

SUPER DUPER FROM TDK.



LABORATORY STANDARD CASSETTE MECHANISM

Capture all the dynamics of digital performance on your cassette deck. TDK HX-S blasts through the sonic parriers with high powered digital sounc

Its exclusive meta particle formulation reprocuces a wider dynamic range and a higher frequency response to handle digitally-enhanced music sources on arry cassette ceck with a Type II (High-Bias) switch With four times the magnetic storage ability of any tape n its class TDK HX-S virtually eliminates high frequency saturation, while delivering unsurpassed sensitivity throughout the audio spectrum. Additionally, HX-S excels in retention of high frequency MOL, which no other Type II formulat on attains.

And to maintain its dynamite performance, TDK HX-S is housed in our special y engineered, trouble-free Laboratory Standard cassette mechanism for durability and reliability—backed by the TDK Lifetime Warranty.

So for optimum results with Type II (High-Eias) and digitally-sourced recordings on your cassette deck, get the only super-duper. TDK HX-S.



Volume 35 Number 5 May 1985 HIGH FIDELITY

UDIO VIDEÓ

11 Currents

Edited by Peter Dobbin

First-ever listening tests of digital audio from a videodisc, and more

22 Completing the Link

by Peter W. Mitchell

Audio-video receivers and control centers can simplify your home-entertainment system.

27 Road Sounds '85

by Jay Taylor

Car CD players and stereo AM front ends heat up the mobile music scene.

36 Top-Flight VCRs

Compiled by Frank Lovece Feature-by-feature comparison of 24 Beta and VHS stereo Hi-Fi VCRs

EPORTS F S T

- 41 NAD 7155 AM/FM receiver
- Stanton HZ-9S phono cartridge 44
- 46 Technics SL-P3 Compact Disc player
- 48 Mitsubishi HS-400UR VHS Hi-Fi VCR
- 51 Jonson ATZ-500 car receiver/tape deck
- 54 Panasonic CQ-S934 car receiver/tape deck

57 When the Doors Didn't Open

American conductor Dean Dixon: an artistic and social force

Popular/Backbeat

73 Playing for Keeps

by Francis Davis Violinists Billy Bang and John Blake fiddle around with jazz.

77 A Resurrected Velvet Underground

by Michael Hill During remastering of their albums, another was unearthed.

DEPARTMENTS

Cover Design: Tony Palagonia

Cover Photos: Ralph Sammarco

On the Cover: Too to bottom Jensen ATZ 500 car receiver tape deck. Pioneer CDX-P1 car CD-player. Panasonic CO-S934 car receiver.

tape deck. Technics SL P3 CD player. Mitsubi shi HS 400UR VHS Hi Fi VCR

2 The Editor's Page 4 Letters

- 19 Crosstalk
- **Basically Speaking** 20
- 56 Mediev
- 59 **Classical Reviews**
- 65 **Critics' Choice**
- **75 Popular Reviews**
- 88 Reader-Action Page
- 88 Advertising Index



Mean FaseLitry (ISN 8918-1456) is published monthly et 825 7th Ave. New York, N Y 10019, by ABC Lessure Magazines, Inc. a subsidiary of American Broadcasting Companies, Inc. Copy-right @ 1965 by ABC Lessure Magazines. Inc. The design and contents are fully protocted by copyright and must not be reproduced in any manner. Second-class postage paid at New York, New York, and at additional maling offices. Authorized as second-class mail by the Post Office Department, Ottawa, and for payment of postage in anth. Yearly subsorption in U.S.A. and Pos-sessions 113-95, elsivwiters 119 95. Single constraints. Since Subscriptions, neurosci. Authorized as lowed and resv. address changes to Hickir Flourity. P. O. Box: 10758, Des Mhorae, Iowe S0440. Change of address. Give old and new addresses, including 2IP pode. Enclose address label from lest issue and allow five weeks for change to become effective. POSTIMASTER: seed change of address. Environment Termer R. D. 80: 9378. De Neuron 14. 5436. Change of address. Give old and new addresses, including ZIP code. Er of address to High FIBELITY, P.O. Box 10758, Des Moines, IA 50345.







Classical

by Noah André Trudeau

MUSIC



Publisher Steven 1. Rosenbaum Editor-in-Chief/Associate Publisher William Tynan Editor, Musical Amarica Shirley Fleming Senior Editor Michael Riggs Managing Editor Peter Dobbin Sanior Copy Editor Ken Richardson

TECHNICAL

DEPARTMENT **Technical Editor Michael Riggs Electronics Features Editor** Peter Dobbin Assistent Editor (Administration) Randy Brozen Consulting Technical Editors Edward J. Foster. Robert Long Contributing Editors Paul D. Lehrman, Frank Lovece,

Gary Stock

MUSIC

DEPARTMENT

Classical Music Editor Theodore W. Libbey, Jr. Popular Music Editor Georgia Christgau Assistant Editor Mildred Camacho Photo Editor Susan E. Fingerhut

Contributing Editors Robert E. Benson, Crispin Cioe. Mitchell Cohen, R. D. Darrell, The Reverend Thomas L. Dixon, Steve Futterman, Edward Greenfield, Thomas Hathaway, Paul Hume, Joyce Millman, Paul Moor, John Morthland, George Movshon, Thomas W. Russell III, David Patrick Stearns, Noah André Trudeau, James Wierzbicki, John S. Wilson

ART

DEPARTMENT

Art Staff Robin Pelkki (layout and graphics). Tony Palagonia (cover and consultant) Technical Art Roy Lindstrom Contributing Photographers Richard Chesnut. Steven Kupinski

PRODUCTION

Director of Production Kathleen Davis Advertising Production Manager Janet Cermak Associate Production Editor Susan E. Fingerbut Production Assistant Paula Ballan

CIRCULATION

Vice President, Circulation Stephen J. Bernard **Circulation Director/V.P., Newsstand Marketing Dominic Mustello**

National Sales Manager/Newsstand Michael Gerardo **Circulation Director/Subscriptions** Lillian Gmitruk Circulation Subscription Staff Mary Beth Colucci. Barbara Donion, Timothy Farrell, William Johnson, Janice Raiford

Customer Service Mary Losi

Assistant to the Publisher Randi Goldman Assistant to the Editor-in-Chief Darlene Edwards



HIGH FIGELITY and HIGH FIGELITY/MUSICAL AMERICA are published monthly by ABC Leisure Magazines, Inc., a division of ABC Publishing, Inc., and a subsidiary of American Broadcasting Companies, Inc. ABC Publishing, Inc., Robert G. Burton President ABC Leisure Magazines, Inc. Ronald Stuart, President, Steven I. Rosen Burn, Vice President, High Fidelity Group. Herbert Kappler, Senior Vice President, Photographic Publishing Division, Roger Canavan, Controller, Ernest G. Scafone, Vice President, Graphics and Production, Stephen J. Bernard, Vice President, Circuation Dominic Mustello, Vice President, Newsstand Marketing, Member Audit Bureau of Circulation Indexed in Reader's Guide to Periodical Literature Current and back copies of High FIDELITY and High FIDELITY MUSICAL AMERICA are available on microfilm from University Microfilms, Ann Arbor, Mich. 48106. Microfiche copies (1973 forward) are available through Bell & Howell Micro Photo Drv , Old Mansfield Road, Wooster, Ohio 44691 **ADVERTISING OFFICES**

New York: ABC Lesure Magazines, Inc. 825 7th Ave., 8th Floor, New York, N Y 10019 Tel. (212) 265 8360 James A Casella, Advertising Director, Richard J Marino. Associate Director of Advertising, Michael H. Goldberg, Eastern Advertis ing Manager, James R. McCallum, Record Advensing Manager, Candice Leyder Classified Adventising Manager Kathleen Davis, Director of Production, Janet Cer mak, Adventising Production Manager

Midwest: High Fidelity Hitchcock Building Wheaton III 60187 Tel: (312) 653

Bo20 Star Lave Midwest Advertising Manager Bo20 Star Lave Midwest Advertising Manager Las Angelos: ABC Lessue Magazines Inc. 2020 Avenue of the Stars Suite 245, Contury City Calif 90067 Tel. (213) 557 6482 Bita Wetzen, Western Adver tising Manager

Elitorial correspondence should be addressed to The Editor, High FithLity 825 7th Ave. New York, N.Y. 10019. Editorial contributions will be welcomed, and New York N.Y. 10019 Editorial contributions will be welcomed, and payment for articles accepted will be arranged pior to publication. Submissions must be accompanied by retrin postage and will be handled with reasonable care however, the publisher assumes no responsibility for return of unsolicited photo graphs or mar scripts



by William Tynan



Groundhogs, form and function, and Harlem

I could blame the Seventh Avenue groundhog. My staff warned me not to trust a groundhog who didn't cast a shadow in the middle of Manhattan on a street where there was no sun. Did I take their advice? No. So while the rest of the nation was glued to their TV sets to see what the "official" prognosticator had to say about the arrival of spring, the HIGH FIDELITY crew was crazily jamming a redesigned magazine through a new typesetter. Alas, I trusted our local furry friend's prediction that the winter of our discontent was indeed over and that the March issue would spring to life in full bloom. We all know it didn't. I thought that rodent's tail was too long and narrow. Anyway, on with our May issue, which fulfills many of our original design goals.

Form and function are wound throughout two of our features this month. In "Completing the Link," Peter W. Mitchell details the new generation of audio-video components, providing some thoughts on assembling a state-of-the-art home-entertainment system. With the Compact Disc, the story has been a curious one. First touted as a totally indestructible playback medium, it is now the focus of many products aimed at care and careful handling. The newest wrinkle-some version of which is bound to catch on-is the CD caddy. The first one we saw was at the Winter Consumer Electronics Show, where Yamaha introduced a prototype designed specifically for use with car CD players. As Jay Taylor's WCES car stereo wrapup was in final preparation for this issue, Philips and Sony privately showed us their versions. Pictures of all three appear in "Road Sounds '85." The design goal of each is to simplify the somewhat cumbersome task of loading a CD into a player. We await with interest the evolution of the production type.

When one thinks of Harlem's music, the sound of jazz immediately comes to mind. But Harlem is also the birthplace (in 1915) of one of America's most accomplished black symphonic conductors: Dean Dixon. Faced with the institutionalized racism in the United States, Dixon built his career in Europe. He made his last major American appearances in 1970-six years before his death. As Noah André Trudeau writes in his profile of Dixon, his recordings are hard to track down, but worth it.

Harlem may be home to jazz, but the music roads there were rocky for jazz violinists John Blake, who was born there, and Billy Bang, who moved there as an infant. Though following dramatically different routes, their careers have had a major influence on the place of the violin in jazz. Francis Davis's article, "Playing for Keeps," includes a selected discography of their recordings.

Sherwood car stereo: Quality, innovation, and money left over for the good times.

At Sherwood, we think you shouldn't sacrifice your lifestyle for your car stereo. So we make great car stereos that don't cost like great car stereos.

Built into every one is the quality and innovative design that has been

Sherwood's benchmark for more than 30 years. The result is performance that sets standards for the more expensive brands.

New CRD-180.

Take, for example, our new CRD-180. It not only performs with the finest car stereos, it has features you usually

find only on far more expensive units. It has auto reverse, Dolby, metal tape capability, pre-amp output with fader, separate bass and treble controls, locking fast forward and rewind, and terrific right illumination.

Great FM, and AM stereo. And the CRD-180 not only has electronic synthesizer tuning with MOS-FET front end for super FM, it also has AM stereo, opening a whole new world of exciting

© 1985, Inkel Corporation.

long-range on-the-road listening. (Sherwood was the first to introduce AM stereo in separately available car receivers.)

Computerized features. Advanced digital tuning lets you enjoy two scan-

because this display lets you know what's happening, including time of day, since it even has a *digital clock*.

Fits your budget. All of this innovation and performance comes in a mini chassis, so this great car stereo

will fit just about any car. And just about any budget.

How much you pay for a great car stereo may not be the only thing on your mind, but it's not the only place you have to put your money, either. So have a little money left for the good times,

but get all the car stereo you want. Buy Sherwood.



Quality and Innovation You Can Afford

13845 Artesia Boulevard, Cerritos, California 90701. In Canada, The Pringle Group, Don Mills,

Ontario.

*Dolby is a trademark of Dolby Laboratories.



CED-160

ning modes: Scanning all stations, or just the ones in memory. This unique preset scan feature works with the ability of the CRD-180 to remember up to 12 of your favorite stations.

LCD display and digital clock. The latest in convenience, a multifunction liquid crystal display (LCD) indicates frequency, preset channel, local/distant, stereo, AM/FM, Dolby, tape direction and more. The CRD-180 is easy to use

LETTERS

TEST REPORT POLICIES

In February's "Crosstalk," a reader asks about the absence of test reports on dualwell dubbing cassette decks in HIGH FIDELI-TY. Your response is that you have tested several such models and found that "performance usually isn't their long suit." It seems to me that this is precisely the reason you should report on these items. How else are we, the readers, supposed to learn (other than the hard way) what you found in your tests? To test something, find it inadequate, and then fail to report that seems to me to defeat the very purpose of equipment reviews. We are as much-perhaps more-interested in knowing what products we should not buy as in which ones we should.

Arthur C. Joy

West Columbia, S.C.

We did run reports on the decks we tested. We haven't done any since because we don't see the point in wasting space on equipment whose basic performance can be expected to fall below the level that most of our readers would demand.—Ed. I can't help but notice that equipment from some manufacturers gets reviewed regularly while that from some others is never seen. There are many products on the market that are first-rate sonically and otherwise, and often excellent bargains, yet they never appear in your magazine.

Gien C. Bartholomew Brooklyn, N.Y.

It's hard to respond fully without more specific information, but it certainly is true that some companies' products rarely, if ever, get reviewed. There are several reasons, including the fact that some manufacturers don't want their equipment tested and therefore refuse to lend us samples. Another is that we don't review products that we think will be of little interest to most of our readership. And a third is simple oversight. We are interested in what you'd like to see covered, so let us know what you feel we're missing.—Ed.

BREAKTHROUGH?

In February's "Currents," you describe and

picture the Bose Acoustic Wave Music System, which is said to incorporate "a radically new method of loudspeaker loading." I recall clearly that in the 1930s, Stromberg-Carlson used what it called an acoustical labyrinth. Their ads included a cutaway diagram of this speaker loading system, which looks very much like that used in the Bose. Bass performance was outstanding for the time. And even when the set was playing rather loud, you could put your ear to the back opening and hear virtually no sound.

Harrison A. Roddick

Seattle, Wash.

Despite superficial resemblances, the Bose system does not work anything like an acoustic labyrinth or transmission line. The most obvious difference is that the speaker in the Acoustic Wave Music System is loaded in front as well as in back, with sound radiating from both ports. Operationally, it differs in that it is a wideband high-Q resonator, which is how it achieves its efficiency advantage. A labyrinth or transmission line, on the other



"We were hardly surprised to find that the V15 Type $\underline{\nabla}$ -MR is a sterling performer...with unsurpassed clarity and freedom from distortion ...Shure has made one of the world's best cartridges even better."

High Fidelity Magazine

"Shure's new V15 Type ∇ -MR actually provides a substantial improvement in the tracking ability of what was already the best tracking cartridge we know of."

Stereo Review Magazine

"This time Shure has really come through... What you get is...detail, especially at high frequencies. There's a wonderful bloom around the music, and it's natural, not hyped."

Stereophile Magazine

The Shure V15 Type ∑-MR—no other component can bring so much sound out of your system for so little money. A combination of the revolutionary Micro-Ridge Tip and Shure's extraordinary Beryllium Stylus Shank, this cartridge has redefined the upper limits of high-frequency trackability.



	CE						
Teemfor							
	ompact Disc Player SL-P2	OIGIT?IL	100 mm	iiiio iim mur	18355.10	1	
phones mi	n volume max	WILL THE PARTY OF	The second second	and a second line			-

Introducing a slight improvement on perfection. The new Technics Compact Disc Players.

Technics compact disc players. And the compact disc. Together they've given you what no conventional audio system can: the perfection of musical reality. Instead of the conventional stylus, Technics compact disc players use lasers and computers. So there's none of the noise. None of the distortion. And none of the wear and tear that affects ordinary records.

With Technics, what you hear is not just a reproduction of a performance, but a re-creation of it: perfection.

But occasionally even the musical perfection of a compact disc can be marred by fingerprints, dust or scratches. So the new Technics SL-P2 compact disc player has improvements like an advanced error correction system. This system has been designed to



ipact compensate for those imperfections. To help ensure that the sound you hear is out a still completely flawless.

You also get sophisticated, convenient controls for accurate, rapid response to your commands: 15-step Random Access Programming so you can play any selection. In any order. Auto Music Scan lets you sample the first few seconds of each song. Automatically. Full information fluorescent displays let you keep track of tracks, playing time and other player functions.

And all of this can be controlled from across the room with Technics wireless, infrared remote control.

So enjoy an improvement on perfection. With the full range of Technics compact disc players. Including the SL-P2, SL-P3 and very affordable SL-P1.

The digital revolution continues at Technics. Perfectly.







The DALI line of world class high-fidelity loudspeaker systems ... Combining modern computarization of engineering and design with traditional European craftsmanship.

The following systems are now being offered at factory direct prices:

6", 2-way
8", 2-way
2×8", 2-way
6", 2-way
10", 3-way

Model	Your Cost Per Pair	Shipping Charge	Retail Value	
DALI 2	\$120.00	\$10.00	\$210.00	
DALI 3	\$150.00	\$12.50	\$270.00	
DALI 4	\$220.00	\$24.00	\$450.00	
DALI 10	\$319.00	\$33.00	\$600.00	
DALI 6	\$396.00	\$40.00	\$750.00	

"Hi-Fi & Electronik", the most recognized Danish Hi-Fi magazine tested our DALI 3 and rated it higher than the Tannoy Titan and B&O Beovox X-35, and concluded."... this speaker sounds better than you'd expect at the price... the DALI 3 represents a truly outstanding value."

Our offer is really risk free; if you are not absolutely satisfied with our speakers simply return them within 10 days for a full refund, including shipping costs both ways!

There's morel With your purchase of any pair of DALI speakers, you may become an official DALI sales representative and start making handsome commissions immediately!

To place your order, or for more information, call toll-free at 1-800-251-DALI (in California call 805-252-7203) or complete the coupon and mail it in today.

Mail this coupon to: DALI Danish American Limited, Inc. P.O. Box 55386 Valencia, CA 91355 Name______ Address ______ City_____

_ Zip _

State _

hand, is designed to eliminate the backwave from the speaker cone.—Ed.

GETTING ALIGNED

One thing that always amazes me when I read a review of a turntable with a P-Mount tonearm is that no one ever discusses how accurately it aligns the stylus to the groove. I used my Dennesen Soundtracktor to check the alignment of an Audio-Technica AT-152LP cartridge in the arm of a Technics SL-M1 turntable (an earlier, slightly less deluxe version of the SL-M2 reviewed in your January issue) and was shocked to discover that the stylus overhang was off by a good 4 millimeters. It might as well have been 4 miles.

How can Technics, a company with such a good reputation for turntable design and manufacture, be guilty of such a heinous error? Can't it afford a Soundtracktor? (Mine cost about \$30.) In many respects, the SL-M1 and M2 are as beautifully designed and constructed as anything available at twice the price. Why couldn't the manufacturer have taken the extra bit of time necessary to get the tonearm geometry right? Until they (and other companies) do, I'll stick to the older but more accurate method of mounting a phono cartridge, even with all the fuss and bother it entails. At least, in the end, I'll know the job has been done correctly.

Tom Bergman

Pleasantville, N.Y.

It's partly a matter of what you take to be the correct geometry. Technics designs its arms to minimize tracing distortion at the inner grooves, at the expense of increased distortion over the rest of the disc. The Soundtracktor, on the other hand, is designed to give the lowest average distortion across the entire grooved surface, which results in higher distortion near the label. It also yields a different optimum offset angle and stylus overhang. We, too, favor the latter approach, but one can make a good argument for either.—Ed.

WHAT HATH GERSHWIN WROUGHT?

A note concerning Theodore W. Libbey Jr.'s review of André Previn's Gershwin on CD [January]: One thing is true—the timings *are* short. In fact, many minutes are simply absent from both the LP and CD. Previn has cut the entire opening section of the *Porgy and Bess* suite, containing the dawn music, the street-sellers' cries, and the requiem for Clara and Jake—exquisite music, all of it. Moreover, the horn figures before "Bess, you is my woman" are not a vamp, but the echoes of the hurricane—which is *also* cut! We should be up to the point of considering instead restoration of the original *Second Rhapsody* orchestration. Maybe a decade more?

Richard E. Sebolt Springfield, Mass.

Many of us share your opinion. By the way, you may be interested to know that Michael Tilson Thomas is involved in a recording project for CBS that should set some of these things right, at last. Keep an eye out for a feature on the subject by David Patrick Stearns in a forthcoming issue of HIGH FIDELITY.—Ed.

HELP!

I enjoy the guidance and information your magazine offers, but I am having difficulty understanding some of the terms (dB, Hz, pF, etc.) and the significance of some of the measurements. I would appreciate enlight-enment on these subjects.

Lynne M. Kesterson Daly City, Calif.

I've just started looking into hi-fi equipment and am having a hard time making sense of the terms and specifications. Is there a book that can tell me what they mean in plain English?

L. Mitchell New York, N.Y.

Our "Basically Speaking" column regularly deals with these matters. If you go back to the October 1981 issue and read forward, you will get a very complete, concise overview of audio concepts, terms, equipment, and specifications, including guidelines to the interpretation of test measurements. Many public libraries have back issues. We have collected material from these columns relating specifically to our test reports in our Complete Guide to High Fidelity's Test Reports. You can obtain this booklet by sending a check or money order for \$3.95 to High Fidelity Test Report Guide, High Fidelity, Dept. JW, 825 Seventh Ave., New York, N.Y. 10019.

If you would prefer a book, an excellent choice is Hi-Fidelity Concepts and Com-



SANSUI CAR AUDIO High Octane Performance. Regular Price.

Sansui puts pleasure in the passing lane! With performance and value that could only come from a proven leader in car and home audio technology, our incredible RX-4000 is power-packed car audio that's not just along for the r de. Even with all its outstanding features, plus 20 watts of pure sonic power,

Sansui's RX-4000 doesn't require shock absorbers for your wallet.

At the heart of this pulsating 20 watt powerhouse is a precision digital synthesizer tuner with 12 presets (6AM/6FM). And to combine total operational pleasure with driving pleasure, our RX-4000 also features: auto scan; auto reverse; ASRC with interference blocker for clear reception in any environment; Dolby[™] NR; built-in four-way fader controller; RCA preamp outputs; clock display—and much more.

And if the performance power of our RX-4000 seems too hot for you, most of the same great features will be found in our models RX-3000 and RX-2000. All deliver the same great Sansui sound and quality that have made us world famous.

For high octane performance, sound thinking and solid value, nothing on the road beats Sansui car audio. Get it now for an incredible moving experience.

For the name of your nearest Sansui Car Audio dealer, call or write: Sansui Electronics Corp., Lyndhurst, New Jersey 07071 (201) 460-9710; Carson, California 90746 (213) 604-7300



Dolby is a registered trademark of Dolby Laboratories, Inc.

Sound Perfection. You can't get any closer than this.

Power. Purity. Startling realism and depth. This is the sound you demand. And no one delivers it quite like Kenwood.



Car buyers have a choice. When shopping for a new car, you may be able to have the factory radio omitted. For the Kenwood Car Stereo dealer nearest you, call 1 (800) 821-7700 and ask for extension 102.

ponents for Consumers, by Kenneth W. Johnson and Willard C. Walker. It is available for \$11.95 from Kendall/Hunt Publishing Co., 2460 Kerper Blvd., Dubuque, Iowa 52001. An expanded version (550 pages, as opposed to 270), with more background on the hows and whys, is available for about twice the price. Its title is The Science of High Fidelity. Although somewhat dated, Edgar Villchur's slender Reproduction of Sound (\$2.50 from Dover Books) is still a fine introduction to how it all works.—Ed.

MORE ON ANALOG EARS

In your December 1984 issue, you printed a letter from Mr. Ken Rihanek on how audio equipment should be judged. Although I agree somewhat with his ideas, I must dispute his statement that human ears are analog devices. This is not strictly true. No, your ears are not digital, but they do respond only to discrete frequencies and volume levels. The cochlea separates the incoming vibrations transmitted by the bones of the middle ear into signals representing these individual frequencies and sound levels and sends them to the brain by way of the auditory nerve bundle. This is the reason for the Fletcher-Munson effect, as well as the inability of the ear to resolve changes in frequency of less than approximately 0.1 percent or changes in level of less than about 10 percent (1/2 dB). To be truly linear (analog), the ear would have to have no such divisions. Incidentally, the accuracy of the analog-to-digital (A/D) and digital-to-analog (D/A) converters in digital audio gear is within 1 bit, which is approximately 99.999998 percent.

Scott Grammar

Chattanooga, Tenn.

CORRECTIONS

The discography accompanying John Morthland's "Punked Out" [January] listed *Blow'n Chunks* as being by the Minutemen. Actually, it is a live recording of Flipper in San Francisco. This, however, is a small error in the midst of a fine article, which I commend you for publishing.

Christopher Pettus

Los Angeles, Calif.

"Loch Lomond" and "Annie Laurie"

(BACKBEAT, February) are not *Irish* songs, they are Scottish.

David Harvey Philadelphia, Pa.

Thanks for the catches.-Ed.

Many thanks from all of us for Bill Zakariasen's complimentary review [January] of our recording of excerpts from Prokofiev's *Romeo and Juliet*. I have sent the review along to Yoel Levi, who will, I am certain, rejoice. By the way, his first name is Yoel, not Joel.

Albert M. Petrak

National Media Coordinator Telarc Corp. Cleveland, Ohio

We checked the spelling against the entry in the SCHWANN ARTIST ISSUE, and, alas, it is given incorrectly there. Our apologies to Maestro Levi.—Ed.

Letters should be addressed to The Editor, HIGH FIDELITY, 825 7th Ave., New York, N.Y. 10019. All letters are subject to editing for brevity.

Stereo TV. Not stereotype TV.



"Give My Regards To Broad Street" is available on Beta and VHS Stereo Hi-Fi Videocassettes from CBS/FOX VIDEO. @ 1985 CBS/FOX VIDEO.



The NEC CT-2020A offers all the features of the CT-2505A plus a flat square (FS) black stripe picture tube for increased image area and a linear, undistorted picture, 142 channel CATV-ready quartz synthesized PLL tuner and on-screen time display With almost 50% of U.S. TV stations planning to broadcast stereo this year, naturally many manufacturers are jumping on the stereo TV bandwagon. That's why NEC wants to remind you of something before you buy any TV, stereo or otherwise. The TV itself.

NEC Stereo Receiver/Monitors incorporate decades of the Company's industrial and professional video experience. In fact, the 20" CT-2020A and 25" CT-2505A offer all the features that make NEC a favorite among serious video users.

Besides receiving stereo or Second Audio Program (SAP) Multiplex Broadcasts directly and playing them back through built-in stereo amps and speakers, the CT-2020A/2505A's feature CATV-ready tuners with full function wireless remote control and Skip Memory; and a complete assortment of antenna, video and audio connection facilities. These stereo NEC Receiver/Monitors also incorporate comb filters, auto flesh control, black stripe matrix picture tubes and smoked glass anti-glare shields for the utmost in picture sharpness, contrast and resolution.

No matter how good the idea of stereo TV may sound, combining stereo with an NEC Receiver/Monitor sounds even better.



NEC Home Electronics (U.S.A.) Inc. 1401 Estes Avenue, Elk Grove Village, Illinois 60007, (312) 228-5900



Most car audio systems can deliver the sound of performance. Enough sound to exceed the human ear's threshold of pain.

But if your taste in music runs the gamut, from the smash of Heavy Metal to the intricate passages of Mozart, volume alone isn't enough. Without sonic excellence, loud sound is just so much musical mush.

PLAY IT GOOD AND LOUD. Now you can have it both ways with Yamaha car audio. The system that takes some of the world's finest home component performance and puts it on the road.

Yamaha cassette-receivers utilize independent dual microprocessors with over 6K of memory. One precisely controls tape handling. The second fine-tunes signals in difficult reception areas.

Yamaha fully digital power amps provide superior, virtually distortion-free amplification.

And easily cope with such road hazards as voltage, impedance and temperature variations.

Yamaha car speaker systems use titanium carbide in the tweeters and carbon fiber in the woofers. Resulting in unrivaled accuracy.

And unequaled performance. ALL TOGETHER, A GREAT PERFORMANCE.

Just as important, Yamaha car audio is a total system with no weak links. Because every Yamaha component is designed to complement and enhance the performance of the system as a whole.

The result is sound that's clean and natural, reproduced with full clarity and resonance. Sound that makes the music.

No matter how loud it's played.



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

CURRENTS

Edited by Peter Dobbin



The New Sound in Laserdiscs: Is It Better than Before?

In March, we reviewed Pioneer's CLD-900, the world's first combination Laserdisc/ Compact Disc player. Our tests of its ability to reproduce the two media were complete, but a lack of software prevented us from commenting fully on its ability to play digitally encoded rideodisc soundtracks. E. Brad Meyer, a frequent contributor to these pages, discovered a source of these still uncommon discs and volunteered to complete our report by comparing the sound quality of digital and analog Laserdisc soundtracks.-Ed.

Laserdiscs with digital sound seem like an audiophile's dream come true. If they live up to their promise, they should outperform Hi-Fi videotapes and the CX-encoded soundtracks currently used on optical videodiscs. In fact, for more than a year the engineers at Pioneer's videodisc pressing plant in California have been transferring all incoming soundtracks to a digital mastering recorder in anticipation of this development.

However, as we have seen with the Compact Disc, what you get out of any medium is limited by what is put into it. Many a bad-sounding master tape has resulted in an equally bad-sounding CD, and movie soundtracks go through more production steps and a great deal more processing than most audio-only releases. Comparisons between the quality of digital and analog Laserdisc soundtracks are possible because digitally encoded discs, which are only now starting to appear, also contain an analog soundtrack, making them compatible with analog-only players. The player I used to compare both soundtrack formats was a prototype of the new NAD 5900, which is functionally identical to the Pioneer CLD-900. Instant Replay of Waltham, Massachusetts, the country's largest independent Laserdisc importer, loaned me several digitally encoded videodiscs for my tests.

Despite early claims about the excellence of the medium's FM-encoded analog soundtracks, Laserdisc sound has proved mostly disappointing. Even CX-encoded discs can have audibly limited bandwidth and unacceptably high noise levels. Partly because Pioneer's F-2 video test disc has only an incomplete set of audio signals, it has been hard to tell whether the players or the discs are to blame. The new combination Laserdisc/CD player, however, is ideally equipped to reveal the answer: It has two sets of audio outputs, one carrying only analog sound, the other switchable between analog and digital.

I connected these two pairs

Denon Goes to Dresden for Its First Opera CDs.

Dresden's rebuilt Semper Opera House (top and center) opened February 13, forty years to the night after Allied air raids destroyed the city in the waning months of World War II. By the time the curtain went up-on a gala performance of Carl Maria von Weber's *Der Freischutz*—engineers of V.E.B. Deutsche Schallplatten (the state recording agency of the German Democratic Republic) and Denon (Japanese Columbia) had nearly finished taping the Weber work and Richard Strauss's Der Rosenkavalier (bottom) for release this month as Denon's first major opera offerings on Compact Disc.

Back in 1972, Denon, an audio equipment manufacturer, became the first firm to make digital recordings on a commercial basis. To date, the company has issued a sizable number of CDs devoted to solo instrumental and chamber music, and it has recently begun to concentrate on broadening its catalog of symphonic releases. Denon's strategy has been to record in Eastern Europe in coproduction with such companies as V.E.B. Deutsche Schallplatten



and Supraphon, leaving distribution in Eastern Europe to the coproducers while handling most of the distribution in Japan, Western Europe, and the United States.



NOW WHICH WOULD YOU RATHER WATCH?

Let's face it. Where video is concerned, bigger is unequivocally better. And if you've never seen Novabeam[®] television, you're in for quite an exciting experience. Because no other television, conventional or projection, provides a bigger picture.

Our 5' picture is impressive. Our $6\frac{1}{2}$ ' Novabeam television picture is more than 22 square feet big. Our 10' picture is over twice the size of that. And now there's a 15' Novabeam version available. But size isn't all there is to Novabeam television. The picture is crisp and clear. It's what *Video Review* magazine called, "the most impressive projection television we have ever seen."

There simply isn't enough room here to detail Henry Kloss' developments over 15 years that resulted in Novabeam TV, the stateof-the-art in projection television. You've really got to see it to appreciate it.

For complete information

(including specific installation details on over 20 Novabeam variations) and the name of your nearest Novabeam dealer, call 1-800-343-1155 (in Massachusetts call collect 1-617-577-1000). Or write Kloss Video Corporation, 640 Memorial Drive, Cambridge, MA 02139.

Kloss Video Corporation





NAD 5900 Laserdisc/CD Player

of jacks to the inputs of a double-blind comparator, a fiendishly clever device designed to reveal whether any two audio signals are distinguishable by ear. The comparator has three buttons, marked A, B, and X. The first two select the two input signals; X selects either A or B, but only the box's on-board computer knows which. It was my job to decide the identity of X after listening to it and comparing it as many times as necessary to A and B. After deciding and writing down the answer, I determined whether I was correct by switching the comparator to its answer mode.

Of course, you always have a 50-50 chance of guessing the right answer even if you don't listen at all. To prove the existence of an audible difference, you must do many trials, giving correct answers most or all of the time. The most commonly used criterion in such tests is that of "95-percent confidence," meaning that the chances are less than 5 percent (one in twenty) that your score was achieved by random guessing. This turns out to require at least five trials. If the number of trials is five to seven, the answers must all be correct; for eight to ten, only one error is allowed; for eleven or twelve attempts, you can make two errors; and for thirteen to fifteen trials, a maximum of three errors is permissible. The comparator I used (made by the ABX Company of Troy, Michigan) actually generates 100 randomly assigned values for X at one time. By switching among the separate trial numbers, you can make many guesses and then calculate your score when you complete the experiment.

At the time of these tests, no featurefilm Laserdiscs with digital sound were available, so I began with a program entitled *Midnight Session*, featuring the Milt Jackson/Ray Brown Quartet. Their music resembles that of the old Modern Jazz Quartet, with which the two principals used to play. At the start of the second band on the disc is a section in which the vibraphone plays very softly, and I set the player to repeat the first

13

This Toshiba has more features than most home sound systems.

OSHIBA





PURE GENIUS



The Carver Magnetic Field Power Amplifier M-400t

201 watts minimum continuous power per channel into 8 ohms, 20 Hz-20 kHz, with no more than 0.5% T.H.D.

Within this 7-inch, 9-pound cube is, quite possibly, the most powerful story in the history of high fidelity amplifier design.

The genius of a music loving physicist was turned loose and the result is an elegant technology that substantially reduces the massive bulk, weight, and cost of high power audio amplifiers. Conventional amplifier power supplies are very costly and inefficient because they produce a constant high voltage level at all times irrespective of the demands of the everchanging audio signal—even when there's no audio in the circuit at all!

In sharp contrast the M-400t's power supply is signal responsive and highly efficient. It produces *exactly and only* the power the amplifier section needs from moment to moment to carry the signal with complete accuracy and fidelity.

Once the crudeness of conventional power supplies was overcome, a wholly uncompromised signal path was designed: Fully complementary topology from input to output; the latest, fastest, highest current transistors; virtually pure class A biasing of the basic linear amplifier; direct coupling; linear metalized film capacitors; precision laser trimmed resistors; vapordeposited 24 Karat gold connectors; and finally, an output inductor whose corner frequency is almost a quarter of a megahertz.

Audition the Carver M-400t and hear the difference: transparency, openness, detail. Without the clipping, distortion, and constraint of lesser amplifiers. With Carver the *pure* sound of music can be, very affordably, yours.



POWERFUL

ACCURATE

CARVER CORPORATION 19210 33rd Avenue West, P.O. Box 1237, Lynnwood, WA 98036

Distributed in Canada by Evolution Audio, Ltd.

couple of minutes of that selection. I conducted my listening tests using speakers playing at a loud, but still realistic level.

The result was conclusive: The difference in background noise between the analog and digital soundtracks was immediately apparent. I was able to log 45 consecutive correct answers within about five minutes without even having to compare sources by pushing the A or B buttons. Listening to X alone sufficed to identify the digital or analog nature of the soundtrack. The same test was almost as easy in the very quiet opening section of a King Crimson concert videodisc, once again at a listening level that, while high, was bearable even in the loudest sections.

In quiet passages, PCM video soundtracks have a clearly audible and meaningful advantage. Pioneer has made a demonstration disc for the new system that includes recordings of eerily quiet Japanese railroad trains, as well as two live rock cuts, a recording of a thunderstorm, and a brief excerpt from a performance of Vivaldi's Four Seasons. Using the sound of the rain as a source of broad-band noise, I measured the difference in frequency response between the analog and digital tracks with a one-third-octave spectrum analyzer. Compared to the analog response curves, the digital tracks were up by about 1 dB at 25 and 31.5 Hz, and also at 12 kHz. In the 16-kHz band, the digital was up slightly more than 2 dB, and in the 20-kHz band (i.e., above about 18 kHz) by 4 dB. (The last band lies entirely beyond the upper limit of my hearing, but this will not be true of HIGH FIDELITY's younger readers, provided they have worn earplugs at rock concerts.)

In a listening test using the very steady and repeatable sound of the rain, I made ten out of ten correct identifications. Then, expecting the digital tracks to be a bit brightersounding, I listened to the *Four Seasons* excerpt. A hurried set of ten trials left me feeling confident until I pressed the answer button and discovered that I had five of them wrong, exactly the score you would expect from random guessing. I did a second set of ten trials, taking a long time for each and switching back and forth slowly. This time my score was eight out of ten, for a 94-percent confidence level that just misses the experiment criterion.

I then went back to a louder section of the King Crimson disc and tried to identify what I thought was a slightly brighter vocal



sound in the digital tracks. Again, scores of six and seven out of ten proved me unreliable. Finally, I tried a Windham Hill videodisc called *Western Light*, which contains a lot of solo guitar and piano music. Here the analog and digital tracks were identifiable. Using headphones, I got a score of thirteen out of fifteen during very fast trials—but the audible difference arose from a mismatch in level of between 1 and 2 dB. (The analog and digital tracks on all the other discs were matched within better than 0.5 dB.)

What does all of this prove? First, if you play video music through a very good system, there will be discs on which you can definitely hear an improvement with digital video sound. Second, for much material the difference will be either very slight or nonexistent. A third, and unexpected, outcome of my tests is that ordinary Laserdisc soundtracks can be much better than many of us previously thought. Ironically, though these early digitally encoded discs presumably were designed to show off the new technology, the "old-fashioned" analog sound was also markedly better than anything I had heard on videodisc before.

Finally, Laserdisc fans take note: All these digital videodiscs are in the CLV format, which has none of the immaculate video special effects (still-frame, variable slow motion, and fast play) that make Laservision such fun. Apparently, the more versatile CAV format is presently incompatible with digital sound, a situation Pioneer is trying to rectify. *E. Brad Meyer*



Direct from SAE

The latest addition to SAE's 02 Series of Direct-Line audio components is the C-102 cassette deck. Styled to complement the rest of the line, this \$429 model has a logic-driven horizontal tape-transport mechanism, which gives the recorder a slim, low-profile silhouette. A two-head design, the Dolby C deck is equipped with an automatic tape-type selector, a tape counter that switches to show elapsed or remaining time, and a programmable music-search function. For information, write Scientific Audio Electronics, 1734 Gage Rd., Montebello, Calif. 90640.

More for Less

Considering the meteoric fall in the price of Compact Disc players since they were introduced little more than two years ago, it seems unreasonable to expect a further dip this year. Indeed, players like Yamaha's new CD-X2 tell a remarkable story about the economies of scale that are helping companies pack more features into their models while reducing price. In comparison to the CD-X1, which at \$500 was considered a remarkable value a year ago, the X2 manages to add random-access programming, indexing, and a headphone amp, yet it costs \$100 less than its predecessor. A Yamaha representative says his company could afford to strengthen the price/performance ratio by







Tape oxides can build up on your VCR tape heads. Result? Fuzzy picture, mushy sound. The answer? Discwasher Video Head Cleaner. It's a revolutionary, patent-pending, non-abrasive dry cleaning system. The cleaning is thorough, removing impurities from both video and audio heads along the entire path—safely. With no harmful chemical solvents. Use



relying on proprietary LSI (large-scale integrated circuit) technology and by devoting an entire new plant to player manufacturing. Will CD decks ever fall below \$200, into the domain occupied by mass-market analog turntables? Industry pundits would probably say yes, but no one is saying when.

A Tougher CD

That Compact Discs are a lot more resistant to wear and tear than LPs is evident the first time you drop a CD on a concrete floor, wipe it off, and then pop it into a player. Chances are that the disc will play through without any evidence of the fall. But CDs are not invulnerable to especially abusive treatment, and severe scratches will show up during playback with an occasional muting or tick. Mobile Fidelity, working in conjunction with the engineers at Sanyo's CD pressing facility in Japan, claims to have come up with a treatment applied during disc manufacture that further toughens up the already hardy medium. The strengthener is an additional layer of thin, hard acrylic resin applied to both sides of the CD. This High Reliability coating, as Mobile Fidelity calls it, also improves a CD's resistance to warpage. (The additional plastic coating over the label area makes the two sides of the disc closer in thickness, thereby equalizing the coefficient of expansion from side to side.) The first discs to use the High Reliability coating are in Mobile Fidelity's *Woodstock* set.

Mission Accomplished?

Mission Electronics has carved out a place for itself in the American market with a series of innovative, reasonably priced audio components. In fact, at the Summer Consumer Electronics Show last year, the president of the English company told us that he was working closely with engineers at Philips to develop a Compact Disc player using dual 16-bit digital-to-analog (D/A) converters running at a four-to-one (176.4-kHz) oversampling rate. Such an approach, he contended, would propel the state of the art to unexplored terrain. A call we made recently to Mission's North American headquarters in Canada revealed that the company is still hard at work with Philips on the project and that such a machine may well be available by the end of the year.

Meanwhile, Mission's two currently available CD players, the DAD-7000 (\$649) and the DAD-7000R with remote control (\$749), use the standard Philips 14-bit chip set, which achieves 16-bit resolution via fourto-one oversampling. What sets these players apart from the competition, says the company, is a proprietary linear-phase analog output stage. On-board memory in the 7000 and 7000R will accept as many as 20 bands for programmed play. For more information, write to Mission Electronics Corporation of America, 5985 Atlantic Dr., Unit 6, Mississauga, Ontario, Canada LAW 1S4.



Discwasher regularly to maintain picture and sound clarity and to protect your VCR from costly repairs. You can trust Discwasher, leader in the technology of audio and video care.

The sound and sight come through clean and clear. discwasher

1407 North Providence Road, P.O. Box 6021, Columbia, MO 65205

©1985 Discwasher A DIVISION OF INTERNATIONAL JENSEN INC.

TANDBERG

...is the choice of those who consider music to be an important part of their life. From digital-ready amplifiers and world's finest FM tuner, to the most sophisticated cassette & reel recorders, only Tandberg offers a complete family of the most respected music reproduction equipment. European-made...acclaimed world-wide. For a color poster (without advertising copy) and the name of your nearest dealer, send \$2 for postage & handling to: Tandberg of America, 1 Labriola Ct., Armonk, NY 10504,

>

C

CROSSTALK

by Robert Long



DESTRUCTIVE ATTRACTION?

I bought my Sansui AU-717 integrated amp and matching TU-717 tuner some years ago. Would it make any difference if I switched to a Carver TX-11 tuner? Would I have to change my amp? Since Carver's is a "magnetic field" amplifier, would it have any effect on my tapes or recorder?

Anthony Pasquale, Jr. Brooklyn, N.Y.

The Carver tuner should bring in weak stereo stations with less noise. You need not change amplifiers, nor need you worry unduly about your tapes or recorder. Of coarse, you should never put a recorded tape on top of any component that contains a power transformer (which almost all do), because its magnetic field could damage the recording. But the Carver amps are no more dangerous in this regard than other amplifiers.

CLASSIC

Will my Fisher 500C receiver have enough headroom if 1 buy a Compact Disc player? 1 saw a used 500C in a stereo store for \$450 in 1977, and some people have expressed interest in buying mine. What is the going price on 500Cs?

David Larson Tarkio, Mo.

Whatever the traffic will bear. (If you sell it to a dealer, remember that he will have to double the price he gives you, approximately, if he is to cover his overhead.) The 500C came at the end of the tube era and was one of Fisher's most popular models. Power output was rated at "75 watts music power (IHF)," which probably would translate to around 15 dBW (32 watts) per channel today, although perhaps with narrower bandwidth than we're used to.

Whether its headroom will be adequate for CDs depends, more than anything else, on how loud you play them. Let's say you're averaging about 1 dBW (11/4 watts) on loud passages, which is fairly typical of home playback levels. If your conventional recordings have some peak compression, they may require only 6 dB of headroom for clean transientsand therefore use only 7 dBW (5 watts) at those instants. If you keep the same apparent loudness with CDs requiring 12 dB of headroom (that is, with a peak-to-average ratio of 12 dB), the transients will need 13 dBW (20 watts) and still will be within the amplifier's capability. But if you play conventional recordings as loud as the 500C will allow—or feel the urge to turn the volume higher for Compact Discs than you would for conventional recordings-the receiver will quickly run out of steam on CDs.

WILL THE REAL

Does the TV-audio tuner in the Technics SA-550 audio-video receiver produce true stereo or just matrixed stereo sound? And does it need any other TV component to operate?

John Burgess Fair Lawn, N.J. It's a self-contained mono tuner from which the receiver can derive simulated (I think that's what you mean by "matrixed") stereo. You can get true stereo from it, however, by adding an outboard multiplex adapter that Technics has designed for this series of receivers.

NEVER SAY DIE

In your December 1984 issue, Michael Riggs states that "the open-reel recorder is close to death." On behalf of those of us who still lovingly pamper our open-reel decks, I disagree.

1 own Tandberg 9241XD and 9141X decks and nearly 200 reels involving more than 1,000 hours of recordings and many years of assembling, recording, editing, and re-editing. The decks are 10 and 12 years old. Labor is expensive, parts often are hard to find and slow to arrive, and tape hiss is becoming a major problem. Should I consider transferring all of this on a top-grade cassette deck, or would a VHS Hi-Fi deck, to be used for both audio and video, he better?

Howard S. Friedman Baltimore, Md.

Your reaction to Michael's statement is understandable, though the rest of your letter certainly bears him out. I suspect you might be happier with the Hi-Fi video deck, partly because it will provide longer uninterrupted playback than cassettes and therefore match this open-reel virtue. If you go for the audio cassette, you'll certainly want Dolby C or DBX noise reduction—or the heretical but effective combination of Dolby B with DBX, which can be achieved only with an outboard DBX adapter. But don't chuck the open reels once you've transferred them. Someday you'll find you can do it better for any of a host of reasons and want to go back to the originals.

FM DAYS NUMBERED?

A great variety of musical programming is available on FM in my area, but the sound quality often is poor. What is the possibility that broadcasts soon will be transmitted digitally to prevent this?

Mark Smith

New York, N.Y.

Nil. The RF (radio frequency) bandwidth requirements are too great, not to mention the problem of incompatibility with current tuners. It may happen someday, but not soon.

FADED OUT?

My old Dual C-939 cassette deck enables me to fade out material that is already on the tape during editing. Do you know of any current decks that have this feature?

A. Abrams

Roslyn Heights, N.Y.

I've never seen it in any other brand. It can be so handy that I assume only a patent controlled by Dual keeps other manufacturers from copying the feature.

We regret that the volume of reader mail is too great for us to answer all questions individually.

BASICALLY SPEAKING

Michael Riggs

bu



More On What You Can Hear

Last month, I started attacking the broad question of what we can and can't hear. Answers are not always easy to come by, depending as they do on the not necessarily reliable "earwitness" reports of not necessarily disinterested listeners. Nonetheless, I think we can arrive at definite conclusions, or at least educated guesses, on many of the issues of the day.

The criteria I set for acceptance of something as an audible phenomenon were that it should be plausible given what we know about how the world works (particularly with respect to the human hearing system) and that it should be supported by evidence from properly controlled blind listening tests. If a claim surmounts both hurdles, it almost certainly is true. If it fails both, it can be dismissed as false. And if it passes one and fails the other, the jury is still out (though in this case, the listening evidence should have greater weight). I've already discussed two general topics in this light: distortion and frequency response. This time out, I'll cover a few more and then move on to some specific matters.

Phase Shift. For the whole story on this subject, see "Basically Speaking" in our November 1984 issue. In short, however, both our theoretical understanding of how we hear and empirical research indicate that it should be very hard for us to detect phase shift in the amounts commonly produced by audio equipment (including Compact Disc players and digital tape recorders). Despite the wide variety of sonic ills sometimes attributed to it, phase shift is an almost toothless beast.

Wow and Flutter. These are

slow and fast (respectively) variations in the transport speed of a tape deck or turntable. When severe enough, they cause a clearly and unpleasantly audible sourness or coarseness to the sound. With today's components, the situation almost never gets that bad, but there is some reason to believe that unobvious amounts of wow and flutter may cause a barely perceptible loss of solidity or stability in the sound of some instruments (piano especially) and that it may even impart a smidgen of false warmth to strings, for example. Also, records with off-center spindle holes (which are all too common) can produce severe wow, and personal portables and other noncomponent tape decks often have quite audible flutter.

Tubes vs. Transistors. This hardy perennial has fed audiophile debates for many years. Some hold that components using vacuum tubes simply sound more natural than those using transistors, or that transistors are better in the bass and perhaps the extreme treble, but that tubes excel in the midrange. There's even a good bit of talk about tubes producing a more three-dimensional sound. None of this appears to have much, if any, foundation.

Let's begin by considering the question of plausibility. Does it make sense that tubes should sound better than transistors, or even different? The function of most audio electronics is simply to strengthen (amplify) the signals passing through them, sometimes with a little carefully tailored alteration of frequency response (as in the RIAA equalization network of a phono preamp). That is to say, what comes out should be what goes in, only a little bigger; other changes are either noise or some sort of distortion.

By all normal measures. however, transistor circuits usually exhibit less noise and distortion than do equivalent tube designs. It sometimes is argued that traditional distortion measurements fail to reveal the errors that occur when a circuit must handle signals as complex as those required to reproduce music. But electronics really don't know anything about complexity: That's purely a human notion. And there are ways of testing for distortion using just about any sort of signal.

One that Quad's Peter Walker is fond of is a simple difference-detection scheme. You run a signal into an amplifier and pad down the output until it matches the level of the input. Then you invert it and mix it with a tap off the input. If the amplifier is perfect, the two signals will be identical except for their opposite polarities and will completely cancel, leaving no output. Naturally, the amp will always contribute some noise and distortion, which may be measurable, but if it is well designed, you won't hear anything, which is what counts. Walker has delighted in doing this with ten of his power amplifiers strung in series, the output from one padded down to serve as the input to the next.

Another common argument is that the distortions created by transistor circuits-even if lower in quantity than those generated by tube circuits-are more annoying in quality. The most often cited basis for this theory is the tendency of transistors to produce high, odd-order harmonic distortion products, as opposed to the more innocuous low, even-order components characteristic of tube circuits. But even this falls down when you look at good modern transistor designs, which typically produce only second- and thirdharmonic distortion productsand in smaller amounts than most tube circuits.

If audible differences really exist, they probably have nothing to do with the amplifying devices themselves. For example, almost all tube power amps have output transformers, which may cause slight rolloffs at the top and bottom of the audible range. And because they typically have rather low damping factors, they may exhibit small response bumps at the bass resonance frequencies of whatever speakers they are connected to, yielding the warmth that sometimes is attributed to tube amplifiers. In practice, however, people are almost never able to tell tube from transistor electronics in properly conducted listening tests. .

The International Preview Society invites you to accept a No-Obligation Classical Music Membership and your choice of any ...

ecording for or

EVORAK, SYMPHONY NO. 9 IN E MINOR (FROM THE NEW WORLO) Chicago Symphony Orchestra/Solti "The playing is superlatively good." Gramophone London 115168

NOZART, PIANO CONCERTOS NO. 15 IN B FLAT; NO. 21 IN C (ELVIRA MAOI-CAN) • Alfred Brendel, piano. Academy of St. Martin-in-the-Fields/Marriner. Philips 115421

AISLE SEAT (GREAT FILM MUSIC) The Boston Pops/Williams. E.T., Char-iets Of Fire, Raiders Of The Lost Ark. The Wizard Of Oz, Gone With The Wind, more. Philips 115082

MOZART, SYMPHONIES NO. 40 IN G MINOR, K. 550; NO. 41 IN C, K. 551 (JUPITER) • James Levine leads the Chicago Symphony Orchestra in a superb recording. RCA 104810

VIVALOI, THE FOUR SEASONS • Simon Standage, violin. The English Concert: Pinnock. "....the performance as a whole is breathtaking."—<u>Stereo</u> <u>Review</u> Archiv **115356**

SUNDAY IN THE PARK WITH GEORGE Original cast album. "It's the most exciting thing to happen since stereo met My Fair Lady. *—<u>High Fidelity</u> RCA 154014

MUSSORGSKY-RAVEL, PICTURES AT AN EXHIBITION; RAVEL, LE TOMBEAU ings."-Ovation RCA 114344

PAVAROTTI: MAMMA • Title song, Vieni sul mar, Non ti scordar di me, Musica proibita, Vivere, 11 more. Henry Mancini, arranger & conductor. London 115310

his remarkable \$1 offer is being made to introduce you to an outstanding classical music membership-with never any obligation to buy.

The International Preview Society features such artists as James Galway Neville Marriner....Vladimir Ashkenazy....Vladimir Horowitz....Georg Solti.... Luciano Pavarotti....James Levine....Placido Domingo....Leonard Bernstein– and hundreds of other world-renowned classical performers.

No obligation to buy-ever!

You'll find hundreds of outstanding albums in each issue of Preview, the Society's bulletin, which will be sent to you every 4 weeks. You will also receive 2 special sale issues, giving you 15 opportunities a year to shop for fine music. Each issue highlights a Main Selection and scores of alternates. But there is no obligation to accept any offering at anytime

You choose only the music you want! If you'd like to accept the Main Selection, you need not do a thing, it will be sent automatically. If you'd prefer an alternate selection or none at all, just mail back the Notification Card by the specified date. You'll always have at least 10 days to decide.

Substantial savings with our half-price bonus plan.

For every regular purchase you do make, you may choose a Bonus album for only half of the members' club price! That can amount to savings of more than 55%! Shipping and handling, plus any applicable sales tax, are added to all shipments.

Three records or cassettes for just \$1!

Begin your membership now by choosing any 3 digital albums shown here for Just \$1 plus shipping and handling. That's a savings of as much as \$31.94 off the suggested list prices! Send no money now. We want you to judge for yourself before you decide to buy. If not delighted, return your 3 albums at the end of 10 days without obligation.

ATTENTION COMPACT DISC BUYERS!

Now there's a Club just for you! The Compact Disc Club offers you hundreds of Compact Discs each year, featuring a full range of the latest CD albums from classical to popular/soft rock—with never an obligation to buy. And a Half-Price Bonus Plan gives you even greater savings on Compact Discs.

Take a Compact Disc of your choice now for only \$1!

Simply fill out the coupon. We'll send your Compact Disc and bill you later for only \$1 plus shipping & handling. All other Club details are similar to those of The International Preview Society noted above. Full details will follow, plus the same 10-day return privilege as noted above if not fully satisfied.

HOROWITZ AT THE MET • Scarlatti, 6 Sonatas; Chopin, Ballade No. 4 & Waltz in A Flat, Op. 69, No. 1; Liszt, Ballade No. 2; Rachmaninoff, Prelude in G Minor. RCA 151876

SHOSTAKOVICH, SYMPHONY NO. 5 STUD JAKUVICH, STMPHONY NO. E Concertgebouw Orchestra, Amster-dam/Haitink.*...quite magnificent.. altogether outstanding.*—<u>Gramo-</u> <u>phone</u> London 115401

ELGAR, VIOLIN CONCERTO • Itzhak Perlman, violin. Chicago Symphony Orchestra/Barenboim. A grammy win-ner! •...dazzling. •—Gramophone DG 105499

ORFF, CARMINA BURANA - Hendricks, Aler, Hagegård. London Symphony Orchestra & Chorus/Mata, A masterful recording of this modern favorite. RCA 144503

OFFENBACH, GAITE PARISIENNE

Address

City

Pittsburgh Symphony Orchestra/ Previn. *...a revelation...a brilliantly fresh interpretation."-Gramophone Philips 115261

HIGH, BRIGHT, LIGHT & CLEAR • The Canadian Brass play Baroque music: Bach, Air On The G-String; Mouret, Fanfare (Masterpiece Theatre Theme). more. RCA 144529

plus shipping and handling

WAGNER, ORCHESTRAL HIGHLIGHTS FROM THE RING • Vienna Philharmonic/Solti. Ride Of The Valkyries. Magic Fire Music, Forest Murmurs, Wotan's Farewell, more London 115426

BACH, ORGAN WORKS • Toccata and Fugue in D Minor; Prelude and Fugue in E Flat; Prelude, Largo and Fugue in C. Daniel Chorzempa, organ. Philips 115193

JAMES GALWAY & HENRY MANCINI: IN THE PINK • The Pink Panther, Breakfast At Tiffany's, Pennywhistle Jig, Two For The Road, Cameo For Flute, more. RCA 151758



Limited to new members, continental USA only; one membership per household. We reserve the right to request additional information. Local taxes, if any, will be added



Audio-video receivers and control centers can simplify the creation of a home-entertainment theater.

by Peter W. Mitchell

The process of integrating audio and video equipment to form a home-entertainment theater raises questions for consumers and manufacturers alike. What new signal-selecting and signalprocessing functions are needed? To which segment of the system should each function be assigned? And does it make sense to combine audio and video functions in a single product called an audio-video receiver?

For many people, the answer to the last question is yes. If your viewing area will be located away from your main system, an audio-video receiver can supply amplification, FM-simulcast reception, switching for two or more video sources, and some degree of video and audio signal processing. Unfortunately, there is no standard for manufacturers to follow when designing this new breed of component, and today's models differ greatly in their flexibility and functions. It falls to you, therefore, to choose an audiovideo receiver capable of accommodating your present needs and any future ones you may envision.

If you plan to create an integrated system around your current audio setup, take note: Though you may not need the additional FM section or amplification of a complete receiver, you will have to choose from an even more diverse crowd of audio-video control centers, and most of the discussion that follows applies equally to you.

Line-level input switching. The first obstacle that everyone encounters when adding video to an audio system is a shortage of line-level audio inputs. Your stereo amplifier or receiver probably has only one AUX input---which may already be occupied by a Compact Disc player, leaving no place to plug in the audio cables from a VCR, videodisc player, or stereo TV decoder.

One simple solution is to add an audio switch box or patch bay for selecting one of several audio signals and routing it to the AUX input. This works, but it is not convenient: You still have to switch video sources somehow and repatch cables whenever you want to dub between VCRs or from videodisc to tape. Audio-video receivers and control centers remedy this with handy one-button switching and dubbing of both video and stereo audio.

How many line-level audiovideo sources do you need to handle? In my case, it's four: a videodisc player, two VCRs, and a computer. (Add another to your list if you are using a TV tuner separate from the video monitor.) And I may need vet another audio input when stereo TV comes to town. If the local cable franchise is unable or unwilling to supply the stereo signal, I will have to add an audioonly TV tuner containing a BTSC stereo decoder to bring in the sound of stereo broadcasts via my old roof antenna.

While planning for the future, you might also want to reserve a spare video input for a surveillance camera in the front hall or in a baby's bedroom. Of course, if the camera is plugged directly into a VCR, its signal can be monitored via the VCR's electronics whenever the deck isn't being used to record or play a tape.

Since line-level video connections use the same RCA phono jacks that audio products do, can an audio switcher be used for video? Usually not. When I've tried it, the result has been a degraded or unviewable picture. Nor can most audio patch cords be used to carry video signals. (Cables designed for the wide bandwidth of video signals usually have plugs that are color-coded yellow to distinguish them from the red, white, green, or black used for audio.) Dubbing. Some audio-video control centers make no provision for copying videotapes; others have one-way dubbing (from disc or VCR 1 to VCR 2). A few offer two-way dubbing, or independent recording and viewing selectors for playing one program while taping another. Do you desire still more flexibility, including the ability to enhance audio and video signals while they are being copied? If so, should the processing circuitry be built-in (which saves cost), or would you rather select external processors that are individually optimized for their tasks? You can use an outboard signal rocessor by unplugging and reconnecting cables, but only a few audio-video control centers are capable of switching an external processor into the dubbing (or viewing) signal path.

RF input switching. If you continue to use a TV set with antenna-only inputs (rather than a video monitor or monitor/receiver with direct inputs), coaxial cables and RF connections are likely to be the most convenient way of hooking together a video system. If all of your signals are strong and locally generated (i.e., from a cable converter and from the RF modulators in VCRs and disc players), you can freely use RF switchers, splitters, and coaxial cables of any convenient length, usually with little or no loss in picture quality. An audio-video control center with both RF and line-level switching could span both present and future needs.

RF modulation. An alternative approach is to select and process signals at line level and then use an RF modulator to put the chosen signal onto

(Continued on page 24)

Peter W. Mitchell, a frequent contributor to these pages, writes extensively on audio and video technologies.



Audio-video control centers run the gamut in features and functions, but few match Denon's AVC-500 (\$375) in flexibility. In fact, this illustration only hints at its creative possibilities. As a switcher, it has three sets of video and four sets of stereo-audio input and output jacks, plus dubbing controls for copying from deck to deck. The unit's video enhancer circuit and five-band graphic equalizer (which operates only in the presence of an audio signal, thus preventing accentuated background noise) can be switched into the recording feed to improve the quality of video dubs. A built-in mike preamp with level control enables you to add volce-overs to your tapes. And to complete the package, an ambience recovery circuit and a 22-watt-perchannel amplifier let you add a set of back speakers to your system for surround-sound effects. Denon claims that its ambience system can also create psuedo-stereo effects from mono sources.





(Continued from page 22)

Channel 3 or 4. Even if your primary video system has direct inputs, an RF modulator can be a handy thing to have because it will enable you to route the selected and processed audio-video signal from any source (disc, tape, cable, etc.) to other TV sets elsewhere in the house via a single 75-ohm coax cable.

Distribution amplifier. A distribution amplifier is an amplified splitter. It may be useful if you need to split a weak antenna signal to feed the tuners in several VCRs and TV sets. But if you only want to distribute the VHF output from a cable converter or a VCR, a \$5 passive 75-ohm splitter will do nicely.

Tuning. A stereo receiver is a tuner/amplifier. So, by analogy, should an audio-video receiver contain TV-channel tuning? That would be ideal if you were using a simple video monitor to display the picture. An audiovideo receiver with built-in TV tuning and BTSC stereo decoding would also be appropriate for someone wanting to upgrade to stereo without replacing the present TV set. (If you have already spent \$3,000 on a big-screen projection model, you won't want to junk it just to get stereo.) But if you do intend to invest in a new stereo TV set or monitor/receiver in the foreseeable future, tuning and stereo decoding in an audio-video receiver would be redundant.

Some component TV tuners provide control-center functions in addition to TV tuning. For instance, the remote-controlled, cable-ready Proton 600T tuner includes connections and switching for videodisc and tape, plus a full set of audio controls (volume, balance, bass, treble, and a sharp high-cut noise filter). Such a combination TV tuner and control preamp may provide all the flexibility you require. Connect its output to the AUX input of a stereo system or directly to a power amp and speakers. The limitation of this system is that it handles only video-related sound sources; there's no provision for FM simulcasts or pure-audio sources. What about stereo? Most

cable systems cannot pass stereo TV directly to subscribers in BTSC-encoded form. If your cable system responds to this obstacle by re-encoding BTSC broadcasts as FM simulcasts, then you needn't pay for a stereo decoder in your audiovideo receiver. But if you're setting up a video theater separate from your existing audio system, you'll need the FM tuner section of an audio-video receiver for these simulcasts.

Pseudo-stereo. When stereo LPs arrived a quarter-century ago, record companies rushed to reprocess many monophonic recordings into pseudo-stereo to increase their appeal. Today, with the coming of stereo TV, many audio-video products contain stereo-synthesis circuits intended to add an impression of breadth to the sound of those TV broadcasts that will continue to be produced in mono.

Some pseudo-stereo circuits produce a more plausible impression of spaciousness than others, and you'll have to do your own listening tests to decide whether the artificially broadened sound is really better than mono. There is no way to get true stereo from a mono signal.

Surround sound, Surroundsound circuits reproduce Dolby Stereo by feeding a dematrixed signal, extracted from the encoded soundtrack, to a pair of back speakers. [See "A New Dimension for Video Sound," November 1983.] Circuits that add 20 milliseconds or more of delay to the rear channel give an extra degree of flexibility, since they can produce a realistic feeling of ambience even with the mono signals that will remain commonplace in TV. Surroundsound decoders are, by and (Continued on page 26)

In "The Link" (November 1984), Peter W. Mitchell outlined the basic strategies involved in getting wide-range TV sound. For a copy of that article, send a check for \$3 to High FideLity, Dept. RB, 825 Seventh Ave., New York, N.Y. 10019.

The Sight and Sound of QUALITY



When you're this good, you put your warranties where your mouth is. That's why, overail, Hitachi probably has the finest limited warranty protection ever offered in home electronics products. Products that perform so well, you may never get a chance to see how good our warranties really are.







NEW COMPACT DIGITAL AUDIO DISC PLAYER

Hitachi leads the way in compact disc performance with Laser Life, a two-year limited parts warranty, twice as long as our major competition. Introducing the DA-600. Three spot laser pick-up servo system; wireless remote control that reads, selects, repeats, skips and scans; memory programming for up to 15 selections; slim-line, front load design.



With Adjustomatic, a limited warranty superior to industry standards, the exceptional VT-89A VCR from Hitachi has brought hi-fi technology to video sound. Sound finer than any turntable or conventional tape deck...far superior to ordinary VCRs, it's sound you have to see to believe. Five video heads, two audio heads, cable ready, with a computer brain that guides you through every program function. Each step is displayed on your TV screen.



Simulated TV picture.

NEW SIGNAL TRACKER COMPONENT TV

Backed by Hitachi's Incomparable 10/2/1 limited warranty, this state-of-the-art 20" diagonal flat square tube receiver/monitor integrates all your home entertainment functions. VCR, VideoDisc Player, stereo system,

video games, home computer and total TV reception. Enjoy more on-screen picture and less distortion. And only Hitachi has Signal Tracker control, our most advanced color control system ever. With the handy wireless remote control and wood cabinetry you get ease of operation, great sound and quality good looks.



SANSUI REWRITES THE RECEIVER RULES

With its SX-1130, a 130-watt stereo-AM/stereo-FM receiver, Sansul has broadened the concept of what a receiver ought to do in an integrated audio-video system. The unit has inputs for three video sources and switching that enables you to route a processed audio-video signal to your TV set or VCR when dubbing. it is the signal processing controls (see detail below)—which include a video fader, a sharpness control, and an audio mixer—that make the SX-1130 a standout.







(Continued from page 24)

large, available only as separate components, though Denon's AVC-500 audio-video control center offers a variant of surround-sound decoding plus amplification for the back speakers.

Noise filtering. Television sound today is vastly better than it was a few years ago, but the top octave of the audio spectrum (above 10 kHz) still tends to have more noise than music. A sharp high-cut filter can make a big improvement; to cut out unwanted noise and harshness without dulling the mid-treble, though, it should have a high turnover frequency (e.g., 8 kHz) and a steep slope (12 or 18 dB per octave). Single-pole (6-dBper-octave) filters are more common, but less useful.

Many manufacturers also offer dynamic noise reduction (DNR), based on an IC that rolls off the highs during moments when there is little high-frequency program content to mask the noise. It automatically restores wider bandwidth whenever musical highs increase. But DNRs do not all sound the same. To be truly effective, it should have a two-stage circuit with a steep slope. This will avoid dulling the mid-treble during quiet and moderately loud passages.

A DNR can be very effective against constant low-level noise, but it is worse than useless if the level of noise or distortion is modulated up and down by the signal itself. My local cable company, a Warner-Amex franchise, recently began scrambling the pay-TV channels (HBO, et al.) and furnished subscribers with new "addressable" converters to unscramble the signal. But the sync-restoration circuit in the converter (which, ironically, is made by one of the largest and bestknown Japanese hi-fi manufacturers) interferes with the audio, adding a harsh burst of noise and distortion to every medium- or high-level sound. DNR just increases the noise pumping.

Video processing. So far I have focused on switching and audio processing. But an audiovideo receiver or control center could, with equal logic, contain video processing circuits. Here is a sample of the various possibilities:

- A stabilizer to prevent picture rolling in Copyguard-protected movie tapes.
- A detail enhancer to sharpen fuzzy tapes.
- A de-noiser to minimize grain in videotapes.
- A video fader to produce professional-looking fadeouts between recorded segments on a videotape.
- A luminance control to adjust the brightness and contrast of any video source.
- A color processor to provide

chairside control of color intensity and tint (the two important variables that are nearly always omitted from TV remote controls).

 A special-effects processor to add an entirely new palette of colors, "solarize" the image (making dark areas light, and vice-versa), produce splitscreens and "wipes," and so on.

The more we load up an audio-video receiver with signalprocessing circuits, the more it begins to resemble a creative production tool instead of a playback product. Imagine, for comparison, a stereo receiver equipped with multichannel mike mixing, panpots, echo send and return, and the other facilities of a studio recording console. You must therefore decide for yourself where desirable flexibility leaves off and excess complexity (and cost) begins. All of the above options and more are available-for those who really want them-in outboard signal processors.



ROAD SOUNDS

The mobile music scene heats up with new CD players, stereo AM front ends, and increasing numbers of home audio companies entering the fray.



by Jay Taylor

O nce you attend a Winter Consumer Electronics Show in Las Vegas, you'll never think of that town as a vacation spot again—especially if your job is to scout out new car-audio gear. As a product manager for Crutchfield Corporation, a consumer electronics specialist, I bang briefcases with thousands of my colleagues as we attempt to see everything that manufacturers have prepared to tempt car stereo fans. Alas, the long hours of a WCES and the din of *karaoke* machines ultimately take their toll, and in covering this year's show, I may have unintentionally wandered past a booth containing an exotic front end or superspeaker. News of any omissions will no doubt be telegraphed to me by manufacturers, and I'll bring you their stories in upcoming "Autophile" columns. But for now, the dozens of products discussed here should be sufficient to whet your appetite for what may turn out to be the hottest summer ever in car stereo.



Car stereo companies vied for attention at the WCES, and Kenwood turned lots of heads with its classic '57 Chevy (top). Installed in this gutsy American road warrior was an assortment of highend Kenwood goodies (above), including a multipath-fighting diversity-reception front end and a new computerized multiband equalizer.

ROAD SOUNDS '85









Though production-model CD players for car use have already arrived on the market, companies are still hard at work trying to devise a caddy system that will simplify disc handling on the road. The Philips approach (1) involves a pair of spring-loaded arms that hold the disc caliper-style. The whole package is loaded into the player, which pulls the arms apart to release the disc. Sony's caddy (2), which is also being promoted as a replacement for the standard "jewel box" CD package, encloses the disc completely but is not inserted into the player. Rather, a hinge in the bottom of the case flips down, releasing the disc so that it can be pulled into the player by a roller mechanism. If the two CD co-inventors don't come to an agreement, there might be room for the solution proposed by Yamaha (3) at the WCES. Inserted completely into a player, the Yamaha caddy has a radial shutter that opens to allow the laser pickup to scan the rotating disc.



2

CD Players

Autosound jumped into the digital age just prior to the Winter CES with the eagerly anticipated first shipment of Sony's CD-X5 car Compact Disc player (\$600). I couldn't conduct my own on-the-road audition of this rare species until after I returned from the show, but it was worth the wait. True to its word, Sony has successfully overcome the preproduction model's problem of shock-induced mistracking. On the first dirt-and-gravel road I could find, a spirited drive caused not a single skip. That's not to say that the unit can't be made to mistrack, but under most normal driving conditions it doesn't. In fact, I suspect that if you can find a pothole deep enough to do the trick, you'll probably be more worried about your car's front-end alignment than a brief interruption in the music.

Sony's monopoly in this new technology will be shortlived, however, as Pioneer has two car CD players ready to ship. The CDX-1 (\$660) will be offered as a companion to Pioneer's top-of-the-line Centrate components, while the CDX-P1 (\$720), with three-way inputs, will be adaptable to almost any system. Both players use a unique circuit that recues the laser pickup to its proper position after a shock-induced mistrack, enabling playback to resume with minimal disruption.

One source of concern for the electronics giants remains unresolved at this point and probably accounts for the large number of prototype car CD decks on display. The big question: Will consumers, who are being asked to shell out five or six Ben Franklins for a CD-only player, prefer to replace their current front ends with a combination player/tuner? Judging from the CD-only prototypes shown by Kenwood, Yamaha, Clarion, and Fujitsu Ten, it appears the industry is betting that the first round of players will be bought and installed by audiophiles who have already

invested heavily in a cassette/ tuner front end and are unwilling to forgo their tape collections.

In my opinion, however, it won't be long before the market swings to combination CD-player/tuners, such as the Sony CDX-R7 (\$700). The reasons are simple: Most cars do not offer an easily accessible location for audio gear other than the spot now reserved for the radio/cassette deck, and unless you live in the middle of the Sahara, I can't imagine anyone doing without a radio. Plus, it makes sense that those who have already forsaken LPs for the sonic wonder of digital discs would be perfectly happy to leave their





Finally, car audio as good as your car.

Very few companies selling car stereos are real *audio* companies. With 75 years of experience reproducing sound, Denon wishes to point out the level of their home audio technology present in the new DC-series of car audio equipment. For example, the only audio components — home or auto — offering the level of circuit sophistication found on the new Denon Car Audio DCA-3250 Power Amplifier are Denon's own top-of-the-line receiver and separates.

Similarly, the Dynamic Range Expansion circuitry found on Denon's new Car Audio DCR-7600 AM/FM Stereo Tuner/Cassette Deck otherwise can be found only on Denon's DE-70 Dynamic Equalizer.

The differences between Denon car and Denon home audio equipment will become apparent the moment you sit behind the wheel. To build car audio for people who love good sound as much as fine cars, Denon created a very limited, ultra-high quality range of car audio components, specifically engineered to become part of the automobile. Controls fall to hand and information is displayed with the *driver* clearly in mind.

For the car lover, Denon Car Audio does more than offer true auto high fidelity — it becomes an integral part of the thrill of driving.

DENON

ROAD SOUNDS '85



Compusonics continues to say that it will be able to manufacture a floppy-disk-based digital audio recorder for home use, and at the WCES the company attempted to show that the system could also be made amenable to car stereo use. Alas, the results did not seem to put it into serious contention as a potential alternative to the Compact Disc system. First, the control panel for CompuSonies DSP 300 Experimental Floppy Disk Audio Deck Environmental Testing

the system (mounted in the center of the dash) failed, and a Radio Shack M-100 portable computer had to be pressed into service to perform the necessary user-interface functions. The disk drive, which holds a 3.3-megabyte floppy, was mounted nicely below the truck's heater control (inset above), but a glance behind the seat (upper right) disclosed the system's prototype status: A bare cage was holding the guts of the computer circuits. The system netted about 3 minutes of mono playback, which a Compusonics spokesman maintained will increase to 40 minutes of stereo by the summer.

cassettes at home in favor of their growing CD collections. Who needs the additional clutter of two music formats in the car?

For the Compact Disc to really catch on as a car stereo medium, however, something has to be done about replacing its "jewel box" case, which is impossible to open while you're driving. Yamaha's solution was the talk of the WCES; in fact, it even managed to overshadow the company's new player. Namely, it's a plastic CD caddy that is inserted into the player along with the disc. Similar in concept to the hard shell that protects 31/2-inch floppy disks for computers, it has a radial shutter that opens in the player. allowing the laser to scan the CD. So far, only Yamaha's player can accept the caddy, but the idea is so good that other manufacturers are bound to offer models that will accommodate it (or a derivative). A Yamaha representative said such caddies could eventually be sold for less than \$5.

In the field of car CD players, Sony's portable Discman merits honorable mention. Though it's not specifically designed to handle road shocks, I've already seen more than a few in automotive applications (usually resting in large blocks of foam to cushion the inevitable blows). Some quick experiments I've conducted reveal that the Discman can be mated successfully to many Concord front ends via their external processor loops. If your front end doesn't have an input for an external source (and most don't), there's no easy way to incorporate the Discman into your system. You might, however, invest in an outboard booster/amplifier, which could take over power amplification chores from your front end. A set of Y connectors for each input on the booster would then enable you to route the CD player's headphone output to your speakers.

Stereo AM

Despite all the hoopla surrounding the car CD players, stereo AM managed to attract some attention at this winter's CES. In fact, so many new front ends now have this feature that it would be easier to list the manufacturers that do not offer it. And just when it seemed that

the Motorola C-Quam system was going to win the reception wars by default, Sony announced that it will market several new ICs that automatically decode any of the four existing stereo AM formats. Interestingly, though Sony says its new decoder will add only about \$25 to the cost of a front end, it is not rushing to put stereo AM into its full line: Only one of the company's front ends has it, the XR-A33 (\$250). A basic model with LCD readout and autoreverse tape player, it is also available without stereo AM as the XR-33 (\$225). Sansui, too, offers a multiformat car decoder, but just in the top-of-the-line CX-990 (\$629).

Sherwood points out that although its AM sections are currently equipped to receive only C-Quam broadcasts, it is keep Engineering expertise never comes easy. It's acquired over time through dedication, and it's Mitsubishi's undaunted benchmark for quality.

We apply that expertise to every product we develop. We apply our signature only when a product satisfies the strictest design and performance criteria. Through advanced manufacturing techniques

and rigid testing, every car audio product we produce stands for unprecedented quality, reliability and performance. The Diamond Collection™ is a car audio triumph. It's a select group of products that offer the optimum in critical car audio listening.

It's no accident that unequaled manufacturing expertise and sophisticated engineering prowess have been combined. It's a matter of breeding and that's a matter of Mitsubishi.



*

ON-VOL A SHBAL

O BASS PUSHTREBLE



STEP NUMSEEN

OFADER

6

PERFORMANCE

IS A MATTER

OF BREEDING.

eng||\|**==**r||\|6

195

UD DO MTL MPS FM

ROAD SOUNDS '85

ing an eye on the multiformat market. Also watchful is Kenwood, which has developed a manually switched multiformat adapter. Panasonic demonstrated a front end equipped with a Motorola decoder, but in a press release stressed the unit's capability "to adapt easily to any other stereo AM system." Maintaining one single-format stereo AM radio apiece are Pioneer and Concord, whose KE-A433AM (\$360) and HPL-550 (\$650), respectively, were introduced in June.

The widespread adoption of Motorola's format began with the decision by GM to offer C-Quam radios in all Buicks and selected Pontiacs and Oldsmobiles in 1985. Chrysler quickly fell into line and now has four models with a C-Quam option, as well as two cars in which it is standard. Ford apparently is committed to the format, although none of its front ends yet includes a decoder. Add all of this to the mass market that will be tapped by new Motorolaformat front ends from Sparkomatic, Kraco, and Audiovox, and very soon a lot of people will be driving around with stereo AM receivers in their cars.

Sparkomatic's SR-420 (\$200) represents the least amount of green you can shell out for a stereo AM ETR (electronically tuned radio). Two high-power models, the SR-425 (\$230) and the SR-430 (\$280, with a built-in equalizer), make this the largest line of C-Quam receivers on the market. Kraco continues its move into the upper end with the new ETR-1090 (\$400). Audiovox is set to deliver two additions to its Hi-Comp line, the HCC-2250 (\$449) and the HCC-2150 (\$399), each a DIN-size ETR with C-Quam circuitry.

Despite the growing availability of stereo AM radios and

the increasing number of stations broadcasting a multiplexed AM signal, I'm still not convinced that people will switch to AM just because of stereo. Though it's often difficult to get high-quality stereo FM reception in a moving car, people still prefer the more-music-and-less-talk programming of FM to the inane chatter of many AM shows. A deejay chewing on my ear in stereo will not be appreciably more tolerable than he was in mono. Unless AM broadcasters revamp their programming, I don't think FM stations need fear losing their listeners.

Flat and Sassy

Like it or not, the day of the flatfaced front end has come. Although the push started about a year ago, many manufacturers held back their panel radios when faced with a potentially unreceptive mass market. Companies like Blaupunkt, Kenwood, Alpine, and Sansui pioneered the design but hedged their bets with high-end units destined for the dashboards of expensive European cars. Now there are panel models at a variety of prices, targeted for the big hole in the dash of your new GM or Chrysler (assuming it doesn't come standard with a nonremovable radio).

Fueling this trend are the new in-dash Compact Disc players, which necessarily are flatfaced to accommodate the width of a CD. Not surprisingly, Sony, Pioneer, and Mitsubishi all have panel radios to complement their new players. Mitsubishi's first such unit, the RX-740 (\$350), has an autoreverse tape deck with music search. Pioneer has three flat-faced models: the FEX-55 (\$500), the latest member of the high-end Centrate line; the high-power KEH-9000 (\$500), with a built-in five-band







Home audio companies invading car stereo turf include (from top) B&W with its Modular Automobile Sound System (MASS) speakers, Audio Control with its sophisticated EQX electronic crossover, and Harman Kardon with its CH-160 front end, which features the new flat-faced design. Sparkomatic's flat-faced SR-430 can receive Motorola C-Quam stereo AM broadcasts.

equalizer and a wired remote control; and the KE-4900 (\$250), a no-frills ETR.

Sony jumps into the panel wars with characteristic determination, fielding three new models: the XR-900 (\$600), a tuner/tape deck with Dolby C; the powerful XR-780 (\$400); and the basic XR-740 (\$300). Sanyo has a number of flat pieces that are otherwise identical to its standard models, and though current sales favor the more traditional approach, company officials are confident that buyers will eventually prefer the panel look. And the new flagship of Clarion's regular line is the flat-faced 8725RT (\$400).

Trying Their Luck

Hoping to capitalize on the growing popularity of high-end we can stereo, several home audio we manufacturers chose the WCES to introduce autosound gear. Denon, for example, now is

AT LAST.

Harman Kardon's striking new line of car audio products leads you to a higher fidelity on the road. Elevating car audio standards, these dynamic components smoothly outdistance the competition by reflecting the excellence so finely honed by Harman Kardon in their home audio products for over thirty years. Three new in-dash cassette/tuners and three power amplifiers blaze new trails. Each in-dash unit incorporates the renowned Harman Kardon design philosophies that enable them to deliver an exceptional frequency response of 20Hz to 20kHz ± 3dB. Each amplifier boasts High instantaneous Current Capability, Low Negative Feedback and Ultrawidebandwidth.

The previously unexplored realms of car audio are now within reach, for those tuned to a higher fidelity. From Harman Kardon.



240 Crossways Park West, Woodbury, NY 11797; In Canada, Gould Marketing, Montreal. For more information call toll-free 1-(800) 633-2252 ext. 250.

∈ H/K 1985

PRESENTING THE ALL-NEW 11th EDITION OF THE SCHWANN ARTIST ISSUE

Locate over 25,000 classical recordings according to orchestra, trio, quartet, conductor, soloist, vocalist, choral group or operatic company.

The all-new 11th Edition of the Schwann Artist Issue is finally here.

And the sooner you return the order form below, the sooner your copy will be in your hands.

This is the first new Artist Issue in three years. Completely revised and updated, it includes 300 pages over 25,000 listings — that help you quickly locate virtually any classical recording by:

Orchestra - categorized by conductor.

Conductor - their recordings with various orchestras and choral groups.

Quartets and Trios.

Soloists - listed according to instrument.

Operatic and Choral Groups -

including soloists for each recording.

Vocalists - and their recordings by composer.

The Schwann Artist Issue is comprehensive and easy to use. And it is the only classical recording directory of its kind.

To order your copy of the all-new Schwann Artist Issue, return the coupon today.

Copies will be mailed within 4 to 6 weeks after we receive your order.

Pats ARTIST ISSUE	Reserve my c new Schwanr I enclose \$6.95 per copy. Number of copi	n Artist Issue . (plus \$1 for postage a	sмаy nd handling)
30,000 listings Ley, CDs, Tapes 2,000 Orchestron	Amount enclos		Currency only.)
Every Conductor 4,500 Solouis Operatic Groups Charal Groups	Name Address		
	City (if foreign)	State	Zip
	Province	Country	
ROAD SOUNDS '85

has two flat-panel front ends, an equalizer, and two power amps. The DCR-7600 (\$600) is a tuner/ tape deck with Dolby C; the DCR-550 (\$500) has a built-in power amp. Denon's sevenband equalizer, the DCE-2200 (\$200), gives you soft-touch frequency controls, an LED display, and a subwoofer output with selectable crossover point. Rounding out the line are the power amps: the DCA-3250 (\$259), rated at 65 watts per channel, and the DCA-3100 (\$100), at 12 watts per channel.

Harman Kardon gets serious about autosound with three new component front ends: the CH-160 (\$475) with Dolby C, the CH-140 (\$395), and the CH-120 (\$275). All three use the same tape transport and claim a frequency response of 20 Hz to 20 kHz, \pm 3 dB. The CH-120 has an analog tuning dial, whereas both the 140 and 160 sport LCD frequency readouts. The two top models are decidedly DINlooking, but a hidden shaft to the right of the nosepiece indicates that they fit a standard three-hole opening. And all three front ends are designed to operate with either the previously introduced CA-260 power amp or its new little brother, the 40-watt CA-240 (\$295). For multiamp systems, H/K is also offering the CA-205 (\$50), a tiny amp rated at just 31/2 watts per channel.

The David Hafler Company's first car product is, not unexpectedly, a power amp. Rated at 100 watts per channel, the unit is said to be capable of pumping out an incredible 40 amps. Infinity's first car unit is the MRA-150 (\$319), a power amp rated at 60 watts per channel. Not to be outdone, Crown has introduced the CMA-1 (\$995), a power amp that can be configured to drive two speakers and a subwoofer (3 × 100

MAY 1985

watts), four speakers (2 \times 50 watts, 2 \times 100 watts), or four speakers plus a subwoofer (4 \times 50 watts, 1 \times 100 watts).

Speakers

Increasingly popular these days are modular speaker systems composed of separate woofers, tweeters, and crossovers. Providing greater installation flexibility, these systems give you the freedom to place the tweeters where they'll do the most good. EPI's first modular entry is the three-way LS-65 (\$120 per pair), consisting of a $6\frac{1}{2}$ -inch woofer and a separate tweeter/ supertweeter module. Proton combines its P-280 crossover, P-290 soft-dome tweeter, and P-295 woofer into a \$220 package. Infinity includes its signature EMIT tweeters in the CS-1 system (\$289), which also has 6-by-9-inch polypropylene woofers, 4inch polypropylene midranges, and crossovers.

SFI-Sawafuji enters the car stereo market with two systems that combine electronics and the company's patented Dynapleat drivers. The most expensive package (\$1,500) comes with three amps, four tweeters, four midrange drivers, and four woofers. B&W has completed the development of its Modular Automobile Sound System (MASS). Containing six modular components-four drivers plus a crossover and a bridge-shaped adapter for surface mountingthe MASS enables you to build up to a complex multiway setup in affordable stages. New speakers from non-newcomer Blaupunkt include three models in its Sound Component Speaker (SCS) line. System I (\$220) has cone tweeters, 31/2-inch midranges, 61/2-inch woofers, and an adjustable crossover. System II (\$250) substitutes dome tweeters and two pairs of 5-inch woofers. System III (\$300) adds

punch with 8-inch woofers.

Following the lead of Pioneer's Tilt Axial systems, several manufacturers now offer two- and three-way speakers with angled tweeters to improve high-frequency dispersion. Craig's 61/2-inch tiltable models-the three-way V-831 (\$140 per pair) and the two-way V-823 (\$130 per pair)-have angled tweeter assemblies that can be rotated for fine tuning. Kraco's new Turbo-Pro line includes a 6-by-9 four-way, a 61/2inch three-way, and a 51/4-inch two-way. The speakers rise up like lopsided pyramids, their short sides revealing a thumbwheel tweeter adjustment. And Pioneer itself has two new models with angle-adjustable tweeters: the TS-1690K (\$150 per pair) and the TS-1200K (\$90 per pair).

Kraco also offers a system with angled tweeters that cannot be adjusted: the TPS-693, a 6-by-9 three-way. Following the same approach are Fujitsu Ten's SG-1623, a 61/2-inch threeway, and Panasonic's EAB-697, another 6-by-9 three-way.

Signal Processors

If you've been trying to build a state-of-the-art autosound system from scratch, you've probably been held back by the relative scarcity of highquality electronic crossovers, a long-neglected product category. The good news from the WCES, however, points to renewed interest in these handy little devices, which are appearing both as stand-alone components and as part of equalizers and amps. One of the most interesting examples is the Audio Control EQX (\$299). It gives you half-octave equalization from 45 to 180 Hz (five bands) and fulloctave equalization from 250 Hz to 16 kHz (seven bands) in each channel. As a crossover, it can be set to a variety of frequencies via replaceable filter modules. And there's no problem matching it with your front end or amps, thanks to a variable input sensitivity control and variable high-, low-, and full-range outputs.

No less impressive, but much less expensive, is Yamaha's new YEC-400 (\$100). If you already have or can live without equalization, the 400 lets you select one of three crossover points in either a low-to-mid or mid-to-high frequency range. Variable output levels ensure easy integration into a multiamp system. Proton has a new active crossover as well: the Model 270 (\$80), with subwoofer outputs (75 or 150 Hz) and a switchable 12-dB boost at 30 Hz.

Yamaha also is marketing two new graphic equalizers, each of which has a subwoofer output with selectable crossover point (80 or 200 Hz) and variable gain. The YGA-619 (\$175) provides five bands of equalization and a built-in 18watt-per-channel amp. The YGE-400 (\$150) has seven bands plus built-in crossovers for midand high-frequency amps.

Other equalizers making their debut include Kenwood's seven-band KGC-9400 (\$329). This computerized beauty can memorize four equalization curves and is preprogrammed with additional curves for loudness compensation, vocal boost, and high cut. Finally, Blaupunkt continues its foray into less-than-traditional equalizers with the BEQ-65 (\$170). It has the same flexible stalk that allowed its predecessor, the BEQ-60, to mount to the firewall rather than the dash, but its five bands of equalization are manipulated from a streamlined control "head," which replaces the BEQ-60's VU meters with an LED display for a sleeker, high-tech look.

TUP-FLIGHT VCRS

Back when consumer videocassette recorders had just reached the market and were astounding people as much for their price as their capabilities, I had the opportunity to peek under the hood of a first-generation Beta deck. Crowded into that chassis were more circuits. mechanical linkages, and just plain stuff than I had ever seen before in a consumer product. I remember commenting to a friend that it seemed almost impossible for a manufacturer to make any money selling such an incredibly complex machine, even at what then seemed an exorbitant price.

Today, the situation is still remarkable. Though I no longer believe that manufacturers are losing money on VCRs, it still seems almost miraculous that a basic VCR with











With their audio-frequency modulation (AFM) recording technology, today's top-of-the-line VCRs combine superb video with state-of-the-art stereo audio reproduction. Pictured at right, from top: Sony SL-2700, Quasar CJ-8494, Magnavox VR-8445SL, Sanyo 7500, Zenith VR-4000, JVC HR-D725U

There are a lot of people putting their names on the front of cassette decks these cays.

But, quite frankly, it's much easier building faceplates than it is build- tures included on a Teac for your home. ing cassette decks. So when it comes to buying one for your system consider this: Teac has been building cassette

decks ever since there was a cassette.

And because we also make professional recording equipment, you can expect to find more professional fea-

In fact, we were among the first to offer cassette decks featuring built-in dbx* and Dolby noise reduction,**direct-drive motors, auto reverse, cobalt amorphous heads, and programmable search and memory systems, to name a few.

So ask yourself this: Do you want a row of matching faceplates, or do you want a cassette deck that can't be matched?



COPYRIGHT 1984 TEAC CORPORATION OF AMERICA, 7733 TELEGRAPH ROAD, MONTEBELLO, CA 90640, "dbs" IS A TRADEMARK OF dbs, INC. ** DOI:BY "IS A REGISTERED TRADEMARK OF DOI:BY LABORATORIES. INC

TOP-FLIGHT VCRS

even more features and better performance than that early unit could be sold for less than half its price. But even more interesting is the situation with today's top-of-the-line VCRs. These flagship designs embody everything manufacturers know about the art and science of video and audio recording and have the kind of convenience and special-effects functions usually associated with professional gear. Yet, as our guide to state-of-the-art VCRs clearly documents, pricing here too defies rational expectations.

Consider, for instance, the audio performance capabilities of these top decks. Their Hi-Fi recording circuits should enable them to reproduce a virtually flat frequency response with a dynamic range in excess of 80 dB. As our test reports of audioonly cassette decks document, such performance is rarely achieved even by the most costly decks, and those that can match it sometimes cost as much as a Hi-Fi VCR. In fact, I've spoken to several audio recording engineers who are using Hi-Fi VCRs as two-track mixdown decks, ignoring their video qualities until they have time to unwind with a movie after work.

Of course, video is what VCRs are all about for most people, and with top decks you'll find an extensive complement of sophisticated special-effects functions. Slow motion, still frame, bidirectional playback, and scan with a minimum of onscreen noise are hallmarks of these decks. Also about to debut is an improved recording system said to increase resolution by about 20 percent. The Beta group of companies will be the first to introduce these "Super" VCRs, and you'll find a tentative description of NEC's first such deck in this guide. Reacting to news of Super Beta recording technology, Panasonic and other VHS manufacturers have publicly stated that they,

too, will be able to incorporate this extended-bandwidth circuitry in future machines. Expect to see Super Beta VCRs on dealers' shelves by the summer; a VHS version will probably not be available until some time next year.

Most of the features described in this guide are self-explanatory, but a few demand some elaboration. Although an increasing number of VCRs include built-in decoding circuits to receive multichannel TV sound (stereo plus a second audio program), you'll need an outboard decoder to receive MTS broadcasts with most decks.

You'll also notice that we have not cataloged the number of channels receivable by these VCRs—all of which are described by their manufacturers as "cable-compatible." What this means is that most of these top models can tune VHF, UHF, as well as midband, superband, and hyperband CATV channels. If one or more premium cable channels are scrambled by the cable system, you'll have to figure out some switching arrangement to accommodate a decoder box into the VCR's RF feed. Random-access tuning is becoming more popular on top VCRs. With this function you can tune to a broadcast by punching up its number on a keypad. Other models enable you to scan sequentially through a preset number of active stations your area.

Finally, a word about audio dubbing. Because Hi-Fi soundtracks are recorded along with the video on the same diagonal tracks, you can't change one without messing up the other. Therefore, any new soundtrack you put on a previously recorded tape will be recorded on the longitudinal edge tracks. Most Hi-Fi decks give you stereo edge-track recording and playback; those that provide variants (stereo playback, but only mono recording) are noted in the chart. Peter Dobbin

	I-FI VCR3						
MODEL	PLAVBACK EFFECTS	PROGRAM	TUNING		VIDEO FEATURES:	size.a Weight	PRICES
Aiwa AV-70M	Freeze frame, frame advance, 2X for- ward scan w/sound (II, III); 9X (II), 15X (III) scan	14-day, 8-event	RA	Dubbing; headphone jack w/volume	3 heads: dubbing: 30 min–5 hr OTR; sharp- ness; slow tracking; on-screen programming directions / functions; auto rewind	13 by 3 3/4 by 12 1/4; 17 lbs.	\$800; 1-yr/ 90-day
NEC VC-N7OUE	Freeze frame, 1/7X slow motion, 2X forward-only and 8X scan (II, III)	21-day, 8-event	Scan	MPX jack; dubbing; head- phone jack w/volume	4 heads; 30 min-5 hr OTR; slow tracking; auto rewind	17 by 4 by 14 1/4; 23 lbs.	\$1,000: 1-yr/1-yr
NEC VC-N65EU Super Beta	Freeze frame (III); 8X scan (II, III)	7-day, 3-event	Scan	MPX jack; headphone jack w/volume	$2\ \text{heads};\ \text{enhanced picture resolution};\ 30\ \text{min-5}\ \text{h}\ \text{OTR};\ \text{auto rewind}$	17 by 4 by 14 1/4; not avail.	Not avail 1 -yr / 1 -yr
Sanyo VCR-7500	Freeze frame, 9X scan (III)	14-day, 8-event	12	Built-in MTS/SAP decoder; dubbing; headphone jack w/volume; mike jacks	2 heads: 30 min-5 hr OTR; auto rewind	16 1/2 by 4 1/2 by 14 1/2; 22 1/2 lbs.	\$750; 1-уг/1-уг
Sony SL-2700	Freeze frame, frame advance, 1/5X, 1/10X slow motion (I, H, III); 9X (II), 15X (III) scan; 2X forward scan w/sound (II, III)	14-day, 4-event	RA	MPX jack; dubbing; head- phone jack w/volume	2 heads: sharpness; multipin camera jack	17 by 4 by 14; 24 3/4 lbs	\$1,500; 1-yr/90- day
Toshiba VS-36	Freeze frame, frame advance, $1/3X\!-\!1/30X$ slow motion, $5X\!-\!20X$ scan (II, III)	14-day, 8-event	RA	Dubbing, headphone jack; ALC recording (no record- ing-level meters or manual controls)	4 heads: 30 min–5 hr OTR; auto rewind	16 1/2 by 4 by 15 1/2; 26 3/4 lbs.	\$1,000; 1-yr/90- day

RFTA HILEI VCDS

¹All models are "cable-compatible." Channel selection is via user-preset buttons (number shown), up/down scan buttons, or a 10-digit random-access keyped (RA). ²All models have FM simulcast recording capability In additions, all will record and play back conventional mono tracks for compatibility with non. Hi. Fr cassettes MTS/SAP =: Multichannel TV Sound/Separate Audio Program decoding (for stere and bulingual bioadcasts). ³All models are front-loading with 2-speed (Beta II and Beta III) recording and playback and wireless remote controls. OTR = one-touch recording, which operates in conjunction with a countdown timer. ⁴Dimensions in inches, width by height by deth. ⁴Stimited warranties: parts/labor.

Chart by Frank Lovece

VHS Hi-Fi VCRS

Mobel	PLAYBACK EFFECTS	PROGRAM	TUM	Audio Features:	VIDEO FEATURES:	Size. Weight	PRICER
Akai VS-603	Freeze frame, frame advance, 1/2X slow motion (SP, EP); 5X (SP), 9X (LP), 15X (EP) scan	28-day, 8-event	16	Dubbing; headphone jack	4 heads; dubbing: 30 min—4 hr DTR; sharp- ness; on-screen time/date/channel/trans- port mode/programming directions; auto re- wind	17 1/2 by 4 by 14 1/2; 22 lbs.	\$1,195; 1-yr/90- day
GE 1VCR-5018X	Freeze frame, frame advance, 1/6X-1/30X slow motion, 3X forward scan (SP, EP); 5X (SP); 9X (LP), 15X (EP) scan	21-day, 8-event	RA	Dubbing; headphone jack	4 heads; dubbing; 30 min—4 hr OTR; sharp- ness; slow tracking; multipin camera jack; auto rewind	17 by 4 by 14; 17 1/2 lbs.	Not avail.; 1-yr/90- day
Harman Kardon VCD-1000	Freeze frame, 1/sX slow motion (EP); 5X (SP), 9X (EP) scan	14-day. 4-event	16	Built-in MTS/SAP decoder; headphone jack w/volume; mono edge track	2 heads: 30 min—4 hr OTR; sharpness; auto rewind	17 1/4 by 4 1/2 by 15 1/4; 22 lbs.	\$1,250; 1-yr/90- day
Hitachi VT-89A	Freeze frame, frame advance (SP, LP, EP): $1/3X - 1/30X$ (SP), $1/5X =$ 1/30X (LP, EP) slow motion, 2X for- ward scan (SP, LP, EP): 5X (SP), 9X (LP), 15X (EP) scan	1-year, 8-event	RA	Mono edge-track recording (stereo playback): no Dolby B: dubbing; headphone jack w/volume; mike jacks; MPX jack	5 heads; dubbing: 30 min—4 hr OTR; sharp- ness, slow tracking; on-screen programming directions/functions; auto rewind	17 by 4 1/4 by 14 3/4; 23 lbs.	\$1,395; 2-yr/90- day
Instant Replay 518 Image Translator	Freeze frame, frame advance. 1/6X-1/30X slow motion, 3X forward scan (SP, EP); 5X (SP), 9X (LP), 15X (EP) scan	21-day, 8-event	RA	Dubbing; headphone jack	4 heads: NTSC play/record: switchable PAL (color) and SECAM (b&w) playback: works with NTSC monitors or TV sets; 30 min-4 hr OTR: sharpness; slow tracking; multipin camera jack: auto rewind	17 by 4 by 14; 17 1/2 lbs.	\$1,795; 1-уг/90- day
Jensen AVS-6200	Freeze frame, frame advance, 1/sX1/4oX slow motion, 3X, 5X, 7X scan (SP, EP)	14-day, 8-event	RA	Dubbing: headphone jack: mike jacks	4 heads: 2-speed (SP, EP) recording; dub- bing; 30 min-4 hr 0TR; sharpness; slow tracking; multipin camera jack; auto rewind	17 by 4 1/4 by 14; 20 1/2 lbs.	\$1,395: 1-yr/1-yr
JVC HR-D725U	Freeze frame, frame advance, 1/5X-1/40X slow motion, 3X, 5X, 7X scan (SP, EP)	14-day, 8-event	RA	Dubbing; headphone jack; mike jacks	4 heads; 2-speed (SP, EP) recording; dub- bing; 30 min-4 hr 0TR; sharpness; slow tracking; multipin camera jack; auto rewind	17 1/4 by 4 1/4 by 15; 20 3/4 lbs.	\$1,295; 1-yr/90- day
Magnavox VR-8445	Freeze frame, frame advance, slow motion (SP, EP); 9X (SP, LP), 15X (EP) scan; reverse play	14-day, 8-event	RA	Dubbing: headphone jack: mike jacks	4 heads, 30 min-4 hr OTR; sharpness; slow tracking; multipin camera jack; auto rewind	17 by 4 by 14; 17 lbs.	\$ 1,400; 1-yr / 90- day
Mitsubishi HS-400UR	Freeze frame (SP, EP): 1/2X slow mo- tion (EP): 5X (SP), 9X (EP) scan	14-day, 4-event	16	Built-in MTS/SAP decoder; headphone jack w/volume; mono edge-track recording and playback	2 heads; 30 min—2 hr OTR; sharpness; auto rewind	16 3/4 by 4 by 15 1/4; 20 lbs.	\$950: 1-уг/б- mon
NEC VC-N895E	Freeeze frame, frame advance, 7X 1/30X bidirectional slow motion/play/ scan (SP, EP)	14-day. 8-event	16 / RA	Dubbing, headphone jack	4 heads; 2-speed (SP, EP) recording; dub- bing; 30 min—4 hr OTR; sharpness; slow tracking; multipin camera jack; auto rewind	17 3/4 by 4 1/4 by 15; 20 3/4 lbs.	\$1,295; 1-yr/1-yr
Panasonic PV-9600 (portable)	Freeze frame, frame advance, $1/4X-1/30X$ slow motion (SP, EP); 5X (SP), 9X (LP), 15X (EP) scan; reverse play (SP, EP)	14 day, 8-event	RA	Dubbing; headphone jack; no Dolby noise reduction on stereo linear track	4 heads: dubbing; 30 min-4 hr OTR; sharp- ness; slow tracking: normal/thin tape switch; multipin camera jack; vertical tuner/ timer docking: top-loading	VCR: 8 1/2 by 3 by 10 1/4; 7 3/4 lbs. Tuner / timer: 8 3/4 by 4 1/2 by 14; 7 1/2 lbs.	\$1,500; 1-yr/90- day
Quasar VH-5845XQ	Freeze frame, frame advance (SP, EP): 1/4X (SP), 1/30X (EP) slow motion: 5X (SP), 9X (EP) scan	14-day, 8-event	RA	Dubbing: headphone jack	4 heads; 30 min-4 hr OTR: sharpness; slow tracking; auto rewind	16 3/4 bγ 4 1/4 bγ 14 1/4; not avail.	\$1,200; 1-yr/90- day
RCA VKP-950	Freeze frame, frame advance, 1/sX slow motion, reverse play, 2X forward scan (SP, EP): 5X (SP), 15X (EP) scan	1-vear, 8-event	RA	Mono edge-track recording (stereo playback); no Dolby B: dubbing; headphone jack; mike jacks	5 heads: docking design (VCR and tuner/ timer): dubbing; 30 min—4 hr OTR; slow tracking: on-screen programming directions/ functions/tage remaining; multipin camera jack; auto rewind; 3-way AC/DC power	In docking position: 17 by 4 by 13; VCR: 8 fbs.; tuner/timer: 10 lbs.	\$1,495; 1-yr/90- day
Sansui SV-R9900HF	Freeze frame, frame advance, 7X- 1/30X bidirectional slow motion/play/ scan (SP, EP)	14-day, 8-event	16	Dubbing: headphone jack: mike jacks	4 heads; 2-speed (SP, EP) recording; 30- min-4 hr OTR; sharpness; multipin camera jack; auto rewind	17 by 4 1/4 by 15; 20 3/4 lbs.	\$1,300; 1 yr/90- day
Sharp VC-489	Freeze frame, frame advance, 1/5X-1/30X slow motion (SP, EP); 7X (SP), 15X (EP) scan	14-day, 8-event	RA	Dubbing; headphone jack w/vołume	4 heads; dubbing; auto rewind/repeat play	17 by 5 by 15; 31 1/2 tbs.	\$1,400; 1-yr/90- day
Sylvania VC-3640	Freeze frame, frame advance, slow motion (SP, EP); 9X (SP, LP), 15X (EP) scan	14-day, 8-event	RA	Oubbing; headphone jack; mike jacks	4 heads; dubbing; sharpness; slow tracking; multipin camera jack; auto rewind	17 by 4 by 14; 17 lbs.	\$ 1,400; 1-yr / 90- day
Teac MV-1000	Freeze frame, frame advance, 1/sX-1/40X bidirectional slow motion (SP, EP); 3X, 5X, 7X scan (SP, EP)	14-day, 8 event	RA	Dubbing; headphone jack; mike jacks	4 heads; 2-speed (SP, EP) recording; 30 min-4 hr OTR; sharpness; slow tracking; multipin camera jack; auto rewind	17 1/4 by 4 1/4 by 15; 20 3/4 lbs.	\$1,400; 1-yr/1-γr
Zenith VR-4000	Freeze frame, frame advance, 1/sX-1/40X slow motion (SP, EP); 3X, 5X, 7X scan	14-day, 8-event	RA	MPX jack: dubbing: head- phone jack	4 heads: 2-speed (SP, EP) recording: dub- bing; 30 min-4 hr DTR; sharpness; slow tracking; unified remote control of selected Zenith TV sets	17 1/4 by 4 1/4 by 15; 20 1/4 lbs.	Not avail. 1-yr/90- day

Chart by Frank Lovece

¹All models are "cable-compatible." Channel selection is via user-preset buttons (number shown), a 10-digit random-access keypad (RA), or both.²All models have FM-simulcast recording capability. In addition, unless otherwise noted, all will recoid and play back conventional stereo edge tracks with Doby B noise reduction for compatibility with non-Hr-Fr cassettes. MTS/SAP = Multichannel TV Sound (Separate Audio Program decoding flor stereo and bilingual broadcasts). ³Unless otherwise noted, all models are front-loading, with 3-speed (SP, LP, EP) recording and playback and wireless remote controls. OTA = one-touch recording, which operates in conjunction with a countdown timer, ⁴Dimensions in inches, width by height by depth. ⁵Limited warranties; parts/labor.

THE 1985 MUSICAL AMERICA INTERNATIONAL DIRECTORY OF THE PERFORMING ARTS 95711

25TH ANNIVERSARY ISSUE

Musical America is pleased to invite you to obtain your copy of its 1985 *Directory* at a publication price of \$50.00.

The authoritative reference source for international listings in music and dance presents in one comprehensive 600-page volume the 1985 listings for:

Music.

Over 600 orchestras, chamber ensembles, opera companies and choral groups are listed with important information on their repertoires, artists and concert halls.

Dance.

From Alvin Ailey to Zorongo Flamenco, over 600 dance companies are listed: ballet theatre, comedy, children's dance, folk and mime. Includes regional and national companies throughout the U.S. and Canada.

Performing Arts Series and Festivals.

A survey of popular and classical music, theatre and dance series sponsored by communities, societies and universities.

Music Schools, Contests, Foundations and Awards.

From small music schools to music departments at major universities. In addition, over 100 international music competitions are accompanied by information on requirements for entry.

Plus complete international listings for:

Music publications. Professional services and organizations. Artist managers. Music publishers. And performance schedules for North American concert halls.

Each listing will also provide you with an address, phone number and the names of key people to contact. To receive your copy of the 1985 International Directory of the Performing Arts at the publication price of \$50.00, please return the form with your check to: **Musical America**, Circulation Department, 825 Seventh Ave., New York, NY 10019.



R.S.	!p:
------	-----

for

MUSICAL AMERICA

CIRCULATION DEPARTMENT, 825 SEVENTH AVENUE, NEW YORK, N.Y. 10019

Please send my copy of the 1985 International Directory of the Performing Arts at the publication price of \$50.

I enclose \$____

______ Directory (Directories). (Price includes postage and handling on U.S. orders. Outside the U.S. add \$10 for surface mail, \$20 for Air Mail.)

IAME		
DDRESS		

CITY/STATE ZIP

(IF FOREIGN) PROVINCE COUNTRY

		OULON		1.4
(Cł	IARGE		
		MASTE	R	C
		VISA		

MASTER CARD CARD NO

PAYMENT IN U.S. CURRENCY ONLY (PAYMENT MUST ACCOMPANY ORDER)

FXP

DATE

TEST REPORTS



NAD 7155 AM/FM RECEIVER

Dimensions: 161/2 by 4 inches (front panel), 133/4 inches deep plus clearance for controls and connections. AC convenience outlets: one switched (250 watts max.), one unswitched (unrated). Price: \$598. Warranty: "limited," three years parts and labor. Manufacturer: made in Japan for NAD (USA), Inc., 675 Canton St., Norwood, Mass. 02062.

n its major features, the NAD 7155 receiver is a sort of summation of the company's products from the original 3020 amplifier to the present. To begin with, it makes a bid as an "audiophile best-buy" in its price category-an endeavor in which NAD has proven particularly adept. Its appearance, like that of all NAD components, is boldly functional, with white lettering clearly legible (almost a heresy these days) against dark brown metal unrelieved by fripperies. And among the features inside are several NAD specialties: a soft-clipping option in the power section, a two-position switch for matching the amplifier characteristics to the impedance of the loudspeakers in use, "bass EQ" to strengthen deep fundamentals in the range where many loudspeakers are rolling off, switchable phono input impedance, and (probably best of all) a Schotz Dynamic Separation FM section.

There is a defeat switch for the Dynamic Separation, clearly implying that the normal reception mode is with the feature engaged. Diversified Science Laboratories took the hint, measuring in that mode unless there was a specific point in testing without it, on the presumption that most owners would want to keep the Dynamic Separation

Report preparation supervised by

Michael Riggs, Peter Dobbin, Robert Long, and Edward J. Foster. Laboratory data (unless otherwise indicated) is supplied by Diversified Science Laboratories.



circuit engaged at least most of the time. The switch for the infrasonic filter, however, was left in the defeat position most of the time to keep the data comparable to those obtained from other receivers. The filter impinges little on the audio band, so the differences in most measurements are slight, in any event.

The owner's manual suggests using the soft-clipping and low-impedance amplifier options unless there's an overriding reason for choosing the alternatives. Here again, we chose to overlook NAD's recommendations in order to make our testing conform as closely as possible to past practice. The softclipping selector on the back panel can be switched while the receiver is operating. Nearby, those for impedance matching and bridged mono output (an operating mode we didn't test) are fitted with plastic "locks" to prevent accidental switching. (To reset either of these selectors, you must remove the screw securing its lock.)

Also on the back panel are switches for the three fixed-coil phono input capacitance options (nominally, 100, 200, and 300 picofarads) and for the two phono gain options (for moving-coil or fixed-coil cartridges). Above this group are the antenna terminals, which include an F connector for 75-ohm coaxial cable as well as spring-loaded clips for 300-ohm twinlead. The amplifier output connections are heavy binding posts designed for use with bared wires.

As the amplifier data show, the 7155 handily exceeds its power specs, which are quite conservative. Switching from high- to low-impedance operation restricts the maximum continuous power somewhat (to prevent overheating of the output stage when driving low-impedance or highly reactive loads), but the difference is a mere 1/2 dB: 80 watts per channel into 8 ohms, 105 into 4 ohms. Dynamic power at the low-impedance setting is 1/4 dB less than at the high-impedance position into an 8-ohm load (for the equivalent of 95 watts), 3/4 dB lower into 4- and 2-ohm loads (125 and 160 watts, respectively). Any way you cut it, this adds up to more muscle than most other receivers (or even integrated amps) provide at this price.

The soft-clipping feature is intended to prevent the sonic harshness that usually accompanies amplifier overload, or clipping. The circuit begins altering the waveform (and, to that extent, distorting it) as it approaches the onset of clipping, keeping it rounded even when the power supply can no longer deUnless otherwise specified, all data were measured with the FM Dynamic Separation on, the amplifier cutput impedance set to 8 ohms, and the amplifier soft clipping off

FM TUNER SECTION

STEREO RESPONSE & CHANNEL SEPARATION

DB	71551	111	-	- T	1		1	1		
0	-	+	+	+	-+-	+	+	+	-	
- 5	<u> </u>	+	-	_		-	+		+ +	
- 10	-	+	-			-	+	-	+ +	
- 15		+	-+-	-		+	+	-	+	
- 20	<u> </u>			-	-+-	-	+	+	+	
- 25	<u> </u>						+		+	
- 30	<u> </u>			-		-	+	-	+	1
- 35		+	+		+	-	+	+	1.	
- 40	-		-	-		_	-		-1/-	
нZ	20	50	100	200	500	łK	2K	5K	10K 2) OK
_										

Frequency response

	L ch	+ 1/4, -1 dB. 20 Hz to 15 kHz
	R ch	+ 1/2, -1 dB, 20 Hz to 15 kHz
Channel		

 \geq 41 dB. 45 Hz to 9 3 kHz. \geq 33 dB. 20 Hz to 15 kHz

FM SENSITIVITY & QUIETING



Stereo sensitivity (for 50-dB noise suppression) 35 dBf at 98 MFz, with 0 48% THD + N

(35 dBf at 90 MHz, 33 1/2 dBf at 106 MHz)

Mono sensitivity (for 50-d8 noise su	pression)
15 3/4 dBf	at 98 MHz
Stereo threshold	27 dBf
Stereo S/N ratio (at 65 dBf)	70 3/4 dB
Mono S/N ratio (at 65 dBf)	79 ¹ /2 dB
CAPTURE RATIO	1 1/2 dB
SELECTIVITY	
alternate-channel	59 3/4 dB
adjacent-channel	7 dB

42

ABOUT THE dBW

liver enough peak voltage to fill out the extremes of excursion. The net result is still distortion, but a different sort of distortion from that produced by hard clipping.

With the feature turned on, harmonic distortion at rated output runs about 0.1 percent over most of the frequency range and nearly 0.3 percent in the deepest bass. It therefore is almost twice as high, on average, as the distortion with the feature defeated, as shown in our data. The latter consists substantially of the third harmonic alone; with soft clipping, the distortion products are (in descending order of quantity) the third, fifth, second, and fourth harmonics. Although the total amount of distortion is higher with soft clipping, the levels still aren't great enough to be worrisome, and its spectral distribution is different. So we can see arguments for both sides of this switch.

The tone controls are gentle and well behaved in their action, impinging only slightly on each other's side of l kHz. The TREBLE shelves (or reaches a peak-it's immaterial which) at 20 kHz, where the maximum control range is about ± 8 dB. The BASS shelves below about 50 Hz, with about 10 dB of cut or boost. Switching in the LOUDNESS, whose action is unaffected by the VOLUME setting over our test range, adds about 6 dB in the bass below 100 Hz and "bends" the treble upward to about $+5 \, dB$ at 20 kHz. If you dislike the contour, you can always touch it up with the tone controls or use them instead, as the excellent owner's manual suggests.

Several infrasonic filters are built into the 7155, only one of which is switchable. A nondefeatable filter is incorporated in the BASS EQ, which can be engaged to add extra oomph in the deep bass—the range in which most small speakers are rolling off. It adds almost 3 dB at 60 Hz, climbs to a sharp peak of about 6 dB near 37 Hz, and then rolls off steeply (at about 20 dB per octave) below 30 Hz, reaching –3 dB at 24 Hz. Many speakers can profit from such a kick in the pants, though (as the manual warns) ones with inherently good bass response may take on a thumpy quality from it. And the emphasis may be too low in frequency to be much help for some minispeakers.

Another nonswitchable infrasonic filter is built into the phono preamp section-which, not incidentally, is a more sophisticated design than you'll find in most receivers in this price range. The measurements show that its three capacitances for fixed-coil cartridges are within 15 percent of their nominal values-an insignificant discrepancy. The attenuation at 5 Hz (in the heart of warp territory) amounts to 20 dB for fixed-coil cartridges, 27 dB for moving-coil models. With the action of the switchable filter added, these figures improve to 43 1/2 and 50 1/2 dB, respectively, for truly outstanding suppression of warp frequencies. This reduces distortion and prevents power from being wasted on unwanted infrasonic signals.

The 7155 has separate source selectors for listening (monitoring) and recording. This makes it easy to (among other things) copy in either direction between the two tape decks the receiver can accommodate. The presence of an OFF position on the recording selector suggests an unbuffered output that could permit a recorder connected to it to load down the listening circuit. But the tape output impedance is identical regardless of the source chosen, demonstrating the presence of a buffer stage to prevent such loading in any case. The circuitry also prevents feedback if you accidentally choose the same deck as both source and recording vehicle, which can deliver nasty results with some preamps.

The tuner section, however, is the centerpiece of the design. In addition to the memory presets for five stations per band, its options are simple: either bidirectional manual tuning—in quarter-chanWe currently are expressing power in terms of dBW—meaning power in dB with a reference (0 dBW) of 1 watt. The conversion table will enable you to use the advantages of dBW in comparing these products to others for which you have no dBW figures.

WATTS	dBW	WATTS	dBW
1.0	0	32	15
1.25	1	40	16
1.6	2	50	17
2.0	3	63	18
2.5	4	80	19
3.2	5	100	20
4.0	6	125	21
5.0	7	160	22
6.3	8	200	23
8.0	9	250	24
10.0	10	320	25
12.5	11	400	26
16.0	12	500	27
20.0	13	630	28
25.0	14	800	29

HARMONIC DISTORTION (THO+N)

	stereo	mono
at 100 Hz	0.13%	D 18%
at 1 kHz	0.11%	D 12%
at 6 kHz	D 15%	D 16%
STEREO PILOT INTERM	OULATION	D D92%
IN DISTORTION (mono	}	D 063%
AM SUPPRESSION		68 dB
PILOT (19 kHz) SUPPRE	SSION	63 dB
SUBCARRIER (38 kHz)	SUPPRESSION	91 1/2 dE
AMPLIFIER SECT	ION	
RATEO POWER	17 1/2 dBW (55	watts)/chann

HATEU PUWEN	17 1/2 ORAA (D:	s watts)/channel
OUTPUT AT CLIPPING	(at 1 kHz; both cha	nnels driven)
8-ohm load	19 ¹ /2 dBW (90) watts)/channel
4-ohm load	20 3/4 dBW (12	20 watts)/channel
DYNAMIC POWER (at 1	l kHz)	
8-ohm load		20 dBW
4-ohm load		21 3/4 dBW
2-ohm load		22 3/4 dBW
OYNAMIC HEADROOM	fre rated power, 8	l-ohm load)
		+ 2 1/2 dB
HARMONIC DISTORTH	DN (THO; 20 Hz to	20 kHz)
at 17 1/2 dBW (55 watt	s}	≤ 0 026%
at 0 dBW (1 watt)		< 0.01%
FREQUENCY RESPONS	E	
+ 1/4 - 1/2 d	B 22 Hz to 20 5 kHz.	
+ 1/4, -3 dB.	12 Hz to 46 2 kHz	
RIAA EQUALIZATION		
fixed-coil phono	+ 1/4, - 1/2 dl - 20 dB at 5 Hz	B, 23 Hz to 20 kHz
moving-coil phono	+ 1/4, 1 dB. -27 dB at 5 Hz	20 Hz to 20 kHz.
SENSITIVITY & NOISE	(re 0 dBW; A-weig	hting}
	sensitivity	S/N ratio
aux input	21.5 mV	86 dB
fixed-coil phono	D 37 mV	78 dB
moving-coil phono	22 µV	79 dB
PHONO OVERLOAO (1-)	(Hz clipping)	
fixed-coil phono		250 mV
moving-coil phono		13 5 mV
INPUT IMPEOANCE		
aux input	8 9k ohms	
fixed-coil phono	51.4k ohms, 11	5/220/325 pF
moving-coil phono	100 ohms	
OUTPUT IMPEDANCE (to tape)	1.020 ohms
OAMPING FACTOR (at	50 Hz)	90
CHANNEL SEPARATIO	N (at 1 kHz)	64 dB
INFRASONIC FILTER	3 dB at 21 Hz	\approx 12 dB/octave

nel (50-kHz) increments on FM, full-channel (10-kHz) on AM—or bidirectional seek to lock onto the next receivable station, depending on the position of the large "search" bar just below the tuning rocker. The display shows frequency, channel centering, and signal strength. The last is shown by a five-segment bar-graph meter that we found surprisingly useful in tuning a rotatable FM antenna, despite the meter's limited range, sharp on/off action, and omission of any multipath indication.

The AM section is unusually capable, in some instances bringing in distant stations with both astonishingly little noise and remarkably bright, lifelike sound using only the built-in ferrite rod antenna. Exclusion of high-frequency noise and interference is the primary reason many AM sections are filtered to the point of sounding muffled and tubby. The lack of such filtering in the 7155 does admit some extraneous buzzing or whistling on some stations, but the extra sonic clarity is worth it.

Operation of the FM Dynamic Separation circuit is basically identical to that of the similar circuit built into NAD's 4125 tuner (test report, October 1984). It is based on the premise that both RF (radio frequency) signal strength, which determines quieting, and audio modulation, which helps mask whatever noise is present, should govern separation. When either is low, separation narrows to less than 10 dB in the treble, for at least partial cancellation of high-frequency noise; when both are high, the tuner maintains full separation for crisp imaging. The result should therefore be a decrease in audible noise on weak stereo stations and an improvement in stereo sensitivity. (Mono, with no separation to blend, can't profit from the technique.)

The quieting curves, made with the Dynamic Separation turned on, are exceptional both in their steepness of descent and in the depths that they reach, in mono as well as stereo. Separation of fully modulated stereo remains 391/2 dB (at 1 kHz) down to RF signal strengths as low as 60 dBf. Between this point and 46 dBf, separation rapidly decreases to 91/2 dB, where it remains down to the stereo threshold. When the Dynamic Separation is turned off, this blend fails to materialize, causing noise to increase by 21/2 to 3 dB near the bottom of the quieting curve. Measured in this mode, sensitivity is 37 1/2 dBf-1 1/2 dB worse (or, rather, less excellent) than the figure in our data column.

Two peculiarities came to light in testing the Dynamic Separation. Under some circumstances, the left-to-right blend at very high frequencies (above 5 kHz) appears to be quite different from that in the opposite direction. And instead of bleeding some of the signal from one channel into the other to keep the sum of the two constant, as most blends do, this one appears to retain full output in each channel at all frequencies no matter how much of each signal is added to the other. In theory, this should sometimes create rather odd effects when the blend is active.

We did notice something that one listener described as a slight phasiness in the highs under marginal-to-poor reception conditions. We have no way of telling whether this is attributable directly to the Dynamic Separation or was, at least in part, an artifact of conditions beyond NAD's control. But we do know that the sound of any marginal station with the Dynamic Separation off-or with almost any other tuner or receiver on the market-is going to be, if anything, inferior to that with it on. Repeatedly we were struck by the listenability of the borderline stations we regularly use in testing FM equipment. In light of this, any minor side effect that the circuit may occasionally impose under these reception conditions is beside the point.

In all respects, then, the NAD 7155 is an outstanding receiver. We feel confident in recommending it to anyone looking for high performance at a moderate price—or just high performance, period.

STANTON HZ-9S PHONO CARTRIDGE

Type: fixed-coil (moving-magnet) cartridge with Stereohedron II multiradial diamond stylus mounted in low-mass conductive aluminum-alloy cantilever with sapphire shell. Price: \$250. Warranty: "limited," one year parts and labor. Manufacturer: Stanton Magnetics, Inc., Terminal Dr., Plainview, N.Y. 11803.

Stanton describes its new Epoch II Series as "the culmination of years of experience in design and development of phonograph pickups." The company is understandably proud of its traditional role at the leading edge of recordplayback technology. Its studies

with its scanning electron microscope—the first to be set up inhouse by an American cartridge manufacturer, as far as we know have shown us what the world looks like from a stylus's perspective. Those images have given engineers and casual users alike a new under-



standing of what is involved in playing a record and how to get the best possible sound from a modulated groove.

All Epoch II pickups use highenergy samarium-cobalt movingmagnet structures that are not only tiny (and therefore unusually light) but located as near as possible to the cantilever pivot to minimize their contribution to effective tip mass. Because of the magnet's strength, the coils in which it induces output can be made with relatively few windings without sacrificing sensitivity, which helps keep the cartridge's weight low. The coils also are designed for perfect symmetry, to reduce distortion.

The stylus tip shape of all but two models in the series is an improved version of Stanton's Stereohedron line-contact geometry, with a slightly increased major radius (76 micrometers, as opposed to 71) and a significantly reduced tracing radius (5.1 vs. 8 micrometers) for improved resolution. The diamond is mounted on a conductive aluminum-alloy cantilever with a sapphire shell, said to achieve the strength of solid sapphire without its high mass. The cantilever is grounded through the cartridge casing to conduct away the static electricity generated by friction between the diamond tip and the vinyl record.

There are six models in the series. Two have LZ prefixes, indicating low impedance and output, and are intended for use-with head amps or matching transformersas replacements for moving-coil pickups. The remaining four are standard (HZ) designs. Two offer the same Stereohedron II tip shape as the LZ models, the same factorycalibration options-with (the 9S) and without (8S)-and the same compliances (slightly higher for the 9S). The other HZ models are said to be distinctly lower in compliance; the 7S has the original Stereohedron I tip, the even lower-compliance 6E an elliptical. We chose to test the premier high-impedance model: the calibrated, Stereohedron II HZ-9S.

The point in keeping cartridge mass low is to prevent the low-frequency resonance of the tonearm/ cartridge combination from going so low that it falls into the warp region (below about 8 Hz) and promotes misbehavior. If the effective mass of the arm plus the cartridge is too low, however, resonance can occur so high as to emphasize rumble and cause mistracking on heavy deep-bass modulation. And some arms simply don't have the counterweight adjustment range to balance cartridges as light as the 4-

(test record: JVC TRS	-1007 Mk. II)	
08		-
0	┼─┼─┼─┿━╍╪╧╧╇	-
-5		_
10 10 10 15 20 50 100 25 20 20 50 100 21 20 50 100 25 20 50 100 20 26 27 88 20 104 20 50 100 20 50 104 20 50 100 20 50 104 5 20 20 50 100 20 54 104 145 20 25 100 104 10 15 104 12 14 10 104 10 104 10 14 12 12 12 12 10 10 10 10 10 10 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 <t></t>	_	
		ß
	the second second	_
H2 95		
HZ 20 50 100 2	00 500 1K 2K 5K 10k	1
Frequency response		
Lch	+ 1, -3 dB, 20 Hz to 14 5 kH	z
Rich	+1 -3 dB 20 Hz to 16 kHz	
Channel separation		
	≥ 15 dB, 100 Hz to 20 kHz	
SENSITIVITY (at 1 kHz	z) 0.74 mV/cm/sec	
CHANNEL BALANCE ((at 1 kHz) ± 1/2 dB	}
CHANNEL BALANCE ((at 1 kHz) ± 1/2 dB	}
CHANNEL BALANCE (VERTICAL TRACKING	(at 1 kHz) ± 1/2 dE ANGLE ≈ 22°	}
CHANNEL BALANCE (VERTICAL TRACKING MAX. TRACKING LEV	(at 1 kHz) ± ½ dE ; ANGLE ≈ 22° EL (ro RIAA 0 VU; 1.0 gram)	
CHANNEL BALANCE (VERTICAL TRACKING MAX. TRACKING LEV lateral	[at 1 kHz) ± 1/2 dE ; ANGLE ≈ 22* EL (ro RIAA O VU; 1.0 gram) > + 18	dB
CHANNEL BALANCE (VERTICAL TRACKING MAX. TRACKING LEV lateral vertical	(at 1 kHz) ± 1/2 dE i ANGLE ≈ 22* EL (ro RIAA 0 VU; 1.0 gram) > + 18 > + 12	dB
CHANNEL BALANCE (VERTICAL TRACKING MAX. TRACKING LEV lateral vertical	ist 1 kHz) ± 1/2 dE iANGLE ≈ 22° EL (re RIAA 0 VU; 1.0 gram) > + 18 > + 12 > + 12 ICE (vertical) > + 12	dB
CHANNEL BALANCE (VERTICAL TRACKING MAX. TRACKING LEV lateral vertical	ist 1 kHz) ± 1/2 dE iANGLE ≈ 22° EL (re RIAA 0 VU; 1.0 gram) > + 18 > + 12 > + 12 ICE (vertical) > + 12	dB
CHANNEL BALANCE (VERTICAL TRACKING MAX. TRACKING LEV Interal vertical DYNAMIC COMPLIAN	ist 1 kHz) \pm 1/2 dE ANGLE \approx 22° EL (re RIAA 0 VU; 1.0 gram) > + 18 > + 12 (CE (vertical)) \approx 16 \times 10 ⁻⁶ cm/dyne	dB
CHANNEL BALANCE (VERTICAL TRACKING MAX. TRACKING LEVI lateral vertical DYNAMIC COMPLIAN RECOMMENGED EFFE	ist 1 kHz) \pm 1/2 dE i ANGLE \approx 22" EL (re RIAA 0 VU; 1.0 gram) > + 18 > + 12 > + 12 iCE (vertical) > + 16 \approx 16 \times 10 ⁻⁶ cm/dyne ECTIVE TONEARM MASS"	dB
CHANNEL BALANCE (VERTICAL TRACKING MAX. TRACKING LEV Interal vertical DYNAMIC COMPLIAN	ist 1 kHz) \pm 1/2 dE ANGLE \approx 22° EL (re RIAA 0 VU; 1.0 gram) > + 18 > + 12 (CE (vertical)) \approx 16 \times 10 ⁻⁶ cm/dyne	dB

SQUARE-WAVE RESPONSE (1 kHz)



"Without extra weight, see fext

TONEARM/CARTRIDGE MATCHING GRAPH

By means of this nomograph, you can determine the compatibility of any cartridge and tonearm we have tested. ideally, the arm/cartridge resonance frequency (indicated by the diagonal lines) should fall at 10 Hz, but anywhere between 8 and 12 Hz will assure good warp tracking and accurate bass response. (It is usually okay to let the resonance rise as high as 15 Hz, although we don't normally recommend this.)

Begin by looking up the weight and dynamic compliance shown in the cartridge report and the effective mass listed in the turntable or tonearm report. Add the weight of the cartridge to the effective mass of the tonearm to get the total effective mass. Then find the point on the graph where the vertical line for the total effective mass intersects the horizontal line for the cartridge's dynamic compliance. For a good match, this point should fall in the white region, between the 8- and 12-Hz disgonal lines.

When necessary, you can back-figure compliances and effective masses for cartridges and tonearms tested before we began reporting these figures directly (in January 1983). For cartridges, look up the vertical resonance frequency (measured in the SME 3009 Series II Improved tonearm) and the cartridge's weight. Add 15 grams (the SME's effective mass) to the car-



tridge weight to get the total effective mass. Then find the intersection of the vertical line repreresenting that mass with the diagonal line representing the measured resonance frequency. Now you can read off the compliance from the horizontal line passing through the point of intersection.

For tonearms, look up the vertical resonance frequency as measured with the Shure V-15 Type III cartridge. Find the intersection of the diagonal line for that frequency with the horizontal line representing the Shure's dynamic compliance of 22.5×10^4 cm/dyne. Reading down the vertical line on which the point of intersection lies will give you the total effective mass of the arm with the Shure V-15 Type III mounted in it. Then subtract 8.3 grams (the weight of the V-15 Type II) to get the tonearm's effective mass.

Because of differences in measurement techniques, manufacturers' specifications for compliance and effective mass often differ from our findings and may therefore yield inconsistent results if used with this graph. gram HZ models. (Spec for the LZ pickups is even lower: 3.8 grams.)

To eliminate such problems, Stanton supplies a 2-gram weight that can be added to bring the total up into the 6-gram range of typical "old-fashioned" cartridges. It fits between the pickup and the headshell and is held in place by the mounting hardware, which includes "clip-on" plastic nuts that simplify mounting considerably by contrast to conventional screw-andnut systems.

The cartridge's mounting brackets appear to be made of plastic as well, doubly preventing the ground loop that could occur with earlier Stantons if you mounted them with metal hardware in a metal headshell. The conductive path from stylus to ground still goes through the cartridge case and, via a strap, to the ground connection for one channel, but not out via the turntable's own ground lead.

Stanton's VTF (vertical tracking force) spec for the HZ-9S reads "1 gram, + 1/2, -1/4," clearly recommending 1 gram as the "normal" setting. We tested it that way, though we note that the factory calibration on both samples used for this report was at 1 1/4 grams. Actually, Diversified Science Laboratories found that the pickup passed our so-called tracking torture test at its minimum recommended setting (3/4 gram), and at 1 gram it tracked all of the high-level test cuts and all of the "problem" music records we regularly use in evaluating cartridges. (It failed to track a damaged record that some other pickups have negotiated, but we would consider it dirty pool to hold that against the Stanton.)

The vertical tracking angle is very close to the nominal standard of 20 degrees. In these tests, there was no difference between the result with low-frequency tones and that with mid-frequency tones, indicating a very accurate stylus rake angle as well. Compliance is moderate, rather than high, and distortion is about average for a phono cartridge.

The frequency response exhibits a very gradual treble rolloff, mitigated by a slight peak near 10 kHz. The load for measurement followed Stanton's recommendation-47,000 (47k) ohms resistive shunted by 275 picofarads (pF) capacitiveand varying the capacitance (within reason) during our listening tests netted no discernible sonic change. Judging from the comments of our auditors, the relatively narrow peak proved more audible than the rolloff: They noted a slight "etching" of string tone but no dulling of the highs.

Overall, the sound was judged first-rate: clean, transparent, well focused, and solid. Imaging is excellent, bass convincing. If, as many contend, the analog record is in its waning years, the lessons that went into the HZ-9S (and other recent top-line models) were learned just in time to assure that we can get from the records we already have (and will acquire in time to come) the very best they are capable of giving.

TECHNICS SL-P3 COMPACT DISC PLAYER

Dimensions: 17 by 3¼ inches (front), 12¾ inches deep plus clearance for connections. Price: \$600. Warranty: "limited," two years parts and labor. Manufacturer: Matsushita Electric Industrial Co., Ltd., Japan; U.S. distributor: Panasonic Co., Div. of Matsushita Electric Corporation of America, 1 Panasonic Way, Secaucus, N.J. 07094.

hen we reported in March 1984 on the SL-P7—the bottom model in Technics's previous line of Compact Disc players-we noted with pleasure that it supported the company's reputation for value. At \$700, it was priced remarkably low for the time, and it performed quite well. Technics's new line (which, paradoxically, sports lower model numbers) follows in the same path, providing both design refinements and still lower prices. For example, the SL-P3 costs only \$600, yet it is the top model short of the \$1,500 SL-P15 CD changer.

The most obvious difference between the SL-P3 and its predecessor, the SL-P8, is in appearance. It is sleeker and darker, and the controls are on a gentle slope at the bottom of the front panel, making them easier to see and use. They also have a much nicer feelsmooth and positive, as opposed to the slightly stiff touch of the old models. One cosmetic change you won't see until you play a CD: Technics has added a feature it calls Disc Prism, which enables you to see the disc spinning in the player from the front as well as from above, even though the CD loads horizontally in All data were obtained using the Sony YEDS 7. Technics SH CD001 Philips $410\,055\,2$ and Philips $410\,056\,2$ test discs

FREQUENCY	RESPONSE





a slide-out disc drawer.

The player's electronic and mechanical design appear to involve no radical departures from previous Technics practice, although there is now a subcode output port on the back panel. This will enable you to display CD graphics, such as liner notes, librettos, scores, or even still pictures, when appropriately encoded CDs and the necessary video translation hardware become available. The SL-P3 also sports at least one feature that we've seen nowhere else; a volume control on its wireless remote handset, as well as on the front panel. (Some members of our staff are enamored of the player for that alone.) A six-step LED display indicates the control's approximate setting. The headphone output has its own VOLUME on the front panel, and there are fixed outputs on the back panel in addition to the variable set.

The SL-P3 also provides all of the virtually standard functions, such as repeat, pause, audible highspeed forward and reverse search, and forward and reverse track skipping. And it can be programmed from either the front panel or the remote handset to play as many as 15 tracks in any sequence. (Indeed, there are very few functions that cannot be performed from the remote as well as from the player itself.) This is done by means of a tenkey numeric pad and a memory button. A recall button enables you to review your selections, and a press of the clear button wipes the memory clean. The keypad can also be used in conjunction with the play button for direct access of any track or index point on the disc. A touch of the scan button will cause the machine to play the first ten seconds of each track on the disc (or in the programmed sequence) until you press either STOP or PLAY.

When you load a CD, the SL-P3's display panel tells you the total playing time in minutes and seconds and the number of tracks on the disc. A segmented bar graph to the left also indicates the number of tracks, up to 15. When you start play, the readout changes to show the track and index numbers and the elapsed time within the track; on the bar graph, the segment for the track being played blinks and then goes out when the track is over. Pressing the time-remaining button (on the front panel only) turns off the numeric track and index displays and changes the time readout to show how many minutes and seconds are left to the end of the disc. Pressing the button again returns everything to normal. This feature works only in regular, unprogrammed playback, however.

A slide switch next to the headphone volume control enables you to set the SL-P3 for automatic playback from an external timer—a

CHANNEL SEPARATION (at 1 h)	iz) 105 1/2 dB
CHANNEL BALANCE (at 1 kHz)	\pm < 1/4 dB
S/N RATIO (re 0 dB; A-weighter	4)
without de-emphasis	99 ¹ /2 dB
with de-emphasis	104 dB
HARMONIC DISTORTION (THD	+ N; 40 Hz to 20 kHz)
at 0 dB	≤ 0 014%
at –24 dB	≤ 0 051%
IM OISTORTION (70-Hz differen	ce; 300 Hz to 20 kHz)
0 to -30 dB	≤ 0 01%
LINEARITY (at 1 kHz)	
0 to - 70 dB no m	neasurable error
at -80 dB +	1/4 dB
at - 90 dB + 3	dB
TRACKING & ERROR CORRECT	ION
maximum signal-layer gap	mىر 900 <
maximum surface obstruction	> 800 µm
simulated-fingerprint test	pass
MAXIMUM OUTPUT LEVEL	
line output (fixed or variable)	2 07 volts
headphone output	8 47 volts*
OUTPUT IMPEDANCE	
line output (fixed or variable)	600 ohms
headphone output	72 ohms
SQUARE-WAVE RESPONSE (1 M	Hz)



IMPULSE RESPONSE



*Into an open circuit, 3 02 volts into a standard 50-ohm load

common feature on today's CD players. More unusual are the two other functions controlled by this switch: automatic pause and cue. The former puts the player into pause at the end of each track, the latter, at the beginning. Although these might at first seem of little value, they actually can be quite useful, particularly when dubbing CDs to tape for playback in your car deck or personal portable.

Diversified Science Laboratories' data show consistently excellent performance. Noise and distortion are very low, channel separation is much more than adequately wide (exceeding 97 dB from 100 Hz up), and linearity is superb even at very low levels. The frequency responses of the two channels diverge from each other very slightly (less than 1/2 dB) at the top and bottom of the audible range, but we would not expect this to be audible under normal circumstances. In themselves, both curves exhibit the characteristic flatness of the Compact Disc medium. Our tests for tracking and error correction are arguably the most important the lab performs on a CD player, and the SL-P3 passed them all quite handily. Output levels and impedances are well suited for connection to other equipment.

The SL-P3 operates very smoothly and efficiently. SEARCH, for example, starts out rather slowly, allowing fine adjustments of pickup position, but shifts to a higher speed after a few seconds of operation, so that you can cover a lot of ground quickly when you need to. Cueing is fast and precise, and the programming method is so easy that you probably won't even have to look at the manual to figure it out. We would prefer that the memory did not forget each track as soon as it ends (except in the repeat mode), which makes it impossible to skip back within the programmed sequence, but this is a minor point. And we are very pleased that the player supports indexing, which will be a real convenience as increasing numbers of indexed CDs become available. The control layout is in all respects logical and easy to use. Shock resistance is excellent laterally and good enough vertically that we would not expect any vibration-induced skipping in normal operation.

All in all, the SL-P3 is a fine, feature-packed performer at a very reasonable price. We'd be hard pressed to think of a competing player that offers more for the money, and we know of none that offers better sound.

MITSUBISHI HS-400UR VHS HI-FI VCR

Dimensions: 16¾ by 4 inches (front), 14¾ inches deep plus clearance for connections. Price: \$950. Warranty: ''limited,'' one year parts, six months labor. Manufacturer: Mitsubishi Electric Corp., Japan; U.S. distributor: Mitsubishi Electric Sales America, Inc., 3030 E. Victoria St., Rancho Dominguez, Calif. 90221.



Priced at less than \$1,000, the Mitsubishi HS-400UR is the least expensive VHS Hi-Fi VCR we've tested. It's also one of only two VCRs now available with a

BTSC decoder built in, so it's ready to take immediate advantage of stereo TV broadcasts as they become available. And though it cannot be said to match more expensive VCRs feature for feature, it is far from impoverished.

The HS-400UR's tuner covers mid- and super-band CATV channels (A through W) as well as the standard UHF and VHF broadcast frequencies. It does not receive the upper cable channels, however, which means that if your cable system uses them, you'll need an external converter. But since no means is provided for hooking up such a decoder so that it can be switched in and out, you will then also have to give up remote-control channel selection through the VCR's tuner. Otherwise, any 16 channels can be preset and either recalled directly via 16 numbered buttons on the remote or scanned by means of up/ down buttons on the main chassis. The tuner presets are programmed with controls hidden under a toppanel cover.

For unattended recording, there's a 14-day/4-event programmer with a repeat feature. The clock (which displays in international, 24-hour format) and programmer are set via buttons behind a flip-down door at the lower right of the main panel. Programs can be memorized in any order and cleared by calling up their numbers and pressing CLEAR. Pressing the programmed-recording button and turning on the power readies the deck for unattended recording, a condition indicated by a clock symbol on the display. We could find no indication in the owner's manual (which is less clear than we would like) of how long the memory is supposed to be retained in the event of a power failure; our sample lost memory after only a few seconds of power interruption. When power is restored, "EE:EE" appears in the display to indicate that an outage has occurred.

The clock and tape counter share the same four-digit display, with a pushbutton for switching between the modes when the flipdown subpanel door is closed. As soon as you open the door, the display goes into the clock mode, which is a convenience when programming the memory. Because so many other controls also lie behind the door, we often preferred to keep it open, forcing us to take the clock display even when we wanted the counter. But this is a matter of personal preference, and if you rarely fiddle with controls, it will hardly matter. The HS-400UR provides no tape-speed display, so you should be careful when setting the slide switch that selects recording speed. (Playback speed is set automatically.)

A three-position input selector enables you to choose between standard recording from the TV tuner, recording video from the tuner and sound from the direct audio inputs for simulcasts, and camera or audio-only Hi-Fi recording. (The deck requires line-level audio signals, so if you're using a microphone, you'll need an external mike preamp.) An audio output switch selects stereo from the Hi-Fi track, left channel only, right only, or the edge track. The HS-400UR neither records nor reproduces stereo on the edge track, so it will play back non-Hi-Fi stereo tapes in mono.

One particularly nice feature of the HS-400UR is one-touch memory rewind. Pressing STOP and then MEMORY rewinds the deck to counter zero; you don't have to press REWIND, and you can place the zero wherever you like by pressing RESET at the desired position on the tape. MEMORY does rewind the tape to a counter reading of zero, plus or minus a digit, but as in most other mechanical memory systems, this is sometimes slightly away from the point at which you pressed RE-SET. The deck automatically rewinds to the beginning of the tape when it reaches the end in the normal recording or playback mode, but this feature is locked out during programmed or OTR recording (see below) to prevent overrecording the beginning of the tape. It's also disabled in FAST FORWARD, to prevent the tape from shuttling backward when it reaches the end.

VCR SECTION

Except where otherwise indicated, the recording data shown here apply to all three speeds SP, IP, and EP (SLP) All measurements were made at the direct audio and video ouputs, with test signals injected through the direct audio and video inputs for VHS Hi Fi, the 0-dB reference input level is the voltage required to produce 3 percent third-harmonic distortion at 13 Fb, tor the standard audio recording mode, it is 10 dB above the voltage at which the automatic level control (ALC) produces 3 dB of compression at 315 Hz. The 0-dB reference output level is the output voltage from a 0-dB input

VHS HI-FI RECORD/PLAY RESPONSE (-20 dB)

HE-40008 (1)	
HZ 20 50 100 200 500 1K 2K 5K 10K 2	к

+ 1/4, -3 d8, 20 Hz to 19 kHz

STANDARD RECORD/PLAY RESPONSE (-20 dB; mono)

STANDAND HECON	D/FLAT HEST	01136 (-20	ao, mono/
DB HS-400MI (2)			
0			
-5			I L
HZ 20 50 100	200 500	1K 2K	5K 10K 20H
SP	+ 1, -3 dB	. 57 Hz to 9 2	kHz
LP	+ 1/2, -3	dB, 60 Hz to 3	.2 kHz
EP	+ 1 1/2, -3	3 dB, 59 Hz to	5 9 kHz
AUDID S/N RATID (re D-dB outpu	rt: R/P: A-w	eichted)
	standard		VHS Hi-Fi
SP	45 dB		83 1/2 dB
LP	45 dB		85 #8
EP	46 dB		85 dB
INDICATOR CAURS			
INDICATOR CALIBR	ATTUN (315 P	IZ; VIIS MI-PI	
for 0-dB input			8b8+ <
for -10-dB input			\approx + 5 dB
DISTORTION (THD	nt —10-dB inp	ut; 50 Hz to !	5 kHz)
	standard		VHS Hi-Fi
SP	≤ 2.8%		≤ 1 05%
LP	≤ 3.9%		≤ 0 94%
EP	≤ 3 9%		≤ 0 99%
CHANNEL SEPARAT	FION (315 Hz;	VHS Hi-Fi)	68 1/4 dB
INDICATOR "BALLIS	STICS"		
Response time			3 2 msec
Decay time			≈ 600 msec
Overshoot			0 dB
FLUTTER (ANSI we	ighted peak; I	R/P; average)
	standard		VHS Hi-Fi
SP	±0.30%		±0.021%
LP	±022%		± < 0 01%
EP	±0 34%		± < 0 01%
SENSITIVITY (for 0	dB output; 31	15 Hz)	
VHS Hi-Fi			437 mV
standard			835 mV
AUDIO DUTPUT LEV	EL (from 0-di	B input; 315	Hz)
VHS Hi-Fi			1 87 volts
standard			0 235 volt
AUDIO INPUT IMPE	DANCE (VHS	Hi-Fi)	44k ohms
VIDED RECORD/PL			
	SP	LP	EP
at 500 kHz	- 1/2 dB	- 1/4 dB	- 1/4 dB
at 1.5 MHz	_4 1/2 dB	-9 1/4 dB	-8 3/4 dB
at 2.0 MHz	-10 dB	-15 1/4 dB	-14 1/4 dB
at 3.0 MHz	•		
SHARPNESS CONT			
at 500 kHz	+ 1 1/4, -		
at 1.5 MHz	+ 5, -3 3/		
at 2.0 MHz	+ 8, -5 3/		
3.0 to 4.2 MHz	no measural	ble effect	
LUMINANCE LEVEL			
SP			15% low
LP			10% low
EP			10% łow

From STOP or PAUSE, the HS-400UR goes into recording as soon as you press RECORD. That's quicker and more convenient than a twobutton safety interlock (pressing both RECORD and PLAY). The deck also incorporates what is called one-touch recording. When you press OTR from the stop mode, recording starts immediately and the display switches to indicate the time remaining before automatic shutoff. Each press of the button increases the recording time by 30 minutes to a maximum of two hours.

From PLAY, you can search forward or backward by pressing FAST FORWARD or REWIND. The sound is muted, and because this is a twohead deck, SEARCH works best on tapes recorded at the EP speed. Pressing PAUSE presents a stillframe picture, but there's no frame advance. The remote permits slow forward motion as well as channel selection, rewind and fast forward (with search if you're in PLAY), normal playback, recording, pause, stop, and power on/off. Mitsubishi's manual suggests that it's possible to record a monaural SAP (separate audio program) on the edge track while simultaneously recording the main stereo broadcast on the VHS Hi-Fi track, selecting between them in playback via the output switch. This feature could not be checked in the lab, but we see no reason why it shouldn't work.

Diversified Science Laboratories tested the HS-400UR's audio recording performance in both the VHS Hi-Fi and standard edge-track modes, setting recording level manually for the former and using the deck's automatic level control (ALC) for the latter. With Hi-Fi recording, response is flat within 1/2 dB from 50 Hz to 10 kHz, rolling off gently at the extremes of the spectrum to -3 dB at 19 Hz and 19 kHz. Response at the -20-dB test level is the same at all three speeds, and the tracking of the VHS Hi-Fi's noise reduction system is essentially perfect.

Edge-track response is good, extending almost to 10 kHz at the SP speed. It is least impressive at the intermediate LP speed, which exhibits a gentle high-frequency rolloff. Flutter barely exceeds our reporting minimum with Hi-Fi recording, and then only at the SP speed. Certainly it's negligible compared to that of conventional audio recorders. The same can't be said for the edge track, where average peak flutter ranges from ± 0.22 to ± 0.34 percent, with maximum readings slightly higher across the board.

Distortion also is much lower in the Hi-Fi mode: 1 percent or less from 50 Hz to 6.3 kHz and less than 2 percent at 10 kHz at 10 dB below our standard recording level. Actually, this is the maximum distortion you're likely to encounter if you set levels manually. DSL takes the 3-percent THD (total harmonic distortion) point as a reference and measures distortion 10 dB below that level. On the HS-400UR, our reference is well beyond the maximum indicator reading, and even at the distortion-measurement level, all but the final red segment are lit. On the edge track (recorded with the ALC on), low-frequency distortion ranges from 3 to 4 percent, depending on tape speed. The Aweighted signal-to-noise (S/N) ratio varies from 83 1/2 dB at the SP speed to 85 dB at the two slower speeds in the Hi-Fi mode, a giant step above the 45 to 46 dB measured on the edge track.

Output level, input and output impedances, and recording sensitivity seem well suited for use with other equipment, whether recording on the edge track or in the Hi-Fi mode. Channel separation in the Hi-Fi mode is more than adequate, and the peak-reading indicators attack quickly and have a decay time long enough for the eye to respond.

The recorder section's video response (which determines horizontal resolution) is down 10 dB at 2 MHz even at the fastest speed and almost as much at 1.5 MHz in the

GRAY-SCALE NONLINEARITY (worst case)				
SP	≈17%			
LP	$\approx 119_0$			
EP	= 17%			
CHROMA LEVEL				
SP	6 dB low			
LP	6 1/2 dB low			
EP	7 1/2 dB low			
CHROMA DIFFERENTIAL GAIN	$\approx 10\%$			
CHROMA DIFFERENTIAL PHASE	see text			
MEDIAN CHROMA PHASE ERROR	≈ + 10°			

TV TUNER SECTION

All measurements were taken at the direct audio and video outputs

AUDID FREQUENCY RESPONSE (mono)

DB III-4449 -5 HZ 20 50 100 200 500 1K 21 IOK 20 + 2. -3 dB. 51 Hz to 13 kHz AUDID S/N RATID (mono; A-weighted) best case (no luminance or color) 41 1/2 dB worst case (crosshatch display) 15 dB RESIDUAL HORIZONTAL-SCAN COMPONENT (15.7 kHz) 83 1/2 dB MAXIMUM AUDID DUTPUT (100% modulation) 1 95 volts stereo 0.30 volt **200**000 AUDIO OUTPUT IMPEDANCE 1 100 ohms **VIDED FREQUENCY RESPONSE** + 1/4 dB at 500 kHz 1 dB at 1.5 MHz at 2.0 MHz 1 dB at 3.0 MHz 1 dB at 3.58 MHz 1 dB at 4.2 MHz 171 a dB 10% high LUMINANCE LEVEL **GRAY-SCALE NONLINEARITY (worst case)** $\approx 14\%$ CHROMA DIFFERENTIAL GAIN $\approx 30\%$ CHROMA DIFFERENTIAL PHASE = + 6" **CHROMA ERROR** phase level red + 1 1 4 dB + 7 + 1 dB + 8* magenta blue + 3 1/4 dB + 5 + 12° 0 dB cyan + 1 2 dB $+10^{\circ}$ green 1 4 dB $+10^{\circ}$ yellow median error + 1 ⁺ 2 dB +812 + 2 dB uncorrectable error

Too low to measure

REPORT POLICY

Equipment reports are based on laboratory measurements and controlled listening tests Unless otherwise noted, test data are provided by Diversified Science Laboratories. The choice of equipment to be tested rests with the editors of High FIDELITY. Samples normally are supplied on loan from the manufacturer Manufacturers are not permitted to read reports in advance of publication, and no report or portion thereof may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples test ed. High FIDELITY and Diversified Science Laboratories assume no responsibility for product performance or quality.

LP and EP modes. You can improve the resolution by turning up the SHARPNESS (which is on the back panel and operative only in playback), but at the expense of increased video noise. If you find the video noise obtrusive as is, turning the SHARPNESS down will help reduce it, but resolution will drop accordingly.

The luminance level of the reproduced video is quite close to the mark, and gray-scale linearity is about average. Chroma level is 6 dB low at the fastest speed and drops a bit more at the slower ones, but this and the 10-degree average chroma phase error can be corrected at the monitor. Chroma noise is high enough to conceal from the lab's instruments whatever chroma differential phase may exist. Chroma differential gain is respectably low, but this measurement also was hard to make because of the higherthan-average noise.

In most respects, the tuner's video performance is very good. Re-

sponse is almost perfectly flat to 3.58 MHz (the color-burst frequency), yielding a horizontal resolution of about 300 lines when the tuner is connected directly to a good monitor. Chroma noise is notably low, luminance level is only slightly off standard (by an amount approximately equal and opposite to the recorder's error), and gray-scale linearity is at least par. The chroma differential gain is all at the highest luminance level, as is most of the chroma differential phase. Thus, both color saturation and hue should remain stable over a very wide range of scene brightness.

The median chroma level is quite accurate, but there is more spread from high to low (which constitutes uncorrectable error) than we've seen in some other tuners. The median hue (chroma phase) error is approximately 81/2 degrees, but the spread is only $\pm 31/2$ degrees. It should be possible to bring all colors close to their proper values simply by adjusting the color and tint controls on your monitor.

On the audio front, the HS-400UR's tuner performs quite well. Response is within +2, -3 dB, from about 50 Hz to 13 kHz, with most of the plus-side deviation occurring in the brightness region around 6 kHz. Output plunges above 13 kHz, no doubt because of a sharp horizontal-scan filter. But as a result, residual 15.7-kHz whistle is an inaudible 83 1/2 dB down—a good tradeoff, in our view. With normal video, overall noise is adequately low, but certain test patterns can cause considerable buzzing.

The HS-400UR is not an allstops-out VCR, but it doesn't carry an all-stops-out price tag either. Nonetheless, it delivers reasonable performance and an array of features that covers all the basic needs, plus a good bit more. Particularly appealing is the inclusion of a stereo TV tuner—a rare touch at present, and one that will keep the deck from slipping rapidly into obsolescence.

JENSEN ATZ-500 CAR RECEIVER/TAPE DECK

Dimensions: 71/8 by 2 inches (chassis front), 51/2 inches deep; escutcheon, 71/2 by 21/4 inches; "nose," 4 by 13/4 inches; main shafts, 51/8 to 53/4 inches o.c. Connections: flat male/female for ignition, battery, power antenna, and power sensor (for outboard amp, etc.); spade lug for ground; female pin jacks for preamp output; bared wires for four speakers; standard coaxial female for antenna input. Fuses: 8-amp in ignition line, 1-amp in battery line. Price: \$520. Warranty: "limited," one year parts and labor. Manufacturer: made in Japan for International Jensen, Inc., 4136 N. United Parkway, Schiller Park, III. 60176.

I ensen has lavished a lot of fresh thinking on its ATZ-500 "computer controlled" front end. You're struck by it immediately upon viewing the faceplate, which has pushbutton arrays mounted on "ears" that replace the usual knob clusters and are attached to the main chassis by flexible ribbon cables. The readout is a multifunction LCD panel mounted on a door that flips down to reveal the secondary controls. Those that are rotary

(bass, treble, balance, and fader) still aren't conventional knobs, which presuppose two-finger manipulation. Instead, they have concave surfaces whose "nonskid tread" is just right for single-finger operation.

If you're mounting the ATZ-500 yourself, you'll also notice that the power connectors both accommodate the tab of a male connector and have their own tabs—which can be broken off or covered with

FM TUNER SECTION

FREQUENCY RESPONSE & CHANNEL SEPARATION





tape to prevent shorts if you're not using them. This arrangement increases your chances for a straightforward installation. (Not all car stereo hookups presume the flat connectors in the first place, but many do, often putting the male, inappropriately, on the hot side.) The control-panel ears mount at the ends of threaded studs that replace the control shafts of conventional designs.

Hidden down inside one of the mounting studs is a screwdriver adjustment that can be used to optimize the LCD for different viewing angles-another example of Jensen's concern for driver conveniences. In a similar vein is a beep tone emitted when the ATZ-500 receives and executes a command. It is a real help sometimes when you're more concerned about the road than about the adjustment you're making. If you don't like being beeped at, you can turn the feature off with a switch on the back of the chassis.

The control concept favors automated over manual tuning. The latter is relatively slow in its pace across the dial (though it does move in whole-channel increments on both FM and AM) and uses small buttons that aren't easy for a driver to see. Instead, you can press one (up or down) of the seek/scan buttons (whose function is chosen at a switch on the panel behind the door) or run through the presets either manually or with the preset scan. You can also go for "tuner advance," which gives up on any signal of less than 42 dBf (strong enough for excellent mono reception or marginal stereo) and automatically seeks out the next acceptable station. Given all these convenient alternatives, you may find that you need manual tuning only to adjust the presets.

Like all companies that seek to make FM listening as pleasurable as possible in a moving car, Jensen has juggled output, channel separation, and noise suppression against each other, adding variable highfrequency filtering. These adjustments, made on the basis of received signal strength, are termed APC (Automatic Program Control). The tuner section also includes DBM (Double-Tuned/Double-Balanced Mixer) circuitry, which is said to promote clean reception of weak signals.

Subjectively, the results of all this are quite good. On the weak, multipath-ridden station we use for our road tests, "spitting" was only moderate and was relatively subdued in quality. The bench measurements show how channels are blended to help control noise on fading stations. Separation is 20 dB or more (enough for good stereo) down to about 48 dBf, but diminishes to effectively mono reception at signal strengths of less than approximately 40 dBf. (This rapid transition occasionally produced sudden image fluctuations on the road.) Stereo reception of full-strength stations yields a maximum signal-to-noise



AM TUNER SECTION

FREQUENCY RESPONSE



(S/N) ratio of about 55 dB. The mono S/N ratio is slightly better than 70 dB from just above 55 dBf to the limit of testing.

Because the ATZ-500 has no mono switch, the mono figures apply strictly to stations that are broadcasting with no stereo subcarrier. However, the APC's progressive channel blend (particularly in the highs) does all that can be done to move performance in that direction. By the standard rating method, the Jensen's mono sensitivity is moderate and its stereo sensitivity fair. Frequency response, on the other hand, is unusually good for a car tuner, and its flatness pays off in listening quality. Alternatechannel selectivity also is very good, while capture ratio is fairly typical of the units we've tested.

The AM section's performance also is fairly typical. Response drops off a little earlier and more precipitously than average at the high end; in the bass, the responsecurve "peak" actually represents distortion, rather than signal, as often is the case. (That's why we offer a numerical response characterization only at the top end.) The remaining AM data are squarely in the middle of the field. Listening quality is a touch on the tubby side with the tone controls set to their "flat" positions, though intelligibility remains good-as does stationpulling power.

Azimuth agreement between the cassette deck and the lab's BASF test tape was good in the forward direction of play, not as good in reverse. The disparity suggests that an attempt to improve the latter would only compromise the former; in any event, the deck delivers significantly flatter response than many other car units do. It is about par in speed accuracy and stability—meaning that we could detect no pitch waver in our bumpy-road test.

Adding to the tape deck's utility is switching for both types of Dolby noise reduction (B and C) and for playback equalization. The deck turns on when you insert a cassette, whether or not the tuner is on. If it is, and you choose "tuner standby," it will play during any gaps in the deck's output, such as during fastwind or seek. The latter can be used in conjunction with the presets keypad to program the deck to skip as many as six selections in either direction. The REPEAT will rewind the tape at the end and replay the side, instead of reversing the transport and playing the other side.

The ATZ-500's built-in amplifier can be wired to separate front and back speaker pairs or bridged to deliver increased power to a single pair. You can then upgrade the system by adding an external stereo amplifier, fed from the preamp output, to drive a second speaker pair. The changeover couldn't be easier: Jensen supplies wiring diagrams and a chassis switch that puts the fader either ahead of the preamp output (to adjust preamp output relative to the bridged internal amp's output) or after it (to adjust front and back amp outputs relative to each other-and enabling you to run a subwoofer pair from the preamp output unaffected by the fader setting).

The amplifier itself measures 12 dBW (16 watts) per side in the bridged configuration—a bit more than some comparable amps we've tested. Presumably, output is around 6 dBW (4 watts) into each of four speakers, which is about par for an unbridged amplifier working from a 12-volt power supply.

The loudness compensation adds some boost in the bass and somewhat less in the treble. Maxima are at about 50 Hz and 13 kHz where, at the test volume setting, the LOUDNESS adds 6 1/2 and 4 dB, respectively. The BASS and TREBLE are very much what we've come to expect.

In the owner's manual—which is considerably more communicative and better organized than average—Jensen comments as follows on the controls hidden behind the LCD display: "These functions require very infrequent adjustment and should be set or changed only when [the car is] parked. Since they are not designed for adjustment while driving, [they] are not confirmed by a tone signal." This, it seems to us, is the key to the design's philosophy. To a rare degree, the ATZ-500's creators have returned to the on-the-road experience in setting their priorities, rather than accepting convention or electronic theory as their guide. The result is one of the most intriguing front ends we've tested, with a unique and uniquely roadworthy personality.

CASSETTE TRANSPORT SECTION

FREQUENCY RESPONSE

SPEED A	CCU	RACY	(10.8	to 14.	4 volt	s}	<	≤13%	fast
WOW &	FLUT	TER		+	< 0.23	3% avg	* <	0 32%	peak.
	rev	erse		+	34	3 dB 4	18 Hz t	0 15 5	kHz
	for	ward		+	1.1/2.	-3 dB	50 Hz	to 17	5 kHz
HZ 20	50	100	200	500	1K	2K	5K	10K	20K
-5	Æ	-	+		+	+	+	-	1
0	00 (4)	-	-	-	-	-		-	*

PREAMP/AMPLIFIER SECTION

BASS CONTROL	+ 10 -11 1/2 dB at 100 Hz
TREBLE CONTROL	+ 11 -11 1/2 dB at 10 kHz
LINE OUTPUT IMPEDANCE	1 480 ohms
MAXIMUM LINE OUTPUT L	EVEL.
from FM (100% modulation	1 25 volts
from tape (OIN 0 dB)	1 25 volts
OUTPUT (per channel into 4	l ohms; at 3% THO + N)
at 1 kHz	16 watts (12 dBW)
See text	

PANASONIC CQ-S934 CAR RECEIVER/TAPE DECK

Dimensions: 7 by 2 inches (chassis front), 51/4 inches deep; escutcheon, 71/2 by 21/4 inches; "nose," 41/2 by 2 inches; main shafts, 51/8 or 53/4 inches o.c. Connections: flat female plus female-to-female adapters for ignition and battery, round female for power antenna, female pin jacks for preamp output, bared wires for four speakers, standard coaxial female for antenna input. Fuse: 3-amp in ignition line. Price: \$350. Warranty: "limited," one year parts and labor. Manufacturer: Matsushita Electric Industrial Co., Ltd., Japan; U.S. distributor: Panasonic Co., Div. of Matsushita Electric Corporation of America, 1 Panasonic Way, Secaucus, N.J. 07094.



ne of the fun aspects of reviewing car stereo components is seeing the innovative ways manufacturers tackle the quagmire of problems encountered in mobile music systems. And Panasonic's new CQ-S934 provided us with a number of opportunities, packing a lot of features behind a relatively unpretentious faceplate. First, let's look at the ergonomics, or ease of handling.

Panasonic has designed its front end for convenience by offering large multifunction controls and switches. (Some manufacturers present the user with a host of tiny controls apparently designed for people with pencil-thin fingers.) The simple control scheme puts tape transport buttons next to the cassette slot, tape electronics (noise reduction and EQ) and tuner controls at the bottom, and a single orange multipurpose LCD readout screen between them. Not only are the switches easy to operate, but the legibility of the faceplate labeling is better than average, which

helps sort out the push/pull options of the main control shafts.

Most novel among the features is what Panasonic calls Daily Priority Station (DPS). It works rather like a clock-radio alarm, automatically switching to a preset station at a set time each day-say, for a traffic report. If you're listening to another station when the clock reaches the time to which the DPS has been set, it switches to the traffic report; if you're listening to a tape, "DPS" will flash on the LCD, reminding you to switch, but there will be no automatic interruption.

Although Panasonic uses a nondetented design for the controls on the CQ-S934, we easily estimated the "proper" settings for bench testing. Diversified Science Laboratories fed in a mono FM signal, then adjusted the BASS and TREBLE for equal output at 1 kHz (as a reference), 100 Hz (to flatten the bass), and 10 kHz (for the treble). These settings were used as the "flat" reference for all tests. On the road, we approximated the same settings by

Reference frequency response for all tests was derived by setting the tone controls for equal output at 100 Hz 1 kHz and 10 kHz with a mono FM input See text

FM TUNER SECTION

FREQUENCY RESPONSE & CHANNEL SEPARATION



ear. The resulting FM response was excellent, with just a slight (1/2 dB) rise between 2 and 10 kHz.

Separation is more than wide enough for good stereo imaging, and the reduction at high frequencies minimizes noise in stereo. In this respect, the separation curve is just about ideal for "full strength" signals. But the real challenge for a car unit is in how the tuner section handles weak or fading signals. For this. Panasonic uses what it calls an automatic FM Optimizer (FMO): a circuit designed to hold onto weak signals as long as possible, gradually switching to mono and finally rolling off the treble if noise becomes too prominent.

Full-strength signals are a rarity on our mountain-laced test track, providing an ideal challenge for this unit. Some noise began to creep in as signal strength faded. The CQ-S934 holds full separation down to about 45 dBf. At about 40 dBf, separation decreases rapidly to essentially mono reception, which can create some image fluctuation in a moving car. "Spitting" (bursts of noise and distortion due to multipath interference or varying signal strength) is well controlled and dull enough in quality to be relatively unobtrusive.

AM reception is clean (even in the deep bass, where many tuners generate heavy distortion) and exceptionally flat up to 1 kHz. Highs begin rolling off immediately above this frequency—gently at first, then with increasing rapidity. Although this takes a little sparkle from the sound, the loss is more than offset by the elimination of the ponderousness found in the responses of some other AM sections and of the noise and interference that greater bandwidth can admit.

As the tops of the cassette playback response curves show, the azimuth of the tape head does not precisely match that of the lab's standard BASF test tape, particularly in the forward direction of tape travel. We noted this on our road-test sample as well, but found that we could substantially alleviate the resulting dullness by turning up the treble control. The deck's speed accuracy is exceptional, and measured flutter is typical of this level of front end. Performance was equally good on the road; once the transport settled into playback, we could hear little waver even with hard road shocks.

Panasonic's inclusion of DBX noise reduction increases the options available to the tape collector (or maker). DBX and Dolby B share a single stepper switch. Which one is on is indicated by illuminating logos at opposite ends of the LCD panel, Dolby on the right and DBX off the left. If neither is on, there is no noise reduction.

The CQ-S934 has no loudnesscompensation button, but the BASS can be readily used for that purpose. Both tone controls are conventional in behavior. Even though we prefer the type with center detents as an aid to keeping track of control settings, the fact is that in car stereo systems they have little other value and may even discourage you from making adjustments that might improve the sound from typical speakers.

Color-coded wire pairs make four-speaker hookup easy, and directions are included for paralleling front and back pairs to defeat the fader for two-speaker installations. At 6 1/4 dBW (a little more than 4 watts) per side, output is typical of moderate-price "aftermarket" models and heftier than you might get from a factory-installed radio. If you want more power, you can use the paralleled outputs to drive one pair of speakers and an external amp connected to the preamp outputs to drive a second pair, with the amp's own level controls functioning as a fader/balance.

Incidentally, the "Bantam" logo at the bottom left of the faceplate refers to the unit's size, which is smaller than average. Panasonic credits this to the use of a single IC in the tuner section, instead of the three in prior models.

Overall, the CQ-S934 provides good performance and flexibility. Particularly noteworthy are its inclusion of DBX noise reduction and its functional, uncluttered front panel. If you're looking for a moderately priced car receiver/tape deck, be sure to check it out.

CAPTURE RATIO		3 3/4 dB
SELECTIVITY (alte	mate-channel)	60 1/4 dB
AM SUPPRESSION	I	53 ¹ /2 dB
DISTORTION (THO	+N)	
	stereo	mono
at 100 Hz	1.3%	1.6%
at 1 kHz	1.0%	1.2%
at 6 kHz	1.4%	2.1%

AM TUNER SECTION

FREQUENCY RESPONSE

AVC RANGE	73 1 2 dB
SELECTIVITY	see text
SENSITIVITY	4.4 µV
	+ 1/2 -3 dB, 20 Hz to 2 3 kHz
HZ 20 50 100 200	500 1K 2K 5K 10K 20K
- 10	
-5	
0	CQ 5934 (3)
DB	

CASSETTE TRANSPORT SECTION

FREQUENCY RESPONSE

DB		Г		1	T	T	
-5				-	-	1	
HZ 20 5		0 500	115	2%	5K	TOK	20K
	lorward	+	1/2	3 dB 31	I 5 Hz	to 8 5	kHz
	reverse	+	1.2	3 dB - 31	5 Hz	to 12	5 kHz
WOW & FI	UTTER	+	± 0 2	4% avg	+ ≤	0 334	e peal
	UTTER				<u>+</u> ≤	0 339	

0.2% alout to 0.2% for

PREAMP/AMPLIFIER SECTION

BASS CONTROL	+ 9 3 4 -10 3 4 dB at 100 Hz		
TREBLE CONTROL	+ 10 1 4 12 1 2 dB at 10 kHz		
LINE OUTPUT IMPEDANCE	480 ohms		
MAXIMUM LINE OUTPUT LI	EVEL		
from FM (100% modulation)	0 625 volt		
from tape (OIN 0 dB)	0 600 volt		
OUTPUT (per channel into 4	l ohms; at 3% THO+N)		
at 1 kHz	4 2 watts (6 1 4 dBW)		

MEDLEY

Edited by Georgia Christgau and Ted Libbey



More Treasures From Dresden

With the establishment of the Compact Disc as a highly desirable medium has come the inevitable duplication of repertory: First it was Pachelbel's Canon and Vivaldi's Four Seasons, and now, as manufacturers gear up for larger projects, it is the Beethoven Piano Concertos. No fewer than four complete sets have appeared in the last year, featuring soloists Rudolf Serkin (Telarc), Alfred Brendel (Philips), Maurizio Pollini (Deutsche Grammophon), and Vladimir Ashkenazy (London). Two more are now in the works.

Dresden is the scene for the most recent of them, a collaboration between V.E.B. Deutsche Schallplatten and Philips with the distinguished American pianist Claudio Arrau and the Staatskapelle Dresden conducted by Colin Davis. It is Arrau's third recorded traversal of the Beethoven cycle and is slated for completion by the end of this year. Originally, the project was to have involved conductor Eugen Jochum, who finished the recent cycle for Deutsche Grammophon-with Pollini and the Vienna Philharmonic-that was left incomplete at the death of Karl Böhm. An illness forced Jochum to cut back on the number of his commitments, however, and Philips turned to Davis to conduct the Dresden sessions, which began this past autumn with tapings of the Fourth Concerto and the Emperor. (The sessions have been taking place in the Lukaskirche, site of many of the Staatskapelle Dresden's sonically outstanding recent recordings.) Arrau's previous Beethoven cycles were made in the mid-1950s with Alceo Galliera and the Philharmonia Orchestra and in the 1960s with Bernard Haitink and the Concertgebouw Orchestra of Amsterdam.

As this issue of HIGH FIDEL ITY appears, the first CD installments in another Beethoven Piano Concerto cycle—with Russell Sherman and the Czech Philharmonic conducted by Václav Neumann—should be in release courtesy of Pro Arte, which is producing the set in conjunction with Supraphon. *Ted Libbey*

Big Buzzard

In a market glutted with radio stations that spend hundreds of thousands of dollars attempting to win the largest share of Cleveland's eighteen- to forty-nineyear-olds, WMMS-FM (100.7) has been on top since the summer of 1983. *Rolling Stone*'s national Readers' Poll recently named the "Home of the Buzzard" No. 1 for the sixth consecutive year.

Cleveland—home of '50s deejay Alan Freed, who is credited with inventing the term "rock and roll"—got a lot of negative press in the early '70s when water pollution caused the Cuyahuga River to catch fire, and later in the decade when the city declared bankruptcy. WMMS conscjentiously developed its own image by identifying with Cleveland, for better or worse. "They've driven home the idea that this is the rock 'n' roll capital of the world," says John Frolik, radio industry reporter for the Cleveland *Plain Dealer*. "We've been given a bad rap the past ten years, and 'MMS gave people something to be proud of. They've built up a mystique."

To do that, the station shells out \$150,000 annually on promotion, although operations manager John Gorman says that's less than many of its competitors spend. The buzzard logo, which shows up on promo Tshirts and bumper stickers all over Cleveland, is a success story in itself. It was designed 11 years ago against the wishes of Malrite Communications Group, Inc., the station's owner. "We were at the bottom of the heap," Gorman remembers. The bird of prey depicted "something that was near to death.... We needed anything. Today the owner's apartment walls are probably lined with buzzards."



The NBC affillate has a sliding playlist, based on what's current; the 60-plus songs receiving heavy airplay are heard in a sixand-a-half-hour rotation. The biggest competitor, WGLC-FM (98.5), works with a 35-song list, but its president, Kim Colebrook, labels the other guys "a tired AOR station" who were much less conservative when they started 17 years ago. Naturally, Gorman disagrees. "We avoided the modal formats of the '70s, and we're not AOR today. This is a rock 'n' roll station. We are not

afraid to play anything."

Last year, in a promotion that played the *Rolling Stone* award to the hilt, WMMS sponsored free concerts by Eurythmics and the Thompson Twins/ Berlin. Attendees, who invited themselves via self-addressed stamped envelope, were named on the air. The first show attracted 3,500 people; the second, an outdoor affair, drew nearly 19,000. Mayor George Voinovich proclaimed a "WMMS Day."

Although the station claims to have always had an ear for black music, it didn't inundate listeners with Michael Jackson's 1983 *Thriller* until it had bankrolled the Jacksons' "Victory Tour" well into 1984. The black community felt a bit chagrined (and left out) by this mutual admiration society.

But the Buzzard's stronghold on the Cieveland market doesn't seem to be in jeopardy. Music director and mid-afternoon announcer Kid Leo has been with the station 12 years; he, like some of his counterparts. went to school in Cleveland and remained. Like the buzzard logo. he's well known throughout the city. And like many WMMS announcers he emcees concerts and charitable events. Comments Frolik, "Leo caught on to Bruce Springsteen early. He broke him here. This was Springsteen's first market off the East Gorman Coast. And is streetwise." Frolik does sense an air of "arrogance, ... a kind of swaggering," since WMMS became No. 1. But, he acknowledges, "they know what people want to listen to."

Jonathan W. Poses

When the Doors Didn't Open

A cool classicist and a soldier for social equality



American conductor Dean Dixon

by Noah André Trudeau

Harlem in the first decades of this century was a community about to boil over in an eruption of black literary and artistic talent. Once that happened, the vital, gritty reality of Harlem life was able to find its

sound in the soul-releasing rhythms of jazz and its voice in such writers as Langston Hughes. Yet from this same creative maelstrom emerged a cool classicist, a symphonic conductor whose major accomplishments in the cause of social equality would come to overshadow his not inconsiderable interpretive achievements.

Dean Dixon was born January 10, 1915. His father, Henry Charles, was a Jamaican trained in law who quickly discovered that America's white legal system had no room for black barristers; he supported his family by working as a callboy in a hotel. Dixon's Barbadosborn mother, McClara, had no musical training but believed she could recognize the talent when she saw it in her son. "When I was three and a half," Dixon remembered, "I made the mistake of walking around the dining room table with two sticks which my mother swears were in a violin position, and that was it."

Even though the family hoped he would go to medical school, young Dean's musical instincts were encouraged. Practicality had a lot to do with it: Dixon suffered from asthma, and his parents reasoned that he could teach students at home while he was convalescing from an attack and thereby not miss a paycheck. Medical school remained the goal until the end of high school, when the head of the music department took the parents aside. "What are you going to do with his musical talent," he asked them, "throw it away in medicine?" A letter to Walter Damrosch got Dixon enrolled at the Juilliard School of Music as a violin major.

Dixon's metamorphosis into a conductor came about as a way of fighting the system. Change was in the air in the early '30s, and it was apparent that efforts by the NAACP and other groups would soon pressure more and more organizations into giving blacks a chance. But Dixon realized that calling up jazz-trained black instrumentalists to audition for symphony jobs would lead nowhere. "I felt what we needed in Harlem was a symphony orchestra. If once a week... these men had a chance to go through the symphonic literature, at least they'd know the difference between the jazz rhythms they are playing and the way Beethoven writes the same rhythm...."

He began his ensemble at a Harlem branch of the YMCA and called it the Dean Dixon Symphony Orchestra. For the next few years, he worked patiently with this and other semiprofessional ensembles (most of which he organized). In 1941, Samuel Chotzinoff heard him conduct and offered him two concerts with the NBC Summer Symphony. Dixon's professional premiere was impressive. "The men gave him everything he asked for," wrote The New York Times. "From the very beginning he was master of the situation." Other engagements followed-with the summertime versions of the New York Philharmonic, the Philadelphia Orchestra, and the Boston Symphonyand in 1948, Dixon was awarded the Alice Ditson Award for Outstanding Contributions to American Music.

Taking a cold, hard look at his life, Dixon realized that these successes, which would have been a springboard for a young white conductor, actually marked the end of the line for a black American. "It suddenly dawned on me that these first opportunities were a gesture in [what was becoming a] confrontation between black and white America. I suppose I could have enlisted help ... but I wanted my music, not my color, to open doors." So Dixon left the United States for Europe, saying later, "I had kicked myself out of America, and even if I hadn't, they weren't interested in helping me. Because helping an American Negro in my field [means admitting that we Negroes possess] a leadership ability that America says we don't."

The career ladder he began to climb in Europe was not without its own stumbling blocks of prejudice, but gone from the construct was America's institutionalized racism. "When I first went to Stockholm," Dixon recalled, "a Swedish orchestra was asked about having me as a guest conductor, and the answer was, 'Well, if he will do it in whiteface with white gloves on, then it's all right.' One year later they asked me to be their conductor." He led the Göteborg Symphony from 1953 to 1960. Subsequent positions included principal conductor of the Frankfurt Radio Symphony Orchestra (1961–70) and principal conductor of the Sydney Symphony Orchestra (1964–67). Guest invitations added more orchestras to the list.

There was never any evidence of bitterness on Dixon's part toward his homeland. Indeed, he programmed American works to the point where Virgil Thomson could write, "He has used his distinguished abilities not only to prove abroad that Americans can conduct but also to prove that they can write music." Dixon made it clear that while he had no intention of moving back to America, he'd be happy to guest conduct here. The first opportunity came in 1970, and the result was a triumph. A summer concert with the New York Philharmonic "brought the great throng to its feet in a standing, especially thrilling, ovation." A 1975 appearance with the Philadelphia Orchestra was "brilliant and exciting." Tragically, these accolades were to serve as Dixon's epitaph. The years of fighting the system and living the strain any expatriate-by-principle feels took their toll: On November 4, 1976, Dixon died in Switzerland at the age of sixty-one. In an interview with reporter Ernest Dunbar given in 1968 (published in The Black Expatriates from E. P. Dutton), Dixon summed up his social accomplishments this way: "I feel that my role has been ... to make as many successes as possible. Because those successes mean that when the next Negro comes along, he won't get the rebuffs that I got."

What kind of conductor was Dean Dixon? His recorded legacy provides the opportunity for an evaluation. That legacy is surprisingly large, though scattered among many small labels. I've been able to identify nearly 30 separate discs on perhaps a halfdozen of them, encompassing music from the Classical to the modern periods. Dixon was at heart a classicist whose readings reveal a preoccupation with clarity and precision. While he may lack the abandon of the stereotypical American conductor, his interpretations have a definite "rightness" to them.

Dixon's records often require some effort to track down, but many are worth it. Without hesitation I'd recommend his poised yet perky readings of Haydn's Symphonies Nos. 48 ("Maria Theresia") and 92 ("Oxford") on Musicaphon SL 1709 and his fluid, transparent interpretations of the two symphonies of Carl Maria von Weber on SL 1710 [available from André Perrault, P.O. Box 8310, Virginia Beach, Va. 23450]. Both discs feature the Prague Chamber Orchestra. In the American vein, first choice goes to two items on old, long-out-of-print ARS pressings: Howard Hanson's Fourth Symphony (ARS 6) and Howard Swanson's Short Symphony (ARS 116). I wish I could be more enthusiastic about the Desto reissues of works Dixon originally set down in the 1950s for the American Recording Society. The sonics, even then, were far from state-of-the-art, and some of the performances have since been bettered. The LP, offering Leo Sowerby's suite for orchestra From the Northland and Otto Luening's Symphonic Interludes and Prelude to a Hymn Tune (DST 6429), is perhaps the best of a poor lot.

Finally, a special niche must be made for Dixon's performance of Beethoven's Seventh Symphony with the Prague Symphony Orchestra. Available here most recently on a label named Three Centuries of Musick (3C 318), it offers a refreshing view of this often recorded work. Elegant, wonderfully crystalline, and—yes—pastoral, this reading is a heady antidote to those all-too-common performances that make this work dance until it drops.

Today, more than seven years after Dixon's death and seventy after his birth, it's a simple matter of both moral and artistic justice to recognize the man as what he always sought and preferred to be: Dean Dixon, conductor.

REVIEWS

A "Boris" Five Years in The Making



Dressed to kill: Alexander Vedernikov as Boris Godunov

MUSSORGSKY: Boris Godunov.

Vedernikov, Shkolnikova, Koroleva, Arkhipova, Sokolov, Piavko, Eisen, Mishutin, Matorin, Sporgis, Mazurok; U.S.S.R. TV and Radio Large Symphony Orchestra and Chorus, Fedoseyev. Philips 412 281-1 (A, 4). (2) (3). (3).

What conductor in the last 30 years would think of choosing any but the original version of a Bruckner symphony to perform? As for Baroque and Renaissance music, the care for absolute authenticity has even led to some musicological excesses. But opera houses have remained less enlightened places than concert halls. That towering masterpiece of Russian opera, Boris Godunov, is still performed in most theaters in the version rescored and-the word is not too strong-corrupted by the well-meaning Rimsky-Korsakov. And the situation is possibly worse with Mussorgsky's other operas. True, it is only now that, thanks above all to Sir Charles Mackerras, the authentic, unexpurgated Janáček is making headway; but then Janáček has been dead for a little over 50 years, whereas Mussorgsky's death centenary passed almost unnoticed in 1981. He still remains one of the most underrated great composers.

Just how damaging Rimsky's rewriting of *Boris Godunov* can be is shown at full length in a remarkable book by the French composer, conductor, and Mussorgsky-lover Maurice Le Roux, published in 1980 by Aubier-Montaigne. It not only contains a masterly analysis of the work but shows every single emendation by Rimsky (in melody, rhythm, harmony, and scoring) in detail, and then proceeds to do the same with Shostakovich's lesser-known, but hardly less condemnable, edition. This has fortunately never been recorded; until now, all standard versions of *Boris* on disc have used Rimsky's emendations (albeit with the Forest of Kromy scene coming last most of the time). All but one, that is: The 1977 EMI-Angel album conducted by Jerzy Semkow more or less followed Mussorgsky's original score; in spite of the fact that this recording remains in the catalog, it offers a mediocre performance. There was thus an urgent need for a new recording of the real *Boris*, and while the present set does not fulfill all our expectations, it still represents a considerable step forward and a definite first choice at this point.

The accompanying booklet calls this the original 1872 version, and that is exactly what it is. It should be remembered that there are two original versions of Boris, of which the first, completed in 1869, remains unrecorded. That consists of seven scenes only, of which the first four are just about identical (except for a few additions and a couple of cuts) to those of the 1872 version. Scene 5 (Act II, the Tsar's apartments), on the other hand, was modified in 1872, and the Tsar's character underwent marked changes. In 1869, the two scenes of the "Polish" Act (III) were missing altogether, and so was the extraordinary final scene in the Forest of Kromy, the opera then ending with Boris's death. This was preceded in 1869 by the Saint Basil's Cathedral scene, which was suppressed in 1872, though part of it (the Idiot and the Children) was reinserted in the Forest of Kromy scene, Discarding Saint Basil was a very great loss (if an inevitable one) since no one wants to miss the spine-chilling moment when the Idiot addresses the Tsar: "No, Boris. I cannot pray for Tsar Herod. The Virgin Mary forbids it!" (This is also of cardinal importance for the future deterioration of the Tsar's mind.) So in some productions this scene is reinstated (when Rimsky's score is chosen, it is performed in an orchestration by Ippolitov-Ivanov, the author of the once popular Caucasian Sketches), and it duly figures in the Semkow album (in the original scoring, of course)-with the inevitable result that the Idiot's complaint appears twice, and that its effect at the close of the opera is thus greatly weakened. This is naturally the wrong solution. If we want to enjoy the Saint Basil scene, there is no other choice but to perform the 1869 version, with its totally different Scene 5. (In a recording, there is still another solution, and that is to add to the four records of the 1872 score a fifth one with the first version of Scene 5 and the Saint Basil scene. This, however, has not been the case with the present production, which gives us a complete and authentic 1872 version, thus without Saint Basil.)

The listener accustomed to Rimsky's version will first of all notice the restoration of some parts excised by Rimsky (about 250 bars in all), the most important of these being the end of Scene 1 and the openings of Scene 5 and Scene 8 (Boris's death). Furthermore, Rimsky's softening of the music's edge and bite, be it by taming the dissonant harmony or by diluting its starkness with his opulent orchestration, not only weakened its dramatic and emotional impact but sometimes distorted its very meaning. For in-

stance, the Coronation scene was never meant to be brilliant and festive, but on the contrary to have the celebratory feeling undermined by the people's discontent. And by "Westernizing" (that is, tonalizing) the typically "Eastern" modality of the original, Rimsky not only deprived it of its unique emotional quality but also killed Mussorgsky's intended contrast with the "Western," and tonal, "Polish" Act, so often misundertood because its significance relies precisely on that opposition. When restored to Mussorgsky's original harmonies, Rangoni's eerie chromaticisms acquire an evil, baleful quality that reminds us of Rimsky's own Golden Cockerel, written some 40 years later! But when Rimsky was revising Boris, he had not yet reached that level of understanding nor that stage of his own stylistic development. Another blatant flouting of Mussorgsky's intentions appeared in Rimsky's systematic recomposition of the ending of every scene. With the sole exception of the Coronation scene, Mussorgsky ended them all pianissimo and with extraordinary suddenness; this, in 1872, was an outstanding stroke of genius, a "distancing" that already looked forward to the laws of Brecht's "epic" theater. Indeed, Mussorgsky to this very day remains by and large the most avant-garde composer Russia has ever produced!

Thus, listening to the original *Boris* is a totally new and shattering experience, with every note searing and grinding its way into one's soul. If any music moves one to tears, then it is this. Unfortunately, the Semkow

н

recording was marred by a regrettable lack of intensity and drama, by singing and tone color of a far-too-Western quality-in short, by a real lack of authenticity even though the score was the authentic one. Now we have a 100-percent Russian production and cast. Its main assets are a chorus and an orchestra of outstanding quality and a conductor, probably the most brilliant one in the younger generation of Soviet conductors, capable of conveying the right atmosphere with clamorous success. Never have the big choral scenes in the Prologue and the last act sounded more heart-rending or more thrilling, never has the Tsar been surrounded by a tenser or a more agonizing mood in his three big appearances.

However, the cast of soloists is only good, and not outstanding as it should have been. The veteran Alexander Vedernikov no longer has the physical resources to sustain every nuance of his admittedly beautiful, moving, and authentic interpretation of the title role. True, his characterization of Boris as a weary, sick man is a plausible one, but it sometimes lacks sheer power and arouses compassion where it should also suggest awe. The death scene, however, stands out as one of the great performances on record. The role of the contender Grigory/Dimitri, whose part is actually longer than Boris's own, is sung here by a younger man, Vladislav Piavko, whose ringing, powerful tenor voice is truly more vigorous than refined and whose intonation is not always accurate. He comes as a letdown when compared to Nicolai Gedda. On the other hand, Vladimir Matorin as Pimen is one of the real assets of this production; he represents the younger generation of Russian singers at its best. I also very much enjoy Yuri Mazurok's insidious, wily incarnation of the Jesuit Rangoni, displaying real acting talent, and Arthur Eisen's boisterous Varlaam.

Janis Sporgis is a correct, but rather indifferent, Idiot-nothing near the spine-chilling, unforgettable Kozlowsky of the old Golovanov set. But Andrei Sokolov is an excellent Shuisky, both vocally and dramatically. The female cast is "equally unequal," with Irina Arkhipova still going strong as an ardent, sensuous, and ambitious Marina, rather full-blooded, to be sure, Elena Shkolnikova's voice is somewhat hard and edgy for the touching character of Xenia (fortunately, her part is a short one), and Glafira Koroleva's heavy, rather bosomy mezzo is totally unacceptable for the young Tsarevitch Feodor. It is in fact far too similar to the fruity, generous Nurse of Nina Grigorieva and the truculent Hostess of Ludmila Simonova

All in all, for the sake of having Mussorgsky's score complete and unadulterated and for the very high quality of the conducting by Vladimir Fedoseyev, the orchestral playing, the choral singing, and the performances of at least an important part of the principal cast, this set definitely supersedes all its predecessors, even if it cannot be said to represent the last word on the matter. The recording was made in the Soviet Union over a period of no less than five years—an unusually long delay, by Western standards of

.

N

BACH: Orchestral Works.

BARTÓK: String Quartets, Nos. 1–6.

т

DEBUSSY: Piano Trio; String and Piano Sonatas.

FALLA: El Corregidor y la Molinera.

HANDEL: Organ Concertos.

HANDEL: "Dettingen" Te Deum; "Dettingen Anthem" HERBERT: Orchestral Works.

II.

S

S

U

E

s

MAHLER: Symphony for Contraito, Tenor, and Large Orchestra.

MENDELSSOHN: Violin Concerto; Overtures.

MILHAUD: String Quartets.

MOZART: Die Zauberflöte MOZART: Piano Concerto; Variations. MUSSORGSKY:

Boris Godunov. PAGANINI: Violin Works.

VERDI:

Macbeth. VERDI:

Opera Arias.

WAGNER: Opera Arias and Scenes.

RECITALS & MISCELLANY

JOHN BAYLESS: Piano Improvisations.

BOURNEMOUTH SINFONIETTA: English Music for Strings.

LONDON WIND ORCHESTRA: Music for Winds, Vol. 2.

WYNTON MARSALIS: Baroque Works.

TREVOR PINNOCK: Baroque Keyboard Works.

THEATER & FILM

WILLIAMS: The River. production—which perhaps accounts for its variable technical quality (this is plain stereo, not digital sound). While being at times a little too reverberant, the acoustics on the whole are good. Let us now hope for a recording of the 1869 version and, above all, for an authentic and *complete* set of *Khovanschchina*. The currently available one, again based on a Rimsky-Korsakov score, omits some *fifteen hundred* bars!

Harry Halbreich

VERDI:

Opera Arias.

⊙ Scotto; Budapest Symphony Orchestra, Fulton. Jenö Simon, prod. Hungaroton SLPD 12624 (D). . (Distributed by Qualiton Imports, 39-28 Crescent St., Long Island City, N.Y. 11101.)

Aïda: Ritorna vincitor!; Un Ballo in Maschera: Morrò, ma prima in grazia; Don Carlo: Non pianger; Tu che le vanita conoscesti del mondo; Ernani: Ernani, involami; Macbeth: La luce langue; Sleepwalking Scene: Una macchia è qui tutt'ora; I Masnadieri: Venerabile, o padre.

WAGNER:

Opera Arias and Scenes.

⊙ Marton; Philharmonia Orchestra, Jóo. Harold Lawrence, prod. Sefel SEFD 5024 (D). ●

Götterdämmerung: Immolation Scene: Starke Scheite schichtet mir dort; Lohengrin: Einsam in trüben Tagen; Tannhäuser: Dich teure Halle; Tristan und Isolde: Mild und leise wie er lächelt.

These two recital discs are being reviewed together not just because they feature two of the Metropolitan Opera's current leading sopranos, but also because of the ironic coincidence that the Hungarian-born Eva Marton's first all-Wagner program was recorded in London, while Renata Scotto had to travel all the way to Budapest to make her first all-Verdi disc. At any rate, these very well-recorded singles show both artists in characteristic—and, in the main, admirable—form.

Scotto's Verdi recital shows this often controversial soprano for the most part in good, even on occasion excellent, voice. Of course, the boons of microphoning make quite unnecessary the forcing that has so often marred her work. Thus her considerable virtues-well-grounded style, superb diction, arching phrasing, and total dramatic commitment-can come appealingly to the fore. Scotto proves convincing in every selection save the Aïda excerpt; here, no amount of artificial darkening of the voice can make one believe that this is a part for her. In everything else she gives quite a bit of pleasure, as much for her vocal control as for her undeniable intelligence. Even in Elisabetta's

magisterial aria from the last act of *Don Carlo*, her canny use of resources makes for a deeply moving experience. In addition, though most of her Met performances of Lady Macbeth carried Verdi's dictum about wanting an ugly voice in this part too far, here she sounds right on top of the role demonic, haunted, yet firmly in control of the situation—and the *fil de voce* she produces on the high D flat in the Sleepwalking Scene possesses optimum eerie radiance. The one novelty—the *Masnadieri* aria—gives Scotto a chance to take a respectable stab at the famous trills Verdi wrote for Jenny Lind, and the rest of the scene more than passes muster. The Met's young Thomas Fulton (whose recording debut I believe this is) conducts with admirably supportive vitality, and the Hungarian orchestra follows his bidding idiomatically.





Sinopoli (left) with Francesco Siciliani and producer Erik Smith

Marton is one of the day's "in" sopranos. and she easily shows why in this impressively sung program. Her voice is a true dramatic soprano: wide-ranging, with a potent (if, on occasion, spreading) top, an attractively dark timbre in its middle and low registers, and a formidable command of dynamics in volume and expression. Perhaps she is rather overbearing as Elisabeth and Elsa, and her rendition of the "Liebestod" is too emphatic at times (she should remember that Wagner himself called this scene "Verklärung"-"Transfiguration"), but it's consistently obvious that a very talented woman is here giving 100 percent. The Immolation Scene is, not unexpectedly, the most interesting performance, especially since Marton will not sing the Götterdämmerung Brünnhilde on stage until this June with the San Francisco Opera. No doubt after that experience she'll have the role more under her belt; here, her phrasing is occasionally tentative or even lumpy (e.g., "Lebt' er kein and 'rer" is muffed), and some high-lying passages toward the end are tremulous and squally. Yet already there is tremendous authority and dramatic awareness through most of this grueling scene, and Marton's diction is consistently pointed to each situation. If her breath control isn't all it should be (R.I.P. Kirsten Flagstad), it's better than par for the contemporary course. Arpad Jóo's extremely expansive conducting (especially in the conclusion to the Immolation Scene) will appeal to those inured to the Reginald Goodall approach, and as such it is splendidly in character. The Philharmonia plays exceedingly well, and the recorded sound is a model for its naturalness and flawless balance between singer and orchestra. All in all, an impressive first for an important singer.

Postscript: Someone should tell Sefel (or at least the liner annotator) that there is no such opera as "*DIE*" *Götterdämmerung*, any more than there are operas like "*I*" *Pagliacci* and "*LA*" *Tosca*. The composers of these works felt one word was enough to describe them and pointedly left out any reference to articles—definite or indefinite.

Bill Zakariasen

VERDI:

Macbeth.

 Zampieri, Bruson, Lloyd, Shicoff, Ahnsjö; Deutsche Oper Chorus and Orchestra, Sinopoli. Erik Smith, prod. Philips 412 133-1 (D, 3). (3). ● (3).

Macbetto, Macduffo, and Banco sing with impassioned patriotism about la patria, not far from la foresta di Birnamo-and what Verdi's score endearingly describes as "country music," when the Macbeths greet King Duncan in Act I, Scene 2, sounds about as Scottish as salsa di potacchio anconetana con agnello e pollo. As Walter Ducloux has observed, "The ruthlessness of tyranny, the plight of its victims, the fiery call to arms by the liberator, most of these are found in every early Verdi opera, no matter what the setting or the period of the plot. Despite the fact that these subjects are treated as thinly disguised political propaganda, Verdi's passionate honesty and rhythmic and melodic power turn these moments into some of the most stirring episodes of his entire dramatic output."

In any event, Verdi, then thirty-three, created in *Macbeth* an opera with sensationally theatrical supernatural aspects that make it much more, so to speak, an opera for the loudspeaker than for the screen. In another play (*Henry V*), Shakespeare has his Chorus instruct the theater-bound audience: "On your imaginary forces work"—in order to conjure up the vasty fields of France. Here, Giuseppe Sinopoli's theatrical conducting infuses so much excitement into this account of villainy and horror that the listener, in conjuring up ancient Scotland, can really let his imagination run riot.

As it happens, I first encountered Sinopoli, the meteoric young conductor and composer (and full-fledged psychiatrist), when he made his Deutsche Oper Berlin debut several years ago conducting this very work; for this recording, he returned to the scene of that triumph. I don't want to get involved in odious comparisons, but that night brought an equal triumph to Olivia Stapp, the Berkeley-based soprano who gave an unforgettable performance as Lady Macbeth. (She scored a similar triumph here at the San Francisco Opera last fall when she replaced an indisposed Joan Sutherland as Donizetti's Anne Boleyn.) With that superlative Berlin performance still vivid in my ears, I can't help regretting that Philips didn't reproduce it in this recording-which is completely uncut, incidentally, and totally faithful to the notes.

Mara Zampieri, who has sung the role in Vienna, does, however, give a harrowing, admirable performance here, making the most of the shattering sleepwalking scene. The higher her powerful voice rises, the harder its cutting edge becomes; that may detract if you seek unrelieved bel canto, but it certainly becomes Lady Macbeth's ambitious personality. As Macbeth, Renato Bruson stands out in his duet with his murderous wife. Neil Shicoff is a distinguished Macduff, and Robert Lloyd displays a rich, mahogany-toned bass as Banquo.

Walter Hagen-Groll's chorus, one of the constant, reliable glories of the Deutsche Oper, sings thrillingly, but almost as soon as they open their mouths you realize you hear choristers singing in a language not their own. The orchestra plays with fire and sounds wonderful. I regret to note that during softer moments and important silences, specifically during the sleepwalking scene, I was not able to overlook the steady, low rumble of surface noise on the LPs sent me to review. That blood-curdling scene, especially, makes one long to hear the same performance, totally free of surface noise, on CDs.

Sinopoli conducts a hair-raisingly effec- 5

tive performance, but following it with the score leaves me feeling a bit unhappy over his general attitude toward tempos. Verdi scattered explicit metronome markings liberally throughout his score, but Sinopoli, as a general rule, takes the fast ones even faster, the slow ones even slower. That exaggerates Verdi's intentions, at times even turning tragic drama into hyped-up melodrama. It does quicken the pulse, I admit, but I can't help wondering what old Verdi himself would think of Sinopoli's interpretation; I'd give a great deal to eavesdrop on such an exchange of opinion between two hot-blooded, articulate Italians.

Paul Moor

BACH:

Excerpts from Various Works

Gelobt sei der Herr, from B.W.V. 129; Wie will ich mich freuen, from B.W.V. 146; Jesu, Joy of Man's Desiring, from B.W.V. 146; Jesu, Joy from B.W.V. 207; Chorus, from B.W.V. 207; Liebster Jesu, wir sind hier, B.W.V. 633; Liebster Jesu, wir sind hier, B.W.V. 634; Prelude and Fugue, in G, B.W.V. 541; Pastoral in F, B.W.V. 590; Oratorium tempore Nativitatis Christi, B.W.V. 248: Jauchzet, frohlocket, auf preiset die Tage; Herr, wenn die stolzen Feinde schnauben; Gavottes 1 and 2, from Suite for Orchestra, No. 3, in D, B.W.V. 1068.

These 13 excerpts concentrate mainly on Bach, "God's minstrel," performing his salaried biblical duty to make a joyful noise unto



the Lord. Joyous Baroque trumpets (superbly played), organ, and timpani figure prominently, with vigor and transparency characterizing most of the music—although Richard Kapp chooses a slightly sedentary tempo for the opening of the *Christmas Oratorio*, which the chorus (here absent) begins with the admonition *"Jauchzet! Frohlocket!* [Shout with joy! Rejoice!]"

Two quibbles about "Jesu, Joy of Man's Desiring," which during many passages juxtaposes a flowing eighth-note triplet figure with a dotted-eighth-plus-sixteenth pattern. German Bach scholars tend to let the latter yield and adapt to conform with the former, but Kapp, with computerized American punctilio, insistently emphasizes the mathematical disparity so that it merely sounds terribly, terribly fussy. Also, CBS's text people have once again (as they did on the recent Brass in Berlin release) confused "Jesu, meine Freude," Bach's unaccompanied motet for five-part chorus, with "Jesus bleibet meine Freude," the original title of the chorale recorded here-a totally different piece of music

Paul Moor

HANDEL: Te Deum ("Dettingen") in D; "Dettingen Anthem" in D.

 Tipping, Christopher, Varcoe, Pearce, Pinnock (hpschd.); Westminster Abbey Choir, English Concert, Preston. Andreas Holschneider, prod. Archiv 410 647-4 (D). ⊙●

Paradoxically, one sometimes learns more about a composer from his routine pièces d'occasion than from his more inspired masterpieces. Certainly, we are given illuminating insights into Handel's mind and technique in the works he felt obliged to compose to please his royal patron and the British public by celebrating the British/Austrian victory over the French at Dettingen in 1743. This is Handel in his most official "Big Bow-Wow" vein, writing so hurriedly that he has to borrow materials (from himself and others), but knowing exactly what is expected of him in ceremonial, not to say pompous, grandeur. Yet because he is Handel, the results transcend the merely routine.

The solo roles here are minimal (although those for alto and light baritone are remarkably effective in the present performances by Christopher Tipping and Stephen Varcoe); the chorus and orchestra, with festive trumpeting and drumming, are dominant throughout. As far as I know, these are

Yes, compact discs do reed cleaning. Fingerprints and a host of other foreign matter will nevitably make their way to the surface of your valuable discs. If dirt is not removed, it will smply block or distort the light transmission "skipping." Allsop has developed a truy innovative system for cleaning CDs based on direct input from both software and hardware manufacturers. The result? The first and only CD cleaning device to

Pat Hart, Product Manager,

YAMAHA ELECTRONIC

receive the direct endorsement of these

manufacturers. If you own a CD player your system is not complete without Allsop...ask Pat Hart.



World Leaders in Hi-Tech Care Products

ALLSOP, INC., P.O. Box 23, Bellingham, WA 98227 U.S.A. (206) 734-9090, FAX (206) 733-4302. the first period-instrument versions to be digitally recorded. Both the Te Deum and the lesser anthem are done with more fervor and fewer (if still some) British-oratorio mannerisms than on any recordings I've heard before, and surely no earlier recordings have matched the sonic splendors here.

R. D. Darrell

HANDEL:

Concertos for Organ and Orchestra: Op. 4, Nos. 1-6°; Op. 7, Nos. 1-61; No. 13 ("The Cuckoo and the Nightingale"); No. 14*; No. 151.

Preston, U. Holliger, Pinnock; English Concert, Pinnock. Andreas Holschneider, prod. Archiv 413 465-4 (D, 2)*; 413 468-4 (D, 2)†. • (2). • (2).

Companisons (Opp. 4, 7):	
Tachezi/Harnoncourt	Teldec 36.35282

Their rich musical content should have guaranteed Handel's organ concertos a wide audience, but several factors have long handi-



Organist Simon Preston

capped them. Written, with one exception, for a single-manual, pedal-less solo instrument, they are ill served by large modern organs; quintessential theatrical music, they're not really at home in churches (where organs mostly exist nowadays); moreover, today's organists and their fans tend to prefer music that better exploits the full powers of "symphonic" organs. It has largely been left to recordings using proper period instruments (even when accompanied by modern forces) to overcome such handicaps. More recently, all-period-instrument recordings have triumphed, at least for Handel connoisseurs. But it's shameful that more nonspecialists haven't been willing to $\overline{\vec{\sigma}}$ let this incomparable music speak to them.

As far as I can tell, the present set is the first pertinent major release since my January and June 1977 HIGH FIDELITY surveys, the fourth period-instrument version, and the first of any type to be digitally recorded. Overall, it surely must be ranked close to, if not at, the very top. The English Concert players are notably deft under Trevor Pinnock, while Simon Preston's only weakness is some lack of spontaneity, especially in the ornamentation and improvisation expected of the soloist. Archiv's choice for the Opus 4, No. 6, concerto is the alternative harp-andorchestra version, superbly played here by Ursula Holliger on a c. 1780 single-action pedal instrument built by the Parisian J. M. Wolters and pitched at A = 409 Hz. I've never heard a better performance.

Also included are three of the usual four additional concertos (No. 16 is deliberately omitted as a more Arnoldian than Handelian transcription of the Third Concerto a due cori), the best known of which is No. 13 with its cuckoo and nightingale imitations. The scope of the present set and its four-disc/cassette format make for a higher cost than the chief all-period-instrument competition, the three-disc Telefunken set containing Opuses 4 and 7 only, by Herbert Tachezi with Nikolaus Harnoncourt's Concentus Musicus (which I treasure in a two-cassette prestige box that is no longer listed in SCHWANN, although the separate cassettes are). The Tachezi/Harnoncourt approach is livelier and more idiosyncratically mannered, but also often freer and more daring-better suggesting the bravura with which Handel himself must have electrified his audiences. And for those who prefer the organ over the harp for Opus 4, No. 6, that is what Tachezi provides. But Tachezi/Harnoncourt aficionados may want to wait for a new digitally remastered version: Opus 7 is out from Teldec/ Conifer in England; Opuses 4 and 7 have just been announced here in a Pro Arte Compact Disc edition (CDT 35282).

R. D. Darrell

MOZART:

Die Zauberflöte, K. 620.

Moll, Serra, M. Price, Schreier, Melbye, Ven- \odot uti, Tear; Leipzig Radio Chorus, Dresden State Orchestra, Davis. Mike Bremner, prod. Philips 411 459-1 (D,3). 📼 (3). 🛈 (3).

The first thing to say about Mozart's Magic Flute is that its libretto about good and evil does not make it a religious work. It is an opera, or rather, a Singspiel. There are ceremonial scenes, but in others the characters run from danger, fall in love, lose and find one another, and so on. Tamino refuses to speak to Pamina in the temple for reasons that have to do with Sarastro's ideals of manhood and womanhood. But Pamina's aria, "Ach, ich fühl's," which comes immediately afterward, is simply about "the joy of love gone forever."

Mozart reserves the solemn music for Tamino's scenes with the priests (notably his realization that things are not as they appear-"So ist denn alles Heuchelei!"'), for Sarastro's two arias, the trials by fire and water, and the celebration of the triumph of good over evil at the end. The rest of the time he writes music to tell us what everyone is up to and how we should take their words. The words may be "Truth and Freedom" at one moment, but they are "I need a net to catch girls" at another.

What sets The Magic Flute apart from other Mozart operas is that the various intrigues do not become increasingly elaborate and entangled with one another, as they do in Le Nozze di Figaro, Così fan tutte, and Don Giovanni. And the ensembles, where so much of the plot develops in an Italian opera like Figaro, are used in the second act of The Magic Flute according to the same conventions of Singspiel governing The Abduction from the Seraglio: They are pauses for comment during which the action stops. What plot there is, and there is not much, is carried forward by the spoken dialogue.

This means that if the libretto's serious aspects are emphasized by taking the music slowly-as though the more stately the pace, the greater the profundity-numbers that are already dramatically static will become musically inert as well. This was understood by Toscanini, whose Magic Flute at Salzburg in 1937 is usually called "unidiomatic": He observed that in "Ach, ich fühl's" Pamina says, "'I lose my Tamino! Where my Tamino!' Must be andante, but is always adagio!"

Colin Davis's recording is not only in large part "adagio," it maintains an almost unbroken tranquility throughout. When Tamino excitedly recognizes Pamina's voice, or Papageno calls frantically for Papagena (over agitated sixteenths in the orchestra), the expression remains as serene as when the chorus is singing of virtue and justice. This is more than a matter of preference. When Mozart varies the tempo from one

INDPHI

GRA

5

JRTESY

NBD.

scene to the next, he does so for reasons of musical form and dramatic variety.

Oddly enough. Davis can be heard on the rehearsal record telling the Papageno that "Der Vogelfänger bin ich, ja" should be "bright." Davis's tempo at this point is moderately quick, and both the singing and the orchestra's part are brightly pointed up. The final take, however, is slower, with a smoothing out of the accompaniment, as though Papageno were just ambling through the forest. Something similar happens to every number on the rehearsal disc. The choruses, and the arias of Sarastro and the Queen of the Night, are the only parts that seem to have survived the producer's reported insistence on recording numbers over and over, which Davis apparently had to accept.

This is sufficient reason to recommend James Levine's recording on RCA instead. But another is the Philips recording itself. It was made by one of those producers who are not content to serve, but must direct. "As the ultimate 'ears' of the recording," he writes about himself, "the producer is the hub round which the wheel rotates, helping the conductor realize on tape his interpretation of the work."

In other words, the producer, not the conductor, is at the center: "The exigencies of ... obtaining a good [recorded] sound makes the distances between the soloists, orchestra and conductor so great that the conductor cannot possibly hear whether, for example, the bassoon and Papageno are exactly together, and [the conductor] has to rely on the ears of the producer, who hears the music over the loudspeakers in the control room."

So the producer is to blame for the near inaudibility of the alto boy the first time the Three Boys appear, for placing the orchestra just far enough from the microphones for it to be present but to lack definition (the first violins sound even further away in "Bei Männern"), for the distance and compression of the Queen of the Night's voice (which sounds ampler on the rehearsal record), for the chorus's sounding distant whether it is supposed to be onstage or off, and for a splice between the acting and singing sessions that has Papageno and Tamino at one point speaking from opposite sides of the stage and singing from the same side. Presumably the producer is also to blame for deciding to make the record in a church, where forest, cave, and courtyard all reverberate. (I did not hear the Compact Discs.)

Davis had additional help in making this, his first *un*enlivened recording of an opera, from the "unceasing interventions" of Joachim Herz, who coached the spoken lines. This "very famous stage director . . . with his red face, his vast brow, and his black flowing hair" is the author of an essay in the liner notes full of thoughts about the Queen of the Night's "kingdom through parturition" and questions like "Who is this prince anyway? Who is the princess ... ?" But aside from the priests' filling the spaces in their conversation with Hms, Umphs, and Hrrmphs, there is little else that sounds out of the ordinary. Papageno overacts boyishly. Pamina responds with an anguished gasp whenever anyone speaks to her, and her light speaking voice is as unlike Margaret Price's singing as it could be.

One novelty is having the actresses deliver the Three Ladies' dialogue as though wickedly sneering through clenched teeth even in the first act ("thirsty damsels looking for trouble," the producer calls them). However, the contrast with the singers' cheerful delivery is senseless. And either the famous director or the hub round which the wheel rotates eliminated most of the pauses for entrances and exits---the minimum one would have thought was required for "preserving a sense of theatre."

The tone of the Dresden Staatskapelle is wonderful to hear, and the soloists are excellent, especially Peter Schreier as Tamino, Kurt Moll as Sarastro, and Luciana Serra as the Queen of the Night. Some may feel that Price's calculated manner of using her voice, notably the almost synthesized effect her singing with no portamento gives to rapid successions of notes, makes her Pamina colder than Cotrubas's in Levine's version.

> Thomas Hathaway (Continued on next page)

C R I T I C S' C H O I C

The most noteworthy releases reviewed recently

BACH:

French Suites, B.W.V. 8 12-17; Suites: In A minor, B.W.V. 8 18a; In E flat, B.W.V. 8 19/8 19a.

Hogwood.⊙Oiseau-Lyre 411 811-1, Mar.

BUSONI:

Turandot Suite, Op. 4 1; Sarabande, Cortège: Two Studies for "Doktor Faust," Op. 51.

Cincinnati Symphony Orchestra, Gielen. ⊙ Vox Cum Laude D-VCL 9072, April.

HAYDN:

Symphonies: No. 100, in G ("Military"); No. 104, in D ("London").

Academy of Ancient Music, Hogwood. O Oiseau-Lyre 411 833-1, Mar.

PUCCINI:

Manon Lescaut.

Freni, Domingo, Bruson, Rydl, Gambill, Fassbaender; Philharmonia Orchestra and Chorus, Sinopoli. I Deutsche Grammophon 413893-4, Mar.

PUCCINI:

Turandot.

Marton, Kmentt, Bogart, Carreras, Ricciarelli, Kerns, Wildhaber, Zednik, Rydl; Vienna State Opera Orchestra and Chorus, Vienna Choir Boys, Maazel. O CBS Masterworks I3M 39160, Mar.

VARÈSE:

instrumental Works.

Yakar, Beauregard; Ensemble InterContemporain, Chorus of Radio France, Boulez. © CBS Masterworks M 39053, April.

VAUGHAN WILLIAMS: Overture to "The Wasps"; Serenade to Music.

DELIUS:

Orchestral Works.

London Philharmonic Orchestra, Handley. () Chandos CD 8330, April.

VIVALDI:

Chamber Works.

Ayo, Demenga, Holliger, Jaccottet, Pellegrino, Petri, Rubin, Thunemann.⊙Philips 411 356-1, Mar.

ZAPPA:

Orchestral and Chamber Works.

Ensemble InterContemporain, The Barking Pumpkin Digital Gratification Consort, Boulez. O Angel DS 38170, Feb.

PARLEY OF INSTRUMENTS: Purcell's London.

Parley of Instruments, Goodman and Holman. ⊙ Hyperion A 66108, April.

HERBERT (arr. Harold Sanford* and Otto Langley†): Orchestral Works.

 The Eastman-Dryden Orchestra, Hunsberger. Ward Botsford and Rayburn Wright, prods. Arabesque 6529 (D). (Distributed by Caedmon.)

Selections from "Mlle. Modiste"†; selections from "Naughty Marietta"*; selections from "The Fortune Teller"*; Badinage†; Souvenir*; The Fall of a Nation: Karma*; Pan-Americana†; Suite of Serenades, No. 3 ("Cubans")*; March ("22nd Regiment")*.

Leafing through this scrapbook, one encounters operetta snippets, a march, light classics, parlor music, and a movie soundtrack fragment in arrangements by two of the composer's contemporaries: Otto Langley and Harold Sanford. With Donald Hunsberger conducting, the Eastman-Dryden Orchestra performs them with an attractive zeal that plays into the hands of sentiment, and, when the feeling strikes, schmalz.

The orchestra essays portions from Mile. Modiste and The Fortune Teller at a breathless clip best summarized in the latter's closing csårdås, which spotlights the lightning-quick xylophone solos of Christopher Norton. For the only vocal excerpts on the album, Teresa Ringholz lends her feathery soprano to selections from the Herbert-Hammerstein classic, Naughty Marietta. She makes the popular tunes "I'm Falling in Love with Someone" and "Ah! Sweet Mystery of Life" positively glow.

However, it's the less familiar nonoperetta pieces that provide the most interest. Herbert the snappy melodist surfaces in *Pan-Americana* (composed for the Pan-American exposition of 1901), which bridges North and South via ricky-tick rhythms and mariachi-style brass interludes. "Cubans," from his *Suile of Serenades*, is a syncopated dance number dominated by winds, muted brass, and percussion. Small wonder that the "King of Jazz" Paul Whiteman, in a crusade to legitimize jazz for the masses, incorporated the work in his famous Aeolian Hall concert of 1924.

Herbert's music was ideally suited for the cinema, as evidenced by "Karma," taken from his score to *The Fall of a Nation* (1916). This plot-thickener anticipates an act of derring-do, the sort guaranteed to keep the audience on the edge of its seats. The orchestra plays with gusto and an inspired sense of fun that makes it seem thoroughly irresistible.

Charles McCardell

N E W C O M P A C T D I S C S _____

Because no store we know of carries every new CD, each month we list the most noteworthy of the latest releases. Most retailers can order your selections even if they don't stock them. Our list is based on information compiled for us by the editors of THE NEW SCHWANN RECORD & TAPE GUIDE from CDs that they have received not from a record company's roster of scheduled releases, which may or may not be available.

BACH:

Brandenburg Concertos; Concerto for Flute, Violin, and Harpsichord; Suites for Orchestra.

English Concert, Pinnock. Archiv 413 629-2 (4).

Christmas Oratorio.

Janowitz, Ludwig, Wunderlich, Crass; Munich Bach Orchestra and Chorus, Richter. Archiv 413 625-2 (3).

Concertos: Harpsichord (2); Two Harpsichords (2); Three and Four Harpsichords; Violin; Two Violins.

English Concert, Pinnock. Archiv 413 634-2 (3). Organ Music.

Koopman. Archiv 413 638-2 (3).

BEETHOVEN:

Violin Concerto, Op. 61. Heifetz; Boston Symphony Orchestra, Munch. (With BRAHMS: Violin Concerto, Op. 77. Chicago Symphony Orchestra, Reiner.) RCA RCD 1-5402.

Symphony No. 9.

Schwarzkopf, Höngen, Hopf, Edelmann; Bayreuth Festival Orchestra and Chorus, Furtwängler. Angel CDC 47081.

BERLIOZ: Roméo et Juliette.

Nomeo et Juliett

Fassbaender, Gedda, Shirley-Quirk; ORF Symphony and Chorus, Gardelli. Orfeo C 08784 (2).

DVOŘÁK:

Slavonic Dances; American Suite.

Royal Philharmonic Orchestra, Dorati. London 411 735-2 (2).

GRIEG:

Piano Concerto, Op. 16.

Rubinstein; RCA Symphony Orchestra, Wallenstein. (With TCHAIKOVSKY: Piano Concerto No. 1. Boston Symphony Orchestra, Leinsdorf.) RCA RCD 1-5363.

MAHLER: Das klagende Lied (complete original vers.).

Döse, Hodgson, Tear, Rae; City of Birmingham Symphony Orchestra and Chorus, Rattle. Angel CDC 47089.

Das Lied von der Erde.

Norman, Vickers; London Symphony Orchestra, Davis. Philips 411 474-2.

MONTEVERDI:

Vespro della Beata Vergine.

Kirkby, Rogers; Taverner Consort Players and Chorus, Parrott. Angel CDCB 47077 (2).

MOZART:

Allegro and Andante, K. 533; Rondos, K. 494 and 511; Sonata No. 15. Uchida. Philips 412 122-2.

PURCELL:

Dido and Aeneas.

Kirkby, Nelson, D. Thomas; Taverner Consort Players and Chorus, Parrott. Chandos CD 8306.

REGER:

Eine Balettsuite; Variations and Fugue on a Theme of J. A. Hiller.

Bavarian Radio Symphony Orchestra, Davis. Orfeo C 09084.

SCHUBERT:

German Dances for Piano, D. 790; Sonata, D. 959.

Brendel. Philips 411 477-2.

Symphonies (10) (including Fragments, D. 615 and 708a).

Academy of St. Martin-In-the-Fields, Marriner. Philips 412 176-2 (6).

STRAUSS, R.:

Don Juan; Ein Heldenleben.

Chicago Symphony Orchestra, Reiner. RCA RCD 1-5408.

STRAVINSKY:

The Rake's Progress.

Pope, Walker, Langridge, Dean, Ramey; London Sinfonietta and Chorus, Chailly. London 411 644-2 (2).

WAGNER:

Overtures and Preludes.

Berlin Philharmonic Orchestra, Karajan. Deutsche Grammophon 413 754-2.

Die Walküre.

Nilsson, Crespin, Ludwig, King, Hotter, Frick; Vienna Philharmonic Orchestra, Solti. London 414 105-2 (4).

MOZART:

Concerto for Piano and Orchestra, No. 20, in D minor, K. 466; Variations on "Ah, Vous dirai-je, Maman," in C, K. 265.

Lubin; Mozartean Players, Lubin. Marc Au- \odot bort and Joanna Nickrenz, prods. Arabesque 6524 (D). • 7524. (1995 Broadway, New York, N.Y. 10023.)

These days, with recordings of performances on reproductions of late 18th-century fortepianos coming out in an ever-increasing trickle, it's becoming standard practice to judge a new product as much by the apparent quality of the instrument as by the demonstrated musicianship of its player. In that regard, Steven Lubin's performance fares better than that of his chosen vehicle, a 1981 copy by R. J. Regier (of Freeport, Maine) of a



Stylish Mozart from pianist Lubin

five-octave instrument-with wood frame, brass strings, and leather hammers---crafted by the Viennese piano builder Anton Walter c. 1785. The bottom-register sound is tubby; the mid-range is unevenly voiced and (in the second movement of the concerto) not entirely in tune with itself; the top is dark and somewhat veiled, with a pervasive softness of tone that seems to counteract all the brilliance both of Lubin's playing and of the music itself. The American pianist Malcolm Bilson uses comparable equipment, a Walter replica built in 1977 by Philip Belt, of New Haven, Connecticut (most recently featured in a two-disc album of Mozart violin sonatas with Sergiu Luca on Nonesuch 79070; and in a set of Mozart concertos, Nos. 9 and 11, with John Eliot Gardiner and the English Baroque Soloists on Archiv 410 905-1). Lubin's instrument has little of the projective power ≤ or articulatory clarity that Bilson's does, and its generally ill-focused sound quality is a constant obstacle to a listener's full enjoyment of the music making.

And it's good music-making, by and large. The Mozartean Players are not perfectionists-one wishes they'd pay more attention to consistency of phrasing, for example, and intonation in the string group could certainly stand improvement. But they provide Lubin with admirably spirited support for his well-considered and splendidly executed treatment of the concerto. This is a nicely stylish Mozart reading, with elegance and panache served up in equal measures, and its essence is hardly negated by the sonic deficiencies of the soloist's instrument.

James Wierzbicki

FALLA: El Corregidor y la Molinera.

Berganza; Lausanne Chamber Orchestra, \odot López-Cobos. Claves D 8405 (D). (Distributed by Qualiton Imports, 39-28 Crescent St., Long Ísland City, N.Y. 11101.)

Taking their cue from The New Grove Dictionary and kindred compendia, program annotators, liner writers, even scholars have been calling Manuel de Falla's 1919 ballet, The Three-cornered Hat, the "final version" of a prior stage piece composed in 1916. The title of that work was a known quantity: El Corregidor y la Molinera (in English, The Governor and the Miller's Wife). So was the date of its premiere in Madrid-April 7, 1917-and its derivation from a novel by Alarcón, El Sombrero de Tres Picos. In Music Since 1900, Nicolas Slonimsky even identified the earlier work as a "mimic farce." Yet the particulars remained a mystery until, by chance, the composer's niece Maria Isabel found the manuscript in 1981, thirtyfive years after Falla's death in faraway Argentina.

Subsequent to that original performance, Falla reorchestrated the first half of El Corregidor on a commission from Les Ballets Russes with scarcely any changes in musical diction or rhythmic grammar. Part 2, however, is significantly different from the later ballet not only in emphases and action but in instrumentation and scoring. Whereas The Three-cornered Hat is lavishly written, as befits a creation for Diaghilev's company in its heyday, Falla composed El Corregidor for flute, piccolo, single reeds, one horn, trumpet, the usual string quintet, and a piano. The original remains closer in



means and methodology to the later puppetopera, *El Retablo de Maese Pedro*, and the Harpsichord Concerto.

Considering that Falla wrote slowly, self-critically, and with extraordinary care, *El Corregidor* was created on-the-wing in a period of four months. As in the ballet afterwards, he incorporates the motto from Beethoven's Fifth Symphony when the Governor knocks on the absent Miller's door. Beyond that, however, is the funny paraphrase of the scale passage in the last movement of Beethoven's First, a joke for which the ballet had no place. Also, the singer gets two stanzas in the original compared to just one in the reworking.

This Claves recording from Switzerland, Direct Metal Mastered by Teldec on silent surfaces, is a certified Event. Jesús López-Cobos has the Lausanne Chamber Orchestra on its mettle for the resurrection, while Teresa Berganza (as on discs of The Three-cornered Hat from Ansermet and Ozawa) is the mezzo soloist in still ripe voice. If the recording site sounds neither large nor ideally resonant, and if the combination of digitalism, DMM, and analog mixdown has hardened the sound on stereo LP, I suspect that a Compact Disc version in the future will sound more ingratiating. Still and all, the spareness of sound on LP is not inimical to Falla's first musical thoughts about an Andalusian miller named Lucas Fernández, his good wife, Frasquita, and the goatish Governor who comes to grief both fitting and comical for his erotic pursuit of a virtuous woman. Ole.'

Roger Dettmer

BARTÓK:

String Quartets, Nos. 1-6.

 → Takács String Quartet. András Székely, prod. Hungaroton SLPD 12502-04 (D).
(Distributed by Qualiton Imports, 39-28 Crescent St., Long Island City, N.Y. 11101.)

Not every day in the week does a new set of all six Bartók Quartets come along—even though SCHWANN does list no less than eight complete sets currently available. Receipt of this handsome album, in heavy blue clothboard, transported me back about 36 years to one of the supreme musical experiences of my life, when the still very new Juilliard Quartet, at the no longer extant New York Times Hall, gave the six Bartók Quartets their first performance together on two consecutive programs. (That occasion found Shostakovich on his first visit to New York, ordered there to attend a Soviet-backed world peace conference at the Waldorf. Even with Bartók at that time still officially damned by Moscow as "formalistic" and ideologically evil, Shostakovich did not miss his first chance to hear those quartets-and I'll never forget the panicky look on his face as he turned away from the stage at the end to discover New York's assembled musical elite unabashedly staring at him as if he'd come from Mars.) Even at that point, with Bartók dead only about three years, one felt inclined to predict that his position in music history would become so enhanced with the passage of time that we would eventually speak not of the Three but of the Four B's of world music.

This new album by Hungary's bright young Takács (TAH-kahtch) Quartet which has swept top honors at international

er a time span from 1908 to 1939. From Bartók's personal standpoint, they embraced two world wars, and all that that meant to him; by the end of his far-from-happy life, his wife, Ditta, would sink irretrievably into schizophrenia-his Third Quartet (1927) found her already undergoing treatment at a sanitorium in Davos. Today, even the earliest of these quartets does not make for simple, easy listening, and one wonders whether coincidence or simply youthful confidence in his own genius motivated Bartók, at the age of twenty-seven, to emulate Beethoven's majestic Opus 131 (the C sharp minor Quartet) by starting his own First Quartet with a fugue. The six quartets gain progressively in complexity and intricacy; by 1928, with the Fourth, he produced a work absolutely staggering in its overall effect-only to go and top it. No other composer has ever come



An impressive Bartók cycle from the Takács String Quartet

competitions in Evian, Budapest, and Bordeaux and until 1987 will serve the University of Colorado as resident teaching quartet—provided me with my first opportunity to reconstitute that indelible Juilliard experience, so I took extra circumstantial pains to get the most out of it. Before going into detail, let me say that some things about this set left me almost euphoric, but some also left me fuming.

If you have thus far missed these six quartets as an entity, you have missed one of the most moving and powerful musical experiences this century has provided. They covclose to Bartók in achieving a synthesis of contemporary musical technique and folk music elements, particularly rhythms of authentic Hungarian (not Gypsy!) folk music.

Very few composers have even attempted the extraordinary precision with which Bartók notated his musical intentions. He knew exactly what he wanted, and his scores (by the time he approved them for the printer) left no doubt about it whatever. Ever hear of a full-bar rest amounting to exactly one single eighth-note? See Quartet No. 1, third movement, three measures before number 35. By Quartet No. 5, of 1934 ("Dedicated to Mrs. Sprague-Coolidge"), Bartók had taken to adding to his printed scores the timings he wanted not only for movements as whole but for individual segments: He broke down that work's Finale into 16 such segments, the shortest only $6\frac{1}{2}$ seconds, the whole movement only 6 minutes, $21\frac{1}{2}$ seconds!

Indulge me, pray, for a moment, in the long overdue proclamation of Moor's Law: The greater the gifts of any musical performer, the greater the humility before, and faithfulness to, the written intentions of the composer performed. With scores as precise as Bartók's, with manifest talents of the magnitude these four splendid young virtuosos bring to them, how could these musicians possibly fail to make these the definitive recordings for years to come?

At times here, they accomplish genuine prodigies. The third movement of the First Quartet, the second of the Fourth (a miracle of clarity, subtlety, delicacy), the same work's astonishing pizzicato fourth movement, the staggering rhythmic complexities of the Fifth's first movement, the downright Satanic difficulties of its Scherzo alla hulgarese (now 4+2+3, now 3+2+2+3, now 5%, back to 4+2+3, all of it at an almost suicidal vivace to vivacissimo)—the Takács players toss all of these off in a manner that leaves you speechless with admiration. Elsewhere, though, they interpolate unindicated tempo alterations, insert small but unnecessary pauses, interpret *meno viro* as a license almost to improvise, detach long notes without legitimation or reason, etc., etc., etc. They have accomplished here an astonishing album, but they have unfortunately blown their rare chance to record a genuinely definitive one.

Hungaroton deserves unqualified praise for superb sound, handsome packaging, and a long, brilliant, highly readable analysis of the music (in five languages, including Hungarian and Russian) by Janos Karpáti. One political observation in passing: I recall how for years the Russian language, in a publication like this out of Eastern Europe, automatically came right after the host language; here it ranks fifth out of five.

Paul Moor

MAHLER: Das Lied von der Erde.

Before I die, I hope finally to hear a good new recorded performance of this masterpiece in which the singers will sing all the right notes. By present-day standards, certainly, Mahler did not make excessive demands on singers' abilities to hear a note in advance and hit it right on target, but he did frequently give the singer, alone, an unexpected note crucial to the momentary harmonic progression, and too many performers I've heard either waffle in their intonation or sing a downright wrong notethe one the auditor may anticipate and expect, but the one Mahler deliberately wanted him not to hear. Francisco Araiza (pronounced a-ra-EE-sa, no matter what you may hear on Met broadcasts and elsewhere) does considerably better than most tenors, but both he and Brigitte Fassbaender sing a number of clinkers, and with such firm conviction that one has the impression they've in



Meet these eminent critics in OPUS.

Richard Freed Harris Goldsmith David Hamilton Dale S. Harris Nicholas Kenyon Igor Kipnis Paul Henry Lang Conrad L. Osborne Andrew Porter Joshua Rifkin

Get Your FREE Ticket to the "Première" of OPUS

mière" season.

What is OPUS?

OPUS magazine is current and timely.

Each bimonthly issue will keep you up-to-

date on new recordings and activities in the

world of classical music. Though the heart of

each issue will be the reviews, you'll also

enjoy discographies, surveys, overviews and

helpful tips on how to build a collection or

interest and every issue worth keeping as

more than 20 top critics guide you. Don't

miss out on this offer to be part of our "pre-

You'll find it all in OPUS. Every page is of

choose the equipment that's best for you.

Y ou are invited to be part of the "première" season of **OPUS** magazine—the new magazine for the classical music enthusiast. Just return the ticket on this page to our **OPUS** box office and your first issue will be on its way.

Return Your Ticket Now

Put your name and address in the "première" ticket and your first issue of **OPUS** will be on its way. We'll reserve the rest of your "première" subscription (6 issues in all) at the low rate of \$14.97 — a savings of more than \$3 off the regular price. If **OPUS** isn't all we've promised just return our invoice marked "cancel" and the FREE first issue is yours to keep.

fact learned them wrong—and neither conductor nor producer noticed them in time to correct them.

Do I detect gutteral mutterings out of Deutsche Grammophon's Hamburg headquarters for me to put up or shut up? Okay, bitte schön. Second movement, rehearsal number 9: Fassbaender sings not A but A flat, and at 13 she ignores the important printed portamento from D down to G. Fourth movement, six measures after 6: She sings not B but A sharp. Fifth movement, number 4 ("so tauml' ich bis zu meiner Tür"): Araiza flubs the augmented-second interval. Three measures before 6, he sings E-an evident misprint in the piano scoreinstead of the E flat in the conductor's full orchestral score, substantiated by the simultaneous E flat of the second violins. Nine measures later he sings not D sharp but D.

I have great admiration for Fassbaender ordinarily, but I personally find her—a true mezzo-soprano, billed here as a contralto—out of place in this music, which to me cries out for a full-throated, genuine contralto. At one spot in the fourth movement, "wie cine Silberbarke schwebt der Mond am blauen Himmelssec herauf," she violates Mahler's express indications by breathing after barke and again after see grounds for engaging another singer, one with breath enough to realize the score as printed.

This great orchestra sounds superb, as usual, but Carlo Maria Giulini reads more optimisim into the closing section (beginning at number 58, where he chooses to ignore Mahler's unequivocal "*Langsam*?") than Mahler's state of mind, at that particularly low point in his life, would seem to justify.

Paul Moor

MENDELSSOHN:

Concerto for Violin and Orchestra, in E minor, Op. 64°; Overtures: "Ruy Blas," Op. 95; "A Midsummer Night's Dream," Op. 21; "The Hebrides," Op. 26.

Joseph Silverstein, one of the most brilliant violin virtuosos this country has ever produced, distinguished himself for many years as the Boston Symphony's exemplary concertmaster and assistant conductor, and as director of the Boston Chamber Players, before taking over as conductor of the Utah Symphony. If we may regard this recording as a taste of things to come, everyone concerned has cause to give thanks.

Silverstein has technique to spare, but he shies away from flash, both as violinist and conductor, in favor of giving every note its musical due. One may quibble with his relatively equable interpretation of the *molto appassionato* Mendelssohn attached to the first movement, and he definitely slights that movement's printed accents and even the sforzatos that spice the solo part, but his rich, singing tone and bedrock sense of



Soloist and conductor Silverstein

rhythm contribute to a splendid overall performance. As conductor, Silverstein also draws stirring, expert performances of the three overtures from his orchestra, which Pro Arte has recorded to sound really opulent. This release makes one look forward to future ones by the same forces.

Paul Moor

DEBUSSY: Trio for Piano, in G (first movement); Sonatas: No. 1, for Cello and Piano; No. 3, for Violin and Piano.

A. Bex, Alberti, R. Bex. Philippe Bary, prod. Cybella CY 708 (D). (Distributed by Qualiton Imports, 39-28 Crescent St., Long Island City, N.Y. 11101.)

Here already we have a second recording of the first movement—all that remains intact—of the Trio that "Achille de Bussy," then only seventeen, composed during his employ as house pianist to Nadyezhda von Meck, the Russian noblewoman who concomitantly purchased immortality by becoming Tchaikovsky's patron and "beloved friend." I told the story of this long-lost manuscript when I reviewed its first recording (by the Western Arts Trio on Laurel LR 127) in MUSICAL AMERICA edition of HIGH FI-DELITY last October. Both LPs have much to recommend them.

The American recording pairs the Debussy piece with Dvořák's Trio in F minor, Op. 65; this one offers the first and third of the highly idiosyncratic sonatas Debussy composed toward the end of his life, during a World War I access of anti-German nationalism that moved him to have his name printed on them as "Claude Debussy, Musicien Francais." These suave, musicianly performances have few flaws, the most serious one the Bex brothers' overriding Debussy's instruction for the First Sonata's finale (Animé, 92 beats to the minute) and perverting it, as all too often happens, into a Presto possibile. Robert Bex's album notes, for their part, get perverted into some of the most wildly hilarious, dictionarily literal English and German translations ever to have come my way, but Cybella has recorded the music itself very beautifully.

Paul Moor

RECITALS and MISCELLANY

WYNTON MARSALIS: Baroque Works.

Gruberova^{*}, Marsalis; English Chamber Orchestra, Leppard. Steven Epstein, prod. CBS Masterworks IM 39061 (D). © 0

FASCH, J. F.: Concerto for Trumpet, Oboe, and Strings. HANDEL: Eternal Source of Light Divine, from "Ode for the Birthday of Queen Anne"": Let the Bright Seraphim, from "Samson."" MOLTER: Concerto No. 2 for Trumpet and Strings. PURCELL: Sound the Trumpet"; excerpts from "The Indian Queen," "King Arthur," "Come Ye Sons of Art." TORELLI: Two Sonatas for Trumpet and Strings.

If you are a trumpet addict, either classical or jazz, place the name Wynton Marsalis high on your roll of honor. In 1984 the recording industry awarded Marsalis a Grammy for his recording of concertos by Haydn, Hummel, and Leopold Mozart, and then proceeded to duplicate the award on the jazz side of the house, an area in which Marsalis already has three Columbia discs. Try either *Hot House Flowers* or *Think of One* if you
want to hear the Florestan of this Eusebius.

Something less than a quarter of the present disc enlists the singing of Edita Gruberova, but it is certainly Marsalis who is the star here; indeed, he has just won a 1985 Grammy for this performance. It is a fluent display of his gifts in high Baroque style, to which he brings a stylish touch in ornamentation, easy trills, and a welcome silvered tone. In any contest, Marsalis easily holds up in comparison to Maurice André, Timofey Dokschitser, or Gerard Schwarz, to name only three of the currently listed trumpet stars. One of the most welcome facets of this recording is the velvety quality CBS has provided, so that the trumpet does not ride out of your speakers with the strident sound heard from other recordings of the same material. Raymond Leppard and the English Chamber Orchestra are on the ball at every moment.

There remains, then, the presence of Gruberova, whose star is ascending very handsomely these days. Her performance on this record, however, sounds strangely tossed-off. She sings the great aria Handel gives to the Israelite Woman in Samson efficiently the first time around, and adds some fine fire to the repeat, though not all of the ornaments come out unscathed. She takes the same brief optional cadenza up to the high D at the end that you can hear in Joan Sutherland's early and magnificent recording. But at no point is there the electricity that fills every measure of Dame Joan's performance; the voice is a bit hard and unyielding. Gruberova is more affecting in the aria from Handel's Birthday Ode for Queen Anne, and her English is occasionally clearer than Sutherland's usually is.

Now about "Sound the Trumpet." It is certainly not *the* "Sound the Trumpet" from the last of the birthday odes Purcell wrote for Queen Mary in 1694, the very year before he had to write her *Funeral Music*, which (along with the *Birthday Ode*) is among his greatest achievements. That "Sound the Trumpet" is a duet for two countertenors, as the old Alfred Deller Bach Guild disc (5047) demonstrated; it can also be heard in a fine account conducted by the late David Munrow (Angel 37251). It is one of Purcell's great duets, which it was once my pleasure to sing with the late Isobel Baillie, neither of us a countertenor.

The "Sound the Trumpet" heard here is a flaccid-sounding affair to which Gruberova brings little vitality or sense of style, and in which Marsalis can but play beautifully—it is not something to which you are likely to return.

It is ungracious of CBS not to include, in its rather skimpy notes, the full texts of Gruberova's three arias.

Paul Hume

JOHN BAYLESS: Piano Improvisations.

O Bayless. Benjamin Bernfeld, prod. Pro Arte PAD 210 (D). ⊡

The title of this album is *Happy Birthday*, Bach!-Best Wishes from Mozart, Beethoven, Chopin, Ravel, Stravinsky, and Gershwin. That pretty well sums it up. Side 1 offers seven contrapuntal juxtapositions and/or superimpositions involving the "Happy Birthday" tune and a vast assortment of themes from Bach's instrumental and vocal works, Side 2 a half-dozen à la manière de improvisations evoking the composers credited, plus a final one from John Bayless himself. A Juilliard-trained Texan, he has imagination, a sly wit, musicality, an imposing technique, and obviously a clear, beady eye on record-shop cash registers in this Bach tercentenary year. Just the thing for your next gathering of musical one-up-persons.

Paul Moor

LONDON WIND ORCHESTRA: Music for Winds, Vol. 2.

○ London Wind Orchestra, Wick. John Boyden, prod. Nonesuch 78026-1 (A). GRAINGER: LincoInshire Posy: Shepherd's Hey; Molly on the Shore; Danny Boy. MLHAUD: Suite française. POULENC: Suite française.

The first volume by this ad hoc orchestra of 60 players zeroed in on music by Holst and Vaughan Williams (Nonesuch 78002). Volume 2, also leased from Academy Sound and Vision (who published it in Britain in 1979), adds the Suites francaises by Francis Poulenc (1935) and Darius Milhaud (1945), plus four band staples by Percy Grainger including Lincolnshire Posy, claimed to be his magnum opus. A good bit of this well-blown repertoire has been featured on older discs by Frederick Fennell and either the Cleveland (Orchestra) Winds or the Eastman Wind Ensemble, but not the Poulenc with its savory addition of a harpsichord. The only competition currently in SCHWANN is an Angel EMI version by Georges Prêtre with the Orchestre de Paris (S 36519).

Poulenc's confection is the principal de-



Improvisor par excellence Bayless

light of this disc, not only for its piquancy but for the performance. Certainly there's nothing withheld in the playing of Milhaud's souvenir de mon pays, commissioned for American school bands by a savvy publisher-except that 15 clarinets in any scoring are bound to thicken the sonic mix and coarsen its texture. Grainger's music, both as harmonized and as scored, is indubitably adroit; for those beguiled by its uncomplicated idiom who haven't the Fennell/Cleveland Posy and Shepherd's Hey already on Telarc, this is a rousingly played alternative, finely recorded, no matter its vintage or analog origin. It adds, furthermore, performances of Molly on the Shore and Danny Boy-altogether 55 minutes of music, by any measure a bargain.

Roger Dettmer

BOURNEMOUTH SINFONIETTA: English Music for Strings.

Deurnemouth Sinfonietta, Hurst. Brian Couzens, prod. Chandos CBR 1020 CD 8375 (A) (Distributed by Harmonia Mundi, U.S.A., 2351 Westwood Blvd., Los Angeles, Calif. 90064.)

ELGAR: Serenade in E minor, Op. 20. HOLST: St. Paul's Suite, Op. 29, No. 2. IRE-LAND: Concertino Pastorale. WARLOCK: Capriol Suite.

If you are (as I am) an unrepentant—nay, unregenerate—lover of most English music, and especially English music for strings, you will be happy with this fine addition to the "Harveys of Bristol English Series." And that is the second best thing I can say about the maker of Harveys sherries, which come in Shooting, Milk, Amontillado, Cream, and other delectable guises. The house of Harvey is a major sponsor of the musical arts in Britain, not to mention a friend of the Old Vic Theater, the Leeds Competition, and the Bath Festival. Now will you stick to Harveys when you drink sherry?

This music is so English that any connoisseur can correctly label it after four measures. The Elgar Serenade was one of the first compositions its composer liked. He said of its lovely larghetto, "it's really string in effect." The Holst, also a relatively early work, is one of his more openly jolly pieces and just as effective in its "stringy" sound as the Elgar.

The Ireland is the most extended work of the four, taking just under 20 minutes. It wanders a trifle, though charmingly at the beginning. But when Ireland moves into its slow section, called "Threnody," he touches a vein of pure beauty. There is no other recording of this *Concertino* in the catalog at the moment, and for it alone I recommend the record. The Warlock, a must in any collection, is as lovely, having the particular charm that comes from the genius with which this unfortunate composer clothed tunes he found in a Renaissance French essay on dancing.

Except for the Ireland, these works have heavy competition in recordings by Neville Marriner (Elgar, Holst, and Warlock) and John Barbirolli (Elgar). The sound of this digital remastering is a bit tubby in the bass, but it has a genuine luster—and the playing is never less than very good.

Paul Hume

TREVOR PINNOCK: Baroque Keyboard Works.

Pinnock. Andreas Holschneider, prod. Archiv 413 591-1 (D). © BACH: Italian Concerto, B.W.V. 971. BAL-BASTRE: La Suzanne. COUPERIN: Les Baricades mistérieuses. DAQUIN: Le Coucou. FIOCCO, J.H.: Adagio. FISCHER, J.C.: Passacaglia in D minor. HANDEL: Air and Variations ("The Harmonious Blacksmith"). RAMEAU: Gavotte avec 6 doubles, in A minor. SCARLATTI: Sonatas: in E, Kk. 380; in E, Kk. 381.

Trevor Pinnock is perhaps best known to the listening public as the director of the English Concert, that masterful band of original instrumentalists currently taking American concert halls and audiophiles by storm. Their great success is not merely the result of hype, for of the numerous authentic-instrument ensembles that have been sprouting in recent years, none has been finer than Pinnock's in combining historical accuracy with an earthy spontaneity and musical sensitivity that lifts its interpretations beyond the commonplace.

Pinnock, however, is also a virtuoso harpsichordist, and it is to these skills that this disc is devoted. The listener is treated to a generous sampling of late Baroque repertoire in various national styles (French, German, Italian), if only within a narrow chronological range (1717-59). The most substantial works recorded here are Bach's Italian Concerto (B.W.V. 971) and three variation sets by Handel, J. C. Fischer, and Rameau. Shorter character pieces by Couperin, Daquin, and Balbastre, together with two of Scarlatti's more famous sonatas, round out the remainder of the collection. J. H. Fiocco's brief Adagio must be mislabeled; according to the jacket it is in G minor, but to these ears it sounds like G major.

Pinnock performs on a modern instrument, tuned to unequal temperament and pitched at a low A=415. This harpsichord is a robust, full-blooded specimen, and Archiv's engineers capture its varied timbres in a flattering manner. Pinnock's performances possess an impeccable precision and clarity; he is nimble, fleet-fingered, tossing off difficult passagework with grace and seeming ease and adding embellishments with such charm that they appear entirely spontaneous. His interpretations never stoop to timbral monotony or mere mechanistic accuracy, always a danger on the harpsichord. Instead, even the most straightforward sections are enlivened by Pinnock's free and expressive application of rubato and ornamentation.

Only in two pieces does Pinnock's approach overwhelm the repertoire. The first movement of the *Italian Concerto* is played far too ponderously, stressing power at the expense of grace. Here, that sparking delicacy of articulation is entirely lost. The Scarlatti Kk. 380 Sonata is distorted not by an overly weighty approach, but by eccentricity of interpretation. Elsewhere Pinnock's tempo fluctuations are a blessing; but here they become mannerisms, interfering with phrasing and robbing the work of its forward motion.

In the long run, these are small points. I am willing to blame Pinnock's interpretive

lapses on youthful exuberance, and end by stressing the positive: It is unlikely that one will hear more virile, personal harpsichord playing than this, tempered by a wealth of historical knowledge and by a virtuoso technique.

K. Robert Schwarz



WILLIAMS: The River.

O Williams. John Williams, prod. MCA 6138 (D).

Ever since Star Wars, John Williams seems to have been writing his film scores for the London Symphony or its aural equivalent. Prior to that first installment of George Lucas's space opera, Williams was much more flexible in his orchestrations. He wrote well for smallish contemporary-music ensembles (Images, 1972) and for chamber orchestras (The Reivers, 1969; Jaws, 1975). Since Star Wars, only a wide-screen symphony orchestra will do--whether or not the dramatic frame of the music is capable of bearing the weight.

Williams's newest score accompanies Mark Rydell's The River. Forget any "folksy" connotations. The mood is bluesy and more urban than anything else, despite the down-home pictures of Mel Gibson and Sissy Spacek that adorn the back cover. Williams's great skill is evident, but so is that LSO-only mentality. At times the music tries to make some intimate gestures on a grand scale; it put me in mind of having to watch Thornton Wilder's Our Town in Yankee Stadium. What could have been a moving dialogue between flute and guitar on a track titled "Growing Up" is kept at a distance, thanks to the big orchestral setting. Some of the old Williams magic does come through, especially in the clever guitar duet in "The Pony Ride" and the beautifully simple guitar/flute interplay in "Young Friends' Farewell."

Overall, a disappointing album and an object lesson in how more can be less. The recorded sound is dark and somewhat muffled. As (unfortunately) usual, there are no notes.

Noah André Trudeau

PLAYING FOR KEEPS

Violinists Billy Bang and John Blake fiddle around with jazz.



by Francis Davis

lthough violinist John Blake A already had ten years of classical study under his belt when he first became infatuated with jazz as a college freshman, learning to improvise and learning to swing were like starting from scratch. "I never blamed the instrument itself, though," says Blake, who brought both a concert violinist's dash and a fiddler's ribaldry to the McCoy Tyner Quintet. "I would hear records by other jazz violinists and realize the problem was with me. Most of them were older, self-taught players whose sensibility was far removed from mine. So I began listening to Coltrane and McCoy, to Wayne Shorter and Herbie Hancock-to the way saxophonists and pianists articulated their phrases, the way they'd bend notes or slide around them and accent off the beat. I wanted to capture that vocal quality Coltrane had when he played the blues. I wanted the violin to cry and sing."

Blake was bucking pretty heavy odds. Despite the violin's family resemblance to African string instruments, and despite the ingenious uses to which it has



TO

been put by disenfranchised people (both black and white) at hoedowns and other country dances, it carries echoes of class distinction and racial oppression that make it suspect within jazz. When Billy Bang started playing the instrument in junior high school, he was embarrassed to be seen going to class through the streets of Harlem. "The violin wasn't from my neighborhood," he says, "and it wasn't welcome there."

At some point, every violinist who plays jazz on that most venerable and patrician of instruments must

Francis Davis is writing a collection of profiles of contemporary jazz musicians, to be published by Oxford University Press. imagine he is the first to dare such folly, and there is an element of logic to that delusion. Throughout the brief history of jazz, violinists have tended to emulate reigning trumpet or saxophone idols, and the Louis Armstrong-based attack of a Stuff Smith or a Joe Venuti isn't likely to provide much guidance if your goal is to graft Coltrane multiphonics onto your strings. Although jazz has produced upwards of half a dozen great violinists (including Smith, Venuti, Eddie South, Ray Nance, Stephane Grappelli, Leroy Jenkins, and-before overexposure to amplification induced cosmic vibrations-the young Jean-Luc Ponty), jazz violin has produced no cynosures on the order of Charlie Christian, Django Reinhardt, and Wes Montgomery, the trinity of patron saints guitarists can return to for council.

Apart from talent, dedication, their relative youth (each in his late thirties), and the instrument they play, the classically trained John Blake and the largely self-taught Billy Bang share little in common. Their paths have never crossed, although at one time or another each has graced the string orchestra that tenor saxophonist David Murray leads around New York on sabbaticals from his Octet. Yet the fact that two such gifted and individualistic violinists should emerge in jazz at roughly the same moment links them together in a way. For in carving out reputations for themselves, they are also carving out a jazz tradition for their instrument.

Bang-who was born Billy Walker in Mobile, Alabama, and moved to Harlem with his unwed mother while still an infant—began playing jazz 15 years ago at the relatively advanced age of twenty-one. The violin was forced on him by a junior-high teacher at about the same time schoolmates began calling him "Billy Bang" after a popular cartoon character. The nickname he readily accepted, but the violin worried him. "I thought it had girlish associations, and I was particularly sensitive to that sort of thing because I was very slight and liked doing things boys weren't supposed to do, like reading and writing poetry."

The violin stayed in its case while Bang attended a radical prep school in Stockbridge, Massachusetts, as a hardship student. One of his classmates there was Arlo Guthrie, son of the most famous of folk troubadours and subsequently a popular folkrocker in his own right. "Once in a while, I played drums with Arlo, who would sing and play guitar. Every weekend, friends of his father-like Pete Seeger and Peter, Paul, and Mary-would be up at the school visiting Arlo or singing at some demonstration, so for three years that was the only music I heard." That may account both for the presence in Bang's repertoire of such unlikely ditties as "Alouette" and "Skip to My Lou" and for the sing-around-the-campfire lyricism that brightens even his most opaque, discontinuous improvisations. "I still love those old songs for their simplicity; simplicity is something I strive for in everything I play, although it might not always sound that way. I remember one time [tenor saxophonist] Frank Lowe was playing in my band, and he nearly fell down laughing when he saw that I had put the sheet music to 'Red River Valley' on his stand. He was reluctant to play it because he thought of it as just a kid's song. But the great thing about tunes like that is you can improvise on them every which way and they still sound beautiful and familiar. Frank wound up loving it."

Ironically, around the same time that Guthrie's "Alice's Restaurant" was becoming an antiwar anthem, Bang was fighting in Vietnam, an ordeal that politicized him and indirectly led him to jazz. "I probably would have been a war resister, but in my neighborhood you were considered chicken if you didn't go when they drafted you. But Nam forced me to confront myself as a black man in a racist society. Sometimes it seemed like there was more open hostility between black GIs and white GIs than between us and our so-called enemy, who were just people struggling for the same freedoms my own people were fighting for back home. When the Army sent me to Hong Kong for R and R, I met a Chinese woman I wound up staying with, and I remember one day she looked at me and said, 'Why were you in Asia killing vellow people when black people are being gunned down in the streets where you live?' I couldn't answer her. Believe me, I came home full of anger and bitterness."

Returning to civilian life, Bang became obsessed with the music of John Coltrane. "His solos were strong enough to focus the feelings I had inside of me and channel them into something positive. It was very antiestablishment music somehow, analogous to the books I was reading by Eldridge Cleaver and Malcolm X. I wanted to play saxophone (Continued on page 87)

SELECTED

0

G R

BILLY BANG Distinction Without a Difference.

S C

DI

Hat Hut 1R 04; 1980. (Distributed by New Music Distribution, 500 Broadway, New York, N.Y. 10012.)

Billy Bang and Dennis Charles: Bangception. *Hat Musics 3512; 1983.*

Outline No. 12. Celluloid/OAO CELL 5004; 1983.

Untitled Gift. Anima 3BG 9; 1984. (Distributed by New Music.)

Jazz Doctors.

A P

Cadillac 1011; 1984. (Daybreak Express, P.O. Box 250, Van Brunt Station, Brooklyn, N.Y. 11215.)

н

With THE STRING TRIO OF NEW YORK

First String. Black Saint BSR 0031; 1980. (Distributed by Polygram Special Imports.)

Area Code 212. Black Saint BSR 0048; 1981.

Common Goal. Black Saint BSR 0058; 1982. **Rebirth of a Feeling.** Black Saint BSR 0068; 1984.

JOHN BLAKE Malden Dance. Gramavision GR 8309; 1984. (Distributed by Polygram.)

With McCOY TYNER Horizon. Milestone M 9094; 1980. 📼

La Leyenda de la Hora. Columbia FC 37375; 1981. 📼

With JAMES NEWTON James Newton.

Gramavision GR 8205; 1983. 🖽 🛈

Luella. Gramavision GR 8304; 1984. 📼

With VARIOUS ARTISTS

The Young Lions. Elektra Musician 60196-1; 1983.

With BOB THOMPSON 7 In, 7 Out.

REVIEWS

Unadulterated Skank

THE GLADIATORS:

Serious Thing. Bob Schoenfeld and Leroy Pierson, prods.

Nighthawk NH 308.

Pave the Way.

O Michael Campbell, prod. Heartbeat HB 31.

DON CARLOS: Just a Passing Glance. O Doctor Dread, prod. RAS 3008.

Most consumers of reggae fall into one of two categories: They stick to the handful of stars whose records are promoted by major American labels, or they prowl specialty shops for obscure imports of dubious quality and exorbitant price. For those of us who don't fit either category—who are neither outright dilettantes nor wild-eyed monomaniacs—independent U.S. labels such as Nighthawk, Heartbeat, and RAS are beginning to provide an alternative: a clear and wide-ranging view of Jamaican and British reggae.

Jimmy Cliff, Peter Tosh, Black Uhuru, Third World-that is to say, most of the artists established on the domestic front-play reggae that is neither very good nor very characteristic of the style; the reverse is true, for example, in funk, jazz, or country, where the best performers are usually well known. The blame for this unsatisfactory situation lies squarely with record companies that have been uncharacteristically reluctant to exploit a good thing. Burning Spear, the best band in the genre whose work is widely available in the U.S. (on Mango), possess a shimmeringly simple surface and an underlying malevolence. Nothing combines charm and menace like reggae, and Nighthawk, Heartbeat, and RAS underline that fact with almost every release.

Nighthawk, based in St. Louis, records

and promotes a small stable of bands, the most prominent of which are the Itals and the Gladiators. The latter's *Serious Thing* is the label's best LP to date. Singer/writer Albert Griffiths has an ear for melody rare among reggae artists, and his music is the sweetest pop-oriented stuff this side of Britain's Steel Pulse. "My Thoughts," typical of Griffiths's approach, establishes a skeletal guitar hook and then expands into a gorgeous hymn of praise to Jah. "Rearrange" likewise takes the form of a prayer; it also features as lovely a horn chart as you'll ever hear. The Men from Glad are at their best when they're celebratory and melodious.

Melodiousness, however, isn't the emphasis of most reggae, which relies on pure rhythm, unadulterated skank consisting of basic chants over haunting dub instrumentation (bass, drums, and oddball sound effects), and Mikey Dread is a master of this popular form. Britain's reggae community is almost as rich as Jamaica's, and Dread is the U.K.'s master deejay, emcee, and dub poet. He has produced cuts for the Clash and hosted the Rockers' Roadshow TV program. Earlier recordings are composed of nothing but angry raps set in the starkest rhythmical contexts, but Pave the Way opts for a more accessible sound. Mikey even sings occasionally, and his revolutionary fervor and vision of apocalypse seem to have vanished completely on lightweight numbers such as "Reggae-Hit Shot." But that change also comes as a relief; anger can be almost as difficult to listen to as it is to sustain. Dread and his all-star band are at their best on minimalist shuffles like "Sunday School" and "Roots and Culture."

D.C.'s RAS (Real Authentic Sound) rereleases Jamaican records and develops its own stars. The company's catalog, which is larger than that of any other American dis-



Carlos: fundamentals of reggae

tributor, includes many important artists: the Melodians, Eek-a-Mouse, and Freddie McGregor, for example. Don Carlos is typical of RAS's commitment to its talent; Just a Passing Glance is an album that cherishes fundamentals. There is no fussiness or ornamentation whatever, just supple vocals over a bare throb. From the joyous lovers' rock of "You Are My Sunshine" to "Spring Hill Skanking," an irresistible invitation to dance, to the power of pure sound in the chants of "Knock Knock," Carlos can knock off your socks. When he creates a hidden threat, when his cheerfulness is tempered by anger, he makes some of the toughest music anywhere. And that, breddrin, is what reggae is all about.

[Nighthawk: P.O. Box 15856, St. Louis, Mo. 63114. Heartbeat: 1 Camp St., Cambridge, Mass. 02140. RAS: P.O. Box 40804, Washington, D.C. 20016.]

Crispin Sartwell

RICHARD THOMPSON: Across a Crowded Room.

On "When the Spell Is Broken," Richard Thompson sings the line "Can't cry if you don't know how" over and over, each time

305

swaying between two different implications. He both damns and revels in his stoicism, at once proud and ashamed of his refusal to break down, and this tension informs not just the verbal fits and starts of this album's wrestle with romantic pessimism, but the sound of that battle. Spraying bits of metal all over a rockabilly romp here ("Little Blue Number"), curling patient lines around a modal ballad there ("When the Spell Is Broken"), the poles of Thompson's eloquent guitar work tell us as much about resolve and remorse as his monologues do.

Thompson's bleak outlook on love has always been suspiciously automatic; in his solo career without former colleague and wife Linda, he actually seems intent on convincing us that lovers' lane is nothing more, and nothing less, than the dark end of the street. (The title quote from Some Enchanted Evening might be his most parched joke.) Hand of Kindness (1983), Thompson's first solo vocal record since Henry the Human Fly (1972), had the wobbly, bitter taste of a weeklong postbreakup binge with the boys: Selfpity loomed as both specter and refuge, old promises were whittled down into wisecracks. Across a Crowded Room has a similarly limited focus, and those who remember when Thompson's moral sense wasn't confined to the bedroom may find it cramped. But not only does he give us a sharply perceived social complaint, "Walking Through a Wasted Land"; overall this album is less suffocating than its studio predecessor, its cynicism less pat, its sourness less automatic.

The wider range of moods and broader rhythmic span are good indicators of Thompson's increased reach. "You Don't Say," in which he gets wind of his ex-lover's continued devotion, is shoved along by a wound-up reggae beat that hustles by as rapidly as small-town talk. The baying accusations of "She Twists the Knife Again" are given the slip by the rhythm section's jagged funk as well as a wiry Thompson solo that slices across his every whine. And the two slow side-closers, which easily could have descended into drones, are marvels of majestic pacing. "Love in a Faithless Country," allegedly based on a couple who killed for thrills, also works as a set of rules on how to escape the contingency of a relationship; it's haunted by some glancing Thompson riffs, almost reluctant singing, and a funereal gospel choir. "Ghosts in the Wind" is the underside of this killing coldness, a psalm from a man who knows no god crueler than his own memory. It's the sort of helpless hymn that would drive a calm man to cry-if only he knew how.

Mark Moses

EMMYLOU HARRIS: The Ballad of Sally Rose. Emmylou Hams and Paul Kennerley, prods.

Warner Bros.25205-1.

In the early '70s Emmylou Harris created a niche for herself singing other people's songs when singer/songwriters were the norm. She came up through the folk-rock scene, riding the trail blazed for her first by Gram Parsons and later by husband/producer Brian Ahern. But today her sweet, elastic soprano is a country music staple. The Ballad of Sally Rose joins these two genres; it's a rock 'n' roll story that Harris might never have written without the inspiration of real country women, specifically writer and friend Dolly Parton. This mild-mannered, thinly disguised autobiography is Harris's account of a conservative heroine's liberation, and as such it is her most personal statement to date.

Emmylou's singer/guitarist Sally Rose travels straightforwardly from obscurity to success, thanks to her talent and the connections of her mentor and lover, "a high-rollin' singer from Tupelo" who fades out after Sally's future is assured. In this re-creation of A Star is Born the hero doubts himself when his woman rises to her own power, and eventually, after causing her pain, dies in a car crash-just before she can let him know that their love means more than any of her fame. A dramatic (or melodramatic) story that lends itself more readily to theatrical release, The Ballad of Sally Rose differs from its film counterpart because Sally tells both sides of the story through Emmylou's words, and the tension that could have been created between the lovers is missing.

While the concept of this album marks a departure for Harris, the music definitely does not. The simple tunes feature hints of A. P. Carter, the Appalachian tunesmith (perhaps best known for "Wildwood Flower") whose melodies are actually quoted on "I Think I Love Him" and "K-S-O-S." Which is nice. In fact Sally Rose is nice: It's a nice album of nice songs about a sad but triumphant woman. Unfortunately, the music fails to provide the charge that would make us care about Sally. The hardest rhythms of "Rhythm Guitar" and "Bad News" are muted, even in contrast to the slowest ballads; it all adds up to the aural equivalent of a faded, soft-focus memory. Though several cuts stand out-"Heart to Heart," "Timberline," and "Sweet Chariot"-the overall unobtrusiveness of this record inevitably washes into pleasant background. Emmylou's voice is lacking the power she has evidenced on rock covers-listen to her version of "Save the Last Dance for Me"-and only further

S IN T ы S

JULIE BROWN: **Goddess in Progress**.

DON CARLOS: Just a Passing Glance.

MIKEY DREAD: Pave the Way.

THE GLADIATORS: Serious Thing. **EMMYLOU HARRIS:**

S

1.1

E

The Ballad of Sally Rose. MICK JAGGER:

ETTA JAMES: Etta James Rocks the House.

She's the Boss.

CHARLIE PALMIERI: A Giant Step.

EDDIE PALMIERI: Palo Pa Rumba.

JOHN PRINE: **Aimless Love.**

SHALAMAR: **Heart Break.**

RICHARD THOMPSON: Across a Crowded Room. **UB40**:

Geffery Morgan.

A Resurrected Velvet Underground

by Michael Hill



Morrison, Tucker, Reed, Cale (1969): three rereleased LPs and a fourth find

THE VELVET UNDERGROUND: VU.

○ The Velvet Underground, original prod.; Bill Levenson, executive prod. Verve 823 721-1. □

The notoriety of the Velvet Underground (1965-1970) and their Andy Warhol's Factory-Max's Kansas City milieu, with its conspicuous consumption of sex & drugs & rock 'n' roll, tends to overshadow their music-a situation made worse by the domestic unavailability of their first three LPs (The Velvet Underground with Nico, White Light/White Heat, and The Velvet Underground). The Velvets were more than just local color, though, and less scary than their legend suggests. Folkrock lyricism interrupted proto-punk dissonance, sly humor offset simmering rage, and passion, however muted or disguised, kept anomie at bay. I discovered them well after the fact-stumbling upon a mint-condition copy of their third LP in the 25-cent pile at a New Jersey flea market-and was shocked only by the paucity of cheap thrills. Instead of tabloid tales, I found the hoping-against-hope plaintiveness of "Jesus," the tranced-out romanticism of "Pale Blue Eyes," and the disarming optimism of "Beginning to See the Light," a message from someone who seemed to no longer worry that it was always darkest before the dawn.

There was an earnestness to the Velvets' work, an underlying belief that, no matter how ironically Lou Reed put it in one of his songs, lives could be saved by rock 'n' roll. On *The Velvet Underground*, their most consistent and accessible effort, Reed quietly assumed control of the group (Sterling Morrison, Maureen Tucker, Doug Yule) and, with both John Cale and Nico gone, became a powerful leading man—sincere, sinister, and seductive, all at the same time. A detached but never dispassionate observer, he found that his walk on the wild side could be poignant as well as sensational.

Yet commercially the group never moved out of New York City; MGM/Verve dropped them in 1969 but kept the tapes to a finished fourth album. The group resurfaced on

MAY 1985

GERARD MALANGA/COURTESY VERVE (POLYGRAM RECORDS

Atlantic with 1970's *Loaded*, which contained their two most famous songs, "Sweet Jane" and "Rock and Roll." Reed called it quits soon after that.

VU picks up where *The Velvet Underground* left off, consisting of the tracks for that lost MGM/Verve LP. Polygram, which owns the MGM/Verve catalog, has just issued remastered editions of the first three Velvets records; the unreleased and unmarked tapes were located among the old masters. VU, then, is like an unearthed treasure. Some of the material will be familiar to fans from bootlegs and live sets, while other songs have appeared in different form on Reed's solo efforts. But VU is not a mere footnote to the Velvets' career, designed for purists only; it's very much an album, as opposed to a compilation, with none of the unfinished quality that often mars such projects.

The tone of VU is wry, not unlike Reed's 1972 Transformer (for which "Andy's Chest" was rerecorded), and the playing is loose, almost offhand. On "Temptation Inside Your Heart," for example, which includes a reappearance by Cale and a guitar lick uncannily similar to the rousing riff that opens Television's "See No Evil," there's a running, tonguein-cheek commentary on the performance-in-progress. For the most part, the material is not brooding or introspective, although "Ocean" has a dreamy, Beach Boys-on-Quaaludes texture. Reed seems to be having a very good time; he means to be menacing on the casually nasty "Foggy Notion," but it's as if Jonathan Richman were portraying the Marquis de Sade.

The final cut, "I'm Sticking with You," at first seems just a reprise of drummer Tucker's wallflower-at-the-orgy lament from *The Velvet Underground*, "Afterhours." But when the rest of the band joins her, this playful little throwaway becomes a sort of summing up of the Velvets' decadent-yet-dedicated approach to art and life. "With you by my side I can do anything/When we swing, we hang between right and wrong," Tucker and Reed duet, then Reed takes over. His subsequent breathy promise that "I'll do anything for you, anything you want me to," embellished with warm, ragged harmonies, has a surprising innocence to it—suggesting that, after all, love is the drug he was thinking of.

Michael Hill, a former editor of New York Rocker, writes for The Village Voice.



Rocks the House ranks Etta James up there with James Brown Live at the Apollo.

serves to dismiss the lyrics. Which, in The Ballad of Sally Rose, are the whole point. Leslie Berman

ETTA JAMES:

Etta James Rocks the House. O Ralph Bass, prod. Chess CH 9184.

Of all the great Sixties soul singers, few got shorter shrift than Etta James. Not that she didn't have much to do with her own demise: A long heroin addiction kept her career from ever getting off the ground, despite a decent string of r&b hits and even the occasional rock crossover. But Etta could do it all. She sang pop, rock, r&b, blues, soul, you name it, and it all came out sounding like some unholy alliance between the church and the bedroom. And as this reissue, recorded at a ∮ Nashville nightclub in 1963, makes clear, she was one of the era's most riveting live performers.

She has the audience testifying before she even jumps into the first verse of the first cut, "Something's Got a Hold on Me."

Her throaty, sassy a cappella intro is all it takes to set up a call-and-response that's snatched from the audience by first the guitarist, then the rest of the band; Etta's whole larvnx sounds like it's creased with sandpaper. "Baby What You Want Me to Do" settles into a lazy Jimmy Reed groove, the horns riffing lightly, Etta rolling the words up her throat, slurring langorously, then building to a sound somewhere between a gargle, a scat, a purr, and a cat in heat. On "Seven Day Fool" she deviates from the melody into something that's neither scatting nor singing, a sweaty, primal cry punctuated with moans, sighs, and semi-yodels; on "Woke Up This Morning" she emulates each of the horns in the band. And on "Sweet Little Angel" she rubs her thigh up against B. B. King's better-known version and more than holds her own, her uncredited guitarist matching her thrust for thrust; you have to go back to the earliest country blueswomen to find such an unabashed celebration of sex for the sake of sex

The band can hit a groove and hold it, but also adapts fluidly to Etta's improvisations. The recording is fittingly shabby; the horn section can barely be heard half the time, and the drums are always too far up front. But I rate Rocks the House just a notch below James Brown Live at the Apollo and leagues above anything else from that era.

John Morthland

MICK JAGGER: She's the Boss.

Mick Jagger, Bill Laswell, and Nile Rodgers, \odot prods. Columbia FC 39940. 📼 🛈

The best thing about the Rolling Stones is their reactionary attitude. They've steadfastly refused to dilute or sweeten their sound, and they've paid the commercial price (though Lord knows they can afford it). Their releases no longer skyrocket to No. 1; somehow the public manages to ignore even exemplary Stones songs like last year's "She Was Hot." But they still make pure, primal rock 'n' roll, the best there is.

It's appropriate, then, that when Mick Jagger decided to make more restrained, sophisticated music, he did it without Keith Richards's neoprimitive guitar and without Bill Wyman and Charlie Watts, the rhythm section that's subtle as a bludgeon and just as effective. But it's immediately apparent

that Mick just doesn't have the range to expand his repertoire effectively. His vocal and emotional limitations conform precisely to the narrow perfection of Keith's melodies, his innate aggressiveness to the raw power of the Stones' instrumentation. Team the man with Jeff Beck, Herbie Hancock, Bill Laswell, et al., however, and his virtues become vices: He sounds simplistic, wooden.

There are good songs here, and fine performances by big stars; "Just Another Night" deserves to be a hit, and Beck's presence is vividly felt on "Lonely at the Top." But nothing can mask the huge incongruity at the heart of She's the Boss. The Stones are readving a new album: save your money for that.

Crispin Sartwell

JULIE BROWN: **Goddess in Progress**.

Steve Thoma and Terrance McNally, prods. \odot Rhino RNEP 610.

It's not enough to say that Julie Brown's Goddess in Progress has the highest vuksper-minute ratio in recent memory, not when the competition is Rappin' Rodney Dangerfield and Weird Al Yankovic. Because Goddess in Progress is one hilarious record that doesn't ask the same old question: Is this some musician cracking wise, or a cutup trying to carry a tune? Or, as the ever eloquent

100	\mathbf{a}	 		199	K	-	~
	Υ.	 	- M		- Ph		- W

- LP/EP
- Cassette
- Compact Disc
- Videocassette
- Ø Videodisc
- Θ 12-Inch single
- Ø **Open reel**

Large symbol beneath title indicates reviewed format Small symbols following catalog number of reviewed format indicate other available formats (if any)

Catalog numbers of all formats of a particular recording usually are identical except for differing prefixes or suffixes. Catalog numbers of formats other than the reviewed format are printed only if their basic numbers differ sub stantially from that of the reviewed format

Arabic numeral in parentheses indicates number of items in multi-item set.

Style Note: In conformance with prevailing us age, titles of all formats in High FIDELITY text are now italicized (e.g., Abbey Road), and individ ual songs or selections appear in quotation marks ("Come Together")

2

	CAMERA & STERE CAMERA & STERE BIDDEFORD, MAINE 1-207-283-1401 SEND 11 Jor new 24 PAGE CATALOG Send all mail order CARE AND PRODUC Send all mail order Corders to: 15 Main Street. Send all mail order Corders to: 15 Main Street.	COFFMAINE 224 WEST JERICHO TPK SYOSSET, L.I., NY 1-516-496-2235 LL TOLL FREE 1-80 TS OPEN SUNDAYS TH		185 UDXL II C-90 1.89 2.49 XL-11 SC-90 2.39 Maine, Alaska and Call 1-207-283-1401 We accept Visa, Mastercord DM We accept Visa, Mastercord	TEO TOK T-120 4.99 Maxell T-120 4.99 Sony T-120 5.99 Scotch T-20 4.99 Minimum 10 tapes per order CALL FOR HANOLING ANO SHIPPING CHARGES TO, American Express & Oliners In COD orders Money orders
ED SATURDAY	Biddetard, ME 04005 THRU MAY 24 BLAUPUNKT TUCSON Image: Comparison of the compari	JENSEN CAR ALIDIO CLOSEI Digital unit, quartz clock, 12 presets, sc tuning, fader control, 10 watts 129 AM-FM CAR STEREOS 129 ATZ 500 349.95 RE 980 195 ATZ 400 309.95 RE 980 195 ATZ 500 279.95 RE 960 195 ATZ 200 279.95 RE 940 164 ATZ 200 279.95 RE 940 164 ATZ 200 279.95 RE 940 164 ATZ 200 279.95 RE 900 145 COA 200 89.95 RE 900 145 COA 2500 69.95 A.35 44 Panasonic Current all all Att all	95 digital quartz, separate base & treble. Dolby* fader control, etc. 265 95 CZ-757 includes 100* 95 RX-737 229.95 955 RX-735-2 179.95 956 RX-734 159.95 956 RX-731 159.95 957 RX-731 159.95	Allow 4 weeks CSHC Whistler Og5 Watt AMF C-740. 219.95 K724 99.95 K724 99.55 K724	Spectrum te Radar Whistler Spectrum Remote Whistler Spectrum Remote Whistler Spectrum S18955 Whistler Spectrum Remote Remote Remote
10AM-8PM EST. CLOSE	Store 1595 Digital AM FM Stereo luner 15995 a:to-reverse tape separate 15995 base and treble 300EOB4 119.95 8550R 159.95 300EOB4 119.95 6300R 169.95 200 EOB-2 99.95 6300R 119.95 6700R 139.95 4700R 114.95 6100R 119.95 CAR STEREO CAR STEREO 119.95 119.95	CQS-793 AM-FM stereo cassette player auto reverse DBX 15995 NR 8 publish button CQS-884 219.95 CQS-834 CQS-934 269.95 CQS-834 CQS-958 309.95 CVSG 100 CQS-958 309.95 CVSG 50	19:95 HPL-532 349:95 HPL518 CALL HP HPL117 CALL HP HOME	22'4 ⁹⁵ FTE-	-25 189.95 189.95 FTU-42 119.95 219.95 PA-6100 119.95 Panasonic 19.95 PA-6100
OF THIS AD. OPEN MON. THRU FRI. AND SUNDAY,	SPEAKERS JENSEN (** 4100) J3033 649 Triax*10 100 watts 3 way 7995 pr Jensen J1365 6x9 50 watts 3 way 64 95 pr Jensen J1401 4x10 Triax 45 watts 64.95 pr Jensen J1405 4x10 Crax 45 watts 44.95 pr Jensen J05 4x10 Crax 45 watts 44.95 pr Jensen J05 4x10 Crax 45 watts 44.95 pr Jensen J05 4x10 Crax 45 watts 44.95 pr Jensen J0316 C Coax 50 watts 49.95 pr Jensen J0316 C Coax 50 watts 49.95 pr Jensen V5620 5 Triax 65 watts 64.95 pr Jensen V5620 5 C Coax 55 watts 49.95 pr Jensen V5620 5 C Coax 55 watts 19.95 pr Infinity RSA-632 6 J way 50 watts 11.95 pr Infinity RSA-632 6 J way 50 watts 11.95 pr Claron SE-920 6k9 Coax 60 watts 49.95 pr Claron SE-930 6k9 Coax 60 watts 59.95 pr Claron SE-930 6k9 Coax 60 watts 59.95 pr Claron SE-530 5 C Coax 30 watts 19.95 pr Claron SE-520 5 C Coax 30 watts 19.95 pr Claron SE-630 6 J way 60 watts 59.95 pr Claron SE-630 6 J way 100 watts 19.95 pr Claron SE-620 5 C Coax 30 watts 59.95 pr Claron SE-620 5 C Coax 30 watts 59.95 pr Claron SE-620 6 C Coax 40 watts 49.95 pr Claron SE-620 6 J way 100 watts 59.95 pr Claron SE-620 6 C Coax 40 watts 59.95 pr Claron SE-620 6 C	AM-FM Cassette 12 Stereo na Sony-Walkman 5995	SPEAKERS Figure 2015 SPEAKERS SPEAKERS SPEAKERS SPEAKERS SPEAKERS SCOTT 312 DL 3-Wal 2 Inch WOOFER pair 219.95	AudioSource E0-ONE SERIES II EQUALIZER & SPECTRUM ANALYZER 25995 25995 26-Eight 29.95 ADC SS5 49.95 ADC SS155 149.95 ADC SS155 149.95 AD	Telephone answering machine, remote controis & voice activate B495 Telephone Answering Machines Noice activate B495 Telephone Answering Machines Panasonic KXT-1410 74.95 Panasonic KXT-1420 94.95 Panasonic KXT-1420 94.95 Panasonic KXT-2425 189.95 Panasonic KXT-2425 189.95 Panasonic KXT-2425 189.95 Code-A-Phone 2530 129.95 Code-A-Phone 2530 129.95 Phone Mate (0-2445 129.95 Phone Mate (0-2445 129.95 Phone Mate (0-2445 129.95 Phone Mate (0-2445 129.95 Panasonic KXT-2203 39.95 Panasonic KXT-2203 39.95 Panasonic KXT-2303 79.95
PRICE VALID ONLY WITH MENTION	AKA I AA-A35 17995 • 48 walts per channel • Quartz lock digital tunng • Cartz lock digital tunng • Cartz lock digital tunng • Carta I Control (Control	I HXA-2 750° tal tape compatible scette deck Doiby * CRR • Direct Ouartz T 1 69 95 A1 69 95 4 19 95 4 19 95 4000 D 269 95 7 19 95 A3 149 95 A8 399.95 SS RS-B18 139.95 SS RS-B468 219.95 V100J 45.95 V100J 45.95 V100J 45.95 V100J 145.95 900X 379.95 900X 409.95 900X 409.95 900X 409.95 900X 409.95 900X 219.95	NE Drive Linear Tracking umtable 10995 TM- Fr Umtable 10995 Fr LB 100 56.95 LB 200 66.95 LB 200 66.95 LB 200 66.95 LD 400 159.95 LD 400 159.95 LJ 1 139.95 LJ 200 MK. 289.95 LJ 200 MK. 289.95 L 1200 MK. 289.95 S 67.95 PR B 335 119.95 S 74.95 PR 20 54.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 94.95 20 <t< th=""><th>UNITOR OF CONTRACT SP STATE SP STATE SP SP SP ST SP ST</th><th>Code-A-Phone 742079.85 Call for other brands & models VIDEO RECORDERS SIMPLY VIDEO RECORDERS Sector VIDEO RECORDERS Sector CALU Zenth VR-2000 w remole Zenth VR-2010 VHS Zenth VR-2020 VHS YC HRJ 130 VHS JVC HRJ 225 VHS ZHASONC PVIZS VHS Zenth VR-200 VHS <td< th=""></td<></th></t<>	UNITOR OF CONTRACT SP STATE SP STATE SP SP SP ST	Code-A-Phone 742079.85 Call for other brands & models VIDEO RECORDERS SIMPLY VIDEO RECORDERS Sector VIDEO RECORDERS Sector CALU Zenth VR-2000 w remole Zenth VR-2010 VHS Zenth VR-2020 VHS YC HRJ 130 VHS JVC HRJ 225 VHS ZHASONC PVIZS VHS Zenth VR-200 VHS <td< th=""></td<>

20 day return policy. All returns must be phoned in for prior authorization and must be received within 20 days from receipt of original shipment. All products must be returned in original factory packaging, clean and unscratched, and biank warranty card. Oo not tape, or deface manufacturers' original cartons. Shipping and handling charges not refundable, Pictures are for illustration only... and do not represent the product exactly as shown. Rainchecks available upon request. Please call and reserve your purchases if you plan to pick up at store. Quantities are limited and subject to availability.

Pheobe Cates put it unforgettably in the prime-time soap opera Lace, "Which one of you bitches is my mother?" The fact is you'd never guess stand-up comic Brown's background; she treats music not as a lamentable expedient, but as a logical springboard for her funny business.

So it figures that "The Homecoming Queen's Got a Gun," the most popular cut here, is rooted in Brown's own frustrations. The best high-school pop-name your Beach Boys favorite, or something as stoopid and glorious as Brownsville Station's "Smokin' in the Boys' Room"-seems marked by reallife experience. "When I went to Van Nuys High, I was the homecoming princess and not the queen, and I think there was a little feeling of bitterness," Brown has said. She (ahem) transforms her pain into art by taking it all out on Debbie, the queen in ques-

C

O

M

P

tion. One moment Debbie's walking proud in her pink chiffon and tiara, the music nice plastic girl-group pomp. Then she whips out a piece and, well, starts acting totally bogus. The math teacher and the cheerleaders buy it before the cops arrive. In a great spoof of a Valley girl, Julie cries, "Stop it, Debbie, you're making a mess/You're getting powder burns all over your dress!"

If there's any concept at work, it's to proffer the kind of sunny bad taste of MAD magazine's glory days, updated for postmall America. Over solid, perky pop, the party girl of "Will I Make It Through the Eighties" counts the number of steps to the door the morning after, muttering, "Sylvia Plath's got nothing on me." In "I Like 'em Big and Stupid," Brown relates, "What kind of guy does a lot for me?/Superman with a lobotomy!" Unlike a virgin-or most any-

T

thing else you'll hear on the radio. All in all, a pretty rad five-song EP.

RJ Smith

SHALAMAR: **Heart Break.**

George Duke, Bill Wolfer, Hawk, and Howard \odot Hewett, prods. Solar 9-60385. 📼

Shalamar is not a group likely to be left behind by the shifting winds of fashion. They've found their niche with a willingness, indeed a compulsion, to stay au courant. Although marked more by calculation than inspiration, they've made some of the most pleasurable pop-soul of the decade, culminating in '83's invigorating The Look (a perfect Shalamar title). Two of the group's three members have been replaced on Heart Break, and so has their long-time producer,

W Because no store we know of

carries every new CD, each month we list the most noteworthy of the latest releases. Most retailers can order your selections even if they don't stock them. Our list is based on information compiled for us by the editors of THE NEW SCHWANN **RECORD & TAPE GUIDE from** CDs that they have receivednot from a record company's roster of scheduled releases, which may or may not be available.

POP

N

E

DAVID BOWIE:

Diamond Dogs. RCA PCD 1-0576

EURYTHMICS: 1984 (For the Love of Big Brother) RCA 1-5371.

GHOSTBUSTERS. Arista ARCD 8246

THE GRATEFUL DEAD: Go to Heaven. Arista ARCD 8181. Shakedown Street. Arista ARCD 8228.

MICK JAGGER: She's the Boss. Columbia CK 39940.

THE JUDDS: Why Not Me. RCA PCD 1-5319.

HUEY LEWIS AND THE NEWS: Sports.

Chrysalis VK 41412.

MOLLY HATCHET: The Deed is Done. Epic EK 39621.

BILLY OCEAN: Suddenly. Jive JRCD 8213.

THE ALAN PARSONS PROJECT: Eve. Arista ARCD 8062.

SIMON AND GARFUNKEL: **Bridge Over Troubled** Water. Columbia CK 09914.

BRUCE SPRINGSTEEN: The River. Columbia C2K 36854.

C

S

THE WHO: Tommy. MCA MCAD 2-10005. Who's Next. MCA MCAD 37217.

JAZZ

D . S

DOROTHY ASHBY: Concierto de Aranjuez. Philips 814 197-2

ART BLAKEY AND THE JAZZ MESSENGERS: **Buttercorn Lady.** Emarcy 822 471-2.

ANGELA BOFILL: Let Me Be the One. Arista ARCD 8258.

Angle. GRP GRCD 8059.

LARRY CORYELL: Le Sacre du printemps. Philips 814 750-2.

THE CRUSADERS: Street Life. MCA MCAD 3094.

EASTMAN JAZZ ENSEMBLE: Live. Second NGS 9002.

DUKE ELLINGTON AND JOHNNY HODGES: **Back to Back.** Verve 823 637-2.

STAN GETZ AND LAURINDO ALMEIDA: Getz/Almeida. Verve 823 149-2.

OSCAR PETERSON AND CLARK TERRY: Trio + One. Emarcy 818 840-2.

NELSON RIDDLE: Silver Collection. Verve/MPS 823 760-2.

JIMMY SMITH: Bashin'.

Verve 823 308-2

VARIOUS ARTISTS: Life is Art.

GRCD 0001. John Blake, Anthony Davis, Oliver Lake, James Newton, John Scofield, Jamaaladeen Tacuma, others.

ANDREAS VOLLENWEIDER: White Winds.

CRS MK 39963.

Leon Sylvers III. Despite the alterations, the Shalamar concept still clicks, at least half the time.

The sharpest cuts have a sleek urgency and inner tension, their synthesized persistence broken up by Micki Free's frenetic guitar solos, their edgy rhythms mirrored in lyrics about erotic confusion. Sexuality is very much at the center of the album, and unusually so. Not that sex isn't a pervasive subject of contemporary music, but it's rare to hear a male singer so openly admit to being shaken up by his urges. "Oh, the price you pay for ecstasy," Howard Hewett sings on the LP's opening cut, the George Duke-produced "Amnesia," and that becomes a key theme.

The trilogy of "Amnesia," "Heart Break," and "Deceiver" is the strongest stuff here, along with the hit "Dancin' in the Sheets" from the movie Footloose. These songs, which all take off from *The Look*'s terrific "Dead Giveaway," have a jittery, densely packed sound—Hewett has been paying attention to Michael Jackson and Prince, of course—and a crackling drive. The remaining four tracks are less distinguished. New singer-keyboardist Delisa Davis's one vocal showcase, a duet with Hewett on her "Whenever You Need Me," is a slick, anonymous ballad. "Don't Get Stopped in Beverly Hills" (featured in *Beverly Hills Cop*), "My Girl Loves Me," and "Melody (An Erotic Affair)"—all co-produced and co-written by Hewett—seem built out of spare parts. "Beverly Hills" is especially confused; the verses and the chorus are mismatched, as though the group were commissioned to come up with something in a hurry and dashed this off.

It's too bad that Hewett feels a need to take on an expanded role in Shalamar; they're more an interpretive group than an innovative one, and Sylvers shaped their sound with more flair in using a variety of composers. It's revealing that on *Heart Break* each member credits a personal makeup artist, but the album hasn't got a live drummer. Style is one thing, but priorities should be set straight.

Mitchell Cohen

UB40: Geffery Morgan. O UB40 and Howard Gray, prods. A & M SP 5033.

UB40's *Geffery Morgan*, the third American outing from this Birmingham, England, multiracial octet, is a refreshing reminder that music and politics can mix in the apathtic '80s. An uplifting horn section, wedging itself between tight harmonies, adds a jazzy swing to the UBs' reggae riddim. Combined with that unique signature, outspoken lyrics are just another distinguishing characteristic. But *Geffery Morgan*, unlike previous releases, contains a lyric sheet—perhaps so that fans who discovered this band on the strength of its 1983 hit "Red Red Wine" will know what they're getting into.

Back home the UBs have had a slew of chartbusters, repackaged here as 1980-83; Labour of Love, their last U.S. release, covered reggae classics. The irresistible dance groove of Geffery Morgan's "If It Happens Again I'm Leaving" is typical: On the less





characteristc instrumental "Nkomo a Go Go," Brian Traver's sax slinks through a percussive arrangement that sets off the group's Afro-Carib/jazz fusion. This segues into a different type of departure, a more disappointing one: the trite love ditty "Seasons," highlighted by the mellifluous harmonies of brothers Ali and Robin Campbell, who resemble Chad and Jeremy with rhythm. A whistling synthesizer adds a dose of British folkiness to the potent "You're Not an Army"; dissenters attacking the British media for biased coverage of Northern Ireland are informed, "And if the rest of this world is against me/It's a fact that the people of this country won't see." Immediately follows the retort "I'm Not Fooled So Easily," whose acerbic lyrics and sinewy bass lines contrast in a patented juxtaposition with pretty vocals and a bright melody.

Like the British press, the UBs are smart media manipulators. Radical ideas about class privilege, unemployment, and "the troubles" are sugarcoated with catchy beats, soothing refrains, and verses requiring study. The repeated chorus "As Always You Were Wrong Again" initially conjures a jaded lover's lament, but closer inspection reveals it's an attack on Thatcher's starve-'emout treatment of England's striking miners. How many popular American groups get away with stuff like this? Hopefully, UB40's commercial success will encourage more to try.

Kate Walter

EDDIE PALMIERI: Palo Pa Rumba.

 Eddie Palmieri, prod. Música Latina MS 56.
 D. (Distributed by G.M. Records, 639 10th Ave., New York, N.Y. 10036.)

CHARLIE PALMIERI: A Giant Step.

○ Charlie Palmieri, prod. Tropical Budda TBLP 003. . (Distributed by Sunshine Records, 747 10th Ave., New York, N.Y. 10019.)

In the halcyon days of the Palladium mambo, the successful dance orchestras of Tito Puente and Tito Rodriguez patented a highly polished, jazz-influenced, big-band type of Latin sound that was as smooth as it was danceable, no matter what the tempo. It was not until the 1960s, when Eddie Palmieri's La Perfecta reached maturity, that the music expanded its vocabulary to include a wider range of emotions—harshness, heat, ferocity, abandon-and became something that really allowed you to get down to the nittygritty, to balance delicately on the jagged edge we call reality. No matter how far Palmieri's iconoclastic experiments have ranged over the years, he has never lost this quality. The Grammy Award-winning Palo Pa Rumba is not a ground-breaking effort, but rather the distillation of years of sweat and risk-taking; what we have now is the essence of the teaching, the core without the peelings.

Listen to the title "rumba" track and hear how Palmieri the arranger makes use of space, optimizing the effects of his dissonant trumpet voicings by interjecting them only where they will drive the music forward. And hear how he handles "Bomba de Corazón," interpreting this folk dance form in the most contemporary urban style; then observe Palmieri the pianist gently restructuring the elements of the tune, floating effortlessly in the spaces between the beats, creating lyricism at the least likely moments. The self-explanatory "Bajo con Tumbao" features rhythm (particularly the razorsharp timbales of Nicky Marrero), but the splendid trumpet solos are what predominate here and on this entire session. Spiraling from one climax to the next, they alternate with the vocals to produce a tension that increases as the excitement and good-time feelings build. It is never an anxious tension, nor is it oppressive. There is only one bolero-"Pensando en Ti"-so what's happening here is muy caliente; but it is heat without sweat, and there are no weak moments.

Unfortunately, the increasingly popular Eddie overshadows older brother Charlie somewhat. Many fans are too young to remember that 20 years ago Charlie Palmieri's Alegre All-Stars were creating the most successful Latin-jazz records of all time. Albums like El Manicero and Missing: Lost in the Subway managed the elusive trick of creating original jazz melodies without losing the fundamental rhythmic feeling (called clave) that gives life to the Latin sound. Unfortunately, A Giant Step isn't as sure-footed; not quite Latin, not quite jazz, it suffers from lack of direction. Its piano-plus rhythm music is pleasant enough, but to me that's not what Charlie Palmieri is truly about. Charlie playing Irving Berlin? Sure he can, but how does it relate to "Muñeca"? This record doesn't tell us.

Joe Blum

JOHN PRINE: **Aimless Love.**

⊙ John Prine, Jim Rooney, and Steve Good-man, prods. Oh Boy OBR 002 (P.O. Box 67800-5333, Los Angeles, Calif. 90067). 📼

The four years since John Prine's last album and the appearance of his new one on his own label are rather sorry (and accurate) proof of the lack of major-label support for American folk music. It's more than ironic that Prine, who emerged at the peak of the singer/songwriter early '70s, should find himself backed into such a corner. But he makes the hiatus work in his favor: The new LP, which collects songs written from 1977 to '84, takes on the broad-ranging feel of a

AKAI GXR-99 NEW AUTO-REVERSE 3 HD COMPUTER RECORD 520.00 AKAI GXR-99 NEW AUTO-REVERSE 3 HD COMPUTER RECORD 520.00 AKAI GXR-99 NEW AUTO-REVERSE 3 HD COMPUTER RECORD 520.00 AKAI GXR-95 DOLBY B&C, dbx WAUTO. REV. CASS. 273.00	VIDE SANYO VCR-7200 BETA HI-FI S HE KOSS PORTA PRO NEW HEAD
KENWOOD KRA-50B 45x2 DIGITAL RECEIVER 175.00 AIWA ADF-330 DOLBY B&C, SOFT TOUCH CASS 149.95 ADC SS-315X 10 BD PER CH. EQUALIZER with ANALYZER CALL SANSUI SX-1130 New! TOP RECEIVER WIAM STEREO CALL SANSUI SX-1130 New! TOP RECEIVER WIAM STEREO CALL TEAC EQ-A10 10 BAND/CHN. EQUALIZER WIANALYZER 90.00 TEAC EQ-A20 SAME AS ABOVE WITH MORE FEATURES 105.00 TEAC R-666X DOLBY B, C, & dbx & AUTO-REV. CALL KOSS CM-530 8" 2-WAY SPEAKER 80.00 TECHNICS SA-450 'NEW' (50x2) DIGITAL RECEIVER 199.00 TECHNICS SR-8780 AUTO-REV. DD TURNTABLE 86.00 TECHNICS SR-878 AUTO-REV. DOLBY B.C. & dbx CASS.DK. CALL MARANTZ SR-8100 DC (90x2) DIGITAL RECEIVER 199.00	SONY MDR-CD5 'NEW' DIGITAI SENNHEISER MS-100 INDOOR TAPE- SONY UCX-90 NEW HIGH BIA SONY UCX-90 TYPE I POSITIO TDK SA3-90 SUPER AVILYN CAS TDK SAX-90 DOUBLE COATED TDK HX-5 90 HIGH BIAS, META TDK D-90 LOW NOISE CASSET BASF PRO II-90 "WORLD'S QU FUJI M-90 METAL CASSETTE. MAXELL XL-90 TYPE I OR II (PI MAXELL XL-50 90 TYPE I OR II (PI
PORTABLES SONY WM-11 CASSETTE PERSONAL PORTABLE SONY WM-16 WITH DOLBY & AUTO REVERSE SONY WM-170 SUPER WALKMAN CASS. WITH DOLBY & FM JVC PC-200 3-PIECE PORTABLE SYSTEM W.AUTO. FEV JUTOMOTIVE JENSEN RE-980 AM/FM DIGITAL CASS. JENSEN RE-980 AM/FM DIGITAL CASS. JENSEN RE-980 AM/FM DOLBY BACH JENSEN J-3033 6x9 TRIAX SPEAKERS (PAIR). SANYO FTE-D6 NEW AM/FM, DOLBY B, AUTO-REV. CASS. SANYO FTU-52 AM/FM CASS.W/DOLBY B&C, METAL CAPABLE	MAXELL UD 'S' 90 II NEW HIGH C/ SHURE V-15 TYPE 5 MR NEW T SHURE V-15 TYPE 5 MR NEW T AUDIO-TECHNICA AT-155LC RI AUDIO-TECHNICA AT-122LP 'P COMPAC SHARP DX-100B PROGRAMM/ TECHNICS SL-P1 'NEW' COMP TECHNICS SL-P1 'NEW' COMP TECHNICS SL-P2 'NEW' WIREL OTHER CD BRANDS AVAILABI SEE A BETTER PRICE? C/ UPS rates apply on these units.
Phone Now 1-312-664-0020 Price Lists & Quotes 10:00-5:00 Mon. thru Sat. 10:00-621-8042 Orders & Quotes	Image: Control

ON NAME BRAND STEREO

	VIDEO RECORDER	
SANYO VC	R-7200 BETA HI-FI STEREO W/WIRELESS REMOTE	385.00
	HEADPHONES	
KOSS POR	TA PRO NEW HEADPHONE	\$44.95
	-CD5 'NEW' DIGITAL READY	
SENNHEIS	ER MS-100 INDOOR-OUTDOOR	
	TAPE—AUDIO & VIDEO	
SONY UCX	S-90 NEW HIGH BIAS CASSETTE TAPE.	. 20.00/10
	90 TYPE I POSITION, HIGH BIAS	
	SUPER AVILYN CASSETTE TAPE	
	DOUBLE COATED 'SA' TYPE CASSETTE	
	0 HIGH BIAS, METAL PARTICLE	
TDK D-90 L	OW NOISE CASSETTE TAPE	15.00/10
	II-90 "WORLD'S QUIETEST HIGH BIAS TAPE"	
	METAL CASSETTE	
	-90 TYPE I OR II (PLEASE SPECIFY)	
	'S' 90 TYPE I OR II (PLEASE SPECIFY)	
MAXELL U	D'S' 90 II NEW HIGH BIAS, (NOT 'XL')	20.00/10
	CARTRIDGES	
	5 TYPE 5 MR NEW TYPE "5"	
	S VP TYPE 5 "P" MOUNT	
	HNICA AT-155LC REGULAR MOUNT	
AUDIO-TEC	HNICA AT-122LP "P" MOUNT	
	COMPACT DISC PLAYERS	
	100B PROGRAMMABLE, LOW PRICE	
	SL-P1 'NEW' COMPACT SIZE	
	SL-P2 'NEW' WIRELESS REMOTE, PROGRAMMABL	
OTHER CD	BRANDS AVAILABLE	CALL
SEE A	BETTER PRICE? CALL US! WE WANT YOUR BUSIN	IESS!!
UPS rates ap	ply on these units. Prices and Availability Subje	ct to Change
	— send for free price list	
\square	Name	
	Address	
VISA	City	
	State Zip	

or use your address label







Enjoy HIGH FIDELITY for a full year for only \$6.98—12 issues at 50% off the regular subscription rate. You'll receive a full

year of the latest news and reviews

of digital audio...video

components...Compact Discs...car stereo...and more. But you must act now. Send your check or money order to HIGH FIDELITY, P.O. Box 10758, Des Moines, Iowa, 50349.

Rates are good in U.S. only and are subject to change. For delivery outside the 50 states, add \$7.00 (U.S. currency).

compilation skimmed from the sharpest material available. To match *Aimless Love* for wry tall tales and serious whimsy, you'd have to go back to 1974's *Sweet Revenge*, and Prine sweetly sustains the album's tone with greater ease than he could have managed a decade ago.

Aimless Love may shortchange Prine the unkempt rocker, but its grainy acoustic settings and lazy tempos let us see him more plainly than ever. Rather than lapsing into easy confessionalism, Prine's songs partake of a c&w-style moralism that's at odds with sloppy sentimentality. "People Puttin' People Down" and "Unwed Fathers" are neighborly plaints the likes of which even Nashville hardly bothers to make anymore. The purest love songs here ("Somewhere Someone's Falling in Love," "Only Love") have a gently paternal, almost secondhand, tone to them, as if Prine were doling out cranky, back-porch advice to a son on his way to a dance. And when he needs to feel sorry for himself, he knows enough to play it for laughs, as in the hang-dog come-on of "Be My Friend Tonight" ("I'll rub your shoulders/Like they were mine") or the pathetic party-for-one of "Me Myself and I."

The way Prine's voice strays off tunelessly at the end of a phrase, the way its thick huskiness slows down his words to a logy gait-these little disturbances are welcome violations of folkie propriety that have a rocker's irreverence stamped all over them. Prine delights in turning folk commonplaces on their ear. "Maureen, Maureen," with its distant echoes of "Corrina, Corrina," is a romantic soliloquy from a psychopath who may or may not have shot a doctor because, for one reason, "he drank more than we do." And the children's nursery rhyme for adults, "The Bottomless Lake," deserves to replace "99 Bottles of Beer on the Wall" on your next interstate bus trip. With its lightly absurd details and comical, fearsome image of a car plummeting toward nowhere. the song might be this record's signature proof that Prine loves the idioms of folk music enough to stretch them out of shape a little, if only to make room for his own.

Mark Moses

Editor's note: Next month look for reviews of the Art Ensemble of Chicago, Paul Gonsalves, and Alvin Batiste in an expanded jazz section.

High Fidelity Classified

MAIL TO: 825 7th Ave., 7th floor, New York, N.Y. 10019 Phone 1-800-ABC-MAGS. In New York call (212) 887-8459 GENERAL: all copy subject to publisher approval Users of PO. Box MUST supply permanent address and telephone number before ad can run

CLOSING DATE: 1st of second month preceding cover date 15 Word minimum No charge for Zip Code CLASSIFIED RATES: regular type, per word 1x—\$2 75, 3x—52 65, 6x—52 55, 12x—\$2 45 Words in caps—15¢ extra each IMPERIAL type, per word: 1x—\$3.75; 3x— \$3.65; 6x—3.55; 12x—\$3.45. Words in caps—15¢ extra each, Minimum 15 words Box numbers \$3 00 additional per insertion to cover cost of handling and postage Display, per inch 1x—\$350, 3x—\$340, 6x—\$330, 12x— \$315 PAYMENT WITH ORDER: Send check, M O. MASTERCARD or VISA No and expiration date to Candice Leyden Classified Dept , HIGH FIDELITY 825 7th Ave , 7th Floor, New York, NY 10019

Quality Tapes MAXELL SA-X 90 SA-X 80 HX-S 90 HX-S 60 MA 90 MA-R 90 SA 90 SA 60 AD 90 AD 60 UDXL II 90 UDXL II 60 1.85 2.31 1.59 2.29 XL N-S 90 MX 90 UD-S1 or II 90 1.45 3.85 D 90 1.00 4 18 1.99 LN 90 \$ 79 UD 35-90 7 RL 4 89 XU 35-908 7 9.39 SONY 1.89 HF 90 1.79 HF 60 UCX-5 90 HF-5 90 1.05 FR METAL 90 3.39 TEAC reel to reel in cassette 0 2.98 CRC 90 (H.B.) FR # 90 CDC 90 3.21 VIDEO TAPE TDK. MAXELL. SONY T-120/L-750 ... 4.98 T-120/L-750 HG 9.98 DISCWASHER DISKIT 32.40 Rec Care Sys . 9.49 16 oz. Refill ... 9.90 DISCSET 14.40 Tape Care Set 9.40 D'MAG 12.40 CALL NOW: 718-434-3417 OR ORDER BY MAIL Shipping cost is only \$4.50 for any order in USA. COD costs \$2.00 more. No extra charge for VISA/INC. OUALITY TAPES 864 East 7th Street, Dept. HF 5, Brooklyn, NY 11230

SAVE 50% BUILD YOUR OWN SPEAKER SYSTEM Write McGee Radio Electronics, 1901 McGee Street, Kansas City, Missouri 61408



CALL US!! HARMAN-KARDON, PERREAUX, SAE, STAX, ADCOM, KLIPSCH, HEYBROOK, PYRAMID, AUDIO PRO, VSP LABS, HAFLER, NAD, AMBER, DENON, TANDBERG, ADS, DCM, CONRAD-JOHNSON, GRACE, DBX, PS AUDIO, OHM ACOUSTICS, GRADO, DYNAVECTOR, **INFINITY, NITTY GRITTY, MONSTER** ALPHA, AKG, CELESTION, AUTOMOTIVE, SONY, THORENS, KENWOOD, ZAPCO, **CRIMESTOPPERS SECURITY, MORE!** FRIENDLY, EXPERT CONSULTATION. FAST, FREE SHIPPING!! MC/VISA. **REFERENCE AUDIO SYSTEMS, 18214** DALTON AVENUE, GARDENA, CA 92048. (213) 398-4205, (213) 391-2679.

CALL TOLL FREE 1-800-826-0520 FOR ACOUSTAT, DAHLQUIST, NAD, HAFLER, DENON, dbx, 3D, PROTON, TANDBERG, BELLES, ORACLE, M&K, GRADO, NITTY GRITTY, AUDIOQUEST, NEC, DUNTEC, MONSTER, SUMIKO PERREAUX, CWD, SNELL, B&W, DEM, THORENS, VSP, STAX, SOTA, GRACE, ASTATIC, DYNAVECTOR. THE SOUND SELLER, 1706 MAIN STREET, MARINETTE, WI 54143, (715) 735-9002.

CAUTION! NAKAMICHI BUYERS!! Nakamichi goods not intended for sale in the United States are being sold by unauthorized dealers. NAKAMICH U.S.A. CANNOT BEAR ANY RESPONSIBILITY FOR SALES OR WARRANTY SERVICING OF UNITS NOT COVERED BY OUR APPLICABLE WARRANTY. For the name of your nearest authorized Nakamichi dealer, catl 1+800/421-2313. In California, call 1+800/223-1521. FACTORY ORIGINAL DIAMOND NEEDLES & PHONO CARTRIDGES. MOST POPULAR LINES AT DISCOUNT PRICES. FOR FREE CATALOG SEND SELF ADDRESSED STAMPED ENVELOPE. LYLE CARTRIDGES, DEPT. H, BOX 158, VALLEY STREAM, NY 11582. CALL TOLL FREE (800) 221-0906, N.Y. (516) 599-1112. VISA/MC.

HARMAN/KARDON, NAKAMICHI, CROWN, CARVER, HAFLER, THORENS, TANDBERG, REVOX, NAD, LUXMAN, DCM, DBX, ELECTRO-VOICE, VANDERSTEIN, AND OTHER QUALITY COMPONENTS, BEST PRICES - PROFESSIONAL SERVICE, EAST (904) 262-4000; WEST (818) 840-0978.

AUDIO, VIDEO, AND AUTO-SOUND AT UNHEARD OF PRICES!! Now you can own the finest in Audio, Video and Auto sound including the esoterics at incredible prices. DIRECT SIGHT AND SOUND (the expanded Direct Sound Marketing) provides sensible expert advice, complete service facilities and factory fresh components on an instock basis. Call (404) 233-9500 or send for our FREE catalog to DIRECT SIGHT AND SOUND, 3095 Bolling Way, Dept. #H, Atlanta, Georgia 30305. MC/VISA/AMEX accepted.

EXCEPTIONAL AUDIO REPRODUCTION SYSTEMS... REASONABLY PRICED!! E.A.R.S, P.O. BOX 658-H, WEST COVINA, CA 91790. 818/961-6158, EVENINGS, WEEKENDS. STAMP BRINGS MONTHLY SPECIALS. MC/VISA.

Tapes & Records

		TAPE	WO	RD	TOU	L PREE	1-0	88-1	46-6000	
704	C	MAXE								
OP RAL	6.05	MX 90	4.50	TDK 1	120/1	750		5.39	SCOTCH T120-L750	5.99
08 AN	4.25	XL11580	2.69	TDR 1	120/1	750HG		6 99	SONY T120/L750	5.99
LAX 90	2 74	KL 1780	1.98	MATE	11 71	26/1.750		5.16	SONY L750UHG	7.99
Dx-90								£ 66	PANASONIC T120	5.39
									BASF 7120	5.79
		UD80							TD6 HX5-80	4.19
								7 28	FUJI METAL-90	1.49
0 60		LNBD							SCOTCH #\$11C90	2 29
2-90	1.10	11135000	6.49	SONY		2.50			BASE PRO 1190	1.99
3-60									MEMORE & HIBIASS	1 1 99
									L ORDER INCLUDIN	
									SIMPPING ANY SIZE C	Designed and
	*8A #								cheels and Gevt on PO	
		Order	a shipp	od m 48	hours	Give we	a wy	18-Fri	8 39-5 68	
220.6	arma	8.	Bar	361		Butler	24	160	01 412-283-8	621

SOUNDTRACKS, SHOW, NOSTALGIA & JAZZ--FREE Catalog & Offering List--A-1 Record Finders, P.O. Box 75071-H, L.A. CAL. 90075

LIVE OPERA TAPES, CASSETTES, DISCS Incredible selection Free Catalogue, Live Opera, Box 3141 Steinway Station, L I C , NY 11103

SEARCHING FOR OUT-OF-PRINTS? Try for Discontinued Records, 444 South Victory, Burbank, California 91502 (213) 849-4791

RARE CLASSICAL AND JAZZ 150,000 LP's The Record Collector, 1158 N Highland, Los Angeles, CA 90038 (213) 467-2875

SHOW ALBUMS--Rare, out-of-print lps 64-page list \$1 00 Broadway-Hollywood Recordings Georgetown, CT 06829

OPEN REEL TAPES from Studio masters Catalogue \$1.00 Barclay-Crocker, 313-H Mill Street, Poughkeepsie NY 12601

RECORDS BY GASPARO Chamber music, solo, baroque—We have something for you! Write for free catalog PO Box 120069, Nashville, TN 37212

OPERA-HISTORICAL PERFORMANCES ON VIDEO AND DISC Most comprehensive selection Send \$1.00 for catalog, LYRIC P.O. BOX 622, MERRICK, NY 11566

Collectors' soundtrack/original cast LP's at reasonable prices. Free list. Records, Box 433, Dearborn Hts., MI 48127

For Sale



BANG & OLUFSEN FULL LINE, ADS, B&W AND BOSE SPEAKERS AND OTHER QUALITY PRODUCTS AT REASONABLE PRICE. SOUNDCREST, INC., (201) 756-4858

AUDIO PRO POWERED SUBWOOFERS The Most Accurate Powered Subwoofer Available Today Call For The Dealer Nearest You Sonic Research, 27 Sugar Hollow Road. Danbury, C1 06810, (203) 792-8824

THEY DON'T DISCOUNT IT? WE DO! GET LOW PRICES on ALL types of audio equipment—including high-end and even esoteric products not normally discounted! Now we can save you money on the equipment you REALLY WANT. Extensive selection—no need to settle for second choice. Thousands of satisfied customers nationwide. Call us for price quotes or friendly, expert advice. Catalog \$1. 616-451-3868. VISA/MC/AMEX. The AUDIO ADVISOR, INC., BOX 6202, Grand Rapids, MI 49506.

LOWEST POSSIBLE PRICES ANYWHERE! FULL WARRANTY-FAST DELIVERY AUDIO-VIDEO-CAR STEREO-COMPUTERS-SOFTWARE VIDEO GAME-TELEPHONE-MORE!! ELECTRIFIED DISCOUNTERS 996 ORANGE AVE., WEST HAVEN, CT 06516-MC/VISA 203-937-0106

EXPERIENCED RECOMMENDATIONS! ACOUSTAT, MITSUBISHI, SAE, HAFLER, NAKAMICHI, KLIPSCH, THORENS, FRIED, ADCOM, MIRAGE, PS, GRADO, CD PLAYERS, more. Immediate, FREE Shipping! READ BROTHERS STEREO, 593-C King Street, Charleston, South Carolina 29403. (803) 723-7276. PIXOFF BY SONIC RESEARCH. Dry Clean Your Records No Messy Liquids. Call For The Dealer Nearest You. Sonic Research. Inc., 27 Sugar Hollow Road, Danbury, CT 06810 (203) 792-8824

FREE ALBUMS

IN EXCHANGE FOR YOUR OPINION. We need Record Raters. Your opportunity to build a substantial album collection. Small membership fee. Write EARS, Dept. HF, Box 10245, Milwaukee, WI 53210.

IN PRINT & OUT OF PRINT RECORDS ALL CATEGORIES Spectacular Catalog¹¹ \$2 00 USA \$3 00 Foreign Serendipity Records, 4755 Durham Road Guilford, CT 06437 USA

FREE RECORD CASSETTE AND COMPACT DISC CATALOG Features a Tremendous Selection of Remaindered LP and Cassette Values in All Musical Categories Compact Disc Cassette and LP New Releases at Discount Prices Many Imports and Smaller Labels Offered Prompt Delivery Rose Records Dept H, 214 South Wabash Avenue, Chicago IL 60604

LIVE OPERA TAPES, REELS-CASSETTES VIDEOS— Unbelievable treasures since 1926, over 10 000 selections Deluxe alphabetical catalog Mr Tape Box 138 Murray Hill Station NYC 10016

Protect your LP's Poly Sleeves 13e Polylined Paper 16e Cardboard Jackets 40e postage \$2.50 We buy and sell like new LP's, pre-recorded reel tapes and cassettes Catalogue \$3.00 House of Records Box 323, Hillburn N Y 10931

AMPEX PROFESSIONAL SERIES AUDIO TAPE SALE High Quality Open Reel 1800' or 2400' on 7" Reels. Used Once Case of 40, \$45.00.10 ½ x 3600' and Cassettes. MC/Visa Vallech Electronics, Box 6-H, Richboro. PA 18954. (215) 322-4866

FROM EDISON TO ELVIS (AND BEYOND) I P's 78 s, 45 s etc. Visit or mail in wants. The Olde Tyme Music Scene. 915 Main Street, Boonton. NJ 07005. 201/335.5040—Tuesday thru Sunday.

15 LP RECORDS \$19 95 No Duplication Sample LP \$2 75 STAR Box 7-B1 Quarryville PA 17566 (717) 284-2573

SAVE MONEY AND GET MAXIMUM FIDELITY STEREO COPYING Record using professional duplicator cassettes Same top grade tape you pay more than double for in regular consumer packaging. Results guaranteed or your money back. Economy packed without tabels or outer plastic boxes. White bodies, five screws, concentrically balanced hubs, rollers. SLX 30Hz to 15KHz C60.35¢, C90. 46¢. XDS 20Hz to 22KHz C60.48¢, C90.64¢. Use Visa, Mastercharge, American Express or check. Ten year guarantee or replacement free. Add freight \$2 up to \$40 purchase. 5% on orders over \$40. Field Magnetics. Inc., 5865.5W21.5treet, Dept. 206, Hollywood, Florida 33023 (305) 962.0707.

OPEN REEL TAPE-MOSTLY AMPEX 641/ 671, used once, unspliced, unboxed. 7" 1800' or 2400' Reels; 50 for \$60.00. Sample: \$2.00. Ten 3600' 101/2" Reels: \$37.50. Sample: \$3.50. New, High-Bias cassettes; Sample: \$1.00. AUDIO TAPES, BOX 9584-J, ALEXANDRIA, VA 22304. (703) 370-5555 VISA/MC

Equipment for Sale

SONUS SUPER BLUE LAMBDA BY SONIC RESEARCH The World's Most Phase Coherent Cartridge Call For The Dealer Nearest You Sonic Research Inc. 27 Sugar Hollow Road Danbury CT 068 10, (203) 792-8824

DJ's, BANDS, NIGHTCLUBS—Disco. Stage Lighting, Professional Sound Equipment—super prices! Send \$1.00 for Catalog. P.O. Box 20395. Bowling Green, KY 42101 COD and Visa orders (502) 781-2448. Specials: Foggers \$225, Color Organs \$89, Rain Lights \$32, 800-Watt Amp \$599, Mixers \$79.00 HIGH PERFORMANCE AUDIO PLUS CAR STEREO AT A LOW, LOW PRICE. Featuring: ADS, Advent, Aiwa, Alphasonik, Alpine, Amber, AR, Audio Source, Blaupunkt, Bose, Celestion, Clarion-Audia, Concord, DBX, Denon, Dual, Dynavector, Energy, Grace, Grado, Harman-Kardon, JBL, Kenwood, Kyocera, Mitsubishi, Monster-Alpha, Onkyo, Pioneer, Pyramid, Robertson, Audio, Scott, Sherwood, Signet, Soundcraftsmen, Sound Dynamics, Sony, Systemdek, Tandberg, Thorens, Vampire Wire, Wharfedale Diamond, Walker, others. Providing: professional advice, personal service, "no rush" showroom, prompt shipments, free delivery and set up tradeins, extended warranty. RETAIL-MAIL **ORDER-EXPORT. Call 12 Noon to 7PM** E.S.T., or write today (regarding specific make and models), HAROLD MINTO, PERFORMANCE AUDIO/VIDEO LTD. 365 South Bayview Avenue, Dept. HF, Freeport, LI., NY 11520. (516) 378-4389. Financing, MC/VISA, AMEX. NO SALES TAX CHARGED TO OUT OF STATE RESIDENTS.

Inventions Wanted

Inventions, ideas, new products wanted for presentation to industry and exhibition at national technology exposition Call 1-800-528-6050, Arizona 1-800-352-0458 x831

Compact Discs



COMPACT DISCS & ACCESSORIES. Call TOLL FREE 1-800-ALL-DISC (in Connecticut 1-452-0203) For Free CATALOG M-F, 10-8, Saturday 10-6, Sunday 11-4. All Disc Music Inc., 133 Wheeler Road, Monroe, CT 06468.

COMPACT DISCS! FREE CATALOGUE— Over 2,000 Titles Listed. Same Day Shipping. Laury's Records, 9800 North Milwaukee Avenue, Des Plaines, IL 60016. Call Toll Free Outside Illinois 1-800-CD-DISKS. In Illinois Call 1-312-296-0420.

COMPACT DISCS-Most \$11.99-\$13.99. 2,800 Plus Titles in Stock. Free Catalogue Plus Monthly Updates. OZ Records, 5246H Memorial Drive, Stone Mountain, GA 30083, (404) 292-5452.

COMPACT DISCS AT COMPACT PRICES¹¹¹¹ Over 2,000 Discs from \$9.49 Send \$2.00 for Complete Catalogue DISC HAVEN, Box 602, Dept. H, New London, CT 06320

GET ORGANIZED Beautiful solid oak CD storage system Holds 75 CD's Three shelves Handsome finish 11" wide, 15" high Unconditional guarantee High Quality without the high price Only \$19 95 complete or send for brochure (Dealer inquiries invited) The Oak People, 5503 17/h N W, B205-H2) Seattle, WA 98107 CD/MATE the latest in compact disc acccessories allows portability plus safe, durable protection for 6 compact discs. Only 1 inch thick, CD/MATE is made of durable, nylon with velour lining and velcro closure. CD/MATE's lightweight, compact design eliminates the need for bulky plastic boxes. Available for only \$12.95 plus \$2.00 shipping and handling in black, red and blue from Shore Brothers Ltd., Box H, 2323 Corinth Avenue, LA, CA 90064.

C.D.SUPERMARKET—MOST COMPACT DISCS \$13.49. LARGE SELECTION. Next day shipping in most cases. For information and phone orders, call TOLL-FREE 800-382-1985. CA residents 800-322-1985. C.D. Supermarket, 1525 Aviation Blvd., Suite B-210, Redondo Beach, CA 90278.

Miscellaneous

HEFTIN LONDON WILL COST YOU LESS—Tax free export—mail, phone, personal visit (Visa/Mastercard) K J Leisuresound, 48 Wigmore Street, London W1H 9DF, ENGLAND 01-486-0552

IS IT TRUE YOU CAN BUY JEEPS for \$44 through the U S Government? Get the facts today¹ Call (312) 742-1142, ext 4671

Business Opportunities

YOUR OWN RADIO STATION! AM, FM, Licensed, unlicensed, low cost transmitters! Free information. BROADCASTING, Box 130-D2, Paradise, CA 95069.

ELECTRONIC REPRESENTATIVES NEEDED¹¹ Lowest Possible Prices¹¹ Over 100 Brands¹ Audio-Video-Car Stereo Computers Electronic Experts 1000 Orange Ave West Haven CT 06516

Computer Software

IBM PC/XT PROGRAM TO TRACK RECORDS/TAPES. Store up to 32,000 records. Requires 128K or more memory, DOS 2.10, Basic A. \$79.95. Information: MICROWARE ASSOCIATES-H, 763 Taft Drive, Suite G, Arlington, TX 76011.

Video

CONVERT VIDEOTAPES PAL-SECAM-NTSC (OVERSEAS) 110 220 Audio, Video recorders, Televisions Apple Audio, 74-18 37th Avenue, Jackson Heights, New York, 11372 (718) 507-5800

Workshops

STUDY OPPORTUNITY WITH Jazz Musician CHARLIE HADEN. August 5-23, 1985. ATLANTIC CENTER FOR THE ARTS. Brochure—1414 Art Center Avenue, New Smyrna Beach, FL 32069. Or call 904/427-6975.

Services



PLAYING FOR KEEPS

(Continued from page 74)

the way Coltrane did, as a political statement, but it was too late to learn. So I figured the violin was at least an instrument I already knew a little bit about." He emulated Coltrane and Ornette Coleman before coming under the wing of Leroy Jenkins, the doyen of free jazz violinists. "Every Tuesday and Thursday afternoon for four years, I'd go over to Leroy's place and he would show me correct methods of fingering the strings and sweeping the bow. But mostly we just played together, and he was important to me as an example, although at a much more advanced level. We both were attempting to prove there was a role for violin in modern improvised music."

Bang describes his style as a synthesis of Jenkins's classicism and Coleman's more intuitive approach to violin-as accurate an assessment of his role as any, though it seriously downplays his startling originality both as leader of his own bands and as a member (along with bassist John Lindberg and guitarist James Emery) of the delightful String Trio of New York. Like Air, the Revolutionary Ensemble, and the Modern Jazz Quartet, the String Trio is one of those cooperatives in which the whole exceeds the sum of its parts, impressive though the parts may be to begin with. Even at their most fragmented, convoluted, and scratchingly contrapuntal, the three-part inventions of the String Trio's four releases on Black Saint maintain a lift and tang that recall the Hot Club of Paris and the scherzo movements of the world's best-loved symphonies. On his own Bang has recorded prolifically in a variety of contexts, ranging from the unaccompanied Distinction Without a Difference to the unusual assembly of four strings, three reeds, and three percussion that play his ambitious charts on 1983's Outline No. 12-a record that conveys the thrilling news that his writing is gradually acquiring some of the grit and pluck of his playing. He is one of the wittiest soloists to surface on any instrument in recent years, and perhaps the first since Dexter Gordon to justify the questionable practice of interpolation both musically and dramatically: On Bangception, an album of duets with drummer Dennis Charles, he underscores Coleman's rootsiness, as well as his own harmonic acuity, when he asks Ornette's "Lonely Woman," what did she do

Although John Blake is as diminutive as Bang, and although he too grew up in a black neighborhood, the violin did not have to be forced on him. "I raised my hand when they asked us in third grade who wanted to learn to play. Little did I know what I was getting into. It's a difficult instrument to master, and it feels so unnatural holding it under your chin with your arm outstretched. I probably would have given it up if my mother hadn't persuaded me to stick with it. The kind of stigma Billy talks about didn't begin to bother me until high school, and by that time it was too late. I was hooked."

As a student, he idolized such classical violinists as Jascha Heifetz, David Oistrakh, and Nathan Milstein. Although he fumbled when he first began to improvise, Blake disagrees with Wynton Marsalis's oft-quoted contention that it's a thousand times harder to become a good improviser than to become a good classical musician. "I think Wynton makes statements like that to get people to take jazz seriously, and bless him for that. But it's not that simple. Granted, in classical music you have the notes in front of you, and all you have to do is interpret them. But on the other hand, when you're improvising, you can plot your solos so as to stay safely within your technical limitations, whereas in playing the classical literature, you're constantly running into technical challenges, and there's no way to sidestep them. It's just hard to be good, period."

Nowly but surely, there is a branch of Jjazz taking root wherein skill at interpreting complex notated passages is as paramount as improvisational resourcefulness, and Blake's background in the classics has served him well in illuminating the music of such ambitious composers as James Newton, David Murray, Cecil McBee, and Anthony Davis. Similarly, he chose the sidemen for Maiden Dance, his debut as a leader, on the basis of their sensitivity to texture and "their ability to maintain a sense of structure throughout a piece, improvised solos and all." Blake has also studied the Carnatic violin style of southern India, and he feels that his use of Indian sliding techniques has enabled him to achieve his early goal of capturing the fever of the human voice.

It was during his four-and-a-half years with Tyner that Blake began to gain national recognition and find his improvisational wings. Last spring they parted ways amicably: "McCoy and I both felt it was time for me to go out on my own." Tyner's esteem for Blake is mirrored in the pianist's cameo on *Maiden Dance*; his clinging duet with Blake on his own Dvořákian blues "For Tomorrow" is among the album's biggest treats, not least for the rare pleasure of hearing Mc-Coy in a deferential accompanist's role.

Blake and Bang are both at a stage where they are asking themselves who's out there listening, and wondering how they can swell the ranks. Although Blake is in constant demand as a sideman, he still lives in his native Philadelphia, commuting to New York whenever the call goes out. His next LP for Gramavision, which he began recording in January, will feature his working band: pianist Sid Simmons, percussionist Leonard "Dr." Gibbs, and two former Tyner compatriots, bassist Avery Sharpe and drummer Wilby Fletcher. Last year he entered the studio in another capacity, producing a frankly commercial album for West Virginia pianist Bob Thompson.

Bang has resolved to meet the masses halfway via Forbidden Planet, whose lineup includes a bass guitarist, a synthesizer player, and a fast-tongued rapper. According to Bang, much more than commercial acceptance is at stake in his decision to play funk: "I have to resolve certain contradictions within myself. I went through a period when I felt that dance music with no redeeming educational value was decadent. But now I'm going back to the old neighborhood, so to speak. I want to close the gap between myself and the people who say they can't follow the kind of music I generally play-the people I grew up with in Harlem and the South Bronx." To judge from a rough-mix cassette of Forbidden Planet currently making the rounds, Bang still has a way to go before reconciling his improvisatorial daring with his desire to make music with grass-roots appeal. And since the band is playing mostly for sedentary listeners on college campuses rather than for the hip hop crowd, his reunification with the peoples of Harlem and the South Bronx will remain symbolic for the time being, a fact he ruefully concedes.

The uncertain economic future of jazz makes it difficult to predict what lies ahead. One thing is sure, however: The violin will play a major role in jazz from here on in, and so will John Blake and Billy Bang.

READER ACTION PAGE

Advertising Index

Allsop Electronics	63
Aiwa America, Inc.	Cover IV
Carver Corp.	14
DALI	6
Denon America, Inc.	Cover III, 29
Discwasher, Inc.	16, 17
Harman Kardon	33
Historical Times, Inc.	69
Hitachi Sales Corp.	25
Illinois Audio	83
International Preview Society	21
J & R Music World	81
Kenwood Electronics	В
Kloss Video Corp.	12
LaBelle Camera & Stereo	79
McIntosh Laboratory, Inc.	13
Mitsubishi Sales Corp.	31
Naiad	67
NEC Home Electronics USA	9
Penguin Feather Records	B4
S&W Electronics	82
Sansui Electronics Corp.	7
Sherwood	3
Shure Brothers, Inc.	4
Stereo Corp. Of America	84
Studer Revox	61
TDK Electronics Corp.	Cover II
Tandberg of America, Inc.	18
Teac Corp. Of America	37
Technics	5
Toshiba	13
Wisconsin Discount	82
Yamaha	10

Many manufacturers who advertise in HIGH FIDELITY offer additional literature on their products free of charge to our readers. For more information on specific products advertised in this issue, drop a postcard, care of Dept. HF-585 unless otherwise noted, to the addresses listed below. If an address does not appear, literature is available through the company's dealers only.

AIWA America, Inc.,

35 Oxford Drive, Moonachie, NJ 07074, Att: Dept. HF 585

Allsop Electronics, P.O. Box 23, Bellingham, WA, Att: Dept. HF 585

Carver Corporation, P.0 Box 1237, Lynnwood, WA 98046, Att: Dept. HF 585

DALI/Danish American Ltd, Inc., P.O. Box 55386, Valencia, CA 91355, Att: Mike Gerutto, Att: Dept. HF 585, (805) 252-7203

Denon America. 27 Law Drive, Fairfield, NJ 07006, Att[.] Oept. HF 585

Discwasher, 1407 North Providence Rd., P.D. Box 6021, Columbia, MD 65205, (314) 449-0941. Att: Dept. HF 585

Harman Kardon. 24D Crossways Park West, Westbury, NY 11797, (800) 528-6050, Att: Dept. HF 585

Hitachi Sales Corporation. 401 West Artesia Blvd Compton, CA 9D220. Att: Advertising Dept. HF 585

Illinois Audio. 12 E. Delaware Place, Chicago, IL 6D611, (800) 621-8042, Att. Dept. HF 585

J&R Music World, 23 Row Park, New York, NY 10D38. Customer Service Dept. HF 585

Kenwood. 1315 East Watsoncenter Rd., Carson, CA 90745, Att: Dept. HF 585

Kloss Video Corp. 640 Memorial Drive, Cambridge, MA 02139, Att: Dent. HF 585

LaBelle Camera & Stereo of Maine, 155 Main St., Biddeford, MA 04005, 800-341-0783, in ME, HI, Alaska 207-281-1401, Att: Dept. HF 585

McIntosh Laboratory, inc., East Side Station, P.O. Box 96, Binghamton, NY 13904, Att: Dept. HF 585

Mitsubishi Electronics Sales, 3010 East Victoria St., Compton, CA 90221, Att Dept. HF 585

NEC Home Electronics (USA) Inc., 1401 Estes Ave., Elk Grove Village, IL 60007, Att: Dept. HF 585

S&W Electronics, 187 Ross Street, Brooklyn, NY 11211, Att: Dept. HF 585

Sansui Electronics Corp., Lyndhurst, NJ 07071, 2D1-604-73DD. Att: Dept. HF 585

Sherwood Electronics. 13845 Artesia Blvd., Cerritos, CA 90701. Att: Dept. HF 585

Shure Brothers, Inc., 222 Hartrey Ave., Evanston, IL 60204, Att: Dept. HF 585, 312-866-2553

Stereo Corporation of America, 1629 Flatbush Ave., Brooklyn, NY 11210, 718-338-8555, Att: Dept. HF 585

Studer Revox. 1425 Elm Hill Pike, Nashville, TN 37210, 615-254-5651, Att: Dept. HF 585

Tandberg of America, Inc., 1 Labriola Court, Armonk, NY 10504, Att: Dept. HF 585

TDK Electronics Corp., 12 Harbor Park Dr. Port Washington, NY 10050, Att: Dept. HF 585

Teac Corp. of America. 7733 Telegraph Rd., Montebello, CA 9D640. Att. Dept. HF 585

Technics, One Panasonic Way, Secaucus, NJ 07094, Att Dept. HF 585

Toshiba, 82 Totawa Rd., Wayne, NJ 07570, Att: Dept. HF 585

Wisconsin Discount Stereo, 2417 W. Badger Rd., Madison, WI 53713, 80D-356-9514, Att: Dept. HF 585

Yamaha Electronics Corp. USA, 666D Orangethorpe Ave. Buena Park, CA 90620. Att: Dept. HF 585

Advertising Offices New York: ABC Lessire Magazines, Inc., 825 7th Ave., 7th Toor, New York, N.Y. 10019. Tel. (212) 265.8360. James A. Casella, Advertising Director, Richard J. Marino, National Accounts Manager. Michael Goldberg, Eastern Advertising Manager, James R. McCallum, Record Advertising Manager, Cardice Leyden, Dasshed Advertising Manager, Kalhleen Davis, Director of Production, Jamet Cermali, Advertising Production Manager. Michaels Michaels, Procu

"A GREAT TURNTABLE DOES NOT COMPROMISE ONE DESIGN PARAMETER FOR ANOTHER."

There is no reason that a maximum performance turntable should not also be beautiful and simple to use. Denon can prove it. From the DP-23F, a full-sized fully automatic turntable with Dynamic Servo Tracer microprocessor controlled tonearm, flat-twin direct drive motor with magnetic speed detection for \$225; to the DP-35FB with a Dynamic Servo Tracer tonearm and high density, anti-resonance base for \$275; to the

Audio Video International Hi-Fi Grand Prix award winning DP-37F (\$325) and DP-45F (\$375)—each model in the new Denon DP-Series offers the maximum combination of performance, construction quality, convenience

and styling. The new Denon DP-Series Turntables. Honest designs that give you something extra for your money without taking something else away.





Denon America, Inc., 27 Law Drive, Fairfield, N.J. 07006 (201) 575-7810

Aiwa's AV-70M brings a new dimension to Beta hi-fi: surround-sound.

Continuing its tradition of engineering excellence, Alwa's new AV-70M Beta hi-fi video system offers an unprecedented level of superior video and audio performanoc.

* Now, when you watch a movie, the action can take place above you, behind you, even right on top of you. We call it surround-sound.

It's what happens when you combine the incredible new Aiwa AV-70M's Beta hi-fi sound quality with Aiwa's latest innovation: the Aiwa surroundsound system. And that's all !

Aiwa's remote-controlled Beta hi-fi system also features a complete on-screen information display. Function and programming commands are shown on the TV screen.



It's simple. It's advanced. It's Aiwa. With all these big features you'd expect the new Aiwa AV-70M to be big. It's not.

The Alwa AV-70M is no wider than a record album. In fact, it matches Aiwa's renowned S.P.A.N. audio systems. Aiwa's new AV-70M puts you in the best seat in the house. Your house.



Heard any good movies lately?









Aiwa America Inc., 35 Oxford Drive, Moonachie, New Jersey 07074 In Canada, Shiro (Canada) Ltd.