARDON

HK6950R 170-W/ch Integrated Amplifier
2 channels. MM/MC phono inputs; 5 line-level inputs; 2 tape-monitor loops; pre-out/main-in loops; headphone jack. Phase-correct-loudness and tone-defeat switches; phono and rec-out selectors; remote control. 170 W x 2 into 4/8 ohms from 20-20,000 Hz with 0.08% THD. FR 0.2-20,000 Hz +0, -3 dB at 1 W; S/N 80 dB MM, 76 dB MC, 98 dB line, 110 dB amp; slew rate 280 V/μs. 17% x 6 1/4 x 15 1/4 in; 39.6 lb \$1,299

HK6650R. As above, tone controls not defeatable. Features mono switch. 100 W x 2 into 4/8 ohms from 20-20,000 Hz with 0.08% THD. FR 0.5-200,000 Hz +0, -3 dB; slew rate 180 V/μs. 17% x 5 1/2 x 14 1/2 in; 24.6 lb \$799

HK6350R. As above, without rec-out switch or pre-out/main-in loops. Features signal-processor loop. 60 W x 2 into 4/8 ohms from 20-20,000 Hz with 0.09% THD. Slew rate 140 V/μs; damping factor 60. 17% x 4 1/2 x 14 1/2 in; 18.1 lb \$499

HK6250 45-W/ch Integrated Amplifier

2 channels. 6 inputs including 2 tape-monitor loops; headphone jack. Phase-correct loudness switch; remote control. 45 W x 2 into 4/8 ohms with 0.09% THD. FR 0.5-150,000 Hz +0, -3 dB; S/N 80 dB phono, 98 dB line; slew rate 90 V/μs. 17% x 4 1/2 x 14 1/2 in; 15 lb \$349

HK6150. As above, 30 W x 2 into 4/8 ohms from 20-20,000 Hz with 0.09% THD. S/N 78 dB phono, 98 dB line. 14 lb \$279

JVC

AX-Z911BK 100-W/ch Digital Integrated Amplifier

2 channels. Features separate digital and analog circuitry; proprietary circuitry for Class A sonic characteristics and Class B efficiency; D/A converter with 4x-oversampling filter; low-imp drive capability; motor-driven volume control. Fiber-optic and coaxial digital inputs; switchable digital coaxial input/output; gold-plated terminals; MM/MC phono inputs. Compu Link system compatibility; remote control. 100 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.0005% THD \$1,100

Super Digifine Series

AX-V1050TN 400-W Digital A/V Integrated Amplifier

5 channels with Dolby Pro Logic decoder and DSP. Features 1-bit A/D and D/A converters with 4th-order noise shaping. 6 audio and 7 video inputs; 2 audio and 3 video outputs; tape-monitor loop; 3 S-video terminals; 2 mono subwoofer outputs; 6 speaker outputs. Normal, wide, and phantom center-channel modes; symphony-hall, recital-hall, church, jazz-club, pavilion, and stadium ambience presets; parametric center-channel EQ; adjustable center-channel delay; programmable remote control. 100 W x 2 with 0.007% THD (front) + 80 x 1 (center) + 60 x 2 (rear) with 0.7% THD \$1,500

AXZ-1010TN 100-W/ch Digital Integrated Amplifier

2 channels. Features Digital Pure-A design to reduce switching distortion and heat dissipation; K2 digital input interface with 8x-oversampling filter and four 18-bit D/A converters; parallel push-pull transistor configuration. MM/MC phono inputs; connections for 2 speaker pairs. Switchable D/A-converter-direct mode; remote control.



100 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.004% THD \$1,200

KENWOOD

KA-V9500 360-W A/V Integrated Amp

6 channels with Dolby Pro Logic decoder and DSP. Features discrete amp circuitry; 18-bit A/D converter; 16-bit digital delay; dual power transformers; motor-driven volume control; source-direct switch. 6 audio and 6 video inputs; MM phono input; 6 S-video inputs and 6 S-video outputs; line-level outputs for each channel; outputs for 2 speaker pairs; outputs for 2 center-channel speakers; subwoofer output. 4 DSP presence modes; Dolby 3 Stereo mode; 10 DSP ambience presets; normal, wide, and phantom center-channel surround modes; auto input balance for Dolby Pro Logic; 5 system presets with alphanumeric labeling; digital tone controls; center-channel tone control; on-screen displays; programmable remote control. 80 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.08% THD or 90 x 2 (front left, right) + 45 x 2 (center) + 45 x 2 (rear) rms into 8 ohms \$1,500

KA-V7500 246-W A/V Integrated Amp

6 channels with Dolby Pro Logic decoder. Features discrete amp circuitry; source-direct switch. 6 audio and 6 video inputs; MM phono inputs; 4 S-video inputs and 3 S-video outputs; outputs for 2 speaker pairs; outputs for 2 center-channel speakers; line-level outputs for each channel; subwoofer output. Dolby 3 Stereo mode; normal, wide, and phantom center-channel surround modes; adjustable digital delay; A/B speaker switching; 5 system presets with alphanumeric labeling; on-screen displays; programmable remote control. 70 W x 2 rms into 8 ohms from 20-20,000 Hz with 0.08% THD or 70 x 2 (front left, right) + 35 x 2 (center) + 18 x 2 (rear) rms into 8 ohms \$900

LINN

Intek 50-W/ch Integrated Amplifier

2 channels. MM and MC phono inputs; switched/unswitched speaker outputs; power-amp-driven headphone jack. Separate rec/play paths. 50 W x 2 into 8 ohms \$1,095

LUXMAN

LV-105U 80-W/ch Tube Integrated Amp

2 channels. Features hybrid solid-state/tube design with J-FETs and twin-triode vacuum tubes; high-current MOSFET output devices; Duo-Beta dual feedback loop; star circuit topology. MM/MC phono inputs; signal-processor loop. CD-direct button; tape and video dubbing; rec-out selector. 80 W x 2 cont avg into 8 ohms \$1,000

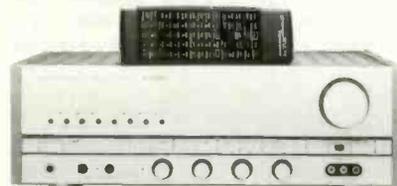
MARANTZ

PM-700AV 200-W A/V Integrated Amp

5 channels with Dolby Pro Logic decoder. 4 audio inputs; front-panel A/V input; 4 A/V inputs including 2 S-video; composite and S-video outputs. Switchable bass boost; preprogrammed remote control. 50 W x 2 from 20-20,000 Hz (front left, right) + 50 x 1 at 1,000 Hz (center) + 25 x 2 rms at 1,000 Hz (rear), all rms into 8 ohms. Gold finish with matching side panels. 17% x 6 x 13 1/2 in; 29 lb \$699

PM-80 100-W/ch Integrated Amplifier

2 channels. Features 2 discrete amp sections; selectable Class A/AB mode; high-current discrete output transistors; low-imp-drive power supply; source-direct switch. 9 inputs including MM/MC phono; 3 tape-monitor loops; signal-processor loop; banana-plug outputs for 2 speaker pairs; gold-plated inputs. Rec-out selector; mono switch; tone and balance controls. 100 W x 2 into 8 ohms from 20-20,000 Hz with 0.03% THD or 160



Marantz PM-700AV

x 2 rms into 4 ohms (Class AB). 25 W x 2 into 8 ohms from 20-20,000 Hz with 0.03% THD or 360 x 2 into 2 ohms (Class A). Damping factor 200 into 8 ohms; slew rate 45 V/μs; peak current 150 amperes. Gold finish with die-cast alloy side panels. 17% x 6 1/2 x 15 in; 37 lb \$699

McINTOSH

C-40 20-W/ch Integrated Amplifier

2 channels. Features anti-clipping circuitry; logic-driven electromagnetic switching. Balanced input and output; 2 processor loops; AC switched outputs. Dynamic-range compressor/expander; 5-band EQ; separate listen and rec; variable loudness control; monitor amp switchable between listen/rec circuits and inputs; 7-position mode selector; mute switch. 20 W x 2 cont avg into 8 ohms. FR 20-20,000 Hz +0, -0.5 dB; THD 0.001%; S/N 100 dBA. 17 1/2 x 5 1/2 x 15 1/2 in; 23 lb \$2,795

MISSION

Cyrus II 60-W/ch Integrated Amplifier

2 channels. Features high peak-current delivery; nonmagnetic, polypropylene and polystyrene capacitors. 6 inputs including MM/MC; headphone jack. Separate rec-out for all inputs; balance control for all inputs. 60 W x 2 into 8 ohms. FR 20-20,000 Hz; THD 0.003% at 1,000 Hz; S/N 83 dB; slew rate 10 V/μs; damping factor 100. 8 1/2 x 3 x 13 1/2 in; 16 lb \$999

Cyrus I 30-W/ch Integrated Amplifier

2 channels. Features magnesium die-cast chassis and heat sink; aluminum die-cast front and cover; metal-film resistors and capacitors. 6 inputs including MM/MC. Separate rec-out control for all inputs; balance control for all inputs. 30 W x 2 into 8 ohms \$649

MITSUBISHI

HTS-100 200-W A/V Integrated Amplifier

6 channels with Dolby Pro Logic decoder. Center-channel, surround-channel, and subwoofer outputs. TV on/off sensing; balance, center-level, and surround-level controls; calibration tone; programmable remote control. 50 W x 2 (front) + 25 x 2 (center) + 25 x 2 (rear) rms into 8 ohms with 1% THD \$599

NAD

Model 3225PE 25-W/ch Integrated Amp

2 channels. Features infrasonic filter; discrete 4-

AMPLIFIERS

transistor phono preamp. Gold-plated phono inputs; pre-out/main-in loops; 5-way binding posts. Speaker imp selector. 25 W x 2 cont avg into 8 ohms with 0.03% THD. S/N 75 dBA MC. 85 dBA line; damping factor 50 at 50 Hz; dynamic headroom 4 dB. 16½ x 3¾ x 10¼ in; 12 lb \$249

NAIM

NAIT 2 18-W/ch Integrated Amplifier

2 channels. MM phono input; 3 line-level inputs. Tape monitor/mute function; defeatable amp section. 18 W x 2. Input sens (at 47 kilohms) 2.5 mV phono. 75 mV line; tape output level and imp 75 mV at 1,000 ohms. 10¼ x 3 x 8 in \$995

NIKKO

NA 150 100-W/ch Integrated Amplifier

2 channels. Features Class AB operation; subsonic filter. 6 inputs including MM; CD-direct input. Loudness/tono controls; remote control. 100 W x 2 cont avg into 8 ohms or 144 x 2 cont avg into 4 ohms with 0.05% THD. Slew rate 5 V/µs; sens 170 mV line. 2.5 mV MM; Frequency response 5-41,000 Hz; dynamic headroom 2 dB \$209

ONKYO

Integra A-SV810PRO 325-W A/V Integrated Amplifier

5 channels with Dolby Pro Logic decoder and DSP. Features low-impedance-drive design; dual power transformers; 8-mode digital sound-field processor; motor-driven volume control. 6 video inputs including 5 S-video inputs; 10 audio inputs; 5 video outputs including 3 S-video outputs; 5 audio outputs; line-level subwoofer output. 10 sound-field presets; adjustable digital delay; on-screen displays; record-out selector; mute switch; Onkyo RI-system remote-control compatibility; remote control. 85 W x 3 (front, center) + 35 x 2 (rear) into 8 ohms or 180 x 2 max into 3 ohms \$1,100

Integra A-809 105-W/ch Integrated Amp

2 channels. Features low-imp-drive design; discrete outputs, power supplies, and transformers; direct signal paths; dual-shielded block construction with 2-panel chassis base; motor-driven volume control and input selector. 5-way binding posts. Remote control. 105 W x 2 rms into 8 ohms or 303 x 2 max into 2 ohms \$650

A-RV401 100-W/ch Integrated Amplifier

2 channels. Features low-imp-drive design; discrete outputs; motor-driven volume control. 7 audio and 2 video inputs. Video dubbing; source-direct switch; loudness control; mute switch; Onkyo RI-system compatibility; remote control. 100 W x 2 rms into 8 ohms or 190 x 2 max into 4 ohms \$400

PHILIPS

FA-950 100-W/ch Integrated Amplifier

2 channels. 7 inputs including MC and MM phono; digital inputs/outputs; ESI bus for communication among 900 Series components. Remote control. 100 W x 2 into 8 ohms or 140 x 2 into 4 ohms \$480

PIONEER

VSA-7500 254-W A/V Integrated Amp

5 channels with Dolby Pro Logic decoder and DSP. Features 6 audio and 6 video inputs; S-video connectors; front-panel A/V input including S-video input; line-level output for each channel; 2



center-channel speaker outputs; subwoofer output. Simulated-surround. disco, church, hall, jazz, and theater ambience presets; Dolby 3 Stereo mode; variable bass synthesizer; on-screen displays; last-function memory; programmable remote control. 75 W x 2 cont avg into 8 ohms with 0.008% THD or 70 x 3 (front, center) + 22 x 2 (rear) into 8 ohms \$1,125

A-51 100-W/ch Integrated Amplifier

2 channels. Direct signal paths. 8 inputs including gold-plated phono and CD inputs. Muting; loudness contour; rec-out selector; source-direct switch; A/B speaker switching. 100 W x 2 into 8 ohms with 0.007% THD \$850

A-301 40-W/ch Integrated Amplifier

2 channels. Features direct signal paths. 6 inputs including phono. Rec-out selector; source-direct



Yamaha DSP-E1000

switch; A/B speaker switching. 40 W x 2 cont avg into 8 ohms from 20-20,000 Hz with 0.01% THD or 50 x 2 into 4 ohms with 0.02% THD \$375

PROTON

AM-656 60-W/ch Integrated Amplifier

2 channels. Features Apex Aural Exciter to enhance vocal clarity; motor-driven volume control. Line-level output; headphone jack. Tone defeat; mono/stereo switch; loudness switch; compatibility with AH-681 remote control. 60 W x 2 into 8 ohms. FR 20-20,000 Hz ± 0.3 dB; THD 0.02%; damping factor 150; dynamic headroom 6 dB; crosstalk 75 dB at 1,000 Hz; S/N 95 dBA line. 18½ x 3¾ x 15¼ in; 29 lb \$700

AM-455 50-W/ch Integrated Amplifier

2 channels. Line-level output. Loudness, mono, and A/B speaker switches. 50 W x 2 into 8 ohms. Dynamic headroom 2 dB \$250

ROTEL

RA980BX 100-W/ch Integrated Amplifier

2 channels. Features electrolytic filter capacitors. 7 inputs including MC and MM; headphone jack. Tone controls; mono switch. 100 W x 2 cont avg into 8 ohms \$700
RA960BX. As above, without mono switch. 60 W x 2 cont avg into 8 ohms \$500

SONY

TA-AV670 270-W A/V Integrated Amp

4 channels with Dolby Pro Logic decoder and DSP. Features discrete output transistors; separate power transformers for audio and control sections; motor-driven volume control. 7 A/V inputs including 3 S-video inputs and 5 VCR-monitor loops; 5 audio inputs including phono; 2 tape-monitor loops; gold-plated inputs; speaker binding posts. 5 sound-field presets; source-di-

rect switch; A/V dubbing; A/V rec-out selector; separate front, center, and rear tone controls; programmable remote control. 70 W x 3 (front, center) + 60 x 1 (rear) into 8 ohms from 20-20,000 Hz with 0.08% THD \$1,000

TEAC

A-X5000 75-W/ch Integrated Amplifier

2 channels. MM/MC phono input; 6 line-level inputs; outputs for 2 speaker pairs. Source-direct switch; independent input and record selectors; -20-dB mute button; subsonic filter; loudness switch; tone and balance controls. 75 W x 2 rms into 8 ohms with 0.009% THD \$450

A-X3000 60-W/ch Integrated Amplifier

2 channels. Phono input; 5 line-level inputs; mic input with level control. Source-direct switch; independent input and rec selectors; -20-dB mute button; subsonic filter; loudness switch; tone and balance controls. 60 W x 2 rms into 8 ohms with 0.02% THD \$380

TECHNICS

SU-V660 90-W/ch Integrated Amplifier

2 channels. Features Class AA circuitry. 6 inputs; switchable MC/MM phono inputs; source-direct input; A/B speaker terminals; pre-out/main-in loops. Defeatable tone and loudness controls. 90 W x 2 into 8 ohms with 0.005% THD \$400

SU-V460 50-W/ch Integrated Amplifier

2 channels. Features Class AA circuitry. 6 inputs; source-direct input; pre-out/main-in loops; A/B speaker terminals. Defeatable tone and loudness controls. 50 W x 2 into 8 ohms with 0.007% THD \$270

YAMAHA

DSP-A1000 340-W A/V Integrated Amp

7 channels with digital Dolby Pro Logic decoder and DSP. Features auto input balance; motor-driven input selector with LED. 10 audio and 5 video inputs with S-video terminal; front-panel S-video A/V input; pre-out/main-in loops; subwoofer output with low-pass filter; 2 switchable center-channel outputs. TV-theater and concert-video modes; 35-mm and 70-mm theater modes; 23 DSP modes; 5-band center-channel EQ; programmable remote control. 80 W x 3 into 8 ohms with 0.015% THD (front, center) + 25 x 4 with 0.05% THD (front, rear) \$1,499

DSP-E1000 180-W A/V Integrated Amp

5 channels with digital Dolby Pro Logic decoder and DSP. Designed as add-on to existing system. Tape-monitor loop; video inputs and outputs with S-video terminals; subwoofer output with 200-Hz low-pass filter; line-level outputs for all channels; 5-way binding posts. TV-theater and concert video modes; 35-mm and 70-mm theater modes; 23 DSP modes; 5-band center-channel EQ; normal, wide, and phantom center-channel surround modes; front, rear, and center-channel level controls; front- and rear-channel bass boost; remote control. 25 W x 4 rms into 8 ohms with 0.05% THD (front, rear surround) + 80 x 1 with 0.015% THD (center) \$999

AX-550 85-W/ch Integrated Amplifier

2 channels. Features motor-driven input selector; switchable subsonic filter with 18-dB/oct slope. Switchable MC/MM phono input; pre-out/main-in loops; 5-way binding posts. Continuously variable loudness control; defeatable tone and balance controls; RS-system remote control. 85 W x 2 rms into 8 ohms \$449

CD PLAYERS



ADCOM

GCD-575 CD Player

4x oversampling, dual 16-bit D/A converters. Features selectable analog frequency/phase-contouring circuitry; 3-beam laser pickup. Fixed and variable outputs. 24-track programming; 4 repeat modes; audible fast scan; 20-track music calendar; timer display; 3-in-CD compatibility; remote control. FR 5-20,000 Hz +0.1, -0.5 dB; THD 0.0025%; S/N 105 dB; ch sep 95 dB. 17 x 3½ x 11¼ in; 12 lb \$600
With white front panel \$650

AMC

CD6 CD Player

1-bit D/A converter. Features interpolating digital filter; 4-pole Butterworth filter. 1 fiber-optic output; 1 coaxial digital output. FR 10-20,000 Hz ±0.1 dB; THD 0.004% at 1,000 Hz; S/N 96 dBA; ch sep 90 dB from 10-10,000 Hz; output level 2 V rms at 0 dB \$600

ARCAM

Delta 70.3 CD Player

1-bit D/A conversion. Features separate transformers. Coaxial digital outputs. 20-track programming; 3-speed search; track skip; repeat; defeatable display; remote control. FR 10-20,000 Hz ±0.1 dB; S/N 105 dB; dynamic range 96 dB. 17 x 3½ x 10½ in; 14 lb \$1,500

Alpha CD Player

4x oversampling, dual 16-bit D/A converters. Digital outputs. 3-speed search; track skip; 20-track programming. S/N 101 dB; dynamic range 96 dB. 34 x 17 x 11½ in; 8 lb \$849

AUDIO BY VAN ALSTINE

FET Tube CD Player

4x oversampling, dual 16-bit D/A converters. Class A hybrid vacuum tube/MOSFET driver circuits; toroidal transformer; regulated power supply; phase-gain tracking. 20-track programming;



Adcom GCD-575

repeat; random play; time/track display; 3-speed track search with cueing; 3-in-CD compatibility; remote control with index selection and direct track access \$1,195

Omega II CD Player

4x oversampling, dual 16-bit D/A converters. Features hybrid output stages and film-coupling capacitors; filter drivers with 200-V/μs slew rate; phase-gain tracking. 20-track programming; repeat; random play; time/track display; 3-speed track search with cueing; 3-in-CD compatibility; remote control with index selection and direct track access \$395

BANG & OLUFSEN

Music Module 10-Disc CD Changer

4x oversampling, dual 16-bit D/A converters, 10-disc magazine. Features multiroom capability. Random play; repeat; remote control compatibility with Beomaster 7000 receiver. FR 20-20,000 Hz +1.5 dB, -2 dB; THD 0.08%; dynamic range 96 dB; S/N 80 dB; ch sep 75 dB at 1,000 Hz. 11¼ x 3¾ x 7¾ in; 13 lb \$1,250

Beogram CD 7000 CD Player

4x oversampling, dual 16-bit D/A converters. Integrates with Beosystem 7000. Features front-loading drawer; digital Bessel filter; elliptical analog filter; 3-in-CD compatibility. Track/skip search; direct track access; track-time, elapsed-time, remaining-time, and track-index displays. S/N 110 dBA. Polished-aluminum or white finish. 16½ x 3 x 12¾ in; 18 lb \$1,250

Beogram CD 4500 CD Player

4x oversampling, dual 16-bit D/A converters. Integrates with Beosystem 4500. Features top-loading mechanism; digital Bessel filter; elliptical analog filter; 3-in-CD compatibility. Track/skip search; direct track access; programming via optional Beolink 5000 remote control. FR 3-20,000 Hz ±0.3 dB; S/N 110 dBA; ch sep 101 dB. Polished-aluminum finish with white trim. 16½ x 3 x 9¾ in; 9.9 lb \$900

CALIFORNIA AUDIO LABS

Genesis CD Player

1-bit MASH D/A converters. Features computer-grade plug-in module with all digital electronics; discrete FET analog stages with balanced output. Fiber-optic output \$1,995

Tercet MkIV CD Player

8x oversampling, 20-bit hand-trimmed D/A converters. Features DC-coupled output stage; 23 separate regulated power supplies; FET input; 24-bit digital filter; custom clock module; EMI filter. Plug-in coaxial or fiber-optic digital output. Remote control. FR 5-22,000 +0, -0.5 dB .. \$1,495

Icon MkII CD Player

8x oversampling, 18-bit hand-trimmed D/A converters. Features 5 separate regulated power supplies; 24-bit digital filter; FET input; custom clock module; EMI filter. Plug-in coaxial or fiber-optic digital output. Remote control. FR 5-22,000 +0, -0.5 dB \$850

CAMBRIDGE AUDIO

CD3 CD Player

16x oversampling, eight 16-bit D/A converters. Features CDM1/MkII fully suspended, die-cast aluminum chassis and transport mechanism; toroidal transformer; discrete power supplies for digital and analog stages; no analog filtering stage. Fiber-optic and digital outputs. 20-track programming; 3-speed search; track and index point selection; remote control \$1,700

CARRERA

CD-3400R 6-Disc CD Changer

4x oversampling, dual 16-bit D/A converters, 6-disc magazine. Fixed line-level outputs; headphone jack. Elapsed disc/track time displays; 32-track programming; 3 repeat modes \$250

CD-3300R CD Player

Dual 16-bit D/A converters. Music calendar; direct track access; 3-in-CD compatibility; random play; remote control \$200

CARVER

SD/A-370 10-Disc CD Changer

1-bit D/A converter, 10-disc magazine. Features

EQ stage. Headphone jack with volume control. Tape edit; 32-track programming; intro scan; all-disc random play; track/disc skip, scan, and repeat; music calendar; FL display; remote control \$700

SD/A-490t Tube CD Player

1-bit D/A conversion. Features two 6DJ8 tubes in output stage; EQ stage; auto 30-second standby mode for tube preheat; motor-driven volume control. Fiber-optic and coaxial digital outputs;



Denon DCD-1290

fixed and variable analog outputs; headphone jack. Variable-length fade; tape edit; 24-track programming; random play; 4 repeat modes; music calendar; remote control. FR 10-20,000 Hz ±0.2 dB; THD 0.5% \$700

SD/A-450 CD Player

1-bit D/A conversion. Features EQ stage. Coaxial digital output. Variable-length fade; tape edit; 24-track programming; random play; 4 repeat modes; track skip, and scan; music calendar; remote control \$500

SD/A-350 5-Disc CD Changer

1-bit D/A conversion, 5-disc carousel. Features EQ stage. Coaxial digital output; headphone jack. Ability to change 2 discs during play; 20-track programming; track, program, or disc repeat; one-disc random play; direct track/disc access; music calendar; remote control \$400

CREEK

CD60 CD Player

4x oversampling, 16-bit D/A converter. Features dual power supplies. FR 20-20,000 Hz; S/N 110 dB; THD 0.005% \$1,295

DENON

DCD-3500RG CD Player

8x oversampling, four 20-bit Lambda ladder-type D/A converters. Features 4 MSB linearity adjustments per converter; 20-bit digital filter; optical isolation between digital and analog stages; separate power transformers, power supplies, and circuitry for digital and analog sections; motor-driven volume control. Switchable fiber-optic/coaxial digital outputs; balanced analog outputs. Direct track access; 20-track programming; index search; auto space; auto edit; headphone jack with level control; remote control; Denon IS-system compatibility. Champagne-gold finish and polished wood case \$2,000

LA-3100 Combi-Player

8x oversampling, dual D/A converters. Plays CDs and videodiscs. Features 20-bit digital filter; dual-side videodisc play. Coaxial digital output. 20-track programming; direct track access; highlight scan; random play; front-panel and remote-control jog and shuttle controls; music calendar; electronic volume control; Denon IS-system remote control compatibility \$1,200

DCD-2560 CD Player

16x oversampling, four 20-bit Lambda ladder-type D/A converters. Features 20-bit digital filter

CD PLAYERS



with 1/2-sample delay; MSB linearity adjustments; optically isolated digital and analog stages. Fiber-optic and coaxial digital outputs. Digital pitch control with $\pm 9.9\%$ range in 0.1% steps; digital fader; peak-search mode; 20-track programming; random play; remote volume control; direct track access; 3-way repeat; auto space; tape edit; music calendar; remote control; Denon IS-system compatibility \$750

DCD-1290 CD Player

8x oversampling, dual 20-bit Lambda ladder-type D/A converters. Features 20-bit digital filter. Fiber-optic and coaxial digital outputs; headphone jack with volume control. Digital pitch control with $\pm 12\%$ range in 0.1% steps; digital fader; peak search; index search; 20-track programming; 2 random-play modes; remote volume control; direct track access; 3-way repeat; tape edit; auto space; timer play; 3-step display dimmer; music calendar; remote control; Denon IS-system remote control compatibility... \$500

DCD-690 CD Player

8x oversampling, dual 18-bit Lambda ladder-type D/A converters. Features 20-bit digital filter with noise shaping; 12-step digital attenuator. Coaxial digital output; headphone jack with volume control. 20-track programming; direct track access; 3-way repeat; tape edit; auto space; remote control; Denon IS-system remote control compatibility \$300

CD Changers

Models DCM-520, DCM-440, and DCM-340 feature a drawer-type carousel that enables 4 discs to be changed while one is playing.

DCM-520 5-Disc CD Changer

8x oversampling, dual Lambda ladder-type D/A converters, 5-disc carousel. Motor-driven volume control. Coaxial digital output. Non-volatile favorite-track memory for 100 discs; 20-track programming per disc; 5 repeat modes; 3 random-play modes; remote control; Denon IS-system compatibility \$500

DCM-440 5-Disc CD Changer

8x oversampling, dual 18-bit D/A converters, 5-disc carousel. Features MSB linearity adjustment for D/A converters; 20-bit digital filter; noise shaping. Coaxial digital output. Favorite-track memory for 100 discs; 20-track programming; 3 random-play modes; 5 repeat modes; Denon IS-system remote control \$400

DCM-340 5-Disc CD Changer

8x oversampling, dual 18-bit D/A converters, 5-disc carousel. Features MSB linearity adjustment for D/A converters; 20-bit digital filter with noise shaping. 20-track programming; 5 repeat modes; Denon IS-system remote control \$300

DUAL

CD-5150RC CD Player

4x oversampling, dual 16-bit D/A converters. Features motor-driven disc loading. Digital output. 20-track programming; 3-speed scan; random play; remote control \$555

CD-1070RC CD Player

8x oversampling, dual 18-bit D/A converters. Features motor-driven disc loading. 16-track programming; auto space; remote control \$345

FISHER

DAC199B 5-Disc CD Changer

8x oversampling, dual 16-bit D/A converters, 5-disc carousel. Features 18-bit digital filter. Head-

phone jack. 32-track programming; selection and title memory; random play; intro scan; scan, skip, repeat; remote control \$400

DAC145 5-Disc CD Changer/Turntable

8x oversampling, dual 16-bit D/A converters, 5-disc top-loading carousel/semiautomatic turntable. Features 18-bit digital filter; disc loading during play. 32-track programming; random play; intro scan; remote control \$400

DAC243 5-Disc CD Changer

8x oversampling, dual 1-bit D/A converters, 5-disc front-loading carousel. Features 16-bit digital filter; 3-beam laser pickup. 32-track programming; random play; intro scan; 3-way program edit; FL display; remote control \$300

AD-738 CD Player

8x oversampling, dual 16-bit D/A converters. Features 18-bit digital filter. 24-track programming; scan/search; remote control \$150

GOLDSTAR

FH-R20R 5-Disc CD Changer

8x oversampling, dual D/A converters, 5-disc carousel. Allows discs to be changed while playing. Features 32-track programming; random play; 4-way repeat; remote control. 14 lb \$230

HARMAN KARDON

HD7725 CD Player

8x oversampling, 20-bit RLS D/A converter. Features heavy-duty damping; motor-driven volume control. Coaxial and fiber-optic digital outputs; fixed and variable outputs; headphone jack. 30-track programming; index search; repeat; audible 2-speed cue/review; remote control ... \$749

TL8600 5-Disc CD Changer

1-bit D/A converter, top-loading 5-disc carousel. Gold-plated fixed and variable outputs. Scan; auto space; audible 2-speed cue/review; top-panel direct track access buttons; remote output-level control; remote control \$699

TL8500. As above, without top-panel buttons, headphone jack, or variable output \$549

HD7525 CD Player

8x oversampling, 20-bit RLS D/A converter. Features damped tray. 30-track programming; repeat; index search; audible 2-speed cue/review; music calendar; remote control \$499

FL8400 5-Disc CD Changer

1-bit D/A converter, front-loading 5-disc carousel. Features 3-beam laser pickup. Random play; programming \$399

HD7450 CD Player

1-bit D/A converter. Features balanced D/A interface. 30-track programming; audible 2-speed cue/review; remote control \$399

HD7225 CD Player

1-bit D/A converter. 30-track programming; repeat; remote control \$249

HITACHI

VIP-RX6EX Combi-Player

8x oversampling, 1-bit D/A conversion. Plays CDs and videodiscs. Features 20-bit signal pro-

cessing with low-pass filter; digital tilt servo to compensate for disc irregularities. Headphone jack with volume control. Tape edit; random play; intro scan; variable-speed search. On-screen displays; remote control \$630

DAC501 5-Disc CD Changer

8x oversampling, top-loading 5-disc carousel. Tape edit; 32-track programming; random play. 14 $\frac{1}{2}$ -in width \$300

JVC

The following feature JVC Compu Link system compatibility and 32-track programming.

XL-G512NBK CD + G Player

4x oversampling, dual 18-bit D/A converters. Plays CD+G (graphics) discs. Features noise shaping; disc-stabilizing clamper; NTSC signal format. S-video, composite-video, and MIDI outputs. 15-channel graphic-data selector; intro scan; 3 repeat modes; 20-track music calendar; multi-disc tape dubbing; remote control. FR 2-20,000 Hz; S/N 100 dB; THD 0.004%, dynamic range 96 dB, and ch sep 90 dB at 1,000 Hz; graphics resolution 288 x 192 pixels \$500

XL-M507TN 7-Disc CD Changer

8x oversampling, dual 1-bit D/A converters, 6-disc magazine, single-disc tray. Headphone jack with volume control. 8-character magazine/disc-title memory for up to 20 magazines/120 discs; tape edit; disc/track intro scan; auto/manual search; all-disc non-track-repeating random play; 15-track music calendar; delete play; resume play; direct track/disc access; 4 repeat modes; remote control with LCD \$380

XL-M407TN. As above, without magazine/disc-title memory. Remote control without LCD \$330

XL-M307TN. As XL-M407TN, without remote control, delete play, or direct disc access. No volume control for headphone jack ... \$300

XL-M207TN CD 5-Disc Changer

8x oversampling, dual 1-bit D/A converters, 5-disc front-loading carousel. Headphone jack with volume control. Direct disc access; non-track-repeating random play; repeat; 3-in-CD compatibility; remote control. FR 2-20,000 Hz; THD 0.0025%; S/N 106 dB \$300

XL-Z451TN CD Player

8x oversampling, dual 1-bit D/A converters. Features balanced buffer. Fiber-optic digital output; headphone jack with volume control. Tape edit; 3-in-CD compatibility; 4 repeat modes; index search; non-track-repeating and delete random play; delete program play; 20-track programming; auto CD-to-tape rec with peak search; remote control \$240



Kenwood DP-2040

KENWOOD

LVD-700 Combi-Player

Dual 1-bit D/A converters. Plays CDs and video-discs. Features 3-line comb filter; digital time-base corrector; PLL FM-detection circuit. Fiber-optic digital output; S-video output; headphone jack with volume control. Random play; 20-track programming; intro scan; synchro play with compatible cassette decks; direct track access;

CD PLAYERS

remote control with jog/shuttle. FR 4-20,000 Hz +0, -1.5 dB; S/N 105 dB; dynamic range 92 dB; THD 0.01% and ch sep 90 dB at 1,000 Hz. Video S/N 50 dB; hor res 425 lines \$980

LVD-300 Combi-Player

4x oversampling, dual 18-bit D/A converters. Plays CDs and videodiscs. Features digital time-base corrector. Fiber-optic digital output; S-video output. 20-track programming; synchro play with compatible cassette decks; random play; intro scan; direct track access; remote control. FR 4-20,000 Hz; S/N 105 dB; dynamic range 98 dB; THD 0.07% and ch sep 90 dB at 1,000 Hz. Video S/N 49 dB; hor res 425 lines \$600

DP-M7740 7-Disc CD Changer

Dual 1-bit D/A converters, 6-disc magazine, single-disc tray. Features 3-in-CD compatibility. Headphone jack with volume control. Program memory for 42 magazines with 8-character alphanumeric labeling for each magazine and each disc within magazine; program memory for single-disc tray; peak search with memory; direct track access; random play; 4-mode time display; system remote-control compatibility; remote control with LCD \$380

DP-R4440 5-Disc CD Changer

Dual 1-bit D/A converters, 5-disc carousel. Features bidirectional tray rotation. Headphone jack with volume control. 20-track programming; random play; repeat; system remote-control compatibility; remote control \$280

DP-R892. As above, without headphone jack or remote control \$250

DP-2040 CD Player

Dual 1-bit D/A converters. Headphone jack. Synchro play with compatible cassette decks; 20-track programming; direct track access; random play; repeat; 20-track music calendar; timer. FR 4-20,000 Hz ± 1 dB; S/N 94 dB; THD 0.005% and ch sep 90 dB at 1,000 Hz \$220

KINERGETICS

KCD-40 Platinum Series CD Player

8x oversampling, dual 18-bit D/A converters. Features fully balanced circuit topology; single-beam laser; 7-V output. Volume and balance controls; remote control \$2,295

KCD-20B. As above, 4x oversampling, 16-bit D/A converters. Features distortion-canceling circuitry; 4-V output \$1,495

KRELL

CD-DSP CD Player

16x oversampling. Top-loading design; discrete buffered. Class A, high-bias balanced output stage; Philips CDM-1 MkII glass lens. Custom cover and fiber optics optional \$3,650

CD-1 CD Player

1-bit D/A converter. Features discrete buffered, Class A, high-bias balanced output stage; drawer-loading transport \$2,850

LINN

Karik CD Player

1-bit D/A conversion. Features 4-motor mechanism. Diagnostic output; fiber-optic output; 2 line-level outputs. Remote control \$3,395

LUXMAN

D-105U Tube CD Player

8x oversampling, dual 18-bit D/A converters. Fea-



tures twin-triode vacuum-tube analog output stage; metal chassis and component shielding; magnetic disc clamper; 3-beam laser pickup. Fiber-optic and coaxial digital outputs. 32-track programming; random play; tape edit; auto scan/pause; timer/power-off memory; remote control. FR 5-20,000 Hz ± 1 dB; THD 0.05%; S/N 105 dB; dynamic range 92 dB \$900

DC-114 7-Disc CD Changer

8x oversampling, dual 18-bit D/A converters, 6-disc magazine, single-disc tray. Features 3-beam laser; magnetic disc changer; all-metal housing and chassis. 24-track programming; random play; timer play; remote control. S/N 104 dB; THD 0.005%; ch sep 95 dB at 1,000 Hz \$800

D-351 CD Player

8x oversampling, dual 18-bit D/A converters. Features MSB D/A-converter adjustments; voltage-driven amplification; gradual-slope linear-phase analog filters. Fiber-optic digital output. 24-track



Linn Karik

programming; random/repeat play; synchro play with compatible cassette decks \$600

DZ-122 CD Player

8x oversampling, dual 18-bit D/A converters. Features 3-beam laser pickup; magnetic disc clamper; metal chassis; motor-driven volume control. Gold-plated fixed and variable analog outputs; fiber-optic output; multiroom inputs/outputs; headphone jack. 32-track programming; tape edit; normal/timed fader; random play; intro scan; direct track access; repeat; auto pause; timer play; remote control \$400

MARANTZ

CDR-1 CD Recorder

1-bit Bitstream A/D converter, four 1-bit Bitstream D/A converters. Features playback compatibility of recorded discs with any CD player; microphone preamp. Coaxial and fiber-optic digital inputs and outputs; balanced XLR input and output; unbalanced analog output; stereo mic input; headphone jack with level control. Track skip and block delete; auto/manual track numbering; random play; repeat; digital peak display. S/N 100 dB; THD + noise 0.004% record, 0.002% playback; dynamic range 96 dB; ch sep 92 dB. Rack mountable \$7,000

CDR-63Q. 63-min blank recordable disc \$50

LV-500 Combi-Player

1-bit Bitstream D/A conversion. Plays CDs and videodiscs. Features 20-bit digital filter; dual-side videodisc play. Fiber-optic audio output; 1 video output; 1 S-video output; 2 RCA audio outputs; 2 RCA video outputs. Tape edit; high-

light scan; 7 CD repeat modes. Dual-mode color-locked scan for CAV/CLV videodiscs via shuttle control; 9 CAV playback speeds; 8 videodisc repeat modes; on-screen displays. Defeatable FL display; single track/chapter play; last-position memory; intro scan; random track/chapter play; 24-chapter/track programming; remote control with shuttle. Gold or black finish \$799

CD-72 CD Player

1-bit Bitstream D/A conversion. Features 20-bit digital filter. Fixed and variable analog outputs; fiber-optic and coaxial digital outputs. Synchro play with compatible cassette decks; non-volatile favorite-track memory for 127 discs; normal/delete programming and random play; variable intro scan; remote control. FR 20-20,000 Hz ± 0.1 dB; dynamic range 96 dB; S/N 105 dB. Gold finish \$699

Black finish \$599

CC-52 5-Disc CD Changer

1-bit Bitstream D/A conversion, 5-disc carousel. Features 18-bit digital filter; ability to change 2 discs during playback. Fiber-optic digital output. Synchro play with compatible cassette decks; tape edit; 32-track programming; 2-speed audible search; random play; repeat; time, track, and index displays; remote control. FR 20-20,000 Hz ± 0.05 dB. Gold finish \$399

Black finish \$349

CD-52 CD Player

1-bit Bitstream D/A conversion. Features 20-bit digital filter. Coaxial digital output; headphone jack with volume control. Non-volatile favorite-track memory to store 2 programs per disc; synchro play with compatible cassette decks; tape edit; 20-track programming; random play; A/B repeat; track search; elapsed-time and track displays; remote control. FR 20-20,000 Hz ± 0.05 dB; dynamic range 96 dB \$299

MCCORMACK

Signature CD Player

4x oversampling, dual 16-bit D/A converters. Features fast-setting, current-summing amplifier stage; proprietary zero-feedback voltage regulation for analog section and D/A-converter voltage reference; motor-driven volume control. Coaxial and fiber-optic digital outputs; fixed and variable line-level outputs. 20-track programming; index search; absolute phase inversion from front panel or remote; track scan; programmable remote control. FR 0.1-20,000 Hz ± 0.5 dB; S/N -100 dB; THD 0.005%; output level 4 V rms \$2,995

Prism II CD Player

4x oversampling, Philips 16-bit digital processing. Features digital-data/clock-line timing for current synchronization and minimal jitter; fast-setting, current-summing amplifier stage; proprietary zero-feedback regulators for analog section and for D/A-converter voltage reference. Coaxial digital outputs; fixed and variable line-level outputs. 20-track programming; 4 repeat modes; remote control. FR 0.1-20,000 Hz ± 0.05 dB; S/N -110 dB; output level 4 V rms, 11 lb \$1,895

MCINTOSH

MCD-7008 7-Disc CD Changer

8x oversampling, dual 20-bit D/A converters. Features magnetic disc clamp. Coaxial output; remote control inputs. Time data memory; 50-track programming; random and repeat play; remote control. FR 5-20,000 Hz +0, -3 dB; S/N 107 dB; dynamic range 100 dB; ch sep 100 dB and THD 0.002% at 1,000 Hz \$1,995

CD PLAYERS



MCD-7007 CD Player

4x oversampling, dual 16-bit D/A converters. Features one-piece cast platform; linear torque disc motor; low-inertia laser assembly. Coaxial output. 20-track programming; scan and repeat; remote control capability. FR 20-20,000 Hz +0, -0.3 dB; ch sep 102 dB and THD 0.0012% at 1,000 Hz; S/N 107 dBA \$1,995

MELOS

CD-T Bitstream Tube CD Player

1-bit D/A converter. Features 2-chassis design; toroidal transformer; regulated power supplies. Gold-plated Tiffany connectors. 20-track programming; remote control. FR 20-20,000 Hz ± 0.3 dB; THD 0.07%; S/N 90 dB; output 3 V rms; output imp 200 ohms \$1,795

MERIDIAN

Model 208 CD Player/Preamplifier

Dual 1-bit D/A converters. Features two-box construction separating transport and electronics; analog preamp with 3 inputs and 64-step volume control. 2 fiber-optic and coaxial digital outputs; line-level analog input convertible to phono with optional MC/MM board. LED display; lighted control keys; remote control. FR 20-20,000 Hz; S/N 106 dBA; THD 0.004%. 12 $\frac{1}{2}$ x 4 x 12 $\frac{1}{2}$ in. \$2,950

Model 206B CD Player

4x oversampling, dual 16-bit D/A converters. Features 2-piece design; physical and electrical isolation between transport, power supply, and digital and analog electronics; passive analog filter. Fiber-optic and coaxial digital outputs. Track/index search; last-position memory. 12 $\frac{1}{2}$ x 4 x 12 in; 20 lb \$1,990

MISSION

Mission DAD5 CD Player

1-bit D/A converter. Features steel reinforced chassis with aluminum front panel. THD 0.005%; S/N 98 dB and dynamic range 92 dB from 20-20,000 Hz; ch sep 90 dB; linearity at -90 dB ± 1 dB. Black. 14 $\frac{1}{2}$ x 4 x 11 $\frac{1}{2}$ in; 7.7 lb. \$699

MITSUBISHI

M-C6010 5-Disc CD Changer

8x oversampling, dual 18-bit D/A converters. 5-disc magazine. Video input for CD+G decoder; video output; fiber-optic and coaxial digital outputs; headphone jack. 20-track programming per magazine for 50 magazines; on-screen displays; tape edit; track and intro scan; index search; random play; remote control \$849

M-C4030 5-Disc CD Changer

4x oversampling, dual 18-bit D/A converters. 5-disc magazine. Headphone jack. 20-track programming; track and intro scan; index search; random play; remote control \$499

M-C2050 CD Player

Dual 1-bit D/A converters. Coaxial and fiber-optic digital outputs; headphone jack. 20-track programming; track and intro scan; random play; music calendar; remote control \$349

NAD

Model 5000 CD Player

1-bit MASH D/A converter. Features separate regulated power supplies for analog and digital sections; dynamic-range circuit. Low-imp fixed and variable inputs; serial digital output. 20-track programming; remote control. FR 5-20,000 Hz;

THD 0.002%; S/N 106 dBA; dynamic range 98 dB; ch sep 100 dB at 1,000 Hz \$499

Model 505 5-Disc CD Changer

1-bit MASH D/A converter, 5-disc carousel. Features ability to replace 2 discs during playback. Coaxial digital output; NAD-Link multiroom input/output jacks. 32-track programming; random play; remote control. FR 20-20,000 Hz -1 dB; THD 0.0025%; S/N 106 dBA; dynamic range 98 dB; ch sep 90 dB at 1,000 Hz \$399

Model 502 CD Player

1-bit MASH D/A converter. Digital outputs; NAD-Link connectors. Direct track access; remote control. FR 5-20,000 Hz; THD 0.0025%; S/N 105 dB; dynamic range 98 dB; ch sep 90 dB at 1,000 Hz \$299

NAIM

NA CDS CD Player

4x oversampling, Philips 16-bit D/A converter. Features top-loading design; separate power supply; precision-suspended mounting for custom high-torque transport; DC offset-sensing protection circuits with fail-safe relay muting; low-mass magnetic clamp. Remote control. FR 10-18,000 Hz ± 0.1 dB; output level 2 V rms at 1,000 Hz; output imp 100 ohms \$7,395

NA CDI CD Player

4x oversampling, 16-bit D/A converter. Features top-loading design; internal suspended subchassis for transport and D/A board; low-mass magnetic clamp. FR 10-18,000 Hz ± 0.1 dB; THD 0.01% from 10-18,000 Hz; output imp 10 ohms \$3,995

NAKAMICHI

All CD changers feature Nakamichi's Music Bank System, a fixed internal mechanism that accepts 6 discs, and a single-disc tray.

MB-1 7-Disc CD Changer

20-bit D/A converter. Features hand-selected converter IC; discrete 3rd-order Bessel analog low-pass filter; rigid 2-layer steel chassis. Coaxial digital outputs. FR 5-20,000 Hz ± 0.5 dB; THD + noise 0.003%; S/N 105 dBA \$1,299

MB-2 7-Disc CD Changer

8x oversampling, 20-bit D/A converter. Features disc stabilizer; 3rd-order Bessel-type analog filtering; regulated power supply; isolated ground topology; floating disc-drive mechanism. Digital outputs; system remote terminals; headphone jack with volume control. Variable output level; random play; synchro rec; disc scan; repeat; music calendar; remote control. FR 5-20,000 Hz ± 0.5 dB; S/N 105 dBA \$799

MB-3 7-Disc CD Changer

8x oversampling, 18-bit D/A converter. Features disc stabilizer; 3rd-order Bessel-type analog filtering; regulated power supply; isolated ground topology; floating disc-drive mechanism. System remote terminals; headphone jack with volume control. Random play; disc scan; repeat; music calendar; 3-in-CD compatibility; remote control. FR 5-20,000 Hz ± 0.5 dB; THD 0.0035%; S/N 103 dBA; ch sep 97 dB \$599

CD-4 CD Player

8x oversampling, 18-bit D/A converter. Features

3rd-order Bessel-type analog filtering; regulated power supply; isolated ground topology; floating disc-drive mechanism. Digital outputs; system remote terminals; headphone jack with volume control. Repeat; 3-in-CD compatibility; remote control. FR 5-20,000 Hz ± 0.5 dB; THD 0.0035%; S/N 100 dBA; ch sep 95 dB \$349

NIKKO

NCD 2700R 5-Disc CD Changer

8x oversampling, 16-bit D/A converter, 5-disc carousel. Random play; 3 repeat modes; scan; LCD; remote control \$260

NCD 2500R 5-Disc CD Changer

8x oversampling, dual 20-bit D/A converters, 5-disc carousel. Fixed line-level outputs; headphone jack. 32-track programming; random play; 3 repeat modes; program/intro scan; remote control. FR 4-20,000 Hz; S/N 100 dB \$259

NCD 950R CD Player

1-bit D/A converter. 20-track programming; random play; 3 repeat modes; intro scan; LCD; remote control \$160

NSM

NSM CD 3101 100-Disc CD Changer

1-bit Bitstream D/A converter, two 50-disc magazines in cabinet with smoked-glass door, single-disc player/controller. Fiber-optic output; fixed and variable line-level outputs; headphone jack with volume control. 100-track/disc programming with nonvolatile memory for 99 programs; user-programmable fading, pausing, and auto turn-on play; random and repeat play; tape edit; advance play of any track in changer; intro scan; LED display; remote control. Changer: 18 $\frac{1}{2}$ x 13 $\frac{1}{2}$ x 8 $\frac{1}{4}$ in; 33 lb. Controller: 16 $\frac{1}{2}$ x 3 $\frac{1}{2}$ x 11 in; 9 lb \$4,000
50-disc magazine \$150



McIntosh MCD-7008

ONKYO

DX-V801 Combi-Player

8x oversampling, dual 20-bit D/A converters. Plays CDs and videodiscs. Features center-mounted tray; aluminum front panel. Two sets of A/V outputs. Intro scan; 24-track programming; 7 repeat modes; A/B repeat; random play; direct track access; two 20-track music calendars; on-screen displays; remote control. FR 4-20,000 Hz ± 0.5 dB; audio S/N 107 dB. Hor res 425 lines; video S/N 49 dB \$1,100

Integra DX-708 CD Player

Dual 1-bit D/A converters. Features optical coupling; copper-plated chassis; center-mounted aluminum die-cast disc tray. Fiber-optic output. Program reverse; auto spacing; peak search; auto fade; 2 random-play modes; 5 repeat modes; 2-mode high-speed scan; switchable display dimmer; RI-system cassette-deck compatibility; remote control \$750

Integra DX-706 CD Player

Dual 1-bit D/A converters. Features center-

CD PLAYERS

mounted aluminum die-cast disc tray. Fiber-optic output. Program reverse; auto spacing; peak search; auto fade; 2 random-play modes; 4 repeat modes; 2-mode high-speed scan; RI-system cassette-deck compatibility; remote control... \$550

DX-705 CD Player

Dual 1-bit D/A converters. Features 3-in-CD compatibility. Fiber-optic output; headphone jack with volume control. Program memory for 204 discs; program reverse; next-selection function; synchro play with compatible cassette decks; auto play; peak search; 5 repeat modes; random play; 36-track programming; direct track access; remote control... \$330

CD Changers

Integra DX-C909 6-Disc CD Changer

Dual 1-bit D/A converters, 6-disc carousel. Features copper-plated chassis; motor-driven volume control. Fixed and variable analog outputs; fiber-optic output; headphone jack with volume control. Program reverse; peak search; 40-track programming; random play; 6 repeat modes; direct track/disc access; 20-track music calendar; RI-system cassette-deck compatibility; remote control... \$650

Integra DX-C606 6-Disc CD Changer

Dual 1-bit D/A converters, 6-disc carousel. Fiber-optic output; headphone jack with volume control. Program reverse; synchro play with compatible cassette decks; peak search; 40-track programming; random play; 6 repeat modes; direct track/disc access; 20-track music calendar; RI-system cassette-deck compatibility; remote control... \$470

DX-C206 6-Disc CD Changer

Dual 1-bit D/A converters, 6-disc carousel. Headphone jack. Synchro play with compatible cassette decks; 40-track programming; random play; 6 repeat modes; 20-track music calendar; 3-mode display; RI-system cassette-deck compatibility; remote control... \$340

OPTIMUS BY RADIO SHACK

CD-6220 5-Disc CD Changer

8x oversampling, dual 18-bit D/A converters, 5-disc carousel. Features floating disc tray; 3-in-CD compatibility. 32-track programming; 5 repeat modes; random play; track skip/scan; elapsed- and remaining-time displays; remote control. FR 20-20,000 Hz ± 1 dB; S/N 105 dBA; THD 0.003% at 1,000 Hz; channel separation 93 dB... \$230

CD-6130 5-Disc CD Changer

8x oversampling, dual 18-bit D/A converters, 5-disc carousel. Features 3-in-CD compatibility. 32-track programming; random play; 3 repeat modes; intro scan; track skip/scan; elapsed-time display; remote control. FR 20-20,000 Hz ± 1 , -2 dB; dynamic range 95 dB; S/N 105 dB... \$220

CD-1760 CD Player

8x oversampling, dual 18-bit D/A converters. Features 3-in-CD compatibility. Headphone jack with volume control. 32-track programming; remote control. FR 20-20,000 Hz ± 0.5 dB; S/N 105 dB; THD 0.008% at 1,000 Hz... \$180

PANASONIC

LX-K700 Karaoke Combi-Player

1-bit MASH D/A conversion. Plays CDs and videodiscs. Features dual-side play with 11-second change speed. 2 mic inputs; S-video output.



Stage, theater, and music acoustic modes; vocal-removal function; staccato vocal effect; adjustable echo; 7-step digital key control; 20-track programming; random play. CAV frame search; CLV time search; chapter skip. On-screen displays; chapter/track search; chapter/track repeat; remote control. FR 4-20,000 Hz; S/N 100 dB; dynamic range 94 dB... \$1,100

LX-900 Combi-Player

1-bit MASH D/A conversion. Plays CDs and videodiscs. Features dual-side play. Fiber-optic output. Random play. CAV/CLV still, slow, forward, and reverse scanning; still and strobe modes with sound; art-effects mode; CAV frame search; CLV time search; chapter skip; jog/shuttle control on front panel and remote. On-screen displays with level meters; chapter/track search; chapter/track repeat; remote control. FR 4-20,000 Hz; S/N 115 dB; dynamic range 98 dB; THD 0.0023% at 1,000 Hz... \$1,100



Philips CD-950

LX-101 Combi-Player

1-bit MASH D/A conversion. Plays CDs and videodiscs. S-video output. Random play. CAV multi-speed and still play; CAV frame search; CLV time search; last-position memory; shuttle control. On-screen displays with level meters; chapter/track programming, skip, search, and repeat; intro scan; remote control. Frequency response 4-20,000 Hz; signal-to-noise ratio 101 dB; dynamic range 94 dB; THD 0.006% at 1,000 Hz... \$600

SL-PD446 5-Disc CD Changer

1-bit MASH D/A converter, 5-disc carousel. Features ability to change 4 discs while one is playing; 2-way platter rotation; 3-in-CD compatibility. 32-track programming; repeat; random play; remote control. Frequency response 2-20,000 Hz ± 1 dB; THD 0.009%; S/N 100 dB; dynamic range 92 dB... \$240

PARAMOUNT PICTURES

SCP110 CD Controller

Controls NSM 100 CD changers. Features disc ID displays of song title, disc title, artist, and record label; database with information on 40,000 CDs; ability to access discs by artist, song, or disc title; 5 play-list modes; disc/track programming; random play; timer; remote control. Black aluminum front and rosewood side panels... \$8,500

CDR-210 CD Recorder

16-bit A/D and D/A conversion. Balanced-XLR and unbalanced-RCA analog inputs and outputs; fiber-optic and coaxial digital inputs and outputs. VU meter; auto/manual track selection for recording; remote control. Sampling rate 44,100 Hz; THD + noise 84 dB; S/N 89 dB; ch sep 86 dB; dynamic range 90 dB. Black. 16½ x 5¾ x 13½ in; 20.9 lb... \$7,000

PARASOUND

C/D-1000 5-Disc CD Changer

8x oversampling, dual 18-bit D/A converters. Features 3-beam laser pickup; regulated power supply. Digital output. Remote control. FR 5-20,000 Hz ± 0.2 dB; S/N 110 dB; THD 0.002%... \$535

C/DX-88 CD Player

8x oversampling, dual 18-bit D/A converters. Features 3-beam laser pickup; regulated power supply. Digital output. 20-track programming; programmable repeat; remote control. FR 5-20,000 Hz; S/N 110 dB; THD 0.002%... \$370

PHILIPS

Models CD-950, CDC-935, and CD-920 feature Philips' ESI bus for communication among 900 Series components.

CDV-600BK Combi-Player

1-bit Bitstream D/A converter. Plays CDs and videodiscs. Features CX NR; digital-frame memory for freeze, strobe, and picture-recall effects. Fiber-optic digital output; S-video output. 5 repeat modes; random play; 20-chapter/track programming; 2-speed scan; remote control with jog/shuttle. FR 2-20,000 Hz ± 0.5 dB; S/N 100 dB; dynamic range 97 dB... \$1,100

CDI-910 CD-1 Player

Plays CDs, CD-1, CD+G, Photo-CD, and CD-ROM XA discs. Features audio, video, and text decoder circuits. Audio, composite-video, and S-video outputs; headphone jack with volume control. Display of total tracks, total and elapsed time, track number, and operating status; track skip; remote control... \$999

CDV-400BK Combi-Player

4x oversampling, dual 16-bit D/A converters. Plays CDs and videodiscs. Features CX NR. Coaxial digital output; S-video output. Favorite-track selection; 5 repeat modes; 20-chapter/track programming; 2-speed scan; random play; remote control. FR 3-20,000 Hz ± 0.5 dB; S/N 98 dB; dynamic range 94 dB; THD 0.003%... \$600

CD-950 CD Player

Dual 1-bit Bitstream D/A converters. Coaxial and fiber-optic outputs; headphone jack with volume control. 20-track programming; random play; favorite-track selection; tape edit; music calendar; FL display; remote control... \$600

CDC-935 5-Disc CD Changer

Dual 1-bit Bitstream D/A converters, 5-disc carousel. Coaxial digital outputs; headphone jack with volume control. 3 discs changeable during play; 20-track programming; random play; favorite-track selection; remote control... \$300

CD-920 CD Player

Dual 1-bit Bitstream D/A converters. Coaxial digital outputs; headphone jack with volume control. 20-track programming; random play; tape edit; remote control... \$180

PIONEER

CLD-D701 Combi-Player

Dual 1-bit PDM D/A converters. Plays CDs and videodiscs. Features dual-side play; 8-bit digital field memory; CX NR. 2 gold-plated A/V outputs; 2 S-video outputs; fiber-optic digital output; headphone jack with volume control. CD-direct mode; track/time search; on-screen level meters. Scan modes; 9-speed forward/reverse play and still/step play on CAV/CLV discs; jog/shuttle controls. 8 repeat modes; level control via shuttle ring; remote control. FR 4-20,000 Hz digital, 20-

CD PLAYERS

20,000 Hz +1, -3 dB analog; S/N 115 dB digital, 70 dB analog with CX NR; dynamic range 99 dB; THD 0.0018% \$1,200

CLD-V820 Karaoke Combi-Player

Plays CDs, videodiscs, and Laser Karaoke discs. Features dual-side videodisc play, 2 mic inputs; headphone jack. Lead-vocal removal; lead-vocal volume control; digital echo control; 9-step digital musical-key controller; independent volume controls for all microphones; remote control \$1,050

CLD-V720. As above, without dual-side play \$900

CLD-V510. As CLD-V720, without digital musical-key controller \$730

CLD-M401 5-Disc Combi-Changer

1-bit D/A converter, 5-disc tray. Plays CDs and videodiscs. Features simultaneous loading of 5 CDs and one videodisc; videodisc play without removing CDs; CX NR. 2 A/V outputs; fiber-optic digital output; S-video output; headphone jack with volume control. Auto digital level control; time search. 9-speed forward/reverse play and still/step play for CAV discs. 5 repeat modes; shuttle ring; remote control. FR 4-20,000 Hz digital, 20-20,000 +1, -3 dB analog; S/N 112 dB digital, 70 dB analog with CX NR; dynamic range 98 dB; THD 0.0025% \$760

CLD-S201 Combi-Player

1-bit D/A converter. Plays CDs and videodiscs. Features separate CD tray telescoped within videodisc tray; CX NR. 1 A/V output. Manual digital level control; tape edit; time search. 9-speed forward/reverse play and still/step play for CAV discs. 7 repeat modes; shuttle ring; remote control. FR 4-20,000 Hz digital, 20-20,000 Hz +1, -3 dB analog; S/N 102 dB digital, 70 dB analog with CX NR; dynamic range 96 dB \$535

PD-TM2 18-Disc CD Changer

1-bit D/A converter, three 6-disc magazines. Headphone jack with volume control. Memory hold for program and level; 48-track programming; remote digital level control; direct track access; FL display; SR-system remote control. Includes single-disc loader. FR 2-20,000 Hz; S/N 104 dB; dynamic range and ch sep 96 dB .. \$510

PD-M901 6-Disc CD Changer

1-bit D/A converter, 6-disc magazine. Features digital ambience processing; semi-center tray orientation. Headphone jack with volume control. Jazz, club, church, dance, hall, and stadium ambience presets with memory for each disc or magazine; program memory for 120 discs; 40-track programming; direct track access; SR-system remote control. Includes single-disc loader. FR 2-20,000 Hz; S/N 105 dB \$445

PD-M601 6-Disc CD Changer

1-bit D/A converter, 6-disc magazine. Features headphone jack with volume control. 32-track programming; remote control. FR 2-20,000 Hz; S/N 102 dB; dynamic range 96 dB \$305

PD-S501 CD Player

1-bit D/A converter. Features semi-center tray orientation. Headphone jack with volume control. Tape edit; highlight scan; memory for program and level; peak search; 24-track programming; 5 repeat modes; random play; direct track access; timer play; SR-system remote control. FR 2-20,000 Hz; S/N 104 dB \$290

Elite Series

CLD-95 Combi-Player

8x oversampling, dual 20-bit D/A converters.



Plays CDs and videodiscs. Features dual-side play; centered tray orientation; 20-bit digital filter; jitter-canceling circuitry; time-base corrector; separate audio and video circuitry and power transformers; brushless spindle motor; 8-bit digital picture memory. 2 A/V outputs; S-video output; fiber-optic digital output. Random play; tape edit; remote control with jog/shuttle. FR 4-20,000 Hz ± 0.2 dB; S/N 115 dB; dynamic range 99 dB; ch sep 105 dB; THD 0.0017%. Hor res 425 lines; video S/N 51 dB \$2,000

PD-75 CD Player

Dual 1-bit D/A converters. Features centered tray orientation; Class A FET buffer amp. Fiber-optic digital output; balanced output; headphone jack with motor-driven volume control. Peak search; tape edit; direct track access; synchro play with compatible cassette decks; delete play; normal/delete random play; remote control. FR 2-20,000 Hz; S/N 112 dB; dynamic range 98 dB; ch sep 108 dB; THD 0.0018% \$1,200

CLD-52 Combi-Player

Dual 1-bit D/A converters. Features dual-side play; digital 3-line comb filter; CD-direct mode. 2 A/V outputs; 2 S-video outputs; fiber-optic and coaxial digital outputs; gold-plated terminals. Theater audio mode; digital level control; tape edit; intro/highlight scan; synchro play with compatible cassette decks; shuttle ring; remote control with illuminated keys. FR 4-20,000 Hz ± 0.3 dB; S/N 115 dB; dynamic range 99dB; ch sep 105 dB; THD 0.0017%. Hor res 425 lines \$950

PD-M95 6-Disc CD Changer

1-bit D/A converter, 6-disc magazine. Features semi-center tray orientation; Class A FET buffer amp; separate transformers for analog and digital sections. Fiber-optic and coaxial digital outputs; headphone jack with volume control. Auto digital level control; program memory for 20 magazines/120 discs; music-type memory; tape edit; direct track access; synchro play with compatible cassette decks; delete play; normal/delete random play; remote control. FR 2-20,000 Hz; S/N 112 dB; dynamic range 98 dB \$850

PD-65 CD Player

Dual 1-bit D/A converters. Features centered tray orientation; 2nd-order noise shaping; proprietary digital processing to smooth FR; direct signal paths; separate circuit boards and transformers for analog and digital sections; Class A FET buffer amp. Fiber-optic and coaxial digital outputs. Synchro play with compatible cassette decks; random play; repeat; track search; direct track access; defeatable display; remote control. FR 2-20,000 Hz; S/N 111 dB; dynamic range 98 dB; ch sep 107 dB \$800

PD-M51 6-Disc CD Changer

Dual 1-bit D/A converters, 6-disc magazine. Features semi-center tray orientation; 2nd-order noise shaping; separate transformers for analog and digital sections. Fiber-optic digital output;

headphone jack with volume control. Auto digital level control; synchro play with compatible cassette decks; memory for 20 magazines/120 discs; music-type memory; tape edit; delete play; normal/delete random play; direct disc/track access; remote control. FR 2-20,000 Hz; S/N 110 dB; dynamic range 98 dB \$550

PD-32 CD Player

1-bit D/A converter. Features semi-center tray orientation; 2nd-order noise shaping; motor-driven volume control. Fixed and variable outputs; fiber-optic digital output; headphone jack with motor-driven volume control. Random tape edit; synchro play with compatible cassette decks; highlight scan; peak search; defeatable display; remote control. FR 2-20,000 Hz; S/N 108 dB; dynamic range 96 dB \$400

PROCEED

Proceed CD Library 100-Disc Changer

8x oversampling, 18-bit D/A converter, 100-disc jukebox-like magazine. Digital output; fixed and variable line-level output, single-ended or balanced. 2 random-play modes; sequence and delete modes; track access by title, artist, or musical genre; remote control with LCD. FR 10-20,000 Hz +0, -0.2 dB; S/N 105 dB; ch sep 120 dB. 33 $\frac{1}{4}$ x 21 $\frac{1}{2}$ x 2 $\frac{1}{2}$ in; 175 lb \$12,000

PCD 3 CD Player

8x oversampling, 20-bit D/A converter. Features rigid aluminum frame with lead-filled base designed to reduce vibrations. FR 10-20,000 Hz +0, -0.2 dB; THD 0.004% at 1,000 Hz; S/N 107 dB; dynamic range 104 dB; ch sep 120 dB \$2,995

PROTON

AC-620 CD Player

4x oversampling, dual 16-bit D/A converters. Fixed and variable outputs; headphone jack. Direct-track access; 20-track programming; random play; intro scan; level control; repeat; index search; remote-control compatibility. FR 20-20,000 Hz ± 0.3 dB; S/N 100 dB \$650

AC-425 5-Disc CD Changer

Dual 1-bit D/A converters, 5-disc carousel. Features ability to change 4 CDs while 1 plays; 3-beam laser pickup. Headphone jack. Direct track access; 40-track programming; random play; track skip; 2 repeat modes; index search; remote control. FR 20-20,000 Hz ± 0.3 dB; dynamic range 96 dB; S/N 100 dB \$450

AC-422 CD Player

Dual 1-bit D/A converters. Features 20-track programming; random play; 4 repeat modes; index search; remote control. FR 20-20,000 Hz ± 0.3 dB; S/N 96 dB \$350

QUAD

Quad 66 CD Player

4x oversampling. Features D/A converters hand-selected for linearity/low noise. RCA and coaxial outputs. Operation via Quad 66 series control panel; remote control. FR 20-20,000 Hz ± 0.1 dB; THD 0.003%; dynamic range 96 dB; ch sep 96 dB at 1,000 Hz; S/N 96 dB \$1,200

QUASAR

LD500 Combi-Player

1-bit MASH D/A converter. Plays CDs and videodiscs. Features aspheric-glass pickup lens; magnetic disc-clamping mechanism; brushless direct-drive motor; digital time-base corrector and



Pioneer CLD-52

CD PLAYERS

Y/C separation circuit. 1 S-video and 2 composite-video outputs; 2 audio outputs. 20-track programming; shuttle dial; tape edit; intro scan; remote control \$650

CD892 5-Disc CD Changer

1-bit MASH D/A converter, 5-disc front-loading carousel. Features bidirectional platter rotation. 32-track programming; 3 random-play modes; repeat play; FL display; remote control. FR 20-20,000 Hz +1 dB; S/N 100 dB \$280
CD852. As above, without bidirectional carousel or remote control \$250

CD832 CD Player

1-bit MASH D/A converter. 20-track programming; track skip, scan, and repeat play; FL display with music calendar. FR 20-20,000 Hz +1 dB; S/N 100 dB \$180

REALISTIC BY RADIO SHACK

MD-1000 Combi-Player

4x oversampling. Plays CDs and videodiscs. Digital audio output; RF and A/V outputs; headphone jack with volume control. Tape edit. Non-volatile resume play; still-frame functions. 20-track/chapter programming; search; intro scan; random play; 4 repeat modes; on-screen displays; digital FL display with music calendar; remote control. FR 20-20,000 Hz; dynamic range 90 dB; S/N 90 dB. Video S/N 47 dB; hor res 425 lines. 17 x 4 7/8 x 15 1/2 in; 19 lb \$400

ROTEL

RCD965BX CD Player

Dual 1-bit D/A converters. Track programming; random/repeat play; indexing; track skip/scan; remote control. FR 20-20,000 Hz ± 0.05 dB; S/N 100 dB; dynamic range 96 dB; THD + noise 0.0025% and ch sep 100 dB at 1,000 Hz. 17 1/8 x 3 3/8 x 13 1/2 in; 13 lb \$550

RCD955AX CD Player

4x oversampling, dual 16-bit D/A converters. Features track programming; random/repeat play; track skip/scan; remote control. FR 20-20,000 Hz ± 0.05 dB; S/N 100 dB; dynamic range 96 dB; THD + noise 0.0025% and ch sep 100 dB at 1,000 Hz. 17 1/8 x 3 3/8 x 13 1/2 in; 13 lb \$450

SANYO

CPM510 5-Disc CD Changer

8x oversampling, dual 16-bit D/A converters, top-loading 5-disc carousel. Features 18-bit digital filter. 32-track programming; time counter; intro scan; random play; remote control. S/N 98 dB; FR 20-20,000 Hz +0, -1 dB; ch sep 80 dB at 1,000 Hz. Charcoal-gray finish. 16 1/2 x 4 1/2 x 15 1/8 in; 9 lb \$200

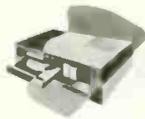
CP791 CD Player

8x oversampling, dual 16-bit D/A converters. Features 18-bit digital filter; 3-beam laser pickup. 24-track programming; repeat play; track skip/search; LCD; time counter. FR 20-20,000 Hz +0, -1 dB; S/N 96 dB; dynamic range 95 dB; THD 0.05% and ch sep 80 dB at 1,000 Hz. Charcoal-gray finish. 17 1/4 x 3 3/8 x 10 3/4 in; 7 lb \$100

SHARP

MVD-2000 Combi-Player

4x oversampling. Plays CDs and videodiscs. Music calendar; tape edit; repeat play; intro scan; program search; direct track access; remote control \$600



SHERWOOD

CDC-5010R 5-Disc CD Changer

1-bit D/A conversion, front-loading 5-disc carousel. Gold-plated headphone jack with volume control; gold-plated line-level outputs. 32-track programming; random, repeat, and timer play; direct disc access; one/all-disc intro scan; music calendar; Sherwood Digi-Link II system remote-control compatibility; remote control. FR 20-20,000 Hz ± 0.5 dB; distortion 0.008%; S/N 104 dBA; dynamic range 96 dB; ch sep 100 dB. 17 1/8 x 5 x 9 5/8 in; 12.5 lb \$250

CDC-3010R 5-Disc CD Changer

8x oversampling, dual 18-bit D/A converters, 5-disc front-loading carousel. Gold-plated headphone jack with volume control. 32-track programming; disc intro; random, repeat, and timer play; ability to change discs while one is playing; music calendar; remote control; Sherwood Digi-Link II system remote-control compatibility. FR 20-20,000 Hz ± 0.5 dB; S/N 103 dB; dynamic range 95 dB; ch sep 100 dB. 17 1/4 x 3 3/4 x 15 in; 9 lb \$225

CD-3010R CD Player

8x oversampling, dual 18-bit D/A converters. Features multi-regulated power supply; 3-beam laser pickup. Gold-plated headphone jack with volume control. 20-track programming; random/repeat play; intro scan; auto space; music calendar; Sherwood Digi-Link II system remote-control compatibility; remote control. FR 20-20,000 Hz ± 0.5 dB; S/N 103 dB; dynamic range 95 dB; ch sep 100 dB. 17 1/4 x 3 3/8 x 9 1/2 in \$180



Rotel RCD965BX

SONOGRAPHE

SD22 CD Player

1-bit D/A converter. Features discrete FET audio circuits and power supplies. Track scan and repeat; track/index cueing; elapsed-time display; remote control. 18 x 3 3/4 x 12 in; 9 lb \$895

SONY

CDP-C725 5-Disc CD Changer

1-bit D/A conversion, 5-disc carousel. Features DSP. Fiber-optic digital output; remote-controllable variable line-level output; headphone jack. Hall, church, jazz, stadium, disco, live, and background-music ambience presets; sound-field, program, and level memory for 184 discs; digital reverb, EQ, and level controls; direct track access; timer play; dot-matrix display; remote control. FR 20-20,000 Hz ± 0.3 dB; S/N 115 dB; dynamic range 100 dB; ch sep 110 dB. 17 x 5 x 15 in; 14 lb \$450

CDP-C625 5-Disc CD Changer

1-bit D/A conversion, 5-disc carousel. Features DSP. Fiber-optic digital output; remote-controllable variable line-level output. Hall, church, jazz,

stadium, disco, live, and background-music ambience presets; digital reverb and EQ controls; direct track access; FL display; remote control. S/N 110 dB; FR 20-20,000 Hz ± 0.3 dB; dynamic range 98 dB; ch sep 102 dB. 17 x 5 x 15 in; 14 lb \$380

CDP-C525 5-Disc CD Changer

1-bit D/A conversion, 5-disc carousel. Features DSP. Remote-controllable variable line-level output. Hall, church, jazz, stadium, and disco ambience presets; FL display; remote control. S/N 105 dB; FR 20-20,000 Hz ± 0.5 dB; dynamic range 98 dB; ch sep 100 dB. 17 x 5 x 15 in; 13 lb \$350

CDP-K1A Karaoke CD Player

8x oversampling, dual 16-bit D/A converters. Features 18-bit digital filter; vocal-eliminator and digital-echo circuits. 2 stereo mic inputs. ± 12 -dB pitch control in 0.1% increments; 5 repeat modes; FL display; remote control. FR 20-20,000 Hz ± 0.5 dB; S/N 98 dB; dynamic range 92 dB; ch sep 95 dB. 14 x 3 3/4 x 12 1/4 in; 7 lb \$340

CDP-C425 5-Disc CD Changer

1-bit D/A conversion, 5-disc carousel. Direct track access on front panel and remote control; FL display; remote control. FR 20-20,000 Hz ± 0.5 dB; S/N 100 dB; dynamic range 98 dB; ch sep 100 dB. 17 x 5 x 15 in; 12 lb \$300

CDP-C325. As above, direct access on remote control only \$280

CDP-C225. As CDP-C325, no remote control. Features remote-control compatibility with most Sony receivers \$225

CDP-497 CD Player

1-bit D/A conversion. Features tape edit; 6 repeat modes; intro scan; direct track access; auto space/cue; remote control. FR 20-20,000 Hz ± 0.5 dB; S/N 100 dB; dynamic range 98 dB; ch sep 100 dB. 17 x 4 x 11 1/2 in; 8 lb \$240

CDP-397 CD Player

1-bit D/A conversion. Features 6 repeat modes; auto space/cue; remote control. FR 20-20,000 Hz ± 0.5 dB; S/N 97 dB; dynamic range 98 dB; ch sep 93 dB. 17 x 4 x 11 1/2 in; 8 lb \$190

CDP-297. As above, without auto space/cue or remote control. Features remote-control compatibility with most Sony receivers \$165

ES Series

The following feature a 45-bit digital filter and a fiber-optic digital output. All CD changers, except CDP-C90ES, feature gold-plated line-level outputs, a headphone jack with volume control, 7 repeat modes, direct track access, 32-track programming, and a fader.

CDP-X779ES CD Player

1-bit D/A conversion. Features 16 converter outputs summed in complementary push-pull configuration; Class A FET analog output stage; linear motor with sapphire bearings. Coaxial digital output; gold-plated line-level outputs; balanced-XLR analog outputs; headphone jack with volume control. Program memory for 184 discs; 7 repeat modes; direct track access; 24-track programming; random play; delete play; fader; music calendar; remote control. FR 20-20,000 Hz ± 0.3 dB; S/N 119 dB; dynamic range 100 dB; ch sep 110 dB. 18 1/2 x 5 x 14 1/4 in; 33 lb \$1,900

CDP-C89ES 5-Disc CD Changer

1-bit D/A conversion, 5-disc carousel. Features DSP; noise shaping; balanced die-cast aluminum platter; copper-shielded chassis. Hall, church, jazz, stadium, disco, live, and background-music ambience presets; EQ and reverb controls; sound-field and program memory for 184 discs;

CD PLAYERS

random play with delete; timer play; dot-matrix display; remote control. FR 2-20,000 Hz \pm 0.3 dB; S/N 115 dB; dynamic range 100 dB; ch sep 110 dB. 18½ x 5 x 15 in; 21 lb \$700
CDP-C79ES. As above, without balanced die-cast aluminum platter and copper chassis shielding. 20 lb \$500
CDP-C69ES. As CDP-C79ES, without 184-disc memory, timer play, dot-matrix display, or wood side panels. Features FL display; 3-yr limited warranty. 17 x 5 x 15 in; 15 lb \$400



Sony CDP-C79ES

CDP-X339ES CD Player

1-bit D/A conversion. Features noise shaping; zinc insulator feet; aluminum front panel; multiregulated power supply. Gold-plated line-level outputs; headphone jack with volume control. Program memory for 184 discs; 7 repeat modes; direct track access; 24-track programming; random play; delete play; fader; music calendar; remote control. FR 2-20,000 Hz \pm 0.3 dB; S/N 116 dB; dynamic range 100 dB; ch sep 110 dB. 18½ x 5 x 14¾ in; 26 lb \$700
CDP-X229ES. As above, without zinc insulator feet. 17 x 4¾ x 13¾ in; 14 lb \$400

CDP-C90ES 10-Disc CD Changer

1-bit D/A conversion, 10-disc magazine. Features magazine compatibility with Sony car CD changers; noise shaping; independent regulated power supplies; monocoque chassis. Program memory for 184 discs; remote control. FR 2-20,000 Hz \pm 0.3 dB; S/N 110 dB; dynamic range 100 dB; ch sep 105 dB. 18½ x 5 x 13 in; 16 lb \$500

SOTA

Vanguard CD Player

Dual 1-bit D/A converters. Features dual-mono circuit design; C-MOS technology; separate power supplies for digital and analog sections; toroidal power transformer; DC-coupled output stage. Fiber-optic and coaxial outputs; headphone jack with volume control. Random/repeat play; track skip/scan; remote control. FR 20-20,000 Hz \pm 0.2 dB; THD 0.002%; S/N 100 dBA; dynamic range 92 dB; ch sep 110 dB at 1,000 Hz. 19 x 3¾ x 12 in; 22 lb \$2,495

TEAC

PD-D700 5-Disc CD Changer

8x oversampling, dual 16-bit D/A converters, 5-disc carousel. Features center-mounted tray; 3-beam laser pickup. CDs changeable during playback; 32-track programming; remote control. FR 20-20,000 Hz \pm 2 dB; S/N 100 dB; THD 0.05% at 1,000 Hz \$300

PD-C400 5-Disc CD Changer

4x oversampling, dual 18-bit D/A converters, top-loading 5-disc carousel. Features 18-bit digital filter; 3-beam laser pickup. 32-track programming; all-disc random play; 10-second intro scan; 3 repeat modes; remote control. FR 20-20,000 Hz \pm 1 dB; S/N 96 dB, THD 0.07%, and dynamic range 92 dB at 1,000 Hz. 17½ x 4¾ x 13¾ in; 9.3 lb \$270



CD-P250 CD Player

8x oversampling, dual 16-bit D/A converters. Features 18-bit digital filter; center-mounted tray; 3-beam laser pickup. 20-track programming; 3 repeat modes. FR 5-20,000 Hz \pm 1 dB; S/N 100 dB, dynamic range 92 dB, and THD 0.005% at 1,000 Hz. 17½ x 3½ x 11¼ in; 7.5 lb \$200

TECHNICS

SL-P1300 CD Player

8x oversampling, four 1-bit MASH D/A converters. Separate digital and analog power supplies; high-speed linear-motor access system. Fiber-optic and coaxial digital outputs; balanced outputs; headphone jack with volume control. \pm 8% pitch control; rocker switch for mixing; auto cue; cueing by CD time code; cue search; 2-speed audible search; 3 repeat modes; remote control. 16½ x 6¾ x 14¾ in \$1,900

SL-PS900 CD Player

Eight 1-bit MASH D/A converters. Features center-mounted transport; digital servo system; Class AA analog audio stages; independent power-supply transformers for analog and digital sections; anti-resonance construction. Fiber-optic outputs; remote-controllable variable line-level output; headphone jack with volume control. Function-management system to assign choice of 17 functions to 5 keys; synchro play with compatible cassette decks; direct track access; peak-level search; time fade; auto space; random play; auto cue; tape edit; remote control. FR 2-20,000 Hz \pm 0.3 dB; THD 0.0022% at 1,000 Hz; S/N 118 dB; dynamic range 98 dB. 17 x 5½ x 13¼ in; 14 lb \$500

SL-PS700. As above, without Class AA analog stages, independent transformers, or remote-controllable variable line-level output. Four 1-bit MASH D/A converters. THD 0.0028%; S/N 114 dB. 12 lb \$340

SL-PG300. As above, without fiber-optic output, function management system, or auto space. Transport not center-mounted. FR 2-20,000 Hz \pm 1 dB; THD 0.007% at 1,000 Hz; S/N 100 dB; dynamic range 92 dB. 17 x 4 x 11¼ in; 8 lb \$190

SL-PG100. As above, without remote control. Features remote-control capability \$170

CD Changers

SL-PD927 5-Disc CD Changer

Four 1-bit MASH D/A converters. 5-disc front-loading carousel. Features digital servo system; linear motor transport; bidirectional platter; anti-resonance construction. Ability to change 4 discs while one plays; tape edit and synchro play with compatible cassette decks; 32-track programming; 2-mode random play; 4 repeat modes; direct track/disc access; delete programming; remote control. FR 2-20,000 Hz \pm 1 dB; THD 0.007% at 1,000 Hz; S/N 102 dB; dynamic range 92 dB. 17 x 5½ x 15½ in; 12 lb \$330

SL-PD827. As above, without antiresonance construction. 17 x 5½ x 15½ in \$250

SL-PD627. As above, without remote control, delete programming, or tape edit. THD 0.009%; S/N 100 dB \$220

YAMAHA

CDX-1060 CD Player

Four 1-bit D/A converters. Features Class A amps; time-base corrector; independent power

transformers for analog and digital sections. Fiber-optic and coaxial outputs; fixed and variable analog outputs; gold-plated jacks; headphone jack with volume control. 10-track program memory for 100 discs; 25-track programming; 5 repeat modes; random play; index search; 3-mode track search and tape edit; RS-system remote control. S/N 120 dB; dynamic range 100 dB. 17½ x 4¾ x 13¾ in \$799

CDV-1700 Combi-Player

8x oversampling, dual 18-bit D/A converters. Plays CDs and videodiscs. RF converter. Fiber-optic output; S-video output; headphone jack with volume control. Freeze-frame and single-frame advance; 10 forward and reverse speeds; index search; chapter/track and skip search; RS-system-compatible remote control. S/N 110 dB; dynamic range 95 dB. Hor res 440 lines; video S/N 48 dB. 17½ x 5¾ x 16¼ in \$699

CDC-835 5-Disc CD Changer

Four 1-bit D/A converters, 5-disc carousel. Features ability to change 4 discs while one plays; Class A analog amps. Coaxial output; variable analog output; gold-plated terminals; headphone jack with volume control. 5-mode digital EQ; program and EQ file for 100 discs; 40-track programming; random and repeat play; disc skip; track/index search; direct track/disc access; RS-system remote control. S/N 115 dB; dynamic range 100 dB. 17½ x 4¾ x 15¼ in \$549

CDC-735. As above, without digital EQ, Class A analog amps, relay play capability, or gold-plated terminals \$429

CDX-860 CD Player

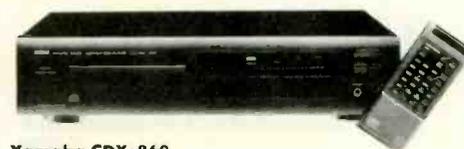
Four 1-bit D/A converters. Features microcomputer-controlled 2-way tracking servo system. Fiber-optic and coaxial outputs; fixed and variable analog outputs; gold-plated terminals. 25-track programming; 4-mode repeat play; random play; index search; 3-mode track search and tape edit; space insert; RS-system remote control. S/N 118 dB; dynamic range 100 dB. 17½ x 4¾ x 10¾ in \$499

CDC-625 5-Disc CD Changer

Two 1-bit D/A converters for 8 least-significant bits and two 10-bit ladder-type D/A converters for 8 most-significant bits, 5-disc carousel. Features ability to change 4 discs while one plays; bidirectional platter rotation; floating 3-beam laser pickup; digital 2-way tracking servo system. 20-track programming; direct disc access; 3-mode track and index search; last-position memory; RS-system remote control. S/N 108 dB; dynamic range 98 dB. 17½ x 4¾ x 14¼ in \$299

CDX-560 CD Player

8x oversampling, two 1-bit D/A converters for 8 least-significant bits and two 10-bit ladder-type D/A converters for 8 most-significant bits. Features microcomputer-controlled 2-way tracking servo system; anti-vibration base; large anti-vibration feet. Variable analog output; headphone jack with volume control. 25-track programming; 4-mode repeat play; random play; 3-mode track search and tape edit; index search; RS-system remote control. S/N 110 dB; dynamic range 98 dB. 17½ x 4¾ x 10¾ in \$249



Yamaha CDX-860

TUNERS

ACOUSTIC RESEARCH

Limited FMT FM Tuner

Features XLR and RCA connectors. 13 lb \$2,200

ADCOM

GFT-555II AM/FM Tuner

Quartz-referenced digital-synthesis design with 8 AM/8 FM presets. Features buffered output stages using Class A amplifier; 1% Roederstein metal-film resistors and metal-film capacitors; tuning accuracy of 0.00025%. Auto scan; switchable high-blend circuit; mono/mute switch; digital FL display; 5-LED signal-strength display. FM: 50-dB quieting sens 36 dBf stereo; cap ratio 1.7 dB; S/N 78 dB stereo; AM rej 70 dB \$350
GFP-555IIV. As above, white \$400

ARCAM

Delta 80 AM/FM Tuner

Analog tuner with 6 AM/6 FM presets. Features flywheel-assisted rotary knob; 3-color FM tuning



B&K Components TS-108

indicator. Logarithmically scaled signal-strength meter; AFC and mono switches; digital frequency display. FM: cap ratio 1.5; S/N 70 dB stereo; sens 1.4 μ V. 17 x 2 3/4 x 10 1/2 in; 10 lb \$699

Alpha 3 FM Tuner

PLL digital design with 16 presets. Manual tuning in 50-kHz steps; scan tuning; 5-segment logarithmically scaled LED signal-strength meter. FR 20-12,000 Hz \pm 0.5 dB; S/N 75 dB mono. 72 dB stereo; THD 0.1% mono, 0.3% stereo; alt-ch sel 60 dB; AM rej 50 dB; cap ratio 1.5 dB; ch sep 40 dB at 1,000 Hz \$399

AUDIO DESIGN ASSOCIATES

MT-3000 Multi-Tuner

Designed for multiroom applications. 3 independent tuner modules with 20 presets per module; choice of AM-stereo, FM-stereo, shortwave, or cable-TV modules in any combination. Features digital-synthesis tuning; auto analog phase-frequency detector; stereo dynamic noise blend. 1 remote-control input for each module; 1 remote-control input to access all 3 modules and 60 presets; 1 line-level output for each module; 1 line-level output for all 3 modules. 4-character alphanumeric labeling for each preset; mute. Cable-TV module features on-screen displays. Remote control optional. FM: 50-dB quieting sens 34 dBf; cap ratio 1.4 dB; AM rej 54 dB; alt-ch sel 80 dB; ch sep 50 dB at 1,000 Hz; S/N 69 dB stereo; FR 30-50,000 Hz \pm 0.5 dB; THD 0.09% stereo at 1,000 Hz. 19 x 3 1/2 x 11 in; 8 lb \$2,500

AUDIOSOURCE

TNR-One AM/FM Tuner

Quartz-PLL tuner with 20 AM/FM presets. Features auto scan and mute; digital display. Cap ratio 1 dB; alt-ch sel 65 dB; S/N 70 dB mono, 76 dB stereo. 16 1/2 x 2 3/4 x 11 1/2 in; 8.4 lb \$230



B&K COMPONENTS

TS-108 FM Tuner

Digital-synthesis tuner with 8 FM presets. Features FL display; 5-segment signal-strength meter; programmable selectivity; mono/stereo and local/DX switches. Cap ratio 1.5 dB; sens 15 dBf mono, 36 dBf stereo; ch sep 40 dB. 17 x 2 1/2 x 9 in; 8 lb \$398

CAMBRIDGE AUDIO

T50 AM/FM Tuner

8 AM/16 FM presets. Features auto/manual scan; bar-graph signal-strength meter; center tuning indicator. FM: capture ratio 2.5 dB; sensitivity 1.8 μ V; S/N 80 dB mono, 75 dB stereo. 17 x 3 1/4 x 12 3/4 in; 8.8 lb \$350

CARVER

TX-11b AM/FM Tuner

Digital quartz-synthesis design with 13 AM/FM presets. Features AM-stereo reception; AM gain and noise-elimination circuits; switchable wide/narrow IF. 3-week memory backup; preset scan; auto/manual tuning. IHF sens 11.3 dBf; cap ratio 1 dB; AM rej 65 dB; ch sep 45 dB and THD 0.05% at 1,000 Hz; S/N 85 dB stereo. 19 x 3 1/2 x 12 1/2 in; 11 lb \$800

TX-14 AM/FM Tuner

20 AM/FM presets. Features FMX decoder. Auto/manual preset scan; FM-mono switch; analog signal-strength meter; remote control. IHF sens 12.8 dBf; cap ratio 1.5 dB; AM rej 60 dB; alt-ch sel 66 dB; ch sep 45 dB and THD 0.08% at 1,000 Hz; S/N 70 dB. 19 x 1 3/4 x 10 in \$400

CREEK

T40 FM Tuner

Auto mute, AFC, local/DX, and narrow/wide-IF switching \$525

DAY SEQUERRA

Reference Analyzer FM Tuner

Analog design. Features panoramic display of 2 MHz on 4 1/2-in instrument-grade oscilloscope for RF spectrum analysis \$12,800

Reference FM Tuner

Analog design. Features 100-Hz tuning accuracy; multiple IF processors with variable Q circuits; dual-mono servos; absolute phase and phase-compensation circuitry; selectable IF bandwidth. Balanced outputs. 4 1/2-in instrument-grade oscilloscope. 35 lb \$4,800

Studio-2 FM Tuner \$3,000

DENON

TU-680NAB is available only through special order; contact Denon for details.

TU-680NAB AM/FM Tuner

Broadcast-monitor design with 30 AM/FM presets. Features AM-stereo section with NAB/EIA-certified "AMAX AM Stereo" performance. NRSC AM de-emphasis standards, noise-blanking microcircuit to suppress pulse noise, and wide/narrow audio bandwidth switch; FM section with 5-gang-equivalent tuning circuits, MOSFET RF amplifiers, wide/narrow IF-bandwidth switch, MPX NR, and auto-peek/manual-step tuning. Remote control. FM: 50-dB quieting sens 37.2 dBf stereo;

cap ratio 1.3 dB; image rej 80 dB; IF rej 100 dB; sel 50 dB wide IF, 75 dB narrow IF; S/N 82 dBA and THD 0.1% stereo; ch sep 50 dB; FR 20-15,000 Hz +0.5, -1 dB. AM: FR 50-7,500 Hz +1.5, -3 dB; THD 0.5% stereo; ch sep 32 dB \$650

TU-660 AM/FM Tuner

Quartz-lock digital design with 30 AM/FM presets. Features switchable wide/narrow IF bandwidth; switchable AM-tuner audio filter bandwidth. Manual-step tuning; last-station memory. FM: 50-dB quieting sens 37.2 dBf stereo; cap ratio 1.3 dB; FR 20-15,000 Hz +0.5, -1 dB; S/N 80 dBA and THD 0.1% stereo; ch sep 50 dB at 1,000 Hz; sel 50 dB wide IF, 75 dB narrow IF. AM: FR 85-7,500 Hz +1.5, -3 dB; S/N 53 dB \$350

TU-280 AM/FM Tuner

Quartz-lock digital design with 30 AM/FM presets. Features wide AM tuning-band range; AM beat-cut filter; FM section with variable 3-gang-equivalent tuning circuits. Low-imp outputs. Denon remote-control compatibility. FM: 50-dB quieting sens 38.5 dBf stereo; cap ratio 1.5 dB; S/N 74 dBA and THD 0.2% stereo; ch sep 40 dB; FR 20-15,000 Hz +0.5, -2 dB \$240

GOLDMUND

Mimesis 4 FM Tuner

Analog design with 6 presets. Features auto frequency-control circuit; 3 separate power supplies using 2 transformers; independent grounds for chassis and signal. Dual antenna inputs; 600-ohm DC-coupled output. Adjustable bandwidth; switchable mute circuit; LED tuning display; manual flywheel tuning; AC line-polarity switch; S/N 75 dB mono, 70 dB stereo; THD (wideband) 0.02% mono, 0.025% stereo; 50-dB quieting sens 2.5 μ V mono, 27.5 μ V stereo; cap ratio 1.5 dB; image rej 75 dB. 3-yr parts-and-labor warranty. 19 x 1 3/4 x 15 1/2 in; 22.1 lb \$6,200

HARMAN KARDON

Citation Twenty-Three AM/FM Tuner

Digital-synthesis, quartz-locking design with 16 AM/FM presets. Features high-selectivity circuit; mono and mute buttons; analog fine tuning; LCD; remote control. FM (with high sel): 50-dB quieting sens 40.4 dBf stereo; AM rej 70 dB; cap ratio 1.75 dB; alt-ch sel 75 dB; ch sep 35 dB at 1,000 Hz. 17 3/4 x 2 3/4 x 14 1/2 in; 15 lb \$699

TU9600 AM/FM Tuner

24 AM/FM presets. Features FM pilot and subcarrier NR; active tracking circuitry; discrete output stage; high-blend circuit. 2 antenna inputs. Digital fine tuning; non-volatile memory of control functions and presets; seek tuning; hi-blend switch; LED signal-strength indicator; digital display; remote control. FM: 50-dB quieting sens 36.2 dBf stereo; AM rej 65 dB at 45 dBf; cap ratio 1 dB; alt-ch sel 45 dB, 80 dB with active tracking. Black. 17 3/4 x 2 3/4 x 13 in; 7.5 lb \$429

TU9400. As above, without active tracking, digital fine tuning, antenna inputs, or remote control. FM: 50-dB quieting sens 37.2 dBf stereo; AM rej 50 dB at 45 dBf; cap ratio 1.2 dB; alt-ch sel 65 dB \$319

TU9200. As TU9400, without FM pilot/subcarrier NR. AM rej 45 dB at 45 dBf; cap ratio 1.5 dB; alt-ch sel 70 dB \$229

JVC

Super Digifine Series

FX-1010TN AM/FM Tuner

Microprocessor-controlled tuner with 40 AM/FM presets. Features computer-controlled RF gain.

TUNERS

IF bandwidth, quieting-slope, and mono/stereo selection; separate analog and digital sections; MOSFET front end; ceramic-filter IF section; PLL detector; PLL multiplex circuit to eliminate beat noise. 2 antenna inputs with switching. Preset scan; preset cancel to bypass undesired presets; 8-event timer; dB-referenced signal-strength indicator; adjustable muting threshold; rec-level-calibration signal generator; Compu Link system compatibility. FM: 50-dB quieting sens 38.1 dBf stereo; AM rej 65 dB; cap ratio 1.2 dB; sel 25 dB wide, 75 dB narrow; ch sep 60 dB wide at 1,000 Hz; FR 20-15,000 Hz +0.3, -0.5 dB; S/N 88 dB A stereo at 85 dBf; THD (wide at 1,000 Hz) 0.009% mono, 0.02% stereo. 17¼ x 4 x 11¼ in. . . . \$480

KENWOOD

KT-5020 AM/FM Tuner

Quartz-synthesis design with 20 AM/FM presets. Features pentacle power supply. Switchable wide/narrow IF; timer; FL display; system remote-control compatibility. 50-dB quieting sens 16.2 dBf mono, 38.8 dBf stereo; S/N (at 85 dBf) 88 dB mono, 82 dB stereo; THD (wide IF from 50-10,000 Hz) 0.1% mono, 0.12% stereo; FR 20-15,000 Hz ±0.5 dB; ch sep 55 dB at 1,000 Hz; cap ratio 1 dB wide, 2.5 dB narrow; AM rej 76 dB. AM: S/N 52 dB; THD 0.3%; image rej 40 dB. 17½ x 3¾ x 12½ in; 9.3 lb. . . . \$270

MARANTZ

ST-50 AM/FM Tuner

Digital-synthesis design with 30 AM/FM presets. Features 4-gang FM front end with dual-gate MOSFETs; linear-phase IF filters; pilot-tone canceler. RC-5 interface for remote-control compatibility with Marantz components. IF-selection memory for each preset; 2-week battery-free preset backup; switchable wide/narrow IF; direct station access; auto/manual scan; FL display. FM: usable sens 10.8 dBf mono; 50-dB quieting sens 37 dBf stereo; alt-ch sel 35 dB wide, 75 dB narrow; cap ratio 1 dB; THD (stereo at 1,000 Hz) 0.08% wide, 0.4% narrow; S/N 82 dB stereo at 1,000 Hz; ch sep 55 dB at 1,000 Hz; FR 20-15,000 Hz ±0.5 dB; image rej 80 dB; IF rej 100 dB. AM: usable sens 48 dB/m; sel 30 dB; S/N 54 dB at 500 Hz; THD 0.3% at 400 Hz. Gold finish with die-cast alloy side panels. 17¾ x 3¾ x 13¾ in; 14.5 lb. . . . \$349

McINTOSH

MR-7083 AM/FM Tuner

PLL design with 8 AM/8 FM presets. Features DMOSFET RF amp for FM signals; JFET amp for AM signals. FM: 50-dB quieting sens 15 dBf mono, 37 dBf stereo; usable sens 11.25 dBf; AM rej 78 dB; cap ratio 1.5 dB; alt-ch sel 70 dB; FR 20-15,000 Hz +0, -1 dB; ch sep 50 dB. AM: adj-ch sel 45 dB. 16¼ x 5¾ x 14 in; 15.5 lb. . . . \$1,695
MR-7083(W). Wide chassis. 17½ x 5¾ x 14 in. . . . \$1,695

MERIDIAN

Model 204 FM Tuner

18 FM presets. Features steel chassis; full RF shielding. Clock/timer; adjustable seek tuning; scan tuning; status and signal-strength displays. Cap ratio 1.5 dB; ch sep 40 dB at 1,000 Hz; sel 56 dB; THD 0.02% mono, 0.4% stereo. 6¾ x 4 x 12¾ in. . . . \$1,190

MTX SOUND CRAFTSMEN

Pro-Tuner Four AM/FM Tuner

Digital quartz-PLL tuner with 16 AM/FM presets. Features active high-blend filter. 5-digit display;



auto scan. IHF sens 1.6 µV; S/N 75 dB; distortion 0.08%. Rack-mount front panel. 19 x 2¾ x 12 in. . . . \$379

T100 AM/FM Tuner

Digital quartz circuitry with 20 AM/FM presets. Features auto/manual tuning. FM: 50-dB quieting sens 11 dBf mono, 34.5 dBf stereo; cap ratio 1.5 dB; S/N 75 dB mono, 70 dB stereo; FR 30-15,000 Hz ±1.5 dB. 17 x 1¼ x 14¼ in. . . . \$360

MUSEATEX

FM-1 FM Tuner

Digital-synthesis tuner with 99 AM/FM presets. 2 antenna/cable inputs; LCD interface; manual fine tuning; auto preset store; stereo/mono and IF bandwidth selection; remote control. 5-yr warranty. 22 lb. . . . \$999

NAD

Model 4225 AM/FM Tuner

14 AM/FM presets. Features linear IF filters; switchable blend circuit. FM: 50-dB quieting sens 37 dBf mono; cap ratio 2 dB; alt-ch sel 65 dB; S/N 75 dB stereo. 16½ x 3 x 10 in; 7 lb. . . . \$249

NAIM

NAT 01 FM Tuner

Features auto bandwidth selection; progressive switching from mono to stereo; separate power supply. Digital frequency display that increases in brightness to indicate signal strength. Output level 250 mV/ch. 11¼ x 3 x 8 in. . . . \$3,395
NAT 02. As above, with integral power supply. . . . \$2,135

NAKAMICHI

ST-7 AM/FM Tuner

PLL design with 16 AM/FM presets. Features Schotz NR. 5-segment signal/multipath meter; L/R output-level controls. FM: usable sens 10 dBf mono, 17 dBf stereo; 50-dB quieting sens 14 dBf mono, 28 dBf stereo; AM rej 60; cap ratio 1.9 dB; alt-ch sel 60 dB; THD (at 1,000 Hz) 0.06% mono, 0.08% stereo; S/N 80 dB mono, 76 dB stereo; channel separation 55 dB at 1,000 Hz. 17¼ x 2½ x 11¾ in; 10.5 lb. . . . \$849



Onkyo Integra T-9090II

ONKYO

Integra T-9090II FM Tuner

20 presets. Features auto/manual reception-optimization system to select A/B antenna, RF (local/distance), IF bandwidth (wide/narrow/S-narrow), high-blend, and mono/stereo. Dual antenna inputs. Preset scan; strongest-station memory; digital display and signal-strength meter; timer programming; FM fine tuning; remote control. Wood side panels. . . . \$750

Integra T-4700 AM/FM Tuner

40 AM/FM presets. Features auto reception-optimization system with manual override; 7-varac-

tor/MOSFET RF section; Isohex power supply; battery-free memory backup. Dual antenna inputs; variable output. 6 preset groups with alphanumeric labeling; full/category preset scan; FM fine tuning in 25- or 50-kHz steps; Onkyo RI-system control compatibility; remote control. . . . \$450

Integra T-407 AM/FM Tuner

40 AM/FM presets. Features auto reception-optimization system with manual override; 5-varactor/MOSFET RF section; Isohex power supply; front-end design to minimize IM; built-in AM loop antenna; battery-free memory backup. 8 preset groups; FM fine tuning in 25- or 50-kHz steps; direct access tuning; switchable tuning level and mute; 10-segment signal-strength meter; 6-digit frequency display; Onkyo RI-system control compatibility. . . . \$350

T-404 AM/FM Tuner

40 AM/FM presets. Features auto reception-optimization system; MOSFET front end; built-in AM loop antenna; battery-free memory backup. 6 preset groups; direct station access; auto scan; 5-digit frequency display; Onkyo RI-system control compatibility. . . . \$200

PARASOUND

T/DQ-2000 II AM/FM Tuner

PLL design with 20 AM/FM presets. Features regulated power supply. Scan/manual tuning; mono switch; remote control. FM: 50-dB quieting sens 36.9 dBf; alt-ch sel 84 dB; THD 0.05% mono, 0.1% stereo; FR 20-15,000 Hz ±0.5 dB; cap ratio 1.2 dB. 19 x 3½ x 12½ in. . . . \$525

T/DQ-260 II AM/FM Tuner

Quartz-referenced, digital-synthesis PLL tuner with 8 AM/8 FM presets. Features regulated power supply. Scan/manual tuning; mono switch. FM: 50-dB quieting sens 37.7 dBf; alt-ch sel 66 dB; THD 0.05% mono, 0.1% stereo; cap ratio 1.2 dB. 17¼ x 2½ x 9½ in. . . . \$295

PHILIPS

FT-920 AM/FM Tuner

30 AM/FM presets. ESI bus for communication among 900 Series components. Direct station access; local/distant switching; station name display. . . . \$240

PIONEER

The following feature a digital signal decoder, which is said to improve channel separation and signal-to-noise ratio.

F-449 AM/FM Tuner

36 AM/FM presets. Features selectable normal/narrow FM IF bandwidth; RF attenuator. 3-speed search; 8-segment signal-strength meter; FL display; SR-system remote-control compatibility. FM: 50-dB quieting sens 16.2 dBf mono, 36.2 dBf stereo; S/N (at 80 dBf) 83 dB mono, 78 dB stereo; FR 30-15,000 Hz ±1 dB; ch sep 50 dB at 1,000 Hz. AM: S/N 50 dB. 16½ x 3¾ x 12½ in; 7.8 lb \$270

Elite Series

F-93 AM/FM Tuner

40 AM/FM presets. Features switchable normal/narrow FM IF bandwidth; MPX NR. Variable/fixed output. Direct station access; fine tuning in 10-kHz FM and 1-kHz AM steps; FL signal-strength meter; RF attenuator; preset scan. FM: 50-dB quieting sens 15.9 dBf mono, 36.2 dBf stereo; S/N (at 80 dBf) 96 dB mono, 88 dB stereo; FR 20-15,000 Hz +0.2, -0.8 dB; ch sep 60 dB at 1,000 Hz. 18 x 4¼ x 13¾ in; 14.3 lb. . . . \$900

TUNERS



F-51 AM/FM Tuner

36 AM/FM presets. Features MPX NR; switchable normal/narrow FM IF bandwidth. Simulated-stereo mode. FM: 50-dB quieting sens 16.2 dBf mono, 36.2 dBf stereo; S/N (at 80 dBf) 83 dB mono, 78 dB stereo; FR 20-15,000 Hz +0.4, -1 dB; ch sep 55 dB at 1,000 Hz. AM: S/N 50 dB. 16% x 3 3/4 x 12 1/2 in; 7.5 lb \$350

PROTON

AT-670 AM/FM Tuner

Quartz PLL tuner with 9 AM/18 FM presets. Features Schott II circuitry with NR; 5-gang GASFET RF amp. Variable output level; mono/stereo switch; wide/narrow IF bandwidth switch; auto/manual rotary tuning; remote-control compatibility. FM: 50-dB quieting sens 30 μ V stereo; cap ratio 1 dB; AM rej 65 dB; S/N 74 dBA stereo at 45 dB; ch sep 45 dB at 1,000 Hz. AM: ch sel 50 dB; S/N 45 dB. 18 1/2 x 4 3/4 x 15 1/2 in; 15.5 lb \$400

AT-470 AM/FM Tuner

8 AM/8 FM presets. Mono switch \$220

QUAD

Model 66 FM Tuner

19 presets. Designed for use with Model 66 preamp. Features auto search in 25- or 50-kHz steps; LCD. 50-dB quieting sens 28 dBf; cap ratio 1.5 dB; S/N 76 dB; AM rej 65 dB; image rej 100 dB; THD 0.05% mono, 0.1% stereo \$1,200

FM4 FM Tuner

8 presets. Designed for use with Quad 34 preamp. Features microprocessor control; signal-strength meter; backup for 5 presets. Distortion 0.05% mono, 0.1% stereo; cap ratio 2.5 dB; FR 20-15,000 Hz +0, -1 dB; crosstalk 40 dB at 1,000 Hz; pilot-tone suppression 60 dB; de-emphasis switchable 50/75 μ s. Anthracite gray finish. 8 x 1 3/4 x 5 1/2 in; 6 lb \$849

REALISTIC BY RADIO SHACK

TM-150 AM/FM Tuner

PLL design. Features built-in AM and FM antennas. FM-antenna output. Mono/stereo switch; FM-stereo LED indicator; illuminated tuning dial \$60

ROTEL

RT970BX AM/FM Tuner

16 AM/FM presets. Features RF attenuation; AM and FM bandwidth selectivity; high-blend circuitry; digital signal-strength display. FM: usable sens 10.8 dBf mono; S/N (at 65 dBf) 80 dB mono, 75 dB stereo; cap ratio 1 dB; alt-ch sel 60 dB wide, 80 dB narrow; THD 0.06% mono, 0.2% stereo; 50-dB quieting sens 14.8 dBf mono, 37.2 dBf stereo. 17 1/2 x 2 1/4 x 13 in \$400

RT950BX AM/FM Tuner

20 AM/FM presets. Features AM wideband reception; mono switch; signal-strength indicator. FM: usable sens 10.8 dBf mono; S/N (at 65 dBf) 80 dB mono, 75 dB stereo; cap ratio 1 dB; alt-ch sel 63 dB; THD (at 65 dBf and 1,000 Hz) 0.07% mono, 0.25% stereo; 50-dB quieting sensitivity 14.8 dBf mono, 37.2 dBf stereo. 17 1/2 x 2 1/4 x 11 1/4 in; 7.9 lb \$300

SONY

ES Series

The following feature direct-comparator circuitry, switchable wide/narrow IF bandwidth, a high-blend circuit, and remote-control compatibility with other Sony components.

ST-S730ES AM/FM Tuner

Diode-activated frequency-synthesis design with 30 AM/FM presets. Features tracking of FM-transmission modulation by shifting narrow band-pass filter for low interference; PLL detector; antenna attenuator to prevent front-end overload; optically-sensed rotary tuning. Calibration tone; timer capability with external timer. S/N 100 dB mono, 92 dB stereo; THD 0.004% mono, 0.0075% stereo; 50-dB quieting sens 16.8 dBf mono, 37.9 dBf stereo; ch sep 70 dB at 1,000 Hz; FR 15-15,000 Hz \pm 0.2 dB; cap ratio 1 dB with wide IF. Simulated-wood side panels \$550

ST-S550ES AM/FM Tuner

30 AM/FM presets. Features switchable antenna attenuator. Alphanumeric preset labeling; interstation muting. S/N 82 dB mono, 78 dB stereo; THD (normal IF) 0.06% mono, 0.08% stereo; THD (wide IF) 0.04% mono, 0.05% stereo; 50-dB quieting sens 16.8 dBf mono, 38.5 dBf stereo; ch sep 65 dB at 1,000 Hz (wide IF); FR 15-15,000 Hz \pm 0.2 dB mono, 15-15,000 Hz \pm 0.5 dB stereo; cap ratio 1 dB, wide IF; IF rej 70 dB. 3-yr limited warranty. Simulated-wood side panels \$300

SOUNDSTREAM

T-1 AM/FM Tuner

16 AM/FM presets. Features defeatable blend circuit; separate audio and switching power supplies. Fine tuning in 50-kHz steps; flywheel-assisted manual tuning knob for fine adjustment; auto search; signal-strength indicator. FM: 50-dB quieting sens 14.8 dBf; AM rej 60 dB; cap ratio 1.5 dB; alt-ch sel 65 dB; S/N 82 dB mono, 79 dB stereo; THD 0.1% mono, 0.1% stereo \$595

TEAC

T-X3000 AM/FM Tuner

Quartz-PLL design with 20 AM/FM presets. Features MPX filter. FM auto stereo/mono switch; MPX switch; FL display; preset scan; seek tuning. FM: 50-dB quieting sens 17 dBf mono, 39.2 dBf stereo; AM rej 65 dB; cap ratio 1.7 dB; FR 20-15,000 Hz +1, -2 dB; alt-ch sel 68 dB; ch sep 40 dB at 1,000 Hz; S/N (at 65 dBf, 1,000 Hz) 80 dB mono, 72 dB stereo; distortion (at 65 dBf) 0.2% mono, 0.4% stereo. AM: sel 25 dB; distortion 0.5%. 17 1/2 x 3 1/4 x 11 in; 6.4 lb \$220

TECHNICS

ST-G460 AM/FM Tuner

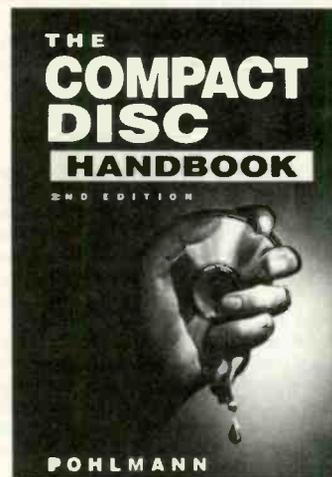
Quartz-synthesis design with 39 AM/FM presets. Features Class AA amp circuitry; DC circuit construction; DC linear switching MPX filter; wide-band quadrature detector. Auto scan; auto preset store; FL display; FM-mode switch. FM: 50-dB quieting sens 38.1 dBf stereo; AM rej 55 dB; cap ratio 1 dB; alt-ch sel 65 dB; THD 0.1% and S/N 73 dB stereo; ch sep 50 dB at 1,000 Hz \$240

YAMAHA

TX-950 AM/FM Tuner

Auto selection of PLL synthesis or FM voltage-servo tuning; 40 presets. Features labeling for up to 24 presets; mono switch; optional RS-system remote control \$399
TX-550. As above, PLL tuning only \$349
TX-350. As above, no station labeling ... \$199

The Ultimate CD Reference



Happy Birthday Compact Disc.

To celebrate 10 remarkable years, Ken Pohlmann has completely updated his popular guide to the wonders of CD technology. *The Compact Disc Handbook* makes the abstruse simple. This revised edition adds new sections on optical and electronic principles underlying the CD—not to mention the latest details on new CD player designs.

"Ken Pohlmann elevates the science, physics, and engineering of digital audio into something as fun to read and as fascinating as a top-flight mystery novel."

—Bob Carver
Carver Corporation

"The new edition improves on the original in almost every respect and brings it thoroughly up-to-date—I wouldn't be without it."

—Michael Riggs
Executive Editor,
Stereo Review

The Compact Disc Handbook

2nd Edition Ken C. Pohlmann

Hardcover \$49.95; Paper \$34.95

Charge by phone

1-800-736-0070 or fax (608) 831-8200

Or mail check or charge info to:

A-R Editions, Inc.

Dept. SR, 801 Deming Way, Madison, WI 53717

NAME

ADDRESS

CITY, STATE, ZIP

SPEAKERS



ACOUSTAT

Spectra 1100 Electrostatic Speaker

8-in woofer in acoustic-suspension enclosure, electrostatic panel. Features electrostatic panel with line-source sector operating above 300 Hz and adjacent sectors for midrange and frequencies below 300 Hz; removable spiked feet. Biwire/biamp terminals. Power handling 75 W; imp 4 ohms. Solid wood with brass electrostatic inlay. Dark-oak-veneer woofer box, optional veneer finishes. 16 x 67½ x 16¼ in. \$1,700/pr

ACOUSTIC RESEARCH

Model 30 3-Way Speaker

Acoustic-suspension design with two 10-in mineral-filled polypropylene-cone woofers, two 5¼-in poly-cone midranges, and one 1-in soft-dome tweeter. FR 38-20,000 Hz +0, -3 dB; sens 88 dB SPL/W/m; imp 6 ohms; crossover points 200 and 3,000 Hz. 11 x 51½ x 15 in. \$2,400/pr

Classic 26 3-Way Speaker

Acoustic-suspension design with two 8-in mineral-filled polypropylene-cone woofers, two 5¼-in poly-cone midranges, and one 1-in soft-dome tweeter. FR 45-20,000 Hz +0, -3 dB; sens 88 dB SPL/W/m; imp 6 ohms; crossover points 200 and 3,000 Hz. 9¾ x 45½ x 12¾ in. \$1,800/pr

M6 3-Way Speaker

Acoustic-suspension design with two 8-in paper-cone woofers, 5-in midrange, and ¾-in ferrofluid-cooled aluminum-dome tweeter. Power handling 200 W. Gray suede, white/black gloss, or veneer finish. 8½ x 42 x 10½ in; 42 lb. \$1,299/pr

M4.5 3-Way Speaker

Acoustic-suspension design with 8-in woofer, 8-in mica-filled polypropylene woofer, and ¾-in fiber-dome tweeter. 33 lb. \$799/pr

Athena Subwoofer/Satellite System

Subwoofer with 8-in dual-voice-coil driver in filtered-suspension enclosure; two satellites, each with 3½-in midrange and ¾-in liquid-cooled fabric-dome tweeter. Features forced-air subwoofer cooling; magnetically satellite shielding. 40 lb. \$599

M3 3-Way Speaker

Acoustic-suspension design with 8-in polypropylene woofer, 2½-in midrange, and ½-in ferrofluid-cooled dome tweeter. Power handling 125 W; FR 53-20,000 Hz -3 dB; sens 90 dB SPL/W/m; imp 4 ohms; crossover points 1,200 and 7,000 Hz. Charcoal-gray vinyl finish. 9¼ x 21½ x 15¼ in; 23.5 lb. \$399/pr

Powered Partner 622 Powered Subwoofer/Satellite System

Subwoofer with 6-in driver; two satellites, each with 2½-in full-range drivers; 30 W x 1 subwoofer amp; 8 W x 2 satellite amp. Features magnetic shielding; active crossover. Volume, bass, and treble controls. \$349

M1 2-Way Bookshelf Speaker

Acoustic-suspension design with 6-in polypropylene woofer and ¾-in ferrofluid-cooled dome tweeter. Power handling 100 W; FR 65-20,000 Hz -3 dB; sens 88 dB SPL/W/m; imp 4 ohms; crossover point 3,600 Hz. Charcoal-gray vinyl finish. 7¼ x 10¾ x 11¼ in; 12 lb. \$269/pr

A/D/S/

M20 3-Way Speaker

Dual-tuned band-pass design with two 8-in copolymer woofers, one 6-in copolymer midrange,

and one 1-in copolymer-dome tweeter. Features 24-dB/oct crossover; butyl-rubber surrounds; OFC voice coils; auto solid-state protection. Multiway binding posts. Power handling 250 W; FR 23-22,000 Hz ±3 dB; sens 91 dB SPL/W/m; nom imp 4 ohms; crossover points 200 and 2,500 Hz. Rosewood or matte black-veneer finish with steel-mesh grille. 10¾ x 43¼ x 16½ in; 88 lb. \$3,500/pr

SAT6 2-Way Speaker

Isolated floating-baffle design with 6-in woofer and 1-in polypropylene-dome tweeter. Features 24-dB/oct Linkwitz-Riley crossover. Power handling 150 W cont; FR 50-20,000 Hz; crossover point 2,000 Hz; imp 4 ohms. Walnut-veneer and black finish. 7¾ x 13 x 9 in. \$800/pr

L400e 2-Way Bookshelf Speaker

Acoustic-suspension design with 7-in Stiffite woofer and 1-in copolymer tweeter. Features 12-dB/oct crossover; aluminum enclosure. Wall mountable. Power handling 100 W cont; FR 60-20,000 Hz ±3 dB; crossover point 2,000 Hz; sens 88 dB SPL/W/m; imp 4 ohms. Black or white textured-urethane finish with convex-steel grille. 7¾ x 11¾ x 7¾ in. \$600/pr

Model 300i/s 2-Way In-Wall Speaker

5¼-in copolymer woofer and 1-in copolymer-dome tweeter in minimum diffraction-baffle enclosure. Power handling 100 W cont; FR 50-20,000 Hz ±3 dB; sens 92 dB SPL/W/m; crossover point 2,500 Hz; imp 4 ohms. 8¾ x 10¾ x 5 in; 1.8 lb. \$400/pr

L200e 2-Way Bookshelf Speaker

Acoustic-suspension design with 4-in Stiffite woofer and 1-in copolymer tweeter. Features 12-dB/oct crossover; brushed-aluminum enclosure. Wall mountable. Power handling 50 W cont; FR 85-20,000 Hz ±3 dB; crossover point 2,000 Hz; sens 86 dB SPL/W/m; imp 4 ohms. Textured urethane finish with convex-steel grille. 4½ x 6¾ x 8¾ in. \$400/pr

Sub6 Subwoofer

6½-in dual-voice-coil driver in band-pass enclosure. Features passive high/low-pass crossover. Compatible with L200e and L300e speakers. Black or white. 19 x 8½ x 8 in. \$269

ADVENT

Advent Heritage 2-Way Speaker

Two 8-in woofers and 1-in ferrofluid-cooled parabolic-dome tweeter. Features aluminum woofer coils. Power handling 150 W rms; FR 42-23,000 Hz ±3 dB; sens 89.5 dB SPL/W/m; imp 6 ohms; crossover point 3,500 Hz; THD 0.5% above 75 Hz at 1 W; resonance 55 Hz ±5 Hz. Oiled-pecan finish. 10½ x 37¼ x 13 in; 46 lb. \$700/pr

Model 350 2-Way Speaker

6½-in woofer and 1-in ferrofluid-cooled soft-dome tweeter. Power handling 500 W; FR 41-23,000 Hz ±3 dB; sens 89 dB SPL/W/m; imp 6 ohms; crossover point 3,000 Hz; resonance 65 Hz ±5 Hz. Vinyl veneer. 13¾ x 43¾ x 9¾ in; 43 lb. \$549/pr

Advent Legacy III 2-Way Speaker

10-in woofer and 1-in ferrofluid-cooled parabolic-dome tweeter. Aluminum woofer coil. Power

handling 100 W cont avg; FR 40-23,000 Hz ±3 dB; sens 90 dB; imp 6/8 ohms switchable; crossover point 2,500 Hz; THD 1% above 100 Hz at 10 W; resonance 50 Hz ±5 Hz. Pecan accents. 14 x 32½ x 10½ in; 42 lb. \$459/pr

Advent Gallery 2-Way In-Wall Speaker

Acoustic-suspension design with 6½-in woofer and ½-in ferrofluid-cooled polycarbonate-dome tweeter. Power handling 50 W cont avg; FR 60-21,000 Hz ±3 dB; sens 89 dB SPL/W/m; imp 6 ohms; crossover point 4,500 Hz. Paintable white finish. 12¾ x 8¾ in. \$299/pr

Mini-Advent II Subwoofer/Satellite System

Subwoofer with two 5¼-in aluminum-coil drivers; 2 Mini-Advent speakers. Power handling 40 W cont avg; FR 110-21,000 Hz ±3 dB; sens 91 dB SPL/W/m; imp 6 ohms; satellite crossover point 4,500 Hz; THD 1.5% above 200 Hz at 1 W. Black-textured-vinyl. 15½ x 13 x 18¼ in; 10 lb. \$290

Advent Baby II 2-Way Bookshelf Speaker

6½-in woofer and ½-in ferrofluid-cooled polyimide-dome tweeter. Features aluminum woofer coil. Power handling 50 W rms; FR 60-21,000 Hz ±3 dB; sens 89 dB ±3 dB; nom imp 6-8 ohms; crossover point 4,500 Hz; THD 1.25% above 100 Hz at 1 W; resonance 79 Hz ±5 Hz. Black-stained oak or pecan accents. 11 x 16½ x 6¼ in; 13 lb. \$250/pr

ALTEC LANSING

AHT-2300 Subwoofer

Two 10-in drivers. Features THX certification. FR 35-150 Hz. Black. \$1,200

AHT-2100 In-Wall Surround Speaker

Two 4-in carbon-filled polypropylene woofers, four 3-in carbon-filled polypropylene midranges, and two ¾-in ferrofluid-cooled polyimide-dome tweeters. Features THX certification. On/in-wall mount. Power handling 100 W nom, 150 W max; FR 80-20,000 Hz; sens 89 dB SPL/W/m; crossover points 180 Hz and 3,000 Hz. Mounting depth 3¼ in. 15¾ x 11 x 6¼ in. \$900/pr

PSW-10 Powered Subwoofer

10-in carbon-fiber driver; 100-W Class B amp. Features selectable 50-, 80-, 100-, or 150-Hz crossover with 18- or 24-dB/oct slopes. FR 26-180 Hz ±3 dB; THD 0.1%; input imp 20 kilohms. Walnut veneer or black finish. 17¾ x 17¾ x 17¾ in. \$850

ACS300 Powered Computer Speakers

Powered subwoofer with two 4-in drivers; two self-powered satellites, each with 4-in magnetically-shielded woofer and ½-in dome tweeter. Designed for multimedia computers, CD players, or CD-I players. Plugs into PC's audio or video card. Features 24-dB/oct crossover. Bass, treble, balance, volume, subwoofer, A/B mixing, and DSP controls. 9 W x 2 satellite, 18 x 1 subwoofer amp, all with 0.8% THD; FR 35-20,000 Hz ±3 dB; sens 90 dB SPL/W/m; crossover point 120 Hz. \$400

ACS150 Powered Computer Subwoofer

8-in long-throw dual-voice-coil driver. Power handling 15 W max; FR 35-250 Hz. 10½ x 5½ x 7 in. \$150

Essentials Series

Model 515 3-Way Speaker

Acoustic-suspension design with 10-in carbon-fiber woofer, 3½-in carbon-fiber midrange, and 1-in tweeter. Power handling 100 W nom, 200 W max; FR 28-22,000 Hz ±3 dB; sens 92 dB SPL/W/

SPEAKERS



m; imp 8 ohms; crossover points 250 and 3,500 Hz. Black or dark-oak vinyl finish. 12 x 33 $\frac{3}{4}$ x 13 $\frac{3}{4}$ in. \$700/pr

Model 215 3-Way Speaker

Acoustic-suspension design with 8-in carbon-fiber woofer, 3 $\frac{1}{2}$ -in midrange, and 1-in polyimide/titanium tweeter. Power handling 75 W nom, 150 W max; FR 40-20,000 Hz \pm 3 dB; sens 91 dB SPL/W/m; imp 8 ohms; crossover points 250 and 3,500 Hz. Black or dark-oak vinyl finish. 12 x 22 x 9 $\frac{1}{2}$ in. \$500/pr

Model 100 3-Way Speaker

Acoustic-suspension design with two 8-in carbon-filled polypropylene woofers, 4-in dome midrange, and $\frac{1}{8}$ -in dome tweeter. Power handling 100 W nom, 200 W max; FR 38-20,000 Hz \pm 3 dB; sens 91 dB; imp 8 ohms; crossover points 250 and 3,500 Hz. Black or dark-oak vinyl finish. 10 $\frac{1}{4}$ x 40 $\frac{1}{2}$ x 11 in. \$500/pr

Model 95 3-Way Bookshelf Speaker

Acoustic-suspension design with 8-in carbon-filled polypropylene woofer, 4-in midrange, and $\frac{1}{8}$ -in ferrofluid-cooled polyimide-dome tweeter. Power handling 60 W nom, 120 W max; FR 40-20,000 Hz; sens 91 dB SPL/W/m; imp 8 ohms; crossover points 250 and 3,500 Hz. Black or dark-oak vinyl finish. 12 x 22 x 9 in. \$300/pr

Model 115 2-Way Bookshelf Speaker

Acoustic-suspension design with 6-in carbon-fiber woofer and 1-in polyimide/titanium tweeter. Power handling 50 W nom, 100 W max; FR 50-20,000 Hz \pm 3 dB; sens 91 dB SPL/W/m; imp 8 ohms; crossover point 2,500 Hz. Black or dark-oak vinyl finish. 9 $\frac{1}{2}$ x 17 x 8 $\frac{1}{2}$ in. \$275/pr

Model 85 2-Way Bookshelf Speaker

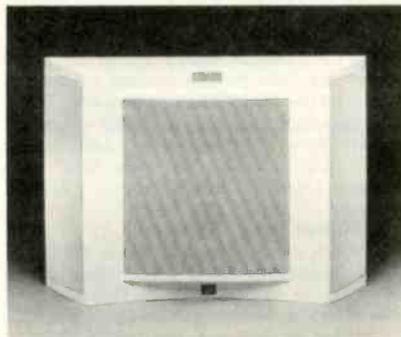
Acoustic-suspension design with 6 $\frac{1}{2}$ -in carbon-filled polypropylene woofer and $\frac{1}{8}$ -in ferrofluid-cooled polyimide-dome tweeter. Power handling 40 W nom, 100 W max; FR 50-20,000 Hz \pm 3 dB; sens 91 dB SPL/W/m; imp 8 ohms; crossover point 3,500 Hz. Black or oak vinyl finish. 9 $\frac{1}{2}$ x 17 x 8 $\frac{1}{2}$ in. \$200/pr

Model 75 2-Way Bookshelf Speaker

Acoustic-suspension design with 5 $\frac{1}{4}$ -in carbon-filled polypropylene woofer and $\frac{1}{2}$ -in polyimide-dome tweeter. Features shielded cabinet. Power handling 40 W nom, 80 W max; FR 50-20,000 Hz \pm 3 dB; sens 89 dB SPL/W/m; imp 8 ohms; crossover point 4,000 Hz. Black or oak vinyl finish. 6 x 9 $\frac{1}{2}$ x 6 $\frac{1}{4}$ in. \$160/pr

SW 8 Subwoofer

Ported design with 8-in driver. Features 12-dB/oct crossover. Power handling 100 W; FR 35-250 Hz \pm 3 dB; sens 90 dB SPL/W/m; imp 6 ohms; crossover point 180 Hz. Black or dark-oak vinyl finish. \$150



Altec Lansing AHT-2100

APOGEE

Duetta Signature 2-Way Ribbon Speaker

Trapezoidal woofer ribbon and midrange/tweeter ribbon. Features internal crossover. Power handling 200 W cont avg; FR 30-20,000 Hz; sens 100 dB SPL/W/m; imp 4 ohms. Anthracite, taupe, or custom finish. 26 x 58 x 3 in; 115 lb. \$4,995/pr

Stage 2-Way Ribbon Speaker

Trapezoidal woofer ribbon and midrange/tweeter ribbon. Features internal crossover. Power handling 150 W cont avg; FR 35-20,000 Hz; sens 107 dB SPL/W/m; imp 3 ohms. Anthracite with basswood or mahogany trim, or taupe with mahogany trim. \$2,595/pr

Ribbin-Wall 2-Way In-Wall Speaker

Hybrid design with 6 $\frac{1}{2}$ -in woofer and 26-in line-source ribbon. Power handling 50 W cont avg; FR 40-20,000 Hz; imp 6 ohms; crossover point 1,200 Hz. Paintable metal grille. On-wall version available. Wall cutout 12 $\frac{1}{2}$ x 48 in. 52 x 12 x 3 $\frac{1}{4}$ in; 40 lb. \$1,350/pr

Centaur Minor 2-Way Ribbon Speaker

Hybrid design with 6 $\frac{1}{2}$ -in woofer and tweeter ribbon. Features woofer-level control. Power handling 50 W cont avg; FR 40-20,000 Hz; imp 6 ohms; crossover point 1,200 Hz. Metallic gray finish. \$1,295/pr

ATLANTIC TECHNOLOGY

Pattern 200 Powered Subwoofer/Satellite System

Subwoofer with two 8-in drivers; 4 rotating dual-enclosure satellites and 1 dual-enclosure center-channel satellite, each with two 3-in full-range drivers; 6-channel 120-W amp; Dolby Pro Logic decoder. Features biamplification for subwoofer and satellites; magnetic shielding; theater compensation for bright soundtracks; 30-ms digital delay; dynamic EQ/limiter. 1 speaker- and 3 line-level inputs with auto source selection. Test signal for center- and surround-channel balancing; individual volume controls for subwoofer, center, and surround channels; master volume control; wireless remote control. \$999

150 Series

Model 152 PBM Powered Subwoofer

8-in polypropylene driver; 30 W x 3 or 70 x 1 amp. Features bass-boost circuitry; selectable 80/120-Hz crossover point with 24-dB/oct low-pass slope and 12-dB/oct high-pass slope; bass and treble controls. \$499

Model 151 LR 2-Way Bookshelf Speaker

4-in polypropylene woofer and $\frac{1}{2}$ -in soft-dome tweeter. Features magnetic shielding; molded cabinet. Power handling 120 W rms. \$149

Model 154 SR Surround Speaker

Two 3 $\frac{1}{2}$ -in polypropylene midbass drivers. Features diagonal mounting to reverse phase between drivers. \$149/pr

Model 153 C Center-Channel Speaker

Two 3 $\frac{1}{2}$ -in polypropylene woofers and $\frac{1}{2}$ -in polypropylene soft-dome tweeter in symmetrical horizontal alignment. Features magnetic shielding. Power handling 120 W rms. Matte black finish. \$139

Surround Speaker Systems

Model 150 HT. Model 152 PBM, two Model 151 LRs, Model 153 C, and two Model 154 SRs. \$899

Model 150 S. Model 152 PBM, Model 153 C, and two Model 154 SRs. \$699

Model 150 A. Model 152 PBM and two Model 151 LRs. \$599

Model 150 CSR. Model 153 C and two Model 154 SRs. \$249

AUDIO CONCEPTS

The following are available as kits or assembled.

Sapphire II TI 2-Way Speaker

Hybrid aperiodic 7-in Kevlar-cone woofer and aperiodic inverted-dome tweeter. Power handling 125 W cont; FR 65-20,000 Hz \pm 3 dB; sens 89 dB. Lacquered oak, black, or cherry finish with black grille. 10 x 16 x 10 in. \$759/pr

G3 3-Way Speaker

Aperiodic 10-in woofer, 5-in cone midrange, and 1-in aluminum-dome tweeter. Power handling 200 W cont; FR 36-20,000 Hz \pm 3 dB; sens 89 dB SPL/W/m. Lacquered oak, black, or cherry finish with black grille. 36 x 12 x 12 in. \$649/pr

LV Subwoofer

12-in dual-voice-coil driver in aperiodic enclosure. Power handling 150 W max; crossover point 100 Hz; FR 35-100 Hz \pm 3 dB; sens 89 dB SPL/W/m. Lacquered oak, black, or cherry finish. \$325

LV Satellite 2-Way Bookshelf Speaker

5-in woofer and 1-in aluminum-dome tweeter. Power handling 100 W cont; FR 70-22,000 Hz \pm 3 dB; sens 89 dB SPL/W/m. Lacquered oak, black, or cherry finish. 7 x 11 x 10 in. \$299/pr

AUDIOSOURCE

SW-3.1 Subwoofer/Satellite System

Bass-reflex subwoofer with 12-in downward-firing dual-voice-coil driver; two LS-One satellites (below). Features crossover network. Power handling 150 W; FR 25-160 Hz; sens 89 dB SPL/W/m; imp 8 ohms; crossover point 150 Hz. Matte-black finish. \$400

IW-Three 2-Way In-Wall Speaker

8-in woofer and 1-in soft-dome tweeter. Power handling 100 W; sens 92 dB; imp 8 ohms. White finish with paintable metal grille. Mounting depth 3 $\frac{1}{2}$ in. \$250/pr

VS-Two 2-Way Powered Speaker

Acoustic-suspension design with two 4-in woofers and 1-in ferrofluid-cooled dome tweeter. Features magnetic shielding. Line and speaker-level inputs. Volume control. 30 W x 1 into 8 ohms. FR 70-20,000 Hz; crossover point 5,000 Hz; imp 8 ohms; input imp 47 kilohms line. 5 $\frac{1}{4}$ x 13 $\frac{1}{4}$ x 5 $\frac{1}{2}$ in; 7 lb. \$160

IW-Four In-Wall Subwoofer

8-in dual-voice-coil woofer. Power handling 100 W; sens 92 dB; imp 8 ohms; crossover point 120 Hz. Mounting depth 3 $\frac{1}{2}$ in. \$150

VS-Three 2-Way Speaker

5 $\frac{1}{4}$ -in woofer and 1-in ferrofluid-cooled tweeter. Magnetic shielding. Black. \$140

VS-1 2-Way Center-Channel Speaker

Ported enclosure with two 4-in woofers and 1-in ferrofluid-cooled dome tweeter. Features magnetic shielding. Power handling 50 W; FR 70-20,000 Hz; sens 93 dB SPL/W/m; imp 8 ohms.

SPEAKERS



Wood composite with matte-black finish. 5½ x 13¼ x 5½ in; 8.8 lb \$119

LS-Ten/A 2-Way Surround Speaker
4-in woofer and 1-in tweeter. Designed for home-theater system. Features optimal balance crossover; magnetic shielding. Mounting hook on back \$100/pr

AVID

Model 232CP 3-Way Speaker
Bass-reflex design with 10-in polypropylene woofer, 4½-in midrange, and 1-in soft-dome tweeter. Features ferrofluid tweeter and midrange cooling. Power handling 150 W cont; FR 40-20,000 Hz -3 dB; sens 90 dB SPL/W/m; imp 8 ohms; crossover points 650 and 5,000 Hz. 15 x 28 x 10½ in \$600/pr

AXIOM

AX 5 3-Way Speaker
10- and 5-in woofers, 1-in dome tweeter. FR 29-22,000 Hz ±2 dB; sens 87 dB; imp 4 ohms; crossover points 180 and 3,000 Hz. Dark, natural, or black oak finish with black knit grille. 12 x 38 x 15 in; 50 lb \$1,699/pr

AX Subwoofer

10-in driver. Features crossover. FR 29-120 (or 250) Hz ±3 dB; sens 87 dB; imp 4 ohms; crossover point 120 or 250 Hz. Dark, natural, or black oak finish with black knit grille. 15 x 24 x 12 in; 40 lb \$1,099/pr

AX 2 2-Way Speaker

Tuned-port design with 8-in woofer and 1-in dome tweeter. FR 40-22,000 Hz ±2 dB; sens 89 dB; imp 6 ohms; crossover point 3,200 Hz. Dark, natural, or black oak finish with black knit grille. 12 x 24 x 10 in; 25 lb \$569/pr

AX 1.5 2-Way Speaker

Tuned-port design with 6½-in woofer and ¼-in dome tweeter. FR 45-22,000 Hz ±2 dB; sens 89 dB; imp 6 ohms; crossover point 3,500 Hz. Dark, natural, or black oak finish with black knit grille. 10 x 20 x 8 in; 18 lb \$299/pr

B & W

Matrix 801 Series 3-Way Speaker
4th-order Butterworth, vented design with 12-in polymer woofer, 5½-in Kevlar midrange, and 1-in metal-dome tweeter. Electronic bass-alignment filter. Power handling 600 W; FR 20-20,000 Hz ±2 dB; sens 87 dB SPL/W/m; imp 8 ohms; crossover points 380 and 3,000 Hz. Walnut or black ash. 17 x 39¼ x 22 in; 119 lb \$5,500/pr

Matrix 804 3-Way Speaker

Bass-reflex design with 6½-in Cobex-cone woofer, 6½-in Kevlar bass/midrange, and 1-in ferrofluid-cooled metal-dome tweeter. Bass-alignment filter. Power handling 200 W; FR 31-20,000 Hz ±2 dB; sens 89 dB SPL/W/m; imp 8 ohms. Black-ash or walnut veneer. 10¼ x 36¾ x 10¼ in; 43 lb \$2,200/pr

DM 640 3-Way Speaker

Bass-reflex design with two 7¼-in woofers, 6¼-in midrange, and 1-in metal-dome tweeter. Features midrange subenclosure. Biwire/biamp terminals. Power handling 150 W; FR 46-20,000 ±2 dB; sens 91 dB; imp 8 ohms; crossover points 300 and 3,000 Hz. Simulated walnut or black veneer. 9¼ x 37¾ x 15¾ in; 53 lb \$1,500/pr

DM 610 2-Way Speaker

2nd-order design with 8-in woofer and 1-in tweeter.

er. Biwire/biamp terminals. Power handling 150 W; crossover point 2,500 Hz; FR 70-20,000 Hz ±2 dB. Black veneer. 9¼ x 19¼ x 11¾ in; 17.1 lb \$500/pr

CWM 6 2-Way In-Wall Speaker

Acoustic-suspension design with 7-in polypropylene woofer and 1-in metal-dome tweeter. Power handling 70 W; FR 45-20,000 Hz ±3 dB; sens 89 dB SPL/W/m; imp 6 ohms. 9 x 12½ x 3 in \$400/pr

DM 600 2-Way speaker

2nd-order design with 6½-in woofer and 1-in metal-dome tweeter. Biwire/biamp terminals. Power handling 150 W; crossover point 2,500 Hz; FR 80-20,000 Hz ±2 dB; Zelda finish. 8 x 13¼ x 11¾ in; 9.7 lb \$350/pr

BANG & OLUFSEN

Beolab 8000 3-Way Powered Speaker
Bass-reflex system with two 4-in woofers, one ¼-in ferrofluid-cooled tweeter, and one integral 80 W x 2 amplifier. Features conically tipped tubular-aluminum cabinet; active crossover with 24-dB/oct Linkwitz-Riley filter at 4,200 Hz for upper woofer, 6-dB/oct at 300 Hz for lower woofer; magnetic shielding; cast-iron base. 8-pin Power Link socket; line-level input. Includes rubber supports and spikes for base. FR 50-20,000 Hz ±2 dB; S/N 98 dBA. Polished and anodized mirror-finished surface with matte-black Lycra grille. 6 x 52 x 6 in; 44 lb \$3,000/pr

Beolab 6000 2-Way Powered Speaker

Bass-reflex biamped design with two 3½-in woofers, ¼-in ferrofluid-cooled tweeter, and 35 W x 2 amp. Features active Linkwitz-Riley 24-dB/oct crossover; proprietary Adaptive Bass Linearization circuitry to optimize relation between SPL and bass reproduction; aluminum cabinet and base; magnetic shielding. Signal-sensing line-level input; two 8-pin Power Link sockets. FR 70-20,000 Hz +4, -8 dB; S/N 95 dBA; crossover point 3,000 Hz. Polished anodized mirror-finished surface with matte-black Lycra grille. 4 x 43¼ x 3¼ in with 8½ x ½ x 9¼ in base; 14 lb \$2,000/pr

RL 6000 2-Way Speaker

Bass-reflex design with two 5-in woofers and 1-in dome tweeter. Power handling 60 W rms; FR 45-20,000 Hz +4, -8 dB; sens 93 dB SPL/W/m; imp 8 ohms; crossover point 3,500 Hz. 21¼ x 16 x 7 in; 19.6 lb \$600/pr

IWS 2000 In-Wall Speaker

Sealed-box design with 5¼-in woofer and 1-in polycarbonate-dome tweeter. Features mounting space for B&O's Master Control Link transmitter and relay box; magnetic grille attachment; Beolink 7000 or 5000 remote compatibility. Power handling 100 W rms; FR 50-20,000 Hz +3, -8 dB; sens 89 dB SPL/W/m; crossover point 2,500 Hz. 14½ x 8 x 3¼ in; 5.2 lb \$500/pr

Beovox Cona Subwoofer

Bass-reflex design with 8-in dual-voice-coil driver. Power handling 60 W rms; sens 89 dB SPL/W/m; Frequency response 40-195 Hz +4, -8 dB; crossover point 195 Hz; imp 6 ohms. White, black, or gray finish. 10½-in height x 17-in diameter; 16.5 lb \$425

RL 1000 2-Way Bookshelf Speaker

Bass-reflex design with 5-in woofer and 1¼-in tweeter. Power handling 35 W rms; FR 48-20,000 Hz +4, -8 dB; imp 8 ohms; sens 92 dB SPL/W/m; crossover point 3,500 Hz. 15¼ x 12½ x 5 in; 7.8 lb \$400/pr

BOSE

Model 901 Series VI Speaker

Direct/reflecting design with 8 front-facing and 1 rear-facing 4½-inch helical-voice-coil full-range drivers. Features pentagonal cabinet; active EQ module with midbass, midtreble, and tape-monitor controls. Imp 8 ohms. Genuine hardwood veneer with walnut finish. 5-yr warranty. EQ: 13 x 2¼ x 4¾ in; 3.4 lb. Speaker: 12¾ x 21 x 13 in; 35 lb \$1,499/pr

Acoustimass 7 Subwoofer/Satellite System

Acoustimass subwoofer with two 5¼-in drivers; 3 satellites, each with two 2½-in full-range drivers in independently rotatable cubes. Designed for surround systems with center and subwoofer channels. Features magnetic satellite shielding; overdrive protection circuitry. Stands and mounting brackets optional. Power handling 100 W max; imp 8 ohms. Black. Subwoofer: 19 x 14 x 7½ in. Satellites: 3¾ x 6¾ x 4¾ in \$999

Acoustimass 5 Sub/Satellite System

Acoustimass subwoofer with two 5¼-in drivers; 2 satellites, each with two 2½-in full-range drivers in independently rotatable cubes. Features magnetic satellite shielding; overdrive protection circuitry. Stands and mounting brackets optional. Power handling 100 W cont avg. Black or white. 5-yr warranty. Subwoofer: 14 x 7½ x 19 in. Satellites: 3¾ x 6¾ x 4¾ in \$799

Model 301 2-Way Bookshelf Speaker

Slotted-port, direct/reflecting design with 8-in woofer and two 3-in tweeters in patented Free Space array configuration. Features dual-frequency crossover. Power handling 75 W rms; imp 8 ohms. Black, white, or walnut-grain finish. 5-yr warranty. 10½ x 17 x 9½ in \$369/pr

Model 4.2 2-Way Bookshelf Speaker

Slotted-port, direct/reflecting design with 8-in woofer and two angled 3-in tweeters. Features dual-frequency crossover network. Power handling 75 W max; imp 8 ohms. Black or wood-grain veneer finish. 5-yr warranty. 17 x 10½ x 9¼ in; 18 lb \$369/pr

RoomMate II Powered Portable Speaker

Aerodynamically tuned port design with 4½-in helical-voice-coil full-range driver; integral amp. Designed for personal stereos or portable CD players. AC/DC compatibility; active EQ network; distortion-limiting circuitry. Black. 1-yr warranty. 9½ x 6½ x 6½ in; 4 lb \$339/pr

Model 201 2-Way Bookshelf Speaker

Slotted-port, direct/reflecting design with 6-in woofer and 2¼-in ferrofluid-cooled tweeter in patented Free Space array configuration. Features dispersion lens; dual-frequency crossover network. Power handling 60 W max; imp 8 ohms. Black, white, or wood-grain veneer finish. 5-yr warranty. 7¼ x 14½ x 9 in; 9 lb \$229/pr

VS-100 Full-Range Speaker

Dual tuned port design with 4½-in full-range driver. Designed for use as rear- or center-channel speaker in surround systems. Features magnetic shielding. Mounting accessories optional. Power handling 60 W max; imp 8 ohms. Black. 9 x 6 x 6 in; 6 lb \$129

SPEAKERS



BOSTON ACOUSTICS

T1030 3-Way Speaker

Acoustic-suspension design with two 8-in copolymer woofers, 6½-in copolymer midrange in subenclosure, and 1-in CFT5 ferrofluid-cooled tweeter. Power handling 150 W rms; FR 40-20,000 Hz \pm 3 dB; sens 90 dB SPL/W/m; impedance 8 ohms; crossover points 250 Hz and 2,500 Hz. Walnut veneer. Tapered grille. 10¼ x 42½ x 12¼ in. \$1,200/pr

T930 Series II 3-Way Speaker

Acoustic-suspension design with 10-in copolymer woofer, 6½-in copolymer cone midrange in subenclosure, and 1-in CFT5 dome tweeter. Power handling 150 W; FR 42-20,000 Hz \pm 3 dB; sens 90 dB SPL/W/m; imp 8 ohms; crossover points 350 and 2,500 Hz. Wood-grain vinyl and black-ash finish. 10½ x 36¼ x 12 in. \$750/pr

SubSat 6 Series II Subwoofer/Satellite System

Subwoofer with 2 drivers in sealed and vented chambers; 2 satellites, each with 4-in midrange and ¼-in ferrofluid-cooled tweeter. Power handling 100 W; sens 89 dB SPL/W/m; imp 8 ohms. Black or white. Subwoofer 16 x 7½ x 15 in. Satellite 8½ x 5 x 5¼ in. \$500

Model 360 Series II In-Wall Speaker

6½-in copolymer-cone woofer and 1-in ferrofluid-cooled soft-dome tweeter. Suitable for marine applications. Power handling 60 W rms; FR 58-20,000 Hz \pm 2 dB; sens 90 dB; imp 8 ohms. Mounting depth 2½ in. 10½ x 7¼ in. \$400/pr

Voyager Indoor/Outdoor 2-Way Speaker

5¼-in copolymer woofer and 1-in ferrofluid-cooled soft-dome tweeter housed in Lexan cabinet. Features heavy-gauge stainless-steel grilles and brackets. Power handling 50 W; FR 65-20,000 Hz \pm 3 dB; sens 89 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Paintable white finish. 10½ x 6½ x 6¼ in; 6 lb. \$400/pr

HD9 2-Way Speaker

6½-in copolymer woofer and 1-in ferrofluid-cooled soft-dome tweeter. Features 8-in passive radiator. Power handling 100 W; FR 48-20,000 Hz \pm 3 dB; sens 90 dB W/m; imp 8 ohms; crossover point 2,800 Hz. Available in wood-grain and black-ash vinyl with black grilles. 11¼ x 21 x 8¼ in; 18 lb. \$340/pr

Model 424v Center-Channel Speaker

4-in copolymer woofer and ¼-in soft-dome tweeter. Features 4-in passive radiator; magnetic shielding. Power handling 100 W; FR 88-20,000 Hz \pm 3 dB; sens 90 dB SPL/W/m; imp 8 ohms. 5¾ x 16¾ x 6 in; 8 lb. \$179

HD5 2-Way Speaker

5¼-in copolymer woofer and ¼-in ferrofluid-cooled dome tweeter. Power handling 50 W; FR 65-20,000 Hz; imp 8 ohms; sens 89 dB SPL/W/m. Black ash and wood-grain vinyl with black grille. 6¼ x 9¾ x 7¼ in. \$150/pr

BOZAK

Symphony II 3-Way Speaker

Patented acoustic-isolation design with two 8-in polypropylene woofers, two 5-in polypropylene midranges, one 1-in titanium-dome tweeter, and one 10-in passive radiator. Two sets of biamp/biwire inputs. FR 31-20,000 Hz +1, -2 dB; sens 92 dB SPL/W/m; crossover points 225 and 2,000 Hz; imp 6 ohms. \$3,600/pr

Sonata 3-Way Speaker

Polygon-shaped/dual-ported enclosure with 8-in

polypropylene woofer, 5-in polypropylene midrange, and 1-in aluminum-dome tweeter. FR 40-20,000 Hz +1, -2 dB; sens 90 dB SPL/W/m; crossover points 300 and 3,000 Hz; imp 8 ohms. 19 x 26 x 11 in; 55 lb. \$1,400/pr

CAMBER

Camber 4.5ii 2-Way Speaker

Bass-reflex design with two 6½-in woofers and ¼-in titanium-dome tweeter. Biwire/biamp terminals. Power handling 200 W cont; FR 40-23,000 Hz \pm 2 dB; sens 90 dB SPL/W/m; imp 8 ohms. 8 x 36 x 11¼ in; 55 lb. \$999/pr

Camber LS9 2-Way Speaker

Acoustic-suspension design with two 6½-in woofers and ¼-in ferrofluid-damped titanium-dome tweeter. Power handling 200 W cont avg; FR 40-22,000 Hz \pm 2 dB; sens 91 dB SPL/W/m; imp 8 ohms. 11½ x 36½ x 7¼ in; 50 lb. \$699/pr

Camber LS7. As above, bass-reflex design with 8¼-in woofer. Sens 90 dB SPL/W/m. 10 x 24 x 11 in; 35.3 lb. \$499/pr

Camber LS Subwoofer

Bass-reflex design with 8-in driver. Optimized for LS1. Power handling 100 W cont avg; FR 20-120 Hz \pm 2 dB; sens 89 dB; imp 8 ohms. 9½ x 24 x 11½ in; 35 lb. \$499/pr

Camber LS5 2-Way Speaker

Bass-reflex design with 8-in woofer and ¼-in ferrofluid-damped titanium-dome tweeter. Power handling 150 W cont avg; FR 50-22,000 Hz \pm 2 dB; sens 91 dB SPL/W/m; imp 8 ohms. 9 x 19 x 10 in; 22 lb. \$399/pr

CAMBRIDGE PHYSICS

The following feature a 5-year parts-and-labor warranty and an oak finish.

G-66 II 3-Way Speaker

Two 8-in polycone woofers, 3-in dome midrange, and 1-in ferrofluid-cooled dome tweeter. Features 24-dB/oct crossovers. FR 26-22,500 Hz; sens 92.5 dB; crossover points 450 and 4,000 Hz. 18 x 44 x 12 in; 90 lb. \$1,000

G-11 II 2-Way Speaker

8-in polycone woofer and 1-in ferrofluid-cooled dome tweeter. Features 12-dB/oct crossovers. Power handling 100 W cont; FR 44-22,500 Hz; sens 90 dB; imp 6 ohms; crossover point 1,500 Hz. 12 x 19½ x 8½ in; 20 lb. \$400/pr

K-5 II 2-Way Speaker

5¼-in woofer and ¼-in dome tweeter. Features 12-dB/oct crossover. Power handling 75 W; sens 88 dB/m; crossover point 4,200 Hz. 8 x 11 x 6 in. \$249/pr

CAMBRIDGE SOUNDWORKS

The following products are designed by Henry Kloss and are available only through mail order.

Ensemble Subwoofer/Satellite System

2 subwoofers, each with 8-in driver; 2 satellites, each with 3½-in ferrofluid-cooled cone midrange and 1¼-in direct radiator with integral ¾-in ferrofluid-cooled dome tweeter. Features high-density-particleboard subwoofer cabinets with inter-

nal bracing. Power handling 200 W; crossover points 170 and 2,300 Hz; imp 6 ohms. Black laminate cabinets with metal grilles. Subwoofer: 12 x 21 x 4½ in. Satellite: 8¼ x 5¼ x 4 in. \$599

With vinyl-clad cabinets. \$499

Ensemble II. As above, 1 subwoofer. \$399

The Powered Subwoofer

Acoustic-suspension design with 12-in driver and 140-W amp. Features active 18-dB/oct crossover with 4-position crossover-point selector. Bass-level control. Power handling 140 W max. 15½ x 26½ x 9½ in. \$599

Slave Subwoofer. As above, no amp controls. Power handling 200 W max when used with above. \$299

The Surround II 2-Way Speaker

4-in woofer with two 3-in midrange/tweeters mounted in dipole fashion. Power handling 100 W cont avg; FR 125-10,000 Hz; sens 86 dB SPL/W/m; imp 8 ohms. Gray finish. \$399/pr

Center Channel 2-Way Speaker

Acoustic-suspension design with 5¼-in woofer and integral dome tweeter. Power handling 60 W cont avg; FR 125-20,000 Hz; sens 86 dB SPL/W/m; imp 8 ohms. 6½ x 10½ x 3¼ in. \$125



Cambridge Soundworks Surround II

CANTON

Ergo 120 4-Way Speaker

Bass-reflex design with two 10-in graphite-reinforced polypropylene woofers, 6½-in midbass, 2-in midrange, and 1-in aluminum/manganese-dome tweeter. Power handling 200 W nom; FR 18-30,000 Hz; sens 89 dB SPL/W/m; imp 4 ohms; crossover points 300, 3,500, and 7,000 Hz. Oak, walnut, mahogany, black, or white. 12½ x 51¼ x 16½ in; 110 lb. \$5,000/pr

Karat 980 3-Way Bookshelf Speaker

Bass-reflex design with 12-in woofer, 5-in midrange, and 1-in aluminum/manganese-dome tweeter. Power handling 140 W nom; FR 20-30,000 Hz; sens 89 dB SPL/W/m; imp 4 ohms; crossover points 400 and 4,000 Hz. Oak, walnut, mahogany, black, or white finish. 14¼ x 26 x 12½ in; 46 lb. \$2,000/pr

Karat 930 2-Way Bookshelf Speaker

Bass-reflex design with 9-in woofer and 1-in aluminum/manganese-dome tweeter. Power handling 80 W nom; FR 30-30,000 Hz; sens 87 dB SPL/

SPEAKERS



W/m; imp 4 ohms; crossover point 2,800 Hz. Oak, walnut, mahogany, black, or white finish. 10 1/4 x 17 x 10 1/4 in; 22 lb \$1,000/pr
Karat 920. As above, 8-in woofer. Power handling 60 W cont avg; FR 36-30,000 Hz. 8 3/4 x 13 1/2 x 10 1/4 in; 12 lb \$750/pr

Plus E Subwoofer

Bass-reflex design with 12-in driver. Features 12-dB/oct crossover. Power handling 100 W nom; FR 18-120 Hz; sens 90 dB SPL/W/m; imp 4 ohms; crossover point 120 Hz. Oak, walnut, mahogany, black, or white. 14 1/4 x 22 x 14 1/4 in; 43 lb. \$1,000

Fonum 601 3-Way Speaker

Bass-reflex design with 8-in woofer, 8-in fabric-dome midrange, and 1-in fabric-dome tweeter. Power handling 100 W nom; FR 25-26,000 Hz; imp 4 ohms; crossover points 300 and 3,000 Hz. Black vinyl. 9 1/2 x 35 1/2 x 10 1/2 in \$995/pr

Combi-Sub Subwoofer/Satellite System

Subwoofer with two 8-in drivers; two satellites, each with one 4 1/2-in midrange and one 1-in aluminum/manganese tweeter. Features 12-dB/oct crossover. Power handling 80 W nom; FR 20-30,000 Hz; sens 89 dB SPL/W/m; imp 4 ohms; crossover points 120 and 2,200 Hz. Black or white. Subwoofer: 19 1/4 x 9 x 15 1/4 in; 34 lb. Satellites: 4 1/4 x 8 x 4 1/4 in; 5 lb \$995

In-Wall 6 2-Way Speaker

Coaxial design with 6-in woofer and 3/8-in aluminum/manganese-dome tweeter. Power handling 40 W nom; FR 45-22,000 Hz; sens 87 dB; imp 8 ohms; crossover point 4,000 Hz. White grille. Mounting depth 3 1/2 in. 8 x 8 in; 3.4 lb. \$450/pr

Plus S 2-Way Mini Speaker

4 1/2-in woofer and 1-in coated-fabric dome tweeter. Power handling 40 W nom; FR 45-30,000 Hz; sens 87 dB SPL/W/m; imp 4 ohms; crossover point 2,200 Hz. Black or white. 4 1/4 x 8 x 4 1/4 in; 5 lb \$350/pr

CARVER

The Amazing Loudspeaker, Platinum

1 1/2-in-thick planar design with 60-in full-range ribbon panel and four 12-in woofers. Power handling 750 W; FR 23-40,000 Hz \pm 3 dB; sens 89 dB; max SPL 121 dBA. Black piano finish. 33 x 66 x 10 in; 110 lb \$2,900/pr
 Oiled oak-veneer finish \$2,500/pr

AL-III 2-Way Speaker

48-in full-range ribbon panel and 10-in woofer. Features separate bass, midrange, and treble controls. Power handling 400 W; FR 34-20,000 Hz \pm 3 dB; crossover point 200 Hz. Hand-matched solid-oak panels. 14 1/2 x 72 1/2 x 16 1/2 in. \$1,500/pr

CELESTION

Celestion 11 3-Way Speaker

Bass-reflex design with 8-in felted-fiber woofer, 4-in midrange, and 1-in titanium-dome tweeter. Black-ash or oak finish \$699/pr

Celestion 9 3-Way Bookshelf Speaker

Bass-reflex design with 6-in felted-fiber woofer, 4-in midrange, and 1-in titanium-dome tweeter. Black-ash or oak finish \$599/pr

Celestion 7 2-Way Bookshelf Speaker

Sealed enclosure with 8-in Polyolefin woofer and 1-in titanium-dome tweeter. Black-ash or oak finish \$549/pr

Celestion 5 2-Way Bookshelf Speaker

Sealed enclosure with 6-in felted-fiber woofer

and 1-in titanium tweeter. Black-ash or oak finish \$399/pr
Celestion 3. As above, 5-in woofer \$289/pr

Celestion CS-135 Subwoofer

Dual-cavity vented design with 8-in woofer. Designed for use with Models 1, 3, and 5. Black-ash finish \$259

Celestion 1 2-Way Bookshelf Speaker

Bass-reflex design with 4-in woofer and 1-in titanium tweeter. Black-ash finish \$199/pr

CERWIN-VEGA

W-8 2-Way In-Wall Speaker

8-in long-throw woofer and 1-in ferrofluid-cooled dome tweeter. Features computer-optimized crossover; self-resetting protection; 3/8-in-thick baffle. Power handling 125 W; FR 40-20,000 Hz \pm 3 dB; sens 92 dB SPL/W/m; crossover point 3,500 Hz. Matte-white finish with metal grille. Mounting depth 3 1/2 in. 16 x 12 in. \$505/pr

VS-120 3-Way Speaker

Bass-reflex design with 12-in woofer, 4-in midrange, and 1-in dome tweeter. Features fuse protection. Power handling 200 W; FR 28-22,000 Hz \pm 3 dB; sens 97 dB SPL/W/m; imp 4 ohms; crossover points 500 and 4,000 Hz. 16 1/2 x 32 x 14 1/4 in; 57 lb \$345

L-9 2-Way Speaker

10-in long-throw woofer and 1-in dome tweeter. Features foam woofer surround; self-resetting tweeter protection. Power handling 100 W rms; FR 40-20,000 Hz \pm 3 dB; sens 93 dB SPL/W/m; imp 8 ohms. Rosewood-vinyl finish with removable grille. 13 x 22 x 11 1/2 in \$220

L-7 2-Way Speaker

7-in paper-cone woofer butyl-rubber surround and 1-in polymer-dome tweeter. Power handling 75 W rms; FR 40-20,000 Hz \pm 3 dB; sens 92 dB SPL/W/m; imp 8 ohms. Rosewood-vinyl finish with grille. 9 x 14 x 8 3/4 in \$170

Home Theater Series

Sensurround Home Theater System

7-piece magnetically-shielded system with two subwoofers with 10-in drivers, 4 satellites, and center-channel speaker \$1,660

HT-210C Subwoofer/Center-Channel System

Two 10-in subwoofers, 6 1/2-in midrange, and 1-in polycarbonate-dome tweeter in scuff-resistant cabinet designed to support a large-screen TV. Features magnetic shielding; defeatable passive crossover. Subwoofer: power handling 150 W; FR 38-100 Hz \pm 3 dB; sens 94 dB; imp 8 ohms. Center channel: power handling 80 W; FR 80-20,000 Hz \pm 3 dB. 33 x 19 x 20 in \$650

HT-S6 2-Way Speaker

6 1/2-in midrange and 1-in polycarbonate-dome tweeter. Power handling 80 W; FR 80-20,000 Hz \pm 3 dB; sens 92 dB SPL/W/m; imp 8 ohms. 8 1/2 x 11 1/4 x 11 in \$380/pr

HT-CTR 3-Way Center-Channel Speaker

Two 6 1/2-in midranges and 1-in polycarbonate-dome tweeter. Features midrange configuration for 120° dispersion. Power handling 100 W; FR

80-20,000 Hz \pm 3 dB; sens 94 dB SPL/W/m; imp 8 ohms. 16 1/2 x 8 1/4 x 11 1/4 in \$320

HT-110 Subwoofer

10-in driver. Features die-cast aluminum woofer frame; defeatable passive crossover. Power handling 250 W; FR 38-125 Hz; sens 94 dB SPL/W/m; imp 8 ohms. 13 x 17 1/2 x 24 1/2 in \$290

CLEMENTS

Model 1000Si 2-Way Speaker

Transmission-line design with 8-in woofer and 1-in linen-dome tweeter. Features biamp/biwire crossover. Power handling 150 W; FR 30-20,000 Hz \pm 3 dB; sens 91 dB SPL/W/m; imp 6 ohms; crossover point 2,500 Hz. Black gloss finish. 34 x 11 x 14 1/4 in \$1,300/pr

Model 600Si 2-Way Speaker

Transmission-line design with 6 1/2-in woofer and 1-in linen-dome tweeter. Features biamp/biwire crossovers. Power handling 150 W; FR 36-20,000 Hz \pm 3 dB; sens 92 dB SPL/W/m; imp 6 ohms; crossover point 2,500 Hz. Black. 9 1/2 x 32 x 14 1/4 in \$850/pr

CLIF DESIGNS

The following are available in black or white.

KP-800 Subwoofer/Satellite System

Subwoofer with two 10-in dual-voice-coil drivers; 2 satellites, each with 4-in midrange and 1 1/2-in ferrofluid-cooled polycarbon tweeter. FR 30-20,000 Hz; sens 88 dB; imp 4 ohms; crossover points 120 and 6,000 Hz. Subwoofer: 16 1/2 x 16 1/2 x 16 1/2 in. Satellites: 14 x 14 x 14 in \$799

KP-700 Subwoofer/Satellite System

Subwoofer with 10-in dual-voice-coil driver; 2 satellites, each with 4-in midrange and 1 1/2-in ferrofluid-cooled polycarbon tweeter. FR 38-20,000 Hz; imp 4 ohms; sens 88 dB; crossover points 120 and 6,000 Hz. Subwoofer: 14 1/4 x 14 1/4 in at base, 12 x 12 x 12 in at top \$499
 Subwoofer only \$325

COUNTERPOINT

Clearfield Continental 2-Way Speaker

Controlled-directivity transmission-line with two 6-in polypropylene woofers and aluminum tweeter. Monocoque construction. Power handling 300 W rms; FR 31-25,000 Hz \pm 3 dB; sens 88 dB; imp 4 ohms. Walnut, light-oak, black-oak, or cherry finish. 18 x 50 x 10 in \$3,500/pr

DAHLQUIST

DQ-28 3-Way Speaker

Vertical, decoupled phase-array design with 8-in polypropylene woofer, 4-in polypropylene midrange, and 3/8-in alloy dome-tweeter with butyl surround. Features vented 2nd-order/quasi-Bessel alignment. Power handling 200 W; FR 37-27,000 Hz; sens 91 dB; imp 4 ohms; crossover points 470 and 4,000 Hz. Rosewood or black trim. 14 1/2 x 41 1/2 x 12 in; 69 lb \$1,400/pr

DQ-16 2-Way Speaker

Vertical, decoupled phase-array design with 6-in polycarbon woofer and 3/8-in alloy-dome tweeter. Features 2nd-order/quasi Bessel alignment. Power handling 150 W; FR 39-27,000 Hz; sens 90 dB; imp 6 ohms. 37 x 14 x 12 in; 43 lb. \$700/pr

DQ-6ci 2-Way Bookshelf Speaker

Boundary-dependent vertical, decoupled phase-array design with 6-in Kevlar/cellulose woofer

SPEAKERS



and 3/8-in alloy dome tweeter. Features 2nd-order/quasi Bessel alignment. Power handling 150 W; FR 46-27,000 Hz; sens 89 dB; imp 4 ohms. 22 x 14 x 12 in; 43 lb \$600/pr

DCM

TimeWindow Seven 3-Way Speaker

7-sided staggered transmission-line design with two 9-in polypropylene woofers, two 6 1/2-in midranges, and two coaxially mounted 3/4-in tweeters, and one 3/4-in rear-firing tweeter. Features 4-chambered enclosure; time-equalized response. Power handling 350 W cont avg; FR 28-25,000 Hz \pm 3 dB; sens 92 dB SPL/W/m; imp 4 ohms. High-gloss black standard finish; removable top, bottom, and side panels may be customized. 18 1/2 x 48 x 14 in; 75 lb \$3,000/pr

TimeFrame TF600 3-Way Speaker

Mirror-image design with 6 1/2-in woofer, 6 1/2-in coaxially mounted polypropylene midrange, 3/4-in dome tweeter with acoustic lens for point-source imaging, and 2 rear-firing 3/4-in dome tweeters. Features staggered transmission-line enclosure terminating in 1 rear vent. Power handling 250 W cont avg; FR 30-20,000 Hz; sens 92 dB SPL/W/m; imp 6 ohms. Dark oak finish. 17 x 41 x 8 3/4 in; 47 lb \$699/pr

TimeFrame TF400 3-Way Speaker

Transmission-line design with two 6 1/2-in cone woofers and one coaxially mounted 3/4-in dome tweeter. Features magnetic shielding; antifraction lens. Power handling 150 W cont avg; FR 42-20,000 Hz; sens 92 dB SPL/W/m; imp 6 ohms. Dark oak finish with fabric grille. 15 x 38 x 8 in; 31 lb \$569/pr

CX-07 2-Way Bookshelf Speaker

Bass-reflex design with 6 1/2-in woofer and 3/4-in dome tweeter. Features rear-firing port; magnetic shielding. Power handling 80 W cont avg; FR 55-20,000 Hz; sens 91 dB SPL/W/m; imp 8 ohms. 8 x 15 x 9 in; 12 lb \$249/pr

DEFINITIVE TECHNOLOGY

BP10 2-Way Speaker

Bipolar radiating design with two 6 1/2-in mineral-filled woofers and two 1-in ferrofluid-cooled dome tweeters. Linkwitz-Riley crossover; aluminum voice coil. FR 20-28,000 Hz; imp 8 ohms. Black grille cloth with wood or black-lacquer finish. 5-yr warranty. 9 x 42 x 11 1/2 in \$550

DR7 2-Way Speaker

6 1/2-in mineral-filled-polymer woofer and 1-in ferrofluid-cooled dome tweeter. Features phase-coherent Linkwitz-Riley crossover; narrow-profile minimum-diffraction cabinet and computer-synthesized transmission-line tuning. Power handling 200 W; FR 22-28,000 Hz; sens 90 dB SPL/W/m; imp 8 ohms. Black cloth grille; black-lacquer or oak end caps. 8 1/2 x 38 x 11 in .. \$375

C-1 2-Way Center-Channel Speaker

Two 5 1/4-in cast-basket woofers and 1-in soft-dome tweeter. Features magnetic shielding; Linkwitz-Riley crossover. Power handling 200 W; FR 25-28,000 Hz; sens 90 dB SPL/W/m; imp 8 ohms; Black. 6 3/4 x 19 x 8 1/2 in \$299

BP2 Surround Speaker

Bipolar design with two 5 1/4-in cast-basket polypropylene-cone woofers and two 3/4-in soft-dome tweeters. Designed for surround or satellite use. May be changed to bipolar radiation. Features Linkwitz-Riley crossover; low-diffraction grille/

baffle interface. Includes plate for wall mounting. Power handling 200 W; FR 50-28,000 Hz; sens 90 dB SPL/W/m; imp 8 ohms. Black or white. 7 x 11 x 7 in \$250

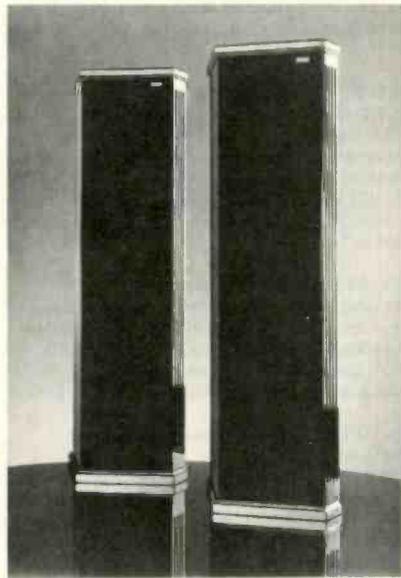
DENNESEN

Denneesen Class A 3-Way Speaker

Hybrid design with slot-loaded 10-in woofer, 6 1/2-in midrange, and four 3-in electrostatic tweeter elements. Features phase-corrected time-aligned design. Power handling 200 W cont avg; FR 25-35,000 Hz \pm 2.5 dB; sens 90 dB SPL/W/m; imp 8 ohms. Oiled walnut finish. 14 x 54 x 12 in; 80 lb \$3,500/pr

Denneesen 2-Way Bookshelf Speaker

Acoustic-suspension/electrostatic hybrid design with 5-in woofer/midrange and four 3-in electrostatic tweeter elements. Features phase-corrected time-aligned design. Power handling 100 W cont avg; FR 55-20,000 Hz; sens 92 dB SPL/W/m; imp 8 ohms. Oiled walnut finish. 10 x 16 x 9 in; 20 lb \$950/pr



DCM Time Window Seven

DESIGN ACOUSTICS

DA-900 3-Way Speaker

Vented design with 8-in downward-firing woofer, 5-in midrange, and 3/4-in sonofoam-treated ferrofluid-cooled metallized polycarbonate-dome tweeter. Features magnetic shielding. Power handling 200 W; FR 40-25,000 Hz; sens 88 dB SPL/W/m; crossover points 130 and 3,500 Hz. Oak or black-ash vinyl finish \$800/pr

PS-10A 3-Way Speaker

Acoustic-suspension design with 10-in downward-firing woofer, 3/4-in midrange, and 1-in ferrofluid-cooled soft-dome tweeter. Power handling 300 W; crossover points 200 and 2,800 Hz; sens 91 dB SPL/W/m; FR 45-22,000 Hz; imp 8 ohms. Oak or black-ash vinyl finish. 11 x 16 3/4 x 13 in; 23 lb \$600/pr

PS-SW Subwoofer

Vented design with 10-in carbon-fiber dual-voice-coil driver. Features impregnated-aluminum voice coils; high-pass filter. Power handling 200 W; sens 89 dB SPL/W/m using 1 voice coil, 95 dB SPL/W/m using 2 voice coils; FR 30-130 Hz; imp 8 ohms. Black-vinyl finish. 5-yr limited warranty. 16 1/2 x 22 x 11 in; 38 lb \$340

PS-55 2-Way Speaker

Bass-reflex design with 5 1/4-in woofer and 3/4-in ferrofluid-cooled soft-dome tweeter. Features tuned rear port. Power handling 75 W; crossover point 4,000 Hz; sens 88 dB SPL/W/m; FR 65-20,000 Hz; imp 8 ohms. Black-ash vinyl finish. 7 x 10 1/4 x 6 in; 7 lb \$220/pr

PS-CV. As above, magnetic shielding \$120

PS-24 2-Way Center-Channel Speaker

Vented design with two 4-in woofers and 3/4-in metallized polycarbonate-dome tweeter. Features magnetic shielding. Power handling 75 W; sens 88 dB SPL/W/m; FR 50-20,000 Hz. Black-vinyl finish with metal grille \$190

DIGITAL PHASE

AP4 2-Way Speaker

Four 6 1/2-in woofers and four 1-in ferrofluid-cooled titanium-dome tweeters. FR 25-20,000 Hz \pm 2 dB; sens 92 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Honey- or black-oak wood finish. 16 x 50 x 17 in; 110 lb \$3,495/pr

AP1 2-Way Speaker

6 1/2-in woofer and 1-in ferrofluid-cooled titanium-dome tweeter. FR 30-20,000 Hz \pm 3 dB; sens 87 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Honey- or black-oak wood finish. 10 1/2 x 38 x 11 1/4 in; 42 lb \$1,250/pr

DUNTECH

Marquis C4000 3-Way Speaker

Sealed design with two 8-in pulp-paper cone woofers, two 4-in midranges, and one 1-in ferrofluid-cooled double-chamber dome tweeter. Features separate sealed enclosures for each driver; vented-magnet woofers; die-cast magnesium woofer and midrange chassis; double-magnet midranges. Gold-plated biwire/biamp terminals. Power handling 500 W max; FR 45-20,000 Hz \pm 2, -3 dB; sens 92 dB SPL/W/m; THD 0.5% above 70 Hz; imp 4 ohms. Golden oak. 11 x 58 x 16 in; 120 lb \$5,995/pr

Viscount D200 2-Way Bookshelf Speaker

Two 6 1/2-in polymer-cone woofers and 1-in ferrofluid-cooled soft-dome tweeter. Features separate sealed enclosures for each driver; vented double-magnet woofer with 3-in aluminum voice coil; aluminum tweeter voice coil. Matching stand optional. Power handling 500 W max; FR 50-20,000 Hz \pm 3 dB; sens 91 dB SPL/W/m; THD 0.5% above 100 Hz; imp 4 ohms. 11 x 34 x 14 in; 53 lb \$2,995/pr

Duchess 2-Way Speaker

7-in woofer and 1-in tweeter. Features 6-dB/oct crossover. Gold-plated inputs. FR 70-20,000 Hz \pm 3 dB; sens 83 dB SPL/W/m; imp 6 ohms; THD 0.3% above 150 Hz. Brown oak finish with cloth grille. 9 1/4 x 13 1/4 x 8 in; 14 lb \$1,295/pr

DYNACO

A-25 Series II 2-Way Speaker

9-in polypropylene woofer and 1-in soft-dome tweeter. Features patented stepped-baffle design to reduce grille reflections; ferrofluid-cooled

SPEAKERS

drivers. Power handling 200 W rms; FR 30-20,000 Hz ± 3 dB; sens 92 dB SPL/W/m. Hand-rubbed black- or natural-oak lacquer finish \$320

FL-650 2-Way In-Wall Speaker

6½-in polypropylene woofer and 1-in soft-dome tweeter. Features waterproof diaphragms; foam woofer surround. Power handling 100 W; FR 58-20,000 Hz; sens 91 dB SPL/W/m; imp 8 ohms; crossover point 2,500 Hz. Mounting hardware included. RIB-2 new construction bracket optional. Matte-white grilles and trim \$300/pr

Amazing Bass Subwoofer

Bass-reflex design with 8-in dual-voice-coil driver. Power handling 100 W; FR 30-120 Hz ± 3 dB; crossover point 100 Hz \$180

ENERGY

Model 22.3 2-Way Speaker

Front-vented design with Spherex front baffle supporting two 6½-in woofers and ¼-in dual-hyperdome tweeter. Biwire/biamp terminals. Adjustable spiked feet. Power handling 150 W cont avg; FR 30-23,000 Hz; sens 87 dB SPL/W/m; imp 6 ohms. Walnut or black-ash-veneer finish. 10 x 40 x 16 in; 67 lb \$2,000/pr

Model 22.1 2-Way Bookshelf Speaker

Front-vented design with 6½-in quadcentric woofer and ¼-in dual-hyperdome tweeter. Features spherex front baffle. Biwire/biamp terminals. Power handling 110 W cont avg; FR 40-23,000 Hz; sens 85 dB SPL/W/m; imp 6 ohms. Walnut or black-ash veneer finish. 10 x 16 x 12 in; 27 lb \$1,000/pr

Model 3.1e 2-Way Bookshelf Speaker

Front-vented design with 8-in quadcentric woofer and ¼-in tweeter. Power handling 100 W cont avg; FR 40-20,000 Hz ± 3 dB; sens 87 dB SPL/W/m; imp 6 ohms. Walnut or black-ash finish. 10 x 19 x 10 in \$450/pr



Fosgate-Audionics MC220, SD180, and F5400

ESAT-2 2-Way Satellite Speaker

Acoustic-suspension design with 4½-in woofer and ¼-in cloth-dome tweeter. Designed for home-theater applications. Features magnetic shielding; sculpted Spherex baffle. Power handling 125 W rms; FR 140-22,000 Hz ± 3 dB; sens 84 dB SPL/W/m; crossover point 2,500 Hz; imp 6 ohms. 5 x 8 x 5 in; 5 lb \$349/pr

Model ESUB-2 Energy Subwoofer

6th-order band-pass vented enclosure with 6½-in



driver. Designed for home-theater applications. Features magnetic shielding. Power handling 125 W rms; FR 40-140 Hz ± 3 dB; sens 84 dB SPL/W/m; crossover point 140 Hz. Black-ash vinyl finish. 8 x 12 x 14 in; 18 lb \$349/pr

ECC-1 Energy Center-Channel Speaker

Dual-vented design with two 4½-in woofers and ½-in polycarbonate-dome tweeter. Designed for home-theater applications. Features magnetic shielding; sloped baffle. Power handling 100 W rms; FR 60-22,000 Hz ± 3 dB; sens 86 dB SPL/W/m; crossover point 2,500 Hz; imp 8 ohms. Black-ash vinyl finish. 6 x 20 x 8 in; 15 lb \$169

EPI

Model 120 Series 3 3-Way Speaker

Tuned-port design with 8-in woofer, 5-in midrange in separate internal enclosure, and 1-in patented air-spring tweeter. Power handling 120 W rms; sens 91 dB SPL/W/m; imp 8 ohms. 10½ x 30 x 9½ in; 26 lb \$400/pr

Model 70 Series 3 2-Way Speaker

6½-in woofer and 2-in patented air-spring tweeter. Power handling 60 W rms; sens 89.5 dB SPL/W/m; imp 8 ohms. 10 x 15 x 7 in; 12 lb .. \$200/pr

ESS

AMT-Monitor 2-Way Speaker

12-in cone woofer, Heil air-motion transformer tweeter with Mylar diaphragm, and 12-in passive radiator. Power handling 400 W cont avg; FR 28-23,000 Hz ± 3 dB; sens 91 dB SPL/W/m; imp 6 ohms. Black walnut finish. 15¼ x 39¼ x 15¼ in; 110 lb \$1,298/pr

PS-1210 3-Way Speaker

Passive-radiator design with 12-in woofer, 4-in midrange, and Heil air-motion tweeter. Power handling 200 W cont avg; FR 28-23,000 Hz ± 3 dB; sens 93 dB SPL/W/m; imp 6 ohms. Matte black finish. 12 x 34 x 14¼ in; 65 lb \$598/pr

E-10/E-200 SW Subwoofer/Satellite System

Dual-vented-chamber subwoofer with two 8-in drivers; 2 satellites, each with 5¼-in woofer and 1-in dome tweeter. Features aluminum voice coils for subwoofer drivers. Power handling 100 W; FR 40-20,000 Hz ± 3 dB; imp 4 ohms. Black-ash finish. Subwoofer: 11¼ x 28 x 12 in; 40 lb. Satellite: 7½ x 12½ x 7¼ in; 12 lb \$419

PS-810 2-Way Bookshelf Speaker

Passive-radiator design with 6-in woofer and Heil air-motion tweeter. Power handling 100 W cont avg; sens 89 dB SPL/W/m; imp 6 ohms. Black. 9½ x 17½ x 9½ in; 27 lb \$358/pr

FOCUS

Model .7 2-Way Speaker

Contoured-port design with 8-in woofer and 1-in dome tweeter. Features computer-matched time alignment; internally braced epoxy-pulp cabinet. Power handling 150 W cont avg; FR 37-19,000 Hz ± 2 dB; imp 8 ohms; sens 90 dB SPL/W/m. 12 x 28 x 12 in; 37 lb \$880/pr

Model .5 2-Way Bookshelf Speaker

8-in woofer and 1-in dome tweeter. Features

epoxy-pulp cabinet. Power handling 150 W cont avg; FR 45-20,000 Hz ± 3 dB; imp 8 ohms; sens 90 dB SPL/W/m \$650/pr

FOSGATE-AUDIONICS

LF-212 Subwoofer

12-in polypropylene driver with dual voice coils. Features bypassable crossover. FR 22-100 Hz; imp 4 ohms. 18 x 20 x 18 in; 48 lb \$595

MC110 2-Way Speaker

Polypropylene woofer. Designed for home-theater applications. Features magnetic shielding; 3-in woofer voice coil; design for phase and time coherence; edge-diffraction control; design to be placed horizontally or vertically without changing dispersion. Power handling 1,000 W max; FR 80-23,000 Hz ± 3 dB; imp 8 ohms; max output power 110 dB; sens 87 dB. Black sandpebble finish with grille. 7½ x 11 x 5½ in; 15 lb ... \$449

AS-602 2-Way In-Wall Speaker

6¼-in polypropylene woofer/midrange and 1-in soft-dome tweeter. Features crossover with air-core inductors. Auto-reset tweeter protection. Power handling 100 W; FR 75-22,000 Hz. 8½ x 12 x 2¼ in \$299/pr

THX-Certified Series

MC220 Front/Center Speaker System

3 satellites, each featuring 2nd-order crossover with 2 midbasses and 2 tweeters. Designed for front left, right, and center channels in home-theater system. FR 60-22,000 Hz ± 3 dB; sens 91 dB SPL/W/m; imp 4 ohms. 10½ x 24 x 14 in; 40 lb \$4,800

SD180 Surround Speaker

Dipole design for rear/surround channels in home-theater system. Wall mountable. FR 80-18,000 Hz ± 2 dB; sens 90 dB SPL/W/m. 14 x 22 x 8½ in; 23 lb \$1,850/pr

F5400 Subwoofer

14-in driver. FR 20-80 Hz ± 3 dB; sens 92 dB SPL/W/m; imp 8 ohms. 24 x 24 x 13½ in; 85 lb .. \$950

FRIED

R/4 3-Way Speaker

10-in polypropylene woofer with vented pole piece, 5¼-in polypropylene midrange with vented pole piece, and 1-in dome ferrofluid-damped tweeter. Features tilt-back pedestal. Power handling 200 W cont avg; FR 32-20,000 Hz ± 3 dB; sens 90 dB SPL/W/m; imp 8 ohms. 12 x 32 x 10½ in; 56 lb \$1,196/pr

A/3a 2-Way Speaker

Vented design 8-in polypropylene woofer and 1-in dome tweeter. Features multi-layer damping. Power handling 100 W cont avg; FR 32-20,000 Hz ± 3 dB; imp 8 ohms; sens 89 dB SPL/W/m. Walnut-veneer finish. 13 x 23 x 10½ in \$718/pr

Q/4 2-Way Speaker

Vented design with 8-in polypropylene woofer and 1-in dome tweeter. Features multi-layer damping. Power handling 100 W cont avg; FR 37-20,000 Hz ± 3 dB; imp 8 ohms; sens 89 dB SPL/W/m. Walnut or black-ash vinyl. 10¼ x 20 x 9 in \$518/pr

Beta IV 2-Way Bookshelf Speaker

Vented design with 6½-in polypropylene woofer and composite 2-in cone and ¾-in dome tweeters. Features series crossover. Walnut or black-ash finish. 8 x 13½ x 8 in \$390/pr

SPEAKERS



GENESIS

IM-8300FW 3-Way Speaker

8-in polypropylene woofer, 3-in titanium/silicon carbide midrange, and 1-in planar ribbon tweeter. Power handling 400 W max; FR 44-34,000 Hz; crossover points 560 and 4,100 Hz; sens 87 dB SPL/W/m; imp 4 ohms. Italian rosewood finish. 75 lb \$2,700/pr

IM-8300F. As above, piano-black finish \$2,500/pr

Servo-12 Powered Subwoofer

12-in polypropylene/Kevlar driver; 275-W power amp. Features balanced differential inputs; continuously variable phase (0° to 180°) and crossover point (40-160 Hz). Power handling 275 W; distortion 0.2% \$1,695

Servo-10. As above, 10-in driver, 150-W amp \$895

Genre II 2-Way Speaker

6½-in woofer and 1-in ribbon tweeter. FR 40-32,000 Hz ± 2 dB. Black-ash finish \$800/pr

HARMAN KARDON

AVS-30 Home Theater Speaker System

2 cylindrical subwoofers with 8-in drivers; two 2-way satellites, each with 5¼-in woofer and 1-in dome tweeter, in matching cylindrical enclosures; matching shielded center-channel speaker; 2 semi-cylindrical surface-mount rear-channel speakers. Power handling 100 W max; FR 35-20,000 Hz ± 2 dB \$1,099

Thirty 2-Way Speaker

Ported design with 8-in polypropylene woofer and 1-in ferrofluid-cooled polyimide-dome tweeter. Features Kapton voice-coil formers; Linkwitz-Riley crossover. Power handling 85 W max; FR 45-20,000 Hz ± 2 dB; sens 88 dB SPL/W/m; nom imp 6 ohms; crossover point 2,200 Hz. Black piano-lacquer finish. 9½ x 23 x 10½ in; 57 lb \$898/pr

Three 3-Way Speaker

Ported design with 8-in down-firing woofer, 6½-in midrange, and 1-in ferrofluid-cooled polyimide-dome tweeter. Magnetic shielding. Power handling 100 W max; FR 45-20,000 Hz ± 2 dB; sens 90 dB SPL/W/m; imp 6 ohms. Black veneer. 9½ x 36 x 10½ in; 57 lb \$669/pr

Two 2-Way Speaker

Ported design with 6½-in woofer and ¾-in ferrofluid-cooled polyimide-dome tweeter. Features magnetic shielding. Power handling 60 W max; FR 60-20,000 Hz ± 3 dB; sens 88 dB SPL/W/m; imp 6 ohms. Black-vinyl veneer finish. 9 x 20 x 10 in; 43 lb \$349/pr

HARTLEY

The Reference Tower 2-Way Speaker

Four 6½-in thermoplastic woofers and four 1-in dome tweeters. Power handling 300 W cont avg; crossover point 3,600 Hz; imp 4 ohms at 100 Hz; FR 24-25,000 Hz. Wood cabinet with removable knit grille. 44½ x 17½ x 18 in \$1,500/pr

SW-24 Subwoofer

Infinite-baffle enclosure. Power handling 300 W cont avg; imp 5 ohms; FR to 16 Hz ± 3 dB. 36 x 50¼ x 22 in; 250 lb \$1,495

HECO

Presto 750 3-Way Speaker

Two 7-in woofers, 5-in midrange, and ¾-in dome tweeter. Power handling 120 W cont avg; FR 28-

35,000 Hz; sens 88 dB; imp 4 ohms; crossover points 290 and 3,000 Hz. Walnut or oak veneer in black or white. 9¾ x 38 x 10¾ in \$1,495/pr

Reflex 35 2-Way Speaker

Two 7-in woofers and ¾-in metal-dome tweeter. Power handling 110 W cont avg; FR 29-30,000 Hz; sens 90 dB SPL/W/m; imp 4 ohms; crossover points 150 and 4,000 Hz. Black. 9¾ x 34¼ x 10¾ in \$850/pr

Libero Subwoofer/Satellite System

Bass-reflex subwoofer with two 7-in drivers; 2 satellites, each with 4¼-in midrange and ¾-in dome tweeter. Power handling 60 W cont avg; FR 28-30,000 Hz; sens 88 dB SPL/W/m; imp 4 ohms; crossover points 120 and 3,000 Hz. Black or white die-cast satellite cabinet; black or white ash subwoofer finish. Satellites: 4¾ x 7¼ x 4¾ in. Subwoofer: 22 x 8¾ x 13¼ in \$649

HEYBROOK

Solo 2-Way Bookshelf Speaker

Infinite-baffle design with 6½-in woofer and metal-dome tweeter. Power handling 75 W; FR 45-24,000 Hz; sens 87 dB; nom imp 6 ohms. Black finish. 9 x 16 x 9 in \$449/pr

Point Five 2-Way Bookshelf Speaker

Infinite-baffle design with 6½-in doped-cone woofer and ¾-in dome tweeter. Power handling 75 W; FR 50-20,000 Hz; sens 87 dB; nom imp 6 ohms. Black finish. 9 x 14 x 9 in \$329/pr

MSU RESEARCH

HRSW10 Subwoofer

Ported design with 10-in driver. Features 2-in driver voice coil; cylindrical enclosure; 12-dB/octave low-pass crossover at 40 Hz. Includes demo CD. Power handling 150 W rms; FR 20-40 Hz ± 1 dB; imp 7 ohms. Walnut finish with black-knit cloth grille. 27-in height, 14½-in diameter; 23 lb \$900/pr

HRSW12. As above, 12-in driver. FR 19-40 Hz ± 1 dB; imp 6 ohms. 82-in height, 13½-in diameter; 35 lb \$1,550/pr

HUGHES

Baser-1 Subwoofer

Two 8-in fiber drivers. Features patented Acoustic Piston Chamber to synchronize drivers. Power handling 100 W max; FR 30-80 Hz; sens 88 dB SPL/W/m; imp 4 ohms. Gray with black cloth grille. 11 x 15 x 23 in \$379

Orb-2 2-Way Speaker

5-in fiber woofer and ¾-in silk tweeter. Features patented baffle designed for 180° lateral dispersion; magnetic shielding. Wall mountable. Power handling 100 W max; FR 55-22,000 Hz ± 3 dB; sens 89 dB SPL/W/m; imp 4 ohms; crossover point 2,000 Hz. Gray ABS with black metal grille. 7 x 10 x 10 in \$319/pr

ICON ACOUSTICS

Icon Parsec 3-Way Speaker

Graphite-impregnated 10-in woofer, 6½-in polypropylene midrange, and 1-in metal-dome tweeter. Features crossovers with polypropylene and polystyrene capacitors; two pairs of gold-plated

5-way binding posts. Power handling 350 W cont avg; FR 25-22,000 Hz ± 3 dB; sens 89 dB SPL/W/m; imp 8 ohms; crossover points 350 and 1,500 Hz. Walnut, oak, or black-oak finish. 12 x 47 x 16 in; 95 lb \$1,795/pr

Icon Lumen 2-Way Bookshelf Speaker

6½-in polypropylene woofer and 1-in metal-dome tweeter. Features crossovers with polypropylene and polystyrene capacitors; gold-plated 5-way biwire/biamp binding posts. Power handling 150 W cont avg; FR 55-22,000 Hz ± 3 dB; sens 89 dB SPL/W/m; imp 8 ohms; crossover point 1,500 Hz. Walnut, oak, or black-oak finish. 9½ x 18 x 10½ in; 26 lb \$795/pr

INFINITY

IRS Beta 5-Way Speaker System

Four servo-controlled 12-in woofers per side, each with polypropylene/graphite injection-molded cones; 2 upper bass/midrange planar push-pull drivers that act as dipole; EMIT transducer for upper midrange; EMITs from IRS V (in dipole configuration) for lower treble; SEMIT (smaller aperture EMIT) which extends response beyond 44 kHz. System is biamplified and includes IRS V servo control unit; active and passive crossover control. Monster Cable internal wiring. FR 25-44,000 Hz ± 2 dB; sens 87 dB SPL/W/m; imp 4 ohms; crossover points 70, 700, 4,000, and 8,000 Hz. Santos finish, black cloth grille. Woofer module: 16½ x 64¼ x 14½ in. Mid/tweeter module: 17 x 64¼ x 1 in. Base footprint: 18 x 17 in. 483 lb \$11,950

SSW-212 Powered Subwoofer

Servo-controlled design with two 12-in poly/graphite drivers; 300-W amplifier. Line- and speaker-level inputs. Honey or black-oak veneer. FR 25-120 Hz; crossover point 40-120 Hz. 31½ x 20¼ x 11¼ in \$1,598

SSW-210. As above, 10-in drivers, 250-W amp. FR 30-120 Hz. 26 x 18¾ x 9¾ in \$1,098

Kappa 8.1 4-Way Speaker

Aperiodic-reflex design with 12-in poly/graphite woofer, 6½-in poly/graphite midbass, polypropylene-dome midrange, and EMIT-R tweeter. Features non-parallel sides and rounded corners to minimize diffraction; rear midrange waveguide; tweeter protection. 5-way biwire/biamp binding posts. Midrange- and tweeter-level controls. Power handling 300 W rms; FR 32-35,000 Hz ± 2 dB; sens 89 dB; crossover points 180, 700, and 4,700 Hz; imp 6 ohms. Honey or black-oak veneer. 16½ x 48¼ x 12 in \$1,100

Kappa 7.1 3-Way Speaker

Ported design with 10-in poly/graphite woofer, polypropylene-dome midrange, and EMIT-R tweeter. Features non-parallel sides and rounded corners to minimize diffraction; tweeter protection. 5-way biwire/biamp binding posts. Midrange- and tweeter-level controls. Power handling 250 W rms; FR 39-35,000 Hz ± 2 dB; sens 89 dB; crossover points 500 and 4,500 Hz; imp 6 ohms. Honey or black-oak veneer. 14½ x 43¾ x 10¼ in \$799

Kappa 6.1. As above, 8-in woofer. Power handling 200 W rms; FR 45-35,000 Hz ± 2 dB. 12¼ x 38 x 9¼ in \$629

Infinitesimal Four Subwoofer/Satellite System

Subwoofer with 10-in poly/graphite driver; 2 satellites, each with 5¼-in poly/graphite woofer and EMIT-R tweeter. Features magnetic satellite shielding; continuously variable subwoofer crossover point. Subwoofer: FR 40-200 Hz ± 3

SPEAKERS



dB; crossover point 50-200 Hz. Satellites: power handling 80 W rms; FR 100-40,000 Hz ± 3 dB; crossover point 5,000 Hz; sens 90 dB; imp 6 ohms. Subwoofer 13 $\frac{1}{4}$ x 13 $\frac{1}{4}$ x 13 in. Satellites 6 x 9 $\frac{1}{2}$ x 6 $\frac{1}{2}$ in \$779

ERS 820 2-Way In-Wall Speaker

8-in graphite woofer and EMIT k tweeter. Features tweeter-level control. FR 50-45,000 Hz; sens 89 dB SPL/W/m; imp 4 ohms; crossover point 3,800 Hz. 11 x 16 x 4 in; 17 lb. \$580/pr

SM 102 2-Way Speaker

Ported design with 10-in woofer and 1-in dome tweeter. FR 65-25,000 Hz ± 3 dB; sens 100 dB SPL/W/m; imp 8 ohms; crossover point 3,300 Hz. Vinyl finish with black grille. 12 x 21 x 12 in; 68 lb \$558/pr

Kappa Video Center/Surround Speaker

Two 5 $\frac{1}{4}$ -in polypropylene/graphite woofers and EMIT-R tweeter. Features magnetic shielding; vented woofer cabinet. Designed for use as center- or surround-channel speaker. Wall/ceiling mountable. Power handling 150 W rms; FR 90-35,000 Hz ± 2 dB; sens 89 dB; crossover point 4,000 Hz; imp 6 ohms. Honey or black-oak veneer. 8 $\frac{1}{2}$ x 20 $\frac{1}{4}$ x 6 $\frac{1}{2}$ in \$400

SM 62 2-Way Surround Speaker

Ported design with 6 $\frac{1}{2}$ -in polypropylene woofer and $\frac{3}{4}$ -in dome tweeter. Power handling 100 W max; FR 78-25,000 Hz ± 3 dB; sens 94 dB SPL/W/m; imp 8 ohms; crossover point 5,000 Hz. Black, walnut, or rosewood vinyl finish with black cloth grille. 8 x 13 $\frac{1}{4}$ x 13 $\frac{1}{2}$ in; 26 lb \$278/pr

Video 1 Center-Channel Speaker

Acoustic-suspension design with two 5 $\frac{1}{2}$ -in woofers and $\frac{1}{2}$ -in tweeter. Features magnetic shielding. Power handling 100 W rms; FR 58-20,000 ± 3 dB; sens 89 dB; crossover point 4,500 Hz; imp 8 ohms. Black. 18 $\frac{1}{4}$ x 7 x 5 $\frac{1}{2}$ in .. \$189

Reference Series

Reference Six 4-Way Speaker

Sealed-box design with 10- and 6-in woofers, 5-in cone midrange, and EMIT R tweeter. FR 35-40,000 Hz ± 3 dB; sens 90 dB SPL/W/m; imp 6 ohms; crossover points 200, 1,500, and 4,000 Hz. Black or oak vinyl finish with black cloth grille. 13 x 40 x 14 in; 132 lb \$999/pr

Reference Four 3-Way Speaker

Sealed-box design with 8-in woofer, 5-in cone midrange, and EMIT R tweeter. FR 44-40,000 Hz ± 3 dB; sens 90 dB SPL/W/m; imp 6 ohms; crossover points 400 and 4,000 Hz. Black or oak vinyl finish with black cloth grille. 11 x 31 x 10 in; 82 lb \$579/pr

Reference Two 2-Way Speaker

Sealed-box design with 8-in woofer and 1-in dome tweeter. FR 50-25,000 Hz ± 3 dB; sens 90 dB SPL/W/m; imp 6 ohms; crossover point 3,000 Hz. Black or oak vinyl finish with black cloth grille. 11 x 18 x 10 in; 51 lb \$349/pr

JAMO

SW-300 Subwoofer/Satellite System

Bass-reflex subwoofer with two 8-in drivers in push-pull configuration; 2 satellites, each with 4-in polypropylene woofer and $\frac{1}{2}$ -in polypropylene-dome tweeter. 24-arat gold-plated screw terminals. Bass-level control. Includes satellite mounting kit. Power handling 100 W cont avg subwoofer, 50 W satellite; FR 30-200 Hz subwoofer, 80-20,000 Hz satellite; sens 90 dB SPL/W/m; imp 8 ohms; crossover points 200 and

3,500 Hz. Black or white. Subwoofer: 8 $\frac{1}{2}$ x 13 $\frac{1}{4}$ x 18 $\frac{1}{2}$ in; 30 lb. Satellites: 5 $\frac{1}{2}$ x 8 x 3 in ... \$699

Concert V 3-Way Speaker

Bass-reflex design with 6 $\frac{1}{2}$ -in polypropylene woofer, 6 $\frac{1}{2}$ -in midrange, and 1-in alloy dome tweeter. Features overload protection. Gold-plated biwire terminals. Power handling 110 W cont avg; FR 30-22,000 Hz ± 3 dB; sens 88 dB SPL/W/m; imp 6 ohms; crossover points 150 and 3,500 Hz. Light-walnut, mahogany, or black-ash finish. 14 x 31 $\frac{1}{2}$ x 11 in; 42 lb \$649

SW-100 Subwoofer/Satellite System

Bass-reflex subwoofer with two 6 $\frac{1}{2}$ -in drivers in push-pull configuration; 2 satellites, each with 4-in woofer and 2-in cone tweeter. Includes satellite mounting kit. Power handling 100 W cont avg subwoofer, 50 W satellite; FR 35-200 Hz subwoofer, 80-20,000 Hz satellite; sens 90 dB SPL/W/m; imp 8 ohms; crossover points 200 and 4,500 Hz. Black or white. Subwoofer: 13 $\frac{1}{2}$ x 7 $\frac{1}{2}$ x 18 $\frac{1}{2}$ in; 29 lb. Satellites: 5 $\frac{1}{4}$ x 7 $\frac{1}{2}$ x 3 $\frac{1}{4}$ in. \$499

Concert II 2-Way Bookshelf Speaker

Bass-reflex design with 6 $\frac{1}{2}$ -in polypropylene woofer and 1-in alloy dome tweeter. Features overload protection. Gold-plated biwire terminals. Power handling 80 W cont avg; FR 40-20,000 Hz ± 3 dB; sens 88 dB SPL/W/m; imp 8 ohms; crossover point 2,000 Hz. Light walnut, mahogany, or black-ash finish. 9 $\frac{1}{2}$ x 16 x 10 in \$399

Atmosphere 2-Way Speaker

Bass-reflex design with 5 $\frac{1}{4}$ -in woofer and 1-in dome tweeter. Features standard low-voltage halogen light with UL-approved transformer; overload protection. Separate on/off switch. Includes wall bracket that rotates speaker 360°. Power handling 60 W cont avg; FR 40-20,000 Hz; sens 88 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Black or white. 14 $\frac{1}{2}$ x 10 $\frac{1}{2}$ x 7 in; 8 lb \$399

CL-30A 3-Way Speaker

Bass-reflex design with 10-in woofer, 4-in midrange, and 1-in dome tweeter. Gold-plated screw terminals. Power handling 120 W cont avg; FR 35-20,000 Hz; sens 92.5 dB SPL/W/m; imp 8 ohms; crossover points 2,500 and 5,000 Hz. Black or white. 10 $\frac{1}{4}$ x 33 $\frac{3}{4}$ x 10 $\frac{1}{4}$ in; 29 lb \$299

Art 2-Way Speaker

Flat-panel bass-reflex design with 5 $\frac{1}{4}$ -in woofer and 1-in impregnated textile-dome tweeter. Designed for wall mounting in surround applications. Features 12-dB/oct crossover. Includes support beam for floor standing. Power handling 60 W cont avg; FR 40-20,000 Hz; sens 88 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Black or white lacquer finish. 15 $\frac{1}{2}$ x 13 $\frac{1}{2}$ x 3 $\frac{1}{2}$ in; 11 lb \$249

Converta 2-Way Speaker

Dish-shaped hanging/wall-mount design with 4-in woofer and 2-in tweeter. Includes wall/table fittings and omnidirectional ball joint. Power handling 50 W cont avg; FR 80-20,000 Hz; sens 90 dB SPL/W/m; imp 8 ohms; crossover point 2,500 Hz. Black, white-steel, pink, mint-green, or violet finish. 4.5 lb \$199

Center 100 Center-Channel Speaker

Bass-reflex design with two 4-in woofers and 1-in

dome tweeter. Features overload protection. Power handling 40 W cont avg; FR 40-20,000 Hz; sens 90 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Aluminum shielded cabinet. 17 x 6 $\frac{1}{2}$ x 4 in; 12.5 lb \$189

JBL

Model 250 Ti 4-Way Speaker

14-in woofer, 8-in midbass, 5-in polypropylene midrange, and 1-in titanium-diaphragm tweeter. Power handling 400 W cont avg; imp 8 ohms; crossover points 400, 1,400, and 5,200 Hz; sens 90 dB SPL/W/m. Black-lacquer finish. 22 $\frac{1}{2}$ x 52 x 14 $\frac{1}{4}$ in; 126 lb \$2,499

XPL 200 4-Way Speaker

12-in die-cast aquaplas-laminate woofer, 6 $\frac{1}{2}$ -in die-cast polypropylene midbass, 3-in titanium-dome midrange, and 1-in titanium-dome tweeter. Power handling 800 W max; sens 90 dB SPL/W/m; nom imp 6 ohms; crossover points 300, 1,100, and 4,500 Hz. Black-lacquer finish. 16 x 39 $\frac{3}{4}$ x 14 in; 90 lb \$1,699

L7 4-Way Speaker

12-in aquaplas woofer, 8-in die-cast midbass, 5-in die-cast mineral-filled polypropylene midrange, and 1-in titanium-dome tweeter. Power handling 450 W; FR 30-27,000 Hz; sens 91 dB; imp 6 ohms. Black-ash veneer finish. 9 $\frac{1}{2}$ x 46 x 17 $\frac{1}{2}$ in; 75 lb \$975

HP520 4-Way Speaker

Double-chamber band-pass enclosure with two 8-in woofers, 6 $\frac{1}{2}$ -in midbass, 5-in polymer-laminate midrange, and 1-in tweeter. Power handling 200 W; FR 34-27,000 Hz ± 3 dB; sens 90 dB; nom imp 4 ohms. 14 $\frac{1}{2}$ x 39 x 12 $\frac{1}{2}$ in; 55 lb \$795

Pro III Plus 3-Way Speaker

Die-cast polypropylene-foam enclosure with 8-in dual-voice-coil polymer-laminate woofer, 5-in polymer-laminate midrange, and 1-in titanium-dome tweeter. Power handling 100 W; FR 35-27,000 Hz; sens 90 dB; imp 4 ohms. 13 $\frac{1}{4}$ x 15 $\frac{1}{4}$ x 13 $\frac{1}{2}$ in; 41.5 lb \$659/pr

HP420 3-Way Speaker

Double-chamber band-pass enclosure with two 6 $\frac{1}{2}$ -in woofers, 5-in polymer-laminate midrange, and 1-in titanium-dome tweeter. Power handling 150 W; FR 40-27,000 Hz ± 3 dB; sens 89 dB; nom imp 4 ohms. Black-ash finish with black-glass top. 11 $\frac{1}{2}$ x 34 $\frac{3}{4}$ x 10 $\frac{1}{2}$ in; 38 lb \$595

P50 3-Way Speaker

8-in woofers and 5-in midrange in separate internal chambers; 1-in tweeter. Power handling 120 W; FR 42-20,000 Hz ± 6 dB; sens 91 dB; nom imp 6 ohms. 10 $\frac{1}{2}$ x 37 $\frac{1}{2}$ x 12 $\frac{1}{2}$ in; 36.3 lb \$450

J5120 3-Way Bookshelf Speaker

12-in poly laminate woofer, 5-in poly laminate midrange, and $\frac{3}{8}$ -in titanium-dome tweeter. Power handling 250 W; FR 38-23,000 Hz; sens 92 dB; imp 6 ohms. Black or oak vinyl finish. 14 x 32 x 12 in \$300

S-4 2-Way In-Wall Speaker

6 $\frac{1}{2}$ -in polymer-laminate woofer and 1-in titanium-dome tweeter. Includes mounting frame and hardware. Power handling 100 W; FR 125-22,000 Hz; imp 4 ohms; sens 88 dB SPL/W/m. 8 $\frac{3}{4}$ x 12 x 3 $\frac{1}{2}$ in; 16 lb \$298/pr

S-3 2-Way In-Wall Speaker

5 $\frac{1}{4}$ -in polymer-laminate woofer and 1-in titanium-dome tweeter. Includes mounting frame and hardware. Power handling 100 W; FR 125-22,000

SPEAKERS



Hz; imp 4 ohms; sens 86 dB SPL/W/m. 7¼ x 10½ x 3½ in; 14 lb \$225/pr

LC312 3-Way Speaker

12-in woofer, 5-in midrange, and ¾-in tweeter. Power handling 140 W; FR 40-20,000 Hz; sens 92 dB; imp 8 ohms. Black vinyl finish. 14 x 36¼ x 10¼ in \$209

A/VP3 2-Way Center-Channel Speaker

Die-cast polypropylene-foam enclosure with 5-in polymer-laminate woofer and 1-in titanium-dome tweeter. Includes MTC-8 L-bracket and safety chain for wall mounting. Power handling 100 W; FR 65-27,000 Hz; sens 90 dB; imp 4 ohms. 6¼ x 9¼ x 5½ in; 12.5 lb \$169

JENSEN

Model 3152 3-Way Speaker

Bass-reflex design with 15-in woofer, 5-in cone midrange, and 3-in ferrofluid-filled cone tweeter. Power handling 80 W rms; FR 33-21,000 Hz; sens 94 dB SPL/W/m; imp 8 ohms. Hickory finish. 18½ x 32 x 11½ in; 35.5 lb \$400/pr

Model 3122 3-Way Speaker

Bass-reflex design with 8-in woofer, 5-in cone midrange, and 3-in ferrofluid-filled cone tweeter. Power handling 60 W rms; FR 43-21,000 Hz; sens 91 dB SPL/W/m; imp 8 ohms. Hickory or oak finish. 15½ x 29 x 9¼ in; 28.5 lb \$285/pr

JOSEPH AUDIO

RM-10 2-Way Speaker

Tuned-port design with 12-in woofer and 1-in soft-dome tweeter. Features design by Richard Modafferi; 100-dB/oct crossover; computer-optimized bass loading and crossover design; die-cast woofer basket. Power handling 150 W; sens 90 dB SPL/W/m; FR 38-20,000 Hz ± 2 dB. Black- or light-oak finish. 11 x 36 x 12 in \$1,500/pr

JRM

Reference Powered Subwoofer/Satellite System

Two 18-in subwoofers; 2 satellites, each with four 8-in midbasses, horn midrange, and horn tweeter; preamp; 6-band remote EQ; 4-way active crossover; two 750-W mono power amps \$15,000

Monitor Powered Subwoofer/Satellite System

3-piece system with 4-way stereo configuration. Subwoofer with two 12-in polypropylene drivers; 2 satellites, each with three 6½-in midbasses, 3-in midrange, and two ring-radiator horn tweeters; 7-way active crossover with 7 level controls and seven 350-W (into 2 ohms) amps in subwoofer enclosure. Features time-aligned drivers; protection circuitry. FR 18-20,000 Hz \$5,500
As above, with two subwoofers \$7,500

S18B-5 Powered Subwoofer

Proprietary alignment with 18-in driver; 200 W 1 cont avg amp. Features 2-way active crossover with bass/midbass EQ. Woofer: FR 20-200 Hz. Amp: THD 0.02%; S/N 102 dB; slew rate 100 V/μs. Crossover: THD 0.001%; S/N 94 dB. 8-cubic-ft enclosure \$2,500

KEF

Model 107/2 3-Way Speaker

Coupled-cavity design with two 10-in woofers, 5-in polypropylene-cone midrange, and 1-in alumi-

num-dome tweeter. Features active EQ providing fixed mid/high-frequency EQ and variable bass EQ; woofers joined by force-canceling rod and rear-loaded in sealed enclosure feeding common ported enclosure; pivoting assembly for midrange and tweeter; conjugate load-matching network. Biamp/biwire terminals. Power handling 300 W; FR 20-20,000 Hz ± 2 dB; sens 90 dB; imp 4 ohms. Rosewood or black-ash veneer. 13 x 46 x 17½ in; 99 lb \$5,900/pr

Model 105/3 4-Way Speaker

Two 8-in woofers, two 6½-in midbasses, 6½-in midrange, and ¾-in soft-dome tweeter. Features woofers joined by force-canceling rod in coupled-cavity enclosure with 6½-in port; tweeter at apex of midrange cone; one midbass above and one midbass below midrange; conjugate load-matching network. Biamp/biwire terminals. Power handling 300 W cont; FR 49-20,000 Hz ± 2.5 dB; sens 93 dB SPL/W/m; imp 4 ohms. Rosewood or black-ash veneer finish. 11 x 43½ x 16 in; 93 lb \$3,900/pr

Model 103/4 3-Way Speaker

Coupled-cavity design with two 6½-in woofers and 1-in neodymium-dome tweeter. Features vertical woofer alignment; conjugate load-matching network. Biamp/biwire terminals. Power handling 200 W max; FR 50-20,000 Hz ± 2.5 dB; sens 91 dB. Rosewood or black-ash veneer finish. 8½ x 35½ x 12 in; 49 lb \$1,800/pr

Q90 3-Way Speaker

8-in reflex-loaded woofer, 8-in polypropylene-cone midrange, and 1-in fluid-cooled polymer-dome tweeter. Features 1½-in woofer voice coil. Power handling 150 W; FR 40-20,000 Hz ± 3 dB; sens 89 dB; imp 8 ohms. Black-ash or oak vinyl finish. 9¼ x 35 x 12½ in; 41 lb \$999/pr

K160 2-Way Speaker

8-in woofer and 1-in fluid-cooled dome tweeter. Features 1-in woofer voice coil. Power handling 100 W; FR 48-20,000 Hz ± 3 dB; sens 89 dB; imp 8 ohms. Black-ash vinyl finish. 10¼ x 29½ x 9¼ in; 29 lb \$549/pr

K120 2-Way Bookshelf Speaker

6½-in woofer and 1-in fluid-cooled dome tweeter. Features 1-in woofer voice coil. Power handling 80 W; FR 65-20,000 Hz ± 3 dB; sens 87 dB; imp 8 ohms. Black-ash vinyl finish. 8½ x 13¼ x 9¼ in; 9 lb \$249/pr

KENWOOD

CS-01 Center-Channel Speaker

Two 4-in drivers. Designed for home-theater systems. Features magnetic shielding. Power handling 80 W max; sens 90 dB SPL/W/m; FR 70-20,000 Hz; impedance 8 ohms. Black laminated high-density-particleboard enclosure with simulated wood-grain finish. 17½ x 4½ x 12½ in; 11.2 lb \$150

KLM

Performance 12 3-Way Speaker

12-in woofer, 5¼-in ferrofluid-cooled midrange, and 1-in ferrofluid-cooled fabric-dome tweeter. Features 1½-in woofer voice coil; 5-element crossover with Mylar capacitors. Gold-plated 5-way binding posts. Power handling 200 W nom; FR 28-20,000 Hz; sens 97 dB SPL/W/m; imp 8

ohms; crossover points 800 and 3,000 Hz. 16 x 43 x 11 in \$299

Premier 81 2-Way Speaker

Tuned-port design with 8-in polymer-fiber cone woofer and 1-in ferrofluid-cooled polymer-dome tweeter. Features 1½-in woofer voice coil; 9-element crossover. Gold-plated 5-way binding posts. Power handling 130 W nom; FR 30-20,000 Hz; sens 87 dB SPL/W/m; imp 8 ohms; crossover point 1,300 Hz. 10¼ x 16½ x 11¼ in \$299/pr

Model 802 2-Way Speaker

Tuned-port design with 8-in polypropylene woofer and 3-in ferrofluid-cooled tweeter. Features magnetic shielding. Push terminals. Power handling 180 W nom; FR 40-22,000 Hz; sensitivity 90 dB SPL/W/m; impedance 8 ohms; crossover point 2,800 Hz. Oak-grain vinyl finish. 11¼ x 19½ x 11½ in \$225/pr

Model 810 2-Way Outdoor Speaker

Metal-cabinet, weatherproof design with 4-in polypropylene/rubber woofer and 1-in dome tweeter. Power handling 60 W nom; FR 80-20,000 Hz; sens 85 dB SPL/W/m; imp 6 ohms; crossover point 2,800 Hz. 4¾ x 7 x 4¾ in \$149/pr

KLIPSCH

Klipschorn 3-Way Speaker

Horn-loaded design. Power handling 100 W cont avg; FR 35-17,000 Hz ± 3 dB; sens 104 dB SPL/W/m; imp 8 ohms. 31¼ x 52 x 28½ in; 167 lb. Price depends on finish, from \$4,000/pr

Belle Klipsch 3-Way Speaker

Horn-loaded design. Power handling 100 W cont avg; FR 45-17,000 Hz ± 5 dB; sens 104 dB SPL/W/m; imp 8 ohms. 30¼ x 35¾ x 18¼ in. Price depends on finish, from \$3,000/pr

Chorus II 3-Way Speaker

Vented design with 15-in woofer, horn midrange, and horn tweeter. Features built-in riser base. Power handling 100 W cont avg; FR 39-20,000 Hz ± 3 dB; sens 101 dB SPL/W/m; imp 8 ohms. 18½ x 39 x 15½ in; 89 lb. Price depends on finish, from \$1,790/pr

Forte II 3-Way Speaker

Vented design with 12-in woofer, horn midrange, horn tweeter, and 12-in passive radiator. Features built-in riser base. Power handling 100 W cont avg; FR 32-20,000 Hz ± 3 dB; sens 99 dB SPL/W/m; imp 8 ohms. 16½ x 35¾ x 12¼ in; 56 lb. Price depends on finish, from \$1,298/pr

KG-5.2 2-Way Speaker

Vented design with 10-in woofer, tweeter, and 12-in passive radiator. Power handling 100 W; FR 34-20,000 Hz ± 3 dB; sens 96 dB SPL/W/m; crossover point 1,600 Hz; imp 8 ohms. 14¼ x 33½ x 12¼ in; 54 lb \$850/pr

IW200 2-Way In-Wall Speaker

Two 6½-in woofers and horn tweeter. Power handling 75 W; FR 40-20,000 Hz ± 3 dB; sens 93 dB SPL/W/m; crossover point 2,200 Hz; imp 8 ohms. Required cutout 8¾ x 19½ in \$550/pr
IW100. As above, one woofer. Power handling 50 W; sens 90 dB SPL/W/m. Required cutout 8¾ x 12½ in \$350/pr

KOSS

KCS/350 2-Way Speaker

Tuned-port design with two 6½-in polypropylene woofers and one 1-in soft-dome tweeter. Features molded baffle. FR 55-22,000 Hz; sens 92 dB

SPEAKERS

SPL/W/m; imp 4 ohms. Black-ash vinyl finish. 9¼ x 36 x 9¼ in. \$600/pr

KCS/150 2-Way Speaker

Tuned-port design with 6½-in polypropylene woofer and 1-in soft-dome tweeter. Features molded baffle. FR 60-20,000 Hz; sens 86 dB SPL/W/m; imp 4 ohms. Black-ash vinyl finish. 8¼ x 15¼ x 8 in. \$350/pr

M/100 Plus 2-Way Powered Speaker

Two 4½-in woofers and 1-in dome tweeter; integral 20 W x 2 amp. Mini-plug input. FR 50-30,000 Hz, 6 x 15 x 12 in. \$260/pr

LEGACY

Focus 4-Way Speaker

Three 12-in carbon-poly woofers, two 7-in Kevlar midranges, 1¼-in metalized dome tweeter, and samarium-cobalt ribbon supertweeter. Features internal bracing; Cardas internal wiring. Biamp/biwire terminals; Power handling 1,000 W; FR 16-30,000 Hz; sens 98 dB; imp 4 ohms; crossover points 180, 2,800, and 12,000 Hz. 16 x 14 x 55 in; 175 lb. \$4,850/pr

Convergence 3-Way Speaker

Two 12-in carbon-poly woofers, two 6½-in polyglass midranges, and 1-in aluminum-dome tweeter with dispersion lens. Biamp/biwire terminals. Power handling 500 W; FR 20-25,000 Hz; sens 98 dB; imp 4 ohms; crossover points 180 and 3,900 Hz. 16 x 14 x 50 in; 155 lb. \$3,850/pr

Legacy Signature II 4-Way Speaker

Three 10-in carbon-poly woofers, two 6½-in poly midranges, 1¼-in dome tweeter, and ribbon supertweeter. Features bipolar response above 5,000 Hz; slot-loaded subwoofer. Biamp/biwire terminals. Power handling 400 W; FR 20-30,000 Hz; sens 93.5 dB; imp 4 ohms; crossover points 80, 2,800, and 8,000 Hz. 12 x 12 x 48 in; 130 lb. \$2,996/pr

LINN

Kaber 3-Way Speaker

Tower-style cabinet with two 5-in woofers and ¾-in tweeter. Woofers operate at different resonances and crossover points. Triwire/triamp ter-



Linn Keilidh



minals. Includes integral base stand. Walnut or black-ash finish. \$2,595/pr

Keilidh 2-Way Speaker

Two 6-in woofers and ceramic-dome tweeter. Biwire/triwire terminals. Black-ash or walnut finish. 8 x 32 x 11 in. \$1,295/pr

Nexus LS 250 2-Way Speaker

Ported design with 8-in carbon-polypropylene woofer and ¾-in soft-dome tweeter. Molded front baffle; 14-in pedestal stand; 4th-order Linkwitz-Riley crossover phase aligned at 2,500 Hz. Biwire terminals. Sens 88 dB. 10 x 22 x 12 in. Price depends on finish. \$1,195-\$1,395/pr

LUXMAN

S-503 2-Way In-Wall Speaker

6½-in carbon-fiber-impregnated polypropylene woofer and 1-in soft-dome tweeter. 2-position tweeter-level switch. Power handling 120 W max; FR 60-22,000 Hz ± 2.5 dB; sens 89 dB SPL/W/m; crossover point 5,000 Hz; imp 8 ohms. 9¼ x 12¾ x 3½ in. \$300/pr

MAGNEPAN

MG 3.3/R 3-Way Ribbon Speaker

628-sq-in planar-magnetic bass panel, 3 x 57-in ribbon midrange, and ¼ x 60-in ribbon tweeter. Power handling 200 W cont; FR 32-40,000 Hz ± 3 dB; sens 85 dB SPL/W/m; crossover points 250 and 1,000 Hz; imp 4 ohms. 24 x 71 x 1¼ in; 130 lb. \$3,000/pr

MG 2.6/R 2-Way Ribbon Speaker

609-sq-in planar-magnetic bass panel and ¼ x 40-in ribbon tweeter. Power handling 200 W cont; FR 37-40,000 Hz ± 3 dB; sens 87 dB SPL/W/m; crossover point 1,000 Hz; imp 4 ohms. 22 x 71 x 1¼ in; 110 lb. \$1,950/pr

MG .5/QR 2-Way Speaker

370-sq-in planar-magnetic bass panel and 1½ x 40-in quasi-ribbon tweeter. Power handling 40 W cont; FR 45-22,000 Hz ± 3 dB; sens 86 dB; imp 4 ohms; crossover point 900 Hz. \$1,075/pr

SMGa 2-Way Speaker

370-sq-in planar-magnetic bass panel and 1½ x 38-in quasi-ribbon tweeter. Power handling 30 W cont; FR 50-18,000 Hz ± 3 dB; sens 90 dB; imp 4 ohms; crossover 2,400 Hz. \$575/pr

M & K

MX-5000 THX Powered Subwoofer

Sealed-box design with two 12-in magnetic drivers in push-pull configuration; integral 400-W rms amp. Features THX certification; independent level control; low-pass filter adjustable between 50 and 125 Hz. FR 18-125 Hz; input imp 15 kilohms line level, 200 ohms speaker level. Oak or black-oak finish. 23 x 15¼ x 23½ in; 125 lb. \$2,195

SS-500 THX Surround Speaker

Sealed-box design with two 5-in polypropylene woofers and two 1-in soft-dome tweeters. Features THX certification; tonal-balance control. FR 100-20,000 Hz + 3 dB; imp 4 ohms. 16 x 7 x 7 in; 22 lb. \$1,450/pr

S-100B Satellite Speaker

Two 5-in polypropylene midranges and three 1-in soft-dome tweeters. Features midrange and treble tonal-balance switches. Glass-bead black finish. 12 x 10 x 9½ in; 2.2 lb. \$995/pr
With magnetic shielding. \$1,120/pr

S-5000 THX LCR Satellite Speaker

Trapezoidal sealed-box design with two 6½-in polypropylene woofers and two 1-in open-back transmission-line dome tweeters. Features tonal balance control. FR 80-20,000 Hz ± 2 dB; imp 4 ohms. 24 x 12 x 9½ in; 45 lb. \$950

MX-70 Powered Subwoofer

Acoustic-suspension design two 12-in drivers in push-pull configuration; 125-W amp. Features level control; selectable 50/125-Hz low-pass filter. FR 25-125 Hz ± 3 dB. Glass-bead black finish. 10 x 18 x 13½ in; 40 lb. \$850

VX-7 Powered Subwoofer

Acoustic-suspension design with 8-in woofer; 50-W amp. FR 40-125 Hz ± 3 dB. Black. 10 x 11¼ x 9½ in; 25 lb. \$425

SX-7 2-Way Bookshelf Speaker

Acoustic-suspension design with 4-in paper-cone midrange and ¾-in soft-dome tweeter. Features cast-aluminum box with perforated metal grille; fuse protection. FR 100-20,000 Hz ± 3 dB; power handling 100 W; sens 87 dB; imp 4 ohms. Black or white. 4½ x 7¾ x 4½ in; 6 lb. \$257/pr

JOHN MAROVSKIS

Janis W I Subwoofer

15-in slot-loaded driver. FR 30-100 Hz ± 1 dB; sens 87 SPL/W/m; recommended min power 60 W; crossover point 100 Hz; imp 8 ohms. Oiled walnut or white-oak finish with wood grille. 18 x 22 x 22 in; 100 lb. \$850
Coca Bola or Brazilian Monarch rosewood. \$1,000
Black. \$900

MARTIN-LOGAN

The Quest Hybrid Electrostatic Speaker

12-in woofer in tuned chamber and 18 x 48-in curved electrostatic panel. Power handling 200 W cont; FR 28-24,000 Hz ± 2 dB; sens 90 dB SPL/W/m; imp 6 ohms; crossover point 150 Hz. Available in variety of finishes. 19 x 73 x 18 in; 125 lb. \$3,995/pr

Sequel II Hybrid Electrostatic Speaker

10-in woofer in tuned chamber and visually transparent 1 x 4-ft electrostatic panel. Features matrix woofer voice coil; design for 30° horizontal dispersion; invertorial line-source format. Power handling 200 W cont; FR 30-24,000 Hz ± 2 dB; sens 89 dB SPL/W/m; crossover point 250 Hz; imp 6 ohms. \$2,995/pr

Aerius Hybrid Electrostatic Speaker

8-in woofer in sealed chamber and visually transparent 38 x 9½-in electrostatic panel. Features curved electrostatic-panel design for 30° horizontal dispersion; proprietary pressure-compensation technology for ±6-dB tone shaping. 5-way biwire/biamp binding posts. Power handling 200 W; FR 40-20,000 Hz ± 3 dB; crossover 12-dB/oct at 500 Hz; sens 89 dB; imp 4 ohms. 10½ x 55½ x 13½ in; 55 lb. \$1,995/pr

MB QUART

Quart 690MCS 2-Way Speaker

Tower design with 8-in woofer and 1-in titanium-

SPEAKERS



dome tweeter. Power handling 100 W cont; FR 35-32,000 Hz. Oak, walnut, black/white, or raw-oak finish. Cherry also available. 10½ x 33½ x 11½ in; 40 lb \$1,500/pr

Quart 490MCS 2-Way Bookshelf Speaker
8-in woofer and 1-in titanium-dome tweeter. Power handling 100 W cont; FR 37-32,000 Hz. Oak, walnut, black, white, or raw-oak finish. Cherry also available. 11 x 17½ x 11½ in; 24.2 lb \$850/pr

Quart Three 2-Way Speaker
Two 6½-in woofers and 1-in titanium-dome tweeter. Includes removable isolation spikes. Power handling 90 W cont avg; FR 38-32,000 Hz; sens 88 dB SPL/W/m; imp 4 ohms. Black. 8¼ x 35½ x 10 in; 32 lb \$699/pr

Quart 90M 2-Way In-Wall Speaker
8-in woofer and 1-in titanium-dome tweeter. Power handling 100 W cont; FR 46-32,000 Hz. White. 10½ x 12 x 3¼ in; 5.7 lb \$649/pr

Quart One 2-Way Bookshelf Speaker
6½-in woofer and 1-in titanium-dome tweeter. Includes removable isolation spikes. Features butyl-rubber woofer surround. Power handling 60 W cont avg; FR 49-32,000 Hz; sens 88 dB SPL/W/m; imp 4 ohms; crossover point 2,800 Hz. Black. 8¼ x 13½ x 9½ in; 13.2 lb \$379/pr

McINTOSH

XRT 18 Subwoofer/Satellite System
Subwoofer with 12-in woofer and 6-in midrange; 2 satellite columns, each with sixteen 1-in dome tweeters. Power handling 500 W max; FR 20-20,000 Hz; sens 86 dB SPL/W/m; imp 8 ohms; crossover points 350 and 1,500 Hz. Subwoofer 17½ x 27¼ x 11¼ in. Satellites 10½ x 57¼ x 1½ in. 108 lb \$2,699

XR-240 3-Way Speaker
12-in woofer, 6½-in midrange, and 1-in dome tweeter. Features solid-state current protection. Power handling 300 W max; FR 20-20,000 Hz; sens 86 dB SPL/W/m; imp 8 ohms; crossover points 375 and 1,200 Hz. Oak, walnut, or black-lacquer hardwood finish. 15 x 43¼ x 13¼ in; 75 lb \$1,150

WS200 2-Way In-Wall Speaker
6-in woofer and 1-in dome tweeter. Features solid-state current protection. Power handling 80 W max; FR 60-20,000 Hz; sens 86 dB SPL/W/m; imp 8 ohms; crossover point 1,300 Hz. White grille. 8½ x 12 x 3¼ in; 7.5 lb \$599/pr

MEMOREX

TS-5 Subwoofer/Satellite System
Subwoofer with two 5¼-in and two 6½-in drivers; 2 satellites, each with 4-in midrange, front-firing ¾-in tweeter, and rear-firing ¾-in tweeter. Sens 91 dB SPL/W/m; imp 8 ohms; crossover points 300 and 6,000 Hz. Black-lacquer finish with black knit grille \$650

TRC-505 2-Way Speaker
Acoustic-suspension design with 6½-in woofer and ¾-in polycarbon-dome tweeter. FR 70-20,000 Hz; sens 88 dB SPL/W/m; imp 8 ohms; crossover point 3,400 Hz. Ebony walnut finish with black knit grille. 7½ x 19½ x 10½ in; 12.5 lb... \$259/pr

WM-500 2-Way Outdoor Speaker
Acoustic-suspension design with 5¼-in woofer and 1-in dome tweeter. FR 49-20,000 Hz; imp 8 ohms; crossover point 2,400 Hz. Aluminum cabinet, black grille. 6 x 7 x 8 in; 9.5 lb \$249/pr

MERIDIAN

D600 3-Way Digital Powered Speaker
Triamplified vented design with 6½-in woofer, 6½-in midbass, and 1-in metal-dome tweeter; three 65-W amps; preamp. 2 analog, 2 digital, and 1 fiber-optic inputs. Information display for 200 Series components; remote control with frequency shaping and tilt controls. FR 36-20,000 Hz; sens 110 dB. Rosewood, walnut, or black-ash. 8¼ x 35½ x 11½ in; 70 lb \$5,500/pr

M30II 2-Way Powered Speaker
Biamplified vented design with 6½-in midbasses, 1-in metal-dome tweeter, and two 70-W internal amps. Features PVC surrounds. Balanced/unbalanced inputs. Auto turn-on circuit. FR 40-20,000 Hz; sens 106 dB SPL/W/m. Walnut or black-ash finish \$1,990/pr

P16 2-Way In-Wall Speaker
8½-in woofer and ½-in tweeter. Power handling 70 W max; FR 6-17,000 Hz; sens 88 dB SPL/W/m; imp 4 ohms. Round or square bezel. 8 x 8 x 3¾ in \$400/pr

MIRAGE

Mirage M3si 3-Way Speaker
Bipolar design with carbon-filled polypropylene woofer, two 4½-in carbon-filled polypropylene front and rear midranges, and two ¾-in cloth-dome front and rear tweeters. Features 1½-in woofer voice coils. Biwire/biamp terminals. Power handling 250 W; FR 25-23,000 Hz ± 2 dB; sens 85.5 dB; crossover points 400 and 2,200 Hz; imp 6 ohms. 19 x 53 x 9 in \$2,800/pr

Mirage M7si 3-Way Speaker
Bipolar design with front-radiating 8-in polypropylene cone woofer, 1 rear-firing 5-in midrange, and 1 front-firing 1-in pure-titanium tweeter. Features rubber woofer surround; cloth tweeter suspension. Biwire/biamp terminals. Power handling 125 W cont; FR 35-22,000 Hz ± 3 dB; sens 88 dB SPL/W/m; imp 6 ohms; crossover points 500 and 2,000 Hz \$1,300/pr

Mirage M-790 3-Way Speaker
Bipolar design with 8-in polypropylene cone woofer, rear-firing 5-in midrange, and 1-in titanium tweeter. Features rubber woofer surround; cloth tweeter suspension. Biwire/biamp terminals. Power handling 150 W cont; FR 38-22,000 Hz ± 3 dB; sens 87 dB SPL/W/m; imp 6 ohms; crossover points 500 and 2,000 Hz. High gloss finish. 10 x 39 x 11 in; 60 lb \$1,100/pr

Mirage PS-12 Powered Subwoofer
Vented cabinet with 12-in driver and 150-W amp. Features protection circuitry; servo and phase controls. FR 23-150 Hz ± 3 dB. Black ash finish with black grille. 18 x 18 x 20 in \$750

Mirage M-490 2-Way Speaker
Front-vented design with 8-in polypropylene cone woofer and 1-in pure-titanium tweeter. Features rubber woofer surround; cloth tweeter suspension. Power handling 150 W cont; FR 40-22,000 Hz ± 3 dB; sens 86 dB SPL/W/m; imp 4 ohms; crossover point 2,000 Hz. Black-ash vinyl finish. 10 x 19 x 11 in; 28 lb \$600/pr

Mirage M-290 2-Way Speaker
Front-vented design with 6½-in polypropylene

cone woofer and 1-in titanium tweeter. Features rubber woofer surround; cloth tweeter suspension. Power handling 100 W cont; FR 45-22,000 Hz; imp 6 ohms. Black-ash vinyl finish. 9 x 16 x 9 in; 17 lb \$450/pr

Mirage M-190 2-Way Speaker
Rear-vented design with 5¼-in polypropylene-cone woofer and ¾-in titanium tweeter. Power handling 75 W cont; FR 55-22,000 Hz ± 3 dB; sens 85 dB SPL/W/m; imp 6 ohms; crossover point 2,200 Hz. Black-ash vinyl finish. 7 x 12 x 8 in; 12 lb \$250/pr

Mirage 2-Way Center-Channel Speaker
Dual-vented design with two 4½-in woofers and ½-in polycarbonate flared-dome tweeter. Features magnetic shielding; angled enclosure. Power handling 100 W cont; FR 60-22,000 Hz ± 3 dB; sens 86 dB SPL/W/m; imp 8 ohms; crossover point 2,500 Hz. Black-ash vinyl. 6 x 20 x 8 in; 15 lb \$170

MISSION

Mission 753 3-Way Speaker
Two 5¼-in plastiflexed paper woofers, two 5¼-in midbasses, and one 1-in ferrofluid-cooled dome tweeter. Features visco-elastically-damped construction; gold-plated 5-way binding posts. FR 70-20,000 ± 1.5 dB; sens 90 dB SPL/W/m; crossover points 200 Hz and 2,300 Hz. Black/white lacquer or wood veneer finish. 8¼ x 34½ x 12½ in \$1,299/pr

Cyrus 782 2-Way Speaker
Bass-reflex design with two 6½-in mineral-loaded polymer woofers and ¾-in ferrofluid-cooled fabric-dome tweeter. ¾-in MDF baffleboard. Biwire/biamp terminals. Adjustable and removable spikes. Power handling 150 W cont avg; FR 49-20,000 Hz ± 3 dB; sens 91.5 dB SPL/W/m; imp 4 ohms; crossover point 3,200 Hz. Natural walnut, black-ash, Nextel gray, or rosewood veneer \$899/pr

Cyrus 781 2-Way Speaker
Bass-reflex design with 6½-in mineral-loaded polymer woofer and ¾-in ferrofluid-cooled fabric-dome tweeter. ¾-in MDF baffleboard and cabinet; flared tuned-port. 5-way biwire/biamp binding posts. Power handling 125 W cont avg; FR 47-20,000 Hz ± 3 dB; sens 90.5 dB; imp 6 ohms; crossover 3,500 Hz. Natural walnut, black-ash, Nextel gray, or rosewood veneer. 8½ x 17 x 11½ in; 20 lb \$699/pr

Mission 762 2-Way Bookshelf Speaker
Bass-reflex design with 8-in Plastiflex woofer and ¾-in ferrofluid-cooled fabric-dome tweeter. ¾-in visco-elastically damped, transverse-folded cabinet; flared-tuned port; inverted drive-unit geometry. 5-way binding posts. Power handling 125 W cont avg; FR 50-20,000 Hz ± 3 dB; sens 93.5 dB; imp 8 ohms; crossover point 4,300 Hz. Simulated walnut and black-ash veneers. 9¾ x 19¼ x 11½ in; 21 lb \$499/pr

Mission 760i 2-Way Speaker
5¼-in Plastiflex woofer and ¾-in polymer-dome tweeter. Features mineral-loaded polypropylene baffleboard. Power handling 75 W cont avg; FR 80-20,000 Hz ± 3 dB; imp 8 ohms; crossover point 3,500 Hz. Black-ash or rosewood veneers. 11½ x 7½ x 8 in; 12 lb \$279/pr

MONITOR AUDIO

MA1200 Gold MkII 2-Way Speaker
Ported design with 6-in polypropylene woofer and 1-in gold metal-dome tweeter. Features

SPEAKERS



MDF cabinet with sand-loading compartment; biwire/biamp terminals. Power handling 200 W; FR 35-30,000 Hz \pm 3 dB; imp 8 ohms; sens 89 dB SPL/W/m; Rosewood, black ash, oak, or walnut finish. 8 x 36 x 10 in \$1,999/pr

MA700 Gold MkII 2-Way Speaker

6-in polypropylene woofer in cast-aluminum/magnesium chassis and 1-in anodized-gold metal-dome tweeter. Features biamp/biwire terminals. Power handling 100 W; FR 45-30,000 Hz \pm 3 dB; sens 89 dB SPL/W/m; imp 8 ohms. Rosewood, black ash, oak, or walnut finish. 8½ x 14 x 10 in \$999/pr

The Sub-Woofer Subwoofer

Infinite-baffle design with 8-in polypropylene driver. Features dual voice coils; 1½-in alloy former; dual-chamber MDF cabinet with bracing and damping. Volume 30 liters. Black-ash or Santos rosewood finish. 10 x 19 x 14 in ... \$699

Monitor 7 Gold 2-Way Bookshelf Speaker

Rear-ported design with 4½-in impregnated woofer and ¾-in metal-dome tweeter. Power handling 70 W; FR 60-20,000 Hz \pm 3 dB; sens 88 dB SPL/W/m; imp 8 ohms. Black hand-rubbed lacquer finish. 6½ x 13½ x 7 in \$399/pr

MORDAUNT-SHORT

Classic 40 2-Way Speaker

Bass-reflex design featuring two 6½-in injection-molded polypropylene cone woofers and 1-in ferrofluid-cooled metal-dome tweeter. Features protection circuitry. Power handling 100 W cont avg; FR 50-20,000 Hz; sens 78 dB SPL/W/m; imp 8 ohms; crossover point 4,000 Hz. Walnut, mahogany, or black-ash finish. 5-yr warranty. 8½ x 31½ x 11 in; 38 lb \$1,499/pr

MS 5.50 2-Way Speaker

Transmission-line design with two 8-in polypropylene woofers and 1-in ferrofluid-cooled aluminum-dome tweeter. Features ¼-in particleboard baffle; protection circuitry. Gold-plated biwire/biamp terminals. FR 50-20,000 Hz; sens 89 dB; imp 8 ohms; crossover point 4,000 Hz. Black-ash finish. 9¾ x 32¾ x 12¼ in; 40 lb \$999/pr

MS 5.30 2-Way Speaker

Ported design with 8-in woofer and 1-in aluminum-dome tweeter. Features minimal-diffraction grilles integrated into baffle; protection circuitry. Gold-plated biwire/biamp terminals. FR 60-20,000 Hz \pm 5 dB; sens 88 dB SPL/W/m; imp 8 ohms; crossover point 4,000 Hz. Black-ash finish. 9¾ x 16¾ x 11 in; 18 lb \$499/pr

MS 5.10 2-Way Speaker

Ported design with 5½-in woofer and ¾-in aluminum-dome tweeter. Features minimal-diffraction grilles integrated into baffle; protection circuitry. Gold-plated biwire/biamp terminals. FR 70-20,000 Hz; sens 86 dB SPL/W/m; imp 8 ohms; crossover point 5,000 Hz. Black-ash finish. 7¾ x 12 x 8¾ in \$299/pr

SW-1 Subwoofer

Two 6½-in drivers. Features acoustic band-pass filter; protection circuitry: 18-mm particleboard enclosure. Spring-loaded inputs. Power handling 100 W per driver; FR 45-110 Hz; sens 90 dB both drivers driven; imp 8 ohms per driver. 21½ x 9¾ x 10 in; 26.5 lb \$449

MTX

D9550E 5-Way Speaker

12-in polymer woofer, two 5-in sealed-back fer-

rofluid-cooled midranges, 3-in cone tweeter, and 1-in soft-dome tweeter. Power handling 205 W cont avg; FR 32-22,000 Hz; sens 99.5 dB SPL/W/m; crossover points 600, 1,000, 2,500, and 7,000 Hz; imp 8 ohms. Oak or black-ash finish. 15 x 40¾ x 14½ in \$880/pr

D5550E 3-Way Speaker

Vented design with 15-in polymer-coated woofer, 5-in sealed-back midrange, 3-in dome tweeter, and 1-in soft-dome tweeter. Features ferrofluid-cooled midrange and tweeters. Power handling 120 W cont avg; FR 43-22,000 Hz; sens 96.5 dB SPL/W/m; imp 4/8 ohms; crossover points 1,700 and 6,000 Hz. 15½ x 27 x 10¼ in \$520/pr

D4550E 3-Way Speaker

Vented design with 10-in polymer woofer, 5-in sealed-back ferrofluid-cooled midrange, and 1-in soft-dome ferrofluid-cooled tweeter. Power handling 80 W cont avg; FR 45-22,000 Hz; sens 95.5 dB; imp 4/8 ohms. 15 x 24 x 10 in \$420/pr

AAL 103 3-Way Speaker

Vented design with 10-in fiber-cone woofer, 4-in ferrofluid-cooled cone midrange, and 3¼-in horn-loaded quartz tweeter. Power handling 75 W cont avg; FR 55-20,000 Hz; sens 91.5 dB SPL/W/m; imp 4 ohms. 15 x 24 x 10½ in \$360/pr

AAL 154 4-Way Speaker

Vented design with 15-in fiber-cone woofer, 4-in and 3-in ferrofluid-cooled midranges, and 3¼-in horn-loaded quartz tweeter. Power handling 125 W cont avg; FR 40-20,000 Hz; sens 92 dB; imp 4 ohms. 18½ x 29 x 15 in \$249/pr

MUSEATEX

RTRE-1 2-Way Speaker

Hybrid design combining 8-in woofer and real-time ripple-effect dipole diaphragm. Power handling 200 W max; FR 40-20,000 Hz \pm 3 dB; sens 85 dB SPL; crossover point 400 Hz \$2,199

Melior One Speaker

Dipole planar design incorporating real-time ripple effect technology. No crossover. Power handling 200 W max; FR 45-20,000 Hz \pm 3 dB; sens 86 dB SPL/W/m; imp 4 ohms. Mahogany or black-lacquer finish. 22 x 45 x 3 in; 65 lb ... \$1,999/pr

Melior Two. As above, power handling 150 W max. FR 50-20,000 Hz \pm 3 dB; sens 84 dB. Mahogany or black semi-gloss finish; high-gloss finish optional. 19 x 38 x 3 in; 45 lb ... \$1,299/pr

Melior WAL-1 In-Wall Speaker

Dipole planar design incorporating real-time ripple-effect technology. Power handling 100 W max; FR 60-20,000 Hz \pm 3 dB; sens 83 dB SPL/W/m; imp 4 ohms. Paintable white frame and grille \$899/pr

NAIM

NA SBL 2-Way Speaker

8-in woofer and ¾-in dome tweeter. Features external detachable crossover; decoupled tweeter. Includes stand. Power handling 75 W max; FR 30-20,000 Hz \pm 3 dB; sens 88 dB SPL/W/m; imp 6 ohms. Black-ash or walnut finish. 10¾ x 34½ x 10½ in \$3,495/pr

NA IBL 2-Way Speaker

5-in woofer and ¾-in dome tweeter. Features detachable crossover. Power handling 65 W max; FR 45-20,000 Hz \pm 3 dB; sens 86.5 dB SPL/W/m; imp 6 ohms. Black-ash or walnut finish. 9¾ x 31¼ x 10¾ in \$1,695/pr

NA PXO. Passive crossover for above ... \$260

NEAR

NEAR-50ML 3-Way Speaker

Tuned-port design with 8-in metal-cone woofer, 4-in metal-alloy midrange, and 1-in metal-dome tweeter. Power handling 250 W max; FR 30-23,000 Hz \pm 1.5 dB; crossover points 250 and 4,000 Hz; sens 91 dB SPL/W/m; imp 8 ohms. Walnut finish. 10½ x 48 x 12 in; 55 lb . \$1,850/pr

As above, black-oak finish \$1,550/pr

NEAR-40ME 2-Way Speaker

Tuned-port design with 8-in metal-cone woofer and 1-in metal-dome tweeter. Power handling 250 W max; FR 32-23,000 Hz \pm 2 dB; imp 8 ohms; sens 88 dB; crossover point 1,800 Hz. Walnut finish. 10½ x 35 x 10¾ in; 40 lb \$1,250/pr

As above, black-oak finish \$999/pr

NEAR-10M 2-Way Speaker

Ported design with 5¼-in metal-cone woofer and 1-in metal-dome tweeter. Power handling 100 W max; FR 48-20,000 Hz \pm 2.5 dB; sens 88.5 dB SPL/W/m; imp 6 ohms; crossover point 2,000 Hz. Walnut finish. 7¾ x 11 x 9¾ in; 14 lb ... \$549/pr

As above, black-oak finish \$399/pr

A.E.S. 1.1 Outdoor Speaker

5¼-in metal-alloy cone/dome driver. FR 65-14,000 Hz. Molded cabinet \$318/pr

A.E.S. 1.2. Coaxial version of above . \$359/pr

NHT

SW2P Powered Subwoofer

Vented design with 10-in driver and 80-W power amp. Features selectable 50-, 100-, or 200-Hz crossover with bypass; line- and speaker-level inputs. FR 21-200 Hz \pm 3 dB. 19 x 16 x 16 in; 51 lb \$650

Model 1.3 2-Way Speaker

Sealed design with 6½-in polypropylene woofer and 1-in ferrofluid-cooled dome tweeter. Features angled baffle. FR 50-25,000 Hz \pm 3 dB; imp 8 ohms; sens 86 dB SPL/W/m. Black, white, or oak finish. 7 x 16½ x 10 in; 15 lb \$500/pr

Model 1A 2-Way Speaker

Sealed design with two 6½-in woofers and 1-in dome tweeter. Features angled baffle; magnetic shielding. FR 63-22,000 Hz \pm 3 dB; imp 8 ohms. Black, white, or oak finish. 7 x 12 x 10 in; 11 lb \$340/pr

Model Zero 2-Way Speaker

Sealed design with 4½-in woofer and 1-in dome tweeter. Features magnetic shielding. Wall mountable with optional bracket. FR 85-21,000 Hz \pm 3 dB; imp 8 ohms. Black or white gloss finish. 6 x 9 x 5 in; 5 lb \$200/pr

Home Theater Series

VT-1 2-Way Speaker

Tuned column-loaded design with two 4½-in woofers and 1-in ferrofluid-cooled tweeter. Features magnetic shielding. Includes base. FR 60-21,000 Hz \pm 3 dB; imp 8 ohms. Gloss black finish. 5½ x 40 x 5½ in; 23 lb \$650/pr

HDP-1 2-Way Bookshelf Speaker

Sealed hybrid dipolar design with 4½-in woofer

SPEAKERS

and two 3-in mid-tweeters. FR 105-10,000 Hz \pm 3 dB; imp 8 ohms. Gloss black or white finish. 9 x 6 x 9 in; 7 lb \$350/pr

Model 1C 2-Way Center-Channel Speaker
Sealed design with 6½-in woofer and 1-in ferrofluid-cooled tweeter. Features magnetic shielding. FR 63-22,000 Hz \pm 3 dB; imp 8 ohms. Black finish. 7 x 12 x 8½ in; 11 lb \$170

NILES

NSW-100 Powered In-Wall Subwoofer
8-in driver and separate 100-W amp. Features 24-dB/oct crossover. Line- and speaker-level inputs. Auto on/off via music sensing; subwoofer-level control; bypass and phase-reversal switches. Crossover point 100 Hz; FR 38-100 Hz \pm 2 dB. Subwoofer: 14 x 42 x 3 in; 24 lb. Amplifier: 17 x 3½ x 10 in; 14 lb \$1,100
NSW-8. As above, without amp \$350

Model 200 2-Way In-Wall Speaker
6½-in polypropylene woofer and 1-in soft-dome tweeter. Features butyl woofer surround; treated-fabric woofer dust cap. 2-position tweeter-level control. Power handling 80 W max; FR 55-20,000 Hz \pm 2 dB; sensitivity 88 dB SPL/W/m; impedance 8 ohms; crossover point 2,800 Hz. Pearl-white finish with metal or cloth grille; new-construction or retrofit brackets. 9 x 12 x 3 in; 5 lb \$500/pr

Model 75 2-Way In-Wall Speaker
5¼-in polypropylene woofer and ¾-in polycarbonate dome tweeter. Designed for ceiling installation. Features treated-urethane woofer surround. Power handling 45 W max; FR 63-20,000 Hz \pm 4 dB; sens 86 dB SPL/W/m; imp 8 ohms; crossover point 4,000 Hz. Pearl-white finish. Choice of square, round, or recessed lighting-type bezel and grille. Square: 6¾ x 6¾ x 2½ in. Round: 7¾ x 3½ in \$250/pr

NORMAN LABORATORIES

Model 635 3-Way Speaker
Three 10-in poly woofers, 5¼-in poly midrange and 1-in dome tweeter. Power handling 600 W max; FR 25-20,000 Hz; sens 95 dB SPL/W/m; imp 8 ohms. 16¼ x 49 x 11 in; 155 lb \$900

Model 435 3-Way Speaker
Two 10-in poly woofers, 5¼-in poly midrange, and 1-in dome tweeter. Power handling 500 W max; FR 30-20,000 Hz; sens 94 dB SPL/W/m; imp 8 ohms. 15 x 40 x 9¾ in; 112 lb \$550

Model 235 3-Way Speaker
10-in poly woofer, 5¼-in poly midrange, and 1-in dome tweeter. Power handling 250 W max; FR 38-20,000 Hz; sens 91 dB SPL/W/m; imp 8 ohms. 12 x 23 x 9¾ in; 60 lb \$300

OHM ACOUSTICS

Walsh-300 2-Way Speaker
Coherent-line-source configuration with inverted-cone driver and supertweeter. Features protection circuitry. Gold-plated 5-way binding posts. Casters/spikes. Power handling 300 W max; FR 25-25,000 Hz \pm 3 dB; sens 88 dB; imp 8 ohms. 13¼ x 17¼ x 48¼ in \$1,995/pr
Walsh-200. As above, power handling 200 W max; FR 32-20,000 Hz \pm 3 dB; sens 90 dB; imp 8 ohms. 11¼ x 15¼ x 42¼ in \$1,395/pr
Walsh-100. As above, power handling 100 W max; FR 40-20,000 Hz \pm 3 dB; sens 90 dB; imp 8 ohms. 9¾ x 13¾ x 42¼ in \$995/pr



CAM-32 2-Way Bookshelf Speaker
6½-in woofer, rotatable ¾-in polycarbonate-dome tweeter, and 10-in passive radiator. Features protection circuitry; patented sub-bass activator. Power handling 100 W max; FR 42-20,000 Hz \pm 3 dB; sens 90 dB; imp 8 ohms. Black-oak vinyl finish. 11 x 11 x 32 in \$520/pr
CAM-16. As above, no passive radiator. Power handling 85 W max; FR 46-20,000 Hz \pm 3 dB; sens 89 dB; imp 8 ohms. 9 x 11 x 21 in \$400/pr

OPTIMUS BY RADIO SHACK

Mach Three 3-Way Speaker
Ferrofluid-cooled midrange and tweeter horns. Features midrange- and tweeter-level controls. FR 50-25,000 Hz; sens 93 dB SPL/W/m; imp 8 ohms. Walnut finish with removable cloth grille. 13 x 30 x 17¾ in \$300

Model 1050 3-Way Speaker
Bass-reflex tuned-port design with 15-in woofer, 5-in midrange, and 3-in tweeter. Power handling 100 W; FR 60-20,000 Hz; sens 90 dB; imp 8 ohms. Oiled walnut finish with removable grille. 11½ x 29¾ x 17¾ in; 44 lb \$200

PARADIGM

Studio Monitor 3-Way Speaker
Two 8-in mineral-filled polypropylene woofers, 5-in mineral-filled polypropylene midrange, and aluminum-dome tweeter. Features aluminum/nomex woofer formers; Kapton midrange former; 12- and 18-dB/oct crossovers; triamp/triwire terminals. Power handling 300 W; FR 25-20,000 Hz \pm 2 dB; sens 90 dB SPL/W/m. Walnut or black-ash veneer finish. 12¼ x 43½ x 16½ in; 93 lb \$1,899/pr

Espirit Monitor 2-Way Speaker
Two 8-in mica-filled polypropylene woofers and 1-in aluminum-dome tweeter. Features Kapton woofer formers; 18-dB/oct crossover; Medite baffle and bracing; biwire/biamp terminals. Power handling 250 W; FR 34-20,000 Hz \pm 2 dB; sens 94 dB. Walnut, oak, or black-ash veneer finish. 10¾ x 37½ x 14¼ in; 62 lb \$1,199/pr

Model 9se MkII 2-Way Speaker
Two 8-in polypropylene woofers and 1-in textile-dome tweeter. Features Kapton woofer formers; radial bracing. Power handling 200 W; FR 34-20,000 Hz \pm 2 dB; sens 93 dB SPL/W/m. Oak or black-ash vinyl finish. 11½ x 30 x 14¼ in; 45 lb \$699/pr

AMS-300 2-Way In-Wall Speaker
8-in mineral-filled polypropylene woofer and 1-in aluminum-dome tweeter. Features Kapton woofer former. Power handling 150 W; FR 45-20,000 Hz \pm 2 dB; sens 90 dB SPL/W/m. 8¾ x 12¾ x 3¾ in; 10 lb \$469/pr

Phantom 2-Way Speaker
8-in polypropylene woofer and ¾-in textile tweeter. Features Kapton woofer former; lateral bracing. Power handling 150 W; FR 40-20,000 Hz \pm 2 dB; sens 90 dB SPL/W/m. Oak or black-ash vinyl finish. 9¾ x 18¼ x 11½ in; 20 lb \$279/pr

Titan 2-Way Speaker
6-in polypropylene woofer and ¾-in polyimide-

dome tweeter. Features Kapton woofer former. Power handling 100 W; FR 55-20,000 Hz \pm 2 dB; sens 88 dB SPL/W/m. Oak or black-ash vinyl finish. 7¼ x 12½ x 9½ in; 13 lb \$199/pr

PARAMOUNT PICTURES

System 330 Subwoofer/Satellite System
Subwoofer with 8-in dual-voice-coil driver; 2 satellites, each with 5¼-in midrange and ½-in dome tweeter. Power handling 50 W max subwoofer, 100 W max satellite; FR 37-100 Hz subwoofer, 100-17,000 Hz satellite; sens 91 dB subwoofer, 89 dB satellite; imp 6 ohms. Gray or black \$430

P-83 3-Way In-Wall Speaker
Ported design with 8-in woofer, 1-in dome midrange, and ½-in polyimide tweeter. Poly-switch protection. Power handling 50 W nom; FR 20-30,000 Hz; sens 92 dB; imp 8 ohms; crossover points 750 Hz and 5,000 Hz. Paintable grille, 10½ x 14¾ x 3½ in \$275/pr

Model 62 2-Way Surround Speaker
6½-in woofer and 3-in tweeter. Designed for rear channel in surround system. Power handling 25 W cont avg; FR 70-18,000 Hz; crossover point 3,000 Hz; imp 8 ohms. 7½ x 12 x 8 in \$224/pr

PC3 2-Way Center-Channel Speaker
Two 4-in polyolefin woofers and ½-in dome tweeter. Power handling 60 W; FR 70-21,000 Hz \pm 3 dB; sens 93 SPL/W/m; imp 8 ohms; crossover point 5,000 Hz. 5½ x 15 x 6 in \$90

Omnispeaker Outdoor Series
The following feature a weatherproof, rust-resistant, cylindrical plastic enclosure designed to be partially recessed in the ground or in a planter. All are designed for 360° dispersion.

Granite 377B 2-Way Outdoor Speaker
8-in Bozak woofer and 2-in piezo tweeter. Power handling 150 W max; FR 40-17,000 Hz; sens 95 dB. White-granite marble finish \$350

D-350/D-350T 2-Way Outdoor Speaker
8-in woofer and 3-in moving-voice-coil tweeter. Power handling 80 W max; FR 60-12,000 Hz; sens 93 dB. Shrub green \$225

PARASOUND

AWM-380 2-Way Outdoor Speaker
Air-suspension design with 5¼-in carbon-fiber-reinforced polypropylene woofer and 1-in dome tweeter. Features die-cast enclosure; weather-resistant parts. Power handling 80 W cont avg; FR 48-20,000 Hz \pm 3 dB; sens 88 dB SPL/W/m; imp 8 ohms; crossover point 2,400 Hz. White finish \$345/pr

PERIOD

Model 96013 3-Way Speaker
Dual-port bass-reflex design with two 8-in woofers, two 4-in midranges in isolated subenclosures, and ¾-in titanium-dome tweeter. Power handling 150 W; FR 38-20,000 Hz \pm 2.5 dB; sens 93 dB SPL/W/m; imp 4 ohms. 9¾ x 50 x 12¾ in \$400

Model 96011 2-Way Bookshelf Speaker
Acoustic-suspension design with 6½-in woofer and ¾-in titanium-dome tweeter. Power handling 50 W; FR 67-20,000 Hz \pm 2.5 dB; sens 90 dB SPL/W/m; imp 8 ohms. 8½ x 13 x 8½ in \$260/pr

Model 96012 2-Way Speaker
Dual-port bass-reflex design with two 6½-in

SPEAKERS

woofers and 3/8-in titanium-dome tweeter. Power handling 100 W; FR 43-20,000 Hz \pm 2.5 dB; sens 93 dB; imp 4 ohms. 9 3/4 x 36 x 12 3/4 in \$250

PHASE TECHNOLOGY

PC-10.5 3-Way Speaker

10-in solid-piston woofer, 5/4-in Kevlar-laminated solid-piston midrange, and 1-in ferrofluid-cooled soft-dome tweeter. Features 38-oz woofer magnet; crossover with polypropylene capacitors and 16-gauge insulated mil-spec silver-plated copper interconnects. Power handling 150 W; FR 25-20,000 Hz \pm 2 dB; sens 89 dB; imp 8 ohms. Piano-black finish. 13 x 44 x 13 1/2 in; 110 lb \$2,400/pr

PC-8.5 3-Way Speaker

10-in solid-piston woofer, 5/4-in solid-piston midrange, and 1-in soft-dome tweeter. Power handling 120 W; FR 35-20,000 Hz \pm 2 dB; sens 89 dB; imp 4 ohms. Dark-oak, walnut, or black finish. 13 x 39 1/2 x 11 1/4 in; 90 lb \$1,200/pr
PC-6.5. As above, 8-in woofer. Power handling 100 W; FR 42-20,000 Hz \pm 2 dB. 11 x 36 1/2 x 9 in; 58 lb \$900/pr

Model 9T 3-Way Speaker

Low-diffraction design with 8-in polypropylene woofer, 1 1/2-in rear-firing ferrofluid-cooled soft-dome midrange, and 1-in ferrofluid-cooled soft-dome tweeter. Power handling 120 W; FR 35-20,000 Hz \pm 3 dB; sens 91 dB; imp 8 ohms. Black cloth-covered cabinet with black-laminate top and base; inlaid-oak optional. 10 x 38 1/2 x 14 1/2 in; 68 lb \$750/pr

PC-40/50 MkII Subwoofer/Satellite System

PC50 subwoofer and two PC40 satellites. Power handling 100 W rms; FR 30-20,000 Hz \pm 3 dB; sens 89 dB SPL/W/m; imp 8 ohms; crossover points 150 and 1,500 Hz \$730

PC-80 2-Way Speaker

6 1/2-in solid-piston woofer and 1-in soft-dome tweeter. Power handling 100 W; FR 50-20,000 Hz \pm 3 dB; sens 88 dB; imp 6 ohms. Dark-oak, light-oak, walnut, or black finish. 9 1/2 x 15 1/2 x 11 1/4 in; 32 lb \$650/pr

Model 7T 2-Way Speaker

Low-diffraction design with 8-in polypropylene woofer and 1-in ferrofluid-cooled soft-dome tweeter. Power handling 100 W; FR 40-20,000 Hz \pm 3 dB; sens 90 dB; imp 8 ohms. Black cloth-covered cabinet with black-laminate top and base; inlaid-oak optional. 9 3/4 x 36 1/2 x 12 in; 52 lb \$550/pr

CI-60 IV 2-Way In-Wall Speaker

6-in solid-piston woofer and 1-in soft-dome tweeter. Features auto-resetting thermal circuit breakers; screened woofer baskets. 5-way binding posts. Power handling 80 W; FR 40-20,000 Hz; imp 4 ohms. 5-yr warranty \$500/pr

PC 2-Way Center-Channel Speaker

Two 5/4-in woofers and 1-in ferrofluid-cooled soft-dome tweeter. Features magnetic shielding; angled cabinet rear. Power handling 75 W; FR 75-20,000 Hz \pm 2 dB; sens 90 dB; imp 8 ohms. Black vinyl finish. 20 x 6 1/2 x 10 1/2 in; 26 lb \$300

CI-20 IV 2-Way In-Wall Speaker

6-in cone woofer and 2 1/4-in cone tweeter. Features auto-resetting thermal circuit breakers; screened woofer basket. 5-way binding posts. Power handling 60 W; FR 55-18,000 Hz; imp 8 ohms. 5-yr warranty \$300/pr



PHILIPS

DSS-930 2-Way Powered DSP Speaker System

Acoustic-suspension design with two 5/4-in woofers, rectangular polyimide-membrane tweeter, 80-W woofer amp, 20-W tweeter amp, and integral DSP/crossover. Features DSP for FR-, phase-, and crossover-error compensation; crossover with 36-dB/oct slope; four 1-bit D/A converters; soft-clipping tweeter-protection circuitry. Digital input. Crossover point 4,000 Hz; FR 40-20,000 Hz \pm 3 dB; S/N 100 dB. 8 3/4 x 23 x 13 in; 35 lb \$1,200
DSC-950. Digital source selector for above. Features 7 analog/digital inputs; multiroom capability for up to 12 DSS-930 speakers via digital bus \$520

PINNACLE

PN Sub+ and a pair of PN 2+ are also sold together as a system for \$329.

Arctic 2 2-Way Speaker

4th-order vented design with two 5/4-in mineral-filled polypropylene woofers and 1-in ferrofluid-cooled metal-dome tweeter. Features butyl woofer surrounds. Power handling 100 W rms; FR 38-22,000 Hz; crossover point 3,000 Hz; sens 90 dB; imp 4 ohms. Black or white lacquer finish. 14 1/2 x 9 1/2 x 8 3/4 in \$440/pr

Arctic 1. As above, one woofer. Power handling 75 W rms; FR 45-22,000 Hz; crossover point 2,500 Hz; sens 86 dB SPL/W/m; imp 8 ohms. 11 1/4 x 7 3/4 x 6 1/2 in \$360/pr

PN Sub+ Subwoofer

Two 6 1/2-in downward-firing drivers. Features braced partitioned enclosure with non-parallel internal walls; switchable 6-dB/oct crossover. Power handling 100 W cont avg; imp 4/8 ohms. 13 3/4 x 19 1/2 x 11 1/2 in \$250

PN 5+ 2-Way Bookshelf Speaker

5/4-in polypropylene woofer and 3/4-in polycarbonate tweeter. Power handling 50 W cont avg; FR 50-21,000 Hz; sens 86 dB SPL/W/m; imp 6 ohms; crossover point 5,000 Hz. 6 3/4 x 11 1/4 x 6 1/2 in; 9 lb \$195/pr

PN 2+ 2-Way Mini Speaker

4-in cone woofer and 3/4-in polycarbonate tweeter. Power handling 40 W cont avg; FR 65-21,000 Hz; sens 86 dB SPL/W/m; imp 6 ohms; crossover point 5,500 Hz. Black-oak vinyl finish. 6 3/4 x 10 3/4 x 6 1/2 in; 7 lb \$160/pr

PIONEER

TZ-9LTD 3-Way Speaker

Bass-reflex design with two 10-in woofers, 2 1/2-in dome midrange, and 1-in dome tweeter. Features ceramic-graphite tweeter and midrange diaphragms; midrange and tweeter mounted on separate boards; internally braced enclosure. Biamp/biwire terminals; gold-plated binding posts. Power handling 300 W max; FR 20-40,000 Hz; sens 91 dB SPL/W/m; imp 4 ohms; crossover points 600 and 4,000 Hz. Piano black finish. 14 3/4 x 47 1/4 x 16 1/4 in; 143 lb \$1,400

TZ-7LTD 3-Way Speaker

Bass-reflex design with two 8-in woofers, 4-in cone midrange, and 1-in dome tweeter. Features ceramic-carbon tweeter diaphragm; internally braced enclosure. Biamp/biwire terminals; gold-

plated binding posts. Power handling 250 W max; FR 20-40,000 Hz; sens 89 dB SPL/W/m; imp 4 ohms; crossover points 800 and 4,000 Hz. Piano black finish \$700

S-F100 2-Way In-Wall Speaker

6 1/2-in woofer and 1-in titanium-dome tweeter. Power handling 60 W max; FR 200-20,000 Hz; sens 87 dB; imp 6.5 ohms. 8 1/2 x 15 1/4 x 3 1/2 in; 4 lb \$350/pr

Subwoofer/Satellite Systems

Each satellite is magnetically shielded, features a 4-in midrange and a 2 1/2-in tweeter, and measures 6 3/4 x 10 3/4 x 4 1/4 in. Each surround speaker features a 4-in midrange, a 2-in tweeter, and measures 6 3/4 x 10 3/4 x 4 1/4 in. Each subwoofer features two 4 1/4-in drivers, a black finish, and measures 7 1/8 x 21 1/8 x 16 1/8 in. Satellite and surround speakers are available in black or white. Common specs for all systems, except S-SR55, include power handling 130 W max; FR 40-20,000 Hz; sens 87 dB SPL/W/m; crossover points 150 and 1,300 Hz; imp 8 ohms.

S-V401. 3 satellites, 2 surround speakers, and 1 subwoofer. Power handling 130 W max. Black or white finish \$880

S-V301. 2 satellites, 2 surround speakers, and 1 subwoofer. Black or white finish \$770

S-4D. 3 satellites and one subwoofer \$660

S-3D. 2 satellites and one subwoofer \$550

S-SR55. 2 surround speakers. Power handling 130 W max; FR 150-20,000 Hz; sens 87 dB SPL/W/m; crossover point 3,000 Hz \$220

POLK

SRS 1.2TL Signature 3-Way Speaker

Eight 6 1/2-in trilaminate-polymer woofers, four 1-in trilaminate polymer-dome tweeters, and 15-in planar sub-bass radiator. Features proprietary Stereo Dimension Array technology for improved imaging. Power handling 1,000 W cont avg; FR 27-25,000 Hz +0, -3 dB; imp 8 ohms. Oiled-oak or walnut finish. 21 x 63 1/2 x 13 1/2 in; 185 lb \$3,400/pr

SRS 3.1TL Signature 3-Way Speaker

Five 6 1/2-in trilaminate polymer woofers, 1-in trilaminate polymer/metal-dome tweeter, and 12-in planar sub-bass radiator. Features proprietary Stereo Dimension Array technology for improved imaging. Power handling 500 W; FR 32-25,000 Hz +0, -3 dB; imp 8 ohms. Oiled-oak or walnut finish. 15 1/4 x 48 x 13 1/2 in \$2,000/pr

LS90 2-Way Speaker

Ported design with four 6 1/2-in woofers and 1-in dome tweeter. FR 20-26,000 Hz; sens 90 dB SPL/W/m; imp 8 ohms; crossover point 2,500 Hz. Rosewood-laminate or oak finish. 13 x 40 x 15 in; 70 lb \$1,499/pr
LS70. As above, two 7 1/2-in woofers. FR 25-26,000 Hz. 12 x 37 x 15 in; 59 lb \$999/pr
LS50. As LS90, two 6 1/2-in woofers. FR 30-26,000 Hz; sens 89 dB SPL/W/m \$699/pr

RM3000 Subwoofer/Satellite System

Subwoofer with two 6 1/2-in drivers and 10-in passive radiator; two satellites, each with 3 1/2-in midrange and 3/4-in dome tweeter. Power handling 125 W; FR 42-18,000 Hz +0, -3 dB; imp 8 ohms. Black-matrix, piano-black, or white finish. Subwoofer 12 1/2 x 20 1/4 x 13 in. Satellites 7 x 4 3/4 x 5 1/2 in. 46 lb \$750

S10 3-Way Speaker

10-in woofer, 7 1/2-in midrange, 1-in dome tweeter, and passive radiator. FR 25-25,000 Hz; sens 91 dB; imp 8 ohms. Black or oak finish with black-knit grille. 13 x 29 x 10 in; 33 lb \$599/pr

SPEAKERS



S8. As above, 7½-in woofer. FR 28-25,000 Hz; sens 90 dB. 12 x 25 x 9 in; 28 lb \$499/pr

S6. As S10, 6½-in woofer and 6½-in midrange. FR 30-25,000 Hz; sens 91 dB SPL/W/m. 10 x 22 x 8 in; 17.5 lb \$399/pr

RM1000W Subwoofer

Two 6½- and 8-in drivers. FR 25-300 Hz; sens 89 dB. Black. 12½ x 20¼ x 13 in; 38 lb \$350

S4 2-Way Speaker

6½-in midrange, 1-in dome tweeter, and passive radiator. FR 30-25,000 Hz; sens 91 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Black or oak finish with black knit grille. 10 x 16 x 7 in; 13.5 lb \$259/pr

M³ 2-Way Bookshelf Speaker

5¼-in polymer laminate woofer and ½-in polycarbonate tweeter. FR 67-20,000 Hz; sens 89 dB SPL/W/m; imp 8 ohms. Black with knit grille. 11¼ x 6½ x 8½ in; 14 lb \$170/pr

CS100 2-Way Center-Channel Speaker

Two 4-in woofers and ¾-in dome tweeter. Power handling 100 W; FR 60-20,000 +0, -3 dB; sens 89 dB SPL/W/m; imp 8 ohms. Black with knit grille. 18 x 6 x 6½ in; 7 lb \$170

Architectural Reference AB Series

AB-900 In-Wall Subwoofer/Satellite System

Subwoofer with two 6½-in drivers; two satellites, each with 2½-in midrange and ¾-in tweeter. Power handling 150 W; sens 88 dB; imp 8 ohms; FR 40-20,000 Hz +0, -3 dB. Subwoofer 14½ x 21¼ x 3¾ in. Satellites 6½ x 4 x 3¾ in. 45 lb \$800

AB-700 2-Way In-Wall Speaker

6½-in trilaminate-polymer woofer and 1-in silver-coil polymer-dome tweeter. Power handling 125 W cont; FR 55-20,000 Hz +0, -3 dB; imp 6 ohms. Off-white. 6¼ x 9¼ x 3 in; 13 lb .. \$400/pr

AB-610 2-Way In-Wall Speaker

Round frame with 6½-in woofer and ¾-in dome tweeter. FR 45-20,000 Hz; sens 90 dB SPL/W/m. White paintable finish. 7¼-in diameter .. \$250/pr

PROAC

Studio One MkII 2-Way Speaker

6½-in woofer and 1-in dome tweeter. Power handling 150 W max; FR 40-30,000 Hz; imp 8 ohms; sens 88 dB. 8 x 16 x 10 in \$1,300/pr

Tablette MkII 2-Way Bookshelf Speaker

4½-in woofer and ¾-in dome tweeter. Power handling 100 W max; FR 45-20,000 Hz; imp 8 ohms; sens 87 dB. 6 x 10½ x 9¼ in \$825/pr

PSB

Stratus Gold 3-Way Speaker

10-in woofer, 6-in midrange, 1-in aluminum-dome tweeter. Power handling 250 W max; FR 36-20,000 Hz ± 1 dB; crossover points 250 and 2,200 Hz; sens 88 dB; imp 4 ohms. Black, light, or dark oak finish \$2,000/pr

PSB-800 2-Way Speaker

Two 8-in carbon-filled polypropylene woofers and 1-in ferrofluid-cooled cloth-dome tweeter. Features PVC nitrile woofer surround; cabinet bracing; bipolar capacitors; frameless grille. Includes steel floor spikes. Power handling 200 W; FR 48-20,000 Hz ± 1.5 dB; sens 92 dB; imp 8 ohms; crossover point 2,000 Hz. Black or medium oak finish. 10 x 35¼ x 13½ in; 45 lb . \$799/pr

HW-1 2-Way In-Wall Speaker

6½-in polypropylene woofer and ¾-in textile-dome tweeter. Power handling 75 W max; crossover point 2,400 Hz; FR 56-20,000 Hz ± 2 dB; sens 89 dB; imp 8 ohms. Off-white \$350/pr

PSB-300 2-Way Bookshelf Speaker

6-in polypropylene woofer and ¾-in ferrofluid-cooled polyimide-dome tweeter. Features treated-foam woofer surround removable grilles; bipolar capacitors. Power handling 80 W; FR 75-20,000 Hz ± 2 dB; sens 91 dB; imp 6 ohms; crossover point 3,000 Hz. Black or medium oak finish. 8½ x 14¼ x 9½ in; 13 lb \$299/pr

Alpha 2-Way Bookshelf Speaker

6½-in woofer and ½-in ferrofluid-cooled poly-dome tweeter. Power handling 80 W; FR 90-20,000 Hz ± 2 dB; sens 90 dB; imp 6 ohms; crossover point 3,000 Hz. Simulated black-oak finish. 8¼ x 12½ x 9½ in; 9.5 lb \$199/pr

QUAD

ESL-63 US Monitor Electrostatic Speaker

Full-range dipole design. Features protection circuitry. Power handling 150 W; sens 86 dB SPL/W/m; imp 8 ohms; axis band limits -6 dB at 35 Hz, third-order, -6 dB at 20,000 Hz. Black finish. 28 x 36 x 11 in; 46.5 lb \$4,995/pr

SW-63 Subwoofer

Dipole design with two 12-in drivers. Features bass-level control; mono/stereo switch. Black finish. 18 x 28 x 11 in; 41 lb \$3,000

REALISTIC BY RADIO SHACK

Nova 18 2-Way Speaker

Bass-reflex design with 10-in woofer and 3-in tweeter. Features tuned port; removable grille. Power handling 100 W; FR 65-20,000 Hz; sens 90 dB SPL/W/m. Oiled walnut finish. 12¼ x 22½ x 8½ in; 17.5 lb \$200/pr

Model 7W 2-Way Mini Speaker

4-in woofer and 1-in soft-dome tweeter. Spring terminals. Power handling 40 W max ... \$120/pr

Model 7 2-Way Mini Speaker

4-in woofer and 1-in soft-dome tweeter. Features die-cast metal enclosure; hanger slots and recessed spring connectors for wall mounting. Power handling 40 W. 4¾ x 7 x 4¾ in ... \$100/pr

ROGERS

P-24A 3-Way Speaker

Symmetrically loaded internal long-throw polypropylene-cone woofer providing output through forward-firing band-pass duct, 6½-in polypropylene-cone midrange, and 1-in time-aligned aluminum-dome tweeter. Features sloped baffle for midrange and tweeter. Power handling 250 W; FR 45-20,000 Hz ± 2 dB; sens 86 dB; crossover points 100 and 2,300 Hz; imp 4 ohms. Black-ash or walnut veneer finish with black cloth grille. 9¼ x 41 x 13¼ in; 64 lb \$4,000/pr

LS8a 2-Way Speaker

Modified acoustic-suspension design with two 8¼-in polypropylene woofers and ¾-in alumi-

num-dome tweeter. Butterworth 3rd-order alignment. Biamp/biwire terminals. Includes foot spikes. Power handling 100 W; FR 50-20,000 Hz ± 2 dB; sens 90 dB; imp 8 ohms. Simulated-walnut or black-veneer finish with black cloth grille. 11 x 18 x 10½ in; 28.6 lb \$1,100/pr

LS2a/2 2-Way Bookshelf Speaker

Bass-reflex design with 8-in polypropylene woofer and ¾-in aluminum-dome tweeter. Features Butterworth quasi-3rd-order alignment with -3 dB at 60 Hz; 18-dB/oct crossover; critically damped particleboard construction with MDF baffle; Kapton woofer former. Power handling 100 W; FR 80-20,000 Hz ± 2 dB; sens 86.5 dB SPL/W/m; imp 8 ohms; crossover point 3,500 Hz. Simulated-walnut or black veneer finish with black grille. 9 x 14 x 18¼ in; 13.2 lb \$550/pr

SENNET

SH600 Home Theater Speaker System

Four satellites, each with 4-in woofer and ½-in tweeter, one 2-way center-channel speaker, and one subwoofer with 8-in driver \$375

SEQUERRA ASSOCIATES

MET-7 MkII 2-Way Bookshelf Speaker

Sealed-box design with 6½-in polypropylene woofer and 2-in midrange/tweeter. Features 6-dB/oct crossover with air-core inductors, polypropylene capacitors, and OFC wiring. Gold-plated 5-way binding posts. Midrange/tweeter level control. Power handling 250 W rms; FR 54-20,000 Hz +2 dB; sens 90 dB SPL/W/m; imp 8 ohms. Satin black-lacquer finish. 7¾ x 11¼ x 11¼ in; 13 lb \$990/pr

SHAHINIAN

Obelisk 3-Way Speaker

Folded double-prism 50-in hybrid transmission-line design with 8-in asymmetrically positioned poly woofer, two 1¾-in cambric-dome midranges, four ¾-in W-shaped dome tweeters, and 10-in mass-loaded polypropylene passive radiator. Power handling 500 W; imp 6 ohms. Walnut or oak finish; other finishes available. 14½ x 29 x 12½ in; 55 lb \$2,150/pr

Super Elf 2-Way Speaker

Vented design with 5¼-in polypropylene woofer and 1-in polypropylene-dome tweeter. Power handling 150 W; FR 55-18,000 Hz +0, -3 dB; imp 6 ohms. Natural, medium, or dark-oak finish. 6¾ x 12½ x 7¼ in; 17 lb \$750/pr

SIGNET

SL280 2-Way Speaker

Vented design with 8-in polypropylene woofer and 1-in aluminum-dome tweeter. Power handling 150 W; FR 40-25,000 Hz; sens 89 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Oak veneer. 9¼ x 25 x 12¾ in; 37 lb \$900/pr

SL260 2-Way Speaker

Vented design with 6-in polypropylene woofer and ¾-in aluminum-dome tweeter. Power handling 125 W; FR 45-25,000 Hz; sens 88 dB SPL/W/m; imp 8 ohms; crossover point 3,000 Hz. Oak veneer. 8¾ x 15½ x 12¾ in; 23 lb \$650/pr

SL250B/U 2-Way Speaker

Vented design with 5½-in paper-cone woofer and ¾-in metallized-polycarbonate dome tweeter. Power handling 100 W; FR 50-22,000 Hz; sens 88

SPEAKERS



dB SPL/W/m; crossover point 3,300 Hz. Black-vinyl finish. 12½ x 10 x 7 in; 17 lb \$300/pr

SNELL ACOUSTICS

Type B 4-Way Speaker

Acoustic-suspension design with 10-in rear-firing subwoofer, 10-in woofer, two 5¼-in polypropylene midranges, 1-in aluminum-dome tweeter, and ¾-in rear-firing tweeter. FR 20-20,000 Hz; min imp 4 ohms; sens 86 dB SPL/W/m; crossover points 40, 275, 2,700, and 5,000 Hz. 25 x 48 x 19 in; 152 lb \$4,490/pr

Type B Minor 3-Way Speaker

Acoustic-suspension design with 12-in side-firing woofer, two 5¼-in cast-frame polypropylene midranges, 1-in front tweeter, and ¾-in rear tweeter. FR 20-20,000 Hz ± 2 dB; min imp 4 ohms; sens 90 dB SPL/W/m \$3,390/pr

Type E/III 2-Way Speaker

Bass-reflex design with 8-in polymer-treated woofer, 1-in soft-dome tweeter, and ¾-in ferrofluid-cooled rear-loaded dome supertweeter. Gold-plated biwire/biamp terminals. Power handling 150 W cont; FR 39-20,000 Hz ± 1.75 dB; sens 91 dB SPL/W/m; imp 6 ohms; crossover point 2,700 Hz. Oak, dark oak, walnut, or black veneer finish. 13 x 35 x 11 in; 50 lb \$990/pr

Type K/II 2-Way Bookshelf Speaker

Acoustic-suspension design with 8-in polypropylene woofer and 1-in ferrofluid-cooled soft-dome tweeter. Biwire/biamp terminals. Power handling 100 W cont; FR 70-20,000 Hz ± 2 dB; sens 90 dB SPL/W/m; imp 8 ohms; crossover point 2,700 Hz. Oak, dark oak, walnut, or black veneer finish. 11 x 18 x 9 in; 26 lb \$475/pr

SNELL MULTIMEDIA

LCR-800 2-Way In-Wall Speaker

Two 6½-in polypropylene-cone cast-frame woofers and two ¾-in aluminum-dome tweeters. Features THX certification. FR 80-20,000 Hz; imp 4.2 ohms; sens 89 dB SPL/W/m. Gold Iridite brushed aluminum. 12 x 21½ x 3½ in; 26 lb. \$999

SUB-800 In-Wall Subwoofer

Acoustic-suspension design with 12-in cast-frame driver. FR 20-80 Hz; imp 5.6 ohms; sens 90 dB SPL/W/m. 14¼ x 53 x 6½ in; 70 lb \$799

LCR-500 2-Way Speaker

Two 6½-in polypropylene woofers and two ¾-in aluminum-dome tweeters. Designed for front placement in home-theater systems. Features THX certification; magnetic shielding. FR 80-20,000 Hz; sens 89 dB; imp 8 ohms. High-gloss black veneer finish. 9½ x 22 x 7½ in; 35 lb. \$799

SUR-500 2-Way Surround Speaker

Compact dipole design with two 6½-in polypropylene woofers and two 1-in aluminum-dome tweeters. Features THX certification. Power handling 150 W cont avg; FR 125-20,000 Hz; sens 85 dB; imp 8 ohms. High-gloss black veneer finish. 9½ x 16½ x 7¼ in; 30 lb \$799

SUB-750 Subwoofer

Acoustic-suspension design with 12-in cast-frame driver. FR 20-80 Hz; sens 90 dB SPL/W/m; imp 8 ohms. High-gloss black veneer finish. 18¼ x 23 x 11½ in; 60 lb \$499

SONANCE

Sonance 45 2-Way In-Wall Speaker

Infinite-baffle design with 8-in polypropylene

woofer and 1-in soft-dome tweeter. Features die-cast woofer frame; 24-dB/oct Butterworth crossover. 3-position high-frequency switch. Power handling 100 W; FR 35-22,000 Hz ± 2 dB; sens 90 dB SPL/W/m; crossover point 2,700 Hz; imp 8 ohms. Waterproofing available. 12 x 16 x 3½ in; 12 lb \$695/pr

AIS 500 2-Way In-Wall Speaker

Infinite-baffle design with 4-in polypropylene woofer, angled 1-in ferrofluid-cooled polycarbonate tweeter, and angled 3½-in polypropylene full-range driver. Features 6-dB/octave low-pass crossover; 12-dB/octave high-pass crossover. Power handling 75 W; FR 60-20,000 Hz ± 5 dB; sens 89 dB SPL/W/m; imp 6 ohms; crossover point 3,200 Hz. 12½ x 16½ x 3½ in \$499/pr

PSW2 In-Wall Subwoofer

Infinite-baffle design with 8-inch dual-voice-coil driver. Features crossover with 3-position level control; L/R inputs and outputs. Power handling 75 W; FR 30-125 ± 3 dB; sens 87 dB SPL/W/m; imp 6 ohms; crossover point 125 Hz. White with cloth or metal grille. 12 x 16 x 3½ in; 14 lb. \$460

Sonance IIIc 2-Way In-Wall Speaker

Infinite-baffle design with 6½-in polypropylene woofer and 1-in soft-dome tweeter. Features woofer with treated-urethane surround and screened basket; 2-position level control; 12-dB/oct crossover. Power handling 75 W; FR 45-20,000 ± 2 dB; crossover point 3,000 Hz; sens 88 dB SPL/W/m; imp 8 ohms. White with cloth or metal grille. 9 x 12 x 3¼ in; 9 lb \$399/pr

SB31 2-Way Indoor/Outdoor Speaker

Sealed-box design with 4-in polypropylene woofer and 1-in soft-dome tweeter. Features weather resistance. Includes wall-hanging bracket. Power handling 50 W; FR 70-20,000 ± 2 dB; sens 87 dB SPL/W/m; imp 6 ohms. Cloth or stainless steel grille. 5½ x 8½ x 5½ in \$325/pr

Sonance II 2-Way In-Wall Speaker

Infinite-baffle design with 6½-in polypropylene woofer and 1-in ferrofluid-damped polycarbonate tweeter. Features 6-dB/oct crossover; treated-urethane woofer surround; screened woofer basket. Power handling 50 W; FR 55-20,000 Hz ± 3 dB; sens 90 dB SPL/W/m; imp 8 ohms; crossover point 3,200 Hz. White ABS with cloth or metal grille. 9 x 12 x 3¼ in; 8 lb \$265/pr

SONY

SS-CN3 Center-Channel Speaker

Bass-reflex design with two 4-in woofers and 1-in dome tweeter. Features adjustable tweeter angle. Power handling 150 W; imp 6 ohms. Gray PVC finish \$280/pr

SS-CR300 Home Theater Speaker System

Two acoustic-suspension surround speakers, each with one 5-in driver; one center-channel speaker with two 4-in drivers. Power handling 50 W surround, 80 W center; FR 90-15,000 Hz surround, 80-15,000 Hz center; imp 8 ohms surround, 6 ohms center. Surround speaker: 8 x 6½ x 6½. Center speaker: 6½ x 17 x 6¼ in \$200

SOTA

Model 4 3-Way Speaker

Two separate enclosures with 8-in Kevlar woof-

er in one enclosure, dual-voice-coil 7-in Kevlar driver and inverted-dome Kevlar tweeter mounted on sloping baffle in quasi-pyramid-shaped second enclosure. Features 1¼-in cabinet walls; single/biwire and vertical biamp/triamp terminals. Power handling 200 W max; sens 89 dB SPL/W/m; imp 8 ohms; FR 38-22,000 Hz ± 3 dB. Brazilian rosewood or Macassar ebony. Woofer enclosure: 11½ x 32 x 16 in; 55 lb. Mid/tweeter enclosure: 12 x 16½ x 11½ in; 32 lb ... \$4,800/pr

SOUND DYNAMICS

SD 400ti 3-Way Speaker

Bass-reflex design with 10-in carbon-polypropylene woofer, 4½-in midrange, and ¾-in titanium-dome tweeter. Biwire/biamp terminals. Adjustable foot spikes. Power handling 250 W cont avg; FR 30-22,000 Hz ± 2 dB; sens 88 dB; crossover points 900 and 3,000 Hz; imp 6 ohms. Black-ash or oak finish. 13 x 33 x 11 in \$800/pr

ASUB-12 Powered Subwoofer

Dual-rear-ported design with 12-in driver; 90-W amp. Line- and speaker-level inputs; EQ switch; crossover adjustable from 50-130 Hz. Black-ash finish. 18 x 18 x 20 in \$500

SD 100ti 2-Way Bookshelf Speaker

Bass-reflex design with 6½-in carbon-polypropylene woofer and ¾-in titanium-dome tweeter. Power handling 125 W cont avg; FR 45-21,000 Hz ± 2 dB; sens 86 dB SPL/W/m; crossover point 1,900 Hz; imp 6 ohms. Black-ash or oak finish. 10 x 16 x 9 in \$300/pr

Home Theater Series

Cinesat-2 2-Way Satellite Speaker

Acoustic-suspension design with 4½-in polypropylene woofer and ½-in titanium-polycarbonate tweeter. Power handling 125 W cont avg; FR 140-22,000 Hz ± 3 dB; sens 86 dB SPL/W/m; crossover point 2,500 Hz; imp 6 ohms. 8 x 5 x 5 in; 5 lb \$249/pr

Cinesub Subwoofer

4th-order vented band-pass design with 6½-in driver. Power handling 125 W cont avg; FR 50-140 Hz ± 3 dB; sens 86 dB SPL/W/m; crossover point 140 Hz; imp 4 ohms. Black-ash vinyl veneer. 7 x 13 x 17 in \$199

Cinecenter Center-Channel Speaker

Dual-vented design with two 4½-in woofers and ½-in polycarbonate flared-dome tweeter. Features sloped baffle. Power handling 100 W cont avg; sens 86 dB SPL/W/m; crossover point 2,500 Hz; imp 8 ohms. Black-ash vinyl veneer ... \$149

SOUND-LAB

A-3 Electrostatic Speaker

Curved full-range element. Sens 84 dB SPL/W/m; imp 8 ohms. 35 x 73 x 11 in; 145 lb ... \$7,990/pr

B-5 Electrostatic Subwoofer

Single-membrane design. Features dual-mono configuration. FR 22-350 Hz ± 2 dB; sens 84 dB SPL/W/m; imp 50 ohms; crossover point 350 Hz. 57 x 72 x 28 in; 185 lb \$5,880

A-4 2-Way Electrostatic Speaker

61 x 20-in woofer element and 61 x 4-in tweeter element. FR 32-22,000 Hz ± 2 dB; sens 86 dB; imp 8 ohms; crossover point 750 Hz ... \$4,975/pr

Pristine Electrostatic Speaker

Full-range design. Power handling 100 W; FR 34-22,000 Hz ± 2 dB; sens 88 dB SPL/W/m; imp 8 ohms; 60 x 28 x 27 in; 100 lb \$3,990

SPEAKERS



SOUNDSTREAM

Granite 12 In-Wall Subwoofer

12-in driver. Features high-temperature voice coil with vented former. Power handling 250 W max; FR 33-500 Hz ± 3 dB; sens 96 dB SPL/W/m; imp 4 ohms. 4 $\frac{1}{2}$ -in mounting depth \$200

Granite 10 In-Wall Subwoofer

10-in driver. Power handling 200 W max; FR 37-500 Hz ± 3 dB; sens 93 dB SPL/W/m; imp 4 ohms. 3 $\frac{3}{8}$ -in mounting depth \$155

SPEAKERLAB

Auricle RD50 2-Way In-Wall Speaker

Infinite-baffle design with 12-in woofer and 3-in x 50-in ribbon tweeter. Power handling 275 W max; FR 21-20,000 Hz ± 3 dB; sens 87 dB SPL/W/m; crossover point 150 Hz; imp 8 ohms. White. Grille: 5 x 53 x 1 $\frac{1}{4}$ in (RD50); 17 $\frac{1}{4}$ x 17 $\frac{1}{4}$ in (W1258PI). 60 lb \$2,495

RD50 Ribbon Speaker. As above, without woofer. FR 150-20,000 Hz ± 3 dB; imp 4 ohms. 4 $\frac{1}{2}$ x 50 $\frac{1}{2}$ in \$499

W1258PI In-Wall Subwoofer. As Auricle, without tweeter. FR 21-150 Hz ± 3 dB ... \$600/pr

RD75 Ribbon Speaker

3 x 50-in ribbon element. FR 150-20,000 Hz ± 3 dB; sens 87 dB SPL/W/m; crossover point 150 Hz; imp 5 ohms. Black. 4 $\frac{1}{2}$ x 75 $\frac{1}{2}$ in \$799

DAS 3 2-Way Speaker

Bass-reflex design with 6 $\frac{1}{2}$ -in woofer and $\frac{1}{4}$ -in dome tweeter. FR 42-20,000 Hz; sens 89 dB SPL/W/m; crossover point 2,500 Hz; imp 8 ohms. Oiled-oak finish. 8 x 21 x 10 in; 23 lb. \$329/pr Kit \$279/pr

DAS/SW Subwoofer

Bass-reflex design with 10-in driver. FR 25-180 Hz; sens 91 dB SPL/W/m; imp 8 ohms. Oiled-oak finish. 18 x 18 x 18 in; 62 lb \$329 Kit \$240

SPICA

Angelus 2-Way Speaker

Mirror-imaged design with 8-inch plastic-cone woofer and 1-inch soft-dome tweeter. Features computer-optimized crossover; adjustable carpet spikes. Power handling 200 W max; FR 35-17,500 Hz ± 3 dB; imp 8 ohms; crossover 3,400 Hz. Walnut or oak finish. 21 x 46 x 10 $\frac{1}{4}$ in; 57 lb \$1,275/pr

TC-50 2-Way Bookshelf Speaker

Acoustic-suspension design with 6 $\frac{1}{2}$ -inch cone woofer and 1-inch dome tweeter. Features triangular cabinet designed to keep output from 350-5,000 Hz within 15° of absolute phase. Power handling 50 W cont avg; FR 58-16,500 Hz ± 3 dB; sens 83 dB SPL/W/m; imp 4 ohms; crossover point 2,500 Hz. Oak, walnut, or black finish. 13 x 15 $\frac{1}{2}$ x 11 $\frac{1}{4}$ in; 21 lb \$550/pr

STAX KOGYO

ELS-F81X Electrostatic Speaker

Full-range element electrically divided into 3 vertical sections. Tilttable panel to modify vertical dispersion. Power handling 180 W max; FR 40-21,000 Hz; sens 76 dB; imp 3 ohms. Oiled teak baffle. 18 x 44 x 11 in; 51 lb \$9,995/pr

SUMIKO

Minima 2-Way Speaker

4 $\frac{1}{2}$ -in cellulose-acrylate cone woofer and 1 $\frac{1}{4}$ -in ferrofluid-cooled silk-dome tweeter. Features 6-

dB/oct crossover. Gold-plated inputs. Power handling 100 W max; sens 84 dB; imp 8 ohms. Walnut cabinet. 8 x 12 $\frac{1}{2}$ x 9 $\frac{1}{2}$ in; 33 lb ... \$1,800

Minuetto 2-Way Speaker

6 $\frac{1}{4}$ -in cellulose-acrylate cone woofer and 1-in silk-dome tweeter. Features 6-dB/oct crossover. Gold-plated binding posts. Power handling 120 W max; sens 88 dB; imp 8 ohms. Walnut cabinet. 9 $\frac{1}{4}$ x 14 x 11 $\frac{1}{4}$ in; 44 lb \$1,500

SYMDX

Gamma Signature 2-Way Speaker

Vented design with 7-inch dual-voice-coil Neoflex cone woofer and 1-inch ferrofluid-cooled aluminum-dome tweeter. Features cross bracing; polypropylene capacitors. Power handling 150 W; FR 45-20,000 Hz; sens 88 dB SPL/W/m; imp 8 ohms; crossover point 2,300 Hz. Oak or black-lacquer formica \$1,750/pr

TANNOY

Definition D700 2-Way Speaker

Twin-ducted port design with 10-in woofer and 10-in dual-concentric driver with tweeter element centered within driver. Features 6-dB/oct crossover. Gold-plated biwire/biamp terminals. Power handling 125 W rms; FR 35-25,000 Hz ± 3 dB; sens 93 dB; dispersion 90° at 10,000 Hz; crossover point 1,500 Hz; imp 6 ohms. 15 x 39 $\frac{1}{2}$ x 14 $\frac{1}{4}$ in; 90 lb \$4,995/pr

Model 615 3-Way Speaker

8-in full-range driver, 8-in dual-concentric midrange/tweeter, and 8-in passive cone. Features 6-dB/oct low-pass crossover; gold-plated terminals. Power handling 170 W cont avg; FR 45-30,000 Hz ± 3 dB; sens 92 dB; imp 6 ohms; crossover points 400 and 2,500 Hz. 12 $\frac{1}{2}$ x 38 x 8 $\frac{1}{2}$ in; 46 lb \$1,600/pr

Model 611 3-Way Speaker

Sealed-box design with 8-in woofer and 8-in dual-concentric midrange/tweeter. Features 6-dB/oct low-pass crossover. Power handling 150 W cont avg; FR 45-30,000 Hz ± 3 dB; sens 91 dB; imp 6 ohms; crossover points 400 and 2,500 Hz. 12 $\frac{1}{2}$ x 27 $\frac{1}{4}$ x 8 $\frac{1}{2}$ in; 33 lb \$900/pr

Model 607 2-Way Bookshelf Speaker

Ported design with 8-in woofer and 1-in dome tweeter. Features 6-dB/oct high-pass crossover. Power handling 100 W cont avg; FR 50-30,000 Hz ± 3 dB; sens 88 dB; imp 8 ohms; crossover point 3,000 Hz. 12 $\frac{1}{2}$ x 19 $\frac{1}{2}$ x 8 $\frac{1}{2}$ in; 20 lb \$600/pr

C Series

C-88 2-Way Speaker

Two 8-in polypropylene cone woofers and 1-in liquid-cooled soft-dome tweeter. Features 1 $\frac{1}{4}$ -in woofer voice coil. Power handling 175 W rms; FR 35-20,000 Hz ± 3 dB; sens 93 dB SPL/W/m; imp 6 ohms. Black or medium-oak wood-grain vinyl finish. 11 x 35 $\frac{1}{2}$ x 14 $\frac{1}{2}$ in; 48 lb \$699/pr

C-8 2-Way Bookshelf Speaker

8-in polypropylene cone woofer and 1-in liquid-cooled soft-dome tweeter. Features 1 $\frac{1}{4}$ -in woofer voice coil. Power handling 120 W rms; FR 45-20,000 Hz ± 3 dB; sens 90 dB SPL/W/m; imp 6 ohms. Black or medium-oak wood-grain vinyl finish. 10 $\frac{1}{2}$ x 19 x 8 $\frac{1}{2}$ in; 18 lb \$399/pr

C-5 2-Way Bookshelf Speaker

5-in polypropylene cone woofer and $\frac{1}{4}$ -in liquid-cooled soft-dome tweeter. Features 1-in woofer voice coil. Power handling 75 W rms; FR 58-20,000 Hz ± 3 dB; sens 87 dB SPL/W/m; imp 6 ohms. Black or medium-oak wood-grain vinyl finish. 8 x 12 $\frac{1}{2}$ x 7 $\frac{3}{8}$ in; 9 lb \$229/pr

TDL

Studio 3 2-Way Speaker

Transmission-line design with two 8-in Cobex-cone woofers and 1-in magnesium-alloy-dome tweeter. Biwire/biamp terminals. FR 24-20,000 Hz; sens 87 dB SPL/W/m; crossover point 3,000 Hz; imp 8 ohms. Walnut or black-oak veneer finish. 12 x 37 x 16 in; 59 lb \$2,595/pr

Studio 0.5 2-Way Speaker

Transmission-line design with 5 $\frac{1}{2}$ -in Cobex woofer and 1-in magnesium-alloy-dome tweeter. Features Kapton-voice-coil former and phase plug. Biwire/biamp terminals. Power handling 100 W cont avg; FR 30-20,000 Hz; sens 85 dB; crossover point 3,000 Hz; imp 6 ohms. Black wood-grain finish. 8 x 24 x 12 in; 30 lb ... \$995/pr

TECHNICS

SB-CX700 3-Way Speaker

12-in Mica-cone woofer, 4-in midrange, 1-in Mica dome tweeter, and 13-inch passive radiator. Features nondiffractive cabinet; tweeter with attenuator and auto-reset protection. Power handling 200 W; FR 25-45,000 Hz; sens 90 dB SPL/W/m; imp 6 ohms; crossover points 400 and 3,500 Hz. 14 $\frac{1}{2}$ x 35 $\frac{1}{2}$ x 12 $\frac{1}{4}$ in; 52 lb \$700/pr

SB-CX500 3-Way Speaker

10-in Mica-cone woofer, 4-in midrange, 1-in Mica dome tweeter, and 11-in passive radiator. Power handling 150 W; FR 28-45,000 Hz; sens 89 dB SPL/W/m; imp 6 ohms; crossover points 500 and 3,500 Hz. 12 $\frac{1}{2}$ x 32 $\frac{1}{4}$ x 12 $\frac{1}{4}$ in; 37 lb. \$600/pr

THIEL

CS2 2 Coherent Source 3-Way Speaker

Woofer with copper rings and metal-dome tweeter with short-coil/long-gap design. Features sloping baffle. FR 35-20,000 Hz ± 2 dB; sens 86 dB; imp 4 ohms. Amberwood or black wood finish. 12 x 42 x 13 in; 70 lb \$2,250/pr

CS1.2 Coherent Source 2-Way Speaker

Polypropylene woofer and metal-dome tweeter. Features sloping baffle; internal bracing. Power handling 150 W cont avg; FR 52-18,000 Hz ± 2 dB; sens 87 dB SPL/W/m; imp 4 ohms. Amberwood or black wood finish with sculpted speaker grille \$1,250/pr

SCS Coherent Source 2-Way Speaker

Woofer with coaxially mounted tweeter. Features internal bracing; crossover with polystyrene capacitors. FR 66-10,000 Hz ± 2 dB; sens 87 dB; imp 4 ohms. Black wood finish... \$1,090/pr

TRIAD

System Seven Powered Subwoofer/Satellite System

Subwoofer with 10 $\frac{1}{4}$ -in polypropylene driver and 150-W power amp; two satellites, each with 5-in polypropylene midrange and 1-in fabric-dome tweeter. Subwoofer: FR 28-90 Hz ± 3 dB. Satellite: power handling 100 W cont avg; FR 110-20,000 Hz ± 2 dB; imp 8 ohms; crossover point 2,400 Hz; sens 90 dB SPL/W/m. Black, white, or galaxy textured-enamel finish. Subwoofer 13 x 13 x 13 in. Satellite 5 $\frac{1}{2}$ x 10 x 5 $\frac{1}{2}$ in \$1,050

SPEAKERS



System 3 Subwoofer/Satellite System

Subwoofer with 8-in dual-voice-coil driver; two satellites, each with 4-in treated-paper midrange and 1/2-in Mylar-dome tweeter. Subwoofer: power handling 75 W; FR 43-105 Hz ± 3 dB; imp 4 ohms; sens 87 dB SPL/W/m. Satellite: power handling 75 W; FR 125-20,000 Hz ± 3 dB; imp 8 ohms; crossover point 3,900 Hz; sens 87 dB SPL/W/m. Black, white, or galaxy textured-enamel finish. Subwoofer 12 x 16 x 12 in. Satellite 5 1/2 x 8 3/4 x 5 in. \$500

VANDERSTEEN

Model 3 3-Way Speaker

10-in active long-throw dual-spider acoustic coupler, 8-in long-throw polycone woofer, 4 1/2-in proprietary ferrofluid-cooled polycone midrange, and 1-in critically damped ferrofluid-cooled metal-alloy dome tweeter. Features biwire/biamp terminals. Power handling 200 W; FR 26-30,000 Hz ± 3 dB; sens 89 dB SPL/W/m; imp 6 ohms; crossover points 600 and 5,000 Hz. 16 x 48 x 10 1/4 in; 97 lb. \$2,395/pr

Model 2Ce 3-Way Speaker

10-in active long-fiber acoustic coupler, 8-in polycone woofer, 4 1/2-in ferrofluid-cooled polycone midrange, and 1-in critically damped ferrofluid-cooled metal-alloy tweeter. Features biwire/biamp terminals. Power handling 160 W; FR 28-29,125 Hz ± 3 dB; sens 88 dB SPL/W/m; imp 7 ohms; crossover points 600 and 5,000 Hz. 16 x 39 3/4 x 10 1/4 in; 63 lb. \$1,295/pr

Model 1B 2-Way Speaker

Rear slot-loaded design with 8-in polycone woofer and 1-in metal-alloy dome tweeter. Power handling 100 W; FR 38-20,000 Hz ± 3 dB; sens 90 dB SPL/W/m; imp 6.8 ohms; crossover point 2,800 Hz. 12 x 36 x 10 in; 50 lb. \$695/pr

VECTOR RESEARCH

VSP-230 Subwoofer/Satellite System

Subwoofer with 8-in driver; 2 satellites, each with 3 1/2-in shielded woofer and 2 1/2-in tweeter. Sens 89 dB SPL/W/m satellite, 90 dB SPL/W/m subwoofer. Subwoofer 5 1/2 x 20 1/2 x 12 1/2 in. Satellites 4 1/2 x 8 1/4 x 4 1/2 in. 18 lb. \$500

VELODYNE

ULD-18 Series II Powered Subwoofer

18-in servo-controlled, downward-firing driver with 1/4-in peak-to-peak linear travel; 400-W Class B power amp. Features open/short circuit, low-voltage, and overload protection. FR 18-85 Hz ± 3 dB; input sens 300 mV; imp 20,000 ohms. Walnut, oak, or black finish. Cabinet: 23 1/2 x 21 1/2 x 31 in. Amp: 3 1/2 x 11 x 17 in. 120 lb. \$2,750

F-1500 Powered Subwoofer

15-in servo-controlled driver; 250-W Class A/B power amp. Features passive 85-Hz high-pass filter; adjustable 40-100 Hz low-pass filter. FR 18-85 Hz ± 3 dB; THD 0.7%. Black vinyl wood-grain, granite vinyl finish. 20 x 20 x 20 in; 79 lb. \$1,495

F-1200 Powered Subwoofer

12-in servo-controlled driver; 100-W Class A/B power amp. Features passive 85-Hz high-pass filter; adjustable 40-100 Hz low-pass filter. FR 20-85 Hz ± 3 dB; THD 1%. Black vinyl wood-grain, granite vinyl finish. 16 1/2 x 16 1/2 x 16 1/2 in; 55 lb. \$1,095

VENTURI BY BIC AMERICA

V830 3-Way Speaker

8-inch carbon/polypropylene woofer, 6-in cast-frame polycarbonate midrange, and 1-in poly-laminate soft-dome tweeter. Power handling 250 W; FR 38-22,000 Hz; sens 91 dB SPL/W/m; imp 8 ohms; crossover points 1,000 and 5,000 Hz. 10 1/4 x 40 x 11 1/2 in; 45 lb. \$799/pr

V820 2-Way Speaker

8-in woofer and 1-in poly-laminate soft-dome tweeter. Power handling 150 W; FR 40-22,000 Hz ± 3 dB; sens 91 dB SPL/W/m; imp 8 ohms; crossover point 2,500 Hz. 10 1/4 x 26 1/4 x 11 1/2 in; 29 lb. \$439/pr

M6 2-Way In-Wall Speaker

6 1/2-in polycarbonate cone woofer and 1-in soft-dome tweeter. FR 50-20,000 Hz. 8 1/2 x 12 x 3 1/2 in. \$229/pr

V62 2-Way Bookshelf Speaker

6-in woofer and 1/2-in poly-laminate tweeter. Power handling 100 W; FR 50-20,000 Hz; sens 90 dB SPL/W/m; imp 8 ohms; crossover point 4,000 Hz. 8 1/2 x 14 1/4 x 9 1/4 in; 14 lb. \$219/pr

VMPS

Super Tower/R 5-Way Speaker

Multiband bass design with two 15-in woofers, 12-in woofer, two 5-in cone midranges, two 2-in ribbon tweeters, and two 1-in dome supertweeters. Separate level controls for midrange, tweeter, and supertweeter. FR 20-50,000 Hz ± 3 dB; sens 96 dB SPL/W/m; crossover points 80, 400, 4,000, and 12,000 Hz; imp 4 ohms. Oiled walnut finish. \$1,998/pr

Tower II 4-Way Speaker

Multiband design with three 12-in woofers, 5-in cone midrange, 1-in dome tweeter, and piezo supertweeter. Separate level controls for midrange, tweeter, and supertweeter. FR 22-50,000 Hz ± 3 dB; sens 95 dB SPL/W/m; crossover points 80, 400, 4,000, and 12,000 Hz; imp 4 ohms. \$1,298/pr

QSO 808 3-Way Speaker

Ported design with 12-in woofer, 5-in cone midrange, and 1-in dome tweeter. Separate level controls for midrange and tweeter. FR 34-20,000 Hz ± 3 dB; sens 94 dB SPL/W/m; crossover points 600 and 5,000 Hz; imp 8 ohms. Oiled-walnut finish. 15 x 26 x 12 in; 50 lb. \$690/pr

VMPS Original Subwoofer

Passive-radiator design with 12-in driver. FR 19-600 Hz; sens 94 dB SPL/W/m; imp 8 ohms. Oiled-walnut finish. 22 x 27 x 17 in; 95 lb. \$429

VORTEX

Signature Screen Subwoofer/Satellite System

Triple chamber, multivented transmission-line subwoofer with 8-in woofer; 2 satellites, each with 5-in fiberglass midrange in MDF chamber and 1-in aluminum-dome tweeter. Power handling 300 W; FR 27-25,000 Hz ± 3 dB; sens 89 dB SPL/W/m. Subwoofer 35 x 18 x 11 in; 69 lb. Satellite 14 x 18 x 11 in; 34 lb. \$1,950

WESTLAKE AUDIO

BBSM-5VNF 2-Way Speaker

Ported design with two 5-in woofers and 1 1/4-in cloth-dome tweeter. Power handling 150 W max; FR 63-18,000 Hz ± 3 dB; imp 4 ohms; crossover point 1,200 Hz. Oiled walnut finish. 7 1/2 x 41 1/2 x 7 1/2 in; 40 lb. \$2,680/pr

BBSM-4VNF 2-Way Speaker

Ported design with two 4-in woofers and 1/4-in cloth-dome tweeter. Power handling 100 W max; FR 65-20,000 Hz ± 3 dB; imp 4 ohms; crossover point 1,500 Hz. Oiled walnut finish. 6 1/4 x 39 1/2 x 11 in; 35 lb. \$2,180/pr

WHARFEDALE

Model 2130 Subwoofer/Satellite System

Subwoofer with two 8-in drivers in push-pull configuration; two satellites, each with 4-in midrange and two 1/4-in metal-dome tweeters. Power handling 40 W cont avg; FR 35-22,000 Hz; sens 89 dB; imp 8 ohms. Black-vinyl finish. Subwoofer: 12 1/2 x 8 x 19 1/4 in; 28 lb. Satellite: 5 1/4 x 8 3/4 x 4 1/4 in; 13 lb. \$600

CRS7 2-Way Speaker

Bass-reflex design with two 8-in woofers and 1-in tweeter. Power handling 140 W; sens 91 dB; imp 8 ohms. Black. 10 x 24 x 8 in. \$500/pr

CRS5. As above, one woofer. Power handling 125 W; sens 90 dB. 10 x 19 x 8 in. \$350/pr

CRS3. As above, 7-in woofer. Power handling 100 W; sens 89 dB. 9 x 15 x 7 in. \$250/pr

Diamond V 2-Way Bookshelf Speaker

5 1/4-in polypropylene woofer and 1-in metal-dome tweeter. Power handling 100 W; FR 47-25,000 Hz; sens 86 dB SPL/W/m. Black-ash finish. 7 1/2 x 10 1/2 x 8 1/4 in. \$300/pr

YAMAHA

Tri-Sound A1 Subwoofer/Satellite System

Two NS-A325 satellites and YST-SW100 powered subwoofer. \$599

Tri-Sound A2. As above, with YST-SW50 powered subwoofer (one 7-in woofer). \$499

YST-SW100 Powered Subwoofer

Active-servo-technology design with two 7-in cone drivers and 1 1/4-in air driver; 70-W amp into 5 ohms. Features magnetic shielding; continuously variable high-pass filter with 24-dB/oct slope. Line- and speaker-level inputs. Volume control. FR 21-180 Hz. Black finish. \$449

NS-A820A 2-Way Bookshelf Speaker

8-in polycarbonate woofer and 1-in microcell dome tweeter. Power handling 140 W rms; FR 50-22,000 Hz ± 3 dB; sens 90 dB SPL/W/m; imp 6 ohms. Oak-veneer finish. \$360/pr

YST-SW50 Powered Subwoofer

Active-servo-technology design with 7-in driver; 50-W amp into 6 ohms. Features magnetic shielding; variable high-pass filter (50-200 Hz) with 18-dB/oct slope. FR 25-200 Hz. Black finish. 8 1/4 x 18 1/4 x 13 1/4 in. \$329

WSX-10 2-Way In-Wall Speaker

6 1/2-in woofer and 1-in tweeter. Power handling 80 W nom; FR 50-25,000 Hz; sens 89 dB SPL/W/m; imp 6 ohms. White paintable finish and grille. 8 1/4 x 12 3/4 x 3 1/2 in. \$200

NS-C110 2-Way Center-Channel Speaker

Shielded cabinet with two 4 1/4-in cone woofers and 1-in soft-dome tweeter. Power handling 120 W max; FR 60-20,000 Hz; sens 92 dB SPL/W/m; imp 6 ohms. Black finish. 18 1/2 x 6 x 7 1/2 in. \$199

DIRECTORY OF MANUFACTURERS

Acoustat, 613 S. Rockford Dr., Tempe, AZ 85281 (800) 366-2349

Acoustic Research, 330 Turnpike St., Canton, MA 02021-2703 (617) 821-2300

Acurus, Mondial Designs, 2 Elm St., Ardsley, NY 10502 (914) 993-8008

Adecom, 11 Elkins Rd., E. Brunswick, NJ 08816 (908) 390-1130

ADS, One Progress Way, Wilmington, MA 01887 (800) 522-4434

Advent (see Jensen)

Altec Lansing, Box 277, Milford, PA 18337-0277 (800) 548-0620

AMC, Weltronics, 1414 S. Fair Oaks Ave., Suite 7, S. Pasadena, CA 91030 (818) 799-6396

Apogee, 35 York Ave., Randolph, MA 02368 (617) 963-0124

Aragon (see Jensen)

Aream, Audio Influx, Box 381, Highland Lakes, NJ 07422-0381 (201) 764-8958

Atlantic Technology, 343 Vanderbilt Ave., Norwood, MA 02062 (617) 762-6300

Audio Alchemy, Kevro International, Box 1355, Buffalo, NY 14205 (416) 428-2800

Audio by Van Alstine, 2202 River Hills Dr., Burnsville, MN 55337 (612) 890-3517

Audio Concepts, 901 S. 4th St., La Crosse, WI 54601 (608) 784-4570

Audio Design Associates, 610 Mamaroneck Ave., White Plains, NY 10605 (914) 946-9595

Audio Research, 5740 Green Circle Dr., Minnetonka, MN 55343-4424 (612) 939-0600

Audio "78", Box 387, Pacifica, CA 94044 (415) 359-7431

AudioSource, 1327 N. Carolan Ave., Burlingame, CA 94010 (415) 348-8114

Audire, 9576 El Tambor Ave., Fountain Valley, CA 92708 (714) 968-1236

Avid, Box 192, Marlboro, NH 03455 (603) 876-4400

Axiom, Hwy. #60, Dwight, Ontario POA 1H0 (705) 635-2222

B&K Components, 2100 Old Union Rd., Buffalo, NY 14227-2725 (800) 543-5252

B&W, Box 653, Buffalo, NY 14240 (416) 771-6611

Bang & Olufsen, 1150 Feehanville Dr., Mount Prospect, IL 60056 (800) 284-2264

Bedini, 7239 Valley St., Dalton Gardens, ID 83814 (208) 772-9207

BEL, 2530 Berryessa Rd. #126, San Jose, CA 95132 (408) 259-8648

Berning, 12430 McCrossin Lane, Potomac, MD 20854 (301) 926-3371

BGW Systems, 13130 S. Yukon Ave., Hawthorne, CA 90251 (213) 973-8090

Bose, The Mountain, Framingham, MA 01701 (508) 879-7330

Boston Acoustics, 70 Broadway, Lynnfield, MA 01940 (617) 592-9000

Boulder, 4850 Sterling Dr., Boulder, CO 80301 (303) 449-8220

Bozak, 539 Norwich Ave., Taftville, CT 06380 (203) 866-1510

Bryston, 57 Westmore Dr., Rexdale, Ontario M9V 3Y6 416-746-0308

California Audio Labs, 16812 Gothard St., Huntington Beach, CA 92647 (714) 841-1140

Camber, 3700 Griffith #306, St. Laurent, Quebec H4T 1A7 (514) 738-3225

Cambridge Audio (see AMC)

Cambridge Physics, Mill Complex, Box 192, Marlboro, NH 03455 (603) 876-4400

Cambridge SoundWorks, 154 California St., Newton, MA 02158 (800) 252-4434

Canton, 915 Washington Ave. S., Minneapolis, MN 55415-1245 (612) 333-1150

Carrera (see Vector Research)

Carver, Box 1237, Lynnwood, WA 98046 (206) 775-1202

Celeation, 89 Doug Brown Way, Holliston, MA 01746 (508) 429-6706

Cello, 315 Peck St., New Haven, CT 06513 (203) 865-1237

Cerwin-Vega, 555 E. Easy St., Simi Valley, CA 93065 (805) 584-9332

Classé Audio, 9414 Cote de Liesse Rd., Lachine, Quebec H8T 1A1 (514) 636-6384

Clements, 25 Esna Pk. Dr., Markham, Ontario L3R 1C9 (416) 474-0909

Clif Designs, 1602 Babcock St., Costa Mesa, CA 92627 (714) 645-8825

Conrad-Johnson, 2800R Dorr Ave., Fairfax, VA 22031 (703) 698-8581

Counterpoint, 2281 Las Palmas Dr. Carlsbad, CA 92009 (619) 431-5050

Creek, Music Hall, 108 Station Rd. Great Neck, NY 11023 (516) 487-3663

Crown International, Box 1000, Elkhart, IN 46515-1000 (219) 294-8000

Dahlquist, 601 Old Willets Path, Hauppauge, NY 11788 (516) 234-5757

Day Sequerra, 330 Turnpike St., Canton, MA 02021 (617) 821-2313

DB Systems, Main St., Box 460, Rindge Center, NH 03461 (603) 899-5121

DCM, 670 Airport Blvd., Ann Arbor, MI 48108 (313) 994-8481

Definitive Technology, 11105 Valley Heights Dr., Baltimore, MD 21117 (301) 363-7148

Dennessen, 715 Hale St., Beverly, MA 01915 (508) 927-5251

Denon, 222 New Road, Parsippany, NJ 07054 (201) 575-7810

Design Acoustics, Audio-Technica, 1221 Commerce Dr., Stow, OH 44224 (216) 686-2600

Digital Phase, 2841 Hickory Valley Rd., Chattanooga, TN 37421 (615) 894-5075

Dual, Euro-Tech, 19 W. 44th St., Suite 1010, New York, NY 10036 (212) 840-1976

Duntech (see Quad)

Dynaco, Panor, 125 Cabot Ct., Hauppauge, NY 11788 (516) 434-1200

Energy, Audio Products International, 3641 McNicoll Ave., Scarborough, Ontario M1X 1G5 (416) 321-1800

EPI, 240 Crossways Park W., Woodbury, NY 11797 (516) 496-3400

Esoteric Sound, 4813 Wallbank Ave., Downers Grove, IL 60515 (708) 960-9137

ESS, 11415 Folsom Blvd., Rancho Cordova, CA 95742 (916) 852-0906

Fisher, 21350 Lassen St., Chatsworth, CA 91311-2329 (818) 998-7322

Focus, 120 S. Patterson Blvd., Dayton, OH 45402 (513) 222-3946

Forté (see Threshold)

Fosgate-Audionics, Box 70, Heber City, UT 84032 (801) 654-4046

Fried, 1304 Conshohocken Rd., Conshohocken, PA 19428 (215) 277-9004

Genesis, 953 S. Frontage Rd. West, Suite 106, Vail, CO 81657 (303) 476-3012

Goldmund, International Audio Technologies, 13897 Willard Rd., Suite J, Chantilly, VA 22021 (703) 378-1515

Goldstar, 1000 Sylvan Ave., Englewood Cliffs, NJ 07632 (201) 816-2000

Hafler, 613 S. Rockford Dr., Tempe, AZ 85281 (800) 366-2349

Harman Kardon, 8380 Balboa Blvd., Northridge, CA 91325 (818) 893-9992

Hartley, 5732 Oleander Dr., Wilmington, NC 28406 (919) 392-0500

Heco, EuroSon America, 694 Ft. Salonga Rd., Northport, NY 11768 (516) 261-7700

Heybrook, D'Asign Source, 5800 Overseas Hwy., Marathon, FL 33050 (305) 743-7130

Hitachi, 3890 Steve Reynolds Blvd., Norcross, GA 30093 (404) 279-5600

Hsu Research, 20013 Rainbow Way, Cerritos, CA 90701 (800) 554-0150

HTG, Music & Sound Imports, 2381 Philmont Ave., Suite 117, Huntingdon Valley, PA 19006 (215) 938-7671

Hughes, Box 7000, Rancho Santa Margarita, CA 92688 (800) 243-2733

Icon Acoustics, 13 Fortune Dr., Billerica, MA 01821 (800) 669-9662

Infinity, 9409 Owensmouth Ave., Chatsworth, CA 91311 (818) 407-0228

J.A. Michell, Artech, Box 1980, Champlain, NY 12919 (514) 631-6448

Jamo, 425 Huehl Rd., Bldg. 8, Northbrook, IL 60062 (708) 498-4648

JBL, 240 Crossways Park W., Woodbury, NY 11797 (516) 496-3400

Jensen, 25 Tri-State Intl. Office Ctr., Lincolnshire, IL 60069 800-323-0707

Joseph Audio, 2 Pine Ridge Rd., White Plains, NY 10603 (914) 347-7917

JRM, 3716 Broadway N.E., Knoxville, TN 37917-3120 (615) 688-6501

JVC, 41 Slater Dr., Elmwood Park, NJ 07407 (201) 794-3900

KEF, 1701 Touchstone Rd., Colonial Heights, VA 23834 (804) 520-7200

Kenwood, Box 22745, Long Beach, CA 90801-5745 (213) 639-9000

Kinergetics, Box 4839, Chatsworth, CA 91313-4839 (213) 582-9349

KLH, 11131 Dora St., Box 1085, Sun Valley, CA 91352 (213) 875-0480

Klipsch, Box 688, Hope, AR 71801 (501) 777-6751

Koss, 4129 N. Port Washington Ave., Milwaukee, WI 53212 (414) 964-5000

Krell, 35 Higgins Dr., Milford, CT 06460 (203) 874-3139

Legacy, Reel to Real Designs, 3021 Sangamon Ave., Springfield, IL 62702 (800) 283-4644

Linn, Audiophile Systems, 8709 Castle Park Dr., Indianapolis, IN 46256 (317) 849-7103

DIRECTORY OF MANUFACTURERS

Luxman, 19145 Gramercy Pl.,
Torrance, CA 90501
(310) 326-8000

Magnepan, 1645 Ninth St., White
Bear Lake, MN 55110
(612) 426-1645

M&K, 10391 Jefferson Blvd.,
Culver City, CA 90232
(213) 204-2854

Marantz, 1150 Feehanville Dr.,
Mount Prospect, IL 60056
(708) 299-4000

Mark Levinson, Madrigal, Box 781,
2081 S. Main St., Middletown,
CT 06457
(203) 346-0896

John Marovakis, 2889 Roebling
Ave., Bronx, NY 10461
(212) 892-7419

Martin-Logan, 2001 Delaware St.,
Lawrence, KS 66046
(913) 749-0133

MB Quart, 25 Walpole Park S.,
Walpole, MA 02081
(508) 668-8973

McCormack, 542 North Highway
101, Leucadia, CA 92024-0965
(619) 436-7666

McIntosh, 2 Chambers St.,
Binghamton, NY 13903-2699
(607) 723-3512

Melos, 723 Bound Brook Rd.,
Dunellen, NJ 08812
(908) 968-4748

Memorex, Box 901021, Fort Worth,
TX 76101
(817) 878-6700

Meridian (see **KEF**)

Merrill Audio, 2125 Central Ave.,
Memphis, TN 38104
(901) 272-1410

Mirage (see **Energy**)

Mission, 400 Matheson Blvd. E.
#31, Mississauga, Ontario L4Z 1R5
(416) 507-0777

Mitsubishi, 5757 Plaza Dr., Box
6007, Cypress, CA 90630-0007
(714) 220-2500

Mobile Fidelity, 105 Morris St.,
Sebastopol, CA 95472
(800) 423-5759

Monitor Audio (see **Audio Alchemy**)

Mordaunt-Short, TGI, 300 Gage
Ave., Unit 1, Kitchener, Ontario
N2M 2C8
(519) 745-1158

Motif (see **Conrad-Johnson**)

MTX, 555 W. Lamm Rd., Freeport,
IL 61032
(800) 225-5689

MTX Soundcraftsmen, 2200 S.
Ritchey St., Santa Ana, CA 92705
(714) 556-6191

Museatex, 1829 54th St. S.E.,
Calgary, Alberta T2B 1N5
(403) 273-2552

NAD, Lenbrook, 633 Granite Ct.,
Pickering, Ontario L1W 3K1
(416) 831-6333

NAIM, 1748 N. Sedgwick St.,
Chicago, IL 60614
(312) 944-0217

Nakamichi, 19701 S. Vermont Ave.,
Torrance, CA 90502
(310) 538-8150

NEAR, 679 Lisbon Rd., Lisbon
Falls, ME 04252
(207) 353-7307

NHT, 537 Stone Rd., Suite E,
Benicia, CA 94510
(800) 648-9993

Nikko, AVS Technologies, 2100
Trans Canada Hwy. S., Montreal,
Quebec H9P 2N4
(514) 683-1771

Niles, 12331 S. W. 130th St., Miami,
FL 33186
(305) 238-4373

Norman Laboratories, 1905
Atchison Dr., Norman, OK 73069
(405) 321-3205

NSM (see **Hecco**)

OCM Technology, Magnum
Dynalab, 6509 Transit Rd., H-1,
Bowmansville, NY 14026
(716) 684-0460

Olm Acoustics, 241 Taaffe Pl.,
Brooklyn, NY 11205
(718) 783-1111

Onkyo, 200 Williams Dr., Ramsey,
NJ 07446
(201) 825-7950

Optimus, Radio Shack, 700 One
Tandy Center, Fort Worth,
TX 76102
(817) 390-3011

Oracle, Box 394, Edmundston,
New Brunswick E3V 3L1
(506) 735-1080

Owl (see **Audio "78"**)

Panasonic, One Panasonic Way,
Secaucus, NJ 07094
(201) 348-7000

Paradigm, AudioStream, Box 2410,
Niagara Falls, NY 14302
(416) 632-0180

Paramount Pictures, Home Theater
Products, 1950 E. Orangethorpe
Ave., Fullerton, CA 92631
(714) 526-0711

Parasound, 950 Battery St., San
Francisco, CA 94111
(800) 822-8802

Period, O'Sullivan Industries, 1900
Gulf St., Lamar, MO 64759-1899
(417) 682-3322

Phase Technology, 6400
Youngerman Circle, Jacksonville,
FL 32244
(904) 777-0700

Philips, 1 Philips Dr., Box 14810,
Knoxville, TN 37914-1810
(615) 521-4316

Pink Triangle (see **Quad**)

Pinnacle, 255 Executive Dr.,
Plainview, NY 11803
(516) 576-9052

Pioneer, 2265 E. 220th St., Long
Beach, CA 90810
(800) 421-1404

Polk, 5601 Metro Dr., Baltimore,
MD 21215
(301) 358-3600

ProAc, Modern Audio Consultants,
112 Swanhill Ct., Baltimore,
MD 21208
(410) 486-5975

Proceed (see **Mark Levinson**)

Proton, 5630 Cerritos Ave.,
Cypress, CA 90630
(714) 952-6900

PS Audio, Box 1119, Grover City,
CA 93483
(805) 481-4844

PSB (see **NAD**)

PSE, 9755 Hamilton Rd., Eden
Prairie, MN 55344-3424
(612) 943-1677

Quad, Pro Audio, 111 South Dr.,
Barrington, IL 60010
(708) 526-1646

Quasar, 1707 N. Randall Rd.,
Elgen, IL 60123-7847
(708) 468-5600

Quicksilver Audio, 4119 Coronado,
Stockton, CA 95204
(209) 462-7711

Realistic (see **Optimus**)

Revolver (see **Creek**)

Rogers (see **Arcam**)

Rotel, Box 653, Buffalo, NY 14240
(416) 771-6610

Jeff Rowland, Box 7231, Colorado
Springs, CO 80933
(719) 473-1181

Sansui, 200 Metroplex Dr., Box
3070, Edison, NJ 08818
(908) 248-4455

Sanyo, 21350 Lassen St.,
Chatsworth, CA 91311-2329
(818) 998-7322

Sennet, Box 1630, Old Milford Rd.,
Milford, PA 18337-2630
(800) 648-6663

Sequerria Associates, 792 Pacific
St., Stamford, CT 06902
(203) 325-1791

Shahinian, 33 A&B Cedarhurst
Ave., Medford, NY 11763
(516) 736-0033

Sharp, Sharp Plaza, Mahwah,
NJ 07430-2135
(201) 529-8200

Sherwood, 14830 Alondra Blvd., La
Mirada, CA 90638
(800) 962-3203

Signet, 4701 Hudson Dr., Stow,
OH 44224
(216) 688-9400

Snell Acoustics, 143 Essex St.,
Haverhill, MA 01832
(508) 373-6114

Snell Multimedia (see **Snell**)

Acoustics)

Sonance, 961 Calle Negocio, San
Clemente, CA 92672
(800) 582-7777

Sonographe (see **Conrad-Johnson**)

Sony, One Sony Dr., Park Ridge,
NJ 07656
(201) 930-7669

SOTA, 1318-B Marquette Dr.,
Romeoville, IL 60441
(800) 772-7682

Sound Dynamics (see **Energy**)

Sound-Lab, 6451 Mountain View
Dr., Park City, UT 84060
(801) 649-0172

Soundstream, 120 Blue Ravine Rd.,
Folsom, CA 95630
(916) 351-1288

Speakerlab, 6307 Roosevelt Way
N.E., Seattle, WA 98115-6616
(206) 523-2269

SpectraScan, 1110A Elkton Dr.,
Colorado Springs, CO 80907
(719) 599-9254

Spica, 3425 Bryn Mawr N.E.,
Albuquerque, NM 87107
(505) 883-6120

Stax Kogyo, 16920 Halldale Ave.,
Gardena, CA 90247
(310) 538-5878

Sumiko, Box 5046, Berkeley,
CA 94705
(510) 843-4500

Sumo, 9829 Independence Ave.,
Chatsworth, CA 91311
(818) 718-8381

Superphon, 225 Oakes South West,
Grand Rapids, MI 49503
(616) 451-3527

Symdex, Box 359, Gloucester,
MA 01931-0359
(508) 281-1115

Tannoy (see **Mordaunt-Short**)

TDL, 1305 Court St., Saginaw,
MI 48602
(517) 792-3948

Teac, 7733 Telegraph Rd.,
Montebello, CA 90640
(213) 726-0303

Technics (see **Panasonic**)

Thiel, 1026 Nandino Blvd.,
Lexington, KY 40511
(606) 254-9427

Thorens, BLR Electronics, 84-03
Cuthbert Rd., Kew Gardens,
NY 11415
(718) 441-0895

Threshold, 7325 Roseville Rd.,
Sacramento, CA 95842
(916) 348-0600

Triad, 9106 N.E. Marx Dr.,
Portland, OR 97220
(503) 256-2600

Vandersteen, 116 W. 4th St.,
Hanford, CA 93230
(209) 582-0324

Vector Research, 1230 Calle Suerte,
Camarillo, CA 93012
(805) 987-1312

Velodyne, 1070 Commercial St.,
Suite 101, San Jose, CA 95112
(408) 436-7270

Venturi by **BIC America**, 883-E
Hampshire Rd., Stow, OH 44224
(216) 928-2011

VMPS, Itone, 3429 Morningside
Dr., El Sobrante, CA 94803
(415) 222-4276

Vortex, Box 1316, Guasti,
CA 91743
(800) 437-8678

VPI, 77 Cliffwood Ave. #3B,
Cliffwood, NJ 07721
(908) 946-8606

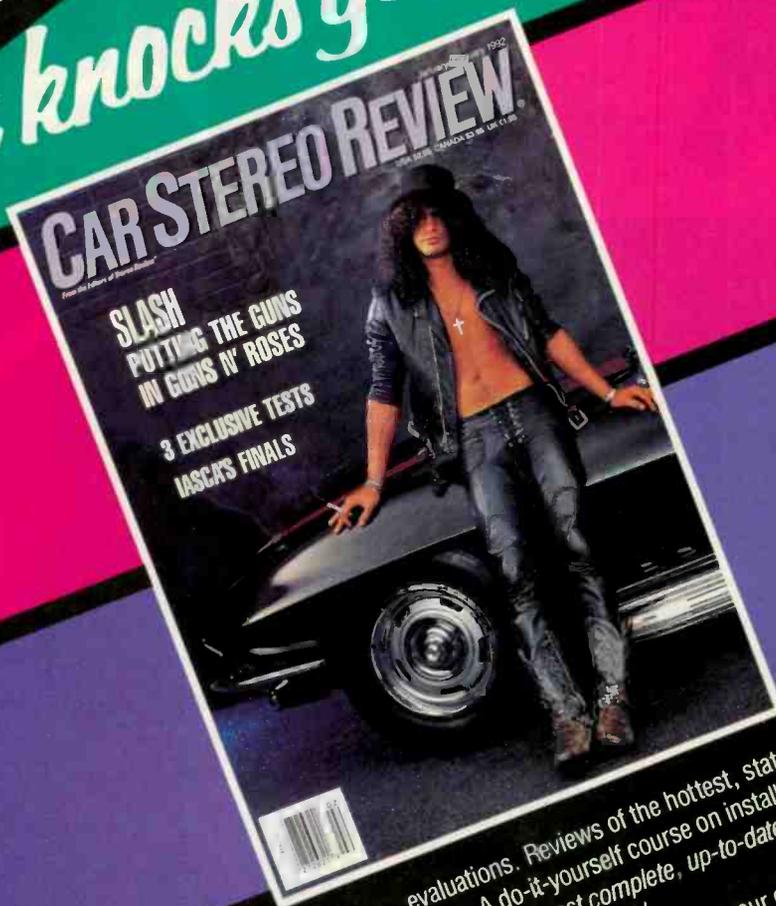
Well Tempered, Transparent Audio
Marketing, Rt. 202, Box 117,
Hollis, ME 04042
(207) 929-4553

Westlake Audio, 2696 Lavery Ct.,
Unit 18, Newbury Park, CA 91320
(805) 499-3686

Wharfedale, Melody Audio, 1940
Blake St., Suite 101, Denver,
CO 80202
(303) 295-3100

Yamaha, Box 6660, Buena Park,
CA 90622
(800) 492-6242

The magazine that knocks you on your ear



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. User's

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%

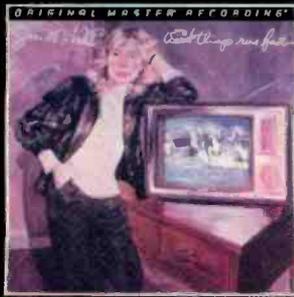
To get home delivery of CAR STEREO REVIEW, simply detach and mail the attached card. You'll get a one-year subscription (6 issues in all—including the annual newsstand cost) for just \$8.97. That's a full 55% off the annual buyer's guide! And if CAR STEREO REVIEW doesn't knock you on your ear every time, we'll send you a full refund for all unmailed issues. That's a promise! So don't delay. Make tracks for the best possible audio system at the best possible price by entering your subscription 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

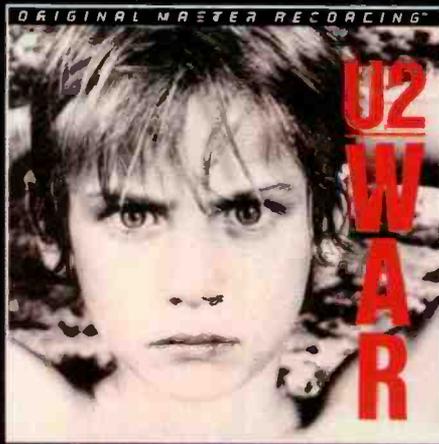
Canadian orders add \$7.00 per year (includes 7% GST),
foreign orders add \$7 per year, payment in US funds must accompany order.
Please allow 30 to 60 days for delivery of first issue.

ORIGINAL MASTER RECORDING™

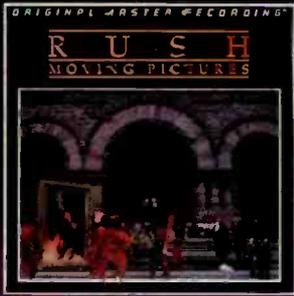
ULTRADISC II™



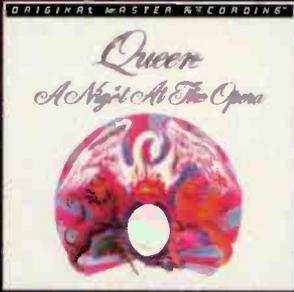
UDCD 570



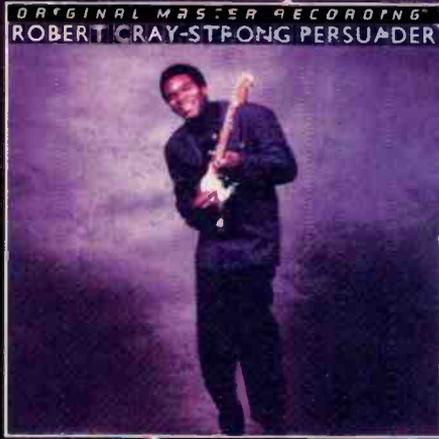
UDCD 571
This video blockbuster catapulted U2 to worldwide acclaim. Features Sunday Bloody Sunday, New Year's Day and Two Hearts Beat as One. Deluxe booklet restores all original artwork and lyrics.



UDCD 569



UDCD 568



UDCD 564
The 1986 breakthrough album by the hottest modern rhythm and bluesman. Features Smoking Gun, Right Next Door and More Than I Can Stand.



UDCD 565

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 800-428-5759

CIRCLE NO. 32 ON READER SERVICE CARD

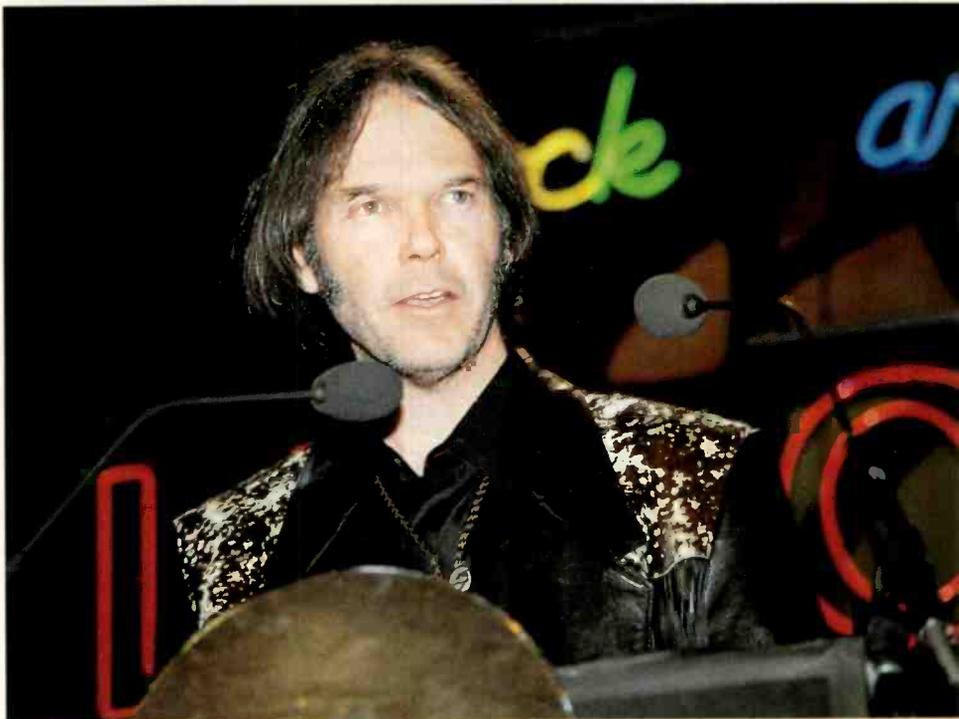
Neil Young: Autumnal Calm and Country Ham

H EY, even a flannel-shirt-to-the-wind hellraiser like Neil Young needs to take a breather every once in a while. After putting out two rip-roaring, socially conscious bile-fests—1989's "Freedom" and last year's "Arc Weld"—Young chills out on his latest, "Harvest Moon," a sort of sequel to his most commercial album, 1972's "Harvest."

Like the earlier album, "Harvest Moon" emphasizes Young's singer-songwriter sensitivity, talking about love and life with get-real directness. Even though he's moseyed down these paths several times since then, Young brings a quieter urgency to these particular meditations. The woman in *Unknown Legend*, who used to ride her Harley into the wind, now has two kids and "gets that far-away look in her eyes." The guy in *You and Me*, musing about how love has lost its heat, gently urges his woman to "Open up and let the light back in."

You and Me is the clearest echo of "Harvest," with a melody that's a distant cousin of that album's "Old Man" and a lyrical reference to an "Old man sittin' there." The original old man symbolized a generation gap that Young was trying to bridge. This time, in a song about coping with a mid-life romantic crisis, the old man—with a "Touch of grey, but he don't care / When he hears his children call"—represents the settling-in phase of old age that is just ahead.

As with most of his softer stuff, Young spices up his reflections on this album with some country ham. The arrangements, laced with pedal steel, hang around his voice and acoustic guitar like a well-used work glove. Performed by his country-folkie band, the Stray Gators, these tunes shuffle along most



pleasantly. Only in *Old King*, a tongue-in-cheek yowler about a hunting dog now dead, and *Such a Woman*, a nearly bathetic valentine pumped up by strings on steroids, does the ruminative spell get broken. Even *War of Man* and *Natural Beauty*, which assert political agendas, never break the calm.

And that's a clue to the natural beauty of the man himself. Young has an effortless expressiveness, whether he's speaking about something harrowingly personal or depressingly political, whether he's singing in an angry whine

or a soothing croon. For all of its autumnal calm, this album says as much, as deeply, as any of his firebreathing efforts. Let's hope it doesn't take him another twenty years to come back to harvest time. *Ron Givens*

NEIL YOUNG Harvest Moon

Unknown Legend; From Hank to Hendrix; You and Me; Harvest Moon; War of Man; One of These Days; Such a Woman; Old King; Dreamin' Man; Natural Beauty.
REPRISE 45057 (52 min)

Leonard Bernstein's Life-Affirming Finale

L EONARD BERNSTEIN conducted his last concert on August 19, 1990, at Tanglewood, where both his career and the Tanglewood Music Center had started fifty years earlier. Bernstein was a student and protégé of Serge Koussevitzky, and the event was, fittingly, the Serge and Olga Koussevitzky Memorial Concert. He was a sick man and had previously canceled many

engagements, but although he let an assistant direct the orchestral version of his own *Arias and Barcarolles*, he was determined to direct the main body of the concert: *Four Sea Interludes* from Britten's *Peter Grimes* (he had directed the American premiere of the opera, which had been commissioned by Koussevitzky, at Tanglewood in 1946) and the Beethoven Seventh Symphony (which

he had conducted for the first time with the Boston Symphony in 1947).

By all reports Bernstein barely made it through the concert, but, as Deutsche Grammophon's recording of it shows, it was a strong and moving performance. The Britten *Interludes* are extraordinarily powerful and, in this context, elegiac. But the Beethoven is hardly a quiet leave-taking. Quite the contrary, it is as



PHOTO: KRISTINA JENTZSCHOV

life-affirming as anything in the recorded output of a musician who always exuded vitality and affirmation. As Tim Page points out in his program note, the performance was, for Bernstein, not very idiosyncratic, not very choreographic or orgiastic in the way that he performed this music half a century earlier. But something else emerged: a kind of steadfastness and clarity in the face of struggle and pain. The slow steadiness of the first movement is almost unbearable, but it eventually gathers strength, and the sense of inevitability carries the momentum forward through the Allegretto, the extraordinarily powerful and manic Scherzo, and the obsessive, painful, death-defying finale.

We'll miss you, Lenny. *Eric Salzman*

BEETHOVEN: *Symphony No. 7*
BRITTEN: *Four Sea Interludes*
 Boston Symphony, Bernstein
 DEUTSCHE GRAMMOPHON
 431 768 (64 min)

Make Room for Dada

DADA's debut album, "Puzzle," is a pleasant surprise from out of left field (actually, out of California). It's refreshing to encounter a rock band with a sure grasp of their instruments and three heads full of inventive ideas to go along with it. As guitar-based trios go, the Police are the most obvious analogy, one that's encouraged by the fact that Dada's on the I.R.S. label, as the Police were. There are, to be sure, similarities in the way the two bands employ space and dynamics, and, like the Police, Dada seems to know the capabilities of their instruments and the studio inside out. But Dada's high-IQ, hard-candy pop has its own ingenious flourishes, and what's more, they recognize the value of a good guitar solo.

The group flashes an armload of tricks on the opening track, *Dorina*. Got your scorecard ready? Guitarist Michael Gurley commences with some clear-toned picking à la Mark Knopfler, abruptly shifts to a wicked descending riff, hits a few bars of T. Rex-style boogie, then takes a dreamlike Southern California turn with a ghostly Beach Boys falsetto rising behind the music. He solos after all three choruses, each one soaring in a progressively higher orbit.

In the following track, *Mary Sunshine Rain*, Gurley's touch on the steel strings of an acoustic elicits a shimmering cluster of notes in a needle-like spray. Gurley and bassist Joie Calio typically sing in tight two-part harmony, even in roller-

coaster rides like *Posters*, a madcap sex romp with a rave-up coda driven by drummer Phil Leavitt, and *Dizz Knee Land*, a dadaist send-up of a society driven bonkers by info-overload. *Here Today, Gone Tomorrow* is a fanciful bit of neo-psychedelia that rekindles the spirit

of Eric Burdon and War's spacy fable *Spill the Wine*, while *Dog* is a bright-hued series of nonsequiturs, including a line about "a girl who believes she used to be a dog." It's a strange world, and Dada paints it wild.

That Dada can shift from a burlesque



PHOTO: ALDO MAURO/LES

like *Posters to Timothy*, a sobering glimpse into the fantasy-filled mind of a kid with absentee parents, proves their range. There is, to be honest, more range than depth to "Puzzles." The lyrics aren't always the equal of the music (the Police have got them there) and toward

the end the album loses some steam and muscle. Nevertheless, "Puzzle" is an arresting debut, and clearly Dada hears things in their heads no one else has thought to play before—an encouraging turn, if you worry about the future of the medium.
Parke Puterbaugh

DADA

Puzzle

Dorina; Mary Sunshine Rain; Dog; Dizz Knee Land; Surround; Here Today, Gone Tomorrow; Posters; Timothy; Dim; Who You Are; Puzzle; Moon
I.R.S. 13141 (55 min)

A New Star-Studded "Tosca"

ANOTHER *Tosca* may not rank among the highest discographic priorities, but who can blame Deutsche Grammophon for releasing one with three genuine audience favorites who, not incidentally, are surefire top-selling artists as well? Nor will these principals disappoint their fans. Mirella Freni is more securely settled into the title role than she seemed to be in her earlier account (1978, on London). Compensating for a loss of lyric freshness and diminished tonal roundness above the staff, she offers a mature interpretation infused with her own special magic. Hers is not the fieriest of Toscas, but she is infinitely moving in her wounded honesty and frank despair, especially in Act III.

For Placido Domingo, this is already a third outing: His Cavaradossi was previously paired with Leontyne Price (RCA, 1973) and Renata Scottò (EMI, 1981). He, too, does his best work in the third act, skillfully modulating his voice to fit the exigencies of the drama, though he cannot respond to the diminuendo phrase "disciogliea dai veli" in "E lucevan le stelle" with the unforced expansiveness of old. Overall, however, he remains a convincing, dignified, and musically interpreter. The only principal new to his role is Samuel Ramey. I doubt that Scarpia is the right role for his splendid bass-baritone: while much of the music lies in his best range, all that

concentration in the E-F area in the second act leaves him a bit uncomfortable. Nonetheless, on the way to his well-deserved doom, Ramey turns beautiful phrases and produces a stream of beautiful sounds that some more seasoned and dramatically more insinuating Scarpias cannot match.

The supporting roles are in good hands. Bryn Terfel is an unusually young-sounding but able Angelotti, Angelo Veccia is a Sacristan who emphasizes singing over clowning, and Anthony Laciura is a properly sneaky Spoletta. There are, however, Shepherds with more alluring timbres than this particular boy soprano.

Possibly because *Tosca* is obviously not "broke" and needs no "fixing," the unpredictable Giuseppe Sinopoli shows himself in a relatively non-idiosyncratic form. His overall pacing is slow, but the tempos are sensibly interrelated and no serious damage is done. The reading is unfailingly theatrical, rich in illuminating detail, and the Philharmonia responds with transparent textures, beautifully captured by the engineers.

George Jellinek

PUCCINI: Tosca

Freni, Domingo, Ramey, Terfel, Laciura, Veccia, Lukas; Philharmonia Orchestra, Sinopoli
DEUTSCHE GRAMMOPHON 431 775
(two discs, 122 min)



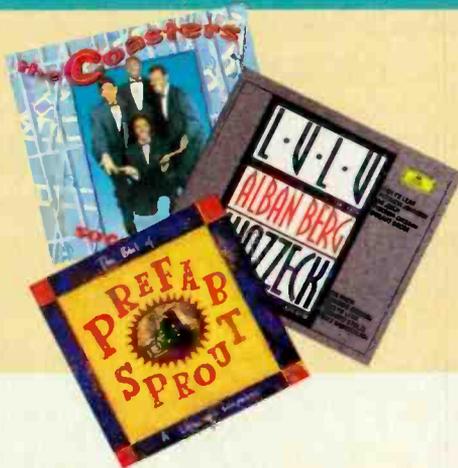
Mirella Freni: infinitely moving

NOW ON COMPACT DISC

POPULAR

• **THE COASTERS: 50 Coastin' Classics.** RHINO/ATLANTIC R2 71090. Authentic mono mixes of the r-&-b/comedy group's greatest hits, with liner notes by original songwriter/producers Jerry Leiber and Mike Stoller.

• **THE BEST OF PREFAB SPROUT: A Life of Surprises.** EPIC EK 52847. The greatest hits and radio faves of the smart Scottish electro-pop/jazzers, including *When Love Breaks Down*.

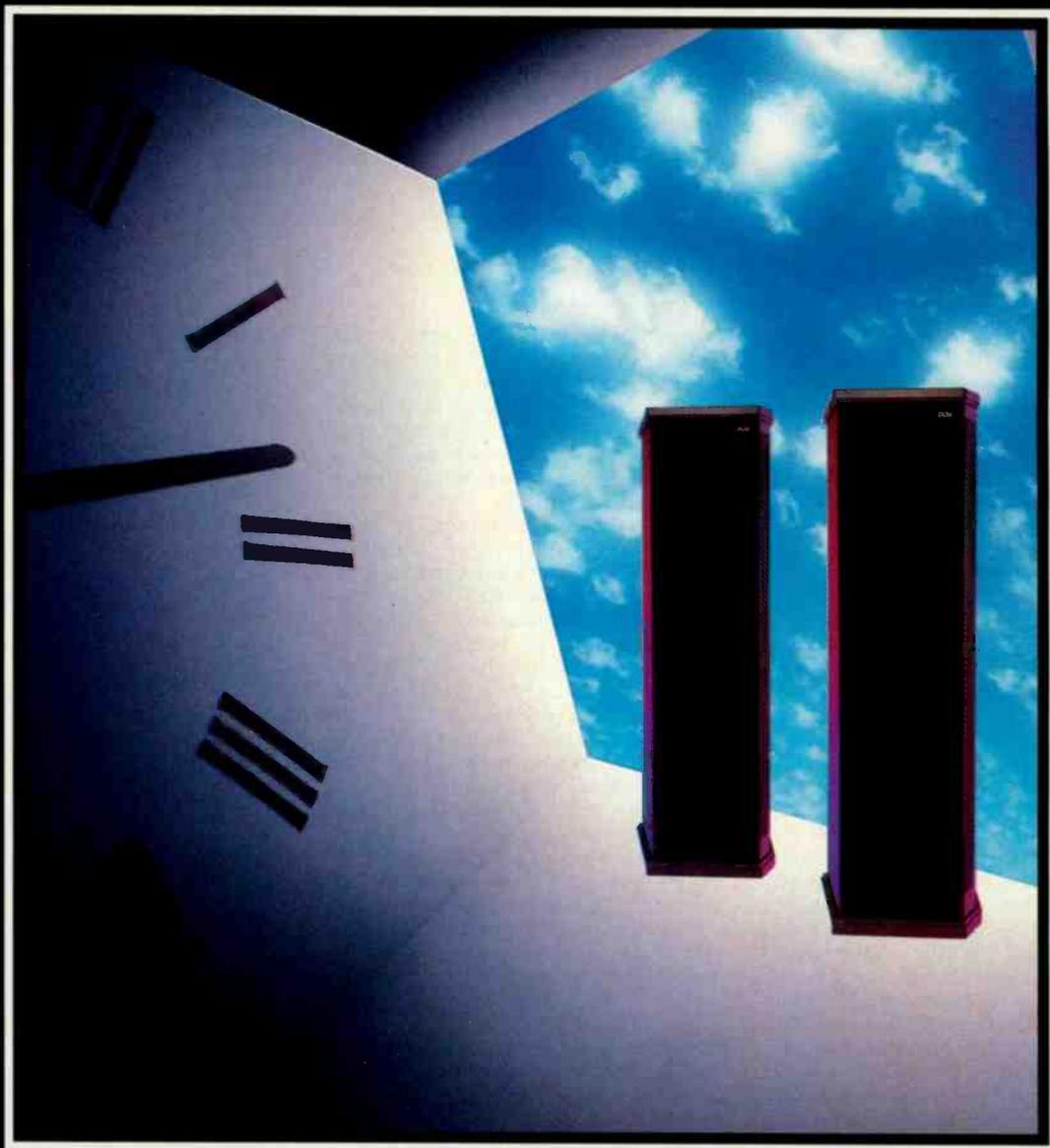


CLASSICAL

• **BERG: Lulu; Wozzeck.** Lear, Fischer-Dieskau, others; Böhm. DEUTSCHE GRAMMOPHON 435 705 (three discs). Both of these Berg operas, with Karl Böhm conducting the Berlin Opera Orchestra, feature Evelyn Lear and Dietrich Fischer-Dieskau in leading roles. *Wozzeck* was hailed as "a major recording landmark," (December 1965), and Lear's performance of the title role in *Lulu* was "effective dramatically and musically" (July 1968).

PHOTO: CHRISTIAN STEINER/VINCENT/FABRELL ASSOC.

THE NEW TIMEWINDOW SEVEN: PERFORMANCE THAT PASSES THE TEST OF TIME.



In the 1970s, DCM introduced the original, critically-acclaimed TimeWindows.™ In the 1980s, the TimeWindow Three™ accompanied the birth of the digital era. Now, to meet the increased expectations of today's audio/video enthusiasts, DCM introduces the ultimate TimeWindow.™

The TimeWindow Seven™ combines the incredible imaging, clarity and accuracy of its predecessors with dramatic improvements in sensitivity, dynamic range and sound distribution. And its enclosure design enhances the listening environment as much as the listening experience. To audition TimeWindow Seven™ speakers write to DCM, 670 Airport Blvd., Ann Arbor, Michigan 48108. Or call toll-free 1-800-878-TIME. The new TimeWindow Seven. It was just a matter of time.

DCM® Loudspeakers

CIRCLE NO. 20 ON READER SERVICE CARD

MICHAEL BOLTON

Timeless (The Classics)

COLUMBIA CK 52783 (40 min)

Performance: A mixed blessing

Recording: Very good

It's easy to fault Michael Bolton for building his career on songs and styles borrowed from earlier rhythm-and-blues artists and for being so successful without having to pay the commensurate dues. But it is also difficult to ignore him. Bolton is a gifted singer with a voice of such compelling texture, range, and beauty that it is a joy to hear him. And he does convey a certain kind of sensuality.

Bolton's new album is made up almost entirely of memorable material previously identified with other artists. The result is a mixed blessing. Those who were raised on rock, without remembering or understanding the roots of a music they consider their own, may well be drawn to these songs and realize that they're American classics on a par with any music that has been conceived in this land. Yet there is little in the way this disc is packaged to call attention to the importance or even the existence of the songs' originators. While liner credits for individual songs note that *You Send Me* and *Bring It On Home to Me* were the creations of "S. Cooke," for example, how are contemporary listeners to know who Sam Cooke was or what he contributed?

That this set is a mixed blessing is immediately apparent with the opener, an absolutely luscious rendition of Buddy Johnson's lamentative r-&-b classic *Since I Fell for You*, enhanced by a Johnny Mandel string arrangement. Bolton's performance is intoxicating, but worlds away from the piercingly intense Ella Johnson original, a 1945 hit in the race (meaning black) record market. Mainstream America ignored the song and its creators back then, so perhaps it is better to have Bolton singing it, and others like it, than for such marvelous songs to be consigned to obscurity. Yet they can be better appreciated if you know the originals and can recognize the quite significant differences. It's a lesson in American music history that is well worth learning. *P.G.*

**BON JOVI**

Keep the Faith

JAMCO/MERCURY 314 514 045 (66 min)

Performance: Too serious

Recording: Fair

Bon Jovi was a lot more fun when it was a trashy little arena-rock band that sang about chasing women, raising hell, and hanging out. In "Keep the Faith," the band makes a

REVIEWS**POPULAR
MUSIC****Discs and tapes**

reviewed by **Chris Albertson,
Phyl Garland, Ron Givens,
Roy Hemming, Alanna Nash,
Parke Puterbaugh, and
Steve Simels**

bid to be taken seriously, which means ponderous, lengthy songs that strain, with heavy hand and furrowed brow, for the grandeur of U2 and Bruce Springsteen. More than half the songs clock in at over five minutes, and no wonder: The arrangements of *I Believe*, *Keep the Faith*, and *Bed of Roses* are arduous and cumbersome, inflated with pomp, and despite some fine guitar work from former Cher boy toy Richie Sambora, it's hard to get past the ten-minute *Dry County's* derivative Springsteenisms about having to "wash these sins from off our hands."

Bon Jovi loosens up and hits the mark three times: the deliriously stupid *Woman in Love*; *Blame It on the Love of Rock & Roll*, a song that endeavors to explain why they didn't do well in school (great line: "I got my vaccinations from a phonograph needle"); and *Little Bit of Soul*, a funky, Stones-like choogler. As for the rest of "Keep of Faith," why is it that in the case of a band like Bon Jovi "progress" is tantamount to embalming? *P.P.*

BOY HOWDY

Welcome to Howdywood

CURB 77562 (39 min)

Performance: More like Howdy Doody

Recording: Better than needed

Boy Howdy is an L.A. club band with a knack for slapping country accents on rockish pop. Sometimes they disperse with the country stuff altogether—in *If This Is Love* snippets of Led Zeppelin's *Whole Lotta Love* float in and out like the ghost of John Bonham hoping to make a new start. Essentially this is an album of pleasant, ersatz country music with strong vocal harmonies, energized picking, and fantasy story songs that could never, ever happen in real life—apparently intended for people who've never seen the southern end of a northbound mule or come anywhere near stepping in what a mule leaves behind. Let's not mince words: If Bill Monroe were to hear the way Boy Howdy's grafted a souped-up bluegrass beat to the Kinks' *You Really Got Me*, you'd be reading his obituary in the next day's paper. *A.N.*

BOBBY BROWN

Bobby

MCA MCAD-10417 (67 min)

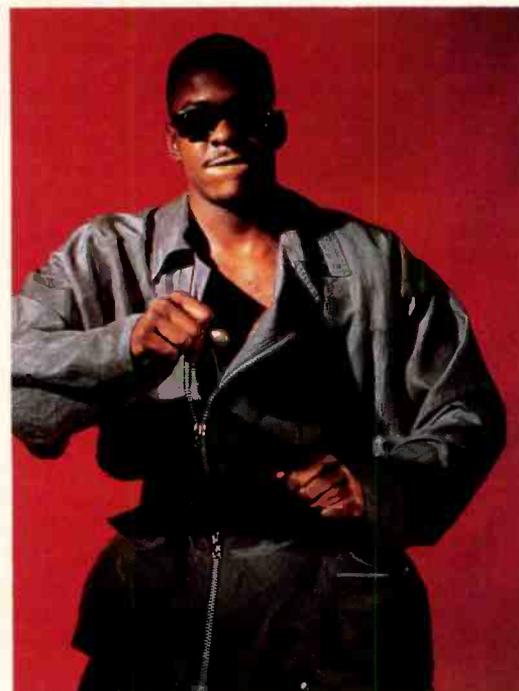
Performance: Roguishly romantic

Recording: Very good

With cunning and exceptional skill, Bobby Brown has created a distinctive persona for himself by combining street toughness with a seductively romantic allure. An extraordinary dancer, he is a commanding figure on stage, exuding a sensual energy that is polished rather than raw but retains the brashness of street chic. What enables him to translate it all to records so well is that he is also a talented singer with a touch of Stevie Wonder to his voice. At once rough rogue and imploring lover, he can shift nimbly from the sung lyric to the cadences of rap, remaining totally convincing at all times.

These two main ingredients have been deftly brought together on this disc, where Brown works primarily with two sets of producers, each creating different but often overlapping effects. Several of the more muscular, propulsive numbers were handled by Teddy Riley for New Jack Swing Productions. Their blistering opener, *Humpin' Around*, speaks for itself. While there is nothing wimpy about L.A. Reid, Babyface, and Daryl Simmons of LaFace, their imprimatur can be found on some of the more sweetly melodic numbers, such as *Good Enough*, an appealing love song that gives Brown a chance to show off his romantic side. His duet with his life partner Whitney Houston on *Something in Common* works better for him than for her, since Houston is at her best when she can settle deep into a song and sing it prettily. The New Jack groove does not suit her nearly so well. But Brown himself wrote and produced the most seductively intimate number of all, *Storm Away*, on which he weaves his spell magically. Capping it all is *I'm Your Friend*, which features Brown in an affecting duet with Debra Winans of the gospel

PHOTO: TODD GRAY/MCA

**Bobby Brown: convincing**

family. In all, this recording showcases Brown as a versatile and appealing artist. As he says in one of his raps, "... cuz originality and creativity add it up together equals the B.B.B. Posse." He's got that right. *P.G.*

LEONARD COHEN

The Future

COLUMBIA CK 53226 (60 min)

Performance: More twisted than usual

Recording: Very good

Well, here's a cheery little mood brightener for you—Leonard Cohen, the angel of doom, mixing recurring themes of the devil, Christ, Charlie Manson, illicit sex, and general debauchery in the biggest, blackest cauldron in the universe. In other words, hell on earth. Whispering—he doesn't ever actually sing, you know—in a flattened voice more grave, gravely, and spooky than ever (he sounds like the spiritual godfather to Tom Waits), Cohen drones on as the quintessential enlightened loser about the imminent end of the world: lines like "Give me crack and anal sex / Take the only tree that's left / Stuff it up the hole in your culture" (*The Future*), and "It's lonely here / There's no one left to torture" (ditto). All this is backed by a female choir that at times sounds like some huge black assembly, and at others like the androgynous chicks from the Robert Palmer video.

No matter how the choristers chortle, however, they're always at artistic odds with our grizzled guide, who fantasizes about the voice of God and a strip joint where his sweet

TALES FROM THE VAULTS

BOB MARLEY

Song of Freedom

TUFF GONG/ISLAND 512 280-2 (four discs, 300 min)

Discussions of Bob Marley center too often around his socio-political impact, which is perhaps unavoidable given that



he was the first genuine Third World pop superstar and something of a mystic to boot. But the fact is the guy wasn't Muhammad Ali or Malcolm X—he was a working musician and bandleader who created a pretty astonishing (and profoundly influential) song

catalog. This long overdue retrospective—seventy-eight tracks, ranging from early (pre-reggae) singles to a live *Redemption Song* taped at his final 1980 concert—includes just about everything he did worth hearing. It's well remastered, too, and the accompanying booklet conveys the essence of the man and his accomplishments far more succinctly than any current biography. *Steve Simels*

companion rubs half the world against her thigh (*Closing Time*). On and on he goes, stopping only to shift from dark, brooding pop to gospel (*Be for Real*, the album's one down-to-earth song about true love) and a country-blues revamping of the pop classic *Always*. But what do you expect from a man who's made a career out of opening a vein and inviting everyone to drink? On *Democracy*, Cohen describes himself as "stubborn as those garbage bags / That time cannot decay." High IQ? More like bloated hallucination. *A.N.*

BOB DYLAN

Good As I Been to You

COLUMBIA CK 53200 (56 min)

Performance: Folk verité

Recording: Straightforward

Throughout the Eighties, and since about 1975's "Desire," to be honest, Bob Dylan's recording career has been a bundle of mixed-up confusion (to borrow the title of his very first single). He's been great, good, and dreadful, but most of all he's been wildly inconsistent, as if he'd lost the intuitive compass that had guided him through the peerless work of his first fifteen years. "Under the Red Sky," his last studio album, was a sort of nadir, as even a hot producer (Don Was) and the proverbial cast of thousands (from George Harrison down to Slash) couldn't prop up doggerel like *Wiggle Wiggle* and *Handy Dandy*.

But the master has masterminded a turnaround on "Good As I Been to You," a completely solo album of acoustic folk blues. In its artless simplicity, with nary a tune written by Dylan himself, it's a bold stroke that puts him back on sound footing in the folk tradition. The album is a personal move, with Dylan endeavoring to reclaim his roots and recover his soul. Yet the signals it sends to the scene around him bear an indelible message: It's time to go back to beginnings if we hope to get back on course, not only in music but in other spheres of American life as well.

All thirteen songs here emanate from the public domain (at least that's the assumption; there are no songwriting credits or historical information, which would have been welcome). Dylan sings about a raft of renegade characters, such as *Diamond Joe* and *Blackjack Davey*, works up a festive, rambling sweat in *Step It Up and Go*, and waxes tender on the gorgeously sung, Fifties-feeling ballad *Tomorrow Night*. It's an unpretentious tour de force whose first-take gruffness stands in refreshing contrast to the antiseptic sterility of the music scene in general.

"Good As I Been to You" is Dylan's first all-acoustic album since his 1961 debut; if it were the last album he ever made, it would close the circle with perfect symmetry. But let's hope that it heralds a new morning in his career instead. *P.P.*

FIVE GUYS NAMED MOE

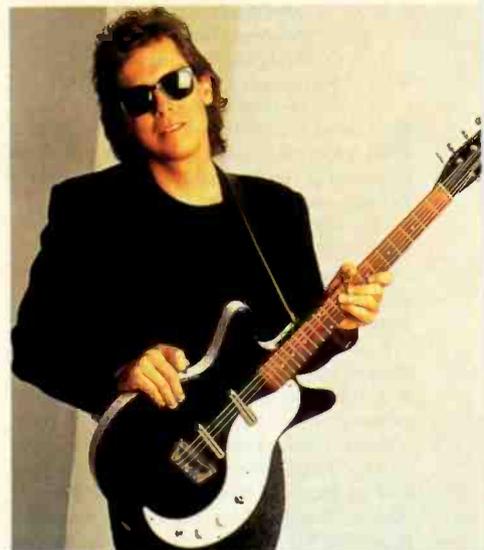
Original Broadway Cast

COLUMBIA 52999 (67 min)

Performance: Vigorous

Recording: Excellent

The singer, composer, and alto saxophonist Louis Jordan worked with several big bands between 1929, when he occupied the piano in Jimmy Pryor's Imperial Serenaders, and 1936, when he joined the reed section of



Ray Kennedy: dangerous

Chick Webb's orchestra for a two-year stint. In the summer of 1938, Jordan formed his Elk's Rendezvous Band, a group that soon became known as the Tympany Five. He signed a contract with Decca and began making a long succession of hits, most of which were characterized by pronounced rhythm and humor. He became one of the Forties' most popular musical entertainers, with individual record sales registering as high as two million copies.

Jordan often wrote his own material, and he had a knack for turning other people's banal songs into something worthwhile. Such was the case with *Five Guys Named Moe*, a pedestrian tune that gave its name to a British cabaret show that became a West End musical and is currently running on Broadway. The Broadway-cast album is an entertaining, well-executed recording that faithfully captures the flavor of the stage production but spares listeners the forced hilarity of its audience-participation segments. The renditions of the songs are also fairly faithful to Jordan's original performances. The show's cast is excellent, but only one singer, Milton Craig Nealy, stands out. I hope someone has the sense to give him an album of his own. This CD serves well as a memento of the show and as an introduction to Louis Jordan, but you ought to treat yourself to the original performances, many of which are available on CD. *C.A.*

THE JAYHAWKS

Hollywood Town Hall

DEF AMERICAN 9 26829 (43 min)

Performance: Affecting

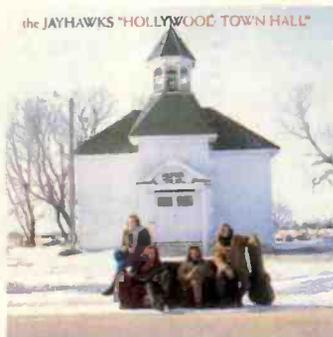
Recording: Very good

Amuted, wintry sense of urgency permeates the ten songs in "Hollywood Town Hall." You can feel the frosty tang of an arctic wind blowing down in the Jayhawks' piquant country-rock. The group hails from Minneapolis, and, like Blue Rodeo, who could be considered their counterpart across the Canadian border, they imbue their music with a sense of place. It seems that the further north you go, the more you notice and internalize changes in seasons, to the point where the weather functions as a metaphor for emotional states: Witness songs such as this album's

Settled Down like Rain, Clouds, and Waiting for the Sun.

At the core of the band are its two singer/songwriter/guitarists, Mark Olson and Gary Louris, whose clear, pure tenors blend in high, lonesome folk harmonies. Olson strums an acoustic, while Louris plays an electric with the searching sound of early Neil Young. Guest keyboardists Benmont Tench and Nicky Hopkins slot right in, adding a "Music from Big Pink" or "Blonde on Blonde" cast to the Jayhawks' rustic ruminations. The rhythm section does exactly what bass and drums ought to do in this kind of music: support the melodies, mark time, throw in an artful fill every now and then.

Like the folk-rock naturals they are, the Jayhawks fit squarely in the tradition of the



Byrds, Gram Parsons, Poco, and Neil Young. The songs flow effortlessly and easily, establishing a comfortable familiarity on first hearing and wearing well. "Hollywood Town Hall" is a tunefully melancholy place worth visiting over and over. *P.P.*

RAY KENNEDY

Guitar Man

ATLANTIC 82422 (32 min)

Performance: Merle, Jr.

Recording: Good

Ray Kennedy's 1990 debut album, "What a Way to Go," was remarkable both for its dark, moody ambience and concise songs of pain and pleasure and for Kennedy's musicianship—he not only played nearly every instrument but engineered the recording, too. "Guitar Man" is the follow-up, and while it's lighter in tone and subject matter—for instance, there's a swing song, *No Way Jose*, in which he has a one-way conversation with a bottle of Jose Cuervo—Kennedy remains a charismatic performer. He's got a heart-on for Merle Haggard, often writing in Haggard's tough-but-tender style, and doing a better-than-average vocal impersonation when he wants to. But his wit is drier than the Hag's, he stays away from Haggard's overt politics, and, as the first album showed, he can talk about dangerous sex, and not just romance.

Once Kennedy gets established, he should pocket the money, go back to his more edgy, atmospheric stuff, and be content to be a cult



Tamiya Lynn: personal

figure. The mystery becomes him—and nobody else in contemporary country can pull it off. Be sure to check out his guitar work, too—he's Mr. Art Deco in the credits. *A.N.*

TAMIYA LYNN

LIBERTY C4-99470 (51 min)

Performance: Intriguing

Recording: Satisfactory

It is difficult to define the kind of music Tamiya Lynn makes on her first album, for which she wrote all the songs. The instrumentation of the opener, *Hip New Moon*, seems to

"a raw-boned masterpiece"

—MUSICIAN

"one of the ten essential albums of 1992"

—VOX

"Tom Waits' supreme achievement to date ...his 'One Hundred Years Of Solitude', his 'Apocalypse Now' "

"One of the finest records of the year"

—BILLBOARD

—SELECT

"nothing short of breathtaking"

—NEW YORK TIMES

"unshakable ... bursts with color and emotion"

—CHICAGO TRIBUNE

"one of pop's most innovative forces"

—DETROIT NEWS

"It's scary, mournful, morbid and easily one of Tom's best"

—NEW MUSICAL EXPRESS

"Tom Waits keeps getting weirder and better—proving that you can live life in sinful disgrace and come out somehow purer in the end."

—SPIN

"the musical equivalent of Clint Eastwood's 'Unforgiven' "

—LOS ANGELES TIMES

"the most bizarrely creative and challenging talent in the pop-song field"

—PEOPLE

"ragged glory"

—MELODY MAKER

"his finest album"

—WASHINGTON POST

TOM WAITS
BONE MACHINE

Produced by Tom Waits. Associate Producer: Kathleen Brennan



Tom Waits BONE MACHINE. Includes the tracks "I Don't Wanna Grow Up" and "Cola Out West". Available on Island compact discs and cassettes.

© 1992 Island Records, Inc. ISLAND

set us up for some airy but offbeat California-flavored jazz, but other tracks go in quite different directions, from the lightly rock-influenced *To Be Your Lady* to the classical tracings of *After All*. Her nonconformity might not be surprising considering that Tamiya Lynn long has been a favorite of Dr. John, appearing on several of his albums while also working with other name artists as a background singer. Indeed, there are echoes of Dr. John's incantatory approach on a couple of these selections, most notably *Love Is*, with its throbbing percussive pulse. But an odd, dreamy quality prevails throughout, and by the time you've listened to a few of these highly personal songs about the nature of love, you will have fallen under Lynn's spell. This is an album to refresh jaded ears. **P.G.**

MADONNA*Erotica*

MAVERICK/SIRE 45031 (75 min)

Performance: Pant, pant

Recording: Fine

Arousal of one sort or another has always been Madonna's calling card. So it was both natural and redundant for her to put out a book called *Sex* and an album called "Erotica." But this time she went too far—for her own good as well as ours. Madonna was much more enlightening and entertaining when she suggested the rich possibilities within relationships and physical love. The book, in making her fantasies explicit, makes her look silly and artificial. The album isn't as narrowly conceived—without the visuals it simply can't be as explicit—so there are fewer truly embarrassing moments. The worst is *Deeper and Deeper*, a sophomoric paean to oral sex ("In case you don't already know / Dining out can happen down below").

Far more troublesome than the silliness is the utter *seriousness* of Madonna's work on "Erotica." On the title cut, when she substitutes a moan for the choicest four-letter word, it should have been funny, or at least done with a salacious wink. But instead it's a thick-voiced expression of how all-consuming this



O'Connell: visionary

hunger can be (tell us something we don't know, babe). Going even further on a musical level, Madonna has shifted the emphasis in her arrangements almost entirely to deep, rumbling rhythms. Maybe she thought these slow shuffles—heavily influenced by the rap and underground dance scenes—would seem primal. But the lack of hooks gives the album a sort of brooding sameness.

To be fair, some cuts—the itchy desperate *Waiting*, for example—manage to kick harder, especially when they break out of a single lockstep beat into a bridge that goes against the rhythmic grain. Listening to longer stretches of this album, though, can be tedious, even boring. And, unfortunately, that's what's really shocking about "Erotica." **R.G.**

JOHN MICHAEL MONTGOMERY*Life's a Dance*

ATLANTIC 82420 (33 min)

Performance: A star is born

Recording: Good

Add another name to the long list of country hunks. John Michael Montgomery strikes a Garth Brooks pose on the cover of this debut album, but he really doesn't have to. Montgomery, a Kentuckian who's been a local club favorite for some time, turns in a first-rate collection of traditional jukebox fare, mostly honky-tonk and tuneful ballads, and he sings it like he knows he's going to be the next guy to own Nashville. Whether going for a Hank Williams choke-and-moan vocal style in the clever *Beer and Bones* (that's all he is since his baby left him) or settling into a Haggard/Straight groove in the sweet waltz *Dream On Texas Ladies*, he's always in command of his material, delivering with the ease of a seasoned veteran. *Life's a Dance* is the most potentially hit-laden debut of the season. Watch Montgomery become a megastar. **A.N.**

MAURA O'CONNELL*Blue Is the Colour of Hope*

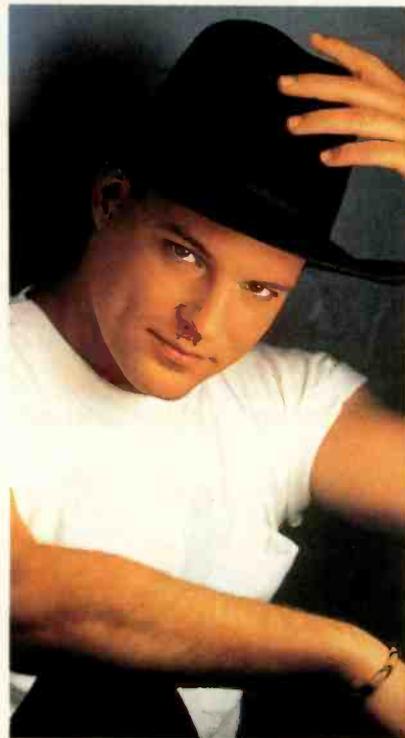
WARNER BROS. 45063 (38 min)

Performance: Superior

Recording: Good

The surprise with Maura O'Connell isn't that she's a cult artist, but that her cult hasn't splintered off into little fringe cults. For O'Connell isn't just an Irish singer who lives in Nashville, singing country-tinged Irish folk, soul, and pop. She's a force field of emotion, a singer with a multicolored corduroy quilt of a voice, and a musical visionary who makes it sound perfectly natural to segue from a sultry, Rosemary Clooneyish jazz piece (*Love to Learn*) to an early-Sixties-style r-&-b number (*First You Cry*), having already followed Mary Chapin Carpenter's somber and elegant *It Don't Bring You with I Would Be Stronger Than That*, a chilling song of wife abuse, and the sophisticated, soul-shaking pop of *So Soft Your Goodbye*.

"Blue Is the Colour of Hope," O'Connell's third solo album, also marks her third collaboration with an offbeat producer. This time it's dobroist extraordinaire Jerry Douglas, who gives her unremittingly sad songs about the different stages of love a fitting acoustic production with electric accents. But Douglas, who also contributes a gorgeous if somewhat overpowering Weissenborn guitar framework for a song of "never ending aching" (*Sunny-*



Montgomery: traditional

shine Day), needs to rethink his approach to sequencing—it's not in anybody's best interest to group all the progressive folk-rock songs together at the outset of the album. And calling on the otherworldly Webb Wilder to put a shadow vocal in *To Be the One* may have seemed like a great idea, but in actuality it just sounds like a radio pulling in two stations at once.

"Blue Is the Colour of Hope" (the title comes from J. D. Salinger) may lack the production edge that O'Connell's previous album, "A Real Life Story," had in spades. But it's still bound to enhance her considerable reputation, and justifiably so. She is a singer whose art comforts and nurtures the soul, her shaded soprano the very voice of desire. **A.N.**

THE PURSUIT OF HAPPINESS*The Downward Road*

MERCURY 314 512 972 (50 min)

Performance: Rundgren rehash

Recording: Good

Brainy but underwhelming, the Pursuit of Happiness comes on like a Grade B Todd Rundgren clone or, worse, a poor man's Utopia. Their first two albums, which admittedly had their moments, were actually produced by Rundgren, and that made a difference. By contrast, "The Downward Road" is a faded copy from a machine in need of toner.

The Utopia comparison is not idly made; the Pursuit of Happiness suffers from plain, homey vocals, like those cuts on a Utopia record not sung by Rundgren. The group mimics voicings and progressions from the Rundgren conservatory, keeping the flame alive but at a dim flicker. Any stab at a pure-pop sensibility is corrupted by clunky concessions to mainstream rock: a big drum sound that marks time with the dull economy of an arena band, riffy power chords from the Cheap Trick-gone-to-

hell school. Finally, there's the incongruity of Moe Berg's lyrics, which scan like amateur psychology produced by a computer program: "You satisfy my ego / Still I'm pathologically restless," he drones in *But I Do*.

"The Downward Road" does have its pleasures. *Bored of You* plumbs the female psyche to puzzle out why "nice guys finish last," and *I'm Ashamed of Myself* turns a libidinous thought into an infectious pop chant. But the album is essentially featureless, and TPOH is really still pursuing an original niche. *P.P.*

THE REMBRANDTS

Untitled

ATCO 92200 (53 min)

Performance: Masterly pop

Recording: Very good

If the Everly Brothers were to sing songs written by Squeeze in the mold of "Abbey Road"-era Beatles, you'd wind up with something along the lines of the Rembrandts' "Untitled." It's stocked to the legal limit with gorgeous melodies, rainbow-hued arrangements, and the sort of goosebump-raising excitement that fans of such smart-pop standard bearers as Big Star, Dwight Twilley, Shoes, and the dB's will recognize immediately. Actually, it took me about a week just to get past the third song, *Rollin' Down the Hill*—a delightful sleigh ride through a scenic pop wonderland, complete with a heart-tugging chorus and merrily bopping, McCartneyesque bridge—and discover the rest of the album. The Rembrandts are aptly named, layering their sonic canvases in bold, painterly strokes. The vaguely Springsteenish *One Horse Town*, for example, is sung against a backdrop of pizzicato strings, and *I'll Come Callin'*, a Byrdsy swirl of harmonies and mandolins, is performed as nimbly as a folk waltz. If classy, quirky, studiously assayed pop is your thing—by now, you all know who you are—the Rembrandts' "Untitled" is a minor masterpiece that deserves to hang in your collection. *P.P.*

RON WOOD

Slide on This

CONTINUUM 19210 (59 min)

Performance: Lackluster

Recording: Sludgy

It's no accident that ten years have passed between Ron Wood solo albums. At the risk of belaboring the obvious, they're just not very good. Neither is his voice, a hoarse bray that argues mightily against cigarette smoking. (But he would not be able to pose in silhouette without one of the damn things fuming away.) Even his vaunted slide playing isn't exactly the stuff of legend; it sounds a little rusty, like he's coasting on reputation.

Granted, the packaging for "Slide on This" is lavish and beautiful, a quadruple gatefold plus a thick booklet that features many of Wood's paintings and drawings. The man is gifted, both as an artist and as a musician, although in the latter department this ultimate journeyman/sidekick may be overextending himself in a front and center role. There's little among the sodden, labored heap of tracks here to argue otherwise, with the glorious exception of the Hothouse Flowers' goading of Wood into a righteous, rocking performance on *Like It*. *P.P.*

Stereo Review
SUBSCRIBER SERVICE



Place
label
here

1(303) 447-9330

STEREO REVIEW

P.O. Box 55627
BOULDER, CO 80322

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 _____

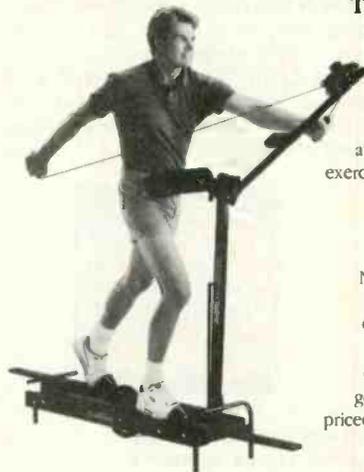
CITY _____

STATE _____

ZIP _____

Why settle for anything less?

**With prices starting at \$299⁹⁵
you can afford a NordicTrack.**



There are good reasons why the NordicTrack® cross-country ski exerciser is known as "The World's Best Aerobic Exerciser®."

For over 17 years NordicTrack has been the leader in bringing cross-country skiing into the home.

While lesser cross-country ski exercisers provide an awkward "shuffling" motion, the NordicTrack cross-country ski exerciser uses a patented flywheel and one-way clutch mechanism that no other ski machine can match.

It's the affordable way to meet your fitness goals.

NordicTrack works all the major muscle groups, burning more calories and providing a better cardiovascular workout than exercise bikes, treadmills and stairsteppers. It's gentle on your knees, joints and back. And it's easy to use.

Over a million owners already know that exercise just doesn't get any better than NordicTrack. And with NordicTrack models priced as low as \$299.95, there's no reason you can't own the best!

30-day in-home trial

- NordicTrack Excel™only \$499⁹⁵!
NordicTrack Sequoia™only \$399⁹⁵!
NordicTrack Challenger™only \$299⁹⁵!
Models priced from \$299⁹⁵ to \$1,299⁹⁵

NordicTrack
A CML Company

©1993 NordicTrack, Inc., A CML Company. All rights reserved. NordicTrack reserves the right to change prices and specifications without prior notice.

Call or Write for a
FREE Video
and Brochure

1-800-328-5888 Ext. 295B3

or write: NordicTrack, Dept. 295B3
104 Peavey Road, Chaska, MN 55318

- Please send me a free brochure
 Also a free VHS videotape

Name _____

Street _____

City _____ State _____ Zip _____

Phone () _____

QUICK FIXES

THE BAD EXAMPLES

Cheap Beer Night

WATERDOG WD 9201 (72 min)

A live set from Chicago's smartest pop band, and nowhere near as redundant as you might think—in fact, they've yet to sound quite this hot in the studio. Nice bonus: the hitherto unrecorded *Sammy the Dog Has Learned to Play Trombone*, featuring vocal support by obviously delighted audience members. S.S.

HERE NO EVIL—A TRIBUTE TO THE MONKEES

LONG PLAY LP23 (64 min)

Twenty-one alternative rock types pay homage to TV's Prefab Four, and, atypically for this sort of project, there's not a bum track in the bunch. Pick hits: R.E.M. pal Mitch Easter's blisteringly authentic *Valeri*, the Vulgar Boatmen's Buddy Holly-style take on *The Kind of Girl I Could Love*. Major oddity: Cruisin's *A Little Bit Me, A Little Bit You*, with lead vocal by Max Collins, the guy who usually writes (no kidding) the Dick Tracy comic strip. S.S.



HERB EIMERMAN

From Your Window

DLS 112378 (43 min)

Pop formalists will fall for this record, produced by Jeff Murphy of the Shoes, and though it doesn't jell on every tune, it will satisfy a compulsive's sweet tooth with its winning harmonies, chiming guitars, and big heart. But proceed slowly: all thirteen bonbons at once may give you a stomach-ache. P.P.

GLOBAL MEDITATION

THE RELAXATION COMPANY

3210 (four discs, 207 min)

The title of this collection and the name of the record company suggest that this is a whole lot of hypnotic music to nod off to. But actually it is a varied, almost encyclopedic overview of world music divided into four sections: rhythm, melody, harmony, and song. Some of it is quite beautiful, and some of it is strange, but the individual selections were well chosen for authenticity and accessibility to Western ears. Ranging from Albania to Tibet, from Norway to Australia, the set covers so much geography that it just might be all the world music you'll ever need. (Available on CD's or cassettes directly from the Relaxation Company, telephone 1-800-788-6670.)

William Livingstone

IZZY STRADLIN AND

THE JU-JU HOUNDS

Geffen GEFD-24490 (44 min)

Tight band. Good songs. Rocks hard. Shame about the voice. P.P.

DARLENE LOVE & LANI GROVE

Bringing It Home

SHANACHIE 9003 (40 min)

Phil Spector chanteuse and *Lethal Weapon* co-star Love and Stevie Wonder backup singer Grove here essay ten soul and r-&-b standards more or less live in the studio. It's a nice idea in principle, and the singing is exemplary, but does the world (or your record collection) really need covers of James Brown, Sam Cooke, and Fontella Bass songs that do not significantly improve on the originals? S.S.

RICK REYNOLDS

Only the Truth Is Funny

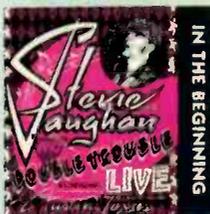
GANG OF SEVEN 74144-22003-2 (75 min)

A live recording of Reynolds's justifiably acclaimed one-man show, a monologue that's half standup comedy, half performance art (*Swimming to Cambodia* with better jokes?), and by turns laugh-out-loud hilarious and almost painfully revealing. The spoken-word album of the year for sure. S.S.

THE SECRET POLICEMAN'S OTHER BALL—THE MUSIC

RHINO R2 71048 (50 min)

This reissued Amnesty International benefit show is a decade old, and some of it holds up (Sting's reconstituted *Roxanne* and *Message in a Bottle*, a Jeff Beck/Eric Clapton rave-up on a trio of blues tunes) while some of it doesn't (Bob Geldof's overwrought ranting, Phil Collin's self-pitying drivel). Trick question: Were we all less discriminating back then or were we just too stoned to recognize dreck when we heard it? A.N.



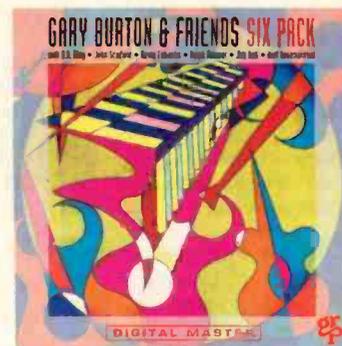
STEVIE RAY VAUGHAN AND DOUBLE TROUBLE

In the Beginning

EPIC EK 53168 (40 min)

Embryonic, pre-record-deal Stevie Ray (from a live, Austin, 1980 radio broadcast) in which Texas's most celebrated non-Albino blues guitarist does his post-Hendrix thing with characteristic panache. Not essential listening, perhaps, but a nice addendum to his legacy and, obviously, a treat for fans. S.S.

JAZZ



GARY BURTON AND FRIENDS

Six Pack

GRP GRD-9685 (68 min)

Performance: Trite

Recording: Good

Gary Burton has long been one of the finest vibraphone players around, a musician whose aesthetic sense was never in doubt, an artist who chose his surroundings well. I suppose he is still all that, but on his new "Six Pack" I'm afraid he is aiming at the gallery. With guest appearances by the likes of B.B. King, John Scofield, Jim Hall, and Ralph Towner, this might have been an interesting get-together, but it is instead a hopelessly banal mélange of clichés. The worst culprit is tenor man Bob Berg, whose monotonous style simply isn't happening. There are, to be fair, flashes of finery here—like *Asphodel*, with Jim Hall and the pianist Mulgrew Miller, and *Redial*, a duet with Ralph Towner—but not enough for me to recommend this set to anyone with a good ear for music. C.A.

ROY CAMPBELL

New Kingdom

DELMARK DE 456 (64 min)

Performance: Excellent

Recording: Good

The opening track of "New Kingdom" is trumpeter Roy Campbell's tribute to his teacher, Lee Morgan. Although *I Remember Lee* starts as a dirge played by some high-school band, it soon blossoms into a delightful bop romp. The forty-year-old Campbell is no newcomer to the music scene, but his name is not as well-known as it should be. As a matter of fact, this album features six relatively neglected musicians. Campbell, tenor saxophonist Zane Massey, and altoist Ricardo Strobert form the front line and fill it with substantive statements, while the action-packed, pianoless rhythm section sizzles with the work of vibist Bryan Carrott, bassist William Parker, and drummer Zen Matsuura. Parker was long associated with pianist Cecil Taylor, but his *For C.T.* is aimed elsewhere, being a bow to the late Clifford Thornton—a trombonist who briefly lit up the avant-garde scene of the Sixties. Massey's turbulent *Peace*, played with bass and drums only, is another highlight, but it is the leader who provides the glue for this cohesive set. Roy Campbell spends a good portion of his time in Holland these days, but this is the kind of album that could bring him home. C.A.

PAUL DESMOND**Like Someone in Love**

TELARCHIVE CD-83319 (61 min)

Performance: Pure alto down**Recording: Very good remote**

It would be difficult to imagine the Dave Brubeck Quartet of the Fifties without the sound of Paul Desmond's alto saxophone. Desmond, who wrote the quartet's biggest hit, *Take Five*, stayed with Brubeck until the group broke up in 1967. His delicate alto had been as vital to its success as the leader's own piano, and it proved to be equally effective when detached. Desmond spent his remaining ten years playing only occasionally and writing a book called *How Many of You Are There in the Quartet?* The book never materialized, but a few recordings were made during that period, including a live performance from Toronto, with the guitarist Ed Bickert. That two-LP set, "Paul Desmond Quartet Live" (A&M), was recorded in 1975 and should not be confused with "Like Someone in Love," a new Telarchive release of previously unissued material from the same period and place. This wonderful find has Desmond, Bickert, bassist Don Thompson, and drummer Jerry Fuller breezing through a program of familiar material. Paul Desmond's lyrical approach and keen



sense of composition could have turned any tune into something delightful, but here he has great material like Django Reinhardt's *Nuages*, Jobim's *Meditation*, and the Van Heusen-Burke ballad *Like Someone in Love* to work with. The result is heavenly. C.A.

ART HODES**Up in Volly's Room**

DELMARK DE 217 (59 min)

Performance: Soothing**Recording: Very good**

Besides caressing jazz with his keyboard work, Russian-born pianist Art Hodes has written many wonderful firsthand observations on jazz people and events he's experienced since he began his professional career over sixty years ago. "Up in Volly's Room" is a rich serving of material from the traditional jazz repertory, recorded twenty years ago by Hodes and some of his long-time associates. The title refers to Volly DeFaut, a former member of the famous New Orleans Rhythm Kings, who also recorded with Jelly Roll Morton, Muggsy Spanier, and the Gene Goldkette orchestra. His agile, somewhat gaunt clarinet style graces all but four of the thirteen tracks. Heard throughout the album is a Hodes regular, former football player Truck Parham, whose solid bass playing earned him a place in

some of the best groups of the Thirties and Forties. Trumpeter Nappy Trottier and trombonist George Brunis (another famous New Orleans Rhythm Kings alumnus) join in on *Ja Da* and—giving this otherwise velvety set a rousing finish—*Panama Rag*. C.A.

JUNIOR MANCE**Here 'Tis**

SACKVILLE SKCD2-3050 (61 min)

Performance: Superb**Recording: Very good**

I have long admired the playing of Junior Mance. His style is an appealing blend of old and new, firmly rooted in the past but adapted to the present, and he can structure a solo with awesome logic. Proof that Mance's piano today is as compelling as ever lies in the pits (formerly grooves) of "Here 'Tis," a tribute to Dizzy Gillespie, who last year celebrated his seventy-fifth birthday, and in whose quintet Mance played in the late Fifties. Contributing generously to this set are four young Canadian musicians: flutist Bill McBirnie, who lends a Gillespie-like feel to half of the selections, including the title track (which also reflects Mance's time with Cannonball Adderley), and Reg Schwager, Kieran Overs, and Norman Marshall Villeneuve—who play guitar, bass, and drums, respectively. They are all exceptional musicians who have captured the essence of this kind of unpretentious jazz, which is as timeless as the Junior Mance style itself. The final track is a solo piano performance of *A Night in Tunisia*, which sums up the appeal of Mance's soulful approach to a music that can be downright frosty. C.A.

RED NORVO**Live from the Blue Gardens**

MUSIC MASTERS 65090 (57 min)

Performance: Good dig**Recording: All things considered...**

Red Norvo made his mark playing an instrument that continues to be an anomaly in the jazz world, but the xylophone was not his only distinguishing sound. He displayed an ear for rare textures as early as 1933, when he made the unconventional *Dance of the Octopus* with a quartet that included Benny Goodman on bass clarinet. Some of that penchant for unorthodox orchestration can be heard on a new release of a radio broadcast Norvo made fifty years ago. "Live from the Blue Gardens" features Norvo's big band broadcasting to WOR listeners and playing for dancers in Armonk, New York, on the night of January 4, 1942. Except for the leader, there are no real big names in this fifteen-piece band, but Norvo always surrounded himself with fine musicians, and this band is as good as any star-studded group of the period. Among the four featured vocalists are "special guest" Helen Ward and trombonist Eddie Bert, whose wife recorded this broadcast. The discs were recently unearthed in one of Bert's closets, and they seem generally to have been in good shape, but I wish that the ticks had been removed on a couple of selections. Sonic limitations notwithstanding, this time capsule is a joy to hear, for besides its obvious nostalgia value (enhanced by the mellifluous voice of a Forties announcer), the set contains superbly executed ballroom material and a generous amount of simmering jazz. C.A.

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 Publisher of STEREO REVIEW Magazine, Nick Matarazzo. Be sure to include copies of all correspondence.



This Month's

Receivers



JVC RX-206 Remote Stereo Receiver
 •40 watts per channel •AM/FM tuner with 40-station presets •4-speaker matrix surround •Discrete output transistors •Full-function wireless remote control
 Our Low Price **\$149⁹⁵** (JVC RX206)

Sherwood RA-1140 **\$99⁹⁵**
 •25 watts/channel, surround sound
Technics SA-GX130 **\$189⁹⁵**
 •70 watts/channel, A/V remote
Yamaha R85 **\$229⁹⁵**
 •45 watts per channel, remote
Technics SA-GX330 **\$259⁹⁵**
 •100 watts/channel, remote
Technics SA-GX530 **\$349⁹⁵**
 •110 watts/channel, Dolby Pro Logic, remote
Technics SA-GX730 **\$549⁹⁵**
 •125 watts/channel, Dolby Pro Logic, remote

Cassette Decks



Teac W-585R Double Cassette Deck
 •Double auto-reverse •Parallel & series recording •4-motors •Dolby B & C •Dolby HX-Pro Fine bias control •Mic inputs
 Our Low Price **\$229⁹⁵** (TEA W585R)

Teac V-370 **\$79⁹⁵**
 •Cassette, Dolby B, auto-tape select
Teac W-410 **\$99⁹⁵**
 •Dual Cassette Deck, Dolby B
Technics RS-TR232 **\$159⁹⁵**
 •Dual Cassette, auto-rev, Dolby B/C/HX-Pro
Technics RS-TR333 **\$189⁹⁵**
 •Dual Cassette, auto-rev, Dolby B/C/HX-Pro
JVC TDW-307 **\$199⁹⁵**
 •Dual Cassette, auto-rev, Dolby B/C/HX-Pro
Yamaha K90 **\$199⁹⁵**
 •Dual Cassette, auto-reverse, Dolby B&C

Mini Audio Systems



Aiwa NS-X330 Mini Stereo System
 •30 watts per channel •Super-T Bass •3 preset equalizer positions (rock/pop/classical)
 •Dual auto-reverse cassette decks •36-key wireless remote •Dolby B •3-way speakers
 Our Low Price **\$399⁹⁵** (AIW NSX330)

Samsung SC-6500 **\$199⁹⁵**
 •Digital tuner, CD Player, Dual cassette, remote
Panasonic SC-TS230 **\$299⁹⁵**
 •CD, turntable, dual cassette, A/V remote
Aiwa NS-X150 **\$299⁹⁵**
 •AM/FM, 3-CD Changer, EQ, Dual Cassette
JVC UXA3 **\$399⁹⁵**
 CD Player, auto-rev, Cassette, remote, 110/220 volt
Aiwa NS-X350 **\$499⁹⁵**
 •3-Disc CD Carousel, Dual Cassette
Aiwa NSX-D55 **\$599⁹⁵**
 •50 watts/ch, CD, dual auto-rev Cassette, Dolby B/C

New Jazz Releases



Ella Fitzgerald The Early Years
 WITH CHICK WEBB & HIS ORCHESTRA
\$21⁹⁹ 2 CD Set
 Also Available:

Jackie McLean: *Rhythm of the Earth* ANT 517075 \$6.99/Cassette \$10.99/CD
 Stanley Turrentine: *More Than A Mood* MMS 65079 \$6.99/Cassette \$10.99/CD
 Geri Allen: *Maroons* BN 99493 \$11.99/CD
 Tony Williams: *Lifetime-The Collection* COL 47484 \$5.99/Cassette \$9.99/CD
 Mike Stern: *Standards (& Other Songs)* ATL 82419 \$7.99/Cassette \$11.99/CD
 Dizzy Gillespie: *Dizzy's Diamonds* VER 513875 \$31.99/3-CD Set
 J. J. Johnson: *Vivian* CON 4523 \$10.99/CD

Compact Disc Players



Technics SL-PD827 5-Disc Rotary CD Changer
 •Designed to allow the changing of 4 discs while one is in play •MASH 1-bit D/A converter •32X oversampling •10 key direct access remote •Spiral play •Synchro-editing
 Our Low Price **\$199⁹⁵** (TEC SLP0827)

Sherwood CD-1000C **\$99⁹⁵**
 •4X oversampling, 16-track programming
JVC XLV-151 **\$129⁹⁵**
 •1-bit, 8X oversampling
Technics SL-PG300 **\$149⁹⁵**
 •CD Player, MASH D/A, remote
Teac PD-D700 **\$169⁹⁵**
 •CD Changer, 5-disc, remote
JVC XLM-407 **\$249⁹⁵**
 •CD changer, 6 disc magazine + 1 in tray
Yamaha CDC-91 **\$269⁹⁵**
 •5-disc CD Changer, SL-bit, remote

Surround Sound



Atlantic Technology Pattern 200 Instant Home Theater
 •Add to a TV & a stereo VCR or LV disc player & enjoy great home theater sound •Complete system contains 5-satellite speakers, subwoofer, amps, Dolby Pro-Logic decoder, cables & remote
 Our Low Price **\$799⁹⁵** (ATC PATTERN200)

Design Acoustic PS-CV **\$89⁹⁵**
 •Point Source Compact Speakers, shielded, Each
Audio Source SS-One II **\$129⁹⁵**
 •Surround Sound Amp, Dolby
Yamaha NSA-PC10 **\$129⁹⁵**
 •Amplified Center Channel Speaker, 25 watts Each
Bose VS100 **\$129⁹⁵**
 •Center Channel Speaker, shielded, Each
JBL AVP3 **\$139⁹⁵**
 •Mini Speaker, 2-way, shielded, w/bracket, Each
AudioSource SS-Three II **\$299⁹⁵**
 •Dolby Surround Processor with rear ch. amp

Audio Add-Ons



Audio Source EQ-11 10-Band Graphic Equalizer
 •10-bands per channel •LEDs on sliders •Spectrum analyzer display •Audio/Video input switching (for proper impedance matching) •Tape-to-tape dubbing •EQ record & tape monitor
 Our Low Price **\$129⁹⁵** (ASO EQ11)

Target BT1 **\$29⁹⁵**
 •Wall Speaker Bracket, swivel, bits, Pair
Niles SPS-1 **\$69⁹⁵**
 •Speaker Selector, holds 4 pairs
Teac EQ-A3 **\$69⁹⁵**
 •Graphic Equalizer, 10 bands/ch, +/- 12 db
AudioSource EQ-8/II **\$99⁹⁵**
 •Graphic Equalizer, 10 bands/ch, LED sliders
Cewin Vega SW12B **\$199⁹⁵**
 •Subwoofer, 12" floor-facing woofer
Niles SVC-4 **\$249⁹⁵**
 •Speaker Control Box, 4-pr w/ ind. volume

Loudspeakers



Bose Model 31 Bookshelf Speaker
 •Compact size •2-way system with 8" woofer •Bass-reflex enclosure •3" tweeter •8 ohm impedance •Handles 10-90 watts
 Our Low Price **\$199⁹⁵/Pair** (BOS 31)

Yamaha NSA635 **\$99⁹⁵**
 •3-way speakers, 8" woofer, Pair
Technics SBL80 **\$129⁹⁵**
 •3-way speakers, 10" woofer, Pair
Pinnacle PN5+/Oak **\$149⁹⁵**
 •Compact Speakers, 2 way, diaduct, Pair
Design Acoustics PS-9 **\$299⁹⁵**
 •3-way, 8 down-firing woofer, mirror-image, Pair
Cerwin-Vega AT12 **\$399⁹⁵**
 •3-way, 12" woofer, Pair
JBL 4312BK **\$599⁹⁵**
 •3-Way Pro Studio Monitors, Pair

Loudspeakers



Pinnacle PN60 Two-Way Speaker System
 •6.5" black polypropylene woofer •Liquid cooled dome metal tweeter •Dual diaduct ports for superior bass •10-85 watts power handling
 Our Low Price **\$199⁹⁵/Pair** (PIN PN60)

JBL Performer **\$99⁹⁵**
 •2-way mini, shielded, Pair
Technics SB-L40 **\$99⁹⁵**
 •2-way, 10" woofer, Pair
Recoton W-400 **\$159⁹⁵**
 •Wireless Speaker System, 2-way, Pair
Bose 101 **\$159⁹⁵**
 •Mini Speakers, Indoor/outdoor, Pair
Technics SB-L80 **\$169⁹⁵**
 •3-way Speakers, 12" woofer, Pair
Acoustic Research 570 **\$299⁹⁵**
 •Powered Partner Speakers, 35 watts/spk, Pair

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 •Duopoint alignment gauge •Top rated
 Our Low Price **\$129⁹⁵** (SHU V15-VMR)

Stanton 500ALMP **\$34⁹⁵**
 •DJ Standard Mount Cartridge, 2-pack
Audio Technica AT-331LP **\$39⁹⁵**
 •Universal Mount Cartridge, line-contact
Stanton 680EL **\$59⁹⁵**
 •DJ Pro Standard Mount Cartridge, extra stylus
Gemini XL-BD10 **\$99⁹⁵**
 •Semi-Auto Turntable, belt, pitch
Technics SL-QD33K **\$164⁹⁵**
 •Fully Auto Direct Drive Turntable, quartz
Thorens 180 **\$299⁹⁵**
 •Turntable, 33/45/78 rpm, belt-drive

DJ Equipment



Stanton CD22 Dual Compact Disc Player
 •Designed to give the DJ as much control of CDs as LPs •Pitch control, cue up, mixing, and scratch effects •Also features visual displays, memory programming, Internal sense and diagnose circuitry
 Our Low Price **\$1299⁹⁵** (ASO SS-THREEII)

Gemini HPM-100 **\$39⁹⁵**
 •Headphone/Microphone mono earpiece
Gemini PMX-12 **\$99⁹⁵**
 •Scratchmaster Mixer, LED meters
Stanton PMC-500 **\$189⁹⁵**
 •Compact Mixer, replaceable cross-fader
Gemini PMX-3500 **\$279⁹⁵**
 •DJ Mixer, 7-band EQ, 2-phonos-line in, 8 sound effects
Gemini PDM-6008 **\$399⁹⁵**
 •Digital DJ Mixer, with EQ
Ness Disco Lights **CALL**
 •A Large Selection, for Information

CALL US TOLL FREE FOR ITEMS NOT LISTED IN THIS AD



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. SR0293, 59-50 Queens-Midtown Expressway, Maspeth, Queens, NY11378



BEETHOVEN: Piano Sonatas No. 12
 ("Funeral March"), No. 15 ("Pastorale"),
 No. 19, and No. 20

Claudio Arrau
 PHILIPS 426 256 (68 min)
 Performance: Ingratulating
 Recording: Excellent

These four sonatas take us just past the halfway point in the remake of the Beethoven cycle Claudio Arrau had under way when he died in June 1991 at the age of eighty-eight. Despite the Funeral March of No. 12, all of these works show Beethoven at his most ingratiating rather than in his Olympian mold, and none of them is among the most demanding technically. Indeed, the biggest challenge of the two-movement Sonatas Nos. 19 and 20 may lie in resisting the temptation to seek out a philosophical mystique, because of the name Beethoven, in music whose essence is unfeigned simplicity and charm. Arrau, of course, was never condescending; there is no striving for profundity here, no trivializing of the music's honest virtues, and no phrase that fails to sing.

The disc carries a dedication to the memory of Arrau's wife, a gesture that is the more affecting for *not* involving something monumental. Elsewhere in Beethoven, and in Brahms and Liszt and Schumann, Arrau was the titan or the philosopher. Here, in playing that is radiant with the intimacy of pleasure received and given, he simply reminds us that musicmaking can be an act of love. And these 1989 performances are enhanced by as lovely a piano sound as Philips has yet achieved. *R.F.*

PHOTO: DONALD DIETZ/SONY CLASSICAL



Emanuel Ax and Ya-Ya Ma

BRAHMS: Cello Sonatas In E Minor, F Major, and D Minor
 Ma, Ax (75 min)
 SONY SK 48191

Performance: From the heart
 Recording: The very best

Marvelous music, marvelous playing, superb sound—all from two of the finest chamber-music partners in the business working in the lovely acoustic surround of Jordan Hall in Cambridge, Massachusetts.

The E Minor Sonata finds Brahms the young romantic in full cry for the first movement, a delicate miniaturist in the second, and a gnarly contrapuntalist in the final allegro. Yo-Yo Ma is at his tonally rich and virile best, and

REVIEWS

CLASSICAL MUSIC

**Discs and tapes
 reviewed by Robert Ackart,
 Richard Freed, David Hall,
 George Jellinek,
 Eric Salzman, and
 David Patrick Stearns**

Emanuel Ax is the perfect keyboard partner.

The late F Major Sonata has an almost Schumannian exuberance in the first of its four movements. There is a fine, brooding slow movement, a tense scherzo, and a thoroughly relaxed and laid-back finale. Again, the performance is just right for the music.

A surprise is the great D Minor Violin Sonata in cello guise. Ma and Ax, after reading through the music for fun, simply did the Op. 108 as it stood with minor modifications to accommodate the cello registration. For the most part it works very well, although the double-stopped episodes in the slow movement seem oddly diluted in comparison to what one hears from the violin. But this is a minor cavil given the fact that this recording is a singularly satisfying achievement on every level. *D.H.*

DEBUSSY: String Quartet
RAVEL: String Quartet
 Quatuor Ysaÿe
 LONDON 430 434 (54 min)
 Performance: Elegant
 Recording: Exemplary

The illustrious Belgian violinist Eugène Ysaÿe led a famous string quartet of his own, the original Quatuor Ysaÿe, which gave the premiere of the Debussy Quartet in Paris at the end of 1893. The present group, formed by four students at the Paris Conservatoire in 1984, does honor to the name in its debut recording. The playing combines—as the two



works themselves do—a specifically Gallic elegance, clarity, and passion. While there is nothing radically different about either performance here, both are remarkably fresh because of a more profound emphasis on both the intensity and the clarity, and a greater success in balancing them, than we are accustomed to encountering at a single sitting. Thus the music comes at us as something both comfortably familiar and provocatively revealing. The scherzo in the Debussy shines with freshness as an almost microscopic violin figure is etched below the other players' pizzicati, and the climax of the succeeding slow movement is the more poignant for the steadiness of the rhythm. In the Ravel, the sinuous themes have a sort of drypoint texture from the outset, giving the pizzicati in that scherzo and the driving energy of the finale an unparalleled sense of power without upsetting the intimacy or proportions of the work. The recording captures the performances superbly, underscoring their aptness to the music without drawing attention to itself. *R.F.*

ELGAR: Symphony No. 1; Pomp and Circumstance Marches Nos. 1 and 4
 Philharmonia Orchestra, Sinopoli
 DEUTSCHE GRAMMOPHON 431 663
 (67 min)

Performance: Finely honed
 Recording: Good

Giuseppe Sinopoli made his first excursion into Elgar territory back in 1989, with the formidable Symphony No. 2. The Symphony No. 1 is hardly less formidable, but I find it a more mercurial piece, with its many pages of turbulent ebb and flow. Sinopoli captures this quality especially well in the opening movement, and I like the way he handles the quiet, visionary opening melody in the truly simple manner called for by the composer. The savage patrol march of the second movement goes well too. As tender as the immediately following *adagio* is, however, I question extending its playing time to almost two minutes beyond the norm; for my ears, the "sweetness long drawn out" began to outstay its welcome. The finale works up to a splendid peroration, with the motto theme fighting its way through rather like Bunyan's Pilgrim attaining the Celestial City. The church acoustic of Sinopoli's recording makes for somewhat less clarity of texture and richness in the bass than is heard in David Zinman's recent and very fine Baltimore performance for Telarc. Of the two *Pomp and Circumstance* marches here, the famous D Major fares best by virtue of the very alert performance of the outer sections. *D.H.*

MASSENET: Chérubin
 Von Stade, Anderson, Ramey, Upshaw;
 Munich Radio Orchestra, Steinberg
 RCA VICTOR 60593 (two discs, 115 min)
 Performance: What a cast!
 Recording: Stunning

More ghosts of Versailles! Beaumarchais, the original author of the Figaro plays, wrote the first sequel himself; *La Mère Coupable* was set to music by Darius Milhaud and provided the inspiration for John Corigliano's *Ghosts of Versailles*. There is also a play called *Figaro Gets a Divorce*, well-known in Germany, and an opera was made



out of it by Giselher Kiebe. Oddest of all is a French play called *Le Chérubin*, by a certain Francis de Croisset, which was set to music by none other than Jules Massenet. *Chérubin* is sexist, terminally cute, and terribly dated, but it is also, like the rascal that Cherubino becomes, utterly charming.

The opera is set in a never-never land of gallantry, willing women, and sexual adventure. The exquisitely pubescent Cherubino of *The Marriage of Figaro* has become an insufferable little macho punk of seventeen who makes a pass at (sexually harasses) every woman he sees, leaving behind a trail of panting females, jealous husbands and lovers, and a mildly disapproving philosophy professor. When the king's mistress, a Lola Montez dancer, turns up, he plays the callow innocent to get her attention. At one point he manages to get three different women going at the same time, and his delight knows no bounds.

This is all clearly supposed to be clever and amusing, especially since (1) it is so absurd, (2) he never really makes it to bed with any of them, (3) Lola gives him his comeuppance, (4) he learns his lesson and is redeemed in the end by the pure love of an honest woman, and (5) he is a she. In spite of the fact that Cherubino's hormone production has multiplied exponentially since the last opera, he is somehow still a mezzo.

But what a mezzo! And what a cast! Frederica von Stade as Cherubino, June Anderson as the sexy dancer, Dawn Upshaw as the faithful Nina, and Samuel Ramey as the Panglossian philosophy prof. Even the minor characters are extremely well cast: Jean-Marc Ivaldi as the otherwise unnamed Count, Michel Sénéchal as the Duke. And they genuinely have something to sing; the vocal writing is as

Giuseppe Sinopoli



CLIVE BARDA/DG

Haydn Surprises

THOUGH it's hard to imagine any surprises from sweet, predictable Papa Haydn, three recently released oratorio recordings are all major additions to the Haydn discography, and two are landmarks. Despite all the phonographic attention Haydn has received with complete recordings of his symphonies, operas, string quartets, and other chamber music, the 1768 *Applausus*, his first oratorio with a secular text, has escaped attention. It can be seen as a laboratory for *The Seasons* and *The Creation*, but its differences from later Haydn are what really make it interesting.

Applausus celebrates the four cardinal virtues. Relentlessly brilliant in the "galant" style, it shows an almost uncharacteristically expansive side of the composer. Each aria is longer than the last, and the final ones (as long as 18 minutes) use the da capo form as a jumping-off point for larger, rondo-like and binary forms with florid violin and keyboard obligattos. The final section quotes previously heard melodies before going on to its own theme for chorus— not unlike the final movement of Beethoven's Ninth Symphony, written roughly fifty years later. *Applausus* is quite a curiosity, then, and well worth listening to, although it might be more enjoyable with somewhat better soloists than the ones on the new Opus recording. Patrick Fournillier is a wonderfully spirited, knowledgeable Haydn conductor, however, and this performance at least provides a sturdy framework with which to become acquainted with the piece.

In the much later oratorio *The Seasons* (1801), his first major Haydn recording, John Eliot Gardiner turns out to be a potent Haydn conductor. The composer's natural vigor lends itself well to the conductor's driving style. In fact, Gardiner seems almost obsessed with clarity here, making sure that every original-instrument strand is crystalline. While such clarity is refreshing after hearing so many conventional-instrument recordings in which the homophonic choral writing obliterates all the details of the scoring, Gardiner's Toscaninian control over everything (including a tendency to straitjacket the soloists) sometimes robs the music of geniality, one of its most essential characteristics. But Gardiner uses this control with the benefit of convincing



Conductor Robert Shaw (center)

ideas about virtually every phrase of the music. He also has a near-ideal lineup of soloists—Barbara Bonney, Anthony Rolfe Johnson, and Andreas Schmidt—something that even Sir Thomas Beecham, that master of Haydn-esque geniality, was not able to assemble for his recording on EMI.

Robert Shaw's performance of *The Creation* (1798) isn't a first of any sort, but it is, in many ways, the most satisfying of the three. With larger performing forces, conventional instruments, and the text sung in an English translation, Shaw's approach is far from authentic. Only a few seconds into the overture, however, even the most rabid authenticist might find Shaw's loving, empathetic interpretation irresistible. He's occasionally guilty of slack tempos in the recitatives, but there is none of the rhythmic stiffness that has marred his previous efforts. Everything has a natural sense of flow. Being a singer's conductor, Shaw often lets the soloists have their way, though they're tasteful enough not to abuse the privilege. In fact, I don't know of any recording that shows these oft-heard singers—Dawn Upshaw, Jon Humphreys, and John Cheek—to such good advantage. And the Telarc production has a radiance befitting the music. *David Patrick Stearns*

HAYDN: *Applausus*

Musoleno, Dolberg, Johnson, Byrne, Courtis; Haydn Vokalensemble, Orchestre Regional De Picardie, Fournillier
OPUS 111 OPS 61-9207 (two discs, 129 min)

HAYDN: *The Creation*

Upshaw, Humphrey, Cheek, Murphy, McGuire; Atlanta Symphony Orchestra and Chamber Chorus, Shaw
TELARC CD-80298 (two discs, 107 min)

HAYDN: *The Seasons*

Bonney, Rolfe Johnson, Schmidt; Monteverdi Choir, English Baroque Soloists, Gardiner
DG Archiv 431-818 (two discs, 137 min)

PHOTO: JOHN MARCUS/ATLANTA SYMPHONY ORCHESTRA

exquisite as anything in Massenet or French opera. Indeed, the score, with its combination of French Romanticism and Classical clarity, expressivity, wit, and spirit, is one of Massenet's finest.

It is not only the leads that are strong. The entire cast, including the chorus of the Bavarian State Opera and the Munich Radio Orchestra under the elegant and inspired leadership of Pinchas Steinberg, contributes to the success of this remarkable and forgotten work. The recording, a co-production of BMG Classics and the Bavarian Radio, is stunning. *E.S.*

MILHAUD: Symphonies Nos. 1 and 2; Suite Provençale

Orchestre du Capitole de Toulouse, Plasson
DEUTSCHE GRAMMOPHON
435 437 (70 min)

Performance: Easygoing
Recording: Fine

Milhaud was hardly a symphonist by nature (or, for that matter, by art), but he wrote a couple of works under the title of symphony. Both were commissions from America—one from the Chicago Symphony, the other from the Koussevitzky Foundation for the Boston Symphony. These mild-mannered pastorales meander pleasantly and take their time working themselves up or getting anywhere. They lack the dramatic edges and developmental confrontations that usually go with the idea of symphonic form. Urgency is what these pieces do not have, and the home-

grown performances here from the south of France (where Milhaud was from) only reinforce that impression. It is not surprising that the *Suite Provençale*, settings of old Provençal tunes originally intended for the theater, makes a deeper impression. *E.S.*

MOZART: Quintets in C Major and G Minor
Zukerman, Tokyo String Quartet
RCA VICTOR 60940 (74 min)

Performance: Superlative G Minor
Recording: G Minor better

Pinchas Zukerman's viola blends gorgeously with the rich-toned yet refined style of the Tokyo String Quartet in these quintets, Mozart's supreme achievements in the medium. Mozart the classicist was in peak form throughout the C Major. The menuetto is elegance itself, the slow movement a fascinating study in harmonic light and shade, the sonata-rondo finale precisely witty. In this recording, however, resonance factors contributed to a disconcerting up-front presence of the cello in the first two movements. I was also a bit surprised at the intense first-violin vibrato at the outset.

But the somber G Minor Quintet put me in a different sonic world altogether, with everything in perfect balance and Mozart's musical message coming through with such piercing loveliness that I was no longer conscious of the instruments as such—no sense of what Charles Ives called the "apparatus of catgut and wires." This is an exquisite performance,

too. The fierce chording in the menuetto, the black despair of the first adagio, the infinite sadness that introduces the "whistling in the dark" finale—these linger in my memory. No sonic problems here! *D.H.*

RAVEL: Daphnis et Chloe; Rapsodie Espagnole; Pavane pour une Infante Défunte; Albarado del Graciosa; Boléro
Chicago Symphony Orchestra, Barenboim
ERATO 45766 (63 min)

Performance: Ranga but controlled
Recording: Exceptional

The *Rapsodie Espagnole* contains the only notes Ravel ever wrote that were intended purely as orchestral music—especially extraordinary considering that he might just have been the most skillful and original (and certainly most elegant) orchestrator of the century. Whether writing for the theater or dance or orchestrating from the piano, he always made the music sound as if it had been conceived in purely orchestral terms. The scope of that orchestral aesthetic is very much the subject matter of these performances and recordings, particularly in the four Hispanic works, which Barenboim has set up as a kind of Spanish symphony. The musical and sonic range of the recording is exceptional but always in a controlled sort of way. This makes for a rather tame *Boléro*, but mostly it works fine for this fastidious and elegant music which, like fine wine, has only improved over the years. *E.S.*

SAVE MONEY, TIME AND FREIGHT ON FAMOUS BRAND STEREO EQUIPMENT

Illinois audio
2184 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



JBL L80T
3 Way Monitor Speaker
• 1" Titanium high frequency transducer
• 10" woofer
• 5" midrange

List pr. \$498.00

SALE \$499⁰⁰ pr.

JBL PRO PERF+
3 pc. Sub/SAT Syst. List 439.00 **SALE \$329⁰⁰**

JBL 2600
6 1/2" 2 way bookshelf speaker List pr. 238.00 **SALE \$125⁰⁰ pr.**

JBL L2013BK
2-way bookshelf speaker system List 299.00 **SALE \$140⁰⁰ ea.**

YAMAHA NSA-635
8 OHM, 8" 3 way List pr. 187.00 **SALE \$99⁰⁰ pr.**

CASSETTE DECKS



TEAC W-6000R
Double Cassette Deck

• Auto reverse • Full function wireless remote • Dolby® MX Pro • One touch dubbing • Pitch control

List \$750.00

SALE \$459⁰⁰

TECHNICS RSTR-232
Dolby® B/C/HX Pro, Deck #1 auto-rev. List 499.95 **SALE \$159⁹⁵**

AIWA ADF 810
3 HD deck, Dolby®, BC, HX-Pro List 400.00 **SALE \$269⁰⁰**

JVC TD-W307
Twin auto reverse, Dolby® HX-Pro B/C NR, Pitch control List 260.00 **SALE \$177⁰⁰**

TEAC V-3000
3 HD-Remote List 500.00 **SALE \$330⁰⁰**

RECEIVERS



TECHNICS SA-GX530
AV STEREO RECEIVER

• 110 watt x 2 front • 10 W x 2 rear • 15 W center • Dolby® Pro-Logic Surround

List \$449.95

SALE \$329⁰⁰

TECHNICS SA-GX 730
125x2 front, 20x2 rear, 20 center, Dolby® Pro-Logic Surround List 749.00 **SALE \$489⁰⁰**

JVC RX-507VTN
80x2 front, 40x2 rear, Dolby® Pro-Logic **CALL FOR PRICE**

JVC RX-905V
Dolby® Pro-Logic, Digital Sound Processing **CALL FOR PRICE**

JVC RX-307TN
80 watts ch., A/V remote, Compu-Link List 270.00 **SALE \$179⁹⁵**

CD PLAYERS



TECHNICS SL-PG300
Programmable Compact Disc Player

• A new generation of CD player using the MASH Digital-to-Analog converter
• 10 key direct access on front panel & remote control

CALL FOR PRICE

JVC XLV 151
8x oversampling • 3 beam laser pickup List 490.00 **SALE \$115⁰⁰**

TECHNICS SL-SD827
1 bit, Mash, front loading remote **CALL FOR PRICE**

JVC XLM-507
1 bit DAC, remote **CALL FOR PRICE**

SHERWOOD CDC 3010R
5 Disc Carousel, Remote List 310.00 **SALE \$155⁰⁰**

PHILIPS CD 40
4 yr. laser warranty List 249.95 **SALE \$168⁰⁰**

PORTABLES

PANASONIC SLS-330 \$118⁰⁰

SONY D-802 \$199⁰⁰

JVC RCX 250 \$159⁰⁰

SONY CFD757 CALL

JVC PCXT 5 \$289⁰⁰

PANASONIC RXDT-707 CALL

AUDIO TAPE

MAXELL XLII-90 \$17⁹⁵

MAXELL XLIIIS 90 \$22⁹⁹

MAXELL MXS100 \$29⁹⁹

TDK SA-90 \$46⁰⁰

TDK MA-110 \$22⁰⁰

SONY UX-PRO 90 \$22⁵⁰

VIDEO

PANASONIC PV4201 \$239⁰⁰

PANASONIC PV4250 \$325⁰⁰

JVC HRDx62 \$349⁰⁰

SONY SLV 595HF CALL

SONY MDD455 CALL

PANASONIC LX101 \$398⁰⁰

MINI SYSTEMS

AIWA NSX-330 \$328⁰⁰

PANASONIC SCCH 33 \$379⁰⁰

SONY MHC 1750 CALL

JVC MX 55M \$75⁰⁰

DENON G-05 \$569⁰⁰

PANASONIC SCCH 55 \$460⁰⁰

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. No responsibility for typographical errors. Prices and availability subject to change.

**"LOOK NO FURTHER...OUR PRICES ARE LOWEST!
WE PUT OUR REPUTATION ON THE LINE!"**

HOME THEATRE

40" - 70" REAR PROJECTIONS
DIRECT VIEW TV's
DOLBY PRO LOGIC®
SURROUND

**TOSHIBA,
HITACHI,
SONY, JVC,
PANASONIC
& MORE**

UP TO 100" TV's
AVAILABLE

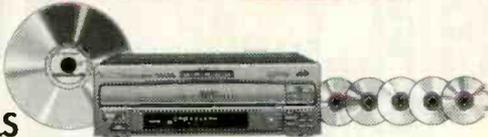
SPECIALS

- 30" PIP/MTS TV **\$799**
- 32" PIP/MTS Stereo TV **\$899**
- 35" Direct View TV **\$1299**
- 40" Projection TV **\$1499**



VIDEO PLAYERS & KARAOKE

**LASER
& VHS**



SPECIALS

- New Star Performer Karaoke Amplifier For VHS w/Microphones & Tapes **\$299**
- Combo Laser Disc/CD Player w/Remote Shuttle Search & Auto 2-Side Playback **\$399**
- Laser Disc w/Special Effects Optical Output & Auto Reverse **\$749**

CAMCORDERS

VHS, 8mm, S-VHS
**SONY, CANON, RCA
JVC, PANASONIC,
MINOLTA, HITACHI**

SPECIALS

- Minolta 8918 Pro Twin CCD Chip
- Canon A1 Digital, L1
- Panasonic PV42
- 8mm Camcorder 8:1 Zoom, w/Remote 2 Lux, Auto Focus, & Sports Viewfinder **\$499**



FAST DELIVERY AVAILABLE ON TV'S OVERNIGHT & 2ND DAY AIR

Call Now For Your Best Delivered Legitimate Price!
INFORMATION & ORDERS:

1(800) 937-3537

FOR CUSTOMER SERVICE CALL:
(201) 696-6531

We ship within 24 hours. All prices quoted include manufacturer's standard accessories & U.S. Warranty. All units are factory sealed. Shipping & handling non-refundable.



CONVENIENT FAX #(201) 633-1476

RECEIVERS



SPECIALS

- Dolby Pro Logic® 100 Watts Per Channel **\$299**
- A/V Dolby Pro Logic® with DSP 120W Per Channel **\$599**

SPEAKER SYSTEMS

BOSE



The Lowest Price Ever For Patented Bose Acoustimas® Speaker Technology! Lifelike Sound Virtual Invisibility New Models Available Call for Best Price

**VCR'S
SUPER VHS & BETA**



SPECIALS

- 4+2 Head Super VHS HI-FI MTS Super Fly Erase/410 Lines Synchra Edit **\$499**
- Toshiba 4 Head HI-FI Stereo **\$299**
- Super Betamax VCR **\$299**
- 8mm Player/Recorder **\$329**

CAR STEREOS

CALL FOR MAKE & MODEL

DETACHABLE FACE



SPECIALS

- AM/FM Cassette High Power Pullout **\$179**
- Car CD Changer Remote Mount **\$279**
- AM/FM CD Player, High Pwr, Pullout, 1 Bit Tech **\$299**
- Power Amps & Car Speakers **CALL**

AUDIO COMPONENTS

**YAMAHA, TECHNICS,
PANASONIC, AIWA,
SONY, JVC**



Compact Bookshelf Stereo
All The Hottest Models & Brand Names!

VIDEO PRINTERS

All Brand Names Available SPECIAL



\$899
Digital Special Effects
Picture In Picture

**PORTABLE CD
COMPACT STEREOS**



- AM/FM CD & Cassette **\$109**
- AM/FM CD & Dual Cassette **\$159**

**PORTABLE & CAR
DISC PLAYERS**



- SPECIAL**
• Portable CD for Car/Home **\$119**

**Authorized
ELECTRONIC
WHOLESALE**

1166 HAMBURG TPKE.
WAYNE, NJ 07470

**OPEN:
M-F 9-9
SAT 9-6
SUN Closed**

**CANADA
WELCOME
(201) 696-6531**



We're reinventing the electronics store.

BEST PRICE PLUS

WE WILL "BEAT" OUR COMPETITORS' BEST ADVERTISED PRICE... "PLUS": if you see an item advertised in Stereo Review or Audio Magazine for LESS, 6th Avenue will BEAT the price! "PLUS": We will include with your purchase a 6th Avenue Extended Warranty. No Additional Charge. (a \$25.00 Value)! Our Extended Warranty will increase the warranty 6 months, both parts and labor.

SATISFACTION PLUS

If you are not satisfied with your purchase, return it for a better kind, return it for a credit on your charge, or request a refund (No Restocking Fee will be charged but shipping is not refundable). While most of our competitors allow a customer 7 days to make a return, 6th Avenue will match their 7 days. "PLUS": add an additional 3 days, making our return policy 10 days! Camcorders, & Large Screen TV's can only be exchanged if defective.

CD CHANGERS



Denon DCM-550*
 • 6 Disc Magazine CD Changer
 • 18 Bit 8x Oversampling
 • Programmable Remote Control

- \$346**
- ADCOM GCD-5000..... 486
 - CARVER SDA-550..... 299
 - DENON DCM-550..... 268
 - WEGA/MAOX CDC-582..... 458
 - PHILIPS CDC-985BK..... 288
 - TEAC PD-7100..... 180
- FREE MAXELL CD-R90 CD CLEANER**
 WITH YOUR PURCHASE OF ANY HOME CD PLAYER

CD PLAYERS



NAD 5000*

- Remote CD Player • 1 Bit Mashed D/A Converter • 32x Oversampling
- ADCOM GCD-575..... 456
- ARCAM BLACK BOX..... 376
- CARVER SDA-450..... 516
- CARVER SDA-490T..... 226
- DENON DCD-690..... 376
- DENON DCD-1290..... 446
- DENON DCD-1560..... 499.95
- PHILIPS CD-950PBK..... 499.95

SPEAKERS



Advent Legacy II
 • Top Rated 500 Watt Floorstanding Speakers
 • 2-Way System

- \$266**
- ALL PRICES PER PAIR
- ADVENT RESEARCH M6..... 296
 - ADVENT NOVATION 250..... 246
 - ALLISON ANNIVERSARY..... 396
 - ALLISON ALI-20 Top Rated..... 146
 - BOSE 2.2..... 236
 - BOSE 4.2..... 236
 - BOSTON ACoustICS HD-7..... 146
 - CELESTION MODEL 3..... BEST PRICE PLUS
 - CELESTION 3000 SERIES II..... 1496
 - CELESTION 7000..... 1496
 - DESIGN ACoustICS PS-9..... 276
 - JBL LC-310..... 386
 - JBL 2800..... 196
 - JBL LX-44..... 356
 - JBL LX-55..... 496
 - JBL L-7..... BEST PRICE
 - Klipsch KG-2-2..... 346
 - Klipsch KG-4-2..... 526
 - NHT..... Full Line In Stock
 - PINNACLE PNG+..... 286

CAR STEREO



Blaupunkt CDC-M4
 • 10 Disc Car CD Changer
 • 3 Beam Laser Pick-Up
 • Track Scan • 16 Bit Dual D/A Converter

- \$276**
- ALPHASONIC PS200..... 200 Watt Power Amplifier
 - ALPHASONIC P270..... 7 Band Graphic Equalizer
 - ALPHASONIC P270R..... 5 1/4" 2-Way Component
 - BAZOOKA SAS 525 R..... 50 Watt Removable Cass Receiver
 - BLAUPUNKT CHEYENNE..... 50 Watt Removable AM/FM CD
 - BLAUPUNKT ASPEN..... 6 1/2" 2-Way Component
 - BOSTON ACoustICS 881..... 5 1/4" 2-Way Hi Power
 - BOSTON ACoustICS PRO 6.2..... 6 1/2" 2-Way Hi Power
 - BOSTON ACoustICS PRO 6.2..... 30W x 4 Power Amplifier
 - CARVER PMA-4120..... 15 Subwoofer/Ketlar Cone 300 WATT
 - CELESTION AD15..... 72 Watt Removable AM/FM Cass
 - CLARION 3771RC..... 8X Oversampling 10 CD Changer
 - DENON DCC-8570..... Removable AM/FM CD Player
 - ECLIPSE EDC-310..... Digital Ambience Processor
 - ECLIPSE EDS-1001..... 50 Watts X 4 High Current
 - ECLIPSE EUM2420..... 4 Channel Amplifier 100W x 2
 - JBL GT0200..... 15" Subwoofer 1000 WATT PRICE PLUS
 - JBL T-516..... 12" Minimum Tweeter 90W
 - JBL 1500GTL..... 12" SUBWOOFER
 - ORION GDS305K..... High Current Amplifier
 - ORION VTR-12..... 275 WATT
 - ORION 225 HCCA..... High Current Amplifier
 - ROCKFORD FOSGATE Punch 45HD..... 45 Watt Power Amp
 - ROCKFORD FOSGATE Punch 75HD..... 75 Watt Power Amp
 - ROCKFORD FOSGATE 460SD..... 120 Watt Power Amp
 - SHERWOOD XC-6320P..... 50 Watt Removable CD Receiver
 - SOUNDSTREAM MC-245..... 5 Channel Power Amplifier
 - SOUNDSTREAM D2001..... 200 Watt Power Amplifier
 - SOUNDSTREAM SS10..... 10" Subwoofer
 - TOSHIBA TX-972FM..... 10 CD Changer

WE CARRY A FULL LINE OF FAMOUS BRAND HIGH END CAR STEREO COMPONENTS - BEST PRICE PLUS!

TELEVISIONS



Toshiba CZ-3299K
 • 32" IDTV • Stereo MTS
 • Surround Sound
 • Picture-In-Picture

- \$1696**
- when you buy an Acoustimass-7 Virtually Invisible home theater speaker system with a 36" (or larger) TV.
- MITSUBISHI CS-20SM..... 20" Stereo TV Remote Control
 - MITSUBISHI CS-27TMI..... 27" Stereo TV/Color "P-I-P"
 - MITSUBISHI CS-35MXI..... 35" Stereo TV/S-VHS Ready
 - MITSUBISHI CS-35AXI..... 35" Stereo TV/S-VHS Ready
 - MITSUBISHI VSS006R..... 50" Stereo Projection TV "P-I-P" PLUS
 - RCA PS2152ST..... 52" Stereo Projection TV "P-I-P"
 - RCA F35050ST..... 35" Stereo TV/Color "P-I-P"
 - SHARP 27A1T00..... 27" Stereo TV Remote
 - QUASAR VV-1220..... 20" TV/VR Combo
- PROJECTION TV FRONT OR REAR IS OUR "SPECIALTY"!**
 SELLING THEM AT "SPECTACULAR" PRICES IS OUR FORTE!

VCR'S



Mitsubishi HSU56P
 • On-Screen Programming
 • VCR Plus Remote Control

- \$426**
- GO-VIDEO FULL LINE..... Dual Well VCR'S
 - MITSUBISHI HS-U57..... 4 Head Hi-Fi Stereo Remote
 - RCA VR665HF..... 4 Head Hi-Fi Stereo Remote
 - SHARP VCH-8770U..... 4 Head Hi-Fi Stereo Remote
 - TOSHIBA M-657..... 4 Head Hi-Fi Stereo Remote

RECEIVERS



Carver HR-895*

- 5 Channel Dolby Pro Logic
 - 30 AM/FM • Infrared Remote
 - 365 Watt Audio/Video Receiver
- | | | |
|-----------------------|------------------------------|-----|
| CARVER HR-742* | 80 Watts Per Channel Remote | 446 |
| CARVER HR-772* | 140 Watts Per Channel Remote | 576 |
| DENON DR-545R* | Audio/Video Receiver Remote | 246 |
| DENON DR-1035R* | 5 Channel Dolby Pro Logic | 746 |
| DENON AVR-810* | 5 Channel Dolby Pro Logic | 436 |
| DENON AVR-810* | 5 Channel Dolby Pro Logic | 546 |
| DENON AVR-2000* | 5 Channel Dolby Pro Logic | 676 |
| DENON AVR-3000* | 50 Watt Receiver Remote | 396 |
| NAD 705* | 100 Watt Receiver Remote | 566 |
| NAD 7100X* | 50 Watt Receiver Remote | 186 |
| PHILIPS FR-910PBK NEW | 5 Channel Dolby Pro Logic | 446 |
| PHILIPS FR-940PBK NEW | 5 Channel Dolby Pro Logic | 446 |
| SANSUI RZ9500AV | 5 Channel Dolby Pro Logic | 596 |
- LARGE SELECTION OF FAMOUS BRAND RECEIVERS BEST PRICE PLUS

SATELLITE SYSTEMS



ATLANTIC TECHNOLOGY Model 150

- Home Theatre • Powered Subwoofer Satellite System
- | | | |
|-------------------------|-------------------------------|-----|
| ATLANTIC TECHNOLOGY 100 | Home Theatre Satellite System | 296 |
| BOSTON ACOUSTICS TS-3 | 5 Piece Subwoofer/Satellite | 646 |
| DESIGN ACOUSTICS PS-3 | 3 Piece Subwoofer/Satellite | 296 |
| BOSE AM-5 SERIES II | 3 Piece Acoustimass System | 749 |
| BOSE AM-7 | 4 Piece Acoustimass System | 899 |

\$796

HI-END MINI SYSTEMS



Denon D-60*

- 60 Watt Remote System
 - CD Player • AM/FM
 - Dual Cassette Deck
- | | | |
|-----------------------|-----------------------------------|------|
| DENON D-200* | CD Player/AM/FM/Dual Tape Deck | Call |
| DENON D-150* | 6 CD Changer/AM/FM/Dual Tape Deck | 396 |
| SHARP COM55 | 6 CD Changer/AM/FM Tape Deck | 1498 |
| BOSE LIFESTYLE SYSTEM | Acoustimass 3SII CD Music System | 1498 |
| BOSE LIFESTYLE SYSTEM | Acoustimass 5SII CD Music System | 1698 |

\$596

RECORDERS



RCA LDR-300

- Combination CD/Laser Player
 - One Bit D/A Converter
 - Slow Motion • Programmable
- | | | |
|------------------|---------------------------------|------|
| DENON LA3100* | 2 Sided CD/Laser Player | Call |
| PHILIPS CLD-600 | Top Rated Laser Player | 696 |
| PIONEER CLD-V720 | Laser Karaoke Double Sided Play | 646 |

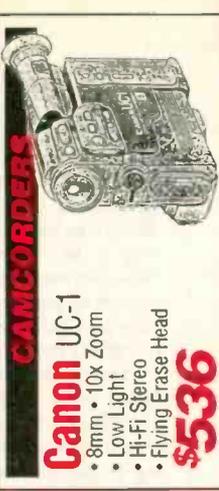
\$296



Magnavox AZ-6810

- Portable CD Player
 - Programmable
- | | | |
|------------------|--------------------|-----|
| MAGNAVOX AZ-6813 | Portable CD Player | 146 |
| RCA RP-7901 | Portable CD Player | 96 |
| PHILIPS 6806 | Portable CD Player | 186 |
- LARGE SELECTION OF HEADPHONES Sennheiser/AKG/Beyer/Dynamics

\$96



Canon UC-1

- 8mm • 10x Zoom
 - Low Light
 - Hi-Fi Stereo
 - Flying Erase Head
- | | | |
|----------------|-------------------------------------|------|
| CANON UC-20 | 10x Zoom/Low Light/Hi-Fi Stereo/8mm | 546 |
| CANON UC-1 | 12x Zoom/Low Light/Remote/HI8 | 876 |
| CANON AT1000 | 10x Zoom/Low Light/Remote/HI8 | 1296 |
| RCA PRO-815 | 8x Zoom/Low Light/8mm/Remote | 546 |
| SHARP VLL-340U | 12x Zoom/Full Size VHS | 546 |
- LARGE SELECTION OF FAMOUS BRAND Camcorders - BEST PRICE PLUS

\$536



Sony UX PRO90

- 10 Pack
- | | | |
|---------------|---------|-------|
| MAXELL XLIU90 | 10 PACK | 21.60 |
| TDK SA90 | 10 PACK | 15.60 |
| TDK TC30EHG | 10 PACK | 46.60 |
| TDK T120EHG | 10 PACK | 29.60 |
| SONY P6120MP | 10 PACK | 46.60 |
| SONY MTLR100 | 10 PACK | 21.60 |
- MINIMUM 10 PACK FOR MAILORDER TAPE ORDERS

\$22.66



Philips 21MK-2460

- 21" Multi System
 - Hi Resolution Color TV
- 0% Financing
No Payments & No Finance Charges for 90 Days
Ask Salesperson for Details
- LARGE SELECTION OF Multi System TV's
VCR's & Camcorders - BEST PRICE PLUS

\$596

TAPE DECKS



Philips DCC-900

- Digital Cassette • DCC Deck
 - Auto-reverse • Remote
 - 1 Bitstream A/D & D/A Conversion
- | | | |
|-------------------|-----------------------------|-----|
| DENON DRM-710* | 3 Head Tape Deck HX Pro | 286 |
| DENON DRW-840* | Double Deck Auto-Reverse | 296 |
| NAD 63-40* | 3 Head Tape Deck HX Pro | 296 |
| NAD 6100* | 3 Head Tape Deck HX Pro | 466 |
| PHILIPS FC-950PBK | 3 Head Cassette Deck HX Pro | 396 |
| TEAC W-525R | Double Deck HX Pro | 196 |
- We Carry A Large Selection of Professional DAT

BEST PRICE PLUS



DIGITAL DCC CONVERTER CASSSETTE

CALL FOR BRANDS & MODELS NOT LISTED • BEST PRICE PLUS

Mail Order 1 800 394 6AVE²⁸³

OPEN 7 DAYS A WEEK • MON-FRI 9AM - 9PM • SAT 10-7 • SUN 11-5 • FOR MAIL ORDER CALLS ONLY PLEASE.

FOR INFORMATION CALL 201-467-0100

NEXT DAY SERVICE Available
Call For Prices

Authorized Dealer For **PIONEER**
Full Line of Audio and Video In Stock

We Welcome Mastercard American Express Discover Visa

New Jersey Retail
22 Route 22 West Springfield, NJ
OPEN 7 DAYS A WEEK
MONDAY-SATURDAY 10-9 • SUNDAY 11-6

New Jersey Retail
331 Route 4 West Paramus, NJ
OPEN 6 DAYS A WEEK
MONDAY THRU SATURDAY 10-9

New York Retail
1024 & 1030 6th Ave New York, NY
OPEN 7 DAYS A WEEK
MONDAY-SATURDAY 10-6:30 • SUNDAY 11-5

* Registered Trademark: Dolby Laboratories Licensing Corporation. • PRODUCT NOT AUTHORIZED & COME WITH 1-YEAR 6TH AVENUE ELECTRONICS WARRANTY • 6TH AVENUE ELECTRONICS IS NOT AN AUTHORIZED DEALER OF BOSTON ACOUSTICS MERCHANDISE AND THE MANUFACTURER'S WARRANTY DOES NOT APPLY. PRICES VALID THRU 3/1/93

QUICK FIXES

BRAMMS: Symphony No. 2;

Tragic Overture

Boston Symphony, Haitink
PHILIPS 432 094-2 (62 min)
Bernard Haitink takes a decidedly broad view, for my taste verging on the stodgy, of the two opening movements of the Second Symphony. The reading of the rest of the symphony is okay, but in the *Tragic Overture* the atmosphere is solemn rather than dramatic. Decent Boston Symphony Hall sound throughout. *D.H.*

BRUCKNER: Symphony No. 7

London Philharmonic, Welser-Möst
EMI 54434 (61 min)
The London Philharmonic's youthful music director, Franz Welser-Möst, has a strongly lyrical view of Bruckner's most popular symphony. Lighter in weight than most readings, it is also swifter by some 6 minutes than either Karajan's or Giulini's recording. Sonics are reasonably good considering it's a live recording at a Proms concert in Royal Albert Hall. *D.H.*

HANDEL: Royal Fireworks Music;
Water Music

Orpheus Chamber Orchestra
DEUTSCHE GRAMMOPHON
435 390 (66 min)
Orpheus is a conductorless chamber orchestra based in New York, and, although the musicians do not play old instruments, they have a very stylish approach to Handel in the Strand. They neatly capture the blowsy outdoor feeling of this music; the very jauntiness of the sound (it really swings) is, I think, quite authentic and a lot of fun. And the ensemble feeling is superb—better than that of a lot of conducted orchestras! Highly recommended. *E.S.*

HONEGGER: Jeanne d'Arc au Bûcher

Petrovna, Lonsdale; Choruses; Orchestre Symphonique Français, Petitgirard
OSF 49008/09 (two discs, 84 min)
Honegger's *Joan of Arc at the Stake* (1935) has not stood the test of time very well; it is melodramatic literally (verses spoken to music) as well as figuratively. So is this high-powered cinematic recording, which features impassioned performances and overwhelming acoustics. *E.S.*



MOZART: Piano Concertos No. 20 and No. 12; Rondo in D Major
Kissin; Moscow Virtuosi, Spivakov
RCA 60400 (56 min)

Russian pianists are often defeated by Mozart, and at this point in his young life Evgeny Kissin does not appear to be the exception. Though there's nothing bad about these enlightened, well-played performances, his technique lacks the refined legato expected of a fine Mozartean. Moreover, interpretive insights seem strangely scant in all but the Rondo (K. 382) and the final movement of the Concerto No. 20, which have a rhythmic spring that the rest of the performances, especially the rhetorically weighty first movement of No. 12, sorely lack. *D.P.S.*

PROKOFIEV: Violin Concerto No. 2

SIBELIUS: Violin Concerto
Zimmermann; Philharmonia, Jansons
EMI CDC 54454 (59 min)
Violinist Frank Peter Zimmermann seems to reach (successfully) for radiant glow and poetic evocativeness rather than propulsive animation here, and Mariss Jansons, in an uncharacteristically expansive mood, provides beautifully meshed support. Within that frame, these are warmly enjoyable performances, but as supplements to, rather than replacements for, others a bit richer in momentum. *R.F.*



VLADIMIR HOROWITZ
Discovered Treasures
SONY CLASSICAL SK 48093 (67 min)
These performances, recorded between 1962 and 1972, hardly had to be "discovered," since their existence was never unknown, but they had never been issued in any format until now, and there is indeed a sense of discovery in the playing. The legendary pianist apparently had a special affection for these brief pieces by Scarlatti, Bach/Busoni, Clementi, Chopin, Medtner, Scriabin, and Liszt; his staggering creative involvement illumines every phrase of the music brilliantly. *R.F.*

ARTUR RUBINSTEIN
The Last Recital for Israel
RCA VICTOR 61160 (75 min)
Not really Rubinstein's last recital for Israel, but a rare example of Rubinstein taped live (at Ambassador College, Pasadena, California, in January 1975). In that respect, the videotape edition may have more to offer; except for the two Chopin études, Rubinstein made studio recordings of everything on this disc, and they are much to be preferred for their all-round greater refinement. *R.F.*

WAGNER: Götterdämmerung
Bavarian Radio Symphony, Haitink
EMI/ANGEL 7 544852 (four discs, 257 min)
Performance: Variable
Recording: Good

This issue completes EMI/Angel's new recording of Wagner's operatic cycle *The Ring of the Nibelung*, which has been somewhat overshadowed by the Metropolitan Opera version available from Deutsche Grammophon on CD, VHS tape, and laserdisc. Each recorded cycle has its strength and weaknesses among the singers. For example, here EMI's tenor Siegfried Jerusalem has more vocal appeal than DG's Reiner Goldberg, and therefore the death of Siegfried is more affecting on the EMI set. But in the Immolation Scene that closes *Götterdämmerung* and the *Ring* cycle, DG's Brünnhilde, Hildegard Behrens, is much more convincing (and pleasing) than EMI's Eva Marton. Although not the equal of the Met's orchestra, conducted by James Levine, the Bavarian Radio Symphony plays well for EMI's sensitive conductor, Bernard Haitink. Overall, I prefer the DG *Ring*, but those who choose EMI's recording of Wagner's lengthy masterpiece will find in it many hours of pleasure. *William Livingstone*

Collections

THE WOMEN'S PHILHARMONIC: Music of L. Boulanger, F. Mendelssohn, C. Schumann, and G. Tailleferre
KOCH 3-7169 (65 min)
Performance: Solid
Recording: Excellent

There's a genuine poignance to this disc devoted to women composers, which might be subtitled "Composers with Great Names and Thwarted Promise." Fanny Mendelssohn's 1830 Overture is a genuinely engaging work much in the style of her brother, Felix, but with a distinctively less fussy, less decorative personality of her own. In her time, however, marriage and domesticity were considered more important than the development of her considerable talent. Clara Schumann's 1836 Piano Concerto has some pretty clunky moments in the first movements, but the affecting piano-cello duet in the second movement suggests another real talent that hadn't quite found its legs.

Jumping ahead to the twentieth century, Lili Boulanger exhibits a strong personality that one might describe as Debussy with teeth in *D'un Soir Triste* and *D'un Matin de Printemps*, written during her last illness, months before her death in 1918 at the age of twenty-five. *D'un Soir Triste* is a minor masterpiece, fearlessly introspective with an incredibly moving deployment of dissonance. Germaine Tailleferre, a member of Les Six along with Poulenc, Milhaud, and Honegger, is represented by her 1927 Concertino for Harp and Orchestra, and there's more than promise here. Her handling of themes and textures is both substantial and fun without resorting to the irreverent rowdiness of Poulenc. Though conductor Jo Ann Falletta, pianist Angela Cheng, and the Oakland-based orchestra almost audibly labor in vain to make the Schumann concerto work, all the other performances are well prepared and beautifully recorded. *D.P.S.*

TURNING THE INDUSTRY UPSIDE DOWN

WARRANTY

LABOR PARTS & LUXMAN 5 YEAR WARRANTY

\$129 (Orig \$280) (Circuitry & more)

DZ-92 REMOTE CD PLAYER

Features dual D/A converters • 4x oversampling digital filter • 3-beam laser • 20 selection program play

All metal chassis and housing • Multi-function remote control • STAR

LUXMAN Compact Disc Player



CALL FOR BRAND NAMES NOT LISTED

SELECTION, PRICE & EXPERT ADVICE

• ADS • ADVENT • AR • AIWA • AKG • ATLANTIC TECHNOLOGY • AUDIO SOURCE • BAZOOKA • BBE • BELTRONICS • CANON • CARVER • CANTON • CERWIN VEGA • CLIFFORD • DENON • HAFLER • HITACHI • HUGHES • JBL • JVC • KENWOOD • LEXICON • LUXMAN • MINOLTA • MITSUBISHI • M&K • MONSTER CABLE • NAD • NHT • NILES • ORION • PANASONIC • PHASE LINEAR • PHILIPS • PINNACLE • PROTON • PS AUDIO • ROCK SOLID • SENNHEISER • SHARPVISION • SHERWOOD • SOUNDGRAFTSMAN • SONANCE • SONY • SOUNDSTREAM • SSI • TECHNICS • TERK • THORENS • TOSHIBA • TRIAD • VELDOPYNE

NEW

AK-500 RETRIEVER

1993 Super Special \$239 (FREE SHIPPING) (Orig \$499)

Perhaps the most effective stereo enhancement system, one that even simulates full surround sound.

Len Feldman Video Review March 1991

HUGHES AK-100 (MODEL) (AUDIO PRODUCTS)

Sound Retrieval System



FREE

BUE 3012

Sonic Maximizer For The Car

"The sound was immediately brighter, clearer, and more sparkling, with added punch and snap to transients."

A \$139 value

*With purchase of a BBE 1002 Sonic Maximizer • Offer valid While Supplies Last • Does not apply to previous purchases

1002 Sonic Maximizer

"New layers of detail were revealed... the soundstage was deeper and more three dimensional... proved to be totally additive to the ears!" A real improvement!

Originally \$239



SPECIAL PURCHASE

NAD FACTORY RECONDITIONED MERCHANDISE

QUANTITIES LIMITED

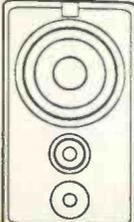
CALL FOR MODELS, WARRANTY AND PRICES

KARAT 980

This top-of-the-line model of Canton Karat Series of speakers not only unparalleled sound neutrality over the entire frequency spectrum - it also provides the highest degree of bass reflexics. 3-Way bass reflex speaker system. Available in mahogany only

Orig \$200

\$995



PHILIPS DFA980

Reference digital integrated amplifier features 100W/ch RMS into 4 ohms, grade "A" version dual D/A converter chip w/4x OS volume control

Orig \$750

\$369

PHILIPS DFA1000

Reference digital integrated amplifier features 120W/ch RMS into 4 ohms, grade "A" version dual D/A converter chip w/4x OS volume control

Orig \$2500

\$965

NOW ONLY

Atlantic Technology System 150

System 150HT is a Complete Home Theater System That Combines All Of The Following Components:

152 PBM "Power directed" bass module

151 LR Main satellite speaker system

153 C Center channel speaker

154 SR Rear channel surround speakers

CALL FOR PRICE

EACH OF THE ABOVE CAN BE PURCHASED SEPARATELY

ADVENT A1026 Legacy

Designed for the discerning listeners. 500 watts peak power, 100W continuous. 2-way floor standing system with a 10" high excursion woofer and a 1" ferro-fluid filled dome tweeter. Useable FR. 30Hz - 23KHz

Orig \$299

\$249

NOW ONLY

Call For Other Models



MB QUART MB350

As reviewed in Stereo Review "The MB350's sound had a distinct forwardness and a clean crisp top end that was always a pleasure to listen to. There was no accentuation of hiss and not a hint of shrillness."

Oak or White **Orig \$1100**

\$429

NOW ONLY



DIGITAL PREAMP

Remote controlled digital preamp features:

- 4 DA Super Linear converters
- 4x oversampling digital filter
- Balanced output terminals (pre-out)
- M/M/MC phono input
- AV compatibility

Orig \$1000

\$469



CAR AUDIO HEADQUARTERS

• CASSETTE DECKS • CD PLAYERS • CD CHANGERS • AMPLIFIERS • BAZOOKA BASS TUBES • ALARMS • PROCESSORS • SPEAKERS • WOOFERS • EQUALIZERS

Hafler MSE80 Car Amplifier

4ch bridgeable MOSFET amp. 160W total power. Orig \$300

\$149

SPECIAL OF THE MONTH

THX LUCASFILM

Technics SC-TH200 System

Come Audition The New



Sound CITY

Meadtown Shopping Center
Route 23 South Kinnelon, NJ 07405 Retail: 201•838•3444

Factory Authorized for all brands we sell • Not responsible for typographical errors • Some pictures for illustration only • NO refunds on video equipment or car stereo products • 10 day defective 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 • Products returned must be in original condition and packaging. Shipping & handling not refundable

MAIL ORDER CALLS

To Order Toll Free Call:
1•800•542•7283

To Order By Fax Call:
1•201•838•9599

To Order By Mail:
Send Check, Cashiers Check or Money Order.

WE WELCOME

Mail Order Hours:
Mon thru Fri 9am - 9pm
Sat. 9am - 6pm • Sun. 11am - 4pm

CUSTOMER SERVICE

Please Have Your Invoice Number Ready: **1•201•838•1180**

Customer Service Hours:
Mon. thru Fri. 10am - 5pm





SIXTH AVENUE ELECTRONICS

We're reinventing the electronics store.

LIMITED QUANTITIES - NO RAIN CHECKS ALL ITEMS FACTORY SEALED BRAND NEW WITH WARRANTY

SPEAKERS	PRICES PER PAIR	LIST PRICE	YOUR COST
ACOUSTIC RESEARCH M4	FLOOR STANDING	590	326
ABS B-7	2 WAY 6 1/2" WOOFER	450	266
ADVENT MODEL 500	NEW VISION SERIES	850	496
ALLISON AL-115	2-WAY 6" WOOFER	425	266
ALLISON CD-7	2-WAY FLOORSTANDING	496	296
ALLISON	ELECTRONIC SUBWOOFER	126	86
ARISTON Q SPEAKERS	2-WAY TITANIUM TWEETER	796	596
AUDIO PRO B1-45	SUB-WOOFER POWER 100W	1100	696
AUDIO PRO B2-70	POWER SUB-WOOFER 150W	1750	996
BOSTON ACOUSTICS HD-10**	3 WAY 10" WOOFER	440	256
BOSTON ACOUSTICS T-830**	3 WAY FLOORSTANDING	500	346
BOSE 6.2	DIRECT REFLECTING	629	316
BOSE 10.2 SERIES II	TOP OF THE LINE	1199	796
CANTON PLUS S	2 WAY 4" WOOFER	350	246
CANTON CT-80	FLOORSTANDING SPEAKERS	2500	996
CANTON PLUS C	10" SUBWOOFER	700	396
CELESTION SL-12 SI	AUDIOPHILE SPEAKER	1496	896
CELESTION 3000 SERIES II	RIBBON TWEETER	996	796
DBX SF-2500	SOUNDFIELD 3 WAY	496	296
DESIGN ACOUSTICS PS-10A	3 WAY 10" WOOFER	520	246
JBL L-2013	2 WAY TITANIUM TWEETER	600	196
JBL L-100T3	3 WAY FLOORSTANDING	1200	596
JBL L-80T3	3 WAY 10" WOOFER	1089	496
KLIPSCH KG-1	2 WAY 6" WOOFER	399	226
KLIPSCH QUARTET	3 WAY 10" WOOFER	1300	696
KLIPSCH HERESY II	3 WAY 10" WOOFER	950	596
NHT MODEL 2	3 WAY SYSTEM	779	396
OHM PRO-42	FLOORSTANDING	570	296
OHM 3X0	WALSH DRIVER	1650	846
PINNACLE PN 8+	2-WAY 8" WOOFER	475	236
PHILIPS FB-1000	4 WAY RIBBON TWEETER	3496	2596
POLK AUDIO SDA-2	4 WAY SYSTEM	1500	796
POLK AUDIO SDA-CRS	BOOKSHELF MONITOR	900	546
POLK AUDIO MONITOR 6 SII	3 WAY SATELLITE SYSTEM	530	326
SNELL TYPE Q	2-WAY BOOKSHELF	850	546
SOTA TIME DOMAIN	FLOORSTANDING	2296	1596
WHARFEDALE DIAMOND 4	2-WAY 4" WOOFER	300	166

SEPARATES	LIST PRICE	YOUR COST
ADCOM GEP-555	PRE-AMP	399
ARISTON Q DECK II	TURNTABLE BELT DRIVE 2 SPEED	369
AUDIO SOURCE PRE ONE	PRE AMP	276
CARVER C-1	PRE-AMP SONIC	600
CARVER C-2	PRE-AMP	550
CARVER TFM-45	375WPC POWER AMP	999
CARVER M 4.0T	375WPC AMP	999
CARVER SILVER 7T	250WPC MONO AMP	2200
DENON AVC-700	A/V INTER-AMP DOLBY	800
DENON DAP-5500	DIGITAL PRE-AMP	1500
DENON DP-47F	T.T. DIRECT DRIVE	450
HAFLEIR IRIS	PRE AMP	900
LEXICON CP-1	SURROUND SOUND	1399
MARANTZ PM-84D	105 WPC CLASS A AMPLIFIER	1100
MARANTZ PM-25	30 WPC CLASS A AMP	296
NAD 4300	DIGITAL TUNER	549
PARASOUND CHD-350	30 WATTS INTEGRATED AMP	299
PHILIPS AV-1002	REFERENCE 8 CHANNEL AMP	3000
PHILIPS FA-80	INTEGRATED AMP 80WPC	650
PHILIPS SM-80	100 WPC POWER AMP	699
PROTON AA-1150	50 WATT POWER AMP	519
PROTON AM656	60 WATT INTEGRATED AMP	700
SHERWOOD AT-1210R	100 W INTEGRATED AMP W/ REMOTE	329
SHURE HTS-503PA	100 WPC POWER AMP	895
SOUND CRAFTSMEN PRO POWER 1	4 CHANNEL POWER AMP	1399
SOUND CRAFTSMEN PRO PT TWO	PRE AMP/TUNER	480
SOUND CRAFTSMEN PRO PT FIVE	PRE AMP/TUNER W/REMOTE	699
TANDBERG TCA 3014	PRE AMP	1176
TANDBERG TCA 3034	PRE AMP	1200
TANDBERG TJA 3032	80WPC INTEGRATED	1650
TANDBERG TPA 3016	250WPC AMP	3800
TANDBERG TPA 3026	150WPC AMP	2199

SEPARATES CONT.	LIST PRICE	YOUR COST
TANDBERG TPA 3036	100WPC AMP	1199
TANDBERG TPT 3001	TUNER	2199
TANDBERG TPT 3031	TUNER	999

CASSETTE DECKS	LIST PRICE	YOUR COST
CARVER TD-1200	2 HEAD B+C HX PRO	399
DENON DRM-400	2 HEAD B+C HX PRO	230
DENON DRM-510	2 HEAD HX PRO	275
DENON DRW-850	DUAL DECK AUTO-REV HXPRO	500
HARMAN KARDON TD-392	3 HEADS B+C HXPRO	599
NAD 6100	2 HEAD, HXPRO WITH REMOTE	499
PARASOUND DHX-550	2 HEAD HX PRO PLAY TRIM	265
PHILIPS FC-50	AUTO REVERSE CASSETTE	389
TEAC V-3000	3 HEAD HX PRO REMOTE	500
TEAC W-990RX	DUAL DECK AUTO-REV HXPRO	799

RECEIVERS	LIST PRICE	YOUR COST
CARVER RECEIVER 900	60 WPC REMOTE	634
CARVER HR-742	80 WATT RECEIVER	630
DENON DRA-1020RA	120 WATT RECEIVER W/REMOTE	1000
DENON DRA-335F	40 WATT RECEIVER W/REMOTE	280
LUXMAN R-117	160 W RECEIVER MOSFET	1000
MARANTZ RS-3557CB	100 W RECEIVER SURROUND	700
NAD 7600	150 WATT W/POWER ENVELOPE	1599
NAD 7200PE	40 WATT RECEIVER HIGH CURRENT	499
PHILIPS FR-70	70 WATT RECEIVER W/REMOTE	499
PROTON AV-646	60 W RECEIVER SCHOTZ TUNER	900
NAD 7225PE	120 WATT RECEIVER HIGH CURRENT	329
TANDBERG TPA 3080	80 WPC RECEIVER	1296

CD PLAYERS	LIST PRICE	YOUR COST
CARVER MDA-420	16BIT CD PLAYER	349
CARVER TL-3100	CD PLAYER W/REMOTE	350
DENON DCD-670	CD PLAYER	329
LUXMAN DC-113	6 DISC CD CHANGER	496
LUXMAN DZ-122	TOP OF THE LINE	549
LUXMAN DZ-111	16 BIT 4X	350
NAD 5060	6 DISC CD CHANGER	549
PHILIPS CD-920	CD PLAYER	176
PROTON AC-620	16 BIT 4X REMOTE	650
TEAC PD-800M	6 DISC CD CHANGER	276
CARVER TLM-3600	10 CD CHANGER	750
HARMAN KARDON HD-7450	SINGLE BIT	430
LUXMAN D-117	SINGLE CD 4X OVERSAMPLING	1275
NAD 5100	SINGLE CD 4X OVERSAMPLING	650
PHILIPS LHH-500	REFERENCE CD PLAYER	1799
SANSUI CDX-711	1 BIT WITH REMOTE	999

CAR STEREO	LIST PRICE	YOUR COST
ADS S-10	10" SUB WOOFER	349
ADS S-6.2I	DUAL 6.5 SUB WOOFER	229
ADS SB-7	7" ENCLOSED SUB WOOFER	360
ADS SB-10S	10" ENCLOSED SUB WOOFER	455
BOSTON ACOUSTICS 705**	5" MID-RANGE	99
BOSTON ACOUSTICS 704**	4" MID-RANGE	119
BOSTON ACOUSTICS 741**	4" 2 WAY COMPONENT	236
BOSTON ACOUSTICS 707**	4 X 6 WOOFER	59
BOSTON ACOUSTICS C-700**	2 WAY PLATE SPEAKERS	96
BOSTON ACOUSTICS 710LF**	10" SUB WOOFER	119
CARVER M-4120	4 X 120 WATT AMP	699
CLARION SE-9252	6 X 9" 2 WAY SPEAKERS	99
DENON DCR-5220	AM/FM CASSETTE RECEIVER	399
DENON DCA-3500	5 CHANNEL AMP WITH X-OVER	569
JBL T-180	18" SUB WOOFER	359
ORION HC-10	10" SUB WOOFER	129
PROTON CR-360	AM/FM CASSETTE RECEIVER	289
PROTON CA-490	180 WATT AMP 4 CHANNEL	499
ROCKFORD PUNCH 75 HD	75 WATT AMP	399
SANSUI SM-2400	6 CHANNEL AMP	599
SOUND STREAM TCA-40	POWER AMP	399
SOUND STREAM D-100 II	2 X 50 WATT AMP	325

Mail Order 1 800 394 6AVE

OPEN 7 DAYS A WEEK MON-FRI 9AM - 9PM SAT 10-7 SUN 11-5 FOR MAIL ORDER CALLS ONLY PLEASE.

* Registered Trademark Dolby Laboratories Licensing Corporation Prices valid thru 3/1/93 ** 6th Ave Electronics is not an authorized dealer of Boston Acoustics merchandise and the manufacturer's warranty does not apply

StereoReview CLASSIFIED

For Advertising Information Call 1-800-445-6066, 9am-5pm EST

AUTHORIZED

SPEAKER COMPONENTS - KITS, Audax-Vifa, Crossovers, Books, more. Catalog \$2. MENISCUS, 2575 28th St. SW, Unit 2, Wyoming, MI 49509. (616)534-9121.

SLEDGEHAMMER, AUDAX, PEERLESS, FOCAL, VIFA & DYNAUDIO LOUDSPEAKERS with good prices and fast service. MADISOUND SPEAKER COMPONENTS, 8608 University Green, Box 44283, Madison, WI 53744-4283. (608) 831-3433.

CALL US LAST

WE WILL BEAT ANY PRICE

PRINTED IN THIS MAGAZINE
ON HOME & CAR STEREO

The SOUND Approach

6067 Jericho Tpke., Commack, NY 11725
Full Manufacturers Warranty

AUTHORIZED DEALER **(800) 368-2344**

SAVE 40% ON HIGH-END home speakers, subwoofers, amplifiers. FREE CATALOG! RTRD, 3021 Sangamon Ave., Springfield, IL 62702. 1 (800) 283-4644.

WE SELL MORE HIGH PERFORMANCE SPEAKER KITS than anyone in the U.S. FREE CATALOG: 1-800-346-9183. AUDIO CONCEPTS, 901 S. 4th St., LaCrosse, WI 54601.

KNOWLEDGEABLE SALESPeOPLE—AUDIOPHILE / CONSUMER / HOME THEATER PRODUCTS—CUSTOM DESIGN / INSTALLATION—COMPETITIVE PRICING—CALL US NOW!!! (516) 997-5888. AUTHORIZED, BESTSELLER AV.

HIGH-END LOUDSPEAKER systems, speaker kits and the widest selection of raw drivers from the world's finest manufacturers. For beginners and audiophiles. Free catalog, A&S SPEAKERS, 3170 23rd St., San Francisco, CA 94110. (415) 641-4573.

EXPERIENCED, FRIENDLY ADVICE! FREE SHIPPING! MIRAGE, PS, CWD, CARY, KINERGETICS, KEF, PHILIPS, AUDIOQUEST, FRIED, MONSTER, QUAD, SPICA, STRAIGHTWIRE, MORE!! READ BROTHERS, 593-B KING, CHARLESTON, SOUTH CAROLINA 29403. (803)723-7276.

CHEAP!!! Altec • Carver (Incl/Loudspeakers) • B & W • Hafler • AR • Forte • Onkyo • Philips • Rotel • DCM & 30 MORE. SoundBox • (305) 262-4766.

CALL TOLL FREE! 1(800) 826-0520. NAD * M&K * HARMAN KARDON * ONYKO * HAFLE * VELODYNE * CARVER * CELESTION * MONSTER CABLE * CWD * PRO-AC * AUDIO-CONTROL * NILES AUDIO * LEXICON * DAHLQUIST * THORENS * GRADO * STAX * FRIED * PROTON * NITTY GRITTY * SOUND ANCHORS * ATLANTIC TECHNOLOGY * TARGET * ACOUSTAT * SANUS * SHARP VISION * SOUND SELLER, P.O. BOX 224, 2808 CAHILL RD., MARINETTE, WI 54143-0224. FAX# 715-735-5838, phone 715-735-9002.

AUTHORIZED

BEDINI ELECTRONICS INC. All warranty and non-warranty work done. 25s, 45s, 100, all MK II series amplifiers & pre amplifiers, New series product, CD Clarifier 2, Bedini Audio Spatial System. Call or write for info. 7239 Valley St., Dalton Gardens, ID 83814. (208) 772-9207.

CAR/HOME/VIDEO AUTHORIZED DEALER for: SONY, DENON, INFINITY, AUDIO CONTROL, PPI, COUSTIC, CWD, ADVENT & VELODYNE. (800) 321-0685 for prices & orders. (301) 729-3711 for info & consultations. C&C AUDIO 10am-8pm EST.

"STEREO WORLD" IS YOUR DISCOUNT SOUND SOURCE WITH GREAT DEALS ON HOME AND CAR STEREO. PANASONIC, JBL-Car, JVC, SONY, MTX, PINNACLE, ORION, PIONEER, SHERWOOD, HIFONICS, BLAUPUNKT, AUTOTEK, ADVENT, KENWOOD, SCOSCHE EFX AND MANY OTHERS. CALL OR WRITE FOR FREE CATALOG. FREE UPS IN 48 STATES. VISA/MC; COD ACCEPTED. P.O. BOX 596, MONROE, NY 10950. (914) 782-6044.

CAR STEREO

No Sony		(513) 451-0112		No Pioneer	
MB QUART*		JBL CAR		INFINITY*	
OM 215CX	Call	1500GTI	\$249 ea	PS 66 3K	\$175 pr
OM 218CX	Call	TC6	99 pr	CS 8K	199 pr
OM 160 KX	Call	GT693	119 pr	CS 5K	185 pr
KENWOOD*		BOSTON*		PPI*	
KRC-930	Call	5.2	\$279 pr	2050 AM	\$275
KDC-77R	Call	6.2	299 pr	2075 AM	375
KGC-6042	Call	8.51	165 pr	2150 AM	489
SPEAKERS	Call	8.61	175 pr	4200 AM	470
COUSTIC		ALPINE*		AUDIO CTRL*	
XM 3	\$115	7915	\$439	4XS	\$169
Amp 460	259	7914	399	Epioneer	169
Amp 360	189	3331	199	Eq II	Call
		3555	395		
POLK*		SPEAKERS		JVC	
MM 3055	\$265				
MM 3065	275				
ORION*		ALPHASONIK		XLG3700 Authorized	
XTR 12	\$99 ea	PMA 2050	\$139	XLMK500	Dealer
XTR 15	115 ea	PMA 2150	325	XLG700RF	Call
XTR 10	89 ea	PMA 4035	215	KSRX700	Today!
		PAS 1100	189		
		PMA 2075	179		
				MTX*	
				CALL!	

PARADIGM*		NAD*		INFINITY*	
9se II	\$535 pr	1600	\$359	Ref 3	\$309 pr
Phantom	229 pr	2400 THX	479	SM 62	159 pr
5se II	349 pr	5000	399	Vldtec 1	149 pr
7se II	389 pr	2100X	345	Ref 6	659 pr
11 se II	639 pr			7.1	1199 pr
Titan	160 pr			SM 82	249 pr
YAMAHA*		PARASOUND*		POLK*	
RXV 850	\$649	HCA-800 II	\$339	RM 3000	\$569
RXV 1050	949	HCA-1200	649	CS 100	140
DSPE 1000	1199	HCA-2200	1245	M 3	150 pr
DSPE 1000	799	P/Fat-900II	350	S 4	189 pr
CDC 735	339	C/P/T-10032	459	LS 50	599 pr
NSC 90	109				
DSPE 200	399				
NAKAMICHI*		CARVER*		JVC	
AV-2	Call	CT-3	\$359	XLM 407 Authorized	Call
MB-3	Call	CT-17	629	RX 807 VTN	Call
DR-3	Call	TFM 35	559	XLZ 1050	Call
		SDA 490T	559	TDV 541	Call
AUDIO SRC		PHILIPS		FRIED	
SS3 II	\$299	CALL/III		CALL/III	
TUNER 1	185	BOSE		ONYKO*	
PRE ONE	199	CALL/III		CALL/III	

*Product not authorized, covered by B.J. Audio's exclusive limited warranty. 10 day return policy - returns subject to restocking charge. Authorized for: Bose, Philips, Fried, H/K, Beyerdynamic, JVC, AlphasoniK, Advent Car, Kimber, and Audioquest

"The Quick Connection"

B.J. AUDIO

991 Beachmeadow Lane
Cincinnati, OH 45238
(513) 451-0112

RETAIL MART

BANG & OLUFSEN SUPERDEALER! IMPRESSIVE DISCOUNTS, In-Home Consultation/Install. Century Audio Video, 16 E. Crystal Lake Plaza, Crystal Lake, IL 60014. PHONE m-f 6pm-10pm, sat 10am-5pm, sun 11am-3pm. (ILLINOIS AREA ONLY-NO MAIL ORDER.) 1-800-554-9531.

FOR SALE

LOW PRICES: We have a wide selection of audiophile products! FULL WARRANTY, plus extended warranties. PRICES TOO LOW TO PRINT! Sound Shop (206)692-8201.

Wholesale Connection

To order-Call: (718) 997-6644

CD PLAYER				
Technics	SLP3000	\$139	KXW6040	199
	SLPD227	170	KXW8040	Call
	SLPD227	190	TKR690	249
JVC	XL2451	159	TCWR590	169
	XL3037	189	TCWR690	199
	XL4407	209	TCWR790	Call
	XL4507	249	TD4000	299
	XL7075	309	TD4600	Call
Pioneer	PM6601	189	HOME SPEAKERS	
	PM701	209	Advent	Heritage
	PM4001	279		Laureate
Kenwood	DPF400	149		Prodigy Tower
	DPR4440	189		Baby II
	DPH6640	219	Bose	10.2 Series II
	DPH7740	289		601
Bony	CDP487	159		6.2
	CDPC525	249		4.2
	CDPC625	279		AM3 Series II
	CDPC725	Call		AM3 Series II
	CDPC810	Call	Pinnacle	PNS0
Herman/Kardon	HD7400	219		PNT0
	HD7450	314		PNE
	HD7500	Call		PNSUB
			Infinity	REF8
RECEIVERS				
Technics	SAGX505	Call		REF5
	SAGX530	329		REF4
	SAGX730	Call		REF3
	SAGX910	Call		Video 1
JVC	RX507	259		SM112
	RX707	319		SM122
	RX807	Call		
	RX905	Call		
	RX1050	Call		
Pioneer	VX451	279		
	VX501	319		
	VXK061	419		
	VXSD7015	Call		
	VXSD9015	Call		
Kenwood	KRV6040	249		
	KRV6300	Call		
	KRV8400	Call		
	KRV8540	Call		
Bony	KRV9300	Call		
	STRD590	199		
	STRD790	279		
	STRD990	329		
	STRD1990	Call		
	STRD2090	Call		
	STRD3090	Call		
Herman/Kardon	HK3500	299		
	HK3600	Call		
TAPE DECK				
Technics	RSTR232	149		
	RSTR332	169		
	RSTR518	Call		
JVC	TDW541	239		
	TDW307	169		
	TDW707	Call		
	TDW805	Call		
Pioneer	CTW501R	Call		
	CTW601R	Call		
Kenwood	KXSS30	189		
	KX7030	249		

CALL FOR PRICES ON Models and Brands Not Listed

HRS: Min Sat 9 AM-6 PM EST. Prices subject to change. Prices exclude shipping & handling. Not responsible for typographical errors. MasterCard, Visa, American Express and E.O. accepted. Non-authorized dealer. Products covered by Wholesale Connection warranty.

Wholesale Connection 63-48 108th St., Forest Hills, NY 11375

ADCOM, ADS, AUDIO RESEARCH, BANG & OLUFSEN, B&W, CARVER, CELESTION, DENON, FOSGATE, HARMAN/KARDON, INFINITY, JBL, KEF, KLIPSCH, LEXICON, MIRAGE, NAKAMICHI, ONKYO, POLK, REVOX, TRIAD, VELODYNE, YAMAHA, AND MORE. MANUFACTURER'S WARRANTIES. LIVE ASSISTANCE WEEKDAYS. AUTOMATED PRICING 24 HOURS. AMERISOUND SALES, INC. (904) 262-4000.

SINGERS! REMOVE VOCALS!

Unlimited Backgrounds!

From Standard Records & CD's with the Thompson Vocal Eliminator™ Call for Free Catalog & Demo Record.

Phone: (800) 482-4189 Ext. 50
Singer's Supply, Dept. SR-1
985 Hightower Trail
Rhonia, GA 30058

24 Hour Demo/Info Request Line (404) 482-2485 Ext. 50
Singer's Supply - We Have Anything & Everything For Singers

LOW PRICES!!! NAD, DENON, NAKAMICHI, CARVER, KEF, ADS, B&K, ONKYO, M&K, ADCOM, POLK & OTHERS!! STEREO TECH.: (414) 836-2942. QUALITY ADVICE!!!

LOUDSPEAKERS

WE REPAIR SPEAKERS! Call for FREE ESTIMATES. SPEAKER CLINIC. (404) 933-0101. Atlanta, Georgia.

PROFESSIONAL FOAM REPLACEMENT. ALL BRANDS AND SIZES. FIVE YEAR WARRANTY. DEALERS WELCOMED. NEVISONICS, (502) 451-CONE(2663). M-F 12-6 EST.

SPEAKER RECONING; Refoaming Kits; Crossover Kits & Mods By "Vans Evers"; Grills Made To Specs; Diaphragms, Mids & Tweets; New Speaker Test Lab Using LE.A.P.-L.M.S. THE SPEAKER EXCHANGE, 1242 E. Hillsborough Avenue, Tampa, Florida 33604. (813) 271-4800.

ROTTEN FOAM EDGES? LOWEST PRICES. BEST WARRANTY. In-walls, DIY Kits. VISA/MC/DISCOVER. SIMPLY SPEAKERS; 1-800-767-4041.

MISCELLANEOUS

TERMPAPER assistance. 19,278 papers available! 306-page catalog—rush—\$2.00. Research, 11322 Idaho, #206SX, Los Angeles, 90025. TOLL FREE HOTLINE: 800-351-0222. (California: (310) 477-8226).

CLASSICAL MUSIC LOVERS' EXCHANGE™. Nationwide link between unattached music lovers. Write CMLE, Box 31, Pelham, NY 10803. (800) 233-CML5.

BLANK TAPES

#1 IN AUDIO, VIDEO, DAT, TAPE. OVER 430 DIFF. 1-800-245-6696

MAXELL SONY FUJI OUR 17TH YEAR TDK

CDT 100	4.00	CDT 120	4.50	CDT 150	5.00	CDT 180	5.50	CDT 210	6.00
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50
MA 100	2.50	MA 120	3.00	MA 150	3.50	MA 180	4.00	MA 210	4.50

DISC. VISA, MC NO EXTRA CHARGE

AUDIOPHILE ELECTRONICS 1.5 MIT MASTER \$3.00 BND \$1.00

FAIR 412-293-8299

1800' OR 2400' AMPEX REELS USED ONCE—SAMPLE: \$3.00. NEW MAXELL REELS/ CASSETTES. TDK SA90: \$1.75. SAX100 \$2.39. AUDIOTAPES, BOX 9584-S, ALEXANDRIA, VA. 22304. (703) 370-5555. FREE LIST!

AUDIO/VIDEO STORAGE

CD STORAGE+



No. A300 (Shown in Solid Brown Oak)

Soricé Systems — Setting the Standards in Audio/Video Storage Systems

- Store 300 CD's in this Premium Solid Hardwood Cabinet.
- Impeccably crafted in your choice of Solid Oak, Walnut, Teak or Cherry.
- Fully adjustable Shelves store any combination of CD's, Videos and Cassettes — all in ONE cabinet.
- No-Slot design maximizes storage space, simplifies organizing & re-arranging your collection, accommodates single & multiple CD sets, allows for possible changes in the size of CD packaging.
- Adjustable Solid Brass Bookends keep Discs & Tapes upright and in place.
- Cabinets can be stacked, wall mounted or left free standing.
- Optional Clear or Smoked Glass Doors are available.
- Completely enclosed back provides dust protection.
- Compact size: 39½" H x 23½" W x 7½" D
- Shipped to you fully assembled.

SORICÉ
P.O. Box 747-A Nutley, NJ 07110

We accept Visa, MasterCard, American Express, Checks and Money Orders. All Models come with a 30 Day Money Back Guarantee and a Full One Year Warranty.

For Prices and Free Full Color Literature on our Complete Line of Audio/Video Storage Systems: Call Toll Free 1-800-432-8005 or FAX your name and address to 1-201-748-2592

RECORDS

LV/CD/RECORD COLLECTOR'S SUPPLIES. Jewel boxes, record jackets, sleeves, storage boxes, 78 sleeves, dividers, much more! Free brochure: CABCO PRODUCTS, ROOM 641, POB 8212, COLUMBUS, OH 43201. (614) 267-8468.

NEEDLES/CARTRIDGES & Belts—Expert Consultations, All Major Brands, One of Largest Stocks in Country including Old/Obsolete Models. NEEDLE EXPRESS. 1-800-982-2620.

RECORDS BY MAIL! LP/CD BARGAINS. DELETIONS/SURPLUS. ALL STYLES EXCEPT CLASSICAL. GREAT PRICES/GREAT SELECTION. FREE CATALOG-LP OR CD. RPM SALES, DEPT SRC, P.O. BOX 1348, SOMERVILLE, MA 02144. 1-800-388-1386/FAX 1-617-776-2514.

HALF MILE VINYL. AFFORDABLE PRE-OWNED LP'S. SELECTED W/CARE. CLEANED & GRADED. ALL CATEGORIES. CALL FINFORMATION. SASE CATALOG/WANTS: BOX 98, EAST WAREHAM, MA 02538. (508) 295-2508.

PHONO CARTRIDGES & ORIGINAL REPLACEMENT STYLI. CALL TOLL FREE INCLUDING CANADA (800) 221-0906. FOR FREE CATALOG SEND SELF ADDRESSED STAMPED ENVELOPE. LYLE CARTRIDGES, DEPT. SR, BOX 158, VALLEY STREAM, NY 11582. NY STATE (516) 599-1112.

WANTED TO BUY

LP's & CD's. BOUGHT & SOLD: Classical, Rock, Jazz, Audiophile, Etc. PRINCETON RECORD EXCHANGE, 20 Tulane St., Princeton, NJ 08542. (609) 921-0881.

McIntosh and Marantz tube type HI-FI; and old JBL, Altec, Tannoy, EV Patrician and Western Electric speakers. David: 1-800-356-4434.

LASER VIDEO/S VHS

USED LASER DISC CLEARANCE. WE BUY, SELL & TRADE. FREE CATALOG. VDIJ, 5339 PROSPECT #221, SAN JOSE, CA 95129.

INVENTIONS WANTED

INVENTORS! Comprehensive Patenting/Marketing services can help you profit. FREE ADVICE! Call ADVANCED PATENT SERVICES. 1-800-458-0352.

FREE CD in a



storage page®

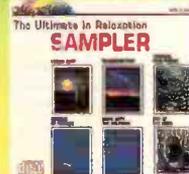
Un.que CD storage system

Choose from one of these great samplers:



Classical

listen to 60+ minutes of Beethoven, Mozart, Bach, Wagner, and many more



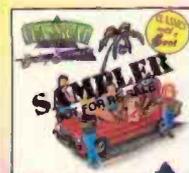
Environmental

a full hour of ocean surf, thunderstorms, whales, and many more settings



New Age

soft resonances of Ocean Whispers, Serenity, and Winter Dreams, this is 42 minutes of tranquility



Baby Boomer

a new twist for classical music! Tchaikovsky, Strauss, Handel, and others set to a fun beat (46 min.)

* \$3.95 S&H

MAJOR CREDIT CARD, MONEY ORDER, OR CHECK
ADDITIONAL TITLES - \$9.95 EACH

OR

for a FREE color catalog

Call

1-800-860-3472

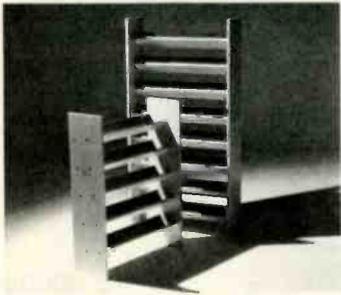
MULTITIME MEDIA
COMPACT DISCS & MORE
P.O. Box 1210 · Dublin, Ohio 43017



We've Got The Greatest Hits Of All Time!

Philadelphia International Superstars on CD at Unbeatable Prices!! (NOT Sold in Stores!)
Buy Any 4 CD's Below - Get a 5th FREE!
 TEDDY PENDERGRASS - Best Of or Greatest Hits \$9.99
 INTRUDERS - Best Of or Save The Children \$9.99
 O' JAYS - Back Stabbers, Greatest Hits or Best Of \$9.99
 LOU RAWLS - Best Of \$9.99
 THREE DEGREES - Greatest Hits \$9.99
 MFSB - Greatest Hits \$9.99
 TSOP DANCE CLASSICS \$9.99
 TSOP BALLAD CLASSICS \$9.99
 HAROLD MELVIN & THE BLUENOTES - Greatest Hits or Best Of \$9.99
 ARCHIE BELL & THE DRELLS - Greatest Hits \$9.99
 CDMO Specializes in Oldies, Greatest Hits & Classic Rock & Roll ONLY! (Both Domestic & Imported) Call for FREE List
WE SHIP TODAY! ... ALL MAJOR CREDIT CARDS
 Add \$4.50 S/H per total order - NY Res. add Tax
CDMO, INC., Dept. S293, 900 Rt. 110, Melville, NY 11747
Info: 516-385-CDMO Orders Only: 1-800-FOR-CDMO

OVER 15,000 USED CD's. \$3.99 TO \$9.99. Buy/Sell, 10th Year, Visa/MC. Send \$2 (Refundable) for 28 page catalog. AUDIO HOUSE, 4304B Brayan, Swartz Creek, Michigan 48473. (313) 655-8639.



STORADISC™ - See why CD Review picked our Library Series as their "top choice." Fine-furniture quality in a variety of finishes and sizes. Call or write Davidson-Whitehall, 555 Whitehall St., Atlanta, GA 30303. 1-800-848-9811.

RETAIL MART

THE DAT STORE
 NEW IN STOCK **CD RECORDERS**
 DIRECTLY RECORDS AUDIO FROM ANY SOURCE • FINAL RECORDER DISCS COMPATIBLE W/ CONVENTIONAL CDS

NEW IN STOCK "SCOOPMAN" RECORDER
 ULTRA SMALL STAMP SIZE CASSETTE • LONG BATTERY LIFE W/ SINGLE AA BATTERY • DIGITAL STEREO RECORDING

COMING IN OCTOBER **DCC**
 DIGITAL RECORD/PLAYBACK W/ OUTSTANDING SOUND QUALITY • PLAYBACK COMPATIBILITY • QUICK TRACK ACCESS W/ ADDRESS DATA • TEXT MICROGRAPHIC DISPLAY

COMING IN NOVEMBER **MINIDISC**
 QUICK TRACK ACCESS • TOTAL DURABILITY • SHOCK & VIBRATION RESISTANT PC COMPATIBILITY • REWINDABLE DISCS • SUPERB COMPACTNESS • QUALITY SOUND

IN STOCK SINCE 1988 **DAT RECORDERS**
 OVER 95 NAMES & MODELS • SALES • DEMOS • REPAIRS
 DIGITAL MIXERS, DAT TO DAT & DAT TO CD • 4MM DATA BRIDGE & BLANK DAT TAPE (5 HOUR AVAILABLE)
 ACCESSORIES & BLANK MEDIA FOR ALL RECORDERS

THE DAT STORE • 2624 WILSHIRE BOULEVARD
SANTA MONICA • CALIFORNIA • 90405
WEEKDAYS 9-6 / SATURDAYS 11-4 / CLOSED SUNDAYS
FAX: 310 828 8757 • 310 828 6487

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

We stock 106 brands of Audio, Video, & Car Stereo, only a few stores in America can make this statement and virtually all of us are located in college towns adjacent to high-tech Universities.

106 Brands Available!

Acurus~Adcom~ADS~Alpine
 Audio Prism ~ Audio Quest
 Audio Control ~ B&W
 Chicago Spk
 CWD Denon ~ Kef
 Esoteric Audio ~ Fineline
 Forte ~ Kimber Kable
 Klipsch ~ Martin-Logan
 Mitsubishi ~ Monster
 NAD~Nakamichi~Niles
 Onkyo ~ Paradigm
 JVC~Phase Technology
 SME ~ Phillips ~ Revox
 Sanus ~ Sennheiser
 Shure ~ Signet ~ Snell
 Sony ~ Sony ES ~ Sumiko
 Stax ~ Tara Labs ~ Target
 Threshold ~ Velodyne
& 61 More

Factory Authorized

KIEF'S
AUDIOVIDEO
 24TH & IOWA ST. LAWRENCE, KS. 66046 MON-THUR. 10-8pm FRI-SAT. 10-6pm
 AUDIO/VIDEO CAR AUDIO CDS & TAPES
 913-842-1842 913-842-1438 913-842-1544
 FOR 33 YEARS ONE OF AMERICA'S FEW REAL AUDIO/VIDEO STORES

CLASSIFIED ADVERTISERS:

You can reach millions of prime prospects for your mail order products or services through low-cost Marketplace Classified advertising in this or other titles of the

HACHETTE MAGAZINES INC. CLASSIFIED MAGNET

to place an ad, or further information including rates, ad styles, sizes and multi-title discounts, call Toll-Free

(800) 445-6066
 9am-5pm EST

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 • LEXICON
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

Custom
Car
Installation

Where Audio-Video Connect

Total
Home
Installation

USA MEDIA JUNCTION

100%

Satisfaction
Guaranteed

30 Day Money-Back Guarantee
Defectives Gladly Exchanged

SEPARATES

ALL MAKES & MODELS

AUDIOSOURCE SS4	295
JVC DIGI AXV 1050	1197
MUSEATEX ACC 1	1949
MUSEATEX FM 1	999
MUSEATEX A 260	799
MUSIC & SOUND SPA 100	849
PIONEER SP 7000	576

VIDEO-CAMS

SONY SLV 595 HF 427

JVC HRD 6800	678
PANASONIC PV 4250	327
TOSHIBA M647	348
SONY SLV 58UC	843
CANON UC 1	745
NIKON VN 750	1384
SONY CCD TR101	CALL

TV's • LASER

PIONEER CLD D701 LOW!

PHILIPS CDV 400	476
PIONEER CLD M301	444
PANASONIC LX 900	846
SONY MDP 605	CALL
JVC AV 27BM3	596
SONY KV 32XB55	1575
TOSHIBA CF 2772	513

SPEAKERS

BOSE AM 5 II 625

AR M2	238
AR M5	693
ADVENT BABY II	137
ADVENT PRODIGY TOWER	263
ADVENT HERITAGE	475
BOSE 301 III	318
BOSE 901 CLASSIC	CALL
BIC V 52S	134
BIC V 620	248
CAMBER LS3	196
DCM TF 400	464
EPI 100 S III	188
JAMO SAT 300 SYST	495
JBL LX 300	276

TAPE DECKS

JVC DIGI TDV 1050	516
SONY TCK 690	267
TECHNICS PSIR 333	173
TEAC V 5010	539

RECEIVERS

JVC RX 507	267
JVC RX 707	326
JVC RX 807	429
KENWOOD KRV 6040	257
KENWOOD KRV 8040	391
PIONEER VSX 451	295
PIONEER VSX 511S	302
PIONEER VSX D901S	764
SONY STR D590	194
SONY STR D790	273
SONY STR D1090	CALL
TECHNICS SAGX 530	339

ALL MAKES & MODELS

CD PLAYERS

SONY CDP C625 278



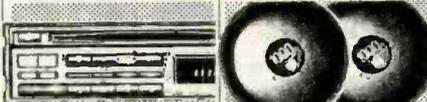
JVC XLM 407	214
JVC XLM 507	257
JVC DIGI XLZ 1050	627
KENWOOD DPM 7740	243
KENWOOD DPC 721	197
MAGNAVOX CDC 552	226
MUSIC & SOUND CDT 1	750
PHILIPS LHH 500	CALL
PIONEER PDS 501	216
PIONEER PDM 701	219
PIONEER PDT M2	353
SONY CDP 497	152
SONY CDP C425	CALL

Call For The Best Prices On All Manufacturers CD's
Monday - Friday 10 - 7

The Best Service • Best Prices
Best Guarantee • Best Selection
and The Best Brands in Stock

Amps CAR STEREO Speakers

PIONEER DEH-680 327 JBL 1500 GTI 211



KENWOOD KDC C600	CALL	BAZOOKA T 102	176
KENWOOD KRC 740	CALL	JBL GT 621	77
PIONEER KEH M6200	259	JBL GT 692	98
SONY XR 5250	195	JBL T 616	246
SONY XR 330U	288	KENWOOD KFC 1683	87
CLARION 6100HF	397	KICKER C 12	CALL
PIONEER CDX M30	298	ORION XTR 10	78
SONY CDX U300	324	ORION XTR 12 DVC	99
AUTOTEK T100BTS	237	PIONEER TSA 1640	57
JBL GIQ 200	287	PIONEER TSA 6905	86
ORION 250 SX	329	PIONEER TSH THX60	198
ORION 250 HCCA	495	PLYE PW 1270	108
PIONEER GMH 100	216	ULTIMATE M10HB	178
SONY XM 4020	165	CALL FOR RADAR	

CALL FOR THE LOWEST PRICES ON YOUR FAVORITE CAR STEREO BRANDS & MODELS

Home Theatre • Dolby® Surround
Laser Disc • Powered Subwoofers
DAT • Separates • Interconnect

Audiophile Avenue

<p>Museatex Melior CD Transport C/Lock Remote Control LCD Display 2 Digital Out 5 Years P&L</p> <p>\$1750</p> <p>Museatex Melior D/A Converter C/Lock Bistream SAA730 Chip 5 Year Parts & Labor FREE Premium Interconnect with purchase</p>	<p>Music & Sound DCC1 Digital Control Center NV w/Remote All control functions together in a single component</p> <p>\$1195</p> <p>Thorens TD290 Announcing Thorens Newest Turntable 2 Speed / Auto Off Zinc Alloy Platter / Black Lacquer Call For Introductory Price</p>
--	---

SPEAKERS

JBL LX 500	447
JBL L5	845
JBL L7	LOW!
PINNACLE PN 5+	149
PINNACLE PN 6+	CALL
ADVENT IN WALL WOODY	297
BIC IN WALL M5	145
JBL IN WALL S3	173

SPEAKERS PRICED IN PAIRS

PINNACLE
PN SUB+ SUBWOOFER 227

ALL MAKES & MODELS AVAILABLE...CALL

MINI SYSTEMS

JVC MX 55 584



BOSE LIFESTYLE	CALL
AIWA NSX330	344
FISHER DCS 992	492
JVC MX 44	452
JVC MX 77	676
KENWOOD UD600	679
KENWOOD UD700M	898
PANASONIC SCC1155	494
PIONEER CCS350	552
PIONEER CCS 450	678
SHARP CDC 900	793
SONY MHC 1200	456
SONY MHC 3750	CALL

Call For The Best Deals On All Manufacturers Systems
Saturday 10 - 5

BOSE AND KENWOOD NOT AUTHORIZED BUT CONTAIN MANUFACTURER U.S. WARRANTY

100% Money-Back Satisfaction Guarantee

30-Day Money Back
Satisfaction

1137 Bloomfield Ave. • W. Caldwell, NJ 07006

Defectives Gladly
Exchanged

1-800-USA-1002

STORE: 201-227-9002

WE ACCEPT ALL MAJOR
CREDIT CARDS

INFO: 800-872-1002

StereoReview

RETAIL MART

More than
55,000 CDs
ON-LINE

WORLD'S LARGEST ON-LINE
AUDIO COMPACT DISC STORE

Discount Prices • Fast Delivery
Free Shipping for Orders of \$100 or More

Modem: 408-730-9015

Up to 9600 bps 8-N-1

In Chicago: 312-751-2447

In New York: 212-532-4045

COMPACT DISC



CONNECTION



1016 E. El Camino Real • Sunnyvale, California 94087
Voice & Fax: 408-733-0801



CAMBRIDGE
MASSACHUSETTS
AUTHORIZED
DEALER FOR:

LEXICON
MARANTZ
M & K
NAD
NILES
PARADIGM
PS AUDIO
SONY
SONY ES
STAX
THORENS

AIWA
APATURE
BOSE
GRADO
HAFLER
H/K

WE LOVE TRADE-INS.

Please bring us your old gear.

Q AUDIO

95 Vassar Street

Cambridge, MA 02139

M-F 10:00-7:00

SAT. 10:00-6:00



(617) 547-2727

The Sound Seller

For the Musical Difference

Authorized Dealer For:

Acoustat	NAD
Audio Control	Onkyo
M&K	Harmon Kardon
Nitty Gritty	Lexicon
Celestion	PROAC
Carver	Dahquist
Kinergetics	Target
Monster Cable	Velodyne
Nakamichi	Grado
Niles	Atlantic Technology
Fried	Apature
Thorens	CWD
Proton	STAX
Component Guard	Sony

2808 Cahill Road

P.O. Box 224

Marinette, WI 54143

1-800-826-0520 (715) 735-9002

Stereo Review RETAIL MART

TAKE THE SOUND APPROACH
 AUTHORIZED DEALERS FOR:

- ADS
- ALPHASONIK
- BAZOOKA
- BOSE
- CARVER
- DENON
- HAFLER
- INFINITY
- KENWOOD
- KICKER
- N.H.T.
- NILES
- ONKYO
- PIONEER
- ROCKFORD
- SONANCE

CALL FOR MANY MORE

THE SOUND APPROACH
 6067 JERICHO TPKE., COMMACK, NY 11725
 FULL WARRANTY **800-368-2344**

Audio Concepts, Inc. has been selling Sound that Satisfies... factory direct for more than 15 years.



Mary Dzurko, V.P. Audio Concepts, Inc. with G3 speakers

You can't buy a better pair of speakers for your money. I guarantee it or your money back. For an even better value assemble them yourself. Call 1-800-346-9183 today for a free catalog on our superior quality high-end speakers.

Audio Concepts, Inc.

901 S. 4th St., La Crosse, WI 54601

CLASSIFIED ADVERTISERS:

You can reach millions of prime prospects for your mail order products or services through low-cost Market-place Classified advertising in this or other *Hachette Magazines, Inc.* titles.

To place an ad, or further information including rates, ad styles, sizes and multi-title discounts, call *Toll-Free*

(800) 445-6066

9am-5pm EST

ROCK MILESTONES: BECK TO BECK



Jeff Beck's signature slash-and-caress guitar style has been at the forefront of virtually every major rock movement through 4 decades. Now, own the music that's made its mark on every rock guitarist... and listener... alive today. 55 digitally-remastered selections,

including:

- The Tridents...rare tracks by Beck's first band.
- The Yardbirds...studio hits, live tracks, and rarities featuring the dual guitars of Jeff Beck and Eric Clapton and Jeff Beck and Jimmy Page.
- The Jeff Beck Group with Rod Stewart.
- Beck's Grammy-winning '80s & '90s music.

"BECKOLOGY" JEFF BECK, 1963-1991



3-CD/3-CASSETTE DELUXE BOXED SET WITH 64-PAGE BOOKLET FEATURING BIOGRAPHY, DISCOGRAPHY, AND RARE PHOTOS.

ON CASSETTE: \$36.98

ON CD: \$51.98

Selection #48661

HOW TO ORDER:

Note selection number when ordering by phone or mail.

CALL TOLL-FREE
1-800-257-3443, ext. 422.

Credit cards only. Call anytime.
(VISA, MASTERCARD, AMERICAN EXPRESS)

OR WRITE:

Sony Music Fulfillment, Dept. 1001-422
P.O. Box 4000, Carrollton, GA 30117

Send a check for \$36.98 for Cassettes (per set) or \$51.98 for CDs (per set). Include \$3.25 for postage and handling. Please indicate number of sets and choice of CDs or Cassettes.

Allow 3 to 4 weeks for delivery.
Please add applicable sales taxes.



"Epic," "Legacy," and Reg. U.S. Pat. & Tm. Off. Marca Registrada. Is a trademark of Sony Music Entertainment Inc. © 1992 Sony Music Entertainment Inc.

Index to Advertisers

Reader Service No.	Advertiser	Page Number
1	Adcom	9
2	Adcom	20
—	Atlantic Technology	96a, b
—	Audio-Technica	33
—	BMG CD Club	32a, b
—	Bose	7, 23
—	Bose Express	57
—	Boston Acoustics	31
6	Cambridge SoundWorks	63, 65, 67, 68-69, 70, 71
17	Celestion	27
10	Cerwin-Vega	40
—	Columbia House CD Club	48a, b
—	Columbia House Laser Club	15
—	The Compact Disc Handbook	91
12	Cooustic	52
—	Crutchfield	29
26	DCM	10
20	DCM	118
27	Definitive Technology	18, 19
25	Denon	2
—	Design Acoustics	33
24	Digital Phase	I
—	Electronic Wholesalers	131
15	Geneva Group	118
—	Illinois Audio	130
28	J&R Music World	126-127
39	Mitsubishi	C3, C4
32	Mobile Fidelity	114
33	NordicFlex	21
34	NordicTrack	123
46	Oldsmobile	34
—	PARA	30
42	Paradigm	51
—	Pioneer-Home	C2
—	Polk Audio	12
—	PolyGram Records	11, 121
37	PSB	21
—	6th Avenue Electronics	132-133, 136
—	Sony	5, 16a, b, 39
—	Sound City	135
—	Warner Music	25
—	Yamaha	47

February



THE HIGH END

BY RALPH HODGES

Surround About

HERE seems to be little love in the audiophile world for more than two speaker channels in the listening room, even though center and surround speakers have been advocated by leading audio figures for decades. Whether the dismissal by enthusiasts results from bad experiences, suspicion of marketeering claims, or a purist aversion to "dolled-up" sound that would seem to exceed the chaste intentions of some artists and record producers is not clear. But it has left the high end pretty much alone in despising what is a dramatic and, in many respects, perfectly legitimate expansion of listening possibilities.

For my part, I deny myself as little as possible; and while I am not about to tolerate musicians sitting in my lap or blasting at me from behind, being engulfed by the glowing ball of ambient energy that emanates from a properly staged performance puts me in the best and most receptive frame of mind. For years I have used a very simple "ambience-extraction" circuit—no more than a modified Hafler L-R hook-up, but implemented at line level and affording a slight adjustment of spatial perspective—to drive rear speakers, and this has generally been enough to do it for me. My usual program sources are ordinary stereo recordings, since there is simply not enough "surround-encoded" material available to satisfy serious music collectors. Some recordings are (presumably by simple happenstance) revelatory, while others are hardly worth the trouble of switching the rear speakers on. But at least I've been squeezing the last smidgeon of gratification out of every record-buying dollar. Or have I?

To find out, I decided to give cabinet space to an AudioSource SS Four, a basic surround processor of very modest cost, with politically correct Dolby Pro Logic and a few afterthoughts meant to enhance stereo—and even mono—music listening. Because the Dolby configuration is the principal operator here, I also imposed on the RCA division of BMG to provide a

handful of Dolby Surround-encoded CD's.

First hearings, with well-known unencoded recordings, both pleased and intrigued me; a dimension beyond my homemade rig's capabilities was apparent. Why this should be, given that the rear-channel presentation is deliberately non-specific as to the identity and locality of any sound source, was ultimately traced to the 30-millisecond delay the Dolby decoding applies to the surround signals. It had the effect of subtly moving the performance back from the front-speaker plane—a desirable effect with the many overly close recordings in circulation—and hence opening up the spatial boundaries encompassing it. The phenomenon was magnified when I switched in the SS Four's HALL mode, which introduces a 50-millisecond delay to the rear speakers.

Appealing as this effect can be, it comes at a price. Additional reverberation, whether natural or artificial, muddles the articulation of an audio experience, particularly making vocals less clear and sharply etched. That's one of the reasons the motion-picture industry has so insistently recommended center speakers for home theaters. Not having a home theater as such, I decided to leave a center speaker out of the mix for the time being.

Further SS Four listening caused me to wonder whether AudioSource had given any consideration to the phase relationship between the front and rear speakers. The front speakers may—and should—be in phase with each other, and likewise the rears, but that says nothing about the left front speaker being in phase with left rear, etc. When I queried the manufacturer, I got the expected (and generally appropriate) response: Since the rear speakers receive a delayed signal, phase relations between them and their front counterparts don't amount to anything meaningful.

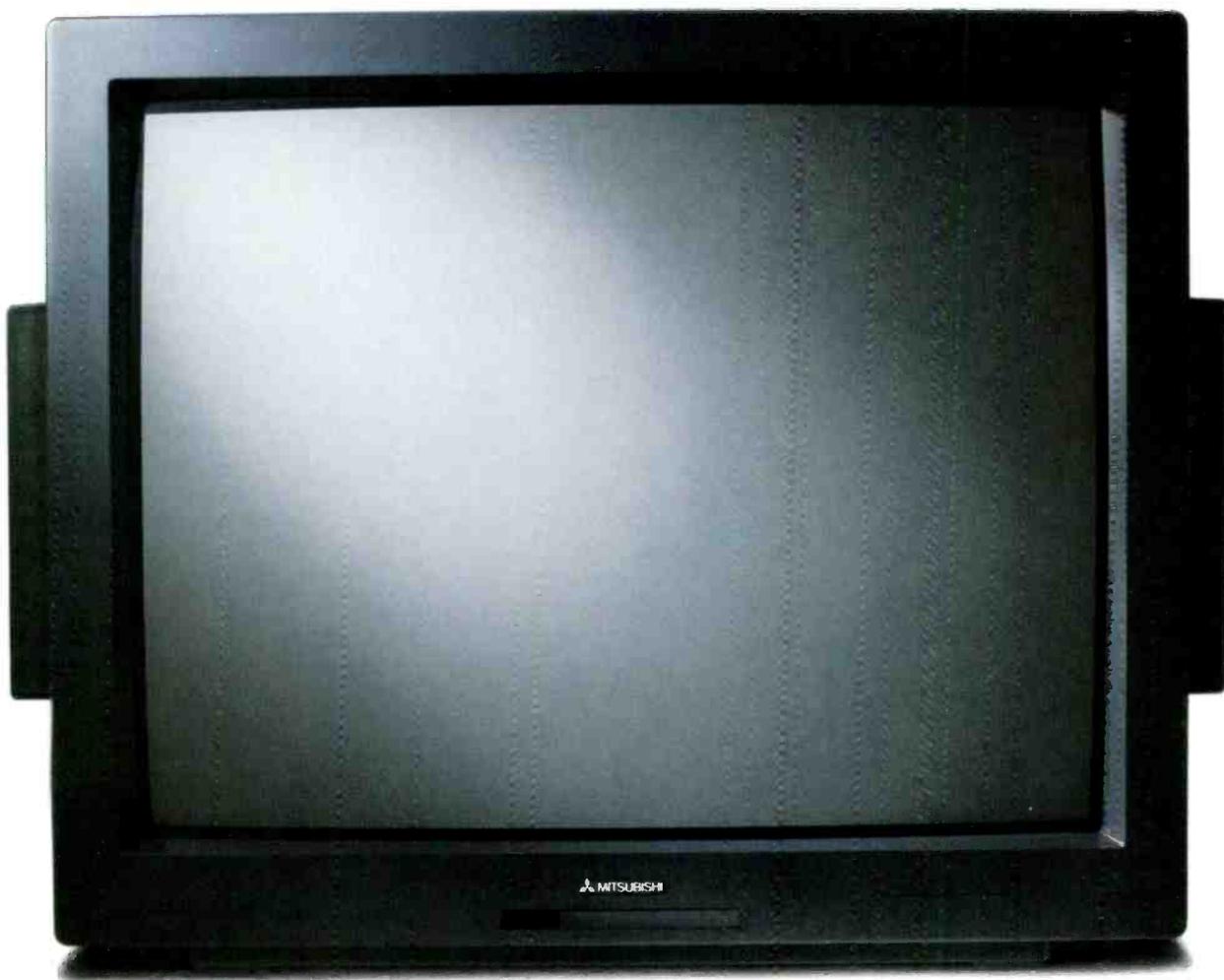
Well, not quite. If speakers are placed at either end of a room, wavelengths corresponding to various multiples and fractions of the room's length will interfere acoustically in ways that can exaggerate or subdue the room's principal axial modes. In

other words, it's possible to use rear speakers to smooth the effects of standing waves. To do this effectively, you have to pay attention to the polarity of the speakers in question. To each other, the speakers will still seem to be in phase or out of phase. So I inverted the polarity of the rear speakers by way of experiment, and found I liked the result better. That's what counts, after all.

Surround processors extract rear-channel information from two-channel recordings by subtracting the two channels from each other, isolating the signal components that are not common to them—the ones that are not coherent. Signals having the same phase and amplitude cancel out in this process and thus emerge only from the front speakers. It is a clever and resourceful scheme, but it does no favors for signal-to-noise ratio. During the subtraction process, noise, which is incoherent, will retain almost its full power in the surround output, whereas much of the signal, which is much more coherent, will cancel. The upshot is that the rear channels can tend to hiss—and the noisier the recording, the more hiss goes to the back.

Delay lines can also hiss, to a degree that is partially determined by the signal, meaning that noise-modulation effects can arise. It's possible to eliminate such noise, but the techniques for doing so are evidently a bit beyond the SS Four's cost constraints. I can sympathize with anyone who objects to hiss coming from around and behind him—unless the performance is truly atrocious, that is. So I regret to say that if minimum noise is a requirement, so is a greater expenditure than the current price for this otherwise admirable device.

As for the RCA surround recordings, I was surprised to find that they were no better at conveying a sense of spaciousness than many unencoded sources. One, however (Stokowski playing familiar Wagner, circa 1973), unexpectedly features the legendary talents of Richard Mohr as producer and Robert Auger as engineer. It also features a recurrent whistle in the left channel—an analog whistle, I suspect, not a digital one. □



Can you spot the Mitsubishi 35" TV in this ad?
(Hint: it's the one sitting behind our new 40")

It's 31% bigger than a 35", 119% bigger than a 27" and 1000% bigger than we could show you in this ad. It's the new Mitsubishi 40", the largest tube television you can buy. Once you've seen it, it's kind of hard to see anything else.

 **MITSUBISHI**
TECHNICALLY, ANYTHING IS POSSIBLE™



© 1993 Mitsubishi Electronics America, Inc. Curiosity is a good thing. Call 1-800-374-4402 if you'd like to hear more about the Mitsubishi 40"

CIRCLE NO. 39 ON READER SERVICE CARD