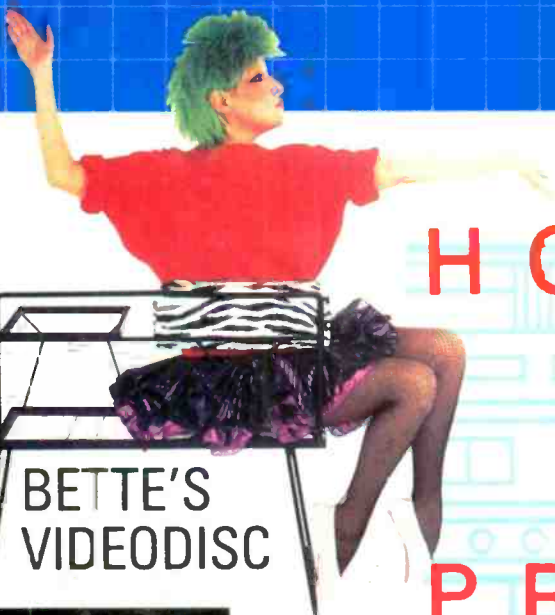


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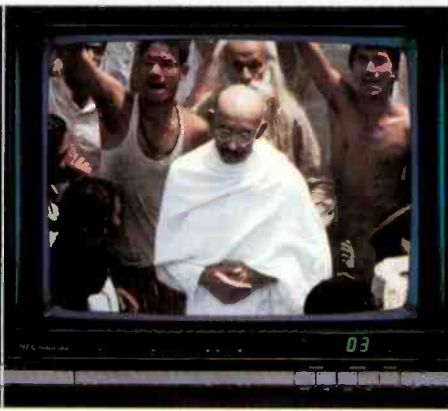


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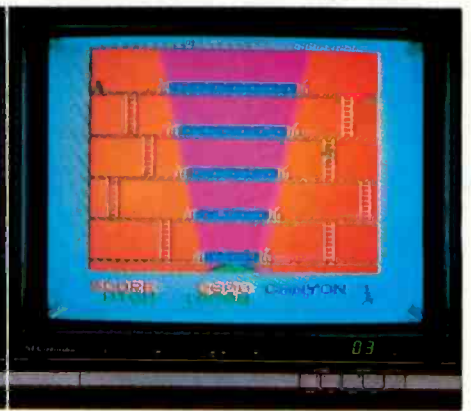
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VOLUME 33 NUMBER 12 DECEMBER 1983

AUDIO

High Fidelity News: Nakamichi's turnaround deck; 15-disc Sinatra set; Pioneer CD player	10
CrossTalk by Robert Long	18
The Autophile by Gary Stock	20
Looking for Mr. Goodsound, or how to choose a car-stereo installer	
* Retsoff's Remedies by Alexander N. Retsoff	23
Rub-a-dub-dub, an LP in the Tub—serious measures for serious dirt	
Basically Speaking: How HF tests power amplifiers by Michael Riggs	24
* New Equipment Reports	
Hitachi DA-800 Compact Disc player	28
Pioneer SX-50 receiver	30
Acoustic Research turntable	35
ADC TRX.2 phono cartridge	39
Sony ST-S555ES tuner	40
JBL L-86 loudspeaker	44
* Assembling a Serious System: Personal Strategies	
The Argument for Separates by Robert Long	46
A Recordist's Reference Setup by E. Brad Meyer	47

NEW TECHNOLOGIES

* Video Lab Tests	
Mitsubishi AM-1301 TV receiver/monitor	55
Jensen AVS-5190 shielded loudspeaker	62
* Music-Synthesis Software: A Beginner's Guide by Lida A. Silverman	66
A survey of music-teaching and music-synthesis programs	
TechFronts: Mind over music; Pint-sized projection TV; RCA's interactive CED	68
Say Hello to SID by Paul D. Lehrman	69
Making music via the Commodore 64 Sound Interface Device	
* Compact Disc Reviews	
Pop: Randy Newman; Wynton Marsalis; Men at Work; Art Pepper	73
Classical: Two cello concertos—Haydn and Boccherini	75
* Videodisc Reviews: Itzhak Perlman's Beethoven violin concerto; Bette Midler's "Divine Madness"	76

CLASSICAL MUSIC

* The 16th Annual HF/International Record Critics Awards by James R. Oestreich	78
The first ballot yielded two clear winners; then came the battle	
Brahms Birthday Bash Reviewed by Harris Goldsmith	80
The Deutsche Grammophon "complete" edition—Part I of a two-part series	
Reviews: DeGaetani sings Crumb and Ives; Giulini's <i>Falstaff</i> , <i>La Cage aux folles</i>	84
Critics' Choice	86
The Tape Deck by R.D. Darrell	91

BACKBEAT/Popular Music

Who Is Richard Thompson? by Sam Sutherland	92
Onetime Fairport Convention member is finally gaining momentum as a soloist	
Pop Reviews: Asia; Big Country; T-Bone Burnett; Linda Ronstadt	96
Jazz Reviews: Sheila Jordan, Harvie Swartz; Lounge Lizards; Lennie Tristano	101

DEPARTMENTS

About This Issue	3	Reader-Action Page	112
Letters	7	Advertising Index	112
		*Cover Story	

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About This Issue

Inside the Pages of December's High Fidelity

PUTTING TOGETHER A STEREO SYSTEM that you truly enjoy takes time. It's more than simply buying the requisite components and linking them together. It involves focusing in on exactly what you want from your system and keeping those needs in mind throughout the selection process. "Assembling a Serious System" explores the personal strategies of two experts: consulting editor Robert Long, who develops the rationale for building a basic stereo system from separate components, and E. Brad Meyer, who explores the special demands of a "monitor system" for the home tape recordist.

Of course, an audiophile is as serious about his record collection as he is about his system. Each year HIGH FIDELITY organizes the International Record Critics Awards, which honor the top classical recordings from around the world. This marks IRCA's 16th year, and, also as in the past, the prestigious Koussevitsky Award is presented to a living composer for an orchestral work in its first recording. Our report lists IRCA's winners, runners-up, nominees, and judging panel. On the popular end of the musical spectrum, this month's BACKBEAT interview is with former Fairport Convention lead guitarist Richard Thompson, who is finally catching on as a soloist in the U.S.

Whether your record library is large or small, a major consideration will always be keeping the discs clean. Although one of the commercially available cleaning kits will usually suffice for routine maintenance, occasionally something extra sticky may get on the record surface, calling for more drastic measures. The title of this month's "Retsoff's Remedies," "Rub-a-dub-dub, an LP in the Tub," should lend a clue to our last-resort solution to these problems.

Our digital Compact Disc coverage continues this issue with a test report on Hitachi's new DA-800 CD player and reviews of many of the latest pop and classical releases on CD. Incidentally, we'd like to thank all of you who stopped by to see us over the past month during our 17-city digital-disc informational tour with WEA (Warner/Elektra/Atlantic), Sony, and Polygram. Some of the most popular materials we offered at these events were three 16-page Special Editors' Reports on the Compact Disc, entitled *A Basic Guide to the Compact Disc*, *CDs—the Players and the Discs*, and *Digital Sound: It's Here!* Watch for details next month on how you can obtain copies.

From time to time we cover home-computer software with which you can create music. This issue we survey more than 15 programs currently available for five of the most popular home-computer systems. And Paul D. Lehrman gives you a first-hand user's report on three of these programs, designed for the Commodore 64, in "Say Hello to SID."

Finally, a quick look ahead to next month: Our annual test report issue will feature 12 lab tests, including those on the latest CD players and two video components.—W.T.



COVER DESIGN: Skip Johnston

Illustration: Nina Wallace
Photos: Ronald G. Harris

ON THE COVER: Hitachi DA-800 Compact Disc player, Sherwood S-250CP cassette deck, Denon POA-1500 power amplifier

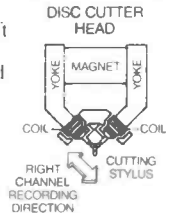
Bette Midler: Photo by Greg Gurman, Courtesy Atlantic Records

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Back to Basics!

When a disc recording is made, a cutting head, with its diamond cutting stylus, slowly spirals from the outside to the inside of the blank record surface. Inside the cutting head are two coils, similar to speaker coils, except they are both coupled to the cutting stylus instead of speaker cones. Each coil is mounted at a 45° angle to the surface of the record, and at 90° to the other. When the left coil is energized, the cutting stylus is moved from upper left to lower right, while the other coil moves the stylus from upper right to lower left.

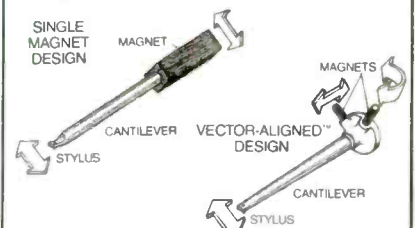


One Groove...Two Signals

This geometry permits independent signals to be recorded on each face of the V-shaped groove. Signals intended only for the left speaker appear as undulations of only the left-hand groove side, while the other groove wall is smooth and unmodulated. A signal common to both channels results in horizontal motion of the cutting stylus if it is in phase, or vertical motion if out of phase, with both groove walls affected.

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Jon R. Kelly

Jon R. Kelly, President
Audio-Technica U.S., Inc.
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Peter Aczel *The Audio Critic* Winter 1982-83

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Letters

Digital Discord

I read with interest E. Brad Meyer's comments in "CD Sound: Trouble in Paradise?" [July]. I have had the unusual opportunity to compare a Compact Disc to the original master tape (analog) at a disc-mastering facility in Los Angeles. I must take issue with Mr. Meyer and state that the Compact Disc is not a faithful replica of the signal source. Instead, the CD in question manifested more differences from the master tape than a phonograph record of the same product.

After listening to various Compact Discs from Telarc, Delos, Polygram, and CBS/Sony, it became apparent that they were universally fatiguing. The best feature of the Sony CDP-101 is the off switch. Therefore, I shall consider the Compact Disc to take its rightful place in audio history alongside quad and the Elcassette.

Melodee Haselton
Universal City, Calif.

Technical Editor Michael Riggs replies: *In the opportunities I've had to compare cutting masters to CDs and LPs made from them, I have occasionally heard differences between the tape and the LP (quite small when the LP was well made), but never between the master and the CD. I have also done bypass tests with a Sony PCM-F1 digital processor (whose operating principles are essentially the same as those of the Compact Disc system) and have not detected any difference between the input and output.*

This leads me to suspect that the tape used for mastering the CD you heard was not the same as the one used for mastering the LP (remixing and re-equalizing for CD is becoming increasingly common, and I suspect that some CDs are being made from Japanese rather than domestic cutting masters) or that some changes were introduced deliberately at the time the CD version was mastered. At least, that makes more sense to me, given my experiences and those of other people whose ears and opinions I trust. In particular, Bob Ludwig of Masterdisk here in New York has said that he loves CDs because they are consistently faithful replicas of the tapes from which they are made—something he can never depend on with analog records.

Finally, I agree that some CDs are fatiguing to listen to, but so are many ordinary photograph records. A recording made with a lot of treble boost is going to sound bad no matter what you put it on. Fortunately, there are good recordings to be found in both formats.

The article by E. Brad Meyer in the July issue would have been more properly titled "Unsound Views" ("CD Sound: Trouble in Paradise?"). Mr. Meyer takes off on the premise that Compact Discs are in trouble because of "CD sound." To support that thesis, he cites the audio press as having a startling number of "negative responses." He then devotes the bulk of the article to tangential issues of poor microphones in poor placements, poor mixdowns, and where concertgoers sit. Not one shred of evidence is presented to support the contention that something is wrong with Compact Discs or the equip-

ment to play them.

What audio press has Meyer been reading? The views of every qualified writer who has spectrum analyzers, IM distortion analyzers, test discs, and other equipment to quantitatively evaluate the system have confirmed that the Compact Disc system rivals a straight zero-resistance wire to the recording studio. So why the cheap shot at the CD system? If Meyer doesn't like what he hears, why shoot the faithful messenger?

The emergence of an important new technology deserves more accurate and objective treatment. The best you can say for this article is that it belongs in the publications of the audio "lunatic fringe."

Frederick W. Johnson
Garland, Tex.

E. Brad Meyer replies: *I would like to thank Mr. Johnson for giving me some ammunition in my fight with what he calls the "lunatic fringe," most of which believes I am much too pro-digital. All I have to do is show them his letter.*

But I'm afraid he has misread me. In the first two paragraphs of the column I dismissed the notion that the digital medium is affecting the sound in any major way. And if the medium is virtually perfect, then microphones, mike placement, and equalization are not tangential: They are an absolutely vital part of what we are hearing.

I have my own test equipment and can confirm the excellent specifications of my CD player. But many of the "subjective" reviewers have correctly pointed out that no matter how good the measurements of the system may be, many CDs sound harsh and unpleasant. I agree with their perceptions but not with their explanations, and so have tried to direct people's attention to the recording techniques that I believe should be our next concern.

Record-Filing Feedback

As an old rock 'n' roll turned library micro-computer hacker, I was interested in Roger Parker's article about using Visifile to catalog a record collection ["Let Order Prevail—Computerize Your Record-Filing System," June]. Allow me to offer two suggestions.

A reader with a plain-vanilla Apple will find that DB Master version 3.0 from Stoneware (San Rafael, Calif.) should handle the task. If he has an Apple IIe (or II+ with 64k), he should use the recent 4.0 version. These programs work best with two disk drives, but can be used quite satisfactorily (with disk swapping) with one.

Depending on the version of CP/M a reader might own, he will find that dBase II from Ashton-Tate (Culver City, Calif.) will also do the job.

These programs will not run out of space or lack the flexibility an individual's collection might demand. The unsophisticated will have some frustration in setting up the files (that's the state-of-the-art trade-off), but in the end, it's worth the effort.

Eric S. Anderson
Editor, *Wired Librarian's Newsletter*
Freeport, Ill.

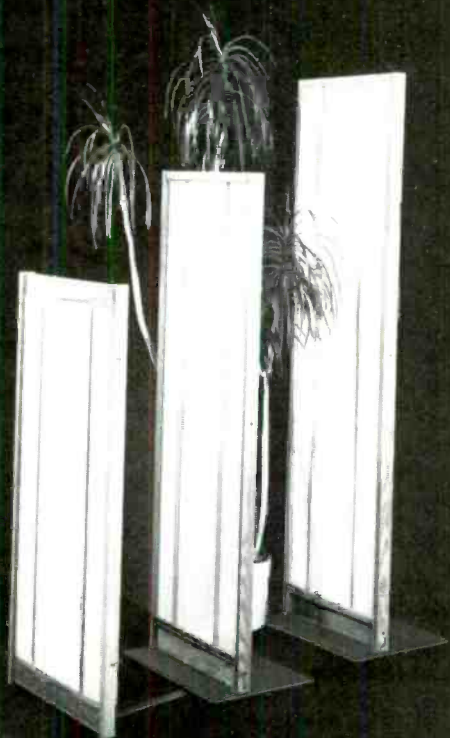
Roger Parker's article on computerizing your record filing brought to mind the loose-leaf-binder record-indexing system (based on the *Schwann Catalog*) that I have used for many years. When I

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Letters

bought a personal computer, one of my justifications was to put my record-collection file in it. I started to, but quickly realized that my old method was a lot easier and better. And that's true for all the other files I was going to transfer (photo-negative file, checkbook, home inventory, car records, recipes, etc.).

Walter H. Mueller
Indianapolis, Ind.

Apparently you didn't select the right software for your filing operations. We are planning a follow-up to Roger Parker's piece in the near future, which should give you additional insight into the pros and cons of using Perfect Filer and dBase II for music-organizing chores.—Ed.

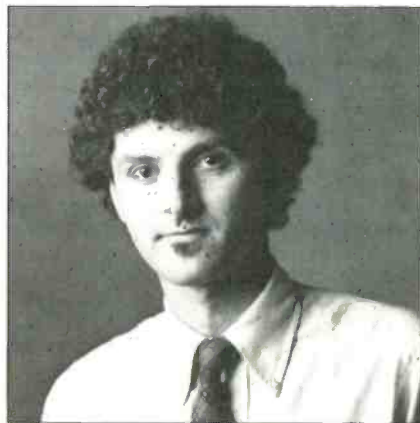
X. Rea Vision

I was delighted to see the interview with Talking Head David Byrne in the September issue. In an age of screaming rock and mindless pop, his group's unique music and interesting lyrics are refreshing.

While I am not in the habit of criticizing HF's regular contributors, I found Steven X. Rea's purely subjective description of Byrne's face morbid, unprofessional, unfair, not nice, and just plain peculiar. "Lycanthropic" indeed! Mr. Rea interviews one of the hottest, most intense artists in the music business today and then reports that this art student-turned-musician has hair all the way around his eyes and looks like a werewolf. Did Mr. Rea write this article, or was it really Roseanne Rosannadanna?

I wonder what Mr. Rea looks like.

Don Holmes
Middletown, N. Y.



MARK HANANER

Steven X. Rea

Missing Persons

How can I get in touch with Naiad Products, whose speaker stands appear on page 11 of your January issue?

Bill Meadors
Jackson, Miss.

Write to Naiad Products, Inc., 121 Roy Blvd., Box 1840, Brantford, Ont., Canada N3T 5W4.—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 and clarity.

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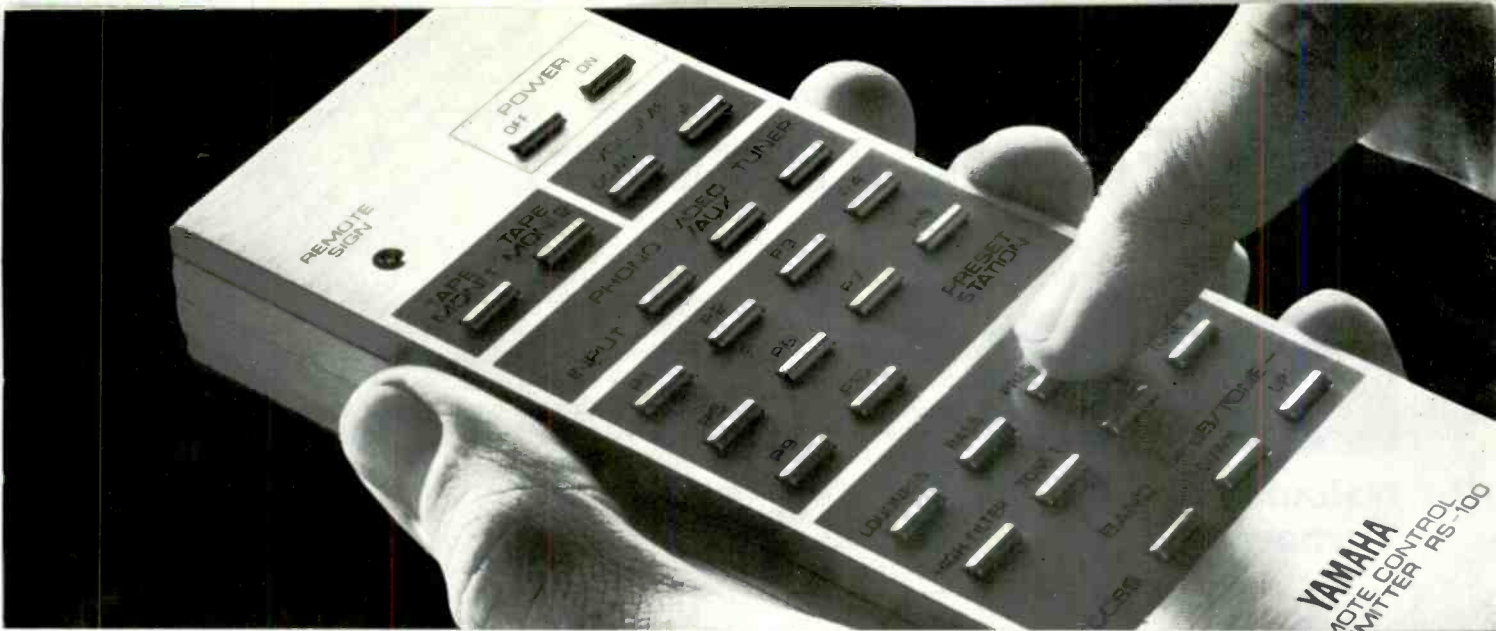
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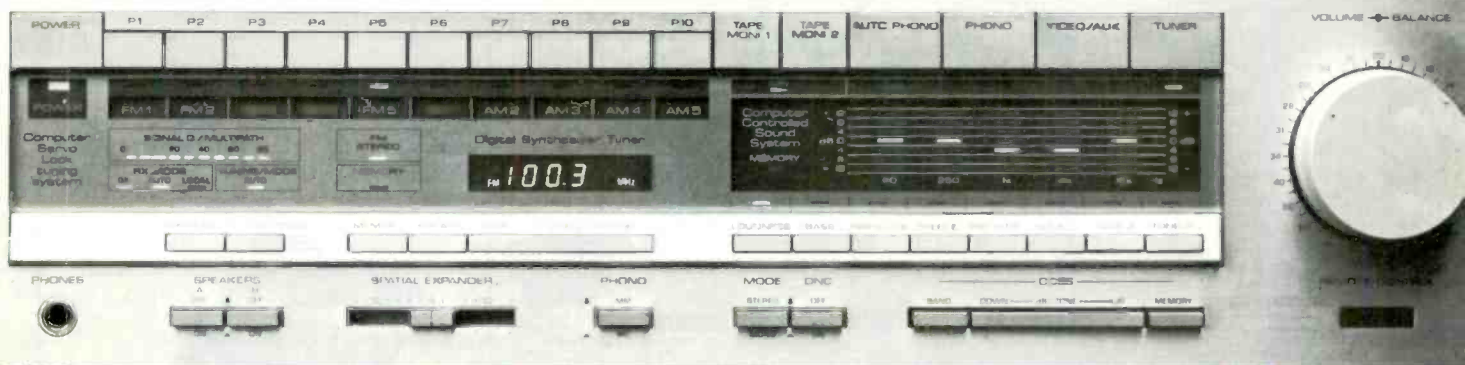
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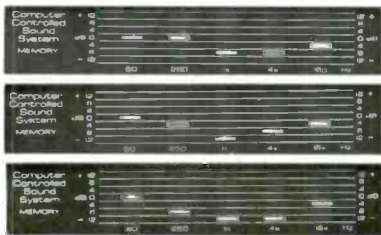


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There's 100 watts RMS per channel (both channels driven into 8 Ohms, 20 Hz to 20 kHz, with no more than 0.01% Total Harmonic Distortion) combined with our unique Zero Distortion Rule circuitry to virtually eliminate power amplifier and thermal distortion. But such wonders have been heard from Yamaha before.

The unheard-of part is the phenomenal control the R-100 gives you over your music. For the first time, a five-band graphic equalizer is combined with a microcomputer. This unique Computer-Controlled Sound System (CCSS) allows you to select from five different preset frequency response curves (Loudness, Bass, Presence, Treble, or High Filter), and then further adjust each of the five curves in four different preset variations. You can then store any three of the preset variations in memory for instant recall.



THREE PRE-PROGRAMMED LOUDNESS CONTOUR CURVES.

And if you really want to be creative with your music listening, you can adjust the five bands independently to form any frequency response curve you choose, then store it in memory.

The CCSS offers you unparalleled flexibility to tailor the music to your personal taste and listening environment.

And you can control all this (and a lot more) by just pressing the right button on the remote control unit that is a standard accessory.

There's more that comes standard with the R-100. Like Yamaha's spatial expander, dynamic noise canceller, the ability to handle low impedance loads, and the headroom to handle "hot" source inputs.

And there are four more models to choose from, each with the same natural sound Yamaha is famous for.

Whichever one you choose, you'll hear your music like you've always wanted to hear it. Give a listen at your Yamaha dealer. Or write Yamaha Electronics Corporation, USA, P.O. Box 6660, Buena Park, CA 90622.

FOR THE MUSIC IN YOU.



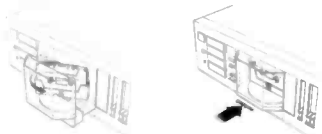
High Fidelity News

New equipment and developments



Nakamichi Turnaround

When the gentlemen from Nakamichi told us that the company would soon be unveiling a cassette deck with a "unidirectional autoreverse mechanism" and asked us to guess how Nakamichi could include bidirectional recording and playback in a deck that pulled tape in only one direction, we were stumped. Simple, he finally said, we just make the cassette turn over and keep the heads stationary. It was a few weeks after that meeting that we finally had a chance to glimpse the new RX-202, which is as elegant a piece of mechanical engineering as we have ever seen. The cassette



Out and around with the RX-202

is turned over by a rotating table that pulls out from the cassette well, flips the tape, then quickly retracts. The whole process takes about five seconds. Unidirectional tape travel eliminates the problem of playback azimuth misalignment in "reverse" play, thus avoiding the inevitable tradeoff between performance and convenience in most bidirectional decks. The RX-202 (\$650) is equipped with Dolby B and C and has typical Nakamichi specifications: flat frequency response at -20 dB recording levels and a signal-to-noise ratio of better than 68 dB with Dolby C. For more information, write to Nakamichi U.S.A. Corp. (1101 Colorado Ave., Santa Monica, Calif. 90401).



Hefty Power

Using a MOS-FET output stage, the A-2801 power amp from Soundcraftsmen is said to be capable of operating continuously into difficult 2-ohm loads. The unit is rated

at 140 watts (21 1/2 dBW) per channel into 8 ohms and 205 watts (23 dBW) into 4 ohms. Special clipping indicators on the front panel light only when a comparison circuit detects the presence of a distorted waveform at the output. The A-2801, which uses no current limiting in its protection circuitry, costs \$550. For more information, write to Soundcraftsmen (2200 South Ritchey, Santa Ana, Calif. 92705).



Sweet Sixteen

A 16-track recorder using 1/2-inch tape, the B-16 from Fostex runs at 15 ips and includes Dolby C noise reduction for a claimed signal-to-noise ratio of 72 dB. Features of the unit include multitrack punch-in/out recording, video interlock capability with a rear-panel connector designed to accept SMPTE synchronizers, and a ±15-percent variable speed control for recording and playback. The basic unit, which uses two direct-drive reel motors and a belt-driven capstan, costs \$5,900; a version with a direct-drive capstan costs \$6,600. The deck can also be ordered with integral DBX noise reduction and full tape monitoring capability; a footswitch for remote punch-in/out and a full-function remote control with a real-time tape counter are available as optional accessories. For more information, write to Fostex Corp. of America (15431 Blackburn Ave., Norwalk, Calif. 90650).

All of Me, Almost

If your old Sinatra albums have gotten too scratchy to do justice to The Voice and you feel the Capitol reissues that have been appearing over the past several years lack the proper panache, you might want to investigate Mobile Fidelity's 15-disc boxed set of half-speed-remastered LPs encompassing Sinatra's output from 1953 to 1962. As with all Mobile Fidelity reissues, "orig-

inal" master tapes were used for these discs, which in many instances means rechanneled "stereo" tapes made from the original mono mixes. The collection contains the following titles: "Swing Easy"/"Songs for Young Lovers" (one disc), "In the Wee Small Hours," "Songs for Swingin' Lovers," "Close to You," "A Swingin' Affair," "Where Are You?," "Come Fly with Me," "Sinatra Sings for Only the Lonely," "Come Dance with Me," "Look to Your Heart," "No One Cares," "Nice 'n' Easy," "Sinatra's Swingin' Session," "All the Way," "Come Swing with Me," "Sinatra Sings of Love and Things." The \$350 set also contains Mobile Fidelity's Geo-Disc phono pickup alignment device. For more information, write to Mobile Fidelity Sound Lab (21040 Nordhoff St., Chatsworth, Calif. 91311).



A Remarkable Remote from Revox

Remote controlled audio systems are becoming increasingly common, and we thought you'd like to see what looks to be an amazingly useful controller. The Revox B-201 (\$125) is designed specifically for use with the company's new 200 Series components, but owners of the B-791 and B-795 turntables, B-710 cassette deck, and B-77 open-reel recorder can have those units modified for remote-control operation. The hand-held controller's keypad is divided into three logical control panels—one each for preamp, tuner, and recorder functions. The flexibility of this arrangement can be seen in its ability to engage the system's record-out selector and preset tone control setting, as well as to switch between source and tape during recording. The only problem with today's remote-controllable audio components is that you must buy one-brand systems to make full use of the capability. Although such an approach makes obvious economic sense to the manufactur-

Buff Stuff from TDK.



You, the audiophile, are the toughest critic we know when it comes to sound performance. You're very selective in deciding the perfect equipment for your recording and listening needs.

And you're just as selective in choosing your recording tape. TDK knows that. So we developed a line of high performance audio cassettes that meet your critical requirements.

We call it the TDK Professional Reference Series.

You're probably using TDK SA-X high bias cassettes now because of their superior performance characteristics. In addition, TDK has developed normal bias AD-X which uses TDK's famous Avilyn particle formulation and delivers a wider dynamic range with far less distortion than ever before. Plus, TDK's unique metal bias MA-R cassette which features high-energy performance in a one-of-a-kind unibody

die-cast metal frame.

The TDK Professional Reference Series...it'll sound impressive to your ears. So share the pleasure with your friends; they'll appreciate it.

 **TDK**[®]
THE MACHINE FOR YOUR MACHINE

The leader in equalizers still stacks up best with improved specs, more features and a new look.

ADC's new line of Sound Shapers® prove that the best just got better. Again. Our stereo frequency equalizers incorporate the superb electronics, reliability, and high performance technology that have made ADC famous. Plus we've improved them with new refinements that offer you more control and a new design that makes them look as good as they function.

Our top-of-the-line SS-315 offers a unity gain of ± 1 dB and the best signal-to-noise ratio in the industry. For the utmost in versatility, the range of each frequency control is an extra wide ± 15 dB, far more than the 12 dB of lesser equalizers. Tape monitoring and two-way dubbing capabilities for two decks are available. LED indicators for each control let you see the selected frequency curve at a glance. The SS-315 includes a built-in real-time spectrum analyzer, pink noise generator and calibrated electret microphone enabling you to attain flat response in minutes. Other features include external noise reduction and sound processor loops to accommodate time delay, subharmonic synthesizer, dynamic range expander or reverb units. There's also a subsonic filter that gets rid of damaging, power-robbing subsonic frequencies.

The other models in our Sound Shaper line offer the same fine ADC quality, with similar features geared to your equalization and budget needs.

If you've been waiting for the right stereo frequency equalizer for your system, don't wait any longer. With ADC Sound Shapers, the odds are stacked in your favor. (And if you're into video, be sure to see and hear what our new ADC Video Sound Shapers can do to improve your video performance.)

*Sound
Shaper*
Frequency
Equalizers

Shaping sound is as easy as **ADC**

ADC Division BSR (USA) Ltd., Blauvelt, N.Y. 10913 (914) 358-6060
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AUDIO High Fidelity News

er, we'd like to see the industry agree on some sort of control standard so that those of us who like to mix brands can go remote with no sacrifice in buying flexibility. For more information, write to Studer Revox America, Inc. (1425 Elm Hill Pike, Nashville, Tenn. 37210).



Diversity Tuning for Better Reception

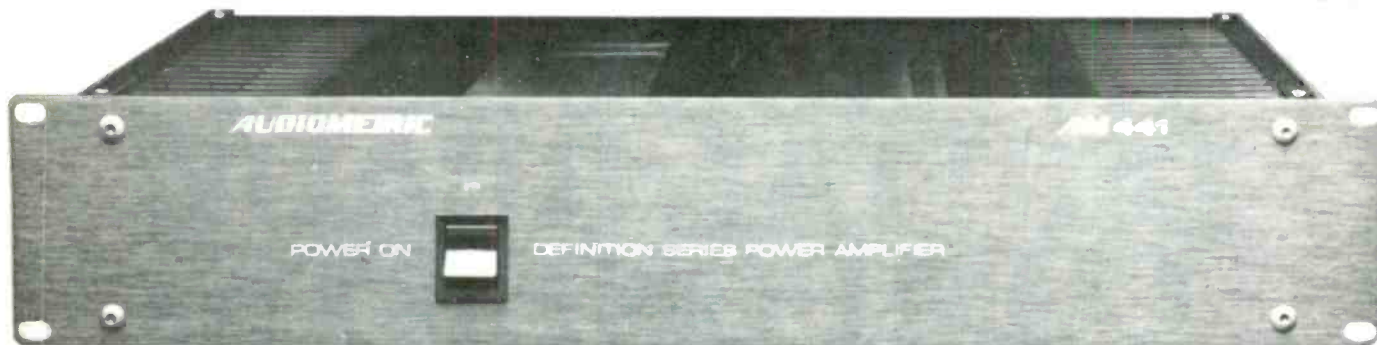
Clarion's new high-technology Audia series of front-ends and electronic separates is bound to elicit some admiring gasps from autosound devotees. Take the top-of-the-line DTX-1000, only the second cassette/receiver we know of to include a diversity-reception tuner. Intended to minimize multipath distortion and picket fencing, diversity reception supplements the car's main antenna with a second one mounted a foot or two behind it. A circuit in the tuner continuously monitors the strength and quality of the signals being received by the two antennas and chooses the cleaner one on a second by second basis. Because many of the problems of FM reception in a moving car are related to short-term signal fluctuations, the ability to choose between the signals from two antennas should improve reception dramatically. For more information, write to Clarion Corp. of America (5500 Rosecrans Ave., Lawndale, Calif. 90260).



Pioneer's "First" Compact Disc Player

Though Pioneer has long been involved in optical disc technology and was one of the first manufacturers to demonstrate a prototype digital audio disc player, its recently announced P-D70 Compact Disc player (\$800) seems to have taken a long time to reach these shores. The unit has a number of convenience features, including programmability for as many as 10 selections, music search either by track number or elapsed time, and fast scan with audible output. The P-D70, which uses a drawer-type disc-loading mechanism, should be readily available next month. For more information, write to Pioneer Electronics (1925 E. Dominguez St., Long Beach, Calif. 90810).

Make The Earth Move For Your Receiver



Infuse your own receiver with 440 watts, 220 watts per channel, of earth shaking mind boggling sound power. Experience the resonant depth, and thrill in the realism that only truly massive audiophile power can produce. And, wait till you see DAK's breakthrough price.

Make the earth move. Shake your home to its very foundations. Your stereo system will explode with life.

Just insert this 440 watt (220 X 2) audiophile amplifier between your receiver and your speakers by using the special 'black box' interface (included).

The sonic difference between the sound produced by this amplifier and a typical 30 to 50 watt receiver is as dramatic as the difference you'll hear when you switch from an AM radio to an FM stereo tuner.

USE YOUR OWN RECEIVER

There's a 3 dimensional aspect to the sound you'll hear that will leave you breathless. Music that sounded fine before, will be muddy by comparison.

You'll hear the dynamic range of your music literally explode as the chains of small amplifier capacity are cast aside. Your music will seem to expand both up and down, and it's so realistic that it will almost reach out and touch you.

And, best of all you'll be using your own receiver or preamp so you can easily compare the awesome difference. Plus, you can forget the specifications of the amp in your receiver, because they're about to be incredibly improved.

GREAT IDEA

Bring your own system to life with this 220 watt per channel, at 8 ohms, from 20hz to 20,000hz, with no more than 0.025% total harmonic distortion, audiophile amplifier.

It has an actual frequency response that stretches from 5hz to 100,000hz and a signal to noise ratio of 100db.

This top of the line Full Complementary Bridged audiophile amplifier is made in the U.S. by Audiometric, an upscale division of one of America's top audio manufacturers.

Just as with any other power amp, it can be hooked directly to any preamp. But, Audiometric has made a special interface exclusively for DAK that also allows it to be used with your own receiver.

Here's how it works. You attach the interface's 'black box' to your receiver's speaker terminals with the included standard speaker wire.

It loads your amp's outputs with an 800 ohm load, not the usual 8 ohm load. This means that your amplifier works virtually 1/100th as hard, so in effect, your receiver's amplifier becomes a preamp.

And for all practical purposes, distortion headroom and frequency response won't be limited by your receiver's amp.

The output from the interface feeds through standard patch cords into the amplifier. Once you've connected your speakers to the Audiometric 220 watt per channel amp, get ready for an incomparable kaleidoscopic explosion of sound.

And, as far as controls, you'll use your receiver or preamp exactly as you do now. The only difference will be the massive proportion and fine detail of the musical sound you'll experience.

FULL COMPLEMENTARY BALANCED BRIDGE

This system of amplification actually includes speaker behavior within the scope of amplifier performance. A Balanced Bridge amp forces the speaker systems to exactly reproduce musical signals from the amplifier.

Technically speaking, the Balanced Bridge system is like a combination of 4 amps. It's almost as if there were two amps for each channel.

The positive side of each speaker system is driven by one amp and the negative or ground side is driven by the other. So, the speaker itself actually becomes the interactive part of the amplifier.

This system literally assures perfect symmetry of the positive and negative sides of each cycle and absolutely locks the speaker into compliance with the signals produced by the amplifier.

It's important to note that the major difference isn't just the frequency response and ultra low distortion when measured at the amplifier.

The major difference is the fact that these specs. are carried out through your speakers for you to hear as massively powerful, but incredibly pure clean sound.

THE BOTTOM LINE

This Full Complementary Bridged Amplifier will deliver authentic musical truth. It has a super fast slew rate, transient intermodulation distortion (TIM) is not discernible, and because the transistors never shut off, you can just about forget crossover or notch distortion.

You'll hear pure uncolored unbelievably powerful sound that will send shivers up and down your spine and peel the paint from your walls.

The difference you'll hear with this amp won't be subtle. It's like opening a door. The music just seems to expand. At low levels there's a fullness and richness of sound that's breathtaking.

At high levels, you won't experience compression or clipping distortion that

smaller amps suffer as they try to produce full orchestral passages.

Most people think that more power (more watts) just makes for louder sound. That's not even half true. High power makes for clean pure unrestrained transparent sound at any listening level with virtually any speaker systems.

AUDIOMETRIC

If you're really into audiophile components, it won't be hard to figure out which of the few companies making 220 watt per channel audiophile amps is responsible for this amplifier.

The last time we ran a component from this company, they had so many dealer complaints about our low discount pricing that they really don't want us messing things up again.

So, while many other audiophile 220 watt per channel amps sell for \$600 to \$1000, from DAK and only under the Audiometric name, you'll have incredibly pure powerful sound for just \$349.

It is 19" wide, 12 3/4" deep and 3 1/2" high. And, it's backed by a standard 2 year limited warranty.

TRY THUNDERING REALISM RISK FREE

Sonically pure, thunderously powerful, this 220 watt per channel amplifier will bring audiophile sound to your receiver. Or, if you already have separates, it will add incredible power and clarity.

Try this power amplifier in your own system. If you don't hear incredibly better musical sound instantly through your own speakers, return it in its original box within 30 days for a courteous refund.

To order your 440 watt Audiometric 441 Definition Series Power Amplifier with 220 watts per channel with the special interface 'black box' for use with any receiver, call toll free or send your check, not for the \$600 to \$1000 you'd expect to pay, but send just \$349 plus \$12 for postage and handling. Order Number 9765. CA res add 6% sales tax.

No matter whose receiver or preamp/amp you now have, the purity and thundering power of this amp will revolutionize the sound of your stereo system.



DAK

INDUSTRIES INCORPORATED

13H

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For credit card orders call 24 hours a day 7 days a week
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**INTRODUCING
DIGITAL-READY
COMPONENTS.**

**FROM THE PEOPLE
WHO BROUGHT
YOU THE
DIGITAL DISC,
DIGITAL PLAYER,
DIGITAL
PROCESSOR,
DIGITAL MIXER,
DIGITAL
REVERBERATOR,
DIGITAL RECORDER,
DIGITAL EDITOR,
DIGITAL
DISC MASTERING**

When the history of music is written, the chapter on digital will read like a list of accomplishments from just one company—Sony.

And now, to meet the stringent demands of their digital creations, Sony engineers have developed an entirely new line of high-fidelity components. The ES Series.

To handle the phenomenal dynamic range of the new CDP-701ES compact disc player and PCM-701ES digital audio processor, ES features what Stereo Review calls a "truly exceptional" integrated amp. One that offers "the highest dynamic headroom of any amplifier we have yet measured."

The patented Accurate Pistonic

Motion (APM) speaker design has been engineered to handle prodigious quantities of power without distortion. Even the tuner's Direct Comparator has been designed to complement the improved FM broadcast signals that result from digital source material.

Furthermore, because no innovation, no matter how remarkable, should force you to discard

your present music collection, ES also includes a Laser Amorphous™ 3-head cassette deck and linear tracking Biotracer turntable—worthy challengers to anything on the market today.

To find out the name of your nearest ES dealer, call Sony toll-free at 1-800-222-SONY.

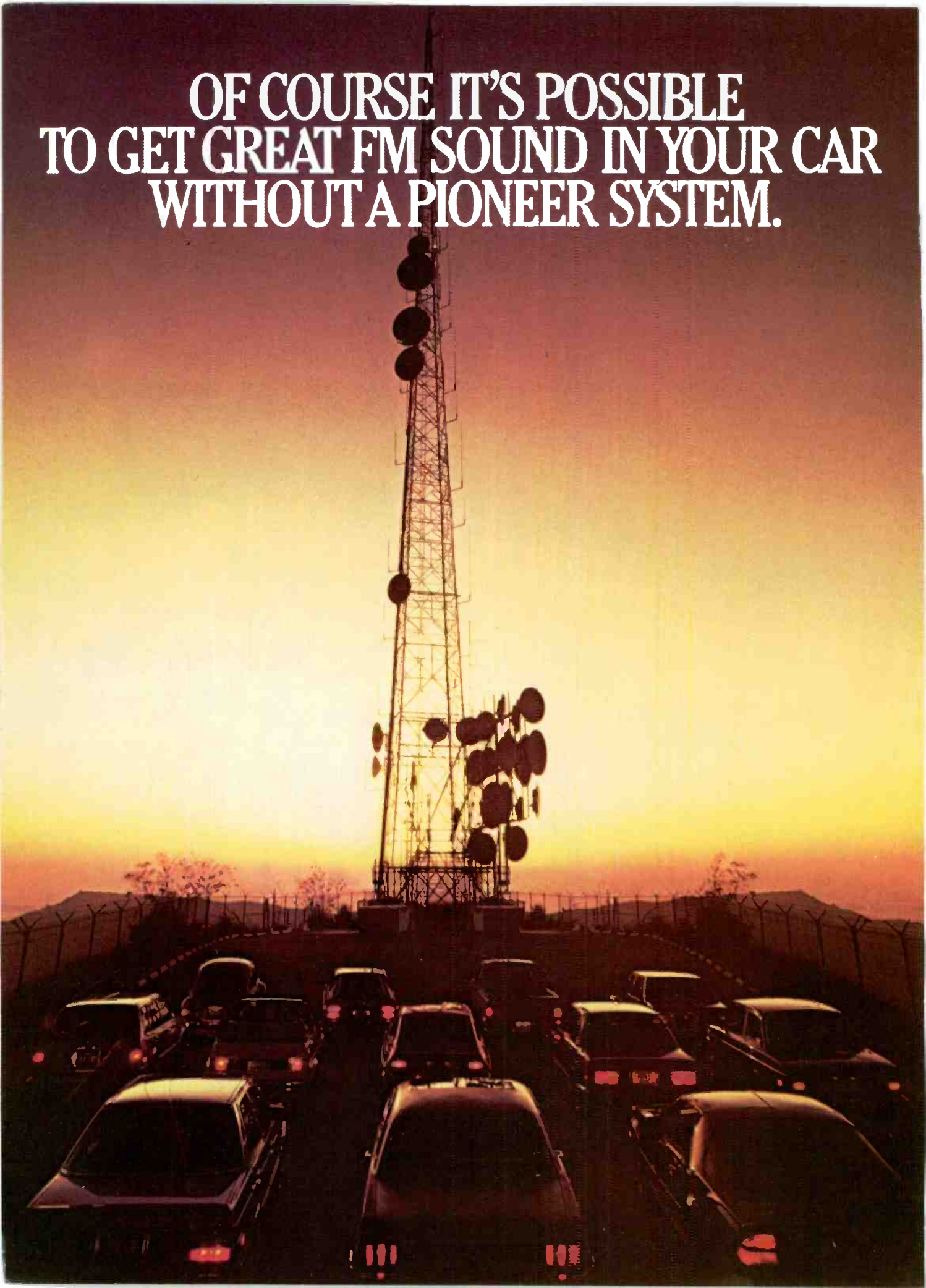
SONY

THE LEADER IN DIGITAL AUDIO

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OF COURSE IT'S POSSIBLE
TO GET GREAT FM SOUND IN YOUR CAR
WITHOUT A PIONEER SYSTEM.



Cars move and radio stations don't. This rather basic precept has always created a lot of havoc for people trying to get good, clear, clean sound on their car's FM tuner.

Because the farther you get from the station transmitter, the weaker the station's signal becomes.

Not to mention the stuff like buildings, mountains, and overpasses that bounce the signal around like a ping pong ball, turning the music into something that sounds like frying mush.

Of course, if you do get lucky and get clean reception, you immediately reach over and crank up the volume to take advantage of this situation.

Leading directly to the other problem. Speaker distortion.

Of course, you do have options in solving these problems. You can find a drive-in radio theater.

Or better yet, you can equip your car with a new Pioneer sound system. A system that features Supertuner™ III and Maxxial™ speakers.

Supertuner III is an FM stereo car tuner with reception so clear, you'll think you're listening to a cassette.

Because Supertuner III virtually eliminates three-signal-intermodulation, multipathing, and loss of weak signals. In other words, all the aggravating things that cause you to bang your fist on the dashboard of your car.

No other car tuner can do this. At any price. None. A fact that Pioneer

continues to prove in road tests against the highest quality tuners currently on the market. Time after time in these tests, Supertuner III is the clear winner.

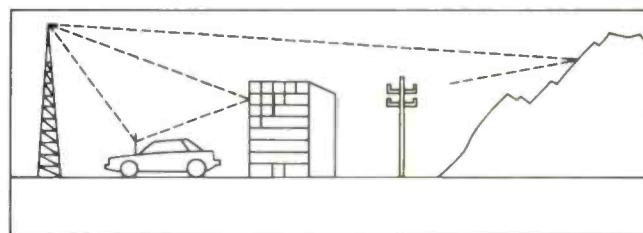
But what good would this be, if the speakers put back in what Supertuner III has taken out.

That's why you need Maxxial speakers. Extremely efficient speakers that can handle up to 100 watts of Max Music Power. A rating system comparable to one of those used to measure the power handling of Pioneer home speakers.

Which means that you can boost the volume on your favorite song (now that you can receive it clearly) and still get clean, undistorted sound.

Maxxial speakers are a complete line of the most popular sizes. With compact yet powerful Strontium Magnets that enable their big power handling capability to fit into tight spaces. And our line of

universal fit Supertuner IIIs offer digital display, electronic pre-set tuning, auto reverse decks with Dolby.* And more.



A lot of things stand in the way of clear reception. Like buildings, mountains, even telephone poles. Radio signals bounce off them like balls on a handball court. Creating static, signals cutting in and out. Unless you have a Supertuner III.

universal fit Supertuner IIIs offer digital display, electronic pre-set tuning, auto reverse decks with Dolby.* And more.

So if you want to hear music the way it was recorded and broadcast in the first place, take this word of advice.

Park the system you have in your car. And get moving on a new one from Pioneer.



PIONEER
Because the music matters.

CrossTalk

Practical answers to your audio and video questions by Robert Long

The FM Jungle

In my neighborhood, behind a hill in a hilly city and near a number of FM and TV transmitters, FM reception is insufferable because of multipath or front-end overload or both, and the local cable is said to be just as bad. I currently have a Sherwood S-7910 receiver hooked to a Beam Box antenna. The options I'm considering are the Carver TX-11 tuner, the NAD 4150 tuner, a highly directional antenna with a rotor, and pretending that FM radio doesn't exist anymore. What do you suggest?—Robert J. Richard, San Francisco, Calif.

Don't cross the last option off your list. The others solve problems, but not necessarily yours. A highly directional outdoor antenna is likely to have high gain, aggravating any front-end overload problems (although this could be alleviated by putting an RF attenuator in the line); the two tuners you mention are superior models for people in weak-signal areas but may be less helpful for you. The Carver unit does address the question of multipath, so it might do the trick. But first try switching your receiver to mono: If that doesn't clear up your reception, neither will the Carver. If it does, there's a good chance that the TX-11 will help.

A Find

Recently I acquired an H.H. Scott 299B stereo amplifier (circa 1959) that appears to be in perfect working order. Does it have value as a collector's item? What was the original retail price? Where can I get replacements for the Telefunken tubes? What do the first three positions of the selector switch mean: EUR 78, NARTB tape, and RIAA NARTB ORTHO?—Arnold W. Chesney, Paramus, N.J.

The 229C, a couple of years later, listed for \$225, and I think the price of the earlier version was quite similar. They certainly are "classics" of home audio, though what they might be expected to fetch would depend on your persistence, your luck, and probably the phases of the moon. The tube types should be relatively easy to find.

The three selector positions all are for the preamplifier and represent three different internal equalizations. The first is for European 78s. U.S. 78s usually were dif-

ferently equalized; Scott may have suggested tone-control settings to adapt the European equalization setting to domestic records, as there appears to be no other setting intended for them. "NARTB" refers to the National Association of Radio and Television Broadcasters, which attempted to standardize tape and LP equalization curves. The tape setting appears to be for direct input for a tape head, bypassing the deck's electronics and supplying the necessary equalization along with the necessary gain.

As for the LP position, the NARTB and the RIAA (the Recording Industry Association of America) were among those preferring equalization similar to that of RCA's New Orthophonic LPs over the more heavily recorded highs of companies using something closer to the original Columbia LP equalization. By the late Fifties, the RIAA equalization (as it is still called) was winning the battle for standardization, but Scott evidently felt a few more names might help establish the credibility of its LP setting.

From Scratch

I'm trying to learn more about scratch filters and how to find one for my record collection. Can you help?—Thomas E. Britten, Manassas, Va.

They come in three types. The simplest is a fixed high-cut (i.e., low-pass) filter, which simply attenuates the treble to suppress whatever is there—noise and signal alike. Such filters are sometimes built into amps, preamps, and receivers, but they are seldom available as separate add-on units.

A more sophisticated alternative is a dynamic noise suppressor—a variable low-pass filter that alters its bandwidth according to signal conditions, to remove as much hiss as possible without unduly affecting the highs in the music. Filters of this variety have the widest range of application and are the easiest to find. Among the most successful component models of recent years have been the Burwen DNF (KLH) and the Carver Autocorrelator (Carver and Phase Linear), but the National Semiconductor DNR chip, which is the Burwen design on an integrated circuit, is fast taking over the field.

Devices whose specific function is to eliminate or reduce the audible ill effects of record scratches are called impulse filters.

They are designed to take out clicks and pops without altering steady tones—or hiss. Units of this type include the Burwen TNE-7000 and the SAE 5000A.

Orderly EQ

I own a Sound Concepts IR-2100 image-enhancement device, a Luxman G-120A equalizer, and a Soundcraftsmen AS-1000 Autoscanalyzer, but I don't know how to proceed with equalization using this combination. Do I equalize my Fried Model M speakers with the equalizer at the same point in the signal path as I will use for listening afterward? And should the image-restoration unit be turned on or off during equalization?—James Thorman, Houston, Tex.

Equalize with the setup the way it will be when you listen, except with the Sound Concepts in the bypass mode. If it is on during equalization, its action may distort the Scanalyzer readings. When you're done, you can switch the IR-2100 back on and make any final EQ touchups by ear.

Just the Facts

I would like to know which 90-minute tapes other than metal give the truest reproduction of sound. If you would send me a list of the top 10 tapes with the flattest response curves, I would be very grateful. I'm interested mainly in Maxell, TDK, Loran, Fuji, BASF, Scotch, and PD Magnetics.—Dannny Hall, Medford, Wis.

You can't speak of a tape, all by itself, as having a certain frequency response: Its response depends almost entirely on the design and adjustment of the recorder in which it's used. (That's one of the reasons we indicate in our test reports on tape machines what formulations the manufacturer recommends.) All of the brands you cite can be superbly flat in the right deck. But so can some others that are distinctly inferior in ways that a response curve won't even begin to tell you. I suggest that you go back and study our August 1983 issue, which includes laboratory tests and evaluations of 28 high-quality tapes.

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

AUDIOPHILE FILE™ XL-S

GREATER DYNAMIC RANGE

Maxell XL I-S and XL II-S are the ultimate ferric oxide cassette tapes. Precision engineered to bring you a significant improvement in dynamic range.

XL I-S provides exceptionally smooth linear performance characteristics with high resolution of sound and lower distortion.

While XL II-S has a greater saturation resistance in higher frequencies resulting in an excellent signal to noise ratio.

How did we achieve this?

IMPROVED EPITAXIAL PARTICLES.

Maxell engineers have managed to improve the Epitaxial magnetic particles used on both tapes.

By developing a crystallization process that produces a more compact, smoother cobalt ferrite layer on the gamma ferric oxide core, they've been able to pack the particles more densely and with greater uniformity on the tape surface.

This increases maximum output level and reduces AC bias noise which in turn expands the dynamic range.

IMPROVED EPITAXIAL PARTICLE CHARACTERISTICS:

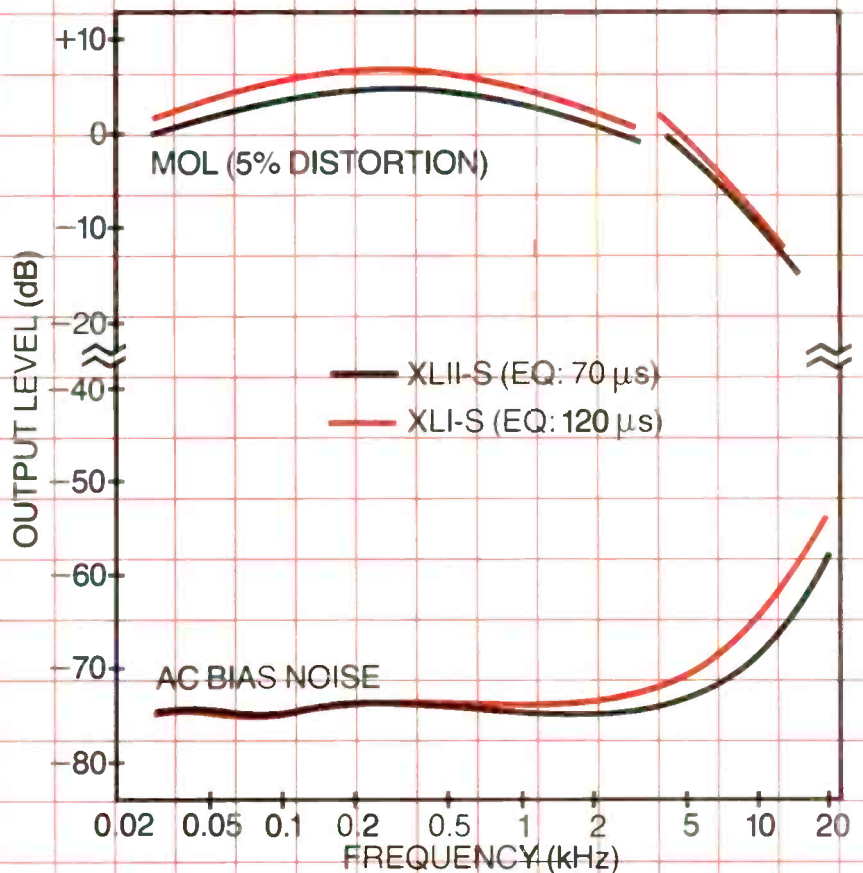
MORE UNIFORM COBALT-FERRITE LAYER

SMOOTHER PARTICLE SURFACE

GAMMA-FERRIC OXIDE

470Å

COATING THICKNESS: 10-11A (1A = 1/10,000,000 mm)



So you get a better signal to noise ratio, greater resolution of sound and higher output levels.

Of course, greater dynamic range isn't the only reason to buy Maxell high bias XL II-S or our normal bias equivalent XL I-S.

Both tapes have more precise tape travel and greatly reduced distortion levels.

You'll see both these improvements covered in detail in future Audiophile

Files. In the meantime, we suggest you listen to them.

For technical specification sheets on the XL-S series, write to:

Audiophile File, Maxell Corporation of America, 60 Oxford Drive, Moonachie, New Jersey 07074.



IT'S WORTH IT.

© 1983 Maxell Corporation of America, 60 Oxford Drive, Moonachie, N.J. 07074

The Autophile

Going on the road with stereo by Gary Stock

Looking for Mr. Goodsound

CHOOSING A CAR-STEREO installer is not a task to be taken casually. If you're any kind of car or audio enthusiast, you'll probably be committing an automobile worth from \$10,000 to \$20,000 and sound equipment costing as much as \$2,000 to the tender mercies of your installer's hot knives and hole saws. And if you use one of the numerous technogorillas in this trade, you might well find that your car stereo sounds wretched and that your beloved plushmobile now bears unhealable cosmetic wounds. To put it bluntly, a strikingly large percentage of the nation's car-stereo install-

him adjust your carburetor—just keep him away from the electronic goodies.

I also recommend that you avoid two other types of alleged experts: the new-car dealer's "sound-system man" and the roving van-equipped autosound gypsy. In the case of the new-car dealer, you're up against a flat-rate, quick-and-dirty mentality; believe me, acoustic subtleties are not likely to be high on a car dealer's list of priorities. With the gypsy installer, you'll run into problems of uncertain warranty protection, inadequate installation facilities, and a fly-by-night style of doing business. I'm sure there are some good new-car dealer installers and some good gypsies, but I wouldn't want to bet my BMW on one.

With these contenders out, we've narrowed the potential installation outfits

car stereos for a living—and whose livelihoods are affected by word-of-mouth reputation—are likely to be that much more committed to the task.

As in any service operation, the level of competence ranges from the pedestrian to the fanatic. And presumably you would prefer that your car be caressed by the latter. To make sure that the installer has the know-how and commitment to do a careful job, use the following check-list as a general guide.

Does he have an installation bay? This indoor, drive-in area allows the work to proceed neatly, calmly, and cleanly regardless of weather. The presence of a bay indicates that the installer is committed enough to buy the right gear and set aside high-rent space to do the job right.

Does he have the right stuff for the job? This includes a range of electronic test gear, equipment for making neat speaker holes, and the hand tools needed to disassemble cars without bashing them up. Ask to see the installation area. If the installer thinks the request is outlandish, take your business elsewhere.

Does he have a well-stocked library of manuals, automotive wiring diagrams, cross-reference guides, catalogs, and texts on cars and car stereos? No installer can possibly know every detail of every car and every piece of electronics on the market. Those who take the time to assemble a reference library are usually the serious ones.

Does he have a burn-in bench? Nothing more than a table with a 12-volt power source, a burn-in bench is a test bed where car-stereo electronics can be played for a few hours to expose any tendency toward sudden death. Serious installers would rather head off failures in the shop than risk disappointing a customer who finds his radio malfunctioning shortly after installation.

Finally, does the installer inspire confidence? Ask to chat with the guy who will be ripping into your car. Has he ever done a similar system in your model of car before? Where will he put the equalizer? How far up on the door panels can the front speakers go? Does the alternator have enough current output for the amplifiers? If your man can answer such questions convincingly, he probably knows his stuff. If not, don't turn him loose on your baby with a screwdriver. **HF**



ers have no business installing anything more complex than a fuse. I'm not alone in that opinion: I've heard many autosound manufacturers express dissatisfaction about incompetent installation work, too.

How do you avoid becoming a victim? To begin with, eliminate the most obviously unfit candidate—you. Though you're unquestionably a person of unimpeachable integrity and honorable motives, it's not likely that you possess extensive engineering knowledge. As I've often said in this column, installing anything more complex than a simple radio and two speakers is not a job for the dabbler. Once amplifiers, equalizers, electronic antennas, multiple pairs of speakers, or crossovers are involved, the task should be handed over to an experienced professional.

"Experienced professional" also eliminates Cousin Chuck—the T-shirt-clad drag racer who shoehorned 10 chromed 6-by-9's into his 1968 Camaro—from contention. If you're in a charitable mood, let

down to two types: Those that sell and install car-stereo gear as part of a larger product mix and those that specialize in automotive electronics (audio and alarm systems). You stand a good chance of getting careful, craftsmanlike installation work from them for three reasons. First there's the experience factor. The fact that an installer has worked on your make of car before and knows what lurks behind its upholstery probably means that your car won't be used as a guinea pig for an unproven approach. And the sheer volume of work that passes through their doors keeps full-time installers up-to-date on new car models and new techniques.

Then there's the tool-and-facility question. To do a clean job of installing today's complex sound equipment you need a variety of tools indigenous to the trade (power nibblers, aperture saws, hum chasers, and the like), and such gizmos are usually on hand only where installation is taken seriously. And finally, people who install

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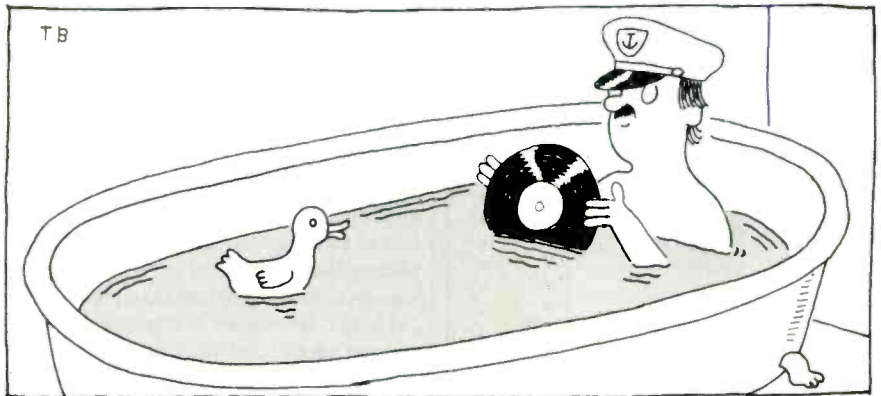
Simple solutions to common stereo system problems by Alexander N. Retsoff

Rub-a-Dub-Dub, An LP in the Tub

ABOUT 15 YEARS AGO, I asked one of the "fathers" of the LP how he cleaned his own discs. "Very simple," he said. "The same way I clean myself—with soap and water." That may seem heretical to some, but on more than one occasion I've found that taking the plunge (so to speak) has rescued some unplayable LPs.

I'm not suggesting that you abandon your Discwasher and lather up the Dial, but as a last resort, soap and water can be sonic lifesavers. Sure, the soap may leave a residue—but not if you rinse the disc well. And yes, it may leach plasticizers out of the vinyl and cause the record to become brittle eventually, but I've never had one self-destruct in the tub. In fact, records always emerge from their baths a good deal quieter than before. And after such drastic measures, I make it a practice to tape the disc immediately and then lay it to rest.

If other cleaning methods fail and you want to try Retsoff's Last Resort, here's how. Go to the hardware store and buy two soft plastic dish basins (at least 6 inches deep) and a few feet of 1/4-inch dowling. Fill each basin with lukewarm water to within 2 1/2 to 3 inches of the rim. You can use ordinary tap water if it's not loaded with minerals. The fastidious might prefer to buy distilled water (not the bottled drinking water whose claim to fame is its mineral content). Add a drop of a mild dishwashing soap (such as Ivory Liquid) to one basin. Use only a drop—you don't want a lot of suds, which can be hard to rinse off. The soap cleans the record by lowering the water's surface tension, making it "slip-



TOM BLOOM

pery" enough to penetrate the tiny grooves.

Slip the dowel through the disc's spindle hole and lower the record into the suds. The dowel should rest on the sides of the basin, supporting the disc so that only the groove area is submerged. A grommet on either side will hold it upright and keep it from sliding back and forth. Slowly rotate the record and work the solution into the grooves with a soft brush. I treasure my old Watts Record Wash Brush, which was designed specifically for this purpose. Its nylon bristles have a 0.00025-inch average tip radius, small enough to get to the bottom of the groove where the crud lurks. A soft sponge also works nicely.

Once you've given the disc a good but gentle scrubbing, rinse it well in the second basin. Groove dimensions are so small that pure water's surface tension may prevent complete penetration without some gentle assistance. So use a second brush or sponge to force clean water to the bottom of the groove. After rinsing, gently pat the disc dry with a lint-free cloth and hang it on its

dowel in a dust-free area to dry. A blower will help speed the drying process, but don't use a hot-air hair dryer. To remove dust that has landed on the record during the drying process, reclean it with the Discwasher system (or an equivalent) before returning it to its jacket.

I repeat: This is Retsoff's Last Resort, designed to remove Coke and the remains of a peanut-butter-and-jelly sandwich. If you treat your records with the respect they deserve, you should seldom, if ever, have to invoke such stern measures. For normal cleaning—preventive maintenance, if you will—I use a Discwasher brush and D4 fluid, an ionization gun, and an antistatic brush, in that order.

Every side gets a once-over with the antistatic brush before the stylus hits the groove. In the winter when the air is dry, I zap with the gun before swiping with the brush. Both operations take place right on the turntable. If the disc is spotted with fingerprints or dirt, it's cleaned with the Discwasher brush and solution first. And I use the Discwasher whenever my ears tell me it's needed, even if my eyes don't. After cleaning, make sure the record is completely dry before playing it. A few years ago there were some who were advocating "wet play" as a way to keep noise down, but I've heard too many horror stories about that technique to take it seriously.

Over the years, I've tried everything from sticky rollers to peel-off plastic coatings, but I haven't found anything more effective than a good scrubbing for a record that has been through the wars. If you don't want to bother with the chore at home, you can take your heavily soiled LPs to an audio dealer who has a Keith Monks or VPI record-cleaning machine. While your records are being cleaned, you'll be able to look at that new turntable you want. **HF**

A Commerical Alternative from Allsop

Washing records, though effective, is a rather extreme measure, and I have found the Allsop 3 Orbitrac System (\$27) to be an effective alternative for deep-cleaning very soiled LPs. The Orbitrac is a pivoting arm with a circular pad on one end and a spindle on the other. To use it, you place the LP on the included rubber pad, squirt on a bit of the supplied cleaning solution, position the Orbitrac by inserting its spindle into the LP's center hole, and then revolve the brush around the disc. The Orbitrac system will probably not remove the remains of a peanut-butter-and-jelly sandwich, but it makes quick work of deeply embedded grit and fingerprints.—P.D.



Basically Speaking

Audio concepts and terms explained by Michael Riggs



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How HF Tests Power Amplifiers

EVERY STEREO SYSTEM includes a power amplifier, whether as a separate unit, as half of an integrated amplifier (along with a preamplifier section), or as the final stage in a receiver (following tuner and preamplifier circuitry). Its sole job is to provide the voltage and current necessary to drive a pair of loudspeakers. But the simplicity of that description conceals how complex and difficult the task really is. Whereas the design of a preamplifier is relatively straightforward these days, that of a power amplifier involves some important tradeoffs and compromises. This is not to say that you can expect to find gross audible differences between amplifiers. You won't. The state of the art has reached a point where almost all power amps with pretensions to high fidelity will perform well over a wide range of typical operating conditions. But an informed reading of HIGH FIDELITY's test reports can help you ferret out the models that will elicit the best possible sound from your loudspeakers with the least possible pain to your wallet.

The most important thing to know about a power amplifier is how much power it will deliver into your speakers. For example, two amplifiers with identical continuous-power ratings into an 8-ohm load (the specification sanctioned by the Federal Trade Commission) may have very different maximum outputs into a 4-ohm load. This is not very important if your speakers look (electrically) more like 8-ohm resistors than like 4-ohm resistors, but it matters a great deal if the opposite is the case (which, often as not, it is). For this reason, Diversified Science Laboratories measures the continuous output at clipping at 1 kHz with both channels driven into both 8- and 4-ohm loads.

But this is only part of the story. Although the law requires that components be rated according to their continuous power output, this measurement does not give a true indication of how an amplifier will perform on most music. Music consists primarily of short-term, transient information—not continuous tones. The IHF amplifier testing standard therefore provides for a measurement called "dynamic headroom." This is the amount, in dB, by which an amplifier can exceed its rated continuous

power into 8 ohms on a series of tone bursts of a specified duration. All else being equal, the greater the dynamic headroom the better.

The trouble with dynamic headroom is that it is based on the manufacturer's rated power into 8 ohms. Many loudspeakers have impedances that are lower (sometimes much lower) than that over much of the audible range, and almost all of their impedances include reactive (nonresistive) components that increase the amount of current the amplifier's output stage must handle. It is therefore highly desirable to know an amplifier's transient power-output capability into impedances that are more difficult to drive than the 8-ohm resistive load traditionally used for specification and testing. So beginning with this issue, we will report dynamic power—not just into 8 ohms, but also into 4 ohms and, when the manufacturer indicates that the amplifier will operate safely driving such a low impedance, into 2 ohms. DSL measures dynamic power with the same test signal it uses to determine the 8-ohm dynamic headroom. Thus, the dynamic power into 8 ohms is equal to the *rated* power in dBW plus the dynamic headroom in dB.

To facilitate comparison with manu-
(Continued on page 26)

About the dBW . . .

We 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
1.00	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	12	500	27
20	13	630	28
25	14	800	29

This box, which appears whenever we test a power amp, includes a table for converting dBW to watts and watts to dBW. Power ratings in dBW correlate better with how we perceive changes in loudness than do power ratings in watts.

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(Continued from page 24)

factors' specifications, we give continuous power figures in watts as well as dBW. But because comparisons of power in watts can be misleading, we use only the dBW for dynamic power. A look at the dBW/watts conversion table shown here will tell you why. Every 3-dB power increase (from 0 dBW to 3 dBW, from 3 dBW to 6 dBW, and so on) entails a doubling of the wattage (from 1 watt to 2 watts, from 2 watts to 4 watts, etc). Because power differences in dB correspond directly to loudness differ-

For music, dynamic power is more important than continuous power.

ences in dB, it is very much easier to grasp what extra power buys you in audible benefits. Watts, on the other hand, tend to obscure this relationship. A 20-watt jump from 20 to 40 watts corresponds to a 3-dB increase in loudness, while a change from 120 to 140 watts amounts to less than 1 dB. Unfortunately, prices tend to follow watts rather than dBW. Consequently, return on investment diminishes rapidly with very-high-power amps—those above, say, 20 dBW (100 watts) or so.

Another advantage of the dBW is that it enables you to judge more easily the relative power requirements of different loudspeakers. A speaker with a sensitivity of 88 dB will require 2 dB more power to achieve the same output as an otherwise similar model with a sensitivity of 90 dB. The only catch here is that when sensitivity is measured for a constant voltage—the way we do it—the results are affected by the speaker's impedance. If the only difference between two loudspeakers were that one had an impedance of 8 ohms and the other an impedance of 4 ohms, the latter would measure 3 dB more sensitive, simply because it would draw twice as much current (and therefore twice as much power) for the same drive voltage. Thus, some care is necessary to keep the apples separated from the oranges.

When an amplifier is driven beyond its power limits (that is, into "clipping"), it will generate large amounts of distortion. But below that point, its output should be very clean. DSL measures total harmonic distortion (THD) from 20 Hz to 20 kHz at the amplifier's rated power and at 0 dBW (1 watt) into 8 ohms. Although the ear is remarkably tolerant of distortion in the presence of music (several percent can easily go unnoticed in complex passages), we

would look askance at an amplifier that produced more than 0.5 percent THD and would prefer to see 0.1 percent or less. This is low enough to assure that there will never be any coloration due to distortion. To discourage meaningless comparisons, we do not report THD below 0.01 percent: Distortion that low is of academic interest only.

As in any other audio component, it is vital that frequency response be flat over the audible range (from 20 or 30 Hz to about 15 kHz) and that noise be low enough not to cause any audible degradation of the signal. Today's amplifiers are almost invariably flat within 1/2 dB from 20 Hz to 20 kHz. Bandwidth beyond these limits is unnecessary and may even invite instability, overload from reproduction of infrasonic warp signals, or radio-frequency interference (RFI). For this reason, some amplifiers include filters that roll off the response at infrasonic and ultrasonic frequencies.

Noise is another nonissue in modern amplifiers. A-weighted signal-to-noise (S/N) ratios of 90 dB or better are typical. The figures we publish are referred to an output of 0 dBW into 8 ohms with any level or volume controls adjusted so that a 0-dBW output is obtained from a 500-millivolt (0.5-volt) input. Don't be surprised if they are much lower than some of the ones quoted in product promotional literature and specification sheets: Manufacturers sometimes inflate amplifier S/N ratios by referring them to full power, which can add 20 dB or more at the mere stroke of a pencil.

DSL also measures sensitivity (the input voltage required to produce a 0-dBW output into 8 ohms with any level or volume controls turned all the way up), input impedance, and damping factor at 50 Hz. Input and output levels are so standardized nowadays that sensitivity is almost never something you have to worry about. Ratings from 100 to 200 millivolts (mV) are typical. Input impedance is likewise seldom a problem. We prefer to see 20,000 (20k) ohms or more, but in most cases, 10,000 ohms is adequate.

Damping factor is an expression of an amplifier's output impedance at low frequencies: The lower the impedance, the higher the damping factor. Theoretically, a high damping factor is better than a low one, but in practice it's unlikely to make much difference as long as it's higher than 20 or so. The output impedances of almost all amplifiers increase with frequency, which may in some cases lead to response anomalies in the presence of a load whose impedance becomes very low at high frequencies, as happens with some electrostatic loudspeakers. DSL measures output impedance at a number of frequencies up to 10 kHz, and our reports comment when an amplifier is unusually good or bad in this respect. **HF**

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New Equipment Reports

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



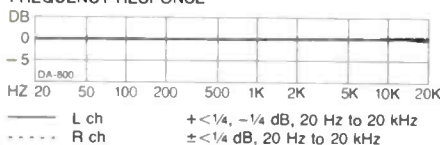
STEVEN MARK NEEDHAM

Hitachi's Top-Drawer CD Player

Hitachi DA-800 Compact Disc player. Dimensions: 17 by 4 inches (front panel), 10 1/2 inches deep plus clearance for connections. Price: \$1,000. Warranty: "full," one year parts and labor. Manufacturer: Hitachi, Ltd., Japan; U.S. distributor: Hitachi Sales Corp. of America, 401 W. Artesia Blvd., Compton, Calif. 90220.

All data obtained using the Sony YEDS-7, Philips 410 055-2, and Philips 410 056-2 test discs.

FREQUENCY RESPONSE



DE-EMPHASIS ERROR

left channel +0, -1/4 dB, 1 to 16 kHz
right channel ±1/4 dB, 1 to 16 kHz

CHANNEL SEPARATION

≥ 88 1/2 dB, <math>< 100</math> Hz to 20 kHz

CHANNEL BALANCE (1 kHz)

±0 dB

S/N RATIO (re 0 dB; A-weighted)

without de-emphasis 101 dB
with de-emphasis 106 dB

Report Policy: Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained 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 tested. HIGH FIDELITY and Diversified Science Laboratories assume no responsibility for product performance or quality.

INITIALLY IT DIDN'T APPEAR that Compact Disc players left much room for improvement. By comparison to analog LP equipment, all were paragons of performance. Well, not only is the Hitachi DA-800 among the most convenient and comprehensible of CD players, but, behind its compact and unassuming faceplate, it also is one of the top performers.

At the left of the front panel is a motorized disc-loading drawer. (Pressing on its control button opens or closes it; like most other CD drawers or doors, it cannot be moved with the power off, and manual opening or closing should not be attempted.) The drawer has finger space at the sides so that discs can be inserted or removed by their edges with ease. In fact, it's so much easier to use than any alternative loading system—and so obvious in operation—that correct handling of the disc is virtually automatic (which isn't true of all players, by any means).

The transport controls are standard in appearance (play, pause, stop/clear, and cueing in two directions), but if you hold either cueing control in while the disc is playing, the deck will sample the disc's contents, rather than playing it continuously. You hear approximately one second of music, then skip the next two seconds or so. Progress is thus quite slow (taking about one minute to get from beginning to end of a three-minute track), but the feature eliminates the frustration of having to know where a passage is in order to cue to it yet having to cue to it in order to find out where it is. (On some machines, you must either play the entire track—or disc, if you don't know which track the passage is on—or take random samples in the hope of stumbling on it). If you press PLAY and, simul-

taneously, either of the cueing controls while the disc is playing, the player moves in the specified direction to the nearest intertrack break and resumes play—thus skipping to the next selection or repeating the current one from the top.

When you first insert a disc, the player displays the total number of tracks and the total playing time. You can program it to begin play at any track (or index point within a track, if the disc is indexed) and to sequence tracks in any order you want. You also can repeat the whole disc, any track, or any specific passage—without regard to track breaks or indexing—as you choose. When you come to the beginning of the passage you want to repeat, you press REPEAT for the first time, and its pilot lights to confirm memorization of the starting cue. At the end, you press REPEAT again, the transport immediately recues to the starting point, and the pilot begins flashing. The deck then plays the selected passage over and over until you press REPEAT a third time.

The only two operations that annoyed us with the Hitachi have been a problem with other CD players, as well, and both are really the fault of the discs, rather than the players. When individual movements are treated as separate tracks in multiwork discs (for example the Schröder/Hogwood Bach violin concertos) and you try to play just one work by programming the tracks for its movements, a slight but clearly audible click is injected into what should be the intermovement silence, destroying the illusion that you are listening in on an act of live music-making. And when a disc is not subdivided (the Dutoit/Montreal *Daphnis et Chloé* consists of a single track, at least in the European Decca pressings), there is no

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(And five alternatives.)

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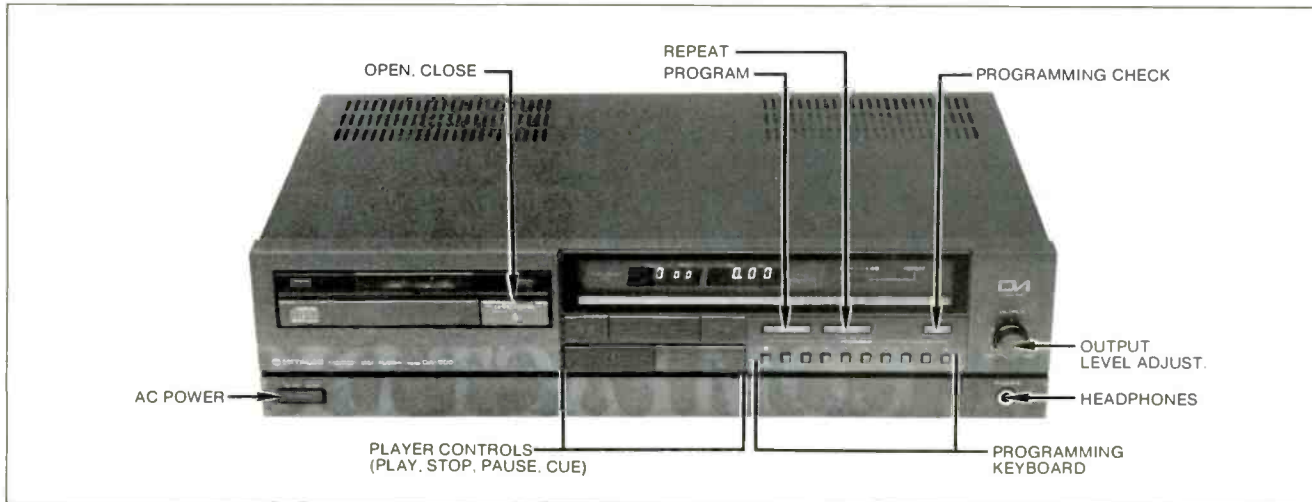
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**CBS
W/E/A
TELARC**



SONY
THE LEADER IN DIGITAL AUDIOSM

Free CD Offer, P.O. Box 163, Lowell, MA 01853.



HARMONIC DISTORTION (THD; 40 Hz to 20 kHz)
 at 0 dB \leq 0.095%
 at -24 dB \leq 0.049%

IM DISTORTION (70-Hz difference frequency;
 300 Hz to 20 kHz)
 0 to -30 dB $<$ 0.01%

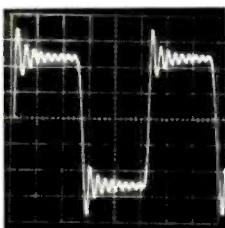
LINEARITY (at 1 kHz)
 0 to -60 dB no measurable error
 at -80 dB +1 dB
 at -90 dB +3 dB

TRACKING & ERROR CORRECTION
 maximum signal-layer gap \geq 900 microns
 maximum surface obstruction \geq 800 microns
 simulated fingerprint test pass

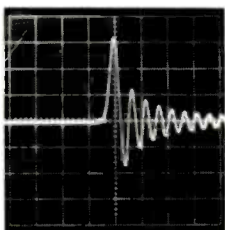
MAXIMUM OUTPUT LEVEL
 line output 2.44 volts
 headphone output 3.32 volts

OUTPUT IMPEDANCE
 line output 100 ohms
 headphone output 110 ohms

SQUARE-WAVE RESPONSE (1 kHz)



IMPULSE RESPONSE



quick way to seek out a section near the end; the fastest is the pause/forward-cue option, which takes some 20 minutes to get to the end of a 60-minute side! Both problems would be neatly solved if producers would treat major divisions (the three concertos in the first example, the three tableaux in the second) as separate bands and index all the subdivisions (the concertos' movements, the ballet's dances).

The DA-800 has two relatively unusual controls. The output level adjustment may be useful in some systems to "tune" the player to the levels delivered by other equipment. But the standardization of modern equipment in this regard and the degree to which the player's measured performance conforms to those standards suggest that you should expect no level problems in any event. More arcane is the back-panel "antishock" switch. Hitachi suggests that you turn it on only if the player will be subject to vibration or other mechanical stress. Evidently it alters the sensitivity of the triple-beam laser tracking system's servo. This enhances the player's immunity to shock and vibration, but at the expense of reducing its ability to correct for disc defects, scratches, and the like. The normal position is off, and that's the way it was switched for both Diversified Science Laboratories' measurements and our listening tests. In fact, it seems unlikely that it would ever be necessary to turn the switch on in normal use.

The DA-800's tracking performance is one of its strongest points: It came through the test for capacity to overlook dust, scratches, fingerprints, and pressing flaws—or to reconstruct the signal after decimation—without a hitch. The only other player to have done so in our tests was a deluxe model costing half again as much. And the Hitachi is no slouch in other respects, either. Distortion is certainly lower than average, but distortion in CD players never is high enough to be really worrisome. As in most players, there is some upward compression of extremely low-level signals (documented by the linearity data), but it's difficult to imagine how, in practice, 3 dB of gain could be perceived in signals at -90 dB—the merest whisper, even with the VOLUME set extremely high.

There is a very slight divergence in the response curves of the two channels at extremely high frequencies. A 1/2-dB spread in the neighborhood of 20 kHz would go unnoticed in most other product categories, perhaps. Here it is surprising, but it also is quite unimportant, since room acoustics alone doubtless introduce greater disparities into the responses of individual speakers—if, indeed, their tweeters are this superbly matched to begin with. The fact that we even remark on so insignificant a blemish is an index of the Compact Disc's overwhelming ascendancy in the world of audio. And among CD players, the DA-800 is an unusually attractive entry.

A Multimedia Receiver from Pioneer

THIS IS THE FIRST strictly audio product we've tested that fully accepts—and even embraces—the brave new world in which we find ourselves: a world in which TV sound may be taken seriously (though it may or may not be stereo) and in which the Compact Disc will take an increasingly prominent place. (We have reviewed one true audio-video receiver, but its built-in

TV tuner takes it out of the "audio product" category.) The SX-50's aux input is therefore specifically earmarked for a CD player, and there is a separate TV-sound input that can handle true stereo, feed mono sound to both channels, or simulate stereo from a mono input.

The TV-sound input, which is just one of the unusual back-panel features, is set up

READ THIS AD AND YOU'LL BUY A HARMAN KARDON CASSETTE DECK



That's a bold statement, but Harman Kardon has been making bold audio statements for over thirty years, introducing the world's first high fidelity receiver, the first stereo receiver and ultrawideband frequency response. Harman Kardon was also the first company to use Dolby[®] in a cassette deck.

Today, Harman Kardon products continue to be so technologically advanced that "state-of-the-art" falls short of describing them. They have become "state-of-the-mind," the highest level at which the mind can create.

The CD491 is Harman Kardon's most sophisticated state-of-the-mind cassette deck and one of the few in the world that can equal the full range of human hearing. The CD491 has a remarkable 20Hz to 24kHz frequency response using any tape formulation, not just expensive metal tape. An audiophile would settle for nothing less. Even more remarkable is that in a national challenge,² Harman Kardon measured frequency response and beat 98% of the competition, including units costing twice as much.

The CD491 incorporates a dual capstan transport with twin flywheels to insure perfect movement of the tape across its 3 high performance heads. The dual capstan serves to isolate the tape from the cassette shell while the dynamically balanced flywheels help generate a

consistently accurate tape speed. Together they enable the CD491 to reduce wow-and-flutter to an inaudible .025%. The only "wow" you'll ever hear is the reaction of people listening to your Harman Kardon cassette deck.

The CD491 incorporates Dolby HX Pro for extended frequency response, plus Dolby B and C for maximum noise reduction. Three precision heads offer improved performance and the convenience of monitoring while recording. Included is a Sendust head to withstand high record levels without overload and a ferrite playback head for extended high frequency response.

The combined benefits of the CD491's performance features allow for the accurate recording of more dynamic audio signals than previously possible. In fact, the large signal response (frequency response at 0VU) of the CD491 is a virtually unrivaled 20Hz-20kHz \pm 3dB. This is especially significant as more demanding forms of software, such as digital audio, become available.

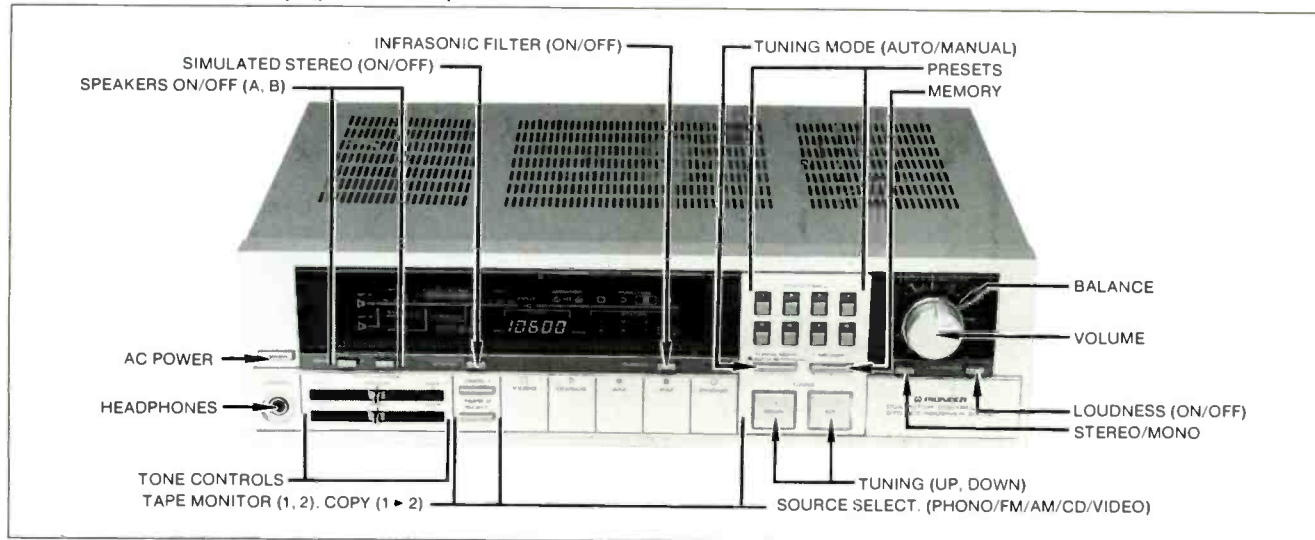
So, while other manufacturers continue to pile on unnecessary features and gimmicks Harman Kardon continues to develop only fundamentally advanced audio equipment.

(1) Dolby is the registered trademark of Dolby Laboratories Inc.

(2) In 1982, Harman Kardon challenged individuals to bring in their cassette decks to a local HK dealer. All units were cleaned and demagnetized in order to insure fair test results. The Harman Kardon unit was factory packed.

harman/kardon

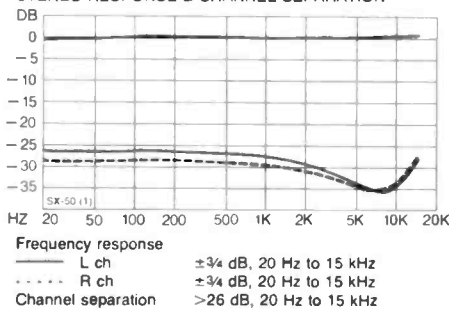
Our state-of-the-mind is tomorrow's state-of-the-art.



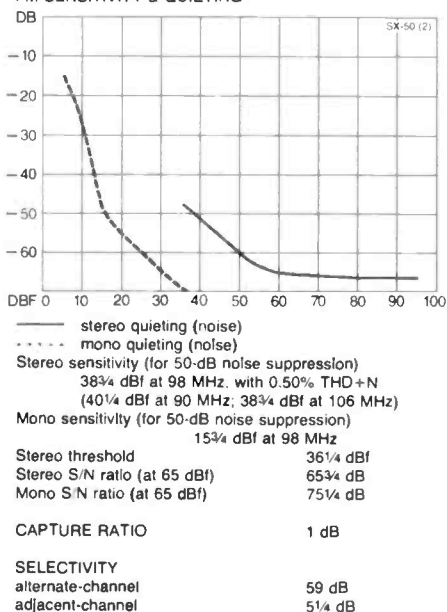
Pioneer SX-50 AM/FM receiver. Dimensions: 16½ by 4½ inches (front panel), 11 inches deep plus clearance for controls and connections. AC convenience outlets: one switched, one unswitched (100 watts max. each). Price: \$380. Warranty: "limited," two years parts and labor. Manufacturer: Pioneer Electronic Corp., Japan; U.S. distributor: Pioneer Electronics (U.S.A.), Inc., 1925 E. Dominguez St., Long Beach, Calif. 90810.

FM tuner section

STEREO RESPONSE & CHANNEL SEPARATION



FM SENSITIVITY & QUIETING



so that if only the left-channel jack is occupied, the signal feeds both channels; if there's a plug in the right-channel jack, the channels function independently. Nearby are jumpers that can be removed if you want to separate the tuner/preamp and power-amp sections—say, for insertion of a speaker equalizer between the two. Terminal strips with clamping locks for bared wires serve both for the power output and for the antenna inputs: 300-ohm twinlead for FM and the supplied loop (or long wire plus ground) for AM. There is also an AM detector output for use with a stereo decoder, although this feature is losing its glamour in the atmosphere of uncertainty created by the FCC's decision not to dictate a standard for stereo-AM broadcasting. Next to it is a well to hold three AA cells that keep the tuning memory from forgetting. And there's a switch that selects increments either of 100 kHz for FM tuning and 10 kHz for AM (for use here) or of 50 and 9 kHz.

Actually, the FM interstation spacing in this country is 200 kHz, so the SX-50 advances in half-channel steps, while the AM advances in full-channel steps. There are manual and automatic (bidirectional seek) tuning modes, plus memory presets for eight stations on each band. When you reach one end of the tuning range, the tuner jumps to the opposite end and continues in the same direction. A three-element LED display over the station frequency callout "moves" (that is, it lights its elements sequentially to simulate motion) in the direction of automatic tuning. Its center element lights when a reasonably strong station is tuned.

The tuning indicator is part of an elaborate mode/status display without which the receiver would be much more difficult to operate. All of the front-panel controls, with the exception of those for volume, balance, bass, treble, and tuning mode, express their settings in one way or another on this board. And even the volume setting (which is indicated directly by the position

of the knob) is suggested to some extent by the output "power meter" at the top of panel.

The receiver comes on set as you left it when you turned it off; the tuning controls "remember" their last settings and will return to them when you press the FM or AM button. You can also return to the tuner by pressing any of the presets, which will change the station but not the band last in use. Lateral sliders are used for the tone controls, which have detented "flat" positions at their midpoints. The simulated stereo option, though intended mainly for punching up mono TV sound, can be used with any input.

This last is a rather curious feature. The most common approach to stereo simulation is to apply complementary comb filters to the two channels. This breaks the audio range into a series of narrow bands that are distributed alternately between the two channels but yield overall response that is flat (or nearly so) when the two channels are recombined acoustically in the listening room. Pioneer has chosen instead to introduce a phase difference, beginning in the bass and growing progressively greater at higher frequencies: This phase shift reaches 180 degrees at 1.6 kHz and 270 degrees (-90 degrees, so to speak) at 6.6 kHz. The result is a dramatically open quality, with some sounds appearing to emanate from beyond the left speaker, when your listening position is well back from the speakers. In close-up listening, however, it simply blurs the mono "image" and pushes it toward the left speaker. How satisfactory the overall effect is will depend on what you want from a stereo simulator.

The shelving tone controls are well conceived in terms of the frequency ranges they affect: below about 100 Hz in the bass and above about 2 kHz in the treble—though the TREBLE action, in particular, is difficult to characterize because of its relatively subtle effect and somewhat inconsistent behavior. It has some influence (say,

Virtuoso

THE NEW AIWA AD-F990
3-HEAD CASSETTE DECK:
PERFORMANCE READY FOR
THE DIGITAL AGE.

At Aiwa, we believe being the best means taking the lead, not following. That's why our engineers developed the AD-F990: the first fully automated cassette deck designed to meet the demands of the compact digital disc.

20-21000Hz FLAT

FREQUENCY RESPONSE!

Listen to the AD-F990 and you'll be stunned. Dolby HX Professional and Aiwa's exclusive amorphous combination head have extended performance parameters so far that the AD-F990 can faithfully reproduce digitally recorded programs without compromise...or effort.

A TRIUMPH IN HUMAN ENGINEERING

To perfectly integrate man and machine, the Aiwa AD-F990 presents its controls on a unique "keyboard." That's new! So is our Auto Record Level Control, Auto NR Detector, Auto Demagnetizing, Auto Tape Selector, Digital Time Remaining Display that shows all tape operation modes, and a fluorescent display for all functions.

The Aiwa AD-F990: the top of our new line of "digital-ready" cassette decks. The sound of the future, today.



AIWA
SIMPLY ADVANCED



AIWA AMERICA INC., 35 Oxford Drive, Moonachie, New Jersey 07074, In Canada, Shrim (Canada) Ltd

EVEN FANATICS CAN BE REASONABLE.



V-300 — DC Servo Capstan Motor. Soft-Touch Transport Control. Brilliance Circuitry (High End Boost). Dolby B NR. 8-dot LED L & R Peak Meters. Auto MPX Filter. 3 Step BIAS/EQ Selector. Record Mute. Timer Capability. LED Lights for Rec/Rec Mute/Pause. L & R Input Level Control. **V-350C** — Same features as V-300 plus Dolby B & C NR. **V-400X** — DC Servo Capstan Motor. IC Logic Transport Control. dbx NR. "dbx Disc." Dolby B NR. 13-dot LED L & R Peak Meters. Auto MPX Filter. 3 Step BIAS/EQ Selector. Memory Stop. Auto Rec Mute to 4 seconds. Timer Rec/Play Capability. L & R Input Level Control. Output Level Control. **V-500X** — Same features as V-400X plus Dolby C NR. Cobalt Amorphous Head. Multi-Electronic Counter w/TRT (Tape Run Time). Memory Play/Stop. Block Repeat.

If it were up to us there would be only one Teac model. We would simply build into it every advancement, every feature, and the most impressive specs our unceasing devotion to recording science has made possible.

But even Fanatics have to be reasonable. And if we only built Teacs that encompassed everything we're capable of, you'd have an immoderately magnificent deck only a few could own. Therefore, though we never compromise, we do offer options. You can own a Teac which is merely superb. Or one that is unbearably superb. Each priced in fair proportion.

The marvelous thing about Teac is that you can go as far as you want, but you can never go too far.

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AUDIO New Equipment Reports

HARMONIC DISTORTION (THD+N)		
	stereo	mono
at 100 Hz	0.40%	0.095%
at 1 kHz	0.38%	0.098%
at 6 kHz	1.55%	0.115%
STEREO PILOT INTERMODULATION		0.24%
IM DISTORTION (mono)		0.055%
AM SUPPRESSION		53¼ dB
PILOT (19 kHz) SUPPRESSION		36 dB
SUBCARRIER (38 kHz) SUPPR.		53¼ dB
Amplifier section		
RATED POWER		17 dBW (50 watts)/channel
OUTPUT AT CLIPPING (both channels driven)		
8-ohm load	18 dBW (63 watts)/channel	
4-ohm load	19¼ dBW (84 watts)/channel	
DYNAMIC POWER		
8-ohm load	18½ dBW	
4-ohm load	20¼ dBW	
DYNAMIC HEADROOM (re rated power, 8-ohm load)		
+1½ dB		
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)		
at 17 dBW (50 watts)	≤ 0.021%	
at 0 dBW (1 watt)	≤ 0.014%	
FREQUENCY RESPONSE		
±½ dB, <10 Hz to 24.1 kHz;		
+½, -3 dB, <10 Hz to 63.1 kHz		
RIAA EQUALIZATION +1, -¼ dB, 20 Hz to 20 kHz;		
-3¼ dB at 5 Hz		
SENSITIVITY & NOISE (re 0 dBW; A-weighting)		
	sensitivity	S/N ratio
aux input	22 mV	79 dB
phono input	0.42 mV	75 dB
PHONO OVERLOAD (1-kHz clipping)		170 mV
INPUT IMPEDANCE		
aux input	53k ohms	
phono input	50k ohms; 115 pF	
OUTPUT IMPEDANCE (to tape)		2,300 ohms
DAMPING FACTOR (at 50 Hz)		51
CHANNEL SEPARATION (aux input)		
≥ 50 dB, <100 Hz to 10 kHz		
INFRASONIC FILTER -3 dB at 29 Hz; 6 dB/octave		

±1 or 2 dB, depending on its setting) down into the midrange and as low as 200 Hz; at 10 kHz, the extreme settings deliver 7 dB of boost and about 8 dB of cut—most of the latter being added between the last two calibration points on the control. The BASS action is more regular: ±9½ dB or so at 50 Hz, with almost no influence above 1 kHz. In practice, these controls are useful in reshaping tonal balance without introducing radical effects.

The LOUDNESS action, which was uninfluenced by volume setting in Diversified Science Laboratories' tests, raises the bass (below about 200 Hz) some 6 dB above the treble (above about 3 kHz). We would have liked a lower turnover frequency to avoid "thickening" the sound, but loudness compensation is, admittedly, a matter of taste. We found we could satisfy ours by using the bass control instead of the loudness-compensation switch. The infrasonic filter slopes at only 6 dB per octave, which we usually judge too gentle to be of significant help in controlling record warps and the like. The phono preamp has some built-in infrasonic rolloff, however, and thus increases the effectiveness of the filter in playing records—which is the critical application.

Most of the remaining data are very much what you would expect of a modern moderate-price receiver. Harmonic distortion at 0 dBW (1 watt) is quite low and consists mostly of the benign second harmonic; at rated power it is still quite low, though the third harmonic is beginning to take over. Response, though not quite ruler-flat, is certainly acceptable. Phono-input loading is not spot-on the 47,000-ohm nominal, but even fussy pickups should accept the slightly high resistance, and the shunt capacitance is a good match for many cartridge/turntable combinations.

Power output is very healthy for a receiver in this price class. This is particularly apparent in the dynamic power measurements, which more closely approximate the conditions of music reproduction than do the traditional continuous-output tests. On a short-term basis, the SX-50 can deliver 18½ dBW (70 watts) into 8 ohms and 20¼ dBW (105 watts) into 4 ohms.

Given the fine performance with 4-ohm loads, we were surprised to find that Pioneer has wired the speaker switch so that when you play two pairs of speakers at

once, they are connected in series. We assume this is intended to protect the output transistors from the very low impedances that can be present when multiple pairs of loudspeakers are driven in parallel. But if you do choose to play both sets simultaneously, the receiver's damping factor will be reduced, its maximum power output will be curtailed, and there may be large frequency response anomalies. The best course is therefore to select only one pair of speakers at a time.

The tuner section's performance is fairly typical for a receiver in this price range. Only if you live in a fringe reception area might you find it less than satisfactory. That is because of the very high stereo threshold, which precludes stereo reception of stations that deliver less than 36¼ dB of signal at the antenna terminals. The thresholds of most receivers are below (often well below) 30 dB, meaning that they are far below full stereo quieting as well. Thus people in weak-signal areas may get used to listening to stereo FM under less than ideal conditions. Pioneer has selected a threshold only just below the 50-dB quieting point, preventing poorer stereo reception. City dwellers and suburbanites may agree with this philosophy (which saves you from getting up to push the mode switch when stereo reception is below par), but it may leave some rural listeners feeling deprived.

One other oddity is the relatively high level of 19-kHz stereo pilot in the output. It's not enough to be audible, but if you record off the air using Dolby noise reduction, make sure your deck's multiplex filter is engaged to prevent Dolby mistracking. Noise and distortion are adequately low, while selectivity and AM suppression are high enough for all but very difficult reception conditions. But the real standout, is the capture ratio, which is excellent.

In future, we should be seeing more receivers with CD and TV-sound switching like that on the SX-50: A single aux input just doesn't make it in this age of high-quality sound from videodiscs, Beta Hi-Fi, and the like. In that sense, Pioneer has created something of a prototype model, though other manufacturers will certainly vary the theme. In concept and in use (though not in the display that reflects these factors), it's essentially simple, straightforward, and easy to use. This is one "bold new thrust" that need intimidate nobody.

AR Updates Its Classic Turntable

FOR MORE THAN A DECADE, the original AR turntable was a favorite not just of audiophiles, but also of people who simply enjoyed music and appreciated the AR's combination of quality, simplicity, and value. Its only serious shortcoming was a relatively unsophisticated, high-mass tone-

arm, which lacked cueing and antiskating facilities and occasionally suffered from excessive pivot friction. A radical, though by no means unheard of solution was to excise the arm and modify the AR's sub-chassis to accept one capable of performance more in keeping with that of the



Acoustic Research two-speed (33 and 45 rpm) manual belt-drive turntable, with walnut-veneer wood base. Dimensions: 18 1/4 by 15 1/2 inches (top), 6 3/4 inches high with cover closed; additional 11 inches clearance above and 2 1/2 inches behind required to open cover fully. Price: with tonearm, \$430; without tonearm, \$300. Warranty: "full," three years parts and labor on turntable, one year parts and labor on tonearm. Manufacturer: Teledyne Acoustic Research, 10 American Dr., Norwood, Mass. 02062.

SPEED ACCURACY (105 to 127 VAC)
 at 33 rpm no measurable error
 at 45 rpm 0.05% slow

WOW & FLUTTER (ANSI weighted peak)
 average ±0.038%
 maximum ±0.050%

TOTAL AUDIBLE RUMBLE (ARLL) -69 1/2 dB*

EFFECTIVE TONEARM MASS =5 grams

VTF-GAUGE ACCURACY
 set for 0.5 gram 0.55 gram
 set for 1.0 gram 1.05 grams
 set for 1.5 grams 1.5 grams
 set for 2.0 grams 2.0 grams
 set for 2.5 grams 2.5 grams
 set for 3.0 grams 3.0 grams

TOTAL LEAD CAPACITANCE 85 pF

*See text.

Tonearm/Cartridge Matching Graph

By means of this nomograph, you can quickly and easily 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 diagonal 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

turntable itself—a practice that is, if anything, more popular now than it was when the turntable was still being made. But since the subchassis suspension was balanced for the weight of the supplied arm, the results were not always optimum.

In the late '70s, after its acquisition by Teledyne, Acoustic Research restyled the turntable, switched to a lighter headshell for a somewhat lower effective mass (about 14 grams), added a cueing mechanism, and rereleased it as the AR-77XB (test report, July 1978). Just a couple of years later, however, AR discontinued the turntable altogether. And that, we thought rather sadly, was that.

How happy we are to be proved wrong. The new AR turntable comes in two versions: one with a blank mounting board (for installation of the arm of your choice), the other with an excellent premounted tonearm. The former undoubtedly will appeal to the many serious hobbyists who until now have had to pay much more to get similar performance and flexibility. (AR is also offering precut mounting boards for Linn and SME tonearms.) But most people will prefer the convenience of the integrated model under review here.

Although the new turntable is a complete redesign, its lineage is readily apparent. In particular, AR has retained the very effective spring-suspended subchassis isolation system it pioneered more than 20 years ago. The platter bearing and tonearm are attached to a single rigid structure (in this case, a die-cast metal "T"), to keep them in a fixed relationship to each other regardless of how either is disturbed by outside forces: When one moves, the other moves with it. This subchassis is suspended from the base at three points by springs tuned to a very low resonance frequency, so that most vibrations transmitted through the base (including those induced by the music playing in the room) are filtered out, virtually eliminating the possibility of acoustic or mechanical feedback.

AR has damped the springs in the new

turntable, to prevent oversensitivity to footfalls or other disturbances occurring at frequencies near or below the suspension resonance. And in a final bid for stability, it has hung the subchassis from the springs, instead of perching it atop them, to forestall any tendency to rocking or swaying.

One of the key advantages of this kind of suspension is that vibration from the drive motor can be isolated from the subchassis by bolting the motor to the turntable base and linking it to the platter via a compliant belt. In the AR, the belt loops around either of two sections of the motor's stepped drive pulley and around an inner platter over which fits a full-size cast-aluminum outer platter. Speed is determined by the position of the belt on the pulley: The smaller diameter step is for 33 rpm, the larger one for 45 rpm. Changing speeds thus requires that you remove the outer platter, move the belt by hand, and replace the platter, but this is easily done and so seldom necessary that it is at worst a minor inconvenience.

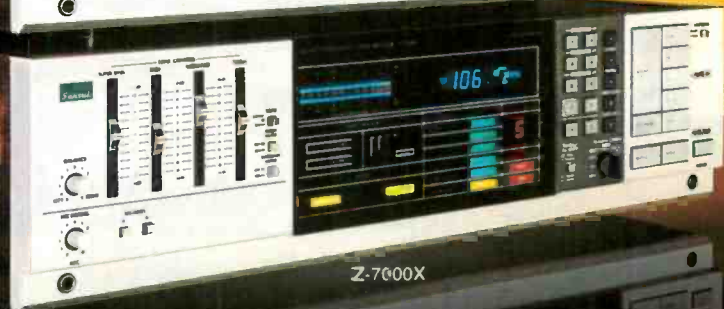
The motor itself is a low-speed, synchronous type, whose speed is governed by the AC line frequency, assuring constant, correct speed almost regardless of the line voltage. (Line voltage does affect torque, but this should be no problem in anything short of a severe "brownout.") The platter rides on a lubricated ball bearing and is covered by a black felt mat.

The tonearm is a straight, static-balance design with a detachable headshell. Height is adjusted by sliding the arm pillar up and down in its mounting collar until the arm tube is parallel to the record surface. It is then locked into place by tightening a pair of hex screws on the right side and back of the collar. This inherently tedious procedure is complicated by the fact that there is a fair amount of play between the pillar and the collar; if you're not careful, you can wind up with the pillar tilted very slightly to one side or the other, which will give the cartridge an unwanted lateral tilt. A tighter fit (or a separate azimuth adjustment) would

Z-9000X



Z-5000X



Z-7000X



Z-3000X

SANSUI DOESN'T CLAIM TO HAVE THE WORLD'S ONLY DISTORTION-FREE RECEIVER. NOW WE HAVE FOUR.

Unlike most high fidelity companies, Sansui doesn't reserve its most advanced technology exclusively for the top-of-the-line model.

That's why every model in our new "Z" Quartz Synthesizer Compu Receiver line (Z-9000X, Z-7000X, Z-5000X, Z-3000X) is distortion-free.

Sansui puts its best Super Feedforward

Some competitive receivers herald the fact that they eliminate audible distortion. But only Sansui, with its highly acclaimed and exclusive Super Feedforward DC power amplifier system, banishes every conceivable type of audible and inaudible distortion—THD, TIM, intermodulation, envelope, switching, crossover, etc. And this unique distortion-destroying circuitry is built into every new Sansui "Z" receiver.

The super intelligence of microprocessor control

Similarly, all models incorporate a high degree of automation, thanks to microprocessor

control. One-touch Simul Switching simultaneously turns on the power and one input—turntable, tape deck or AM, FM broadcast. The microprocessor also controls the Quartz-PLL digital synthesized tuning that presets 8 FM and 8 AM stations. The drift-free tuning, whether auto scan or manual, is so precise that in congested areas even the weakest station sounds as if it's just around the corner. There's also a programmable digital quartz timer/clock with three daily independent memory functions. You can awaken to FM; fall asleep to cassette music; and arrive home to hear your favorite record.

The top-of-the-line Z-9000X makes listening even more pleasurable with a 7-band graphic equalizer, a built-in reverb amp, preset volume control, plus preamps for MC and MM cartridges.

More music control across the board

Combine all this with power handling capability ranging from

30 to 55 watts, and you can appreciate why no other collection of receivers gives you so much control over your music.

Maybe you're wondering why Sansui doesn't give you less technology and fewer features, as others do. It's because we never compromise when it comes to music. And neither should you.

Watts per channel

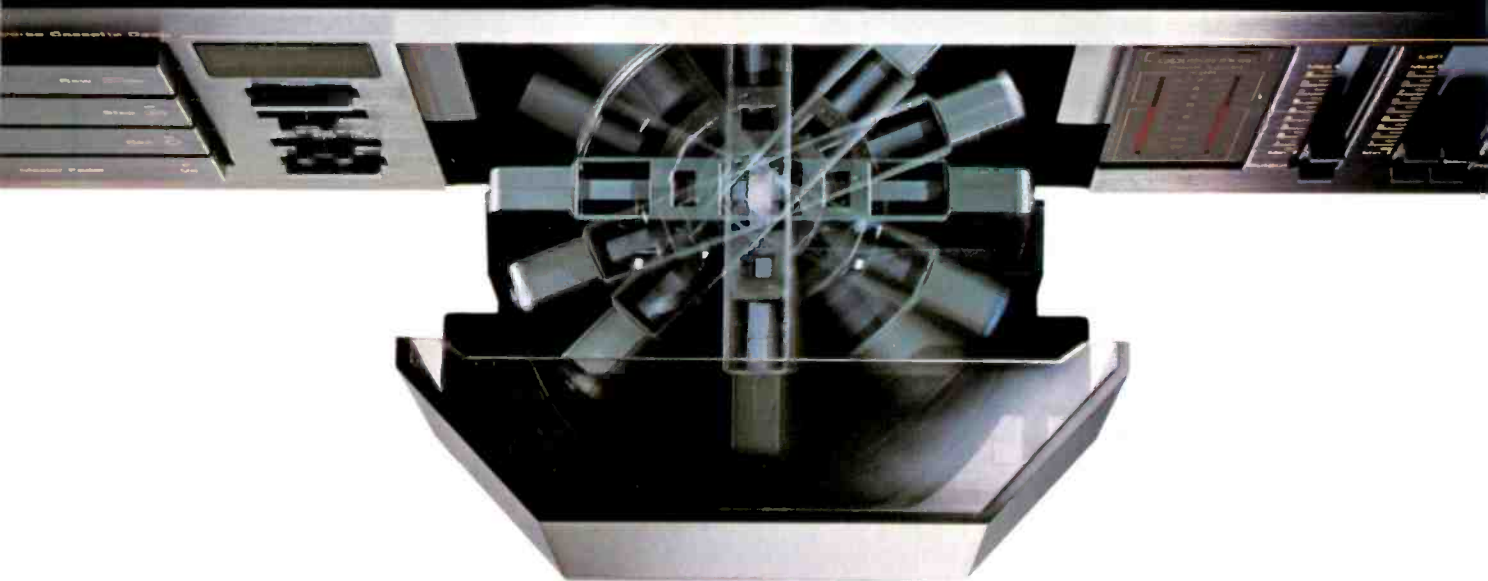
Minimum RMS, 20-20K-Hz both channels driven into 8 ohms, at rated Total Harmonic Distortion.

Z-9000X	130 w.	.005%
Z-7000X	100 w.	.005%
Z-5000X	70 w.	.007%
Z-3000X	55 w.	.008%

SANSUI ELECTRONICS CORPORATION
Lyndhurst, NJ 07071 Gardena, CA 90248
Sansui Electric Co. Ltd. Tokyo, Japan

Putting more pleasure in sound

UDAR The *Perfectionist's* Auto-Reverse!



Why sacrifice performance for convenience! If you've always wanted an auto-reverse deck but were too much a perfectionist to settle for questionable response, Nakamichi has the answer—UDAR—*Unidirectional Auto Reverse*—a revolutionary development in the *true* sense of the word! Ordinary auto-reverse decks *change* direction at the end of the side causing tape to track along a different path and produce "bidirectional azimuth error." Since azimuth differs on the two sides, frequency response differs too. Compare this with UDAR. At the end of the side, UDAR disengages the cassette, flips it, reloads, and resumes operation in under 2 seconds! Tape plays in the *same* direction on Side A *and* on Side B so there's no "bidirectional azimuth error." UDAR *automates* the steps *you* perform on a conventional deck to give you auto-reverse convenience and *unidirectional* performance.

You'll find UDAR in the Nakamichi RX-202—a perfectionist's auto-reverse recorder with some surprising features at an even more surprising price!
See it now at your Nakamichi dealer.

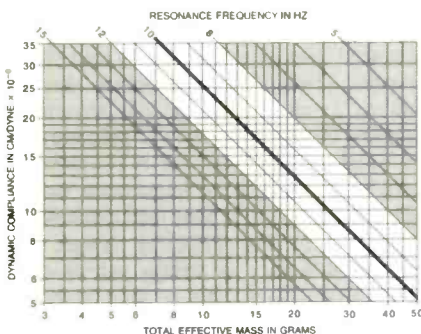
For more information, write Nakamichi U.S.A. Corporation,
1101 Colorado Avenue, Santa Monica, CA 90401.

RX-202



 Nakamichi

SME's effective mass) to the cartridge weight to get the total effective mass. Then find the intersection of the vertical line representing 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^{-9} 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 6.3 grams (the weight of the V-15 Type III) 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.

speed things along.

AR supplies an unusual plastic gauge for setting stylus overhang. A hole near the back fits over the spindle. The long end of the gauge serves as a pointer that you are supposed to aim at the arm pivot. On the short end is a bump with a small dimple in its peak. The idea is to position the cartridge so that it is square in the headshell and the stylus is resting in the dimple. We were skeptical at first, but it turned out to be one of the easiest and most accurate alignment techniques we have ever encountered. Balance and tracking force are set with the counterweight, which is accurately calibrated in half-gram increments up to 3 grams; antiskating is set with a dial that extends out from the right side of the arm pillar. The arm cables terminate in gold-plated RCA pin plugs, and there is a small LED on the right front of the turntable base that lights whenever the motor is on.

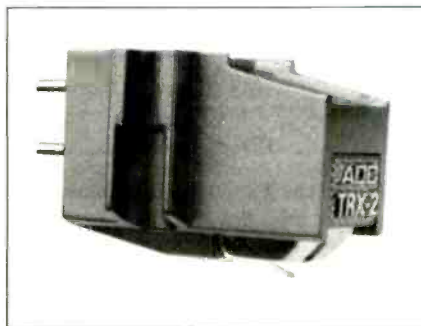
Diversified Science Laboratories' measurements show outstanding performance in every category. Speed is dead on at 33 rpm and within a gnat's eyelash at 45, and the wow and flutter measurement is among the lowest DSL has ever recorded. Rumble figures also are in the championship class, ranging from $-68\frac{1}{2}$ to $-70\frac{1}{2}$ dB when measured with DSL's lacquer test disc. These numbers are so low that the lab decided to double-check them with a Thorens Rumpelmesskoppler, which couples the stylus to the platter by means of a precise, low-friction bearing, to see if the measurement was being limited by the disc. After correction for a small amount of inaudible hum from the AC motor, the reading was approximately -75 dB. The lab also noted that all the measurements were

exceptionally stable, with none of the once-around peaks commonly produced by belt-drive turntables.

The tonearm's effective mass is very low—much lower, in fact, than its appearance had led us to expect. DSL speculates that this may be because the counterweight is very well decoupled from the arm tube and therefore is not "seen" by the stylus as part of the arm's moving mass. Whatever the reason, it makes the arm an excellent match for top-quality high-compliance cartridges. Lead capacitance also is very low, assuring a wide latitude in adjusting for the load requirements of various pickups.

Overall, we would rate the new AR turntable as reasonably easy to set up and very easy to use (although without any of the conveniences of automation). We would have appreciated electronic speed switching and built-in leveling feet, but of course, such frills would drive up the price. Performance is uniformly superb, but we are especially impressed by the effectiveness of the turntable's suspension. We have not been able to induce acoustic feedback under any circumstances. Even strong blows to the turntable's top plate or mounting surface leave it unperturbed. A hard bump from the side will cause groove skipping, but you have to give it a pretty good push. Only a handful of turntables can match the AR in this respect, and all the ones we know of cost far more. Indeed, most of the AR's serious competitors sell for two or three times its price, which makes it quite a bargain. It may not be much for features, but if you're the sort who puts performance and reliability first, we think you'll like this new AR turntable a lot. We certainly do.

A New Look from ADC



FOR THE LAST TEN YEARS, ADC cartridges have been immediately recognizable by the sports-car slope of their stylus assemblies. So our curiosity was aroused when we noticed the squared-off, "blocky" styling of the company's new top-of-the-line model, the TRX.2. And indeed, it does embody some significant changes. The cartridge housing is of die-cast metal, instead of the usual molded plastic, with the replaceable stylus assembly screwed tightly into place for minimum resonance. Also, instead of metal or a sapphire rod (such as was used for the ADC Astrion we reviewed in July 1981), the TRX.2's stylus cantilever is a sapphire tube, designed to give a superior combination of low mass and high rigidity. (The \$175 TRX.1 uses a beryllium cantilever.)

Much remains that is familiar, however. In particular, the TRX.2 works by means of the induced-magnet principle used in virtually all other ADC pickups. A

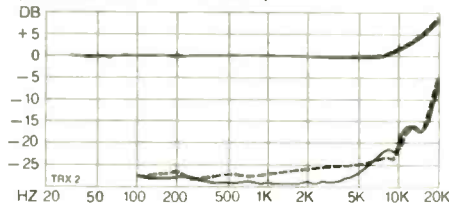
permanent magnet attached to the cartridge body induces a magnetic field in a metal armature connected to the stylus cantilever. This armature is positioned near a set of fixed coils within the cartridge. The motion of the stylus in the record groove causes a corresponding movement of the armature (and its magnetic field), generating an electric current in the coils with a voltage proportional to the velocity of the stylus. The advantage of this transduction method is that a relatively bulky magnet can be used to induce a powerful field in a low-mass armature. This can yield a very desirable combination of high sensitivity, low coil inductance (for consistent performance over a wide range of load impedances), and good high-frequency tracking ability.

Diversified Science Laboratories' measurements show fairly high sensitivity, which should ensure a good signal-to-noise ratio with typical phono preamps, and about average channel balance. Tracking is also

AUDIO New Equipment Reports

ADC TRX.2 fixed-coil phono cartridge, with multiradial (line-contact) diamond stylus. Price: \$250; RTRX-2 replacement stylus, \$75. Warranty: "limited," one year parts and labor, excluding stylus wear. Manufacturer: made in Japan for BSR (USA), Ltd., Route 303, Blauvelt, N.Y. 10913.

FREQUENCY RESPONSE & CHANNEL SEPARATION (test record: JVC TRS-1007 Mk. II)



Frequency response
 — L ch +8, -1/2 dB, 30 Hz to 20 kHz
 - - - R ch +9, -1/2 dB, 30 Hz to 20 kHz
 Channel separation
 ≥ 22 dB, 100 Hz to 7 kHz;
 ≥ 16 dB, 100 Hz to 19 kHz

SENSITIVITY (1 kHz) 1.08 mV/cm/sec

CHANNEL BALANCE ± 1/2 dB

VERTICAL TRACKING ANGLE 25°

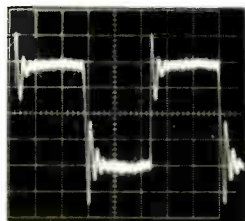
MAX. TRACKING LEVEL (re RIAA 0 VU; 1 1/4 grams)
 lateral ≥ +15 dB
 vertical > +12 dB

DYNAMIC COMPLIANCE (vertical)
 19×10^{-6} cm/dyne

RECOMMENDED EFFECTIVE TONEARM MASS
 optimum 7 grams
 acceptable 3 to 14 1/2 grams

WEIGHT 6.4 grams

SQUARE-WAVE
 RESPONSE (1 kHz)



about par for good cartridges these days. The TRX.2 negotiated DSL's "torture test" at its 1-gram minimum tracking force and all but the hottest (+18-dB) bands of the CBS STR-112 test disc at its 1 1/4-gram recommended tracking force. Increasing the tracking force to 1 1/2 grams (the maximum specified by ADC) did not result in any improvement, so 1 1/4 grams was used for all further tests.

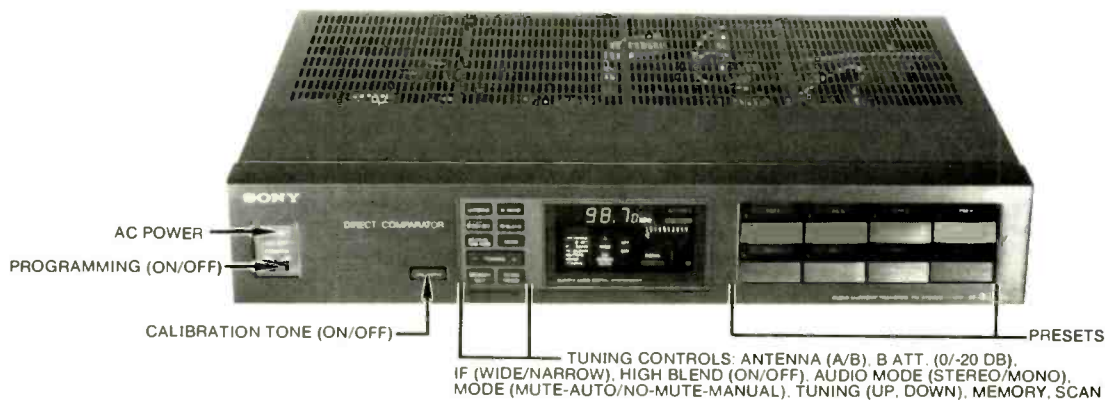
Distortion measurements essentially confirm the data from the tracking tests. Intermodulation products are moderate by cartridge standards up to very high recorded velocities, where they climb rapidly, suggesting the onset of mistracking. Vertical tracking angle is close to the 20 degrees generally accepted as standard, but there is enough difference between the figures obtained at low and middle frequencies on the DIN test record to suggest that the stylus rake angle is a little off. The TRX.2's weight and moderately high dynamic compliance make it suitable for use in a wide variety of low- and medium-mass tonearms.

DSL measured channel separation and frequency response into the manufacturer's specified load of 47,000 ohms in parallel with 150 picofarads of capacitance. Separation is wide and uniform up to very high frequencies—more than good enough for excellent stereo effect. Even more impressive is the response over the bottom nine

octaves, which is superbly flat. But in the last octave, between 10 and 20 kHz, it rises very sharply, going from +1 1/2 dB at 10 kHz to +5 dB at 15 kHz to about +8 dB at 20 kHz.

The frequencies involved are so high that the audible effect is much less pronounced than the curves might lead you to expect. (This is partly because there is almost never any significant amount of musical information above 15 kHz and partly because the human ear is considerably less sensitive at these frequencies than at lower ones.) Still, it does lend a distinctive character to the TRX.2's sound. We noticed it mainly on strings and on cymbals, which lose some of their body and take on a slight thinness of tone. This is accompanied, however, by an increase in apparent detail that will strike a responsive chord among aficionados of some of the popular, and often more expensive, moving-coil pickups. Tracking is mostly quite secure, though we have noticed an occasional blurring of strong trumpet blasts.

The TRX.2 reminds us of the importance of subjective evaluations when it comes to actually buying a phono pickup. This is a cartridge with its own sonic personality, which will delight some but leave others unmoved. Overall, it marks several interesting departures for ADC, and we look forward to seeing what these new directions will bring in the future.



A Sony Tuner with a Memory for Detail

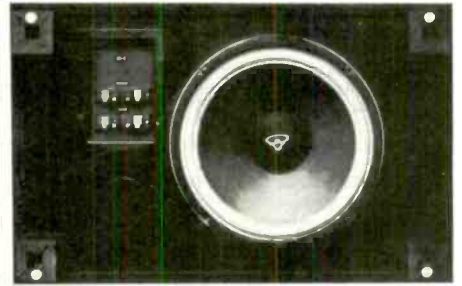
AMONG THE INVETERATE INNOVATORS of electronic home entertainment, Sony is one of the names that come first to mind. And the ST-S555ES is yet another example of the company's brand of positive innovation—as opposed to the sort that simply tries to be "different" and thereby call attention to itself. That its performance is very good is not news: The plateau on which the best tuners and receivers sit these days is quite high. What sets the Sony apart

is its ability to store a list of ancillary factors, along with the carrier frequency, to optimize reception of programmed stations, even in unattended operation.

Just beneath the power switch is one marked "program." It is used to memorize a sequence of stations that will be followed (when this switch is in the ON position) at successive power turnons. If you use a timer for wakeup or recording, the first programmed station will be tuned the first time



PUPPY LOVE AT 50% OFF



Here's a 'floor's eye view' of the subwoofer. The woofer is positioned just 3" off the floor. You'll feel and hear bass so alive, you'll think it is.

sensitivity is 92db at 1 watt at 1 meter). Finally, even the cabinet is special. It produces extremely high bass efficiency which is derived from the Helmholtz resonator design. In fact, this is the newest of Cerwin-Vega's Subwoofers, the SW12B and it has an increased output of 2db at 30hz over the original SW12.

So, whether you have two or three-way speaker systems, with 8", 10" or 12" woofers, you will find the sound and sonic differences staggering.

EASY HOOKUP

It's easy to connect. You simply run both the right and left channels from your amplifier to the input terminals of the woofer. It works with any system from 15 to 125 watts per channel.

The signal is passed through its special massive crossover network to two totally separate voice coils on the woofer. Then you connect the speaker wires from your two stereo speaker systems to the output terminals on the Subwoofer and only the 120hz signals and above reach your speakers.

Placement of your regular speakers is just as critical as usual for stereo imaging, but the Subwoofer can be placed anywhere because low frequency material is totally nondirectional.

The Subwoofer makes a perfect end table or cocktail table. Its rich woodtone appearance matches any decor and it is 25½" long, 13¼" high and 16¼" wide.

TRY AUDIOPHILE'S BEST FRIEND RISK FREE

The fullness, richness and depth is awe inspiring. Connect this Subwoofer to your system and you'll feel and hear your music like you never have before.

If you aren't 100% satisfied, simply return it to DAK in its original box within 30 days for a courteous refund.

To order the new improved Cerwin-Vega SW12B Subwoofer risk free with your credit card, call toll free, or send your check, not for the \$332 retail price of the earlier SW12, but for just \$164.50 plus \$14 for postage and handling. Order No. 9714. CA res add 6% tax.

You can't replace the love and softness of a warm puppy. But, wait till you experience the richness and depth this Subwoofer will add to your bass and the clarity you'll hear in your midrange. It lets a smaller system sound massive and lets a large system achieve its potential.

DAK INDUSTRIES INCORPORATED

14H

TOLL-FREE ORDER LINE
For credit card orders call 24 hours a day 7 days a week
CALL TOLL-FREE. . . 1-800-325-0800
10845 Vanowen St., N. Hollywood CA 91605

Subwoofer

Man's best friend meets the audiophile's best friend.

A puppy may be man's best friend. *Woof, Woof.* . . But, now I've got a new friend you can add-on to your stereo system that doesn't need to be taken on walks, washed or fed. But, it makes a great cocktail table for you when you're being fed, and oh what a woof it has.

GREAT SOUND FOR EVERYONE

It's called a Subwoofer. And, normally it is the beloved pet of only the most ardent audiophiles.

It is not generally understood that it can be used with virtually any speaker systems in any stereo. And, in addition to substantially increasing and perfecting the bass response, it also has a significant impact on the midrange clarity too.

Before I tell you exactly how marvelous your stereo will sound when you connect this Subwoofer to it, there are two things you should know.

First, you'll be getting your new friend at a large discount. Over 50% off retail. And Second, you won't have to worry about paying vet bills.

Your new friend comes complete with a paid up health insurance policy in the form of a 5 year limited warranty from its father, Cerwin-Vega.

And, after 25 years, Cerwin-Vega certainly qualifies as the father of deep rich bass. Their disco systems have just about shaken California right into the ocean.

But, don't be misled. Cerwin-Vega bass is clean and tight; never sloppy or overpowering. It adds a feeling of depth and fullness to your music that you simply can't get with conventional two or 3-way speaker systems.

HERE'S WHAT IT DOES

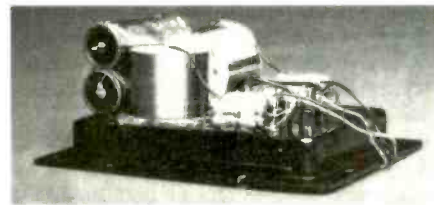
Basically, the problem with most speaker systems is that the bass overpowers the system. In a 3-way system, a woofer may be crossed over at about 800hz. And, in a 2-way system as high as 2-3000hz.

So, the speaker must handle movements of up to an inch at frequencies below about 80hz, while at the same time attempting to reproduce the very fine vibration type movements of the midrange frequencies.

It is this difference in movements that causes both the bass to be weak or non-precise, and the midrange to become muddy. Even the best 3-way systems fall prey to these problems.

PROBLEM SOLVED

It has a specially engineered crossover network that sends frequencies above



120hz to your regular speakers and reproduces just the mammoth movement frequencies from 120hz down to 29hz with a special floor firing dual wound super woofer. (If you have downstairs neighbors, this Subwoofer isn't for you.)

The woofer is a very special hybrid. It has a mammoth two inch voice coil which is about double the average size of a woofer in a two or 3-way system.

This large voice coil allows the speaker to make the very large movements required to reproduce the very low frequencies.

But, it would do a lousy job of reproducing midrange or high frequencies which is why, cost aside, manufacturers don't put big coils in normal woofers.

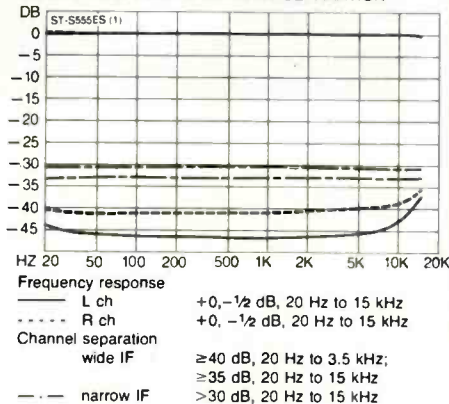
To make the massive movements, this woofer has a very large speaker magnet that weighs an incredible 112 ounces. This super magnet also makes the subwoofer system extremely efficient. (The

AUDIO New Equipment Reports

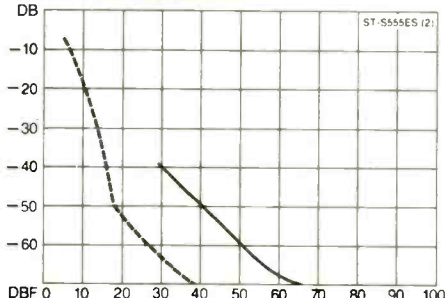
Sony ST-S555ES FM tuner. Dimensions: 17 by 3 inches (front panel), 13 inches deep plus clearance for connections. Price: \$450. Warranty: "Illimited," three years parts and labor. Manufacturer: Sony Corp., Japan; U.S. distributor: Sony Corp. of America, Sony Dr., Park Ridge, N.J. 07656.

Except as noted, data is for the wideband mode.

STEREO RESPONSE & CHANNEL SEPARATION



FM SENSITIVITY & QUIETING



— stereo quieting (noise)
 - - - mono quieting (noise)

Stereo sensitivity (for 50-dB noise suppression)
 40 1/2 dBf at 98 MHz, with 0.32% THD+N
 42 1/2 dBf at 90 MHz; 42 dBf at 106 MHz

Mono sensitivity (for 50-dB noise suppression)
 18 1/2 dBf at 98 MHz

Muting threshold	31 dBf
Stereo threshold	30 1/2 dBf
Stereo S/N ratio (at 65 dBf)	69 1/4 dB
Mono S/N ratio (at 65 dBf)	76 dB

CAPTURE RATIO

wide IF mode	1 dB
narrow IF mode	1 1/2 dB

SELECTIVITY

wide	narrow
alternate-channel	46 1/2 dB
adjacent-channel	64 1/4 dB
	4 1/2 dB
	10 dB

HARMONIC DISTORTION (THD+N)

	stereo	mono
at 100 Hz	0.068%	0.17%
at 1 kHz	0.053%	0.14%
at 6 kHz	0.115%	0.11%

STEREO PILOT INTERMODULATION 0.055%

IM DISTORTION (mono) 0.095%

AM SUPPRESSION 64 dB

PILOT (19 kHz) SUPPRESSION 68 1/4 dB

SUBCARRIER (38 kHz) SUPPR. >120 dB

OUTPUT IMPEDANCE 620 ohms

the power is turned on; the next time the power is turned on, the second station will be tuned; and so on up to a maximum of four off/on cycles. This is, of course, a big plus if you use a tape recorder to catch broadcasts you would otherwise miss while you're away from home. But there's more.

In addition to carrier frequency, each of the eight memory locations has room for the following information: which of the two back-panel antenna inputs to take the signal from, whether to insert a 20-dB pad into the Antenna-B input (the equivalent of the LOCAL switching option on some tuners), whether to use the wide (standard) or narrow IF filter (about which, more in due course), and whether to receive the station in stereo, stereo with high blend (to reduce hiss on weak stereo stations), or mono (to reduce it still further). These choices apply whether or not you're using the programming function: Whenever you push one of the station presets, the station comes on with all of these factors preadjusted. You can manually override the settings to check their appropriateness under existing signal conditions. If you decide that a change should be incorporated into memory, you simply "rememberize" that station; otherwise, the next time you select the station the original settings will be called up once again.

The most striking of these options are those for the two antennas, which presumably will be differently oriented and may be of different design, to achieve different gain and directionality objectives. In the event that you end up with a high-gain antenna oriented toward a strong station (or live close to a transmitter), the 20-dB pad will help mitigate the possible side effects. And remember that the pad and the antenna will be chosen, along with the station, by the programming feature. Short of some sort of programmable rotator, it's hard to see how else you might get this degree of unattended, automatic adjustability—and even with a rotator, you normally would not have the overload-inhibiting pad, if you need it. This feature also will be appreciated by those who want to receive both broadcast and cable FM.

The back-panel antenna inputs are 75-ohm coaxial "F" jacks—the standard variety for TV cable and downlead interconnections these days, but seldom to be found on stereo equipment. If your antenna cable is 300-ohm twinlead, you can use a plug-in balun transformer that Sony supplies with the tuner. This sensible and convenient antenna-input scheme is one we wish other manufacturers would copy.

The only other unusual feature of this panel is the output: a small jack that is round but for a flat section that acts as a keyway and has four tiny holes to accept the conductors from a mating plug. The supplied three-foot interconnect cable has a small "black box" near the outboard end, fol-

lowed by a conventional pair of pin ("RCA") plugs. The reason for this unusual arrangement is to be found in the Audio Current Transfer (A.C.T.) circuit, which, according to Sony, has proved successful in combatting residual noise and crosstalk in the company's amplifiers. This system uses current, rather than voltage, as the inter-stage medium of passing on signals; the black box on the cables contains matching transformers to convert the signals to conventional voltage drive for the benefit of your preamp's tuner input.

The tuning circuitry itself works in quarter-channel (50-kHz) steps and includes Sony's latest refinement of the phase-locked loop principle (called Direct Comparitor), which uses an unusually high comparison frequency to minimize noise in the audio band. Diversified Science Laboratories' measurements show its basic performance to be typical of that of the top separate tuners on the market these days.

The switchable IF mode does make a difference. Filtering of the IF (intermediate frequency, as opposed to the station's actual radio frequency or the audio frequencies of the demodulated output) is critical to good performance, yet it's always something of a compromise. Ideally, it should include everything within the 200-kHz channel of the tuned station and exclude everything outside that band. But even if such an ideal filter could be built, it would still let in some interference from adjacent strong stations, and the sloping skirts of real-world filters begin to shave off some of the desired station's signal before they completely suppress such over-strong neighbors.

Switchable IF bandwidth enables you to make your own decisions about the trade-offs involved. The wideband mode should yield the lowest distortion and flattest response; the narrow mode should improve selectivity markedly, at some possible slight expense in high-frequency response and a greater one in channel separation and distortion. The ST-S555ES follows this pattern. The already superb response is essentially unaffected by the IF setting. The narrow band reduces channel separation from excellent to very good and increases the sensitivity figures somewhat. Performance in the wide mode is shown in the graph; that in the narrow mode is identical or nearly so at relatively high or very low signal strengths, but signals in the 15-dBf range (which precludes stereo reception) are some 10 dB quieter in the narrow mode. Capture ratio is better in the wide mode; selectivity improves from good to excellent when you switch to the narrow mode. Distortion increases very slightly in the narrow mode, but since the difference is at most a negligible 0.05 percent, we have listed only the wideband measurements.

A related feature is the BLEND, which we continue to miss on the many tuners from which it is absent. By reducing sepa-

Perfect Selection

(When the mood calls for just the right song.)



Onkyo's Instant Song Location

Everyone has a special song for a special moment, as our friend above will tell you. And, Onkyo's new TA-2044 Integra Series cassette deck makes finding that tune easier than ever before.

That's because the TA-2044

provides the most advanced Automatic Music Control System (AMCS) you can buy. Not only will it scan to let you identify the next cut, but you can program it to instantly play only the one song you want to hear. If you want to listen to the third song on a seven song tape, all you do is punch up the number three, and the TA-2044

locates it and plays it. It can also repeat the song (or any other) as

often as you wish.

The TA-2044 is a three motor cassette deck that features Auto Space for precise spacing between songs when recording, Dolby B&C, Hard Permalloy head, timer standby, continuous repeat mode, and ten segment LED meter. As with our other new tape decks, the TA-2044 utilizes a full logic, computer controlled design. That means from our low end to our high end, Onkyo cassette decks guarantee the finest recording/playback performance.

So remember, when the mood calls for just the right song, there's only one right cassette deck—the Onkyo TA-2044. But please, don't use your feet.



Nobody knows more about audio than Onkyo.

ONKYO®

200 Williams Drive, Ramsey, NJ 07446

For complete literature on our TA-2044, plus our new TA-2022, TA-2033 and our Integra Series TA-2066 and TA-R77 with Auto Reverse, write directly to Onkyo.

About the dBW . . .

We 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
1.00	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	12	500	27
20	13	630	28
25	14	800	29

ration progressively as audio frequency rises, it cancels much of the hiss that occurs in stereo reception of weak signals. Because stereo perception depends more on midrange separation than on separation at the frequency extremes, weak stations can be "cleaned up" appreciably (by about 3 dB maximum, for an effective stereo sensitivity of 37½ dBf in the wide IF mode) before you can hear a significant loss in the stereo effect. Thus this feature, like the narrow-IF option, makes a welcome contribution to the listenability of less-than-optimum signals.

The signal-strength display, too, is very useful. The triggering points of its ten working elements cover a range extending from 32 dBf (below the stereo threshold) to 89½ dBf (where ultimate quieting has been achieved) in steps that average about 6 dB—slightly more toward the extremes of

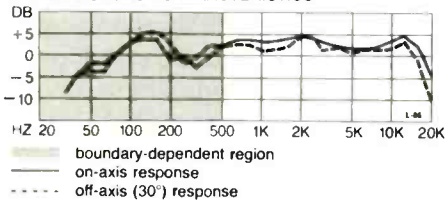
the range, somewhat less in the middle. Furthermore, the shape of the pattern these elements produce as they light suggests the mono quieting curve, giving you a fix on the sonic meaning of the signal strength being documented.

This tuner is so full of welcome features—a recording-level calibration tone at approximately 400 Hz and 6 dB below the output from 100 percent carrier modulation, for example—that the joy of using it overwhelms its manifest technical performance. Its only user-unfriendly facet, in our estimation, is the quarter-channel tuning increment, which slows manual tuning considerably. Once the presets were programmed, however, we found we hardly ever used the manual tuning. And when you consider what this tuner will do for the recordist, a little inconvenience elsewhere pales into insignificance.

A Tradition Revisited: The JBL L-86

JBL L-86 loudspeaker, in particleboard enclosure with walnut-veneer finish. Dimensions: 13 by 21¼ inches (front), 10 inches deep. Price: \$295. Warranty: "limited," five years parts and labor. Manufacturer: JBL, Inc., 8500 Balboa Blvd., Northridge, Calif. 91329.

ROOM RESPONSE CHARACTERISTICS



SENSITIVITY (at 1 meter; 2.8-volt pink noise, 250 Hz to 6 kHz) 88 dB SPL

AVERAGE IMPEDANCE (250 Hz to 6 kHz) 9½ ohms



A LIKELY CANDIDATE to continue JBL's long winning streak with loudspeakers of so-called bookshelf size is the L-86. It is the smallest three-way system in the current L series and uses the same 5-inch midrange driver as the larger models. It is crossed over at 800 Hz to an 8-inch woofer, employing JBL's distortion-bucking symmetrical-field magnetic structure and a diaphragm coating of a performance-optimizing compound called Aquaplas. The tweeter, which reproduces the range above 3.7 kHz, is a 1-inch dome. All this is housed in a conventional ducted-port bass-reflex enclosure. The drivers (but not the port) are aligned vertically on the front panel. Power input is via twist-to-lock connectors—which provide easy, positive action with bared leads—in a recess on the back.

JBL rates the L-86's impedance at 8 ohms. The actual impedance curve is relatively flat; except for a very narrow 38-ohm peak (at 60 Hz, representing the woofer resonance in the enclosure), it never rises above 12 ohms or falls below 6 ohms within the audio range. The average across that entire range is more than 10 ohms, and the average in our "music band" is 9½, so L-86s should pose no problems, even for finicky amplifiers, when used in paralleled pairs. Sensitivity is fairly typical of good modern speakers.

Diversified Science Laboratories made its measurements with the speaker mounted on a 12-inch stand and four feet in front of the back wall. JBL's positioning instructions in the owner's manual—which evidently is written to cover a multitude of models—are vague. A brief discussion of stereo imaging aside, they say only: "Placing the loudspeakers in corners or against a wall will result in the strongest (but not necessarily the most accurate) bass." Experi-

mentation showed that such placements can easily make the L-86 both measurably and audibly bass-heavy, so we chose a free-standing position for both the lab and listening tests. (The shelving response visible at the bass end of our graph appears only when the speaker is pulled out from the walls and therefore must be counted as a room effect.)

The curve shows exceptionally broad response: ±4½ dB from the 40-Hz band up to the limit of testing on-axis. (Off-axis, the spread is only a little greater—±5¼ dB—and the treble drops off only in the uppermost band, indicating unusually broad high-frequency dispersion.) Measured distortion below 100 Hz is higher than usual, averaging about 4 percent even at the lowest testing level. Had the speaker been placed to increase bass response, these figures doubtless would have been lower. From 100 Hz up, distortion is moderate: It averages around ¼ percent at a sound pressure level (SPL) of 85 dB, increasing gradually to about ¾ percent at the maximum testing level (100 dB SPL). The L-86, which is rated for amplifiers of as much as 200 watts (23 dBW) per channel, accepted the full output of the lab's amplifier in the 300-Hz pulse power-handling test, for a calculated peak sound pressure level of 115 dB.

Even with the speakers free-standing, we found we liked a slight cut in bass response to prevent heaviness with some program sources, though the L-86 certainly does not lack for brightness. Overall, its tonal properties are appealingly lively and vivid, and its stereo imaging is very good. We have no doubt that it will find favor with a wide audience; whether it will achieve the "best-seller" status of many of its forebears is up to the buying public.

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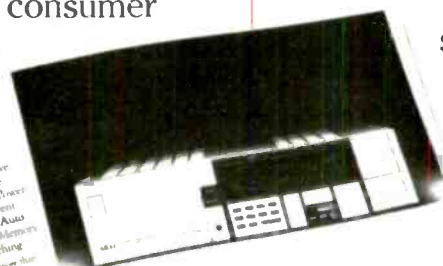
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ASSEMBLING

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THE ELEMENTS OF SUCCESS: TWO EXPERTS SHARE THEIR PERSONAL VIEWS ON WHAT IT WOULD TAKE TO SATISFY THEM IN AUDIO ELECTRONICS, TAPE RECORDERS, AND SPEAKERS

WHEN IT COMES TO picking the right system for your needs and tastes, an expert's advice is never the last word. Not that he doesn't know the field or the technicalities involved in assembling components that will work well together, but he doesn't know you. Ultimately, you must do most of the work—deciding not only between competing brands and models, but determining exactly what configuration of components will give you the most use and enjoyment. We asked Robert Long, one of HF's consulting technical editors, and Brad Meyer, a well-known audio consultant and frequent contributor, to drop their accustomed personas as unbiased experts and share with you their personal opinions. There's plenty of "objective" information here, but how these two writers combine their technical knowledge with their own needs and tastes to create a satisfying system is the real lesson.—Peter Dobbin

The "Necessity" for Separates

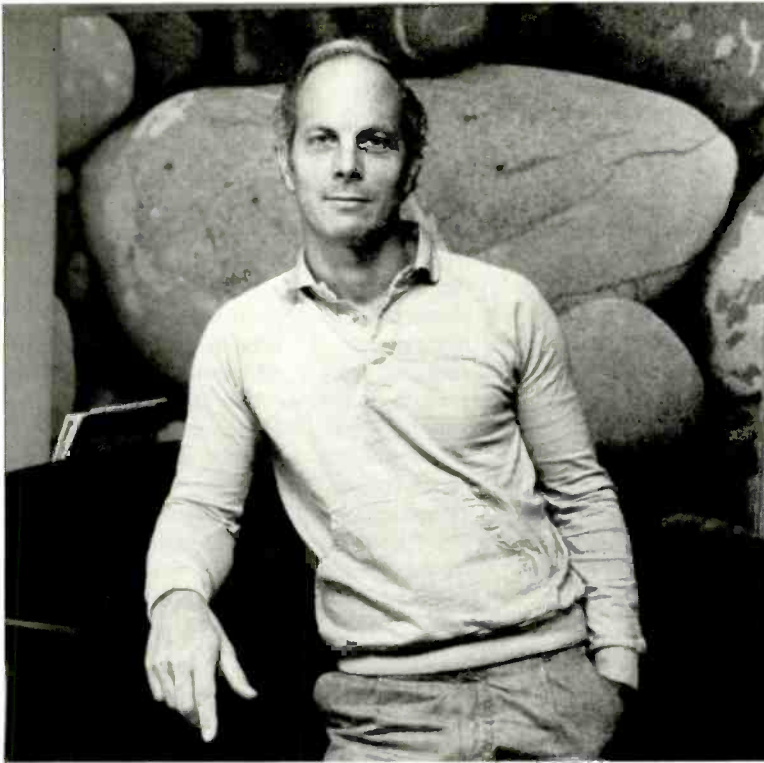
BY

ROBERT LONG

A SYSTEM I WOULD assemble for myself would be composed of separate components. While there is much to be said for receivers, the flexibility of separates is more than worth the extra cost. The very first component I would plan for, in fact, never even comes as part of a receiver.

Because of my interest in historical recordings of various sorts and my attempts

HIGH FIDELITY



E. B R A D M E Y E R

to extract best-possible sound from sources that leave something to be desired, a parametric equalizer is important to my system. Whether attempting to make a tape copy or just listening to old recordings made with primitive equipment, there is nothing as useful as a parametric equalizer for restoring faded sonic bloom.

Parametric equalizers certainly aren't a stock item in stereo componentry. They're usually much more expensive than so-called graphic equalizers of comparable quality—insofar as they *can* be compared—but I find that the smooth curves they yield even at extreme settings and the ease with which they can be tuned to a specific problem make them much more satisfactory. A couple of companies (SAE and Yamaha) have offered parametrics built into preamps and integrated amps, but with one or two exceptions they can't be set to influence the tape feed. Thus, a separate equalizer is a better bet for recording, even if the pre/post switching must be handled by another outboard tape/processor switching box.

Let's say that I already had my "dream" parametric equalizer, replete with before/after tape switching, and wanted to replace the rest of the system. Would I still go straight for separates? Yes, I think I would, depending on how I felt about FM radio at the time. There are some wonderful programs—in particular, the "live" performances from the various symphonic and operatic transcription services, plus the genuinely live ones from the likes of Tanglewood and the *(continued on next page)*

A Recordist's Reference System

BY

E. BRAD MEYER

FOR THE SERIOUS tape recordist, choosing a stereo system is different from assembling components whose only purpose is to play back commercially recorded music. The difference revolves around the basic philosophy of high fidelity reproduction.

In the general sense, "high fidelity" implies great faithfulness. But to what do we want to be so faithful? "To what's on the record," would be the easy answer—except that a record doesn't contain music. The wiggles inscribed in the vinyl are not sound, nor do they represent waveforms that we would want to transform without modification into varying sound pressure. Each element in a playback system—cartridge or tape head, preamp, power amp, loudspeakers, and listening room—changes the original waveform radically, and each change is necessary to achieve the desired final result—sound that is as pleasant and as realistic as possible. *(continued on page 50)*

E. Brad Meyer, a frequent contributor to these pages, is president of the Boston section of the Audio Engineering Society.

The "Necessity" for Separates

Met. But of the three stations I can receive that offer such fare, one has very low technical standards, one is too far away to deliver a good stereo signal, and one broadcasts too many hours of runout grooves for my taste.

So if I'm to hear good sound from FM, I need a tuner with enough sensitivity to pull in the distant station whose programming I like. That requirement is met neatly by at least one supertuner or by an add-on that contains the relevant signal-processing circuitry (both from Carver Corp.).

Attempting to find a receiver that meets my FM sensitivity needs, plus whatever other input and switching facilities seem useful, is near to hopeless. Plus, by committing myself to separates, I can always sell just the tuner should another "breakthrough" permit an even more dramatic circumvention of the accepted theoretical limits of FM reception.

And there, in a nutshell, is why separates are so attractive. You can upgrade one portion of the system without replacing elements with which you're satisfied, and there are some special features—generally what might be lumped under the broad umbrella of "signal processors"—that solve special problems and can't (yet) be bought in a receiver. In fact, it has been true for decades that, with only a handful of exceptions, the leading edge of technology has appeared first in separates and subsequently percolated down into receivers. (Carver, for instance, has recently released a receiver equipped with the same FM sensitivity increasing circuitry as contained in its TX-11 tuner, which HF reported on in January.) If keeping up with the latest is high on your priority list, there's no question about the preeminence of separates.

THERE IS ANOTHER good reason for going to separates: If you need a lot of power—say, 20 dBW (100 watts) or more per side—the range of choice in receivers is very restricted.

The question is, how much power do you really need? The answer depends on a number of factors, including the size of your listening room and the sensitivity ("efficiency") of your loudspeakers. The overriding consideration, however, is your taste in playing music. Many audiophiles seem to feel that louder is better and crank up the volume accordingly. Many music lovers (me included), on the other hand, dislike extremely loud music, even when it remains relatively free of distortion.

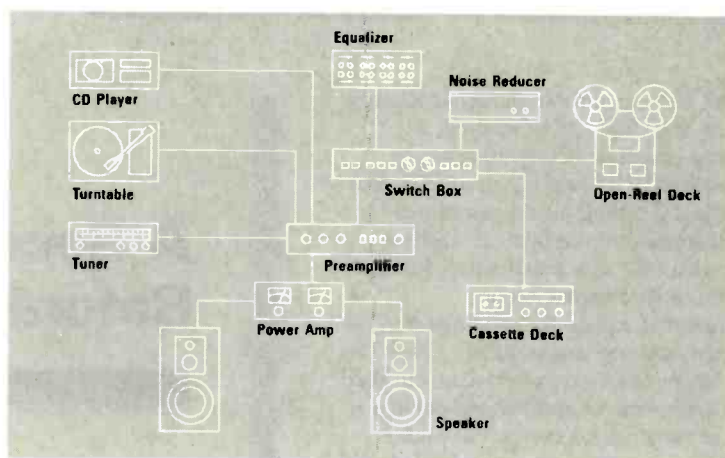
With an average room and speakers, you can expect a sound pressure level (SPL) of around 85 dB in the listening area from a 0-dBW (1-watt) input. Changing the speakers may make a difference of as much as a few dB; redecorating or moving into a

will be just beginning to get turned on.

This, then, is a crucial point in deciding whether or not a given budget will require a compromise in your listening habits. If you need a kilowatt per side to achieve a desired loudness, you'd better be prepared to pay for it—not just with a superamp, but with multiple amplifiers and an electronic crossover. If your requirements are more modest, the cost descends rapidly. Obviously, there's no point in fussing over the difference between 75 and 80 watts per channel of rated output (a mere ¼ dB—imperceptible under most circumstances), but amplifiers in this general range will deliver ample power for most purposes.

And that brings us right back to

THE SEPARATE ELEMENTS



ASSEMBLING a system composed of carefully chosen components need not entail a large initial investment: Excellent buys are available in used equipment, and you can add components slowly to a basic "core" system as your budget allows.

larger or smaller room may make similar differences. It would take a fairly radical cumulative change in these respects to get a difference of 10 dB. But that's the minimum change you must make in drive level—and therefore in amplifier power—if you want a really significant change in perceived loudness. From 0 dBW, the next step would be to 10 dBW (10 watts), for some 95 dB SPL in our "average" setup. So far, so good. The next step would be to 20 dBW (100 watts), for 105 dB SPL. At this point, many listeners will be getting very edgy, even if they're not worried about good neighbor relations, while others

receivers, because most companies put very much the same properties into their receivers in this power range that they do in their separates—and at a lower price, albeit at some sacrifice in flexibility. In this context—with a budget as the determining factor—I can make a good case for buying a receiver; even if you plan to upgrade someday, you probably can add on and use only part of the receiver circuitry until, eventually, the whole unit has been replaced. In the meantime, you will have had maximum enjoyment for minimum investment.

In choosing the speakers themselves, I wouldn't be too easily

Why Your First Compact Disc Player Should Be A Second Generation Mitsubishi.

No wow. No flutter. Dynamic range over 90dB. Plus complete freedom from dust, dirt, surface noise, rumble and speaker feedback.

The truth is, the basic technology of the digital audio disc is so vastly superior to analog sound, that deciding on a player becomes very tricky indeed.

That is, until you check the record.

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Most companies now introducing digital audio players were just recently introduced to digital audio themselves.

Mitsubishi has been at the leading edge of digital audio research since the beginning. Moreover, much of the second generation technology found in the Mitsubishi DP-103 compact disc player you see here is a direct result of that experience.

For example, the DP-103 employs a three-beam optical pickup in place of the conventional single beam. These two insurance beams constantly correct for imperfections in the disc, ensuring stable, error-free tracking.

The retaining springs for the laser optics pickup, which are susceptible to vibration, have been replaced by Mitsubishi's exclusive linear-sliding cylinder—in effect eliminating a problem before you've had one.

These second-generation refinements also allow simplified servo circuitry which results in fewer parts, less to go wrong.

The play, fast forward, fast reverse, skip, and repeat functions are yours all at the touch of a button. With track number and elapsed time visually displayed. And when you've experienced the music that emerges in its full power and range, every nuance etched in magnificent relief, you'll know you've heard the future.

Like stereo componentry that preceded it, the compact disc player of the future will offer improved technology at a lower price.

Just like the Mitsubishi DP-103 does. Today.



Even If You Can't Have The Best Of Everything,
You Can Have The Best Of Something.

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The "Necessity" for Separates

seduced by arcane technology. The cone (or dome) has been with us for many years, and—despite some fascinating virtues in alternate air-moving techniques—seems almost impervious to competition. I look first for an uncolored midrange, next for excellent stereo imaging, and only then for extended bass and treble response. If the basics are done right, minor imbalances of timbre can easily be cured with equalization, if necessary; and good transient response usually goes hand in hand with the foregoing virtues. To repeat a cliché, the choice of speakers is the most personal part of the component selection process.

Obvious by their omission from the discussion are any mentions of tape

or almost any of record-playing gear. Neither is available built into a receiver, of course, and to that extent doesn't represent part of the "central" system. But tape is part of my way of life, and I can't imagine being without it—in both cassette and open-reel form. I can't honestly urge most of you to buy an open-reel deck for listening pleasure these days: Cassette decks are (at their best) almost equally good for most recording purposes, far more convenient, and usually much less costly, and the available prerecorded cassette repertory is vast by comparison to open reels.

And I want to play records, of course. But much more important is the ability to play Compact Discs. For the last year or two, I've found myself reluctant to buy digitally recorded LPs because of the tacit (and, in many cases, probably unrealistic) assumption that the same recordings will be available on CD within a reasonable time. But there is not the slightest doubt in my mind that the Compact Disc is the most important single advance in music reproduction since Edison invented the tinfoil phonograph and that it represents the

ineluctable future. So as soon as the dust begins to clear on CD-player features and prices, that is a high-priority add-on.

With several thousand LPs in my collection, however, I'm not about to be without a conventional turntable. But I would buy a new one only reluctantly at this point, and would buy only a simple model if I did. The one "luxury" I'd go for is a record hold-down device. They're relatively inexpensive, and they have been more effective for me in cleaning up reproduced sound than most fancy arms or almost any automated turntable feature. So a moderate-price turntable and cartridge seem quite adequate.

One last caveat: Don't be ashamed to admit that you're hung up on a brand name. Buying high-technology products is not a totally rational process. Too many shoppers—including me, occasionally—end up with what they've been told they *ought* to want and therefore are never satisfied with their purchases. The least little annoyance reminds them of the brand that got away. With high fidelity equipment, as with most other consumer products, emotional satisfaction cannot be discounted. **HF**

A Recordist's Reference System

Both "pleasant" and "realistic" are entirely subjective. The sound is pleasant if you like it and realistic if you hear a convincing illusion of a musical event. Fidelity, then, implies faithfulness to your own concept of live sound.

As a dedicated audiophile, you may keep changing your playback system to improve the final sound. In doing this you are not necessarily making the system more accurate; rather, you are tuning the system to match the recordings you happen to like at the moment. Often a new component will make some recordings more convincing, others less so. Over

time, both the system and your ideas about what constitutes a good recording evolve interactively.

Throughout this process you are largely at the mercy of the recording industry. But the minute you go out and record live music, the whole nature of the game changes, for two reasons. First, you now have an experience of the original event with which to compare the sound of your system. Second, you can control the sound by changing either the recording or the playback segment of the process.

The best system for playing commercial recordings is one that produces the most satisfying results with the greatest variety of records, while the ideal tape recordist's system (or monitor system, as I'll call it) is not so much a purveyor of satisfying illusions as it is a diagnostic tool—one that delivers the source material in the most revealing fashion while adding as little as possible of its own sonic character.

This shift in emphasis produces certain subjective changes in the sound of the system, changes that bring both rewards and penalties. The biggest

penalty is that many commercial recordings sound harsh and unmusical on a good monitor system (more on this subject in the section about loudspeakers). And a monitor system isn't inherently more accurate than an ordinary one, because after it has been installed you begin changing your recording technique to match its character. Thus, the whole enterprise still has the basically circular quality that pervades all of audio.

Whether you are recording solo piano, jazz, a rock group, or a full orchestra, you'll need a half-track open-reel recorder that runs a 7½ and 15 ips, with either built-in or outboard noise reduction. It is possible to use a cassette deck for live recordings if you are experienced at setting levels. By doing so you will learn a great deal about sound in general and your system in particular. But for mastering—that is, for making recordings from which copies (perhaps records) will be made—you need the editing ease, the extra dynamic range, the more consistent tape-to-head contact, the immunity to tape skew, and the

Thunder Lizard Mistake Plus

Earlier this year we offered a 15" BSR speaker system with the wrong tweeter at a close-out price. Now, here's a super improved version of the same speaker for the exact same close-out price.

It was a mistake. Somebody goofed and put the wrong tweeter in 3500 of BSR's best 15" 3-way speaker systems.

THUNDER LIZARDS

BSR's salesman referred to the speakers as Thunder Lizards because the 15" acoustic suspension bass driver is so powerfully dramatic that it can literally recreate the power of an earthquake or explosion in your living room.

Unfortunately, without the brilliant and powerful exponential horn tweeter, the bass simply overwhelmed the highs and so the name Thunder Lizard was born.

But, DAK came to the rescue. We not only bought all 3500 of the speakers, we bought the exponential horn tweeters that BSR had left out and let our customers install the correct tweeter themselves. The highs and lows this system created were nothing short of awesome.

BUT, THERE'S A PROBLEM

We thought we'd have enough speakers for the rest of the year, but we sold over 3300 in just our Spring Catalogs. So, we went back to BSR and tried to buy more of the speakers. But, they only sold us the first batch at a close-out price because they had put in the wrong tweeters and didn't know what to do with them.

BSR said that luckily they didn't make mistakes very often and the only other 'problem' they had was an inventory of 6000 too many super tweak 8" midrange drivers with an exotic polypropylene cone they used for an expensive BSR tower system.

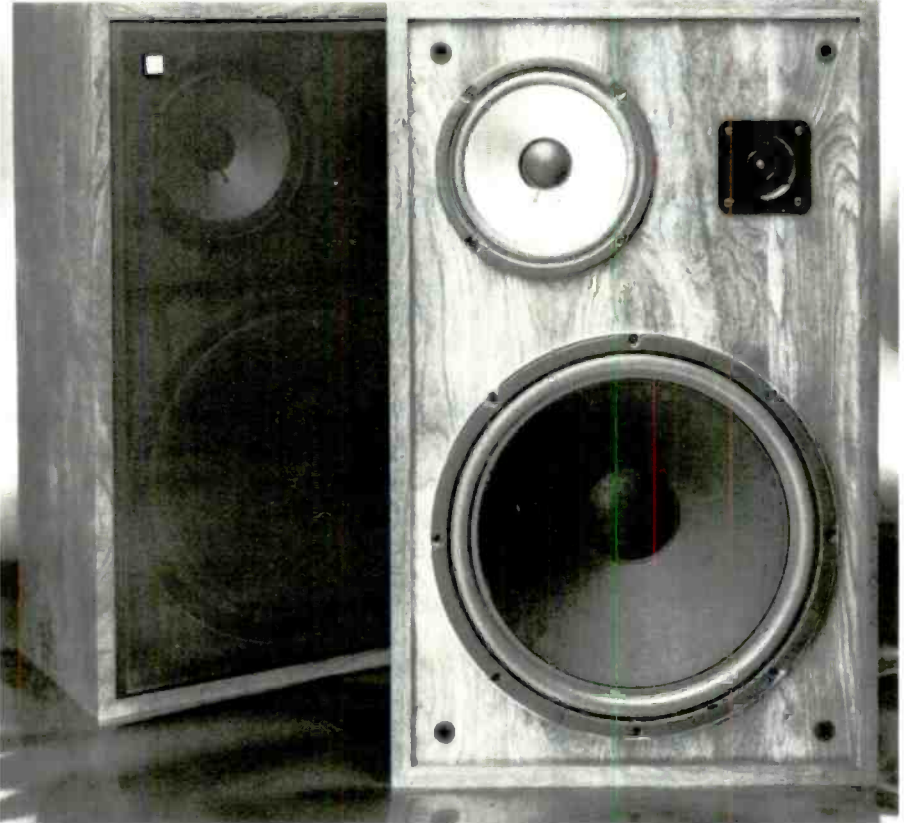
LOOK NO FURTHER

Well, to make a long story short, we got BSR to replace the plain paper 5" midrange in the Thunder Lizard Mistake with the new exotic 8" polypropylene midrange driver. And, they put the correct tweeter in for us too.

So, for exactly the same close-out price, we have 6000 speaker systems that produce a kaleidoscopic panorama of sound that is nothing short of incredible. You're in for an earthshaking, bone jarring musical experience.

The exponential horn tweeter gives you startling dramatic highs to 20Khz. You won't just hear cymbal crashes, you will experience them. The highs are simply brilliant. Plus, a brilliance control lets you decide just how powerful you want the highs to be.

The bass, all the way down to 20hz is reproduced with thundering accuracy by



the pride of the BSR line, a 15" acoustic suspension bass driver. The lows seem to have life of their own.

You'll hear string basses emerge that you never knew were in your recordings. Just a bass drum is an experience.

And finally, the midrange from 1000hz to 4000hz is flawlessly reproduced by the newest development in high-tech speakers. Instead of using paper, polypropylene is used.

Its characteristics give incredible purity to the entire midrange. It's much more accurate than a paper midrange.

And, it's a perfect match for the dramatic thundering bass and startling highs these speaker systems produce. There's a presence control that lets you adjust the midrange level to suit your taste.

GREAT LOOKS AND GREAT SOUND

The beautifully crafted wood-grain appearance cabinet is 29" tall, 18" wide and 10 1/2" deep. It comes with a beautiful removable real cloth speaker grill.

BSR backs this system with a 2 year limited warranty, and speaking of protection, the tweeter is fuse protected. The system can handle 180 watts peak, 90 watts continuous and requires 15 watts.

NEVER AGAIN?

BSR says that this is it. When these 6000 speakers are gone, there'll be no more. They say they have no more mistakes and no more extra speakers.

Well, we're delighted they make mistakes. And, we know once you've heard these 15" three-way speaker systems you'll be delighted too.

**'THUNDER LIZARDS NO MORE'
RISK FREE**

Soft listening will give you a fullness and realism of sound not possible with conventional 10" and 12" speaker systems.

And, wait till you (and your neighbors) hear the thundering realism of high volume listening with these incredibly pure audiophile speaker systems.

Normally, only the most sophisticated audiophile can afford the ultimate, a 15" 3-way system. But now, due to BSR's errors, anyone can experience the incredible realism of a truly great speaker.

If for any reason you're not 100% overwhelmed by these speaker systems, simply return them to DAK in their original boxes within 30 days for a refund.

To order your BSR top of the line 15" 3-way loudspeaker system with the exponential horn tweeter and the new 8" polypropylene midrange already installed by BSR risk free with your credit card, call toll free, or send a check not for the suggested retail price of \$199 for the system with the 5" midrange but for only \$119 each plus \$12.50 each for postage and handling. Order Number 9717. CA res add 6% sales tax.

Now, without even having to install your own tweeter, you'll experience dramatic earthshaking musical sound that's so startlingly alive, it'll send shivers through your body for years to come.



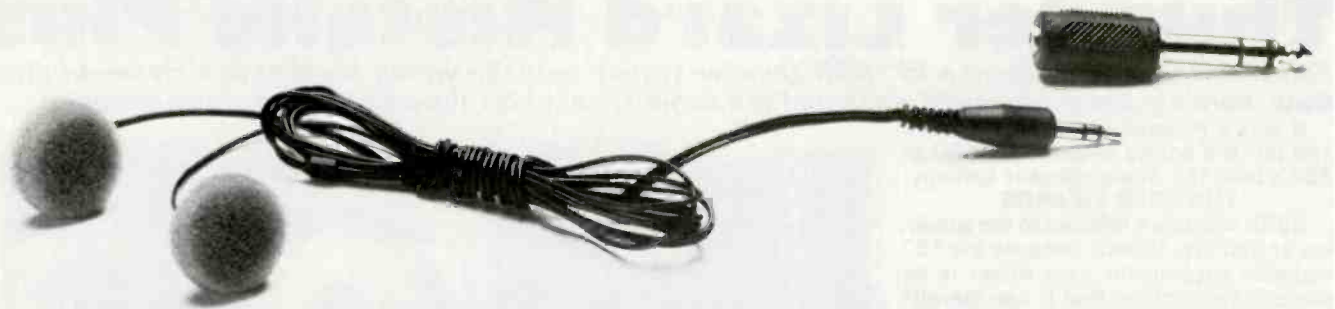
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IT'S A GREAT DEAL BUT THERE'S A CATCH

Only \$4.50? It's true. Sound that rivals the most expensive speakers? That's also true. But there is a catch to this deal. Not number 22. Actually, our first. Read on.

We're a new company. We need customers. So we're offering this special deal, on a very special product. The headphones are very new on the market. You'll see similar models just beginning to appear in hifi stores bearing respected names like Sony and Toshiba.

Actually they're miniature versions of the famous new technology headphones that wrap around your head with a steel band. The mylar diaphragms are exactly the same. So the tight crisp response is unbelievable, over the entire 20-20,000 Hz frequency range. And as you probably know mylar domes simply don't work with normal speaker magnets. So the miniatures have the same powerful rare earth Samarium magnets as the ones you've seen.

But here's where the similarities end. There is no steel band to fit around your head and press against your ears. They simply slip into your ears. That makes them more comfortable, but what's more important something really amazing happens to the sound. You're closer to the music, it almost seems to envelope you. The sound truly is all encompassing. If you ever try the older style headphones again, you'll think you're missing half the sound you've

come to expect. You get these remarkable little speakers with a standard phone plug adaptor plus an extra set of foam covers.

Now you're saying you never bought a Walkman. Glad you thought of that. Because we also have this neat little radio. Take seven normal filter cigarettes. Line 'em up in a row. That's the size of it. Really, it's that small. Plus it comes with its own headphone set, and it's powered for up to 24 hours straight by two normal AAA batteries. Get the FM stereo version for \$18.50 or the slightly larger AM/FM model for \$22.50. Both include headphones exactly like the ones we've described.

Now if you like that idea, you don't mind the catch. Painless and easy, here it is: Try the radio and we'll throw in the extra headphones, adaptor and foam covers for only \$4.50 more.

So why do we do it? We're losing our shirts on the earphone, but we need to build our sales, and find people who like neat deals on neat electronics. We're a brand new division of a very large electronics company. And we want to show those guys at headquarters what we can do. The best way is very special deals like this. So you benefit.

To try this deal with your credit card call the RCD toll free hotline or send your check plus \$2.00 postage and handling. Specify group 1900 on FM or AM/FM on the radio. If you aren't 100% satisfied return it in the original carton within 25 days for a courteous refund. No hassles, no problems.

Be prepared to get an explosion of sound, at home or anywhere you go.



RCD

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call TOLL FREE 800-228-8108

A Recordist's Reference System

channel-to-channel consistency in bass response that only half-track noise-reduced tape can give.

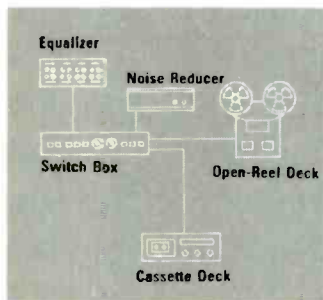
My main open-reel recorder is a modified Revox A-77 (not the B-77, whose unreliable switches make it unsuitable for serious recording), which is rugged and dependable and can be easily set up for very flat response, especially in the bass. Since I use DBX noise reduction, accurate low bass response is particularly desirable; overall, the DBX works exceptionally well with the deck, giving virtually no audible side effects in exchange for its phenomenal degree of quieting. To set up a deck for a particular batch of tape you must be able to adjust both bias and recording equalization. Getting to the Revox's bias and EQ controls involves removing the cover. Decks that lack such trimpots altogether, however, should be eliminated from consideration.

For copying, you will need more than one recorder, of course. If your tapes will be used for broadcast, another half-track machine is necessary. A good cassette deck will be fine to make copies for most other uses. And the extra open-reel recorder can also serve as a backup for concert recordings, where one chance is all you get.

An increasingly attractive alternative to open-reel machines for mastering purposes is the combination of a video recorder and a digital adapter. Sony's PCM-F1, the first digital adapter to reach the market at an affordable price (\$1,500), remains the most desirable because of its choice of processing modes—standard 14-bit or 16-bit for several dB of extra headroom (albeit at the expense of some error-correction power). If you already own a video recorder, investing in a digital processor is cheaper (recent 14-bit-only units are priced at less than \$1,000) than buying a good open-reel

deck. Or, if you don't own a VCR, you might want to investigate some of the new Beta Hi-Fi models, which are available at discount for well under \$1,000 complete. I have not tested these systems in the field, but the approach—which theoretically comes near to digital in performance—holds great promise.

As for cassette decks, recent models with the Dolby HX Pro headroom-extension circuit are more likely to copy your wide-range source material without high-frequency headroom problems. Cassette decks equipped with DBX will also do the job, and some now come with DBX plus Dolby B and C. Once you get used to either digital or open-reel with noise reduction, however, you will likely come to regard cassettes the way I do—as a very convenient, versatile,



A SWITCH BOX is an invaluable tool in a complex system. It lets you perform tape dubbing and signal routing chores without reconnecting components and adds high-level inputs for new audio sources.

and portable secondary medium.

If you were buying a conventional system I would tell you to make sure that the dealer has a good service department, but in this case it doesn't matter much. Since the bias and record equalization on any analog recorder must be tweaked from time to time, you'll need test equipment—at minimum, an AC voltmeter with sensitivity down to about one millivolt and a function generator with good frequency response. A low-distortion oscillator and a distortion meter (or at least a notch filter) will be useful, too, but they can be added later. The test equipment will also enable you to do basic trouble-shooting of your cassette decks and other components.

For the system's preamp, a unit with at least two separate tape-monitor

loops and dubbing facilities is a must. A successful recording will be greeted by multiple requests for copies, and you don't want to tie up the system while you're making them. Another important requirement is that the preamp have very low crosstalk between all inputs and outputs; in this regard the Apt Holman reigns supreme.

Another possibility is a separate switch box or patch panel that can handle all your signal processors and recorders at once. I have two DBX processors (professional Type 1 and consumer Type 2), an outboard Dolby B unit, and both an octave-band and a parametric equalizer (the latter a Technics SH-9010, which I especially recommend), any one of which may need to go either before or after any recorder in the signal path. Russound makes several patch panels of varying complexity. For a complete switch box your best bet is the DBX Model 200; Switchcraft and Radio Shack offer well-made though much less elaborate models.

Power requirements are affected very strongly by the loudspeaker and listening room, but it's safe to say that you need a power amp with high output current. Although most of my listening is done at somewhat less than live-concert levels, I have to be able to play the system louder than life for such diagnostic tasks as assessing the quality of the reverberant sound, finding an exact edit point on the tape (and verifying that the finished edit is truly clean), and checking the noise level of the microphones, mixer, or recording location. An ordinary system should be forgiving of low-level hiss or imperfect edits, but a monitor system must be able to reveal them mercilessly.

The two elements with the greatest influence on the overall sound, and the ones whose performance is the most difficult to codify, are the loudspeakers and the room. What makes a good monitor system isn't just frequency response, although the overall frequency balance of the speakers and room will determine how your recordings sound to others.

Many professional microphones have resonances in the upper midrange or treble to compensate for the deficiencies of the average playback system or to give flatter response with off-axis sources. Typically, however, these microphones are placed very close to the performers in order to focus on a small group of instruments, *(continued on page 111)*

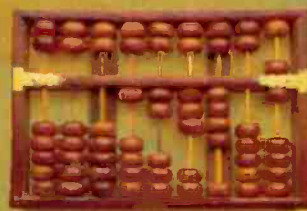
It writes, rates, creates, even telecommunicates. Costs less, does more- the Commodore 64.



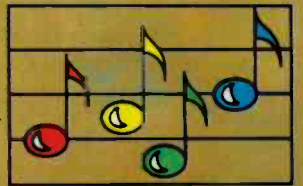
When Commodore introduced the 64, the industry suddenly realized that

there would be a computer in every home, school and business years before anyone ever dreamed.

That's because Commodore 64 halved the price of high technology: while you can compare the 64's capabilities with those of any sophisticated business PC, you can compare its price with that of an average television.



What can you do with it? Create with its high resolution Sprite Graphics. Add a printer and type with it. Add a disk drive to use spread sheets and other financial programs. Learn and play music through your home sound system on the 64's professional quality music synthesizer.



Add a modem, and hook up with the vast computer networks through your telephone. In short, the Commodore 64 is the ultimate personal computer, at a price you can afford.



COMMODORE 64



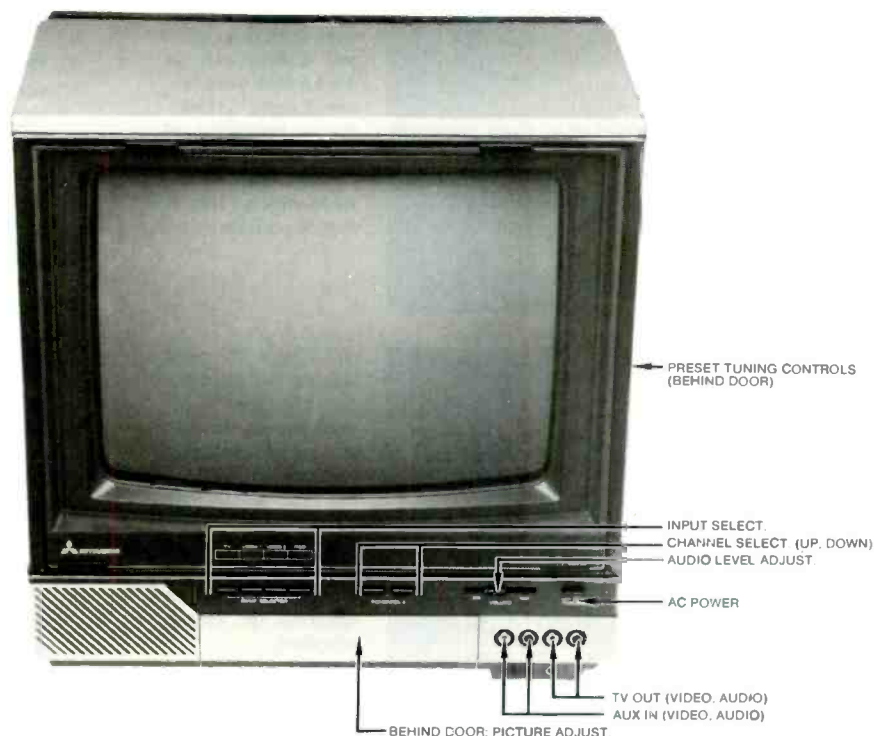
NEW
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Digital Audio
Video
Computers
Software Reviews

MITSUBISHI AM-1301 TELEVISION RECEIVER

Mitsubishi AM-1301 13-inch color television receiver, with antenna, composite-video, and RGB inputs and built-in loudspeaker. Dimensions: 14¾ by 15 inches (front), 15½ inches deep. Price: \$600. Warranty: "limited," two years parts and labor on picture tube, one year parts and labor on all other components.

Manufacturer: Mitsubishi Electric Corp., Japan; U.S. distributor: Mitsubishi Electric Sales America, Inc., 3010 E. Victoria St., Rancho Dominguez, Calif. 90221.

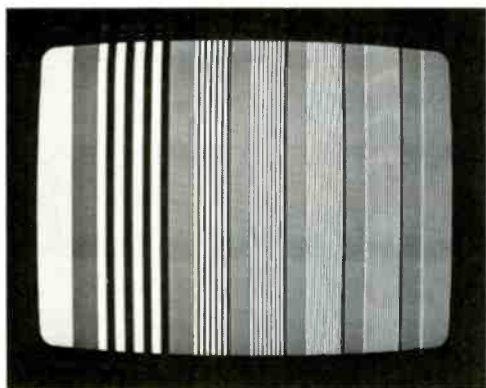


SPORTS FANS KNOW Mitsubishi for the 50-by-70-foot "Diamond Vision" displays that are popping up in stadiums around the country. But the less athletic among us can still get

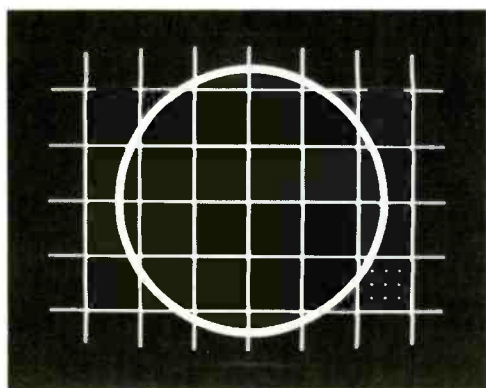
a taste of Mitsubishi video in the AM-1301 13-inch color television receiver, which is one of the most versatile pieces of video equipment we've come across.

Laboratory data for HIGH FIDELITY's video-equipment reports are supplied by Diversified Science Laboratories. Preparation is supervised by Michael Riggs, Peter Dobbin, and Edward J. Foster. All reports should be construed as applying to the specific samples tested. HIGH FIDELITY and Diversified Science Laboratories assume no responsibility for product performance or quality.

The AM-1301 walks the center line between video separates and conventional TV sets. Essentially, it combines a TV tuner and an independent high-resolution monitor in a single cabinet. It has audio and video outputs (so you can record on a portable VCR without buying another tuner) and *three* monitor inputs: Two for conventional NTSC-composite signals, plus one for RGB video (such as some computer consoles generate). You choose the source via four front-panel pushbuttons (TV, Video 1, Video 2, and RGB). The RGB (8-pin connector) and Video 2 (audio and video pin-jack) inputs are on the back panel, where they can be unobtrusively and permanently wired to your system;



HORIZONTAL RESOLUTION is tested with a multiburst signal. On the AM-1301, the vertical lines are clear and distinct even in the 4.2-MHz band (extreme right), indicating a resolution of more than 330 lines through the direct-video inputs. This is superb performance.



OVERSCAN is quite low on the AM-1301, and centering is almost perfect. A small amount of geometric distortion is visible in the test pattern, including a slight inward bowing along both axes, but probably not enough to be apparent on normal programs.

the audio and video outputs and Video 1 audio and video inputs (all pin jacks) are on the front panel.

The tuner receives the 82 standard VHF and UHF channels, any 16 of which can be preset via controls behind a side door. Once you've adjusted the set for the stations in your area, you

tune them sequentially with front-panel up and down channel-selector buttons. Vertical and horizontal hold, brightness, color, tint, picture, and contrast are adjusted via controls behind a front-panel door. (Actually, there are two separate contrast controls—one for composite video, the other for RGB). VHF "rabbit ears" and a UHF loop antenna provide local reception but can be disconnected to allow hookup with external antennas.

The AM-1301's tuner cleared Diversified Science Laboratories' tests with aplomb. Video bandwidth holds up solidly to the color-burst frequency (3.58 MHz). This suggests a horizontal resolution approaching 300 lines on good broadcasts, which is excellent. The response peaks by 3 dB at 2 MHz, presumably to enhance apparent detail, but one might question whether this really is needed. Although DSL could discern the extra sharpness when feeding test patterns through the tuner and comparing them with the same patterns fed through the composite-video input, the difference is subtle and should not be apparent on normal broadcasts where you don't have the opportunity for direct A/B comparison. On the other hand, the boost may very well enhance the quality of a tape recorded through the AM-1301's tuner: The response of a typical VCR is down much more than 3 dB at 2 MHz.

Chroma and luminance levels are right on the money, and chroma differential gain is perfect except for a 20-percent reduction in saturation at the brightest level. Although this error is no greater than we've measured on other tuners, it is discernable in a direct comparison between monitor and tuner inputs. Gray-scale linearity is less admirable (with a 20 to 22 percent variation at several levels), but the eye could detect almost no difference in our direct comparisons. Chroma phase can be brought within ± 4 degrees of perfection with a slight touch-up of the set's tint control, and though the colors remain quite true as scene brightness changes (within $\pm 3\frac{1}{2}$ degrees), direct comparison with the monitor input did reveal this small variation.

The audio data must be interpreted in light of the tuner's unusually high line output impedance of 44,000 (44k) ohms. Output level is 300 millivolts into an open circuit but drops by a factor of more than five into the IHF standard load of 10,000 ohms in



C37-7001 BEETHOVEN SYMPHONY NO. 5 in C Minor, Op. 67
Otmar SUITNER conducting
STAATSKAPELLE BERLIN



38C37-7028 HANDEL TRIO SONATAS
Heinz HOLLIGER, oboe



C37-7003 MOZART STRING QUARTET
NO. 17 in B Flat Major, KV 458 "HUNTING"
NO. 15 in D Minor, KV 421
SMETANA QUARTET



C37-7004 DIE GROSSE SILBERMANNORGEL
DES DOMES ZU FREIBERG
J.S. BACH
Hans OTTO, organ



38C37-7011 BEETHOVEN SYMPHONY NO. 3
"EREOICA" in E Flat Major, Op. 55
Otmar SUITNER conducting
STAATSKAPELLE BERLIN



38C37-7013 ANTONIO VIVALDI: "THE FOUR SEASONS"
Gunars LARSENS violin
Rudolf BAUMGARTNER: direction
FESTIVAL STRINGS LUCERNE

**DENON REFERENCE
COMPACT DISCS.**

**MAKE
THESE
YOUR
FIRST
CD'S.**



38C37-7032 BEETHOVEN NO. 7 in A Major, Op. 92
Otmar SUITNER conducting
STAATSKAPELLE BERLIN



38C37-7033 BEETHOVEN STRING QUARTET NO. 8
in E Minor, Op. 59, NO. 2
RASOUMOVSKY NO. 2
SMETANA QUARTET

As more and more people discover the Compact Disc, they also learn that Denon was the first Company to apply digital technology to audio recording. They find out that over the past 11 years Denon has assembled the largest Digital library and is currently using fifth generation Denon-developed digital studio recorders. It is no wonder that Denon has become one of, if not the largest CD manufacturer in the world and is quickly earning the reputation for producing the "best sounding" Compact Discs.

When you combine the finest performances of world-renowned masterpieces with unparalleled sound quality, you have the Denon Reference CD's. The first Compact Discs anyone serious about music will want to own. From the Company that was the first to take Digital Recording seriously.

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IMAGINE WHAT WE'LL DO NEXT.**

VIDEO MONITOR SECTION

Except where noted otherwise, all measurements were made through the composite-video input.

HORIZONTAL RESOLUTION

direct input	>330 lines
through tuner	≈300 lines

INTERLACE	perfect
------------------	---------

OVERSCAN

horizontal	≈8%
vertical	≈8%

CENTERING

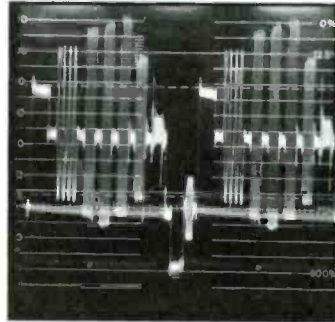
horizontal	right ≈ 1¼%*
vertical	perfect

BLOOMING	none
-----------------	------

*Can be corrected with horizontal hold control

parallel with 1,000 picofarads (pF). Frequency response will also depend upon the actual load. The curve shown in our data was obtained with a load of 10,000 ohms in parallel with 150 picofarads; with 1,000 picofarads, however, the high-frequency cutoff drops from 19 to 10.5 kHz. Reducing shunt capacitance improves high-frequency response if the load resistance is maintained at a fairly low value (thus sacrificing output level). As the load resistance increases, level goes up, but, for a given shunt capacitance, high-frequency response diminishes. We therefore advise you to use the shortest length of low-capacitance cable

What sets it apart from the crowd is its ability to double as a high-resolution color monitor. Mitsubishi says that its Diamond Vision experience enabled it to develop a new picture tube for the AM-1301, with a smaller spot size, higher contrast, and more accurate hue reproduction than conventional CRTs. Its color-line pitch is 0.4 millimeter, rather than the 0.63-millimeter spacing used in typical consumer-grade tubes, providing 36 percent more elements horizontally across the screen. A "selective-transmission" faceplate absorbs incident light, instead of reflecting it toward the viewer, thus increasing picture contrast, and new



TUNER MULTIBURST RESPONSE is unusually well maintained over the lower five test-frequency bands (500 kHz to 3.58 MHz); it's actually up by a few dB from 1.5 to 3.0 MHz. The steep falloff at 4.2 MHz—typical of TV tuners—limits horizontal resolution to between 280 and 330 lines, but this is still excellent performance.



TUNER COLOR CONSISTENCY is excellent: Chroma differential phase and gain are both very low. Differential gain (how much color saturation varies with scene brightness) is indicated by the radial spread of the color vectors (dots). Differential phase (how much hue varies with brightness) is shown by their angular spread.

that will reach between the AM-1301's audio-output jack and your amplifier.

The Mitsubishi's internal speaker is no better than that of any other small TV set, but since its audio circuitry is better than average (despite the strange output impedance), you probably will want to use an external audio system. The audio signal-to-noise ratio under typical operating conditions is quite good, and the horizontal-scan component is exceptionally well suppressed. And into the proper load, response approaches hi-fi quality.

Although the AM-1301 is a fine TV receiver, we doubt that many would buy it only for that purpose.

rare-earth phosphors are claimed to provide truer reds and greens. Finally, a doubling in the number of electronic "lenses" used to focus the scanning beam (from two to four) is said to reduce spot size by 30 percent and prevent blooming.

Indeed, there is no blooming at any brightness setting, and the picture has excellent resolution. Horizontal and vertical overscan are quite modest, and the picture is accurately centered. Color rasters are pure, and convergence is excellent except at the extreme corners of the screen, where some misconvergence is almost inevitable. (That of the AM-1301 cannot be

SELECTAVISION



THE GLORY.

Presenting, in all its glory, the RCA CC030 Solid State Color Video Camera. A breakthrough in form and function. How has RCA combined the most advanced video technology with unequalled design? Turn the page for the inside story.

RCA

CC030 CAMERA

SELECTAVISION

THE FIRST DETACHABLE COLOR VIEWFINDER WITH REMOTE CONTROLS. The only one that shows you what you're shooting—in color. Doubles as a color monitor for instant replays. Detaches for remote taping.

THE FIRST CONSTANT AUTOMATIC WHITE BALANCE. Automatically adjusts and monitors the color balance whenever lighting conditions change.

NEW SOLID STATE M.O.S. IMAGE SENSOR. The innovative M.O.S. (metal oxide semiconductor) pickup system is free of troublesome image "lag." Gives you superb overall color reproduction.

THE FIRST AUTO FOCUS WITH "VIDEO DETAIL." Goes beyond infrared and ultrasonic technologies to give you worry-free focusing. Actually "sees" the camera's subject and adjusts the focus accordingly.

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The CC030 is as remarkable inside as it is outside.

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The first Electronic Color Viewfinder. (And it's detachable.) The first Constant Automatic White Balance, so you'll never have to check color levels again. The first "Video Detail" Automatic Focus with "Focus Lock."

There's more, of course. More than twenty other outstanding features, including an amazing 62-Character Title/Display with Calendar and Stopwatch. But it's

time to stop reading and start experiencing a degree of sophistication you won't find with any other camera.

See your RCA dealer for a demonstration. You'll realize that with the CC030, you don't say, "What can I do with this camera?" but rather, "What can't I do with it?"

And while you're there, attach the CC030 to RCA's incredible 900 Convertible VCR. You'll see why we say:

WE'LL OPEN YOUR EYES.
RCA

For the complete line of SelectaVision Color Video Cameras and VCR models, write to:
RCA Consumer Electronics, Department 32-312R, P.O. Box 1976, Indianapolis, IN 46206

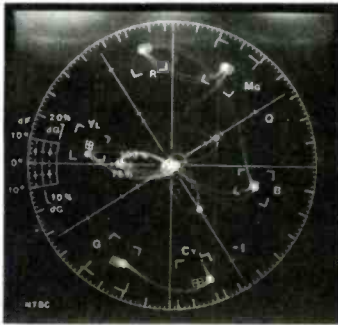
CC030 CAMERA

discerned at the normal viewing distance for a 13-inch screen.)

Vertical interlace is perfect, transient response is excellent, and horizontal resolution (through the direct-video inputs) exceeds the limits of the NTSC broadcast system. The picture control affects only the finest details on the screen (as it should), and the monitor's chroma differential gain and phase are exceptionally low (which may explain why we could discern the slight change caused by the tuner's modest error). Color accuracy also is better than average, especially on greens, which many CRTs shift toward yellow.

undistinguished gray-scale accuracy probably masks the tuner's gray-scale error, just as its extremely good differential gain and phase reveal the small deviation in the tuner.

The AM-1301's high resolution prompted DSL to try using the monitor with its Apple II computer, which delivers a composite-video signal. The Mitsubishi did well with games but was no match for a dedicated monochrome computer display when used for word processing. The slight vertical overscan forced the upper and lower lines of text partially off the screen (computer displays are designed to underscan to prevent this), and its



TUNER COLOR ACCURACY is top-notch, as indicated by the vectorscope photo at left, which shows only a very small amount of chroma phase error. The photo at right was made with a



4-degree clockwise phase rotation to simulate the best color one could obtain using the tint control on a monitor. This puts all six color vectors (represented by white dots) on target.

But into every life a little rain must fall. Slight "pincushioning" (a bowing inward of what should be straight lines) along both the horizontal and vertical axes and noticeable distortion of vertical lines below the horizontal markers of the test crosshatch caused DSL to rate geometric linearity as only fair to good. We should point out, however, that these distortions are unlikely to be noticed on normal program material, which rarely presents a pattern of horizontal and vertical lines.

Black retention is only fair to the brightness control set at its detent, but improves at slightly reduced settings. Unfortunately, this degrades gray-scale linearity from fair to poor, so you're probably better off at the detent. The monitor's relatively

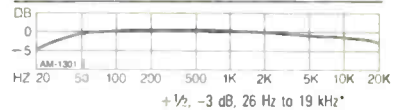
resolution—though excellent by ordinary standards—wasn't up to presenting 80-column upper- and lower-case characters with sufficient clarity for long-term use. An RGB signal might produce better results, but few personal computers generate such a signal directly.

Although we'd not suggest the Mitsubishi AM-1301 for serious computer work, we can recommend it very highly for normal home-entertainment use. It will handle direct video and audio signals from both a VCR and a videodisc player as well as normal television broadcasts—without the need of an external switchbox. If you want the flexibility and performance of component television in a compact, integrated package, the AM-1301 is a good choice.

TV TUNER SECTION

All measurements were taken at the direct audio and video outputs.

AUDIO FREQUENCY RESPONSE



AUDIO S/N RATIO (A-weighted)

best case (no video signal)	54½ dB
worst case (crosshatch pattern)	19 dB

RESIDUAL HORIZONTAL SCAN COMPONENT (15.7 kHz)

	-66½ dB
--	---------

MAXIMUM AUDIO OUTPUT

	0.30 volt
--	-----------

AUDIO OUTPUT IMPEDANCE

	44k ohms
--	----------

VIDEO FREQUENCY RESPONSE

at 500 kHz	+½ dB
at 1.5 MHz	+2¼ dB
at 2.0 MHz	+3 dB
at 3.0 MHz	+2¾ dB
at 3.58 MHz	-¼ dB
at 4.2 MHz	-14¾ dB

LUMINANCE LEVEL

	1% low
--	--------

GRAY-SCALE NONLINEARITY (worst case)

	-22%
--	------

CHROMA LEVEL

	standard
--	----------

CHROMA DIFFERENTIAL GAIN

	-20%
--	------

CHROMA DIFFERENTIAL PHASE

	+3½°
--	------

CHROMA PHASE ERROR

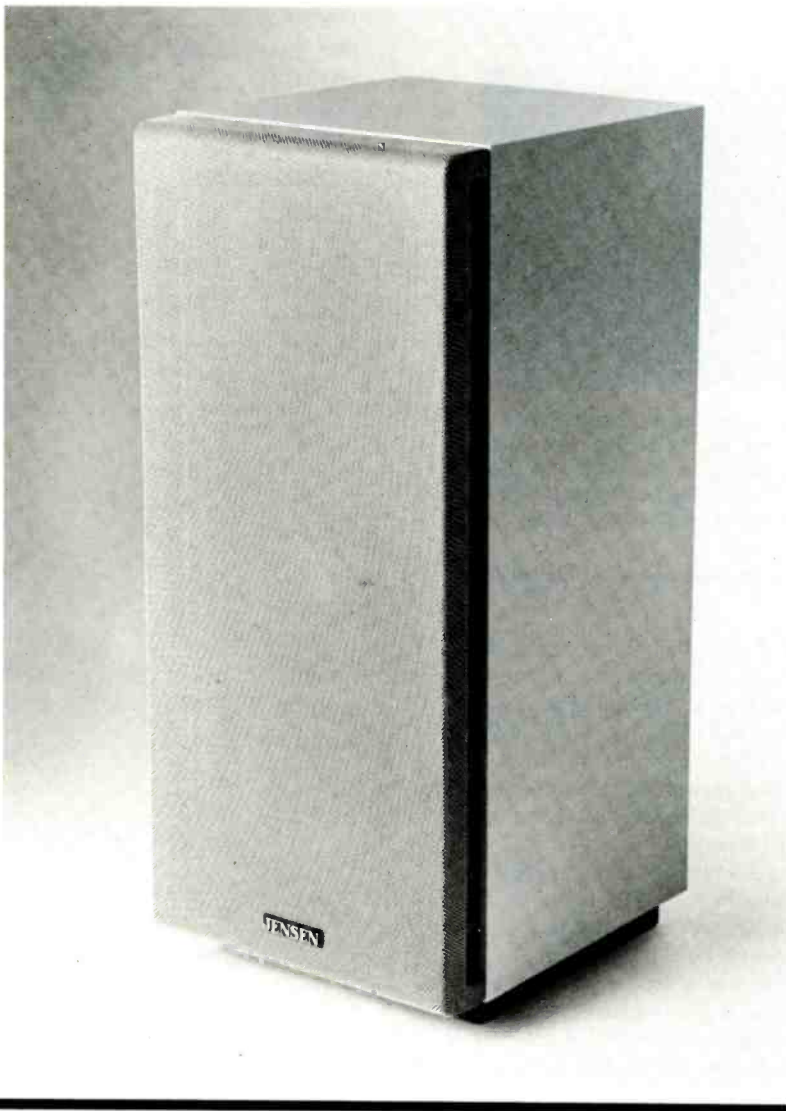
red	+3°
magenta	+3°
blue	0°
cyan	+8°
green	+5°
yellow	+8°
median error	+4°

*Measured with load of 10,000 (10k) ohms in parallel with 150 picofarads (pF). Because of the tuner's high output impedance, response deteriorates when the load resistance or capacitance is raised. Into the standard IHF load of 10,000 ohms in parallel with 1,000 picofarads, it is +½, -3 dB, 26 Hz to 10.5 kHz.

JENSEN AVS-5190 SHIELDED LOUDSPEAKER

Jensen AVS-5190 shielded loudspeaker, in wood cabinet with silver finish.

Dimensions: 8 by 18¾ inches (front), 9¼ inches deep. Price: \$125. Warranty: "full," five years parts and labor. Manufacturer: Jensen Sound Laboratories, 4136 North United Parkway, Schiller Park, Ill. 60176.



WITH VCRs, VIDEODISC players, and satellite relays (see "Stereo TV Now," November) now providing high fidelity stereo sound and broadcast stereo television not that far off, considerably more attention is being paid to TV sound quality than ever before. Obviously, it will be reproduced over loudspeakers, and therein lies the rub: The cheap 3-inch drivers and low-power amplifiers built into most TV sets simply can't do justice to high-quality audio. To hear all there is to hear, you have to route it through a separate high fidelity amplifier and loudspeakers.

If you've tried using a conventional stereo setup, with speakers 8 to 10 feet apart, flanking your monitor, you've probably found it works fine for musical material but is less effective on dramatic programs. With a conventional monitor (as opposed to a projection-TV screen), the stereo sound stage is too wide, and voices often are disembodied and originate far off-screen. Of course, you can eliminate the problem by switching to mono, but that's hardly an ideal solution.

A better approach is to place a pair of speakers close to the screen. Unfortunately, the average high fidelity loudspeaker spews out enough magnetic flux to pull the electron beam off target when the speaker is placed near the picture tube. This produces color blotches on portions of the screen near the speaker and can actually magnetize the CRT. Jensen has therefore designed its AVS-5190 (and AVS-5250) with shielded driver

P R O J E C T I O N

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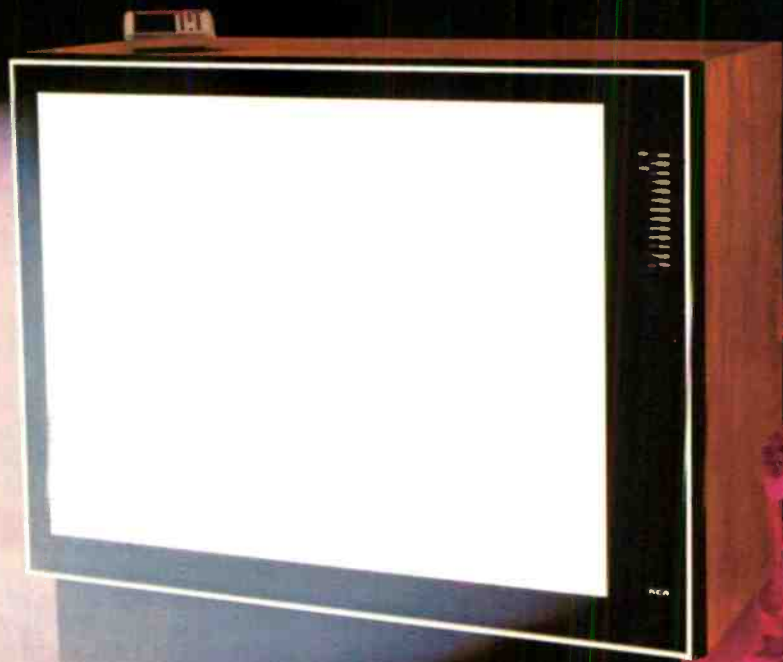
SIZE ISN'T EVERYTHING. RCA's best and brightest features our exclusive Digital Command Center. The total control remote control that enables you to switch from broadcast to VCR to videodisc viewing at the touch of a button.

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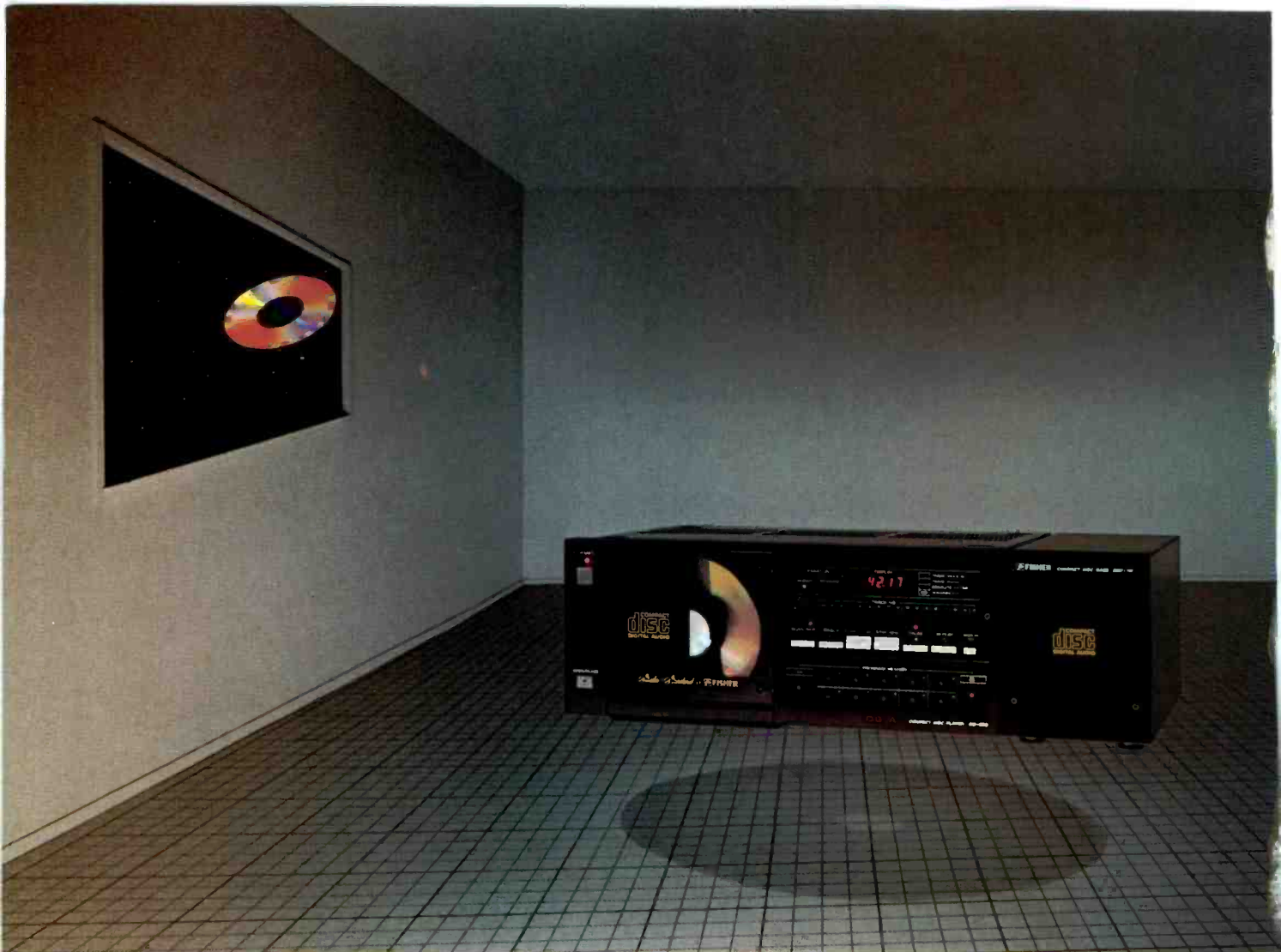
It promises to be a most enlightening experience.

For more information and a free copy of "Living With Video" (a \$2.50 retail value), write: RCA Consumer Electronics, Department 32-3*2P, P.O. Box 1976, Indianapolis, IN 46206.

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T E L E V I S I O N



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This year, Fisher has taken another step into the future to produce perhaps the highest fidelity ever.

The AD850 Compact Digital Disc Audio Player.

It utilizes the latest space-age technology to produce a degree of sonic perfection that's almost inconceivable.

A laser beam scans the computer-encoded surface of an encased disc to pick up audio signals and deliver them through a digital filter.

Since nothing touches the disc, surface noise and wear-out are things of the past. The 60 minutes of playback on each 4 $\frac{3}{4}$ " disc is reproduced at the original digitally recorded specifications almost indefinitely.

And as both player and disc offer dynamic range of more than 90 dB, the sound is almost indistinguishable from a live performance.

As well as perfecting its reproduction, we've also endowed the AD850 with the most sophisticated features and virtually faultless human engineering. Via soft-touch controls, you have instant command of random access, sample scanning, auto-search plus pre-programmed automatic playback.

But perhaps the AD850's most convenient feature is synchronous recording. Used with compatible Fisher components, it makes recording a simple pleasure.

In spite of all this advanced technology, the front-loading AD850 will fit most of today's rack systems. Once there, we're confident you'll find your entire hi-fi system taken to levels you've never imagined.

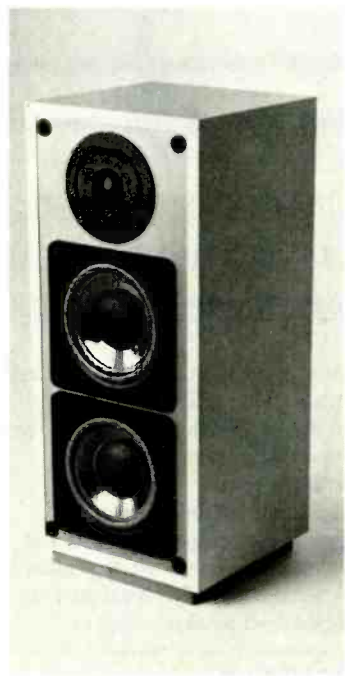
Let alone experienced.

 **FISHER**
THE ULTIMATE EXPERIENCE.

magnets to eliminate stray flux, so that it can sit right next to a monitor without causing color distortion.

The AVS-5190 uses a 5¼-inch polypropylene-cone woofer, which crosses over to a 1-inch soft-dome tweeter at 2.8 kHz. A 5¼-inch polypropylene passive radiator extends bass response by approximately one-half octave. Amplifier connection is via conventional color-coded spring-clip terminals.

Diversified Science Laboratories tested the AVS-5190 in the same way it would any other high fidelity loudspeaker. Response curves were run



THE AVS-5190 IS a two-way loudspeaker with a 1-inch soft-dome tweeter and a 5¼-inch polypropylene woofer. The cone below the woofer is a passive radiator that extends the system's low-bass response.

with the speaker in a number of locations consistent with its intended use. Those shown were taken with the AVS-5190 17 inches above the floor with its grille flush with the front of a typical 19-inch monitor. At 24 inches above the floor—perhaps closer to average viewing height—the peak at 630 Hz sharpens, but there is little

change in the rest of the curve.

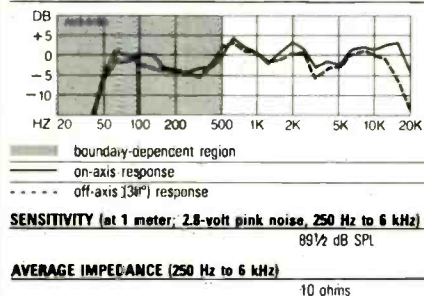
Because you're most likely to view the screen "straight-on," we consider the on-axis curve more important than the off-axis one in this case. So measured, response is within $\pm 4\frac{1}{2}$ dB from 55 Hz to 20 kHz, which should easily encompass all dramatic material and handle most music very well, too. Sensitivity is about average, and the impedance curve is quite smooth. This, together with the fact that the impedance never drops below $6\frac{1}{2}$ ohms and averages 10 ohms in the region of greatest program energy, should make the AVS-5190 an easy load for any good amplifier.

On DSL's 300-Hz pulse test, the AVS-5190 was able to accept a peak input of $35\frac{1}{2}$ volts (equivalent to 22 dBW, or 160 watts, into 8 ohms) for a calculated peak sound pressure level (SPL) of $111\frac{1}{2}$ dB. Above that level, there was an audible change in sound quality. At a moderate sound pressure level of 85 dB, total harmonic distortion (THD) remains safely below 1 percent from 100 Hz to 10 kHz, increasing to between 3 and 4 percent from 40 to 80 Hz. At 90 dB SPL, distortion inches up somewhat above 100 Hz and more substantially below. The small drivers start to strain at higher levels, with the THD at 100 dB SPL averaging about $2\frac{1}{2}$ percent above 100 Hz and considerably more at lower frequencies.

That the AVS-5190 will not deliver pristine pure bass at thunderous sound pressure levels is not a serious limitation. TV sound sources that demand such volume and bandwidth are likely to come off better on more widely spaced speakers, anyway, and we thoroughly agree with Jensen's suggestion that two pairs of speakers be used—one set flanking the screen quite closely for dramatic material, the other normally spaced for music-program reproduction. That gives you the best of both worlds.

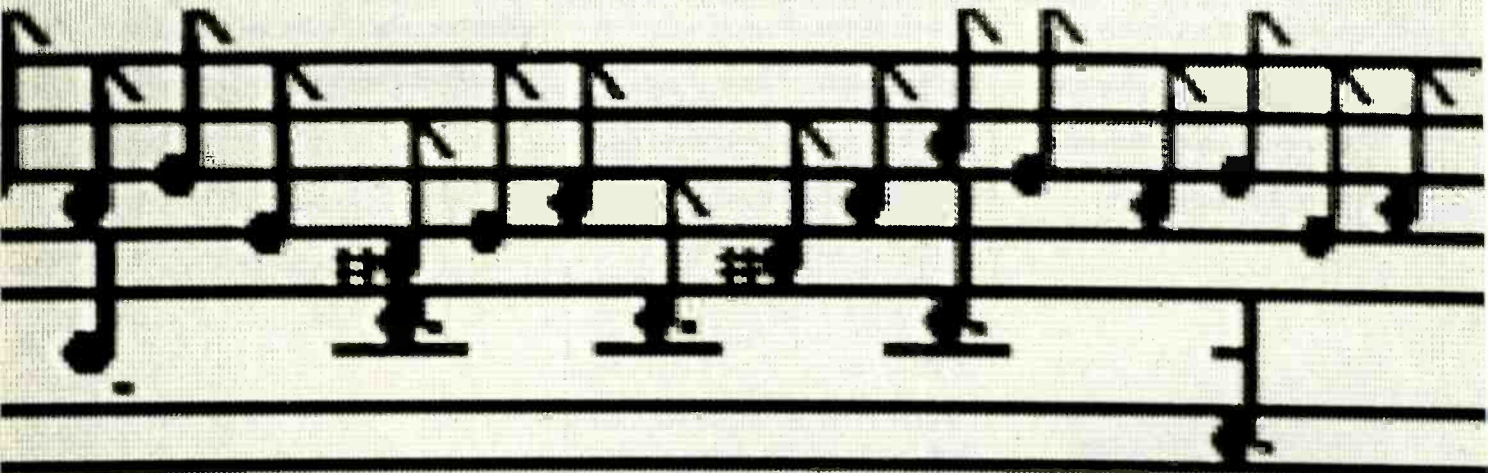
Compared to high-quality loudspeakers designed strictly for music reproduction, the AVS-5190 is a little distant sounding and exhibits a trace of boxiness. But considering the low price and the intended application, these are very minor criticisms. Overall, the AVS-5190 is a well thought out product that is both a good value and a fine complement to Jensen's other AVS audio-video components.

ROOM RESPONSE CHARACTERISTICS



MUSIC-SYNTHESIS

S O F T W A R E :



A

Beginner's Guide

BY

LIDA A. SILVERMAN

HF SURVEYS MUSIC-TEACHING AND MUSIC-SYNTHESIS PROGRAMS FOR APPLE, ATARI, TRS-80, TIMEX/SINCLAIR, TEXAS INSTRUMENTS, AND COMMODORE COMPUTERS.

THE FOLLOWING LIST of music-software programs for personal computers is intended as a general guide. While we have included as many companies as responded to our inquiries, new programs are appearing all the time.

Also, our capsule comments briefly summarize the general intent behind the software; they do not

include all of the capabilities of each program. That information is available from the individual distributors listed at the end of this article. As Paul Lehrman's review of the three Commodore 64 music-creation programs (see page 69) points out, however, only hands-on experience with a program will reveal its true strengths and weaknesses.

COMPUTER MUSIC BOX**For:** Texas Instruments 99/4A**Format:** Cassette**System Requirements:** 16k bytes RAM**Distributed by:** Texas Instruments**Price:** \$10

A three-voice music-composition system with on-screen editing and note storage, Music Box also provides an automatic chord creation feature.

MICRO MUSIC**For:** Timex/Sinclair 1000 and ZX-81**Format:** Cassette**System Requirements:** 1k byte RAM**Distributed by:** Data-Asstette**Price:** \$15

Your computer's keyboard becomes a 3½-octave instrument with this real-time synthesizer program.

MUSICALC**For:** Atari 400 and 800; Commodore 64**Format:** Disk**System Requirements:** 48k bytes RAM**Distributed by:** Magic Metal Products**Price:** \$60

MusiCalc is a real-time synthesizer program with envelope control and four-channel recording and overdubbing capabilities. An on-screen editor function enables you to notate your compositions.

MUSIC BOX**For:** Atari 400 and 800**Format:** Disk**System Requirements:** 32k bytes RAM**Distributed by:** Program Design**Price:** \$30

Music Box lets you insert

preprogrammed tunes into your own Basic programs. To create original tunes, Music Box must be used in conjunction with the Atari Music Composer program.

MUSIC MACHINE MUSIC COMPOSER

For: Commodore 64

Format: Cartridges

Distributed by: Commodore Business Machines

Price: Music Machine, \$20; Music Composer, \$30

For details on these two programs, see feature review on page 69.

MUSIC MAKER

For: Apple II

Format: Disk

System Requirements: 48k bytes RAM

Distributed by: Sublogic Corp.

Price: \$40

You can create, edit, and save melodies up to 1,000 notes long with the Music Maker program. An optional graphics routine provides a kaleidoscope-like accompaniment to playback.

MUSIC MAKER

For: Texas Instruments 99/4A

Format: Cartridge

System Requirements: Cassette data recorder or disk drive

Distributed by: Texas Instruments

Price: \$40

A music-composition program with three-voice capability, Music Maker offers note file storage and a choice of two on-screen displays (normal notation and musical bar graphs).

MUSIC I, II, III

For: Atari 400 and 800

Format: Disk

System Requirements: 16k bytes RAM

Distributed by: Minnesota Educational Computing Consortium

Price: Music I, \$37; Music II, \$38; Music III, \$35

These three programs provide a comprehensive introduction to music theory. Music I covers the elements of notation. Music II deals with rhythm and pitch, and Music III teaches scales and chords.

MUSIC SKILLS TRAINER

For: Texas Instruments 99/4A

Format: Cassette or disk

System Requirements: 16k bytes RAM

Distributed by: Texas Instruments

Price: \$10 for cassette, \$30 for disk

This program is recommended for beginners and includes drills on pitch, interval and chord recognition, and phrase recall.

MUSIC TEACHER

For: TRS-80 Models I and III

Format: Disk

System Requirements: 32k bytes RAM, amplifier, and speaker

Distributed by: Instant Software

Price: \$20

A two-part instructional program, Music Teacher's overview of music theory and ear-training practice is aimed at sharpening students' recognition of tones and intervals.

MUSIC THEORY

For: Apple II

Format: Disk

System Requirements: 32k bytes RAM

Distributed by: Minnesota Educational Computing Consortium

Price: \$44 (less for Minnesota residents)

Music Theory uses on-screen graphics and sound to tutor students in notation, rhythm, pitch, intervals, scales, chords, and musical terms.

ORCHESTRA-90

For: TRS-80 Models III and IV

Format: Disk or cassette

System Requirements: 16k bytes RAM

Distributed by: Software Affair, soon to be available at Radio Shack outlets

Price: \$100

Orchestra-90 consists of a plug-in sound-creation circuit board equipped with two jacks for "stereo" output and a sophisticated five-voice music language program. Orchestra-90 users regularly swap their compositions via a special-interest group on the Compuserve Information Service.

SYNTHE SOUND

For: Commodore Vic 20

Format: Cartridge

System Requirements: Vic 20

(unexpanded memory)

Distributed by: Human Engineered Software

Price: \$30

This program converts the Vic's keyboard to a two-octave music keyboard for real-time play. It has three-voice capability and enables you to create a variety of instrument sounds. A Commodore 64 version is also available for \$35.

VIC MUSIC COMPOSER

For: Commodore Vic 20

Format: Cartridge

System Requirements: Will operate with unexpanded memory, longer playing times with additional RAM

Distributed by: Thorn EMI Video

Price: \$40

A simplified compositional system that lets you move notes of varying durations across a grand staff display, Music Composer has three-voice capability and will store note files on disk or cassette.

VIRTUOSO

For: Timex/Sinclair 1000 and ZX-81

Format: Cassette

System Requirements: 2k bytes RAM

Distributed by: William Don Maples

Price: \$7

Virtuoso is a simple, single-voice program that enables you to create melodies up to 150 notes long.

You can obtain more information on the programs mentioned here by writing directly to the distributor.

Commodore Business Machines

1200 Wilson Dr.
West Chester, Penn. 19380

Data-Assette

56 South Third St.
Oxford, Penn. 19363

Human Engineered Software

150 North Hill Dr.
Brisbane, Calif. 94005

Instant Software

Peterborough, N.H. 03458

Magic Metal Productions

P.O. Box 732
West Acton, Mass. 01720

Minnesota Educational Computing Consortium

2520 Broadway Dr.
St. Paul, Minn. 55113

Program Design, Inc.

95 East Putnam Ave.
Greenwich, Conn. 06830

Software Affair

858 Rubis Dr.
Sunnyvale, Calif. 94087

Sublogic Corp.

713 Edgebrook Dr.
Champaign, Ill. 61820

Texas Instruments

P.O. Box 53
Lubbock, Tex. 79408

Thorn EMI Video

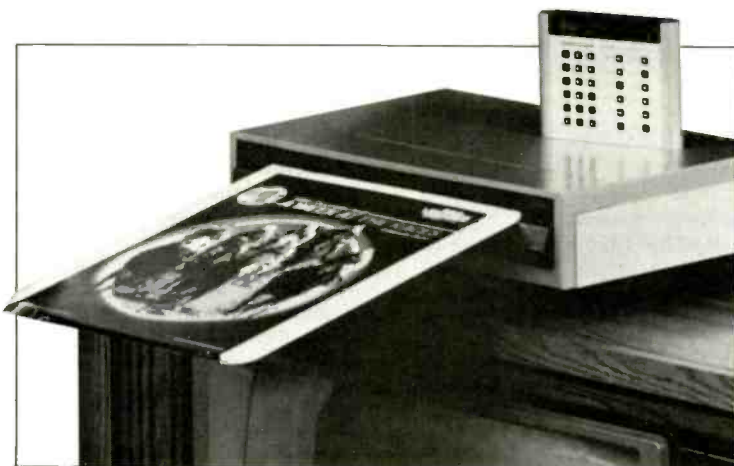
1370 Avenue of the Americas
New York, N.Y. 10019

William Don Maples

Dept. F
688 Moore St.
Lakewood, Colo. 80215

News and
new equipment

RCA GOES INTERACTIVE



RCA waited a long time to introduce an interactive CED videodisc player, but the recently announced SJT-400 looks like it was worth the wait. Its roster of special features includes random access by elapsed playing time or "page" (still-frame) number and search to specific selections on discs containing several bands or tracks. (All concert discs will have this band information, says RCA.) Memory in the player will even let you program any sequence of as many as five bands for customized playback. The SJT-400 has a hand-held remote control with special-function controls and a numeric keypad for entry of time and band information.

The key to many of these functions is RCA's use of a Digital Auxiliary Information (DAXI) code contained in the vertical blanking interval of each video field. The player uses this digital information to calculate elapsed playing time, to find the beginnings of bands, and to go into automatic pause with specially programmed discs. The DAXI code consists of 77 bits, 27 of which have not yet been assigned any specific function. The player even has a computer port on the rear that will enable ambitious hobbyists to tap into the DAXI bit stream and thus create extremely sophisticated Level III interactive programs. RCA has announced only two interactive discs so far—"Many Roads to Murder" and a horse-racing game called "A Week at the Races," each priced at \$30. ●

GUMSHOE VIDEO

The killing continues, and it's your job to determine the perpetrator, the motive, and even the victim in Vidmax's second interactive videodisc mystery game, "Many Roads to Murder." Available in both CED and laserdisc formats, "Many Roads" uses a slightly different approach from the first offering in the MysteryDisc series—"Murder, Anyone?" (reviewed

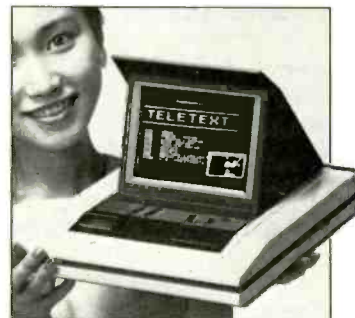
in April). Here, your moves early in the game set the stage for a wider variety of scenarios: Depending on the choices you make at the various "decision points" on the disc, the plot may involve you in a nefarious smuggling operation, an African expedition, an espionage caper, and so on. For more information, write to Vidmax (251 W. 19 St., New York, N.Y. 10011). ●

MIND OVER MUSIC

Marketed as a biofeedback stress reducer, the Calmtone Stereo Controller appeals to the music critic in us. Its developers, Thought Technology, Ltd., seem to think that being able to lower the volume of music by force of will (the Calmtone will do just that when used with a galvanic skin-resistance meter and a stereo receiver) can facilitate relaxation. But we like music played at a reasonable volume—good music, that is. For us, the Calmtone would probably work best when lowering the volume of really horrible stuff. Just think how relieved you'd be if you could reduce Culture Club or Barry Manilow to a whisper by thought alone. Such power doesn't come cheaply, however. The Calmtone costs \$100 and the GSR-2 galvanic skin-resistance meter another \$50. For more information, write to Thought Technology, Ltd. (2180 Belgrave Ave., Montreal, P.Q., Canada H4A 2L8). ●

A PINT-SIZED PROJECTION TV

If you equate projection television systems with huge screens and room-filling cabinets, Matsushita's newest marvel—a portable color projection system with a pop-up 6.3-inch screen—should give you pause. The Matsushita prototype is half the size



and weight of direct-view sets of comparable screen size and has a power consumption of just 12 watts. Like some of its big brothers, the unit uses separate red, green, and blue projection tubes and a double-mirror arrangement to bring the picture into focus on the rear of a lenticular screen. ●

VIDEO
EQUIPMENT
REPORTS

S A Y
HELLO TO
SID

BY

PAUL D. LEHRMAN

PROGRAMS FOR HARNESSING
THE MUSIC-MAKING POWER OF
SID—THE COMMODORE 64'S
SOUND INTERFACE DEVICE

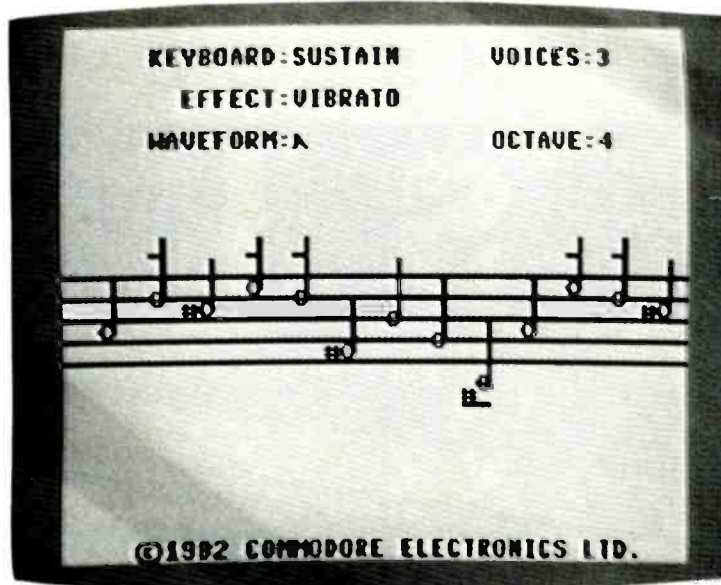
Were it just for its music-making capabilities, the Commodore 64 personal computer would still prove remarkable. By dint of its built-in three-voice music synthesizer chip, this \$300 computer has as much potential for music creation as synthesizers selling for upwards of \$1,000.

The 64's nine-octave music-synthesis chip is dubbed a Sound Interface Device, or SID. It can generate four waveforms—triangle, sawtooth, noise, and variable-width pulse. A programmable filter can be selected for each voice, providing high-pass, low-pass, bandpass, and notch filtering. SID also provides a programmable envelope generator (attack, decay, sustain, release), along with variable resonance and master volume controls.

But an integrated circuit that generates nice sounds is only part of the battle. To use it, you have to be able to control it. With an analog synthesizer that's relatively easy: Make each parameter respond to a voltage-controlled oscillator (VCO) or amplifier (VCA), and have lots of knobs and maybe a piano-type keyboard to

Paul D. Lehrman is a freelance writer and musician specializing in the field of electronic music synthesis.





WITH MUSIC MACHINE, the notes you play on the computer's keyboard are visually represented on screen, along with the status of the controllable parameters.

manipulate the voltages feeding the VCOs and VCAs. A computer doesn't have knobs, however, nor does it have voltage control. Everything is digital, so the chip has to be told what to do by those strings of ones and zeroes known as binary words.

The most direct way of controlling a digital device is to feed it binary instructions directly from a terminal's keyboard, but this can get incredibly cumbersome for an error-prone human with a limited attention span. The solution is software that provides a set of English-language commands that the computer can interpret into the proper binary codes. Each of the three music-creation programs available from Commodore—Music Machine, Music Composer, and a Basic-language program described in the computer owner's manual—provide such an interpreted control scheme.

The Music Machine program (\$20) comes in a cartridge that plugs into a slot on the 64. Turn on the computer, and the program announces itself on your TV screen by displaying a blank music staff (sans clef) and the controllable parameters. Press a couple of keys and you discover something else in the program: Two rows of keys

are now functioning as a piano-type keyboard, black keys on top and white below. Press a key, and a note sounds (through your TV speaker or through your home audio setup if you've made the proper connection) as well as showing up on the staff displayed on the TV screen. Sharp signs appear before each note wherever appropriate; there are no flats. Also, regardless of their duration, all notes are depicted as half-notes.

The controllable parameters are labelled Keyboard, Waveform, Effect, Octave, and Voice Select. Keyboard gives you a choice of three rudimentary envelopes: One causes a note to sound until the next is played, the second holds the played note as long as its key is pressed, and the third gives each note a piano-like attack and decay. Waveform lets you switch among triangle, sawtooth, square, and pulse waves. Effect will give you either a glide between notes (portamento), an FM-type vibrato, or a chorusing effect. Octave shifts the keyboard up or down over a range of almost six octaves.

You can also order the computer to generate a rhythm line as accompaniment to a melody you're creating—à la the band boxes built into organs from the '60s. This feature is

controlled by the four function keys on the right side of the keyboard. One turns the effect on and off, two change the tempo (which can also be controlled with an optional game paddle), and one cycles through seven rhythm patterns.

Although the rhythms are limited (the patterns are all variants of 4/4 time, except for one that comes close to 3/4), the rest of the program is quite good. There are no signs of the high-frequency distortion that you can hear in some far more expensive dedicated digital synthesizers. Overall, the sounds are very clean, and some are quite pleasant. The major drawback of the program is that it doesn't provide any means for storing compositions or parameter settings. Nor is it fast enough to convert the 64 to a performance instrument. But as an educational tool or a rudimentary introduction to the principles of digital music synthesis, it scores high marks. Remember, too, the Music Machine costs only \$20.

The Basic-language program described in the 64 owner's manual solves the problem of storing your music, but it's not intended for the casual computerist. The manual is exhaustive in explaining the capabilities of the SID chip and how to control them, a process that—at least in Basic—entails sticking numerical values into specific memory locations via "poke" commands. The memory locations are all expressed as five-digit numbers, and each of them relates to a single function—waveform, envelope, pitch, filtering, or number of voices. Needless to say, creating a sound this way can get very complicated. Here is a program for playing a high C with no special effects:

```

5 FORL=54272TO54296:POKEL,0: NEXT
10 POKE 54296,15
20 POKE 54277,190
30 POKE 54278,89
40 POKE 54273,34
50 POKE 54272,75
60 POKE 54276,33
70 FORT=110300: NEXT
80 POKE 54276,32

```

The first line clears all the memory locations; the next five lines set the volume, waveform, envelope, and pitch; and the last three start the note, determine its duration, and stop it. A program in the manual for playing one bar of "Michael Row the Boat Ashore" consists of 15 lines—some of which are 64 characters long. Programs

can get much more complex when you try to play more than one note at a time or engage a special effect. The chief advantage of such a program is that it can be customized to do a certain job well: If you like scales, for instance, you can write a 16-line program that will play them forever. And you can save programs on an external mass-storage device, such as a cassette recorder.

The Music Composer program (\$20), which also comes in a plug-in cartridge, is similar to Basic in that it is more of a music-creation language than a real-time instrument program. A choice on the initial menu gives you a brief version of Bach's *Jesu, Joy of Man's Desiring*. As it plays its three voices, notes appear on a grand staff (again, sans clefs) on the screen, with each voice highlighted in a different color. The menu also lets you assign different instruments to each voice. You choose from a list of ten sounds: Nine are predefined, and one you can design yourself.

Creating a new instrument is simple. The program takes you through a series of steps in which you choose the sound's various parameters. You can listen to it by calling up a routine that turns the middle and top rows of the computer keyboard into an octave-length piano-type keyboard or by using it as one or more of the voices in a stored tune.

But the heart of the program is its

THE HOOK-UP



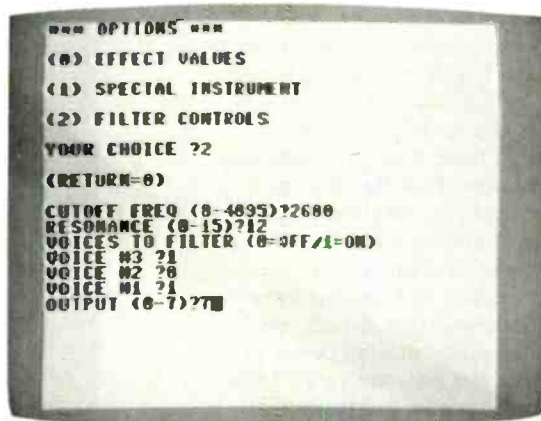
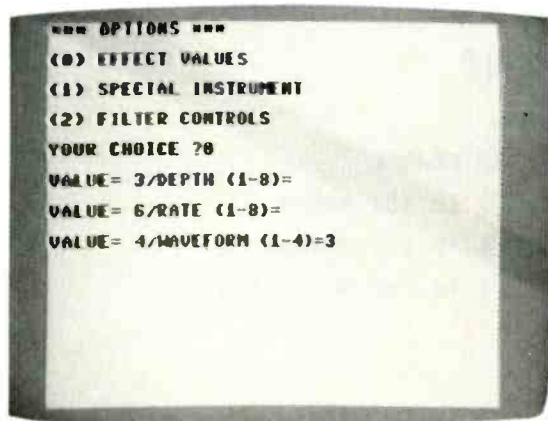
A DIN ADAPTER lets you route the 64's audio and composite video outputs separately, as above. A built-in RF modulator allows direct connection to a TV set.

edit mode, which lets you compose by entering sequences of notes. And here is where things start to get complicated. Although it is simpler than Basic, the Music Composer language, which includes commands for pitch, duration, and special effects, still takes a lot of getting used to. A sample line of code looks like this:

```
0010V104QCEFG(3V104HGV203EV3C)
```

The first four digits make up the

program line number. Since each program line can contain only 40 characters, you may need many lines for one composition. "V1" is voice one, "04" signifies the fourth octave, "Q" is the length of the notes to follow (in this case, a quarter-note), and "CEFG" are the notes themselves. The first "3" following the open parenthesis means repeat the next segment three times, "V2" and "V3"



AN "OPTIONS" MENU provided by Music Composer gives you access to submenus used to control special effects, instruments, and filters. Choosing Option 2 (left) gives you the filter parameters for the three voices. Option 0 lets you modify the intensity, rate, and waveform of a special effect. Calling in a special effect leaves you with two voices for the rest of your composition.

turn on the second and third voices, and "H" orders a half-note value.

If you followed the above explanation, you now know this line will play C, E, F, and G as quarter-notes followed by four half-note repetitions of a C-major triad played in first inversion, open position. You can check the accuracy of your codes via a playback feature that causes each note, voiced appropriately and with the proper duration, to sound as you enter it.

Other letter commands are used to create special effects via a variety of techniques, including pulse-width modulation, ring modulation, dynamic filtering, and something called sync modulation. (The last, which I had never encountered before, seems to enable you to play a single note in two voices, detuning them far enough so that they beat against each other.) The rate and depth for some of the effects are set using a separate special effects menu. Since all of the effects use the SID's third voice as a low-frequency oscillator, you are limited to two voices when you call in a special effect.

Music Composer is a flexible programming language, and programs created with it can be stored on cassette tape. (Because of a unique connecting scheme, you will need Commodore's own \$75 Datasette cassette recorder to do so.) But Music Composer has its negative aspects, as well. Without hours and hours of practice, it's very slow and difficult to use. And it has one particularly annoying quirk. When you reach the end of an edit line, the program doesn't warn you or cause the cursor to jump to the next line. Instead, as you continue typing, the last character in the line continues to be replaced.

Though these three programs may have some appeal for the dedicated computer hobbyist, they are simply not fast or multifunctional enough for the serious musician. Commodore evidently realizes this and has three projects underway that should greatly enhance the music-making power of the 64. One is a program called Meta Music that is similar to Music Composer but uses floppy disks instead of cassette tape as a storage medium. Meta Music may also enable music stored on disk to be notated and printed automatically. Whether it is issued by

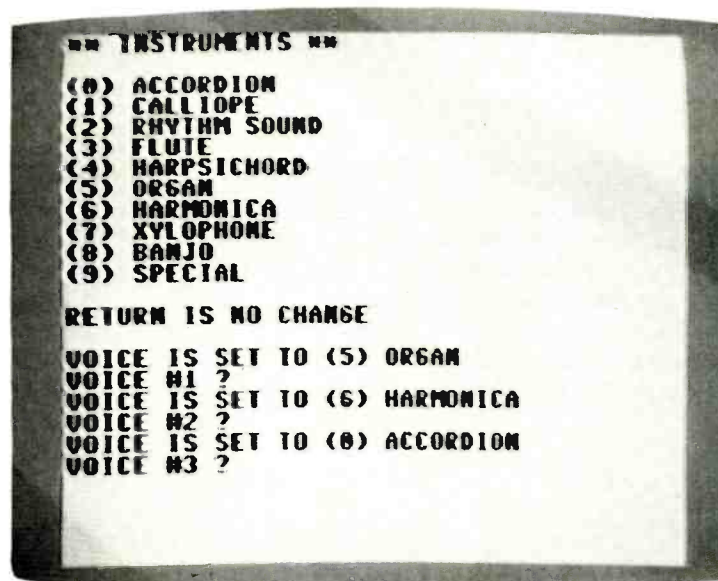
Commodore or the subcontractor currently developing it, the program should be available by the end of the year.

Another product on the way is called Digi-Drum. A three-voice drum synthesizer, the package will consist of drum pads and the necessary software. According to Commodore, Digi-Drum will be capable of creating high-hat cymbal, snare drum, and tunable tomtom sounds. Rhythm tracks created with the program can be recorded, looped, and overdubbed, and there will be on-screen editing of up to two minute's worth of sound. Digi-Drum will cost "less than \$50" and should be available this month.

But the most impressive music-making tool for the 64 will be a four-octave piano keyboard attachment, scheduled for release early next year. It will contain three of its own SID chips and be capable of generating 12 voices altogether. Software with it will let you record and overdub as many as four tracks, each 15 minutes long. Ten preset instrument sounds should enable the beginner to start making music immediately; each of the instruments can be modified, and there is lots of capability for creating sounds from scratch. User-created sounds can be stored on cassette tape or floppy disk,

and there is a program cartridge add-on (about \$30) for storing note files on disk, as well. Other add-on cartridges will contain more preset instruments and various music-teaching programs. Astonishingly, the keyboard is expected to sell for only \$100 and should be available by the first of the year.

Commodore is also aware of another problem I encountered in my evaluation of the system. Possibly because of some leakage of the video signal's vertical and horizontal sync pulses into the audio output computer's built-in RF modulator, a distinct buzz occurs in the musical output. If you use a standard TV receiver to handle the audio and video output, the buzz is hardly noticeable. But if you route the audio to a high-quality stereo system, the noise becomes intolerable. A spokesman for the company told me that the buzz is endemic to the design of the system and that means are being sought to control it via noise-reduction circuitry built into the software cartridges and the upcoming keyboard. If it all works, and the new software packages accomplish the goals the designers at Commodore have set for them, the Commodore 64 may well emerge as one of the most useful and affordable music synthesizers ever. HF



MUSIC COMPOSER OFFERS nine preset instrument sounds and one that you can design yourself. Each voice can be assigned a different instrument.

REVIEWS

Pop and classical
music releases
on videodisc
and digital
Compact Disc

POPULAR COMPACT DISC

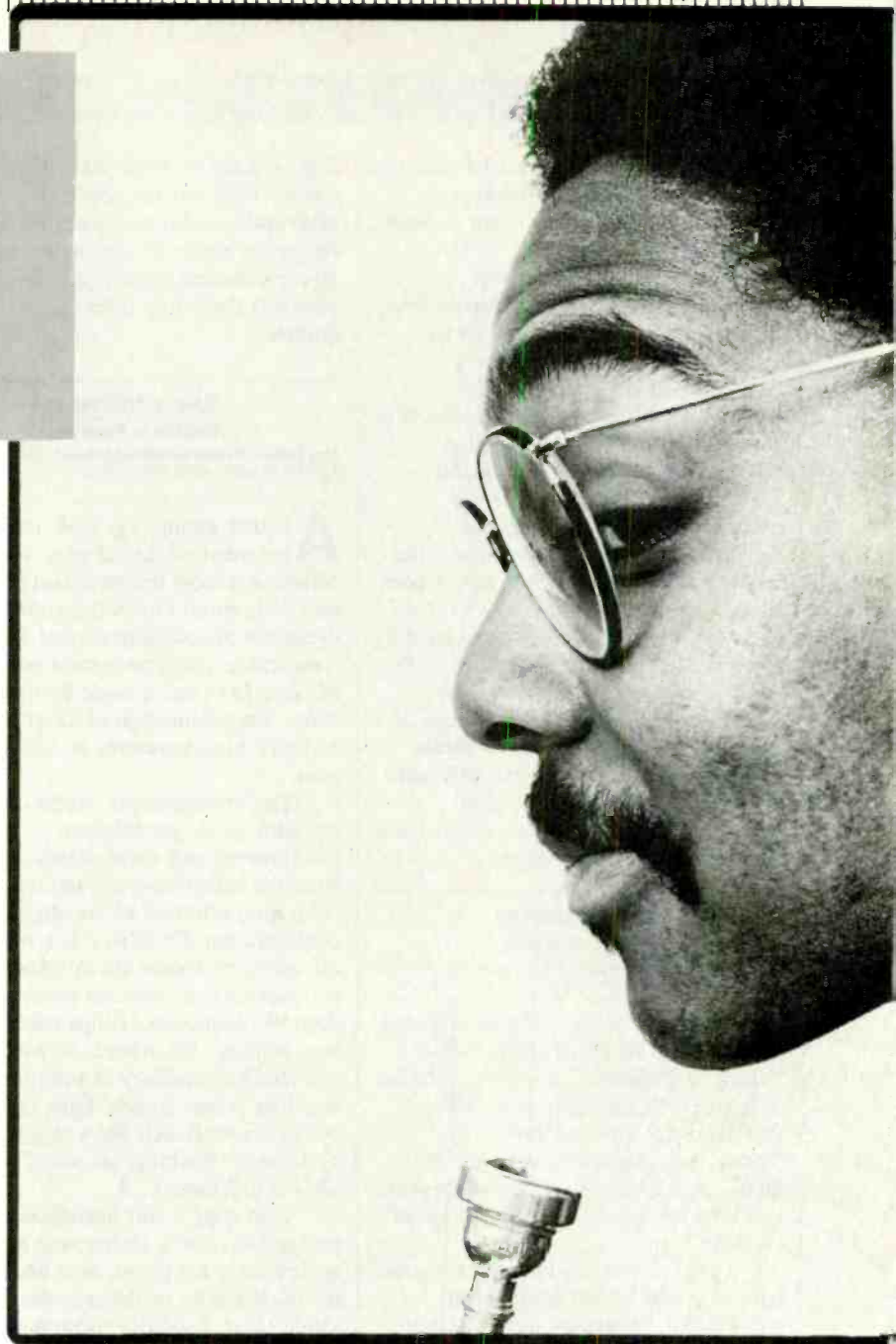
RY COODER: **Bop Till You Drop.**

Ry Cooder, producer. WARNER BROS. 03358-2 (fully digital Compact Disc). LP: 3358.

The LP and cassette of this 1979 album by southern Californian guitarist, arranger, and musical archivist Ry Cooder was the first major-label foray into digital recording for pop styles, and in Compact Disc it emerges as a heartening glimpse of digital audio's promise. That's especially welcome given the checkered CD realizations of many analog pop recordings auditioned thus far.

Apart from its original digital source, "Bop Till You Drop" offers close to a best-case scenario by merit of Cooder's essentially live approach. Instead of a layered, electronically assembled stereo image, we're presented with a beautifully rendered, naturally proportioned portrait of Cooder and some stunning musical allies flexing their formidable technique. The songs here are among his most accessible, but their sources are typically eclectic, fusing rock, country, blues, and Mexican motifs seamlessly.

Cooder's exquisite acoustic and electric guitar work looms even more palpably in CD. His trademarked bottleneck work likewise reaps additional bite, both on acoustic settings (*Look at Granny Run Run*, a thrashing country-blues reworking of a sturdy r&b fable) and in stinging electric slide work (the chilling *The Very Thing That Makes You Rich*). Just as satisfying is the work of David Lindley, percussionists Jim Keltner and Milt Holland, bassist Tim Drummond, and the richly soulful auxiliary of



MARSALIS: a critically acclaimed debut makes future all-digital projects promising.

backing vocalists (including Bobby King and Chaka Khan).

Ironically, the original LP offered glints of harsh, upper-frequency brilliance, yet here the high-end response is smoother and less glaring, offering a sonic warmth often presumed alien to digital recording. One explanation may be the reported involvement of engineer Lee Herschberg, who handled the original recording dates and the CD transfer. That knowledge of Cooder's goals has likely maximized the new format's effectiveness. —SAM SUTHERLAND

WYNTON MARSALIS.

Herbie Hancock, producer. CBS CK 37574 (analog recording; digital Compact Disc) LP: FC 37574; reviewed 4/82.

This critically acclaimed debut for trumpeter Wynton Marsalis wears its CD raiment well, thanks to some vivid, dynamically varied arrangements and Herbie Hancock's crisp but straightforward production. An emphasis on intricate, staccato exchanges between Wynton and brother Branford on various saxophones showcases the signal-to-noise edge provided by digital recording, as do

expressive rhythm-section contributions from drummer Tony Williams and bassist Ron Carter, who alternate with Marsalis's own band.

The stereo image appears somewhat flat, despite a balanced array in which drums are centered in the mix. But the tonal purity of sax, trumpet, and Hancock's piano is consistently enhanced. That trade-off is summarized by one of the album's most seductive midtempo ballads, Williams's lilting *Sister Cheryl*, elsewhere (notably the dazzling *Hesitation*) the tonal splendor tips the balance in CD's favor. Marsalis's horn sounds particularly lucid on *Who Can I Turn To*, its piquant tone augmented by the sort of detail often blurred on LPs. And, in this otherwise crystalline performance, Marsalis's gentle use of a breathy, grainier edge adds a subtle emotionalism. Moments like this make the prospect of a wholly digital recording for the young trumpeter loom as a worthy future endeavor. —S.S.

FREDDIE HUBBARD:

Back to Birdland.

Ken Kreisel (CD), Ralph Jungheim (LP), producer. RealTime RT 3005 (fully digital Compact Disc). LP: RT 305.

Trumpeter Freddie Hubbard silenced many of his purist critics with "Back to Birdland," a stirring exercise in bop-driven ensemble jazz. That RealTime LP, pressed abroad by Teldec, was a stunning example of digital audio's appropriateness for jazz and here the label's CD version keeps the faith.

That's not to say there aren't some hurdles posed by the new format, particularly on barn-burning uptempo pieces like *Shaw Nuff*, the opener. As was the case when the track appeared on the excellent RealTime CD sampler, "Real Hot Jazz" (reviewed in September), Hubbard and his six powerhouse partners seem almost overwhelming—there's too little subjective distance between listener and performers. But when the band shifts to a simmer instead of such full-bore blazes, the presence and tonal purity of the recording are gratifying indeed.

Dazzling sonics aren't the only virtues here, of course. The band assembled for the date finds Hubbard's horn matched by Richie Cole's ebullient alto sax, Ashley Alexander's ripe double trombone figures, and George Cables's consistently fluid piano work. The results are bracing,

high-spirited acoustic jazz, auguring a worthy road test for new CD aficionados, who may find the high-frequency sizzle of percussion and the aforementioned ambience in louder passages their only (and slight) quibbles. —S.S.

RANDY NEWMAN:

Trouble in Paradise.

Russ Titelman & Lenny Waronker, producers. WARNER BROS. 23755-2 (analog recording; digital Compact Disc). LP: 23755; reviewed 3/83.

Another strong pop work originally recorded on digital gear, Randy Newman's most recent album shines in its CD version. Given the gothic dynamics punctuating several of its memorable moments—most notably on *My Life Is Good*, a snide hymn of self-love—the elimination of vinyl noise and tape hiss represents an obvious gain.

The arrangements, studded as they are with subtle yet intricate instrumental and vocal details, benefit from the stable imagery and improved separation afforded by the digital configuration. On *Mikey's*, a nervous, off-center recitation set to suitably edgy neo-techno-pop, staccato horns and deep electronic bass fillips take on a new solidity. Elsewhere, Newman's star-studded auxiliary of backing vocalists comes to new light as typified by the ersatz Beach Boys swells added by Lindsey Buckingham and Christine McVie to *I Love L. A.*

That song's soft introduction, pitting Newman's sleepy singing against only his piano, also underlines the tonal clarity of the recording, a virtue most obviously illustrated on the set's two low-keyed but dramatic ballads. —S.S.

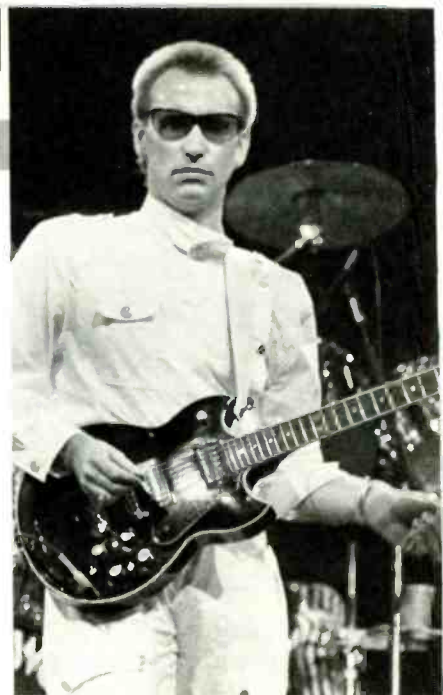
MEN AT WORK:

Cargo.

Peter McIan, producer. CBS CK 38660 (analog recording; digital Compact Disc). LP: QC 38660; reviewed 7/83.

Condolences are hereby offered to producer Peter McIan, who will probably pale at the consequences of digital transfer of this recent hit album by Australian pop ensemble Men at Work. As one of the few rock bands with several CDs on the market, it's all the more jolting to hear the sonic pratfalls on the "Cargo" CD.

Simply put, the greater separation afforded by the new format backfires here. Producer McIan's penchant for positioning percussion, guitar, and reed



COLIN HAY: Only his vocal clears the hurdles posed on "Cargo" by the analog-to-digital transfer.

motifs at wide intervals is mitigated on LP by his use of echo and the inevitable leakage near the center of the mix. Here, though, the arrangements often leave audible gaps in the stereo array; the ghostly backing vocals on *Overkill*, for example, only highlight the problem.

McIan also varies the panning of percussion and drums from clustered center channel arrays to exaggerated gulfs between high hats, cymbals, toms, and kick drums. The drumming thus seems disembodied in spots.

Colin Hay's whiskey-tinged vocal timbre does achieve a bit more clarity and presence, and where the production opts for a more traditionally centered array, the performances sound clean and well focused. But given the music's layered assembly and atmospheric use of different types of electronic and natural echo, even the basic signal-to-noise enhancement offered by CD tends to be minimized. In short, "Cargo" exemplifies how analog production techniques can pose fresh hurdles for Compact Disc. —S.S.

ART PEPPER, JOE FARRELL, GEORGE CABLES:

Darn That Dream.

Ken Kreisel, producer. RealTime RT 3009 (fully digital Compact Disc). LP: RT 309.

Like the best classical Compact Discs released thus far, this contemporary jazz date represents digital recording pursued from a

conservative, documentary vantage point. The performance has been captured live as an ensemble event, rather than assembled electronically, and the spacious setting of the Annex, an old Hollywood soundstage now enjoying a renaissance for recording, affords a naturally open environment.

One of Art Pepper's final recordings prior to his death only weeks later, "Damn That Dream" is clearly a comfortable if not a revelatory musical meeting. While his burry alto saxophone is well matched to Joe Farrell's vinous tenor, the pairing doesn't really offer fresh insights into either player. But that caveat is minor, given their probable intentions. Working from a program of standards (*Some Day My Prince Will Come*, *Sweet Lorraine*, and *Who Can I Turn To*) and fairly tradition-bound originals, Pepper, Farrell, and pianist George Cables sound more interested in revisiting some sturdy heartlands for small-group jazz than mapping new horizons.

Drummer John Dentz gains added punch to his snare and tom-toms and crisp detail to cymbal work without suffering from excessive brilliance, while Tony Dumas's acoustic bass exploits CD's low frequency benefits. As for the two reed players, both come across with enhanced presence while retaining the warmth of their respective styles, and Cables's fleet piano solos and sparkling comping sound full bodied indeed. —S.S.

CLASSICAL
COMPACT DISC

BOCCHERINI (arr. Grützmacher):
Concerto for Cello and Orchestra, in B flat.
HAYDN:
Concerto for Cello and Orchestra, in D, H.
Vllb:2.

Mari Fujiwara, cello; Netherlands Chamber Orchestra, Michi Inoue, cond. DEMON 38C37 7023. \$19.95 (fully digital Compact Disc)

This is a good old-fashioned cello record, with the Boccherini-Grützmacher confection in place of the real Boccherini Concerto in B flat. For

years, this pleasant but trivial score was accepted as gospel—by cellists, anyway—until the genuine article turned up in the early 1960s and was recorded by Maurice Gendron, with Pablo Casals conducting (and, if memory serves, subsequently by Miloš Šádlo). Old habits die hard, however, and all five of the versions currently listed in SCHWANN (Du Pré, Fournier, Cassado, and Starker in stereo, the ancient Casals/Ronald in mono) also use the hybrid score—actually a synthesis of several Boccherini concertos. I won't make a federal case out of it, but, for the small-claims court, let the record show that Yo-Yo Ma's recent Carnegie Hall performance of the Urtext demonstrated anew how much more substantial and varied a work it is. Let's hope that it soon again becomes available.

The musicology is more up-to-date in the Haydn D major; Mari Fujiwara, like most modern cellists, is sophisticated enough not to use the once commonplace Gevaert

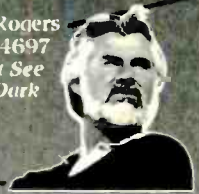
EBET ROBERTS

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*Horowitz At
The Met
Recorded Live*



Kenny Rogers
PCD1-4697
*Eyes That See
In The Dark*



Alabama PCD1-4665
The Closer You Get



"Les Misérables" Original Cast Recording
RCD1-4824

James Levine
RCD1-1552
*Dvorak: Symphony
No. 9 Chicago
Symphony
Orchestra*



John Denver
PCD1-4740
It's About Time



James Galway
RCD1-5061
Annie's Song



And great artistry continues with 17 more releases for the months of October and November.

RCD1-4573 Mussorgsky: Pictures At An Exhibition; Ravel: Le Tombeau de Couperin/ Eduardo Mata. Dallas Symphony Orchestra
RCD1-4378 Julian Bream Plays Granados and Albeniz ("Music of Spain. Vol. 5")
RCD1-4415 Mozart: Symphonies No. 40 & 41 James Levine. Chicago Symphony Orchestra
RCD1-4458 Ravel: Bolero. Rapsodie Espagnole. Alborado del gracioso/ Eduardo Mata. Dallas Symphony Orchestra

RCD1-4439 Tchaikovsky: Capriccio Italien; Mussorgsky: A Night On Bald Mountain; Dukas: Sorcerer's Apprentice; Enesco: Roumanian Rhapsody No. 1/ Eduardo Mata. Dallas Symphony Orchestra
RCD1-4550 Orff: Carmina Burana. with Hakan Hagegard. Barbara Hendricks. John Aler. Eduardo Mata. London Symphony Orchestra and Chorus
RCD1-4551 Gershwin: An American In Paris. Cuban Overture. Porgy And Bess—A Symphonie Picture/ Eduardo Mata. Dallas Symphony Orchestra

RCD1-4621 Mozart: Die Zauberflöte (highlights); Gottruf as Tappy. Boesch. Talvela. Vienna Philharmonic Orchestra. Vien ta Staatsoper Chorus. James Levine
RCD1-4622 Handel: Messiah (highlights)/ Richard Westenburg. Musica Sacra: soloists Judith Bleger. Katherine Ciesinski. John Aler and John Cheek
RCD1-4748 Williams: Return of the Jedi (music from the John Williams score)/ Charles Gerhardt. National Philharmonic Orchestra

RCD1-4194 "Hooked On Classics." Louis Clark conducting the Royal Philharmonic Orchestra
PCD1-4681 "Sweet Dreams (Are Made Of This)." Eurythmics
PCD1-5772 "Greatest Hits." Ronnie Milsap
PCD1-4677 "Ross." Diana Ross
RCD1-4660 "Living In Oz." Rick Springfield
PCD1-4818 "After Eight." Taco
RCD1-4332 "Snowflakes Are Dancing." Tomita

RCA CDs—The Evolution of Excellence Continues

bowdlerization instead of the original. But this work, truth to tell, is not from Haydn's top drawer either, for all its elevation by cello enthusiasts.

The real importance of this first CD release of both works lies in the excellent performances by the young Fujiwara (who appears from photographs to be in her late twenties or early thirties). She employs a warm, evenly produced sound, but balances it with the classical restraint of a player trained in the best modern method. Thus, the manner is both expansive and punctilious. The Netherlands Chamber Orchestra, under the young Japanese maestro Michi Inoue, provides trim, finely tailored support. The digital sound is clean as a whistle, and the dynamic level is very high.

—HARRIS GOLDSMITH

CLASSICAL VIDEO

BEETHOVEN:

Concerto for Violin and Orchestra, in D, Op. 61.

Itzhak Perlman, violin; Philharmonia Orchestra, Carlo Maria Giulini, cond. [Christopher Nupen, video prod., Suvii Raj Grubb, audio prod.] PIONEER ARTISTS PA 83-042, \$24.95 [CX-encoded laser disc].

DVOŘÁK:

Concerto for Cello and Orchestra, in B minor, Op. 104.

SAINT-SAËNS:

Concerto for Cello and Orchestra, No. 1, in A minor, Op. 33.

Mstislav Rostropovich, cello; London Philharmonic Orchestra, Carlo Maria Giulini, cond. [Hugo Käch, video prod., Suvii Raj Grubb, audio prod.] PIONEER ARTISTS PA 82-024, \$24.95 [CX-encoded laser disc].

As orchestral music goes, concertos offer the most obvious innate potential for video presentation. On the surface, at least, there is a primary focal point (the soloist), along with a number of secondary ones (the conductor, the orchestra as a whole, the various sections, and even the individual players and instruments), and, depending on the work, there is the possibility of either competitive tension or simply collaborative give-and-take between them. That's not to say that one concerto disc will look radically different from another, or that it will offer anything near the visual variety an opera or ballet videodisc does; still, the form is not likely to prove as bland as most straight symphonic video.

The first two concerto videodiscs to come my way bear out the theory, and, while I can't say they make captivating viewing from start to finish, they are successful productions overall.



BETTE MIDLER: A Broadway memento not to be mistaken for the real thing.

Of paramount importance, of course, the performances themselves are first-rate. In fact, essentially identical performances—different recordings that employ the same forces and embody the same basic interpretive impulses—have been available on LP for a few years and have fared quite well critically (Perlman, Angel DS 37471; Rostropovich, Angel S 37457).

The Perlman disc is an elegantly simple production directed by Christopher Nupen, whose Allegro Films company has made many a tasteful classical-music documentary for British television (including one on Perlman, shown here by PBS as part of the Allegro-produced *Here to Make Music* series). Nupen sets his players in a darkened, seemingly infinite, studio and illuminates them with intensely bright lights that, at certain angles, reflect off the violins and cellos and, at others, give players white halos. Essentially, he takes the "highlighted score" approach, although after the orchestral introduction, he becomes less religious about following the themes through the instrumental thickets and relies instead on broader views and fewer shifts. Now and then, he even shows instruments playing secondary lines.

Naturally, we see plenty of Perlman, mostly in close-up; yet, while Giulini is hardly absent from the screen, we are spared the often pointless emphasis on the conductor that video producers seem so inordinately fond of. Actually, next to shots of Perlman, who has most of the "action," Nupen's favorite is an attractive low, sidelong view of the cellos—instruments and bows only, no players. Similarly appealing are his playerless close-ups of the kettledrums, a motif he uses to begin and end the performance—a small touch, certainly, but since you have to put *something* on

the screen, the orchestral choreography might as well have a logic of its own and make musical sense.

Perlman's performance here, as on the LP, emphasizes the concerto's inherent lyricism. Some who prefer greater tension and muscularity in Beethoven have found the LP version too sweet. Perhaps the visual aspect plays a part in underscoring the violinist's phrasing and the nature of his interaction with the orchestra surrounding him, but I find the performance as a whole quite expressive and the Rondo particularly exciting. Perlman's playing here, especially in the cadenzas (Kreisler's), is slightly more emphatic than in the LP performance, and his violin is recorded with a bit more natural brightness and less ambient echo.

The Rostropovich disc is even better. This is, of course, comparing apples with oranges—Perlman with Rostropovich; Beethoven with Dvořák and Saint-Saëns; different orchestras, settings, and video directors—and, in purely theoretical terms, the equation doesn't work. (Normally, I'd take Beethoven over the other two anytime.) Yet, if I had to choose here, the cello disc would win. Perhaps it's because of the way the rich, sensuous sound Rostropovich draws from his instrument animates these two works; and possibly it's because, in strictly visual terms, the larger, upright cello offers a more strikingly picturesque view of the way a consummate artist makes his instrument sing.

Director Hugo Käch puts the ensemble in a warmer setting, a well-lit Henry Wood Hall, and, although his camera angles are not as sleek or as coolly sophisticated as Nupen's, he is equally effective in mixing the larger view with a generalized tracing of the

orchestration. In the Saint-Saëns, he adds sleight of hand, lightly superimposing a solo flutist on the part of the picture Rostropovich does not occupy during a passage where both cello and flute have important material, and superimposing Giuliani when the end of a cello statement overlaps the start of the orchestra's response. Still, the best visual material here is the most straightforward, and that's Rostropovich's fingerwork. Käch doesn't miss any opportunity to close in and show how the cellist produces and regulates his rich vibrato or how he commandingly negotiates climactic double-stopped passages.

Visual matters aside, the Dvořák performance is thrilling, and Rostropovich's communicative shaping of the solo line finds a perfect match in Giuliani's orchestral molding. In the opening *Allegro*, especially, the conductor builds sweeping dynamic arches in the tutti sections, drawing impeccable passage-work from the winds and producing a lush but tight ensemble sound. The Saint-Saëns, though a less substantial score, provides plenty of meat for its soloist, and Rostropovich's outgoing account is winning.

Technically, both discs stand up well. Their video images are crisp and beautifully defined, and the stereo sound is impressive. Timbres are clear through the entire orchestral range: In the Beethoven first movement, for instance, the kettledrums pack a tangible punch, and in the Dvořák finale, the triangle, though a bit too loud and forward for my taste, is entirely without distortion. Also impressive are the discs' dynamic ranges—most telling in the opening pages of the Dvořák, where the quiet, lean introduction builds quickly to a furious, full-textured orchestral statement.

Out of curiosity, I did an A/B comparison between the Perlman laser disc and the digitally recorded LP. Other than the differing sound of the solo violin noted earlier, the recordings prove remarkably similar sonically. Yet the CX-encoded laser disc has the edge: Though the instrumental timbres remain equally vivid from either source, the LP (a decent pressing, played fewer than five times) throws in a hefty layer of vinyl noise.

The laser disc has problems of its own, however. The faint buzz I noted

in my review of the Covent Garden *Bohème* (PA 82-028, July) can also be heard in the quietest passages of the Beethoven, but only under certain circumstances—if one uses headphones or stands directly in front of one of the speakers. Had the Perlman recording been available on CD, the comparison would undoubtedly have favored that: no buzz and no vinyl noise. The problem, I suspect, may be a pressing defect, for some laser discs—including the Rostropovich, also CX-encoded—show no trace of hum.

A more serious and pervasive drawback is the noise—a chugging sound—generated by the machine itself, Pioneer's top-of-the-line LD-1100. I'm told that because the discs are comparatively heavy and must be spun at 1800 rpm, the machine cannot (yet) be silenced; nor can it be placed in isolation, since any barriers render the remote control (the only access to some functions and the most efficient access to others) useless. Discs with consistently loud soundtracks—some films and pop discs—mask this machine noise sufficiently. But for classical recordings, or, for that matter, any recordings that slip below mezzo forte level, this continuous chugging becomes unacceptable. More's the pity, for the laser discs themselves are clearly capable of delivering excellent high-fidelity sound, and the companies producing them are beginning to build attractive catalogs. —ALLAN KOZINN

POPULAR VIDEO

BETTE MIDLER: Divine Madness.

Michael Ritchie, producer & director. RCA/Warner Home Video 13148, \$24.98 (CED disc).

The ways Bette Midler uses a stage and plays an audience are as much a trademark as the high emotional pitch she brings to a variety of musical styles, jokes, and dead-on parodies. On a TV screen you can see her "divineness" alright, but you can't fully appreciate how she fills a theater with her presence. "Divine Madness" features shattering performances of *The Rose*, *Stay with Me*, and *I Shall Be Released*, and her Dolores DeLago medley, sung and "danced" from a motorized wheelchair, is as hysterical as ever. An excellent memento of a fine Broadway show, but don't mistake it for the real thing. —IRA MAYER

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Sixteenth Annual High Fidelity/International Record Critics Awards

by James R. Oestreich

WHEN, LAST YEAR IN SPAIN, Alain Fantapié proposed Aix-en-Provence as the site for this year's IRCA meeting, he couldn't have known what he was getting into (though, indomitable spirit, he would have done so anyway). In New York in March, he reported that, barring total disappearance of the franc, the funding was ninety-nine-and-forty-four-one-hundredths-percent sure. As my credit-card statements loudly attest, the franc remains a considerable unit of currency, but the financing for the July meeting did almost collapse when one of the sponsoring agencies went bankrupt. Into the breach leapt the publisher Éditions Musicales Durand, eager particularly to provide a forum for the Koussevitzky Award in line with its active support of contemporary music. Other sponsors included Échanges Musicaux Francophones, an organization that promotes musical endeavors in French-speaking countries worldwide, and the Paris Union of Banks.

And so, the meeting took place, in a Festival week rife with activity: John Eliot Gardiner's English Baroque Soloists and Monteverdi Choir performed Handel's *Israel in Egypt* even more engagingly than they had in New York three months earlier and took part in a striking production of Rameau's *Hippolyte et Aricie* (with Jessye Norman, John Aler, Jules Bastin, and José van Dam). Impressive singing by the Americans Ashley Putnam and Marvis Martin and the Australian Yvonne Kenny only partly relieved the monotony of the trains of arias and recitatives in Mozart's *Mitridate*; when, at the end of two long acts, the fourteen-year-old composer takes a notion to put two voices together, it comes like the discovery of the wheel. Heard in a new outdoor Festival setting, controversial for its problematic acoustics, were the Lille National Orchestra under Jean-Claude Casadesus, which closed a rather dreary evening

with a sometimes magical *Firebird* Suite, and a presentation of Rossini's *La Cenerentola*, with Lucia Valentini-Terrani filling in for Teresa Berganza, who, by varying accounts, was either unwell or unwilling to submit to the capricious acoustics.

Though Fantapié resisted all efforts to make him jury president in his home country—Edward Greenfield became our official spokesman and acquitted himself eloquently in French at the concluding award ceremony—he was, as the juror best equipped (“dazzlingly bilingual,” in Greenfield’s phrase), prevailed upon to shepherd the French-English deliberations.

As usual, the always articulate and

Judges

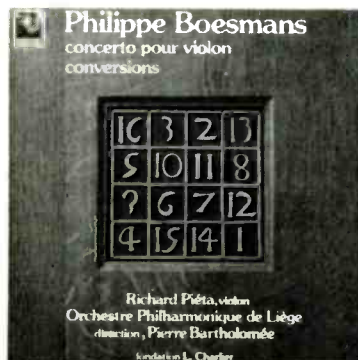
Alain Fantapié, France
Edward Greenfield, Great Britain
Harry Halbreich, Belgium
Alfred Hoffman, Romania
Pierre Michot, Switzerland
James R. Oestreich, United States
José Luis Pérez de Arteaga, Spain
Bengt Pleijel, Sweden

animated Pierre Michot provided some of the discussion’s sprightliest moments, especially when it came to Carlo Maria Giulini’s *Falstaff*: He jumped to his feet, grabbed the box, with its photo of Renato Bruson looking dourly quizzical in the title role, and exclaimed, “*Ici Falstaff*.” Then he opened the box, pulled out the booklet, with its cover photo of a prayerful conductor, and blurted, “*Ici Giulini dirigeant Falstaff—il dirige Parsifal*.” Thus redubbed *Parsifalstaff*, the recording mustered a certain respect, but only limited support for an award.

Almost as spirited was the discussion of Berganza’s recording of Haydn arias, José Luis Pérez de Arteaga’s “special choice.” Notwithstanding that a number of copies, including those distributed to the jurors, had been pressed with right and left channels reversed, the disc’s artistic merits sufficed to keep it in contention to the very end. (Shades of 1981, when jurors were sent pressings of a Mahler Third Symphony with two second movements, no fourth.)

After lengthy discussions, the voting went relatively quickly. Preliminary ballots were used to narrow the list to a dozen recordings: Bach (Fantapié: “a record that will be discussed 10 years from now, 30 years from now”), Britten (Harry Halbreich: “Simon Rattle will be the Herbert von Karajan of the year 2000”), Charpen-

Serge and Olga Koussevitzky International Record Award



BOESMANS: Violin Concerto. R. Piéta; Liège Philharmonic, Pierre Bartholomée. RICERCAR RIC 014.

tier (Greenfield: "a revealing record superbly recorded"). Haydn arias, Mozart concertos (my special choice—Halbreich: "somewhat effeminate, rococo performances"; Greenfield: "reverse everything Harry said"; Michot quoted approvingly Harris Goldsmith's laudatory HF review, April 1983) and *Nozze* (a strong contender over my strenuous objections—Greenfield: "disproves that Georg Solti has no sense of humor"), Purcell, Roman (Greenfield: "I defy anyone to dislike this recording"), Schoenberg (Pérez de Artega: "one of the finest things Pierre Boulez has done"; Halbreich: "an album that yields fabulous treasures, repays many hearings"), Szymanowski, Verdi *Falstaff* (Pérez de Artega: "a Buster Keaton Falstaff"), and Zemlin-sky.

After further samplings of group sentiment, the first ballot yielded two clear winners: Gardiner's enchanting performance of Purcell's *Fairy Queen*, in something like its original scoring, and Boulez's Schoenberg set (scheduled for U.S. release in 1984). From the start it had been evident that the only obstacle in the way of the latter would be another Boulez entry, the delightful recording of Stravinsky songs; but the sheer weight and importance of the CBS set, with the first recording of *Die Jakobsleiter* and what Halbreich termed a "reference performance" of *Die glückliche Hand*, ultimately prevailed, some judges viewing it as a choice for "duty" over "pleasure."

Then came the battle. It was generally and repeatedly agreed that a third award should be granted. Just as strongly as some of us supported Glenn Gould's *Goldbergs*, however, others opposed it (some simply because an award to a dead performer is "wasted" in comparison to the good it can do for a living one—all irrelevant, in my opinion). The contras clung through numerous ballots to the Haydn arias and the Mozart *Nozze* until finally the *Goldbergs* broke through. At that point it was decided (with only mild acrimony) not to grant a

Nominating Committee

ARGENTINA

Pablo Luis Bardin, *Tribuna Musical*
Martin Müller, *La Nación*

AUSTRALIA

Ian Woodward, *Spins 'n' Needles*

BELGIUM

Harry Halbreich, *Harmonie, La Croix*, Belgian Radio

BULGARIA

Dimiter Zenginov, *Bulgarska Musica*

CANADA

Ray Chatelin, *The Province, Musicanada*, CBC

Barry Edwards, *Music*

Jurgen Gothe, *International Music Guide*, CBC

Rick MacMillan, *Music, The Music Scene*

FRANCE

Alain Fantapié, *Diapason, Opéra International, Médias et Langage*

Jacques Gallois, *Diapason*

Sergio Segalini, *Opéra International*, French Radio

GERMANY

Ingo Harden, *Preis der deutschen Schallplattenkritik*

Wolfgang Seifert, *Musikmarkt, Die Musikforschung*, West German Radio

Gerhard Wienke, *Fono Forum*, South German Radio

GREAT BRITAIN

Edward Greenfield, *The Guardian, Gramophone*

Nicholas Kenyon, *London Times, Early Music*

Robert Layton, *Gramophone*

ITALY

Luigi Bellingardi, *Nuova Rivista Musicale, Ital-*

iana, Stereoplay, Il Mondo della Musica

Mario de Luigi, *Musica e Dischi*

Umberto Masini, *Musica*

JAPAN

Toshio Oka, *Stereo Sound*

Kenji Tsuniori, *Asahi Shimbun*

THE NETHERLANDS

Jan de Kruijff, *Elseviers, HiFi Video Test*

ROMANIA

Alfred Hoffman, *Muzika, România Literară*

SPAIN

José Luis Pérez de Artega, *Reseña, El País*, Spanish Radio

SWEDEN

Stig Jacobsson, *HiFi & Musik*

Camilla Lundberg, *Expressen*

Bengt Pleijel, *Musikrevy*

SWITZERLAND

Pierre Michot, *Journal de Genève, Gazette de Lausanne*

UNITED STATES

John Ardoin, *Dallas Morning News*

John Canarina, *High Fidelity*

R.D. Darrell, *High Fidelity*

Peter G. Davis, *New York*

Thor Eckert, Jr., *Christian Science Monitor*

Harris Goldsmith, *Keynote*

Matthew Gurewitsch, *Opera Quarterly*

David Hamilton, *The Nation*

Harry Haskell, *Kansas City Star*

Paul Hertelendy, *San Jose Mercury News*

Bernard Holland, *New York Times*

Lawrence B. Johnson, *Milwaukee Sentinel*

Allan Kozinn, *New York Times*

Tim Page, *New York Times*, WNYC

Teri Noel Towe, *American Record Guide*, WBAI

James Wierzbicki, *St. Louis Globe-Democrat*

fourth award.

Alfred Hoffman had proposed a special award for a series nearing completion on the Romanian Electrecord label docu-

menting all the works of Enescu. The idea of making the series "complete," however, seems to have been an afterthought, and (Continued on page 108)

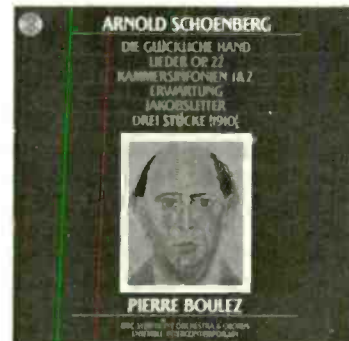
Award-Winning Recordings



BACH: Goldberg Variations. Glenn Gould. CBS MASTERWORKS IM 37779.

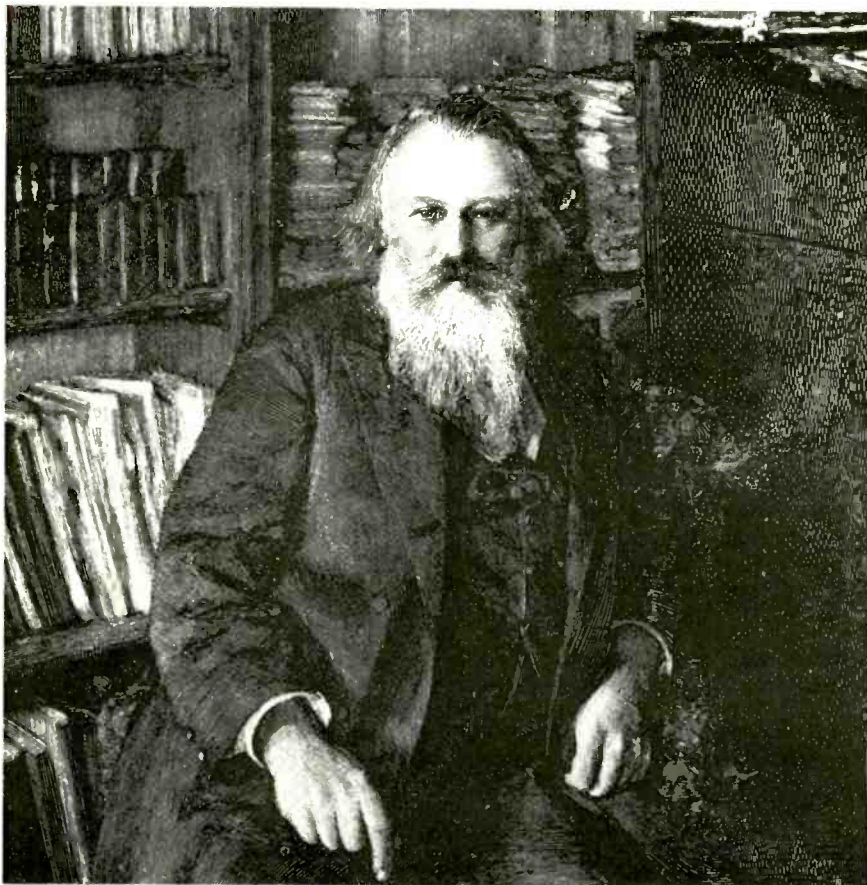


PURCELL: The Fairy Queen. Monteverdi Choir, English Baroque Soloists, John Eliot Gardiner. ARCHIV 2742 001 (3).



SCHOENBERG: Vocal and Orchestral Works. BBC Symphony, Pierre Boulez. CBS MASTERWORKS I3M 37863 (3).

A Brahms Birthday Bash



Deutsche Grammophon's "complete" edition, though not the final word, is a handsome offering.

Reviewed by Harris Goldsmith

1983 MARKS THE 150th anniversary of Brahms's birth, and Deutsche Grammophon has commemorated it with a Brahms Edition, similar in scope and content to the label's 1970 bicentennial tribute to Beethoven. This compilation, like the earlier one, comprises both new and reissued material, conveniently arranged according to musical genre. Each album is accompanied by a handsome booklet that lists contents and artists and contains notes on the music; there are also various essays on the appropriate phase of the composer's creativity—

Next month our coverage of DG's Brahms edition continues with Will Crutchfield's reviews of the song, vocal ensemble, and choral work recordings.—Ed.

some a bit farfetched, but all interesting.

Also like the Beethoven monument, this one is "selectively complete": As is well-known, Brahms was ruthlessly self-critical, allowing only a fraction (less than half) of his output to survive. Possibly out of respect for the master's wishes, the producers have decided to omit the posthumous early A major Trio, although its authenticity is pretty well established. Yet certain items that *did* have Brahms's blessing are also omitted. The 51 Exercises for piano are, of course, arguably not "music," but with compositions existing in more than one form, we encounter perplexing anomalies: The *Haydn* Variations are included in both orchestral and two-piano guise, and the great Op. 34, likewise, appears as both

a piano quintet and a sonata for two pianos. One also finds the solo piano arrangement of the B flat Sextet's slow movement. On the other hand, one searches in vain for the solo version of the Op. 39 Waltzes (which I happen to prefer to the original two-piano scoring) and the viola-piano version of the Op. 120 Sonatas (which, unlike the violin alternatives, the disputed cello reworking of the Op. 78 Violin Sonata, and the viola substitutions in the horn and clarinet trios, are much more than mere arrangements). These omissions are especially incongruous since DG sees fit to present all the *Hungarian Dances* in orchestral as well as four-hand garb, though Brahms himself arranged only Nos. 1, 3, and 10.

Still, although one can quibble over inconsistencies and fault the selection of one artist's performance of a given work over another's (particularly when multiple options existed, as with the Op. 10 Ballades, the concertos, and the symphonies), the Brahms Edition as a whole is a handsome offering.

The largest segment of the collection, with 15 discs, is the chamber-music box, about equally divided between new and reissued material. (Another inconsistency, the Op. 78 Violin Sonata runs to almost two sides, with only the Scherzo of the *F-A-E* Sonata rather than the whole of that interesting composite creation by Brahms, Schumann, and Dietrich, while the Op. 114 Trio and Op. 115 Quintet are crammed onto a single disc, and the Op. 60 Piano Quartet gets a single side.)

The exemplary Hungarian pianist Tamás Vásáry and two principals from the Berlin Philharmonic, violinist Thomas Brandis and cellist Ottomar Borwitzky, are entrusted with the three piano trios; violist Wolfram Christ, also of the Berlin Philharmonic, joins them in the three piano quartets, and the horn player Norbert Hauptmann and the clarinetist Karl Leister fill in as appropriate in the Op. 40 and Op. 114 Trios. All of these digital recordings appear for the first time and make a strong entry on the whole. Vásáry's Brahms—tonally centered, tautly structured, and kinetically intense—is very much in the modern, "classical" tradition. (His approach reminds me somewhat of Leon Fleisher's prior to his forced retirement.) Vásáry's colleagues, without exception, contribute thoughtful phrasing and gleaming tone—as well as technically expert collaboration.

The Op. 8 Trio, which appears only in its (far superior) revised form, receives an arching account, as noble as the Rubinstein/Szeryng/Fournier (RCA ARL 3-0138) but, appropriately, with greater fleetness in the Scherzo; the same comments apply with

even greater force to the performances of Opp. 87 and 101. Interestingly, the *Zigeuner* elements in both Op. 25 and Op. 26 are minimized by this reserved *echt*-Hungarian pianist; the finales are never allowed to break the sonic barrier, and the approach to rubato is relatively straightlaced, though never devoid of ardor. Also noteworthy is the observance of the long exposition repeat in the first movement of Op. 26: This extremely cogent, beautifully organized interpretation makes a far more persuasive case for that option than does the Beaux Arts/Trampler (Philips 6747 068), the only other recorded edition I know of that takes the repeat. If the horn trio seems a mite businesslike and restless in its brisk pacing (I prefer the older DG version by Eschenbach, Drolc, and Seifert), the clarinet trio improves on the generally excellent Leister/Donderer/Eschenbach interpretation (both on DG 139 398). The Op. 60 Piano Quartet is an absolute winner in this lean, ferociously incisive account. (Not since the days of Schneider, Katims, Miller, and Horszowski has this work had such a Toscanian reading on records; Heifetz, Lateiner, and company, RCA LSC 3009, were merely rushed and superficial.)

Also new, and just issued as a single (2532 073), are the two Cello Sonatas, Opp. 38 and 99, played by Mstislav Rostropovich and Rudolf Serkin. I find them a bit perplexing: The pianist's rectitude and musicianship have acquired, in recent years, an element of academic dryness, and this sobriety seems to have cooled the ardor of the cellist (whose recent concentration on conducting has also taken a toll in virtuosity). These are, of course, distinguished interpretations, but I find some of the cellist's shifts and fingerings disturbing in the F major, and the energy level in both works is on the low side. (The slowish tempo for the E minor's fugal finale seems nailed to the ground—or, rather, to the bar line.)

Still, this represents a first for Serkin's discography (Rostropovich has been around for some time in pirate versions), and is thus not to be overlooked.

The Clarinet Sonatas, Op. 121, are played by Leister and Jörg Demus in an oldish recording appearing for the first time in this country. One wishes that Leister, a fine clarinetist with a colorful tone reminiscent of the Boston Symphony's Harold Wright and the Chicago's Larry Combs, had remade this music with Vásáry at the time he rerecorded the Op. 114 Trio. Demus, to make no bones about it, is an impossibly affected, inadequate partner who lacks the requisite technique for these demanding piano parts and has to simulate "temperament" by attacking the music's central rhythmic nervous system. There is no dynamic contrast, for instance, between the *pp*-minus of bar 24 and the *forte* of bar 25 in the F minor's first movement, and throughout both pieces Demus relies on inane staccato and frivolous *a capriccio* "charm." To make matters worse, the disc is mastered at an exceedingly low level.

One may certainly take issue with Pinchas Zukerman and Daniel Barenboim for excesses in their reissued set of the violin sonatas and *F-A-E* Scherzo, but at least the partnership is on an equal footing. On rehearing, I am bothered more than before by the violinist's occasionally saccharin portamento and by certain sentimental excesses from both players. For the most part, however, these are large-scale, intelligent readings, sonorously and impactfully reproduced, with both instruments in what I consider proper ratio. (The piano part in a Brahms sonata ought to surround the other instrument like the orchestra in a concerto.)

I continue to find the gruffly Teutonic, structurally oriented LaSalle Quartet better suited to the three Brahms string quartets than to late Beethoven, although my favor-

ite accounts of these pieces, among modern versions, are those by the Berg Quartet (Telefunken 26.35447). The augmented Amadeus gives the two string quintets and the two sextets more than adequate readings, although my loyalty for Budapest/Trampler (quintets) and Les Musiciens (in the B flat Sextet, Harmonia Mundi France HM 1073), remains unshaken. The Leister/Amadeus clarinet quintet, while less revelatory than the wonderful Kell/Busch (on an HMV Treasury British reissue), remains near the top among performances recorded in the stereo era, and I like the Pollini/Italiano version of the piano quintet even more than I did when it was first issued a year or so ago; it is similar to the Serkin/Budapest (CBS, just deleted) in approach, but more elegantly reproduced.

The eleven discs of "piano works" that constitute the second largest album contain, in addition to the solo piano music, the works for piano duet and the organ works. DG has assigned the three piano sonatas, works of a young composer, to Krystian Zimerman, a Polish artist still in his mid-twenties. The C major, Op. 1, and F sharp minor, Op. 2, taped a few years ago, are played with brilliant momentum and a kind of icy objectivity that works rather well (particularly in the Op. 1 finale) for these problematical scores.

By the time he reached the F minor, Op. 5, Brahms had learned much in the way of simplicity and long-range structural planning (although there are still a few redundant spots in this uneven but bonafide masterpiece). Zimerman, too, seems to have learned a few things in the intervening years—alas, not always to the music's advantage. In contrast to the earlier recordings, his reading here, while pianistically polished to the hilt, tends toward static superficiality. Melodic lines are "shaped" with a kind of swooning cosmetic smoothness, but one gets the impression that Zimerman does not yet grasp the writing's brawny harmonic structure. Everything sounds a bit precious, and the musical argument keeps breaking into bits and pieces. One is tempted to say that Brahms's Op. 5 does not make it as early Chopin. Furthermore, the slightly icy clarity of Zimerman's touch (furthered by the brightness of DG's digital processing) works to the music's detriment as it did not in the (analog) recordings of Opp. 1 and 2. One wishes that Wilhelm Kempff had remade his superb interpretation of this sonata for stereo.

There was a two-channel Kempff version of the Op. 10 Ballades available to DG—as well as recordings by Gilels and Michelangeli (2532 017)—but I doubt that any listener will feel serious dissatisfaction with Zimerman's thoughtful, poetic, perceptive readings, which stress the music's patrician classicism in preference to its gruff somnolence and incipient Romanticism. Zimerman's fleet digits make as light

BRAHMS: Chamber Works.

Pinchas Zukerman and Thomas Brandis, violin; Wolfram Christ and Cecil Aronowitz, viola; Mstislav Rostropovich, Ottomar Borwitzky, and William Pleeth, cello; Karl Leister, clarinet; Norbert Hauptmann, horn; Daniel Barenboim, Rudolf Serkin, Jörg Demus, Tamás Vásáry, and Maurizio Pollini, piano; LaSalle Quartet; Quartetto Italiano; Amadeus Quartet. [Günther Breest (1), Hanno Rinke (2), Cord Garben (3), Manfred Richter (4), Hans Hirsch (5), Karl Faust (6), Klaus Scheibe (7), Rainer Brock (8), and Hans Ritter (9), prod.] DEUTSCHE GRAMMOPHON 2740 277, \$119.70 (digital recordings*); 15 discs, manual sequence). Cassettes (4; Opp. 8, 18, 34, 38, 51, 78, 99, 108, 114, 115): 3378 122, \$51.92. [†From DG and ‡PHILIPS originals, 1967–79.]

Sonatas for Violin and Piano: No. 1 in G, Op. 78; No. 2, in A, Op. 100; No. 3, in D minor, Op. 108; F-A-E Sonata: Scherzo (Zukerman, Barenboim; 1).† Sonatas for Cello and Piano: No. 1, in E minor, Op. 38; No. 2, in F, Op. 99 (Rostropovich, Serkin; 2, 3).* Sonatas for Clar-

inet and Piano, Op. 120: No. 1, in F minor; No. 2, in E flat (Leister, Demus; 4, 5, 6).† Trios for Violin, Cello, and Piano: No. 1, in B, Op. 8; No. 2, in C, Op. 87; No. 3, in C minor, Op. 101 (Brandis, Borwitzky, Vásáry; 2, 3).* Trio for Violin, Horn, and Piano, in E flat, Op. 40 (Brandis, Hauptmann, Vásáry; 2, 3).* Trio for Clarinet, Cello, and Piano, in A minor, Op. 114 (Leister, Borwitzky, Vásáry; 2, 7).* Quartets for Piano and Strings: No. 1, in G minor, Op. 25; No. 2, in A, Op. 26; No. 3, in C minor, Op. 60 (Vásáry, Brandis, Christ, Borwitzky; 2, 3).* Quartets for Strings: No. 1, in C minor, Op. 51, No. 1; No. 2, in A minor, Op. 51, No. 2; No. 3, in B flat, Op. 67 (LaSalle; 8).† Quintet for Piano and Strings, in F minor, Op. 34 (Pollini, Italiano; 8).†† Quintet for Clarinet and Strings, in B minor, Op. 115 (Leister, Amadeus; 4, 5, 6).† Quintets for Strings: No. 1, in F, Op. 88 (5, 6, 9); No. 2, in G, Op. 111 (5, 6, 8) (Amadeus, Aronowitz).† Sextets for Strings: No. 1, in B flat, Op. 18 (5, 6, 8); No. 2, in G, Op. 36 (5, 6, 9) (Amadeus, Aronowitz, Pleeth).†

of the intricacies of the Op. 4 Scherzo as did Kempff's on the older recording, and he plays the touching transcription of the B flat Sextet variations with loving succinctness. Zimerman also has complete success with the discerning arrangement, for left hand alone, of the Chaconne from Bach's Violin Partita, S. 1004.

Vásáry takes on the remainder of the variations and also the eight pieces of Op. 76. As in the chamber music, his taut but studious interpretations are mostly a delight—"mostly" pertaining to a few fustian adjustments of phrase and to a slight loss of impetus in the concluding fugue of the Op. 24 *Handel* Variations, which otherwise receives an aristocratic, full-bodied, intellectualized reading reminiscent in certain ways of both Solomon and Fleisher (Odyssey Y 35920). On the other hand, Vásáry seems especially inspired in the early Op. 9 *Schumann* Variations, a not too well-known, perhaps overly lengthy, but nonetheless magical—and very difficult—opus. There is a requisite differentiation in Op. 21 between the seriousness of No. 1, on an original theme, and the relative boisterousness of No. 2, on a Hungarian song. The two books of *Paganini* Variations, Op. 35 (Vásáry rightly repeats the theme before launching into Book II), are as virtuosic and accurate as anyone could wish, but the infusion of poetic introspection, the coloristic diversity, and the ability to take time over certain rhythmic details instead of always racing onward give this version a musicianly rectitude far transcending mere pianistic fireworks. Deutsche Grammophon, incidentally, now has two absolutely stunning versions of Brahms/*Paganini* in its catalog, the other being young Mikhail Faerman's equally exceptional account in the low-priced Concours series (2535 013). Vásáry shows similar distinction in Op. 76. His is modern pianism, but its modernity never for a moment excludes charm, intimacy, or sentiment. (His bejeweled B minor Capriccio shows almost impudent ease and exquisite balance between hands.)

After years of lamenting the unavailability of Kempff's Brahms performances I take great pleasure in welcoming back a large segment of them. His way with the two Op. 79 Rhapsodies is instructive, particularly in juxtaposition with the Brahms playing of Zimerman and Vásáry: By modern standards, Kempff seems to favor "horse-and-buggy" tempos—animated but leisurely, and displaying no compulsion to drive the material relentlessly onward. (In truth, I even began to find some of his phrase stretching and melodic inflections slightly bombastic and self-indulgent, though I was soon won over again to his relatively low-pressured approach.) In any event, Kempff could be as powerful as anybody when he chose to be, and his stormy, emphatic account of the E flat Rhapsody, Op. 119, No. 4, proudly makes that point. As for the more intimate creations of Opp.



Zimerman: perceptive readings, overall

116, 117, 118, and 119, he makes you realize what Shakespeare meant by his phrase "the ripeness of it all." DG's vintage 1964 sound, though a little more subdued than its recent work, is extremely well balanced and fits the music and these magical performances like a glove. (And though the original tapes were probably pre-Dolby, the background hiss is never obsessive or even intrusive.)

The Kontarsky brothers are meticulously sensitized to each other, and all of their work here, whether on one or two pianos, is nuanced, coloristic, and uncanny in its ensemble. But much of their generally distinguished work strikes me as terribly unintuitive as to flow and rubato. In the severely metrical accounts of the *Hungarian Dances* and in the charming miniatures comprising the little-known *Souvenir de la Russie*, the tricky stop-and-go phrasing can prove enjoyable; but the Op. 39 Waltzes,

the Op. 23 *Schumann* Variations, the *Haydn* Variations, and the sonata version of Op. 34 are lamed by the pervading pedantry. (The *Luftpausen* in Var. 2 of the Haydn sequence provide a case in point.)

Peter Planyavsky's direct, unadorned simplicity in the early preludes and fugues (1856) and autumnal chorale preludes (1896—they were the last things Brahms undertook, and the last prelude is, appropriately enough, set to the tune of "O Welt, ich muss dich lassen") are framed by the bright, reedy "baroque" sound of his organ and by DG's cleanly etched, yet sonorous, recording. This direct, eloquent, unegotistical approach moves me much more than, say, Virgil Fox's technicolor dramatization on an old RCA mono disc.

It may appear a bit perverse for DG to bypass its fine Karajan *Deutsches Requiem* (2707 018) and Ludwig/Böhm *Alto Rhapsody* (just deleted) in favor of an untested avant-garde composer-conductor right out of the late Bruno Maderna's stable. But, for the most part, Giuseppe Sinopoli proves himself a *simpatico* Brahmsian. Sometimes, like the late Dimitri Mitropoulos, he cuts across the lines of "tradition" with stresses and tempos: His sharp, punchy beginning of the *Gesang der Parzen* is in surprising contrast to the more massive and sustained Toscanini interpretation. (Toscanini, who was supposed to "take everything too fast," was in truth a generally monumental Brahmsian.) And conversely, Sinopoli's *Alto Rhapsody* is somberly deliberate, saved from tedium by a few vehemently dramatic sforzandos. But unlike Mitropoulos (who sometimes came to grief in Brahms—I recall accounts of the Third Symphony and *Haydn* Variations in which all tempo relationships were topsyturvy), Sinopoli always stays within the

BRAHMS: Keyboard Works.

Krystian Zimerman*†, Tamás Vásáry‡, Wilhelm Kempff**, piano; Alfons and Aloys Kontarsky, piano duet, two pianos††; Peter Planyavsky, organ. [Hanno Rinke*††††, Wolfgang Mittelehner*††††, Otto Gerdes**, Manfred Richter**, Werner Mayer††, and Cord Garben (Opp. 9, 76), prod.] DEUTSCHE GRAMMOPHON 2740 278, \$87.88 (digital recordings††††; 11 discs, manual sequence). Cassettes (4; Opp. 4, 5, 10, 21/1, 24, 35, 39, 56b, 76, 79, 116–19, Hungarian Dances, Chaconne): 3378 123, \$51.92. [††††*From DG originals, 1963–80.]

Sonatas for Piano: No. 1, in C, Op. 1*; No. 2, in F sharp minor, Op. 2*; No. 3, in F minor, Op. 5†. Variations: on a Theme by Schumann, Op. 9; on an Original Theme, Op. 21, No. 1; on a Hungarian Song, Op. 21, No. 2; and Fugue on a Theme by Handel, Op. 24; on a Theme by Paganini, Op. 35. ‡ Scherzo in E flat minor, Op. 4†; Ballades, Op. 10 (4)*; Pieces, Op. 76 (8)‡; Rhapsodies, Op. 79 (2)**; Fantasias, Op. 116 (7)**; Intermezzos, Op. 117 (3)**; Pieces, Opp. 118 (6), 119 (4)**; Chaconne for the Left Hand, in D minor (arr. from Bach). * Theme and Vari-

ations in D minor (arr. from Op. 18 Sextet). †

††Sonata for Two Pianos, in F minor, Op. 34b. Variations: on a Theme by Schumann, Op. 23; on a Theme by Haydn, Op. 56b. Waltzes, Op. 39 (16). Hungarian Dances (21). Souvenir de la Russie.

‡‡Organ Works: 11 Chorale Preludes, Op. 122; Fugue in A flat minor; O Traurigkeit, o Herzeleid; Two Preludes and Fugues.

BRAHMS: Works for Chorus and Orchestra.

Lucia Popp, soprano*; Brigitte Fassbaender, alto**; René Kollo, tenor†; Wolfgang Brendel, baritone*††; Prague Philharmonic Chorus, Czech Philharmonic Orchestra, Giuseppe Sinopoli, cond. [Hans Hirsch and Wolfgang Stengel, prod.] DEUTSCHE GRAMMOPHON 2741 019, \$31.92 (digital recordings; four discs, manual sequence). Cassettes (4; Opp. 45, 53, 54, 82, 89; plus choral works): 3382 018, \$51.92.

Ein deutsches Requiem, Op. 45*; Rinaldo, Op. 50†; Alto Rhapsody, Op. 53**; Schicksalslied, Op. 54; Triumphlied, Op. 55††; Nänie, Op. 82; Gesang der Parzen, Op. 89.

bounds of propriety. In fact, some listeners might wish for a bit less decorum in parts of the Requiem, where Sinopoli seems inclined to bring out that same seraphic Gemütlichkeit that some loved—and others didn't—in Kempe's mono HMV recording (now on Arabesque 8007-2L). Sinopoli, perhaps uniquely among performing composers, seems more concerned with nuance than with shape. Not that his interpretations are without structure; but others—Klemperer, Toscanini, Ansermet, Haitink, and even Karajan—have produced readings of some of these pieces with firmer outlines and more granitic textures.

Part of this diffuseness may be due to the blended resonance, even cavernousness, of DG's acoustic here: Thanks to the characteristic cutting leanness of the Czech Philharmonic (similar to the silvery, acerbic sound Szell obtained from his Clevelanders), sufficient color and detail can be heard, but felicities such as the brass comments in the second movement of the Requiem—stressed with such telling effect by Klemperer (Angel SB 3624) and, more recently, Haitink (Philips 6769 055)—are only just discernible. Some may also cavil at the way the *Alto Rhapsody* recording places Brigitte Fassbaender's contralto amidst the orchestral (and, later, choral) backdrop, but this is really closer to the way the music sounds in the concert hall.

On the whole, I like Sinopoli's performances very much: They have warmth without ponderousness; clarity without obsessive detail; animation without frenzy. But I like some other performances—e.g., the *Nänie* of Ansermet, the Requiems of Solti (London LDR 12114), Haitink (Philips 6769 055), Karajan (Angel SB 3838 and DG), and Ansermet—even better. The convenience of having all this music together, capably performed, cannot be overlooked, and this may be the first recording ever of the dramatic *Triumphlied*, Op. 55.

"We cannot expect you to be with us all the time," Thomas Beecham reputedly told one of his players at rehearsal, "but perhaps you would be good enough to keep in touch now and again." Something of this easygoing attitude is evident in Herbert von Karajan's 1978 symphony cycle. In decided contrast to, for example, his approach in the Mahler Ninth (DG 2707 125), where his direction is alertness itself, in Brahms the distinguished maestro tends to close his eyes, switch his uncanny control into monitor, and leave his great orchestral machine to its own resources. Perhaps I exaggerate, but, here as in concert, the balances—so extraordinary in some Karajan/Berlin Philharmonic Mahler and Bruckner performances—go a little awry, with brasses sometimes swamping strings and with the orchestra's various sections operating as chamber ensembles only loosely affiliated with one another. On the other hand, these Brahms performances are more exciting

BRAHMS: Orchestral Works.

Berlin Philharmonic Orchestra, Herbert von Karajan*† and Claudio Abbado*†††, cond.; Vienna Philharmonic Orchestra, Claudio Abbado, cond.††. [Hans Hirsch*, Magdalene Padberg*, Michel Glotz*, Cord Garben*, Otto Gerdes†, Hans Weber†, and Rainer Brock ††††††, prod.] DEUTSCHE GRAMMOPHON 2740 275, \$69.86 (digital recordings*†††; seven discs, manual sequence). Cassettes (4)*†: 3378 120, \$39.92. [*†††††From DG originals, 1964–78.]

Symphonies: No. 1, in C minor, Op. 68; No. 2, in D, Op. 73; No. 3, in F, Op. 90; No. 4, in E minor, Op. 98.* Variations on a Theme by Haydn, Op. 56a.† Academic Festival Overture, Op. 80.‡ Tragic Overture, Op. 81.* Serenades: No. 1, in D, Op. 11**; No. 2, in A, Op. 16††. Hungarian Dances (21; orch. Brahms [Nos. 1, 3, 10], Hallén [No. 2], Juon [No. 4], Schmeling [Nos. 5–7], Gál [Nos. 8, 9], Parlow [Nos. 11–16], Dvořák [Nos. 17–21]).‡‡

BRAHMS: Concertos.

Maurizio Pollini, piano*†; Anne-Sophie Mutter† and Gidon Kremer***, violin; Mischa Maisky, cello**; Vienna Philharmonic Orchestra, Karl Böhm*, Claudio Abbado†, and Leonard Bernstein**, cond.; Berlin Philharmonic Orchestra, Herbert von Karajan, cond.‡. [Werner Mayer*, Rainer Brock†, Günther Breest†, Michel Glotz†, Hanno Rinke**, and Hans Weber**, prod.] DEUTSCHE GRAMMOPHON 2740 276, \$39.92 (digital recordings†**); four discs, manual sequence). Cassettes (4): 3378 121, \$39.92. [*††From DG originals, 1976–79.]

Concertos for Piano and Orchestra: No. 1, in D minor, Op. 15*; No. 2, in B flat, Op. 83†. Concerto for Violin and Orchestra, in D, Op. 77.‡ Concerto for Violin, Cello, and Orchestra, in A minor, Op. 102.**

and flexible than Karajan's earlier ones, with greater urgency and with sharper, more thrusting outlines replacing the erstwhile somber mass. Discussing an early Karajan/Philharmonia recording of the First Symphony in a HIGH FIDELITY Brahms discography, C. G. Burke compared it to Guido Cantelli's reading with the same orchestra: Whereas the latter stressed light, Karajan favored darkness, giving prominence to the lower instruments. But over the years, as these newer versions demonstrate, Karajan has metamorphosed, shedding his Teutonic qualities in favor of a more Italianate grace and lyricism. The Second Symphony, which afforded the best performance in Karajan's 1964 DG cycle, is even more refined and animated here, and the other three readings, though a bit lacking in the sterner stuff that many look for in Brahms, are far more likable than their ponderous and sedate predecessors. The disturbing pitch fluctuation at bar 338 in the Second's finale has been corrected.

Deutsche Grammophon has gone back to the earlier Karajan cycle for the *Haydn* Variations. (His later version of this work was made for EMI/Angel, SB 3838.) I have always felt this performance to be the exception that proves the above generaliza-

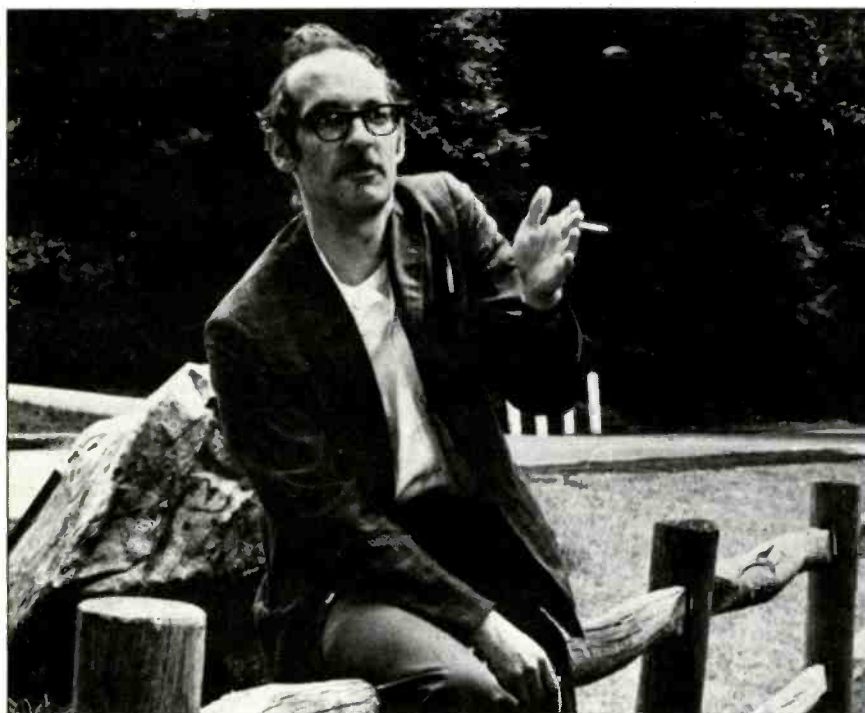
tion, with Karajan displaying somewhat brisker tempos (e.g., Var. 5) and a firmer hand in 1964 than in 1977. The 1978 *Tragic Overture*, though a bit more compact and less sluggish than Karajan's two earlier recordings, is still not particularly attractive.

For whatever reason (personal dislike?) Karajan has never recorded the *Academic Festival Overture*. Deutsche Grammophon has therefore revived Claudio Abbado's spirited 1968 performance—which again serves as filler for his gracious, sinewy account of the A major Serenade, Op. 16. Abbado and the Berlin Philharmonic have finally recorded the D major Serenade, Op. 11, as well; whether because of the conductor's greater "maturity" or the music's grander scale, the feeling of this performance is more monumental, reminiscent of vintage Klemperer. Happily, however, Abbado retains his ability to conjure pliant, singing lines from his players. On the whole, this bucolic, superbly executed account is the best since István Kertész's taut, symmetrical edition (London, deleted). Deutsche Grammophon's digital sound, if a trifle less atmospheric than the analog reproduction of the companion piece, is impressively sonorous. Impressive, too, is Abbado's complete orchestral performance of the *Hungarian Dances* with the Vienna Philharmonic.

The concerto box has only one completely new entry, the Op. 102 Double Concerto, played by Gidon Kremer and Mischa Maisky with the Vienna Philharmonic conducted by Leonard Bernstein. (The orchestra and conductor have also completed a new set of symphonies, overtures, and the *Haydn* Variations for DG.) This is an absorbing and controversial interpretation—"absorbing" because of the massive yet cleanly etched sound and the divergent, but not uncongenial, styles of the two principals (Maisky has a warm, generous temperament reminiscent of the young Piatigorsky; Kremer is more patrician, with a delicately tapered tone and a fondness for almost finicky detail); "controversial" because of the conductor's exceedingly slow tempos, idiosyncratic phrase adjustments, and punchy emphases. Only time will tell whether this wears as well as the more orthodox Angel interpretation by Perlman, Rostropovich, Haitink, and the Concertgebouw Orchestra (SZ 37680).

The Mutter/Karajan reading of the violin concerto—committed and elegantly incisive—was reviewed in Compact Disc format (400 064, September). As for the two piano concertos, I continue to prefer the firm outlines and impressive sobriety of the Pollini/Böhm D minor to the fancier tempo fluctuations, tenuto phrase adjustments, and (in my opinion) mistaken soft-focus style of the Pollini/Abbado B Flat. Both are well played by the Vienna Philharmonic and well recorded by DG. **HF**

Reviews



Reviewed by:

John W. Barker	R. Derrick Henry
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Scott Cantrell	Allan Kozinn
Will Crutchfield	Paul Henry Lang
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	Susan T. Sommer

Crumb: one of our best composers for voice and writing at last in his own language

CRUMB: Apparition. IVES: Songs (9).

Jan DeGaetani, soprano; Gilbert Kalish, piano. [David Starobin, prod.] BRIDGE BDG 2002, \$10.98 (Bridge Records, Inc., P.O. Box 1864, New York, N.Y. 10116).

IVES: Down East; Two Little Flowers; Tom Sails Away; The See'r: Songs My Mother Taught Me; The Sideshow; The White Gulls; West London; Afterglow.

The intrinsic worth of George Crumb's new cycle seems to me considerable, but even apart from that it is welcome on two counts. It's good to have one of our best composers for voice writing at last in his own language (and that of his performers and most immediate audience), and it's good that he has finally written a piece for voice and piano—a performing combination regularly assembled for "mainstream" concert purposes. Not that anyone should feel tied to his mother tongue or to traditional formats—but there *is* virtue in them, and their use bespeaks an effort both to communicate directly with hearers and to help willing performers integrate new music with old and propagate the former with fewer practical obstacles.

Apparition ("Elegiac Songs and Vocalises for Soprano and Amplified Piano") is linked to Crumb's Lorca-inspired works by a continuing fascination with images of death. The texts are from that rich vein of inspiration for American composers, Whitman's "When Lilacs Last in the Dooryard Bloom'd"—all but two lines from the section subtitled "Death Carol." Crumb has answered them with a deep lyricism, at

once fearful and consoling (and often quite openly tonal without ever seeming to insist didactically on being heard that way). The piano parts are tremendous. "Amplified," as far as I can tell without having seen a score, refers only to the portions played directly on the strings. These range from a mesmeric strumming in the first and last songs (described in the notes as an evocation of nature, it suggests to me—perhaps because of the Whitman association—a muted, metallic drumbeat or trudging march) to terrifying orchestral explosions in the second vocalise, "Invocation to the Dark Angel."

The interspersed vocalises may well be necessary foils to the almost uniformly slow and reflective Whitman fragments, but I can't help thinking that Crumb might do better to eliminate them. I find myself unwillingly transported to the world of *Ancient Voices of Children* or *Black Angels*, torn from the poet's solemn invocation of Death the "dark mother," the "strong deliveress," which had made me want to linger. It is good for a composer to have an identifiable, personal style—one could never turn on the radio midway and imagine this to be anyone else's music—but Crumb is repeating himself. It's rather as if (to borrow from Shaw) Verdi had turned up another "*Il balen*" in *Falstaff*.

Nor is DeGaetani fully convincing in the Crumb pieces, for all her marvelous efficiency in executing them. Even lacking a score, one imagines instructions like "breathy," "white tone," "stage whis-

per." Composers were wiser, I think, when they left such "expressive" devices to emerge only if part of the particular singer's genuine vocabulary of self-expression. One also wishes that this singer had another way to sing the top besides wailing straight tone. Still, there are many delicate pianissimo melismas and (best of all) simple, serene phrases where the Melba-pure placing and cool warmth of DeGaetani's tone (that contradiction seems the best way to explain its appeal) are quite ravishing.

The same virtues make the Ives side rewarding. Not that there isn't character: The merry-go-round in "Sideshow," with its unsteady horse and infectious tune, gives just the right combination of fun and a sense of impending hiccups. But it is the quality of sound, along with the odd fascination of the singer's *almost* static sense of line and energy, that makes these performances so valuable.

The Ives songs are national treasures, worthy of standing beside Britten's and Poulenc's as the finest large body of twentieth-century art song that isn't simply an extension of the nineteenth. Their current condition in the record catalogs is only fair, with fine performances by Boatwright, Stewart, Lear, and Nixon deleted. The Nonesuch collection by the present team (H 71325) is an essential, as is—though I am almost alone in considering it a great record—the Fischer-Dieskau (DG/PSI 2530 696). (Everyone has remarked that he fails to sing with an American accent; how many have noticed that, at most, only four

of his 18 songs have any specifically American associations in text or music?) In the current narrowed field, the new disc deserves a recommendation even stronger than the one it would get on its own considerable merits.

For the record, two entries here are commercial premieres, as far as I know, the haunting "Down East" being the more important of them. "Songs My Mother Taught Me," a deeply felt setting of the MacFarren translation published with Dvořák's chestnut, has been done before only on a little-known Brewster disc (BR 1299); the pianist isn't half as good as Kalish, but I think Walter Carringer's warm tenor captures the song's spirit more generously.

W.C.

HAHN: *Ciboulette*.

CAST:

Ciboulette	Mady Mesplé (s)
Zénobie/LaComtesse	Colette Alliot-Lugaz (s)
Françoise	Monique Pouradier-Duteil (s)
Young Girl/La Marquise	Carole Bajac (s)
La Mère Grenu/La Baronne	Claude Vierme (ms)
Antonin	Nicolai Gedda (t)
Roger	François le Roux (t)
Auguste/Victor/Tranchu/L'Huissier	Marcel Quillevéré (t)
Le Père Grenu/Le Marquis	Jean-Christophe Benoit (b)
Duparquet	Jose van Dam (bs-b)
Le Patron/Grisard/Le Maire	Jacques Loreau (bs)
La Mère Pingret	Laurence Badie (spkr)

Le Lieutenant/Oliver Métra

André Batisse (spkr)

Jean Laforge Choral Ensemble, Monte Carlo Philharmonic Orchestra, Cyril Diederich, cond. [Eric Macleod, prod.] EMI FRANCE 2C 167-73105/6, \$25.96 (digital recording; two discs, manual sequence) (distributed by International Book and Record Distributors, 40-11 24th St., Long Island City, N.Y. 11101).

Someone at EMI France must have a fast spot for Reynaldo Hahn. Rarely do commercial recordings arrive these days exuding such an aura of love and care as this performance of *Ciboulette*. Even the album cover is completely disarming: a nostalgic pastel drawing of Paris's famed vegetable market, Les Halles, c. 1867, filled with a throng of busy customers as the captivating heroine herself poses proudly in the foreground amid her fresh cabbages and carrots. ("Ciboulette" means "chives" in French.) Even Nipper is there—EMI's famous pooch graces the sign in front of the tavern "Au Chien Qui Fume," far more interested in watching the milling crowd and contentedly puffing on his meerschaum pipe than listening for his master's voice.

The two discs inside this box are a delight, too. The operetta charmed all Paris when it was new in 1923, and remains Hahn's most enduring stage work. It is one of those remarkable creations that unabashedly look backward—in this case to the post-Offenbach style of French light opera

as practiced by such turn-of-the-century composers as Lecocq, Messager, Audran, Ganne, Planquette, and Varney—yet still seem utterly fresh. The whole genre came to an end with this work, a delicious epitaph written, typically enough, by a foreigner who came to cherish Gallic musical virtues more than did most native-born Frenchmen. (Hahn's father was German, his mother Venezuelan.)

The libretto of *Ciboulette* might have served just as well for any of Hahn's predecessors: the opening tavern scene, for example, with its rousting soldiers and the giddy triangular affair involving Roger, the flirtatious Zénobie, and her discarded admirer, Antonin; or the colorful atmosphere of Les Halles, which introduces Ciboulette—a pretty, vivacious, and ingenious young thing, but well aware that Antonin is the man for her if she manages him properly; and the gala finale at Olivier Métra's salon, where Ciboulette, now the toast of Paris as the entertainer Conchita Ciboulero, sings her way into Antonin's heart. Assisting her along the way is the kindly Duparquet, wise in the ways of young love since he had once given his heart to a coquettish seanstress named Mimi who died of consumption—yes, Rodolfo of *La Bohème* reappears here as a middle-aged philosopher, and Hahn reserved some of his most touching inspirations for this lovable figure as he reminisces

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Critics' Choice

The most noteworthy releases reviewed recently

BEETHOVEN: String Quartets (complete). Talich Qt. CALLIOPE CAL 1631/40 (10), June.
BEETHOVEN: Violin Concerto. Ughi; London Symphony. Sawallisch. RCA ITALY RL 31590, Oct.
BRITTEN: Our Hunting Fathers; Folksong Arrangements. Söderström, Armstrong. EMI ASD 4397, Oct.
CARTER: Night Fantasies; Piano Sonata. Jacobs. NONESUCH 79047-1. Rosen. ETCETERA ETC 1008, Sept.
CARTER: Syringa; Concerto for Orchestra. DeGaetani, Paul, Sollberger. New York Philharmonic, Bernstein. COMPOSERS RECORDINGS SD

469, Sept.
ELGAR: Enigma Variations; Pomp and Circumstance Marches (5). Philharmonia, A. Davis. CBS IM 37755, Sept.
GLUCK: Orfeo ed Euridice. Speiser, Baker, Leppard. ERATO NUM 750423 (3), Aug.
GRIEG: Piano Sonata; Lyric Pieces. Kocsis. PHILIPS 6514 115, Nov.
MENDELSSOHN: String Quartets (complete). Melos Qt. DG 2740 267 (4), Sept.
MENDELSSOHN, TCHAIKOVSKY: Violin Concertos. Chung; Montreal Symphony. Du-toit. LONDON LDR 71058, Oct.
MOZART: Opera Arias. Te Kanawa; London Symphony. C. Davis. PHILIPS 6514 319, Sept.
MOZART: Serenade No. 10, K. 361. Collegium Aureum. PRO ARTE PAD 137, Oct.
MOZART: Symphonies Nos. 38, 39. Bavarian Radio Symphony, Kubelik. CBS IM 36730, July.
PROKOFIEV: String Quartets Nos. 1, 2. Sequoia Qt. NONESUCH 79048-1, Nov.
PUCCINI: Orchestral Works; Operatic Ex-

cerpts. Berlin Radio Symphony, Chailly. LONDON LDR 71107, Nov.
SALLINEN: The Red Line. Valjakka. Hynninen, Kamu. FINLANDIA FA 102 (3), Nov.
SCHUBERT: Songs (16). Ameling, Baldwin. ETCETERA ETC 1009, Oct.
SCHUBERT: Symphony No. 9. London Philharmonic, Boult. EMI SXLP 30558, Sept.
SMETANA: The Bartered Bride. Beňáková-Čápková, Dvorský, Košler. SUPRAPHON 1116 3511/3 (3), Aug.
SZYMANOWSKI: Orchestral Works. Kasprzyk, Semkow, Wit. EMI GERMANY IC 165-43210/2 (3), July.
TIPPETT: Concerto for Violin, Viola, Cello, and Orchestra. Pauk, Imai, Kirshbaum; Boston Symphony, C. Davis. PHILIPS 6514 209, Aug.
WAGNER: Operatic Excerpts. Various. SERAPHIM IG 6139_d(7), Nov.
NELLIE MELBA: The American Recordings. RCA AUSTRALIA VRL 5-0365 (5), Nov.

about his misspent bohemian youth.

Hahn intentionally turned his back on the fashionable light music of his day—the breezy jazz rhythms of the 1920s, the fox-trots, music-hall chansons, and other popular idioms of the time—and instead conjured up a more innocent era of romantic waltz songs, frothy duets, intricate ensembles, and extended finales. Not one note is carelessly placed or ill-considered: "When I compose," Hahn once said, "I want all my sequins to be clear and pure, creating that mysterious equilibrium which keeps everything miraculously afloat. . . . I like taste, I detest extravagance, I loathe imposture." The sinuous turn of melody, refined instrumentation, and delicately scented perfume of *Ciboulette* perfectly illustrate this fastidious composer's artistic credo. Some will doubtlessly find the music's fin-de-siècle flavor a trifle pallid compared to the boisterous high spirits of Offenbach and his successors. Even at that, few would deny that Hahn brought the era of French operetta to a dignified close with this beautifully crafted score, a work of unflinching grace, tenderness, charm, and elegance.

Pathé's affectionate performance would be difficult to beat, although I am bound to admit that Mady Mesplé and Nicolai Gedda are beginning to sound rather mature for a pair of wide-eyed young lovers. Still, the ear adjusts readily enough, especially since both singers are in such sympathy with the piece and bring so much nuanced character to their roles. José van Dam's mellow bass-baritone fits Duparquet like a velvet glove, while the rest of the cast sparkles with all the necessary insouciance. A generous portion of the dialogue is included (fortunately a French-English libretto also comes with the discs), and the imaginative production effects heighten the dramatic immediacy of the recording. Hahn's shimmering orchestration sounds absolutely ravishing here; Cyril Diederich

savors its fragrance without ever dawdling over details or slackening the forward pace. After this all-round triumph, Pathé might be encouraged to regroup the same forces and investigate Hahn's *Mozart* or *Le Marchand de Venise*. P.G.D.

MOZART: Zaide, K. 344.

CAST:

Zaide	Judith Blegen (s)
Gomatz	Werner Hollweg (t)
Soliman	Thomas Moser (t)
Principal Slave	Wolfgang Bellon (t)
Allazim	Wolfgang Schöne (b)
Osmín	Robert Holl (bs)

Salzburg Mozarteum Orchestra. Leopold Hager, cond. [Gottfried Kraus, F. Axel Mehrlé, Dieter Sinn, and Dieter G. Warneck, prod.] ORFEO S 55 832. \$27.96 (digital recording; two discs, manual sequence) (distributed by Harmonia Mundi U.S.A., 2351 Westwood Blvd., Los Angeles, Calif. 90064).

We have here a substantial but incomplete (and untitled) Singpiel that Mozart apparently began on spec in 1779–80 and abandoned when no performance prospects materialized. Immediately thereafter, however, he undertook *Die Entführung aus dem Serail*, a more ambitious Singpiel also about the rescue of a European maiden (in this case *Zaide*) from the harem of a benevolent Turk (Sultan Soliman). Whether viewed as a warm-up for *Entführung* or as a work of considerable inherent charm, *Zaide*—the title given by its first publisher—is well worth knowing. At its best, as in *Zaide*'s semi-famous aria "Ruhe sanft," the music has the power to take sympathetic possession of the central nervous system in that way that only Mozart knew.

The performance is one of the stronger ones in this Austrian Radio lesser-Mozart series, whose new affiliation with Orfeo has produced records of that company's typically outstanding quality (direct-metal-mastered and pressed by Teldec). As in *La*

finta giardiniera (DG 2740 234, July 1981), Hager sounds like another conductor when presented with material of some real interest. Of course Mozart himself sounds like another composer working in the opera-buffa and Singpiel genres; the evidence mounts that he had no feel for, and nothing to say in, the opera seria.

Except for the somewhat springier rhythmic flow and more forward and open recording, this performance balances out about even with the now deleted East Berlin recording conducted by Bernhard Klee (Philips 6700 097, February 1977). Blegen sings a nice "Ruhe sanft" and copes successfully with the later arias—not as murderous as Constanze's in *Entführung*, but no cinch. She's a bit warmer-toned than Philips's more biting-edged Edith Mathis; neither is entirely secure on top. Her proto-Belmont, Hollweg is no Wunderlich or even Simoneau, but he sings OK. He was, perhaps inappropriately, in sweeter voice when he recorded Soliman for Philips.

Then Peter Schreier was the somewhat firmer-profiled Gomatz. Now Moser is Soliman, one of his better roles since he can project some strength and the absence of much tonal allure isn't a great handicap. (Note that Soliman, unlike Pasha Selim, does sing—a melodrama, two arias, and a quartet.) As the Turkish slave Allazim, who helps *Zaide* and Gomatz escape, Schöne makes a thicker and more labored sound than Philips's Ingvar Wixell, but he also provides a firmer bottom line in the trio and quartet. As Osmín, a more modest role than his *Entführung* namesake, Holl sings his one aria, "Wer hungrig bei der Tafel sitzt," more firmly and resonantly than Philips's perhaps marginally livelier Reiner Süss.

Both sets do some improvising to present a "complete" opera. Since there is neither an overture nor a finale, Philips borrows a symphony (No. 32 in G, K. 318) and a march (in D, K. 335, No. 1). Orfeo dis-

penses with an overture, and for a finale fits new words to the opening song for a principal and three accompanying slaves. Both sets connect the musical numbers with spoken dialogue adapted from the libretto on which Mozart's librettist, Andreas Schachtner, is presumed to have based his work, which apparently hasn't survived intact. Orfeo's dialogue selection is more compact, and also more believably performed—ironically, by the singers themselves.

K.F.

SCHUBERT: Songs (13).

Elly Ameling, soprano; Dalton Baldwin, piano. PHILIPS 6514 298, \$12.98 (digital recording). Cassette: 7337 298, \$12.98.

An die Musik, D. 547; Schwestergruss, D. 762; Sei mir gegrüsst, D. 741; Die Blumensprache, D. 519; An den Mond, D. 296; Abendbilder, D. 650; Frühlingssehnsucht, D. 957, No. 3; Erster Verlust, D. 226; Nachthymne, D. 687; Die Sterne, D. 684; Der Knabe, D. 692; Wiegenlied, D. 498; Bertas Lied in der Nacht, D. 653.

Hard on the heels of an Etcetera collection (ETC 1009, October) comes yet another hour of Ameling's Schubert from the label that has already brought us several. I enjoy this one even more than the last, but can't imagine choosing between them: I'd cheerfully trade, oh, the last 15 Puccini sets for either.

Highlights this time include an irresistible thumbnailed trouser-role in "Der Knabe." (The boy pretends to be a bird, and Ameling and Baldwin flutter off gaily into the distance at the end; the very next song has his mother singing the little charmer to sleep!) "Schwestergruss" and "Bertas Lied" show a fine gravity of feeling and unbroken beauty of tone. Several pieces evoke the serenity of nocturnal skies; in particular, I'm grateful for the success with "Abendbilder," a wonderful but elusive song. It is too light for what one thinks of as a "soaring" voice, but it does need to soar, or to float heavenward, on the final page; none of the versions on my shelves is as celestial as this one. (My reservations about Baldwin and about a possible falling-off in vocal quality on the Etcetera disc apply not at all here. Perhaps Ameling was just having an off day; would that more singers were so "off" when they're on.)

Best of all is the opening song, for which the collection is named—especially in the hushed second verse, where one has the sudden, thrilling realization that the singer is not on automatic in this overfamiliar piece, but wholly possessed by it; that "a sigh from music's harp" might really have opened a heaven of better days for her, or kindled her heart to love in gray hours. *Die Musik*, one feels, has given much to Ameling; likewise, she to it, and to us.

W.C.

VERDI: Falstaff.

CAST:

Alice Ford
Nannetta

Katia Ricciarelli (s)
Barbara Hendricks (s)

Mrs. Quickly Lucia Valentini-Terrani (ms)
Meg Page Brenda Boozer (ms)
Fenton Dalmacio Gonzalez (t)
Dr. Cajus Michael Sells (t)
Bardolfo Francis Egerton (t)
Sir John Falstaff Renato Bruson (b)
Ford Leo Nucci (b)
Pistola William Wildermann (bs)

Los Angeles Master Chorale, Los Angeles Philharmonic Orchestra, Carlo Maria Giulini, cond. [Günther Breest and Renate Kupfer, prod.] DEUTSCHE GRAMMOPHON 2741 020, \$38.94 (digital recording; three discs, manual sequence). Cassettes (3): 3382 020, \$38.94. [Recorded in performance. April 1982.]

COMPARISONS:

Evans, Solti/RCA Italiana Lon. OSA 1395

F.-Dieskau, Bernstein/Vienna CBS D3S 750
Valdengo, Toscanini/NBC RCA LM 6111
Gobbi, Karajan/Philharmonia Ang. SBL 3552

Each listener will have to balance for himself the attractions and frustrations of this performance. On my scorecard, the final scene (III/2, Windsor Forest) registers on the whole in the plus column, its two predecessors (II/2, Falstaff's wooing, and III/1, the last Garter Inn scene) in the minus, with the others too close to call. Almost always, the balance swings positive when those singers who are able to, meaning most often Renato Bruson and Lucia Valentini-Terrani and sometimes Barbara Hen-

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dricks, fill out their music enough to create some vocal activity—not the same thing as humanly motivated and wholly pursued character action, but something, at least.

Brunson can be quite a nice Falstaff when: (1) the writing lies in that good, plump middle part of his voice, roughly from F up to E (with a decent upper F, in forte only, available on special order), and (2) he is content to let the sound flow freely into the music's organic shapes—as in the opening exchange with the aggrieved Dr. Cajus, the spooked midnight arrival at Herne's Oak, and parts of the *IV/1* scenes with Quickly and Ford (bridged by a lovely "Va, vecchio John").

He usually loses me when he tries to get fancy (the voice, even in its good octave, seems to lose all body at lower dynamics), and he gets into more serious trouble when the writing takes him into perilous territory. Partial as I am to a straight-singing-baritone Falstaff, the singer has to be equipped for his frequent conversational anchorages, generally more straightforwardly communicative, in the fourth or fifth from F or G down to the C below middle C. This condition was met wonderfully by the robust-voiced young Giuseppe Taddei (in the still vital 1951 Cetra set), and was at least finessed by Tito Gobbi (Angel), who—for once not having to worry much about a role's top—contrived to toughen and weight the rest of the voice with a snarl that he shrewdly made the basis of his characterization. The bass implications of Falstaff's tessitura were pursued interestingly by Fernando Corena in London's strongly cast 1962 excerpts disc (OSA 1154, deleted). Note how Brunson's mask slips off, after Cajus's departure, in the opening-scene marks-and-pennies strategy session with Bardolfo and Pistola, or how the Honor tirade fades out and in with the music's dips and rises.

Valentini-Terrani has the same kind of range problem. The absence of a usable chest register not only undercuts her presence in the merry wives' ensembles but leaves her minimally armed for the range of Quickly's actions that take her below the break, generally running to certain kinds of flattering and ingratiating ("Reverenza") or conspiratorial confiding ("dalle due alle tre"). In such writing, she can't compete with Giulietta Simionato (London), Regina Resnik (CBS and London excerpts), or Fedora Barbieri (Angel), but where the music lies comfortably for her, she sings confidently and attractively. She is quite lively in her *II/2* recounting of the interview with Falstaff, and fairly riveting in *III/1* as she begins telling Falstaff the legend of the Black Huntsman ("Quando il rintocco della mezzanotte"). Here this scene comes briefly to life, only to falter when Quickly and Falstaff go inside and Alice takes over the story.

Hendricks does some beautiful singing when Nannetta's writing inclines to the



Brunson's Falstaff: quite nice in the good, plump middle part of his voice

high and light, as in the recurring "Anzi rinnova come fa la luna" completion of Fenton's "Bocca baciata" and in her fairy-queen entrance and the aria in the final scene. However, when she has to sustain tone below the upper midrange—say, from the C above middle C on down—the sound has an unsupported quality that I'm not crazy about. This vocal configuration makes for an odd match-up with her Fenton. Dalmacio Gonzalez manages the aria OK, but in general his basically appealing light tenor tightens here as he reaches upward or outward. The class of this field is still Alfredo Kraus (London), though it's a shame that Luigi Alva, a rather recessive presence in the Angel set, didn't get to record more than the aria in the London excerpts.

The Ford household as a whole isn't well represented here. Even Hendricks doesn't show much alertness to Nannetta's precarious perch on the brink of adulthood. It's no surprise that she is allowed (directed?) to simper when she tells her mother (*II/2*) about her father's plan to marry her to Cajus. But listen to what London's splendid Mirella Freni, the excellent Ilva Ligabue as Alice, and Georg Solti do with this moment by taking it absolutely seriously. When Nannetta presents her mother with a real problem—yet another one arising from the impossible behavior of men, and a more immediate one than Falstaff's absurd proposition—a fiercely protective maternal instinct is engaged, and Alice can release her redoubled determination in a really charged "Gaie comari di Windsor." Compare the interestingly different choice that Ligabue and Leonard Bernstein make here in the CBS set—an Alice targeted more narrowly toward revenge than toward the broader goal of self-justification in a more rationally

ordered world.

No choice at all is made here in the DG set. "Gaie comari di Windsor" and the ensuing ensemble are just pecked out, like most of the women's ensembles. In fact, both the senior Fords miss most of the opportunities of roles that would seem more congenial for them than their usual weightier repertory. The strange recorded careers of Katia Ricciarelli and Leo Nucci are beginning to fit into a pattern observable among many current singers. Less and less able to activate themselves physically or emotionally unless they're pumping at or near maximum physical output, they seem actually to need roles that stretch them to the physical limit, just to get themselves functioning.

Apart from failing to find how Alice exercises control in her scenes, Ricciarelli simply doesn't sound very good much of the time. The voice often goes out of focus even in the midrange, and upward intervals of more than a third are consistently managed by ugly scoops—the normally surefire climactic phrases of the *I/2* letter-reading ("Facciamo il paio . . ." and "E il viso suo. . .") are hashed. Nucci meanwhile gets out the occasional reasonably solid note (e.g., in the more strenuous passages of the monologue—the high G is there, and not bad), but in the context of a namby-pamby vocal jumble. The basic points about Ford can be made with as modest a voice as the character baritone of Cetra's Saturno Meletti, and all sorts of other possibilities open up given the variously more vibrant presences of Robert Merrill (London), Renato Capecchi (London excerpts), and Rolando Panerai (CBS). But I don't see what you can do without *some* kind of vocal coherence.

COURTESY DEUTSCHE GRAMMOPHON/CAHEN

Falstaff, of course, is widely thought of as a "conductor's opera," a dangerous habit of thought in an era when the opera conductor's role is so badly understood. We have already noted instances of conductorial ideas being successfully expressed in the form of singers' actions, supported and filled out by orchestral actions. The best *Falstaff* conductors on records—Toscanini, Bernstein, Solti—understood this, and their performances remain perpetually fresh in the dramatically vital work of their casts and orchestras.

Giulini has lots of ideas about *Falstaff*, and I like many of them. But the nature of this project—a production of what he describes in a booklet interview as "one of four or five ideal operas that I know," in which he was given effective control over all artistic matters—seems to have drawn him into the trap of "definitiveness." Instead of a performance happening in the moment, seemingly for the first time, in response to immediate needs, we get shapes executed out of memory and habit.

To be sure, the shapes are often attractive, locating much of the opera's charm and loveliness. (Compare the sterile machinework of the second Karajan recording, Philips 6769 060, June 1981.) Note the care with which Giulini has voiced those crashing orchestral chords in the opening scene, or the explosive reentrances of the rampaging men in the wooing scene. Tempos are generally moderate, though subjectively they may seem slower because of the pre-vaillingly rounded rather than sharp-edged mode of articulation. Transitions are made with disarming sophistication; in *I/2*, note the ease but also decisiveness of the bridge between the first Nannetta/Fenton interlude and the reentry of the women.

The Los Angeles Philharmonic does an impressive job of executing Giulini's elaborate array of rhythmic and articulatory choices, falling short only in the matter of a truly distinctive tonal core at moderate to loud dynamics. (It may be that a more vivid or sensuous orchestral sound would relieve the feeling of doggedness besetting certain rhythmically repetitive phrases that other conductors solve by quicker and/or sharper execution.) The soft playing is quite lovely; listen to the shimmer and rhythmic spring of the music for muted strings with harp, flutes, et al., after Nannetta has led on her fairy cohorts in the final scene.

The one category of shapes I can't buy is the methodically ground-out ensembles, which eliminate even the possibility that human problems are being dealt with. (Poor Meg, who has a hard time establishing any identity under the best of circumstances, has no chance here.) But this is only an extreme expression of the performance's avoidance of the dramatic urgencies of the characters. The failure to pursue them may explain the flatness of *II/2* and *III/1*—the clash of those urgencies and its aftermath.

It's hard to believe that the supporting roles couldn't have been better cast. The Cajus is just barely adequate (no real projective strength for the outbursts of the opening scene), the Bardolfo and Pistola not even that. As in most *Falstaff* casting matters, the strongest team is London's, with my favorite Bardolfo (Piero de Palma), a solid Pistola (Giovanni Foiani), and a decent Cajus (John Lanigan). Probably the best Pistola is Angel's Nicola Zaccaria, and certainly the most distinctive Cajus is CBS's Gerhard Stolze (seconded by a reasonably good Bardolfo and Pistola in Murray Dickie and Erich Kunz).

Deutsche Grammophon's live-performance recording is warm, full, and clear.

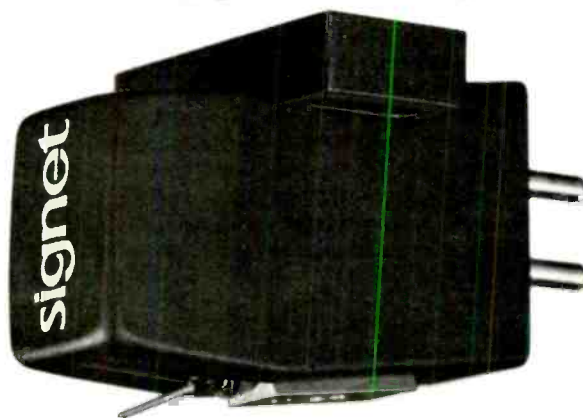
K.F.

Recitals and Miscellany

CAROLYN WATKINSON: Wigmore Hall Recital.

Carolyn Watkinson, mezzo-soprano; Tan Crone, piano. [Roy Emerson, prod.] ETCETERA ETC 1007, \$10.98. Cassette: ET 1007, \$10.98. [Recorded in performance, Nov. 2, 1982.]

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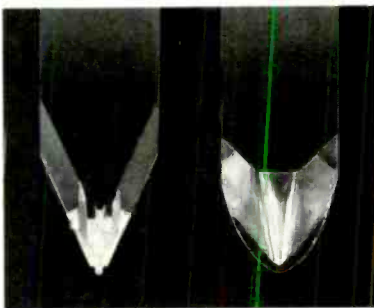
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BERG: Four Songs, Op. 2. BIZET: Chanson d'avril; Sérénade; Adieux de l'hôte arabe. BRAHMS: Treue Liebe, Op. 7, No. 1; Mädchenlied, Op. 107, No. 5; Mädchenlied, Op. 85, No. 3; Das Mädchen spricht, Op. 107, No. 3; Von ewiger Liebe, Op. 43, No. 1. DVORÁK: Four Songs, Op. 2. IVES: Walking; Grantchester; Tom Sails Away; The Cage; The Sideshow. TRAD.: The Water of Tyne.

It's tiresome and not very useful, we all know, to "review" a new recording simply by droning a list of the characteristics it does or does not share with selected earlier ones. But when a performance fails to assert its own context, then, like it or not, the mind's ear will wander to that other record—the one that made us value the singer, or go to the piano to play over the song, or pause to read the poem once more. The fine young mezzo Carolyn Watkinson is fast making a place for herself on records (most notably in the title part of Jean-Claude Malgoire's much-discussed *Serse*, CBS M3 36941), but my response to her first recital is mostly to wonder why it does not do those things for me, and to recall others that have.

It is partly a matter of things she does not do, things I might wish she had absorbed from some of the records hers makes me want to get from the shelf. She does not find anything sensuous in the rise and fall of the "*Chanson d'avril*," for instance, or suggest, as others have, what the handsome white stranger might be losing as he bids his Arabian hostess farewell. She does not (or cannot, but I really suspect it's the former) let her lower voice fill out the warm, expansive lines of "*Von ewiger Liebe*."

That list could be droned on group by group; better to praise what Watkinson can do. She can, among other things, hold a note rock-steady against shifting dissonances in the accompaniment. She can sing (in the Berg) with almost no vibrato, yet not seem to make a special effect of it (perhaps because she has learned to do it so naturally for Handel). Above all, she can sing a varied, serious, and demanding program without, so far as I noticed, a single wrong note, verbal slip, fault of accent, or lapse of intonation. There is hardly a moment of imperfect ensemble. Nothing seems to stand between artistic intent and physical fact. Watkinson, then, can give, with one try, before an audience and under pressure, a performance that matches the most rigorous standards of studio recording.

But at what cost? I cannot help but feel that the formidable enabling discipline has been cultivated at the disabling expense of explorations, reflections, pursuits of impulse, and indulgences of fancy such as might have made the artistic intent worthy of the technique. The harsh fact is that nothing here makes me curious to attend Watkinson's New York recital debut when eventually it takes place. Harsh, because she is still a young artist and will surely

grow—yet the observation needs to be made, because she is typical, a singer in the image of those piano competition winners everyone complains about, who get everything right and are even "expressive," but whose names one somehow can't remember next week.

To end on a more positive note, it's interesting to see how Ives fares as his songs gradually penetrate the international repertory. "Walking," in fact, strikes me as the most successful number on the program, with an outdoorsy boldness of stride (but singers who can't do it convincingly should not adopt the Jan de Gaetani "tradition"—it has already become that—of reading aloud the descriptive marginalia while the interludes are being played). I've never heard the whistle effect in "Tom Sails Away" realized so neatly as here. But of course there's that *other* Ives record—in this case a less accurate, though studio-produced, one, where in the first phrase of "Grantchester" Evelyn Lear gives an almost physical sense of lying "day long . . . flower lulled in sleepy grass."

Well, that's just how I said I wouldn't end. Final observations: Tan Crone is a splendidly capable accompanist, and with the deletion of Fischer-Dieskau's hypnotic performance this disc becomes the best choice for Berg's gripping Op. 2. W.C.

Theater and Film

LA CAGE AUX FOLLES: Original cast recording.

Music and lyrics by Jerry Herman. Donald Pippin, cond. [Thomas Z. Shepard, prod.] RCA HBC 1-4824, \$9.98. Cassette: HBE 1-4824, \$9.98.

The new musical *La Cage aux folles* makes an enjoyable evening at the theater, but the ways in which it is most distinguished are only partly capturable by electronic means. At the Palace, David Mitchell's magical scenery whisks the spectators through the alleys of Saint-Tropez to the door of the world's most celebrated TV bar and then spirits them inside just in time to see the curtain rise on the opening high-drag nightclub act. Later changes of scene (upstairs, downstairs, backstage, out into the streets and hot spots of town) are accomplished with the same fluidity. It sounds right to call the transitions "cinematic," but they have nothing to do with the movies. All the pieces fall into place in the audience's full view without a single blackout, cut, or dissolve. Theoni V. Aldredge's costumes juxtapose, to brilliant effect, the plain and the madly fanciful, especially during the final curtain call, when the chorus line's broad-clothed finery (and wigs!) go flying into the loft, and the Cagelles stand revealed in trim gray

slacks and tops as ten nice boys—and two nice girls.

The book is by Harvey Fierstein, who has already shown the knack (in his long-running *Torch Song Trilogy*) for suffusing the gay life with such quanta of middle-class convention and sentimentality that a taboo subject becomes acceptable to an enormous, previously inaccessible public. All credit to Fierstein for building bridges. But such bathos! His evangelism is getting soapier and soapier. The characters get lost in the suds. However their originals in Jean Poiret's Paris farce may have appeared, the Renato and Albin/Zaza of the French movie hit were—within their special world—round, full, and credible. The Broadway versions (with Renato rechristened Georges) are washed out and thin.

The blame does not fall on Fierstein alone. The music and lyrics fail to do their share. They are by Jerry Herman, who hereby adds another money-machine hack-work smash to a series that also includes the fairly indistinguishable *Hello, Dolly!* and *Mame*. Though he writes lyrics with considerable facility, his rhymes and rhythms don't remotely compare with the best. There are the expected, driven, tedious mantras: "La Cage aux folles!/The maître d' is dashing!/Cage aux folles!/The hat-check girl is flashing!" (The title songs of Herman's earlier hits play precisely the same incantatory game.) There are the pounding, padded lines and stanzas: "So hold this moment fast./And live and love as hard as you know how./And make this moment last./Because the best of time is now, is now, is now." And does none but Beckmesser hear the impurities in the compound rhymes Herman yokes together? (Italics indicate stress.) "When life is a *real bitch* again./ And my old sense of humor has up and gone./It's time for the *big switch* again./I put a little more mascara on./ When I count my *crow's feet* again./And tire of this perpetual marathon./I put down the *john seat* again./And put a little more mascara on." Herman tosses in a bit of French (Perrier, Dubonnet, Givenchy), but in the main steers clear of macaronics (exception: "Try making it [i.e., "your voice"] rough and gruff and low./Try more of John Wayne and less Brigitte Bardot"). At least there are in the lyrics no such Miss-Piggy-isms as "Excusez-moi!" which peppers the book. All the same, Herman's lyrics stay with you—maybe because of their prosaic plainness. Take lines like these: "Through the crash of the waves I could tell that the words were romantic./ Something about sharing./Something about always." Then forget them and improvise an equivalent; it will turn out as written.

As for Herman's tunes, they lack class but are infectious. After one exposure, it takes days to shake them, especially since as *numbers* they are arranged to build and (Continued on page 107)

The Tape Deck

Critiques of new cassette and open-reel releases by R. D. Darrell

Fireworks Music

Blazing sonic sensationalism has electrified concert audiences ever since the spectacular 1749 peace celebration, in London's Green Park, for which George III commissioned Handel's *Royal Fireworks Music* and actual pyrotechnics. And in more recent years, every new advance in recording technology has had to be documented by ever-more incandescent electrical/high-fidelity/stereo/digital realizations of showy scores.

My first batch of current examples sticks to long-familiar brass-sonority and percussion-thunder display—beginning appropriately with the eponymous Handel Suite itself as arranged by Howarth for the ultra-brilliant Philip Jones Brass Ensemble. Augmented by various other Handelian transcriptions, these rescorings for George's favorite "martial instruments only" surely would have delighted the King as much as they will now—in the most scintillating and plangent sonics—thrill today's audiophiles (London digital/chrome LDR5 71064, \$12.98.) And the Jones Ensemble's ringing supremacy is reaffirmed in its Locke and Purcell contributions to a "Best of the Brass" anthology of mostly Baroque materials, also starring the Canadian Brass, Eastman Brass Ensemble, New York Trumpet Ensemble, and Maurice André (Moss Music Group CMG 1139, \$7.98).

The popular Canadian Brass Quintet is heard alone in typical form (with anachronistic tuba but *sans* live-concert comic turns) in a resplendently recorded "Glory of Baroque Brass" German and English miscellany (RCA Red Seal digital/chrome ARE 1-4574, \$12.98). And in the most amusingly outré all-kitchenware special since Audio Fidelity's 1956 "Bach for Percussion," Harold Farberman leads an all-star group of symphonic percussionists in his own tintintabulating Beethoven, Berlioz, Bizet, and Pachelbel transcriptions (MMG digital/chrome D-CMG 115, \$10.98; with complete scoring specs).

Super-symphonic scores. In the standard (music-as-she-is writ) repertory, the current showpieces are refreshingly just a bit off the most beaten paths, or at least distinctively individual in approach—as might be expected from such exciting newcomers to conducting fame as Charles Dutoit (b.

1936), Vladimir Ashkenazy (b. 1937), and Enrique Bátiz (b. 1942).

Dutoit strengthens his claim to the mantle of Ansermet with dazzling state-of-the-art versions of some of his compatriot's hit-vehicles: the most dramatically gripping Falla ballet coupling yet, *The Three-Cornered Hat* and *Amor brujo*, and a notably poetic Saint-Saëns *Organ* Symphony (London digital/chrome LDR5 71060 and 71090 respectively, \$12.98 each). Dutoit's superbly reenergized Montreal Symphony is admirably augmented by sopranos Colette Boky and Hughette Tourangeau in the ballets, but organist Peter Hurford is handicapped by a coarse-toned, non-concertante-balanced instrument.

Bátiz miraculously endows the London Philharmonic with authentic Iberian accents for a Turina program that not only rescues the familiar *Danzas fantásticas* and *Rapsodia sinfónica* (Frank Wibaut, piano) from the travelogue genre, but establishes the masterpiece status of the too-seldom-heard *Sinfonia sevillana* (Angel digital/ferric 4XS 37950, \$9.98, no notes).

Two other examples, spectacular indeed for sheer sound, may be less likely to enrapture anyone but their conductors' fans. The Concertgebouw seldom has seemed tonally lovelier than in Liszt's extraordinary *Faust* Symphony (with Wagner's *Faust* Overture and the familiar excerpts from Berlioz's *Damnation de Faust* in Philips Prestige-box digital/chrome 7654 089, \$25.96). But Dorati's readings are just too magisterially restrained, lacking the sharper-edged *diable* of the Ferencsik/Hungaroton Liszt ("Tape Deck," Oct. 1980). Then, as moving as Tennstedt and the London Philharmonic are in the quieter moments of Bruckner's Eighth, they fail to capture its virile force and full grandeur (Angel Prestige-box digital/ferric 4X2S 3936, \$19.98).

Warhorse rejuvenations. It's almost incredible how today's editing and chromium cassette duplication techniques can restore and enhance the original vitality of yesterday's spectaculars. Witness EMI's star-studded "Portrait of the Artist" double-play anthology TCC2-POR series (\$12.50 each, no notes)—especially the most awesome of all Mahler *Resurrections*, the c.1963 Klemperer/Philharmonia masterpiece (54293). And nearly as overwhelming are the monumental 1973/1976 Kempe/Dresden Strauss *Alpensymphonie* and *Heldenleben*, heard here uninterrupted! (54279).

Of more specialized appeal are Pollini's Chopin First Concerto (with Kletzki) and solo recital of 1960/1970 (54275); the Georges Prêtre/Orchestre de Paris Poulenc Organ Concerto and *Jeux d'esprit* (54289); and Berglund's Sibelian novelty, the early *Kullervo* Symphony and lighterweight *Scènes historiques* Suite No. 1 (54287).

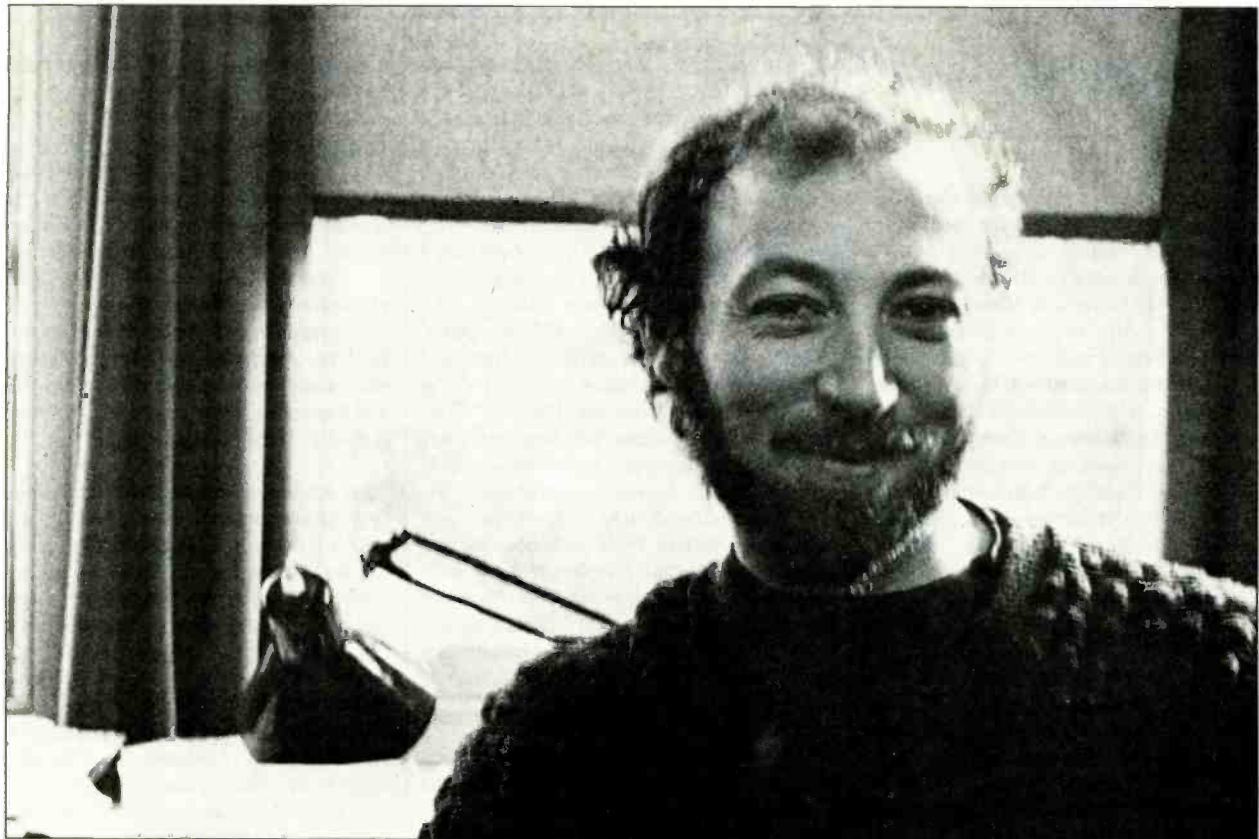
Then, RCA Red Seal's 0.5 series of chromium cassettes reminds us anew of the incomparable Heifetzian virtuosity in the favorite Mendelssohn and Tchaikovsky concertos with Munch's Bostonians, 1959, and Reiner's Chicagoans, 1957, respectively (ARE 1-4567, \$12.98).

Reel sonic sensationalism. Serendipitously pertinent to my present preoccupation with pyrotechnical symphonic showpieces are the latest open-reel releases from Barclay-Crocker (313 Mill St., Poughkeepsie, N.Y. 12601). Indeed the latest version of the quintessential spectacular, Tchaikovsky's *1812* (coupled with the *Romeo and Juliet* Overture in Philips/B-C unidirectional reel H 9500 892, \$11.95) is unique both for its one-way format, eliminating any trace of reverse-channel spillover, and the unmannered straightforwardness of the Colin Davis/Boston Symphony performance with Tanglewood Festival Choral interpolations in the *1812*.

Barclay-Crocker's reelizations of two Philips digitally recorded programs (\$11.95 each) contrast polar extremes of audiophile appeals: primarily to the musically unsophisticated in the "Pops in Space" program (H 95200 921) that marked John Williams's debut with the Boston Pops Orchestra in some of his own flashy filmscores (*Star Wars*, *The Empire Strikes Back*, etc.) and to connoisseurs of tender poetry and sly humor in a glowing complete Ravel *Ma Mère l'oye* ballet coupled with a Saint-Saëns *Carnival of the Animals* that not only is mercifully free of any spoken-verse superfluties, but also presents Previn and his Pittsburgh Symphony players in top form (H 9500 973).

Another digitally recorded program (Pro Arte/B-C F 0100, \$9.95) displays the stratospheric—at times excruciatingly sharp-edged—trumpet virtuosity of Wolfgang Bach in relatively familiar Molter and Telemann concertos, plus a less well-known one by Neruda, and what may be the first recording of an imaginatively scored Concerto in F by Johann Samuel Endler (c. 1700-62)—all with the Winschermann/Bach Solisten Ensemble. **HF**

BACKBEAT[®]



MARIO PACHECO

Who Is Richard Thompson?

A longtime critical favorite, this songwriter-guitarist has remained a well-kept secret in the U.S.—until now.

by Sam Sutherland

IMAGINE A SONGWRITER whose best work combines adult themes, timeless imagery, and classic folk and ballad song forms with enough rock and roll vitality to invite comparisons with Bob Dylan, Robbie Robertson, and Neil Young. Add a formidable musical style and guitar playing at once richly eclectic and immediate in its galvanic power. Finally, place these traits in the context of a 16-year recording career encompassing band, solo, and duo work.

Such a figure should certainly cut a highly visible path through modern pop and rock. Yet until recently British folk-rock stylist Richard Thompson has remained vir-

tually unknown here. In Europe and the British Isles, his recordings with former wife Linda Peters Thompson earned high praise and respectable, if modest, popular acceptance. His distinctive electric-guitar playing, shaped by a vivid but gimmick-free synthesis of folk, country, blues, and rock elements, has generated wide session demand throughout his career and has been echoed in the work of a new generation of players, most notably Dire Straits' Mark Knopfler.

In the U.S., Thompson is remembered chiefly as lead guitarist for Fairport Con-

vention; his more recent solo work and the six albums recorded with Linda have garnered only scattered exposure here. Indeed, his vinyl legacy has been largely restricted to the import bins, a source of frustration to the determined minority that has been lucky enough to follow him since his departure from Fairport in 1972.

The teenaged Thompson tasted the promise of conventional rock stardom when that band first appeared in 1967 as a decidedly rock-powered ensemble. Yet he and his partners soon forged beyond their original path as a British counterpart to the Jefferson Airplane by reaching into Scottish and English folk music for inspiration and

material. At its most atmospheric, Fairport's music elevated folk-rock to much more than the clichéd pastiche one usually associates with the genre.

Richard's subsequent solo work carried that fusion of rock and traditional forms even further. Augmenting his spidery Stratocaster lines with mandolin, hammer dulcimer, and other, more esoteric string instruments, he used often striking instrumental contrasts from silver horns and violin to concertina and accordion. His partnership with Linda set her pure, controlled alto as a foil to his own craggy but increasingly expressive baritone. Even his earliest songs rung with a moral conviction rare in rock, but Richard's deepening interest in Islamic philosophy introduced an understated spirituality to his work.

Ironically, it was not until the Thompsons' personal and professional ties started to unravel that the duo began to attract attention here. Richard's long-overdue U.S. solo stage debut in December of 1981 drew critical acclaim, and the release several months later of his and Linda's "Shoot Out the Lights" [see BACKBEAT, August '82] further enhanced that critical standing. That album, their last together, also formally marked a reunion with Fairport's original producer, Joe Boyd, who issued it through his own small Hannibal label. It offered a riveting array of crackling uptempo rock, lambent ballads, and puckish folk dances while addressing the turmoil of collapsed emotional commitments.

A spring tour by the couple, backed by a crack band dotted with Fairport alumni, earned sold-out houses and even more praise from the press, contributing to the album's emergence on the top rungs of virtually every major year-end critical poll. News of their impending separation only heightened awareness of the Thompsons, an ironic benefit, given Richard's career-long avoidance of the self-relevatory style of other singer-songwriters.

His new solo album, "Hand of Kindness," [see BACKBEAT, September] rivals "Shoot Out the Lights" in both musical energy and thematic gravity. Plans are afoot for the reissue of the duo albums in this country, and Thompson's first video, *The Wrong Heartbeat*, was aired on MTV in October to coincide with his fall tour. As reflected in the following, Thompson's perspective on his unsung musical pilgrimage is refreshingly free of bitterness. I spoke with him on two separate occasions: during the final stages of the 1982 tour and on the eve of the new disc's release. Boyd was present at the first interview and some of his astute observations are included here.

Backbeat: The past eighteen months have marked a real turnaround in America's awareness of your music. Since there has been no outright change in your musical direction, is it safe to say the tours did the trick?

Richard Thompson: They certainly helped. I think in America out of sight is definitely out of mind. Without touring, it would be hard to make any impact at all.

Backbeat: From conversations with your manager, Jo Lustig, I know you had long wanted to tour here. Why the delay? Was the reason largely financial?

Thompson: Yeah, usually. There were a lot of factors. Having children made it difficult, and it was hard to get record-company support. So it was a combination of internal and external affairs.

It was very frustrating. There must have been two or three tours that were pretty much set up, only to fall through.

Backbeat: Does your belated arrival here explain your recent interest in recording with American musicians? John Hiatt appears on the new album as one of the backing vocalists, a role he has taken for Ry

Cooder. So does Bobby King, another Cooder cohort. Were you attracted to them through Cooder's work?

Thompson: Not particularly, no. I met Hiatt on this record, actually. I was attracted to him because of the texture of his voice—it has a driving quality to it. We asked him who he'd like to sing with, and he said Bobby King. I wouldn't have thought of putting them together.

Backbeat: I understand you're also on T-Bone Burnett's next album [see page 98].

Thompson: I met T-Bone about a year ago. He played with me at McCabe's [McCabe's Guitar Shop is a Santa Monica mecca for folk musicians], and I hang out with him occasionally. I think I only show up on one track on his new record. But it was good fun.

Backbeat: Not to stretch the point too much, but Burnett is a committed Christian

Selected Discography

Although still in his early 30s, Richard Thompson has managed to appear on a formidable number of albums between his days with Fairport Convention and his subsequent career as a soloist. But because he remained little more than a cult artist here, his early solo and duo recordings are difficult to find, even British imports are rare. New fans interested in an overview of his work with Fairport might want to investigate either of two anthologies. As for Thompson's solo and duo recordings, these have yet to yield a formal retrospective.

FAIRPORT CONVENTION

Fairport Convention. Cotillion/Atlantic 9024; 1969. (U.K.: Polydor 538 035; 1969. Reissue: 2384 047.)

Fairport Convention. A&M SP 4185; 1970. (U.K.: "What We Did on Our Holiday." Island ILPS 9092; 1969.)

Unhalfbricking. A&M SP 4206; 1970. (U.K.: Island ILPS 9102; 1969.)

Liege and Lief. A&M SP 4257; 1971. (U.K.: Island; 1969.)

Full House. A&M SP 4265; 1972. (U.K.: Island; 1970.)

Angel Delight. A&M SP 4319; 1972. (U.K.: Island; 1971.)

History of Fairport Convention. U.K.: Island ICD 4 (two discs); 1974.

The Fairport Chronicles. A&M SP 3530 (two discs); 1975.

RICHARD THOMPSON

Henry the Human Fly. Reprise 2112; 1972. (U.K.: Island 9197; 1972. Reissue: IRSP 20.)

Richard Thompson. U.K.: Island ICD 8 (two discs); 1976. Compilation of rare live recordings and unreleased studio material.

Strict Tempo. U.K.: Elixir LP 1; 1981. An album of instrumentals featuring Thompson on guitars, mandolin, banjo, hammer dulcimer, and bass, backed by drummer Dave Mattacks. The label is Thompson's own, created for direct mail sales abroad,

but some copies have been imported.

Hand of Kindness. Hannibal HNLP 1313; 1983.

RICHARD AND LINDA THOMPSON

I Want to See the Bright Lights Tonight. U.K.: Island ILPS 9266; 1974.

Hockey Pokey. Island ILPS 9305; 1975. (U.S. and U.K.)

Four Down like Silver. Island ILPS 9348; 1976. (U.S. and U.K.)

Live (More or Less). Island ILPS 9421 (two discs); 1977.

Misleading graphics obscure the fact that this set actually includes all of "I Want to See the Bright Lights Tonight," along with a number of tracks from the British "Richard Thompson" disc.

First Light. Chrysalis CHR 1177; 1978. (U.S. and U.K.)

Sunnyvista. U.K.: Chrysalis CHR 1247; 1980.

Shoot Out the Lights. Hannibal HNBL 1303; 1982.

THOMPSON ON GUITAR

The Electric Muse. U.K.: Island/Transatlantic FOLK 001 (four discs); 1976. Excellent boxed anthology of British folk-rock from various performers.

Over the Rainbow. U.K.: Chrysalis; 1975. Various artists, including Richard and Linda Thompson, recorded at the last concert at London's Rainbow Theater.

Nick Drake: Five Leaves Left. U.K.: Island ILPS 9105; 1969.

Ian Matthews: If You Saw Thro' My Eyes. Vertigo, 1971.

Sandy Denny: The North Star Grassman & the Ravens. A&M SP 4317; 1971.

Sandy. A&M SP 4371. (U.K.: Island ILPS 9207; 1972.)

Ashley Hutchings: Morris On. Antilles, 1974. (U.K.: Island)

Albion Country Band: No Roses. Antilles (U.S.); Island (U.K.)

Loudon Wainwright: Fame and Wealth. Rounder 3076; 1983.

who expresses his spiritual convictions through his music. That's true of your work, too, and I can't help wondering if this isn't a link.

Thompson: I think possibly, yes. A believer is a believer.

Backbeat: So it's safe to say your interest in Sufism [a form of Islamic mysticism] remains an active principle in your work?

Thompson: Yeah. Sufism is a rather debased word, so I just call it Islam. I'm still practicing.

Backbeat: However admirable the commitment, matters of the spirit when combined with pop culture have so often wound up being heavy-handed, glaring. But you and T-Bone, in different ways, have always steered clear of flashing obvious signals. The issues are there, as are your feelings, but you don't draw attention to Islam *per se*.

Thompson: Preaching to the unconverted is largely a waste of time, especially if you approach people directly and in a blind fashion. People have seen too much of it. They've been disappointed by too many promises from too many factions within spiritual groups.

I've always preferred music that has a certain subtlety in what it's saying. I think it's more effective to be slightly ambiguous, perhaps suggest something deeper through a fairly orthodox type of love song. Just suggest it, and if that's not acceptable to people, they can just leave it.

Backbeat: You also sidestep the specifics of sectarian differences. You reduce—but don't simplify—them to the fundamentals of spirit, faith, and morality. That way, you reach across different faiths.

Thompson: I think it's important to speak to people in a language they understand, whatever that language is. And I think popular music is *the* common currency for whatever you want to say.

Backbeat: Let's turn from the message to the musical vehicle. Many of your songs have another kind of double vision: They address timely problems, yet in language and music that could be found in unearthed works from hundreds of years ago.

Thompson: The richest source of songs is still Scottish ballads. It's unbelievable; there's nothing like them.

Backbeat: Yet in contrast to the folk music community here—which in its "purest" intentions has sometimes tried to preserve the mummified remains of lost folkways—you choose to create your own songs. You support a living tradition.

Thompson: Well, in the British Isles, traditional music has always been that way. It's not something that gets dug up and resurrected. That's why in America people often misunderstood Fairport's intentions. They'd think of Fairport as a band that was reviving merry old England—a kind of Hollywood version of Olde England. If we had dressed up a bit, in sixteenth-century pageantry, we could've taken it further. But

Fairport was always a contemporary band. That's why we played rock and roll.

Backbeat: Steeleye Span, which had earlier been founded by one of your Fairport partners, Ashley Hutchings, went on to package themselves in just that way.

Thompson: I think very much so, yes.

Joe Boyd: And the Americans rewarded them for it.

Backbeat: But how do you keep a tradition vital?

Thompson: Well it's important to go back in time, to listen to music. If you want to play jazz, you have to go back to early jazz. You can't start at Albert Ayler: You won't have any grasp of what he's saying.

You can't understand the blues unless you've heard Charlie Patton and the other early guys. When you understand what's gone before, then you can really innovate. If you have no idea at all, then you can't innovate at all, or your innovation's very limited.

Boyd: We're talking around this whole idea of tradition. There's an illusion that seems more prevalent in America than in England that change is happening really fast. But just because somebody invents a new video game doesn't mean things have really changed that much.

In music particularly, there's an appearance of acceleration because of the record industry. But all we're really seeing is the telescoped effect—the feedback from recording and the influences flying around rather fast.

Backbeat: In addition to which, technological change is frequently equated with cultural progress, which is really a fallacy.

Boyd: Exactly.

Thompson: It's Devo, definitely—it's developing rapidly.

Backbeat: But you've steered well away from surface trends. In particular, you've continued to address social issues, something recent pop and rock has avoided. In that respect, I think of many of your songs over the years as modern broadsides.

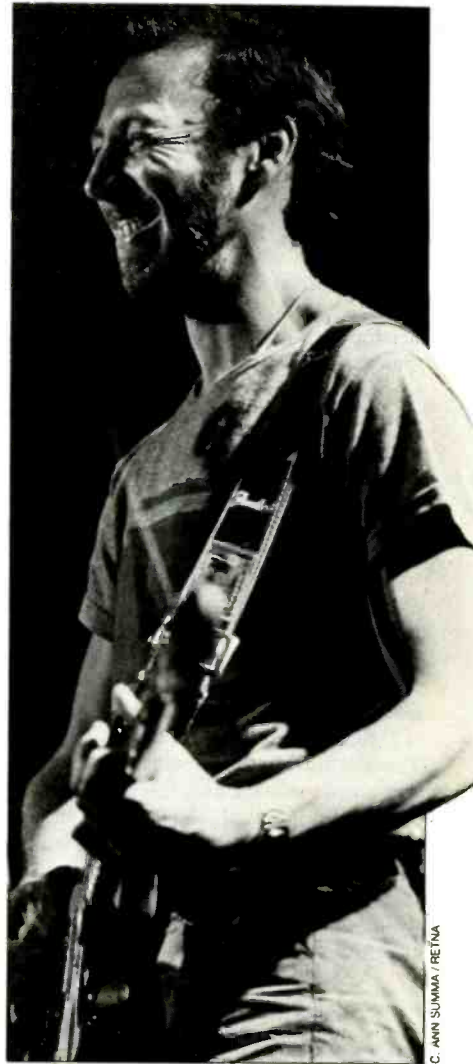
Thompson: There are two statements I could make that you can't put together. One is that what I do is only part of the British tradition—it's nothing more than that. The other is that all I play is rock and roll. But you can't put the two together. It doesn't make sense.

Backbeat: Your use of traditional elements is clear, but I'm also interested in your other influences. I can hear traces of jazz and some solid country ideas along with the folk, blues, and rock we've discussed. I know you considered going back to music school at one point, but basically you didn't have any training, did you?

Thompson: Not really, in a formal sense. And not even in a guitar sense, like a jazz player. I'm lacking in a lot of theory, a lot of technique.

Backbeat: So was Django Reinhardt for that matter.

Thompson: True, he was completely



Not bitter, after all these years . . .

untrained.

Backbeat: Do you listen to much jazz?

Thompson: I listen to it a lot, but I can't really play it. I pinch a lot of ideas, that's for sure. It's very interesting stuff. I love Django, for example. I think in Europe he's still probably the most imitated guitarist.

Backbeat: What about Cajun music? John Kirkpatrick's accordion and concertina have long been part of your stage and studio work, and while he gives a very British flavor to the arrangements, on recent records it's hard not to think of a Cajun connection in some of the faster songs.

Thompson: A lot of people say that. To me, it's just Scottish and English dance music, really. The accordion is as native an instrument to Britain as it is to Louisiana. The feel I'm after is more Scottish than anything else, but the use of an electric rhythm section would bring out the Cajun association as well.

Backbeat: Both the new album and "Shoot Out the Lights" use the same rhythm section and have a strong live feel. Is the latter aspect conscious?

Boyd: Recently I made a decision that was

(Continued on page 111)

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LAURA LEVINE

David and Don Was: probably the only things Ozzy Osbourne, Mel Torme, and Branford Marsalis will ever have in common

Mel Torme Will Never Be the Same

Reviewed by Mitchell Cohen

Was (Not Was):

Born to Laugh at Tornadoes

Don St. Was, David St. Was, Jack Tann, producers. Geffen/Ze GHS 4016

What's oddest about "Born to Laugh at Tornadoes"—an album rife with oddities—is that it doesn't sound like a hodgepodge. For their second album, the Detroit duo Was (Not Was) has assembled the most incongruous cast of characters this side of the low-budget disaster movie, and placed them on a record that begins with electronic soul, ends with inscrutable cocktail-pop, and strikes any number of stylized poses in between. Despite the eccentric-eclectic nature of the project, it hangs together.

Don and David Was, musical wise-guys, write and produce songs that utilize modern technology (Oberheim OBSX synthesizer, Linn drums, etc.) entwined with "real" instruments (among the guest players are saxophonist Branford Marsalis, trumpeter Hannibal Petersen, and guitarist

Marshall Crenshaw), and that always respect the idiosyncracies of vocal personality. The strange goings-on have an underlying common sense: The Wases are steadfastly against malicious gossip, child abuse, pointless promiscuity, and parties where singers sing *Feelings*.

Since neither Was is a singer—David recites *The Party Broke Up*, and both of them are part of a vocal aggregation on *Man Vs. the Empire Brain Building*—they go far afield in finding voices to interpret their compositions. What are hard-rocker Ozzy Osbourne and crooner Mel Torme doing on the same album? Plugging their stylistic quirks into the quirky world view of Was and Was, and getting to do what would be unthinkable on their own records. Osbourne claws at the devil-may-care electro-dance number *Shake Your Head (Let's Go to Bed)*, and Torme takes his turn on *Zaz Turned Blue*, lolling around in the cryptic fable as if it were a newly discovered pearl from the Gershwin catalog.

Was and Was deserve high praise as creative catalysts and discoverers of talent: *Bow Wow Wow Wow* updates Mitch Ryder's rowdy bluster more effectively than his own '83 LP, and Sweet Pea Atkinson and Harry Bowens are r&b singers worthy of wider exposure. (The Wases produced Atkinson's fine debut last year, after introducing him on their own first LP.) It's no small feat to make Osbourne or the Knack's Doug Fieger come off as anything except obnoxious, and this LP pulls it off.

But beyond their ability to make congenial vocal matches, Don and David Was have other meritorious qualities. They don't see any contradiction in synthesized music that has soul; and musicians who dedicate their LP's bass clef notes to the late Motown bassist James Jamerson aren't likely to become overenamored with gizmo-gimmickry. Was (Not Was) strikes a clever balance, not letting jokes get in the way of ethical and musical seriousness, and not letting social commentary step on the punchlines or undermine the beat.

Asia: Alpha

Mike Stone, producer
Geffen GHS 4008

Listening to "Alpha," the follow-up to Asia's enormously popular 1982 debut, one

is reminded of the story in which actress Tallulah Bankhead, upon witnessing the opening of a pretentious and overly elaborate theatrical production, turned to a companion and whispered, "You know, there's less here than meets the eye." So it is when one's ears are bombarded by an Asia song—after 30 seconds, it's all over but the overdubbing.

If it often sounds to you as if John Wetton (bass and vocals), Geoff Downes (keyboards), Steve Howe (guitar), and Carl Palmer (drums) aren't doing much more than conducting lengthy in-house seminars in musical double talk, then perhaps you've forgotten that back in the '70s—when the band's members were in groups like Yes, U.K., and Emerson, Lake and Palmer—such stuff was encouraged. It even had its own name: Progressive Rock. Playing this kind of music usually demanded that the virtuosic-instrumentalist participants fly missions of evasive (and not necessarily intersecting) action around the target known as "the song." Asia can pride itself in being a worthy postscript to that gonub-not-forgiven genre.

Lyricist Wetton appears to have almost nothing whatsoever on his mind on "Alpha"; calling his ten compositions here overridden with clichés is paying him a compliment. Suffice to say that any writer using the titles *Eye to Eye*, *Open Your Eyes*, and *The Smile Has Left Your Eyes* on the

same LP, and mentioning the word "love" exactly once on an album composed of 80 percent ballads, is not the sort whose strong suit is verbal communication.

The priorities for Asia are those of any inalienable progressive group—riffing, noodling, and the pursuit of density. As such, the following truths are self-evident: a) No fragile little melodic line shall be allowed to venture onto vinyl without at least fourteen instrumental chaperones; b) One must always calculate one's tempo changes before they hatch; and c) When all else fails, change the settings on the synthesizers—all 3,000 of them. And leave us not forget producer Mike Stone who, once again, has successfully mixed all of Asia's music into one thick, foglike mass of midrange mulch, the elements of which are indiscernible, even through headphones. Then again, maybe you're better off not being able to distinguish what you're hearing.

BILLY ALTMAN

Big Country: The Crossing
Steve Lillywhite, producer
Mercury 812 870-1

Any band that can make its guitars pluck and plunk like fiddles, drone and wheeze like highland bagpipes, and cluck like crazed, squawking chickens can't be all bad. And Big Country—a new aggregation fronted by Scottish singer/guitarists Stuart

Adamson (late of Britain's the Skids) and Bruce Watson—matches its skirling, whirling guitars with fierce rock rhythms that thunder along like the Four Horsemen of the Apocalypse.

Speaking of the Apocalypse, you'd be hard-pressed to find a selection of songs anywhere these days that contain as much doom, disaster, and portentous change as Big Country's debut album. All of the compositions have been recorded by producer Steve Lillywhite with a bold, brazen murkiness, and more than half of them sport images of flaming holocausts and burning houses. The word "fire" alone occurs in six songs: *In a Big Country*, easily the album's strongest cut, thanks to drummer Mark Brzezicki's gloriously clumping militant backbeat; *Fields of Fire* (which put Big Country on the map in Britain); *The Storm*; *Harvest Home*; *1000 Stars*; and on the incantatory *Porrohman*—whatever a Porrohman is. (Some of the lyrics are truly awful. What does "Now the skirts hang so heavy around your head" mean?)

All this fire and brimstone gets a little heavy-handed, and after a while the buzzy drone of guitars, Adamson's pounding piano, Tony Butler's roiling bass runs, and Brzezicki's relentless percussion begin to overwhelm. It's like being shell-shocked in battle: The explosions and thundering guns have no effect—one just sits there staggered and numb.

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Still, what Big Country is attempting to do, and to some degree succeeds at, is admirable and even fun. Its music is a striking mixture of the rich Celtic folk tradition—with its stomping reels and elegiac airs—and an intense, forceful brand of rock that is devoid of any trendy synthesizers or drum machines. At best, the songs contain a dark, vigorous beauty. If Adamson, Watson, and Co. would only put a little more humor into their work and take some of the pretense out of it, Big Country could prove to be an important outfit. In the meantime, buy the eponymous single. STEVEN X. REA

T-Bone Burnett:
Proof Through the Night

Jeff Eyrich, producer
Warner Bros. 23921-1

“Proof Through the Night” is T-Bone Burnett’s third solo record since he exited the oddball, Born-Again bunch of Dylan-ites, the Alpha Band. It is riddled with Christian symbolism, with sad, stabbingly precise social commentary, with cautionary tales of lust and of the pressure to stay on a straight moral path. It would be easy, and certainly valid, to get into some heavy interpretation here, but to do that would be to miss out on the seductive, sly, and reckless beauty of Burnett’s music, and the sharp, vivid poetry of his lyrics.

Burnett’s Christian philosophy is a given. What is not a given is the bent humor, the skewed vision of an America where Hugh Hefner and Walt Disney are interchangeable, where moody blondes who smoke cigarettes and pout become the artist’s muse. These are new and weird and decadent.

Burnett has assembled an impressive group to flesh out his eccentric folk/country/rock/Eastern modal amalgam: guitarist David Mansfield, bassist David Miner, drummer Jerry Marotta, and backup singers the Williams Brothers. Making guest appearances are guitarists Pete Townshend, Mick Ronson, Ry Cooder, and Richard Thompson (who plays mandolin on the bluegrass album closer), and drummer Stan Lynch (of Tom Petty’s Heartbreakers). Ronson’s grinding guitar riffs on *The Murder Weapon* and Townshend’s twanging Beatles-like chords on *Fatally Beautiful* are the kind of embellishments that imbue these songs with a commercial (in the best sense of the word) muscularity.

What is especially striking about “Proof Through the Night” is what T-Bone is doing with talking blues. *Fatally Beautiful*, the Dylan-esque *After All These Years*, and the bizarre, self-examining *The Sixties* find him mumbling lines of verse in a kicked-back, conversational way that is both sly and ingratiating. In one song he muses about hip jargon, playing with the word “freak” (“You know/I’m a sports freak/I’m a jazz freak/I’m a video freak”). On *Stunned* he takes off on a stream-of-



Tim Finn: hummable mainstream pop

consciousness groove that mixes F. Scott Fitzgerald with Flash Gordon. When he suddenly shifts into melody, as he does on the choruses of *The Sixties* and *Fatally Beautiful*, the effect is powerful and uplifting. This is songwriting as high drama—high drama you can dance to.

If there’s anything at all to gripe about, it’s Jeff Eyrich’s dense and muddy production. Burnett’s Warner EP “Trap Door” and brilliant 1980 album “Truth Decay” were cracklingly austere, aurally clean, stripped-down works. Hearing him in the busy, musically ambitious framework of “Proof Through the Night” takes a little getting used to. But the results are well worth the effort. Burnett is one of the strongest, singularly intelligent songwriters working in this country today.

STEVEN X. REA

Tim Finn: Escapade
Ricky Fataar & Mark Moffatt, producers
A&M SP 4972

Removed from the wacky, off-kilter context of Split Enz, Tim Finn resembles a cheery, poor man’s Paul McCartney. On his first solo album, he shows a penchant for sunny, sappy pop, replete with glossy reggae rhythms, bouncy horn charts, and slick, almost predictable arrangements—a tasteful sax break here, some backup singers cooing there, a spiffy guitar line thrown in for good measure.

Produced by onetime Beach Boys percussionist Ricky Fataar and guitarist Mark Moffatt, “Escapade” is really more of a lark than anything bold or daring. Unlike

his brother Neil (with whom he guides Split Enz), Tim’s compositions steer a steady, mainstream course. There are some sweet, uplifting love songs (*Not for Nothing*, the mushy *In a Minor Key*); some pensive, melancholy end-of-romance ditties (*Staring at the Embers*), a funky, upbeat rocker (*I Only Want to Know*), and a Fiftiesish twistabout (*Through the Years*).

To his credit, Finn runs through these highly hummable numbers with sprightly vigor. His voice has a smart, croony edge to it, and he can wail high and wildly, as he does on the refrain of *Staring at the Embers*, or mumble low and plaintively à la Gerry Rafferty on the slow, soulful *Wait and See*. Along with Fataar and Moffatt, supporting musicians include session pianist Richard Tee, country-rock mandolinist Vince Gill, a small gaggle of sax and trumpet men, and Amanda Vincent on synthesizers. As in Split Enz, Finn plays piano, and he does it with vigor and style.

The bottom line is that if you like that band’s peculiar, goofy, and unpredictable pop, you might not think much of “Escapade,” which is pop music in its most middle-of-the-road incarnation. But those who find Split Enz too far around the bend will probably like the sprightly, albeit fluffy sounds that Finn has come up with on his own.

STEVEN X. REA

Ray Manzarek: Carmina Burana
Philip Glass & Kurt Munkacsi, producers
A&M SP 4945

“Carmina Burana” is more than a mere comeback effort for a ’60s rocker. Former Doors keyboard stylist Ray Manzarek has displayed a penchant for lofty conceptual goals in his earlier stabs at a solo career, but with this label debut he attempts a formal presentation of an existing “serious” choral work, a hardy perennial in the 20th century repertoire. Teaming with composer Philip Glass, who serves as coproducer with his regular studio collaborator, Kurt Munkacsi, Manzarek practically pulls it off: Granted there will be sniffing disclaimers from some scholars, on balance this “Carmina” works both as a reverent update of Carl Orff’s masterpiece and as hypnotic modern rock.

Much of the credit lies with the work itself, of course. Few serious compositions offer riper ground for a rock-inflected reworking. Derived from the “profane” writings of medieval German poets and profligate monks, its text summarizes the fevered musings of outcasts responding to the galvanic culture of their day, a world of elemental contrasts of Good and Evil. Light and Dark, spiritual and carnal. Using mixed chorus and an orchestral score dominated by urgent, primitive ensemble settings, Orff’s 1937 piece slips from remorseless power and unbridled rhythmic drive to pastoral delicacy in broad strokes. Its text, mingling Latin vulgate and Middle Ger-

man, remains instructive but almost incidental to the sheer vigor of the music.

Manzarek recasts the work for an amplified rock ensemble built around synthesizers, which easily replicate the harmonic fabric of the orchestration; his fatter rhythm section, spiked with thundering drum tracks, isn't at all inappropriate in this case. The choral text remains largely untouched.

Those familiar with the original will catch those instances where entire arias have been reduced to tidy but complete keyboard statements, and the need to sustain a clockwork regularity to the tempo could prompt one to miss the fluid character of standard readings, as derived from the fateful ritards and subtle eccentric cross-rhythms. Yet it's not stretching a point to argue that Manzarek's stronger rhythmic foundation is actually in keeping with Orff's intent, and his discretion in editing the score to fit his contemporary goals remains laudable for its attention to the basic shape of the work. Even Manzarek's reedy organ fills (if not the heavy-handed piano flourishes on the opening *O Fortuna*) work emotionally.

Commercially, this "Carmina" may prove less saleable than the original, given contemporary pop and rock emphasis on the short song form and the apparent indifference to grander album concepts. Yet the project remains admirable in its intent and

generally involving in its execution, working not only as a teaser for new listeners who may be seduced to check out the original but also as a vivid piece of progressive rock.

SAM SUTHERLAND

Moving Hearts: Dark End of the Street WEA International 1802

Moving Hearts whip up an emotional, swirling sound that would be as appropriate for a square dance as for an antinuke rally. Of all the Celtic groups that are incorporating traditional elements in their music (Big Country, the Alarm, Aztec Camera, Dexys Midnight Runners), this Irish band stays closest to its musical heritage; it's also among the most explicitly political. In clipped, accented vocals backed by a rich expansion on folk sources, Christy Moore sings about nuclear proliferation (*Hiroshima Nagasaki Russian Roulette*) and the search for "a cleaner way to kill" (*Remember the Brave Ones*), as well as political martyrs from Sacco & Vanzetti to Bobby Sands (the epic *No Time for Love*, which traces oppression from Chicago to Saigon to Belfast).

The band uses as a base the textures and spirit of Irish folk music, particularly in the Uilleann pipes and low whistle of Davy Spillane, and then builds on it with stinging rock guitars, a solid rhythm section, and the rollicking saxophone of Keith Donald. It's

a bracing mix, and "Dark End of the Street," made up of tracks from the group's first two studio albums, is a well-balanced compilation that shows great versatility.

The LP consists of inventive instrumentals, fervent protest, and cover versions of three divergent American songs. Jackson Browne's *Before the Deluge* proves comfortably adaptable to the Hearts' approach, fitting into their gloomy outlook on the outcome of the planet, but the other two covers are left-field choices. Quicksilver Messenger Service's *What About Me* (here retitled *What Will You Do About Me*) was, in its original incarnation, an assertion of "outlaw" status that sounded clichéd and phony. Moving Hearts take the song's basic message ("If you stand up for what you believe in/Be prepared to be shot down"), and with the aid of a stirring synthesizer arrangement and bitter vocal, give the trite lyrics resonance. Sentiments such as "I feel like a stranger in the land where I was born" have more validity coming from "British-occupied Ireland" than from Marin County. And the band's version of *Dark End of the Street*—a country-soul tale of clandestine adultery that has been recorded by Percy Sledge, the Flying Burrito Brothers, Richard & Linda Thompson, and others—is brooding and guilt-ridden.

This album doesn't represent Moving Hearts' most recent music: Moore has left since these tracks were completed. Mick

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Hanly replaced her, and the new lineup has recorded a live album in London that's yet to be released in the U.S. But "Dark End of the Street" is a generous (nearly 50 minutes), varied, and often exhilarating introduction to a group that's up to something different. There's anger and joy in the music of *Moving Hearts*, cautionary words about the future joined to a respect and feeling for the musical past. MITCHELL COHEN

**Holly Near & Ronnie Gilbert:
Lifeline**

Holly Near, Jo-Lynne Worley, &
Joanie Shoemaker, producers
Redwood RR 404

A blurb on the lyric sheet for "Lifeline" offers the convictions of singers Holly Near and Ronnie Gilbert that those bemoaning the apathy of contemporary culture "aren't hanging around with the right people." That's a fitting corollary to this modest but passionate concert's theme of enduring social activism among musicians in the now underground folk community.

That concern has been central to Holly Near's work throughout the past decade. If there is a superstar within the restricted realm of feminist music, Near is the most likely candidate, having turned her back on conventional career avenues by declaring her lesbianism and her commercial independence. She has released all of her solo work through her own Redwood label, enlisting other women to assist in the company's running (although stopping short of the reverse chauvinism of other feminist indies).

The news here, however, is Near's "new" partner: none other than Ronnie Gilbert, whose own big-voiced presence was an essential component of the Weavers. Gilbert may be a matron with a full family life behind her, but her credentials as a musician concerned with social issues are beyond reproach, and her teaming with Near imparts a heartening, generational depth to these performances. Gilbert's voice wears its age and is edged with a hoarseness in spots, but the sheer force of her tone and her sure sense of blend make her a formidable vocal ally.

The settings are spare indeed—Jeff Langley's piano and Carrie Barton's electric bass—making the focal points the two singers and, perhaps more pointedly, their catalog of social concerns: racism, sexism (and intolerance for homosexuality), ageism, and more. But the program also finds time to inject gentle humor into the romantic tradition (via a medley of love songs by Near) and rekindle Woody Guthrie's worker's-eye-view of the national spirit (*Pastures of Plenty*).

With a list of characters that spans Harriet Tubman, Sacco & Vanzetti, Stephen Biko, and other symbols of social resistance, and songs that explicitly or obliquely allude to Third World political

turmoil, homosexual and lesbian solidarity, pacifism and post-'60s disillusionment, "Lifeline" won't offer a diversion for listeners lulled by pop and rock's current apolitical stance. Moreover, the musical context precludes snappy surface details to showcase two unadorned voices. But these songs do attest to the survival of protest music, and even if the crowd's responses suggest a sermon to the already converted, the material offers hope of a special kind.

SAM SUTHERLAND

**Jonathan Richman &
the Modern Lovers:
Jonathan Sings**

Peter Bernstein, producer
Sire 23939-1

Jonathan Richman is a loon. He even sings like a loon, in a quavery, earnest yelp. Like Van Morrison and the lesser-known singer/songwriter Michael Hurley, Richman makes music that is both deeply personal and thoroughly wacky. In the beginning, he rocked; his eponymous debut, produced by John Cale, was a landmark new-wave album featuring the classic "let's get in the car and drive" anthem *Road Runner*. But with steadfast determination, Richman has shrugged all that off. Nowadays, his music is bare-bones: acoustic guitar, or a dinky-sounding electric; drums that sound like

many of these songs, his wonky Buddy Holly arrangements are augmented by Beth Harrington and Ellie Marshall's chirrupy backup vocals and chorus duets ("Well, tell us Jonathan," they coo), which are variably campy-comic and soulful. Sometimes they're both, as in *The Neighbors*, a wonderfully innocent testament to marital trust and fidelity. In this slow, hymnlike tune, Richman warbles about how he won't let "the neighbors run my life"—if his female friend wants to stay overnight, that's okay by him. And, he adds, his wife will understand.

Richman's nutsy world view is, of course, way out of line with what's commonly thought of as reality. His life is ruled by a dogged simplicity, by a strong sense of integrity, honesty, forthrightness, and love. His perceptions are that of a child's; he's caught-up in the beauty of the commonplace. On *Not Yet Three*, Richman puts himself in a baby's shoes, explaining to his parents why he won't go to sleep in the car. It's twilight, the prettiest time of the day, and anyway, there's so much to see as they're driving down the road. On *When I'm Walking*, he sings "I don't want automotive help, thank you." He'd rather feel his feet thump down the path and be able to look under logs at insects.

The album opens with *That Summer Feeling*, one of several songs where Rich-



Holly Near and Ronnie Gilbert: a testament to the survival of protest music

they're wrapped in shag carpeting; a stand-up string bass; the occasional bleat of an off-key sax.

Such is the case on "Jonathan Sings," the New England-based performer's first album in nearly five years. On *This Kind of Music*, Richman explains that he likes homemade, primitive rock and roll because he can play it while he's waiting for a bus, or doing his clothes at the laundromat. On

man's naïveté is balanced by something wiser and sadder. This is a piece about the loss of innocence, about the futility of regaining it by doting on the past. "Do you long for her or for the way you were?" he asks with a dark, almost ominous urgency. But for the most part, "Jonathan Sings" is thoughtful, silly, and charged with a bratty, glad-all-over sensibility. Yes, these are loony tunes, songs from the funny farm, but

they are also wonderfully sincere, inspired music.

STEVEN X. REA

Linda Ronstadt: What's New

Peter Asher, producer
Asylum 60260

That this archetypal '70s pop stylist should reach so boldly into the pre-rock-pop landscape is nearly sufficient cause to shower lavish praise on Linda Ronstadt and arranger/conductor Nelson Riddle for their fidelity to a now neglected mother lode of valuable American music. The leap from J.D. Souther to the Gershwins, Irving Berlin, and Gordon Jenkins begs respect for bravery alone, and Ronstadt buttresses that bold gesture with fresh evidence that her vocal powers are greater and more refined than ever.

Why, then, is her long-awaited torch album, "What's New," ultimately an anticlimax? Riddle's string settings and dreamy yet vivid solo instrumental accents are cut from the same glossy cloth as those he crafted for a veritable Who's Who of vocalists canonized in the '40s and '50s, and the program draws from an impressive mix of standards and well-chosen sleepers: The Gershwins' *I've Got a Crush on You* and *Someone to Watch Over Me*, Irving Berlin's *What'll I Do*, *I Don't Stand a Ghost of a Chance* (by Bing Crosby, Ned Washington, and Victor Young), and the Billie Holiday signature *Lover Man* are matched by lesser-known but glove-tight chestnuts seemingly invented for Ronstadt's sadder-but-wiser vocal mien.

Ronstadt brings greater subtlety and more sheer vocal technique to these songs than she has to virtually anything she has ever sung. Her lower register has gained considerable strength over the past decade, now supplying a rich glow to her readings. Likewise, her upper range now possesses control as well as sheer clout—a testament to the delicate precision honed during her fling with Gilbert & Sullivan.

Ironically, though, Ronstadt is undercut by a show-business maxim that earlier generations of vocalists took seriously indeed. An entire album of ballads demands some careful planning, and while there's evident care in each of these performances, the narrowness of tempos and the polite but equally regulated emotional shadings lend a deadly sameness. Complicating matters are her more pointed stylistic statements, which tend to suddenly soulful vocal codas that might have meshed had the preceding verse and chorus readings been any less reverent.

There are individual performances here that will hearten that minority willing to confess admiration for old-guard pop: The title song, *Someone to Watch Over Me*, and *What'll I Do* offer vulnerability and worldliness in a piquant mix consistent with Ronstadt's contemporary pop work. As an album, however, "What's New" sags

under the weight of its own aspirations, its emotional impact undercut by the sense of calculation, albeit laudable, behind the delivery.

SAM SUTHERLAND

Jazz

Borah Bergman: A New Frontier

Giovanni Bonandrini, producer
Soul Note 1030

Borah Bergman is another entry in the long list of solo pianists who have arrived in the

last few years. Like the others, he is bursting with technique and is as familiar with contemporary concert music as he is with jazz.

In the liner notes for "A New Frontier," Bergman mentions Bud Powell and Lennie Tristano as influences, and he'll get no arguments from this corner. I suspect, however, that he could easily have added Alexander Scriabin, Cecil Taylor, and Keith Jarrett. His use of bright splashes of tonal color are right out of the late-19th-century virtuoso tradition, but he is equally capable of the rhythmic bombast so characteristic of Taylor. The Jarrett connection is less obvious, though he is similarly interest-



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Sheila Jordan: a remarkable risk that pays off remarkably well

ed in long, episodic, free improvisations. Unlike Jarrett, however, Bergman builds structural guideposts in most (not all) of his pieces. Side 1, for example, is devoted to a long, two-part piece called *Night Circus*. Part 1 (*By the Red Mood*) begins with vaguely pointillistic ramblings—little brush strokes of sound that have no particular focus. But a gradual accretion leads to a darkly melodic middle section in which the ancient technique of repeated-note accompaniment patterns is used to contain the melody. Then, dramatically, Bergman closes with an aggressive display of rapid technique. (His left hand, in particular, is remarkably adroit).

Part 2 of *Night Circus* follows a similar bell curve beginning with some frag-

ments of melody thrown from one register to another, then shifting into a strong, declamatory melody for the middle section. The closing, like the opening of Part 1, is fleet and nonspecific.

Side 2, aptly titled *Time for Intensity*, starts with a full head of steam and continues to pick up speed. Like Taylor, Bergman seems more concerned with the authenticity of his improvisation than with accessibility. In Part 2 of *Time . . .*, he gets even further out, banging the piano with an enthusiasm that simply won't be denied.

Obviously, this isn't music to play for a candlelight dinner, and much of it is little more than emotional bombast. But the best moments, especially on Side 1, suggest the emergence of a talent that can be both

abstract and specific. If Bergman can bring those two elements into balance, he will be a performer to contend with.

DON HECKMAN

**Sheila Jordan, Harvie Swartz Duo:
Old Time Feeling**

Herb Wong, producer
Palo Alto PA 8038-N

It has taken nearly twenty years, but Sheila Jordan has finally produced her second major solo recording. The first, "Portrait of Sheila," issued in 1963 on Blue Note, has been a collector's item for more than a decade. Since then, she has recorded intermittently—with George Russell, on her own via Japanese and Danish releases, and in partnership with pianist Steve Kuhn. With "Old Time Feeling," she finally has the opportunity to record the songs she wants to in an environment of her own choosing.

And what an environment it is. Unfettered by the bonds of overblown orchestrations, unaccompanied by backup singers, and unbounded by a rhythm section's style, she is totally on her own, accompanied only by the strong, supportive bass playing of Harvie Swartz. It's a remarkable risk to take, and memory recalls no other singer who has tried it on this scale. (Ella Fitzgerald has worked from time to time with guitarist Joe Pass or pianist Ellis Larkins, but chordal backing is far different from the spare lines of a solo string bass.) What is even more remarkable is how quickly we forget Jordan's audacity and begin to concentrate on her music.

The repertoire reflects the careful good taste that has always typified Jordan's programming. Ironically, the only track that really fails to cut the mustard is the sole original, Swartz's *I Miss That Old Time*

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Feeling. Slick and groovy though it may be, it draws little more than a cursory performance from both musicians.

The meat of the program begins with Harold Arlen's *Sleeping Bee* (from "House of Flowers"). Wise in the ways of classic songs, Jordan starts, recitativo, then swings ever so smoothly into the gently teasing sentimentality of the chorus. Underneath her line, Swartz struts, first in two, then in a walking 4/4. Irving Berlin's *How Deep Is the Ocean* and Duke Ellington's *It Don't Mean a Thing* move through the dark land that lies somewhere between jazz and poetry. In both cases, Jordan takes a classic jazz artist's approach, singing her first chorus close to the original, then building a series of variations on the theme. In *How Deep*, notice her rubato statement of the melody directly after Swartz's solo. And listen for the perky head tones that enliven her *Don't Mean a Thing* improvisation.

Tribute (Quasimodo) and *Let's Face the Music and Dance* lean even more strongly toward uptempo jazz. The former, which employs Jordan's lyrics to a classic Charlie Parker line, reminds us how difficult it is to scat-sing bop lines. Again, Jordan surprises us in her improvisation, this time by avoiding the expected bop syllabification. On *Let's Face the Music*, the fleetest track on the album, she floats characteristically above the rhythmic flow like a butterfly, darting in and out to make her points on this lovely old Ginger Rogers/Fred Astaire showcase number. Swartz—responsible for the time-keeping—has a more difficult task. To his credit, he keeps the performance together without having to resort to strong-arm methods. His uptempo walking lines are virtually flawless.

Finally, Jordan throws in a pleasant, but relatively passive filler, *Whose Little Angry Man Are You*. She closes by shaping the old Leonard Bernstein/Comden & Green song, *Some Other Time*, into a performer's farewell.

This is a recording with few flaws. At this moment, Jordan is at least the equal of anyone else calling themselves a jazz singer. And "Old Time Feeling," I promise you, presents her at her very best.

DON HECKMAN

The Lounge Lizards: Live from the Drunken Boat

Teo Macero & John Lurie, producers
Europa JP 1012 (611 Broadway, New York, N.Y. 10012)

In the late Seventies, the Lounge Lizards emerged from Manhattan's so-called "downtown" art and music scene sporting a cool stage presence and playing a blend of avant-garde-influenced jazz whose sources ranged from Monk and Mingus to Dolphy and beyond. They recorded one studio album in 1981 with Teo Macero, Miles Davis's famed producer, only to split shortly thereafter. The original unit used electric

bass and guitar, and their sound was largely determined by the fiery, invariably atonal meanderings of guitarist Arto Lindsay.

The new Lounge Lizards are an acoustic group and retain only John and Evan Lurie from the original lineup. "Live from the Drunken Boat" was recorded at a club in Stockholm a few months after they first assembled. Though I can attest to their continuing growth since then, even at that formative stage the quintet's concept was well established. Bandleader/alto saxist John Lurie is certainly not a jazz virtuoso, but he does have a flair for combining the achingly romantic tonal approach of older stylists like Johnny Hodges with fairly limited but controlled avant-garde techniques. The Lizards' treatment of *In a Sentimental Mood*, for instance, moves the Ellington classic into an angular, Monkian framework, with pianist Evan Lurie (John's brother) planting his chords carefully and with feeling. Trombonist Peter Zummo turns in a warm, conversational solo, full of human inflections and smears, and then doubles up with the leader's edgy alto on the theme.

On Eric Dolphy's monumental *Out to Lunch*, perhaps the definitive Sixties avant-garde theme, Lurie wisely avoids attempting to mimic the composer's awesome technique, instead building dry, ribbonlike lines from the diminished-chord harmonies, and then contrasting them with raspy, moaning cries. His approach at times resembles that

of John Tchicai, the spare, dry-toned altoist who recorded with Archie Shepp in the '60s.

Lurie's own compositions favor bluesy lines whose rhythms gradually break down for improvised solo sections, then reconvene for ensemble passages. *Hair Street* is an amusing traditional New Orleans blues stomp that finds Zummo in top form. The rhythm section of drummer Doug Browne and bassist Tony Garnier is experienced in both rock and jazz idioms; Brown has toured and recorded with Iggy Pop, Garnier with Asleep at the Wheel and Robert Gordon. Both lend solid support without bumping into the horn players. Garnier, especially, turns in some wonderfully surefooted walking lines. The Lounge Lizards' "fake jazz," as some critics have called it, straddles modern rock and jazz in a far more interesting way than most of its kind. Better still, their music is filled with hints of frontiers to come. CRISPIN CIOE

Joe Thomas/Jay McShann: Blowin' in from K.C.

Robert Sunenblick & Mark Feldman, producers. Uptown UP 27.12 (276 Pearl St., Kingston, N.Y. 12401)

The group whose work is the basis of this album was not one of jazz's better-known ensembles. In fact, it was an offshoot of a failed offshoot. Its source was Jimmie Lunceford's orchestra, the great 1930s



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BACKBEAT Reviews

band whose style, polish, and originality made it, with Duke Ellington's and Count Basie's, one of the most brilliant ensembles of the period. Its stars were arranger, trumpeter, and singer Sy Oliver; alto saxophonist Willie Smith; trombonist and singer Trummy Young; drummer Jimmy Crawford; and burly tenor saxophonist and singer Joe Thomas. When Lunceford died in 1947, Thomas and the band's pianist, Eddie Wilcox, kept the band going for two years. When that project failed, Thomas formed his own seven-piece group that played the rhythm-and-blues circuit, though with a strong Lunceford influence.

The group on "Blowin' in from K.C." not only recalls that 1949 configuration but includes four of its original members: Thomas, Dicky Harris on trombone, Johnny Grimes on trumpet, and the most celebrated alumnus, George Duvivier on bass. Titles such as *Raw Meat*, *Dog Food*, and *Jumpin' Joe* suggest the original r&b vein in which these musicians worked, while Mary Lou Williams's *What's Your Story Morning Glory* gets an exemplary Lunceford interpretation.

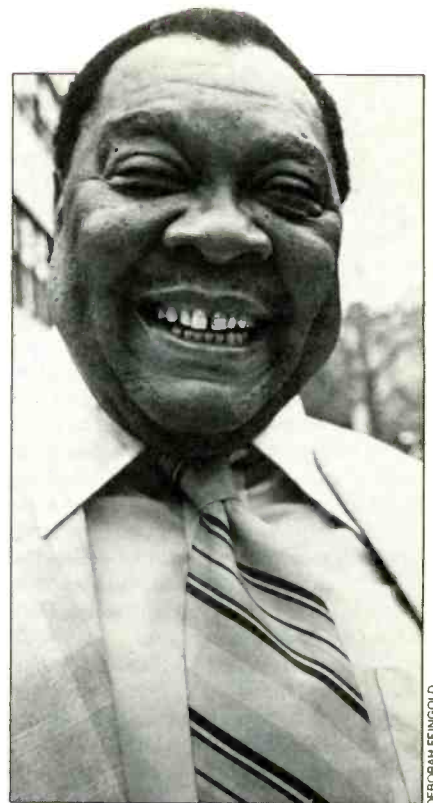
Thomas's contribution here is quite competent, though he tends to put himself in limiting situations. Of far more interest are Duvivier, pianist Jay McShann, and trombonist Harris. Duvivier's invocation of the Stan Kenton style on *Star Mist*, which he wrote for the Thomas septet in 1950, serves as a reminder that the Kenton band began as an attempt to copy Lunceford's. McShann has nothing to do with Lunceford or Thomas but lights up the sky every time his lustily swinging piano moves into the spotlight. And Harris has such a strong musical personality that, whether muttering through a mute or emulating the braying Kenton trombone style, he tends to wipe out everything around him in a positive, joyful manner.

JOHN S. WILSON

Lennie Tristano:
New York Improvisations
 Bruce Lundvall, producer
 Musician 60264-1

Pianist Lennie Tristano was one of the white shadows of jazz. Like Bix Beiderbecke, Joe Albany, Lee Konitz, and Warne Marsh, he neither entered its blues and gospel-based mainstream nor made commercial concessions to bring his music to the attention of a mass audience. Most of his career was spent in the New York area, working occasionally in small-group settings and teaching a dedicated group of followers. His recordings were few and far between, and often marred by rhythm sections that kept the coolly detached, near-metronomic time he seemed to prefer. His best work was generally done in more challenging settings, usually with Marsh and Konitz.

Despite the presence of the colorless bass and drums of Peter Ind and Tom Wey-



McShann: lusty, swinging piano

burn, these first-time released tracks from the mid-Fifties include some sparkling examples of Tristano's art. *Lover Man*, for example, reaches far beyond his characteristic single-line style into an emotionalism that is reminiscent of his *Requiem* to Charlie Parker. His performances of *I'll See You in My Dreams*, *Momentum*, and *Manhattan Studio* are more characteristic, with long, loping lines that somehow manage to elude the rudimentary harmonic cadences of these familiar pieces. His unique ability to play phrases that could begin and end on any beat (or upbeat) of the bar no doubt accounted for his desire to have drummers keep precise time; in the case of *I'll See You in My Dreams*, the complexity of his lines more than justifies the rhythm section's conservatism.

All the Things You Are is the album's highpoint because its long, demanding chord chart pulls Tristano in so many directions. Simultaneously traditional and personal, his improvisation soars up and down the keyboard. And, for once, he seems as concerned by the piquancy of the harmonies as he is by the rhythmic displacement of his long lines.

There are other high points: his revisionist approach to the old turkey *My Melancholy Baby*, his boppish interpretations of *Mean to Me* and *I'll Remember April*. But the album should be heard in its entirety, if only because of its unusual range of material. I'm not quite sure why several of the tracks have been truncated with quick fades and/or endings. Surely these extremely valuable performances should be heard in their entirety, unedited by anyone other than Tristano.

DON HECKMAN

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CLASSICAL REVIEWS

(Continued from page 90)

build and *build*. And there *are* odd felicities here and there: the wolf whistles built into the Cagelles' "We Are What We Are"; the ballroom swing of "A Little More Mascara"; the music-hall oomph of "The Best of Times"; the sea-swept nostalgia of "Song on the Sand"; the shady minor key of the title tune. And Jim Tyler's orchestrations, with their aptly considered timbres and floating snatches of respondent melody, dress up the material to the very best advantage.

This list of the good things may create the impression that the score is richer than it is. But look again. Herman keeps making songs do double duty. "We Are What We Are" ("and what we are is an illusion"), the fey curtain-raising number for the Cagelles, is converted to "I Am What I Am," Albin's angrily rousing, purportedly improvised first-act curtain. Yes, the conversion makes a dramatic point—what the Cagelles have sung in jest becomes the vehicle for defiant self-definition in earnest. ("We love how it feels,/Putting on heels,/Causing confusion" gives way to "I beat my own drum,/Some think it's noise,/I think it's pretty.") And the two takes span an entire long act. But the song is no masterpiece in either form, and hardly bears punching up into a major statement (though there is a population that has already embraced it as such, just as, some years ago, there was a population that seized on Helen Reddy's equally self-congratulatory "I Am Woman").

Next among the paired numbers is the puppyish "With Anne on My Arm." First, it is sung by Jean-Michel, Georges's son, as he attempts to reconcile his old dad to his decision to marry a *woman* ("I mean a *white* woman," Albin amplifies in a later flustered moment). The very next musical number is "With You on My Arm," in which Georges, in turn, tries to mollify Albin. If a message is intended about teaching one's parents well (as Crosby, Stills, Nash, and Young put it in the late Sixties), the instant reprise telegraphs it too insistently. If it's not intended, a second little song of sentiment would not be too much to ask. Certainly there *is* such a message in "Look Over There," a hymn to the doleful St. Albin, who, though not having borne Jean-Michel nine months in his womb, has been a true mother to the child. First time round, Georges sings it to Jean-Michel; second time round, Jean-Michel sings it to his bigoted and reluctant father-in-law-to-be. His character would gain, as would the score, if instead of mouthing his father's lines he could declare his loyalty in his own way. There is a virtue, though Herman seems neither to know it nor to believe it, in letting the spectators make a connection or two on their own. (There can be no complaint, however, about the reappearance of "Song on the Sand"; the same pair of lovers is

onstage as the first time, and the tune thereby appropriately becomes, as it might be called in a soundtrack, "Georges and Albin's Theme." And the rousing potpourri of the grand finale does just the work it should.)

The musical performance is carried by two stars—and (this is an old-style show) the excellent chorus. As Georges, Gene Barry looks craggy and sounds like gravel. There is no elegance in his emcee persona, or in his diction. (Is "John Paul Belmahn-do" really as close as he could get?) He has the love songs, however—"With You on My Arm" (the reprise, not the third-person version celebrating Anne), "Song on the Sand," "Look Over There"—and they exert their calculatedly tender appeal even through the gruff delivery. Wholesome and high-spirited (too much so), "Masculinity" brings Barry to life in a more engaging fashion. In the number, Georges, assisted by all those *supportive* folks of Saint-Tropez, shows Albin what to do to pass as butch for a night. Suddenly *Oklahoma!* is in the air. (Revisiting *The Music Man* via *Victor/Victoria*, Robert Preston could no doubt make the moment far wickeder.)

George Hearn's Albin is much more of a piece and of greater interest. In general contour, the role is Mame all over again: the lovable madcap with the heart of gold who comes to know sorrows and bravely bounces back. Still, there are distinctions. When Mame is down, she cheers herself

and her loved ones up with an improvised holiday ("We Need a Little Christmas"). Albin instead fastens his ankle straps, spreads out his paintboxes, and "rouges the other cheek" (?). Surely there is more to well-being than sparkle dust, bugle beads, ostrich plumes, and all the other tinsel Albin hangs on himself as if he were not the bringer of festivity but the jolly tree. "A Little More Mascara" could not perk along more merrily if Herman had dropped in the old Rodgers-and-Hammerstein standby "I Enjoy Being a Girl." To be sure, we all invent ourselves; but there is, at the heart of such radical self-transformations as Albin's into Zaza, a wounded narcissism the Collaborators, as the makers of *La Cage aux folles* are calling themselves, don't want to know about—or to betray to the Broadway public. (Whom are they collaborating *with*?) "I Am What I Am" explodes with pain untempered by (indeed, contemptuous of) insight. The tautology is nothing more or less than a paean to the unexamined life, which for some time has been recognized as not worth living.

Hearn plays these scenes to the hilt. Applying Zaza's mood-altering embellishments, he lifts off from the flats of depression like a rocket. His stormy first-act exit, that Pyrrhic victory over insult and injury, is scarcely less impressive. And then there are the production numbers: "La Cage aux folles" and "The Best of Times," served (Continued on page 108)

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IRCA

(Continued from page 79)

the recordings, carried out over an extended period, betray considerable unevenness in performance, production, and packaging, not always attaining a high international standard. It was decided, therefore, to take special note of the project without granting a specific award.

The nomination process for the Koussevitzky Award, given to a living composer for an orchestral work in its first recording, was changed this year to enlarge the final list, and it produced a stronger field than usual. Consideration of the Tippett—in many ways the strongest entry; an imposing work in a beautiful performance—was virtually precluded by all the attention we gave the composer last year. The Sessions was subjected to a variant of the Gould argument—that an award stands to benefit a young composer more than an established one. And to a younger composer the award ultimately went—the forty-seven-year-old Belgian Philippe Boesmans, for his imaginatively scored violin concerto, a strong favorite of Halbreich (“comes out of the great tradition of the Liège violin school; is able to reconcile contemporary music with a larger public”) and Michot, and a work perfectly acceptable to the rest of us.

The award carries a cash prize of \$2,000, contributed jointly by the Musicians Club of New York and HF. HF

Musicians Club of New York

The Musicians Club of New York, which administers the Koussevitzky Award of the American International Music Fund and provides the cash prize jointly with HF, was founded in 1911 “to bring about a better understanding and closer fellowship among musicians and lovers of fine music.” Comprised of professional musicians and amateurs, its goals remain: to cultivate a more lively interest in music; to aid young musicians through sponsorship of concerts and competitions; and to focus attention on the American composer and performer. Its president is Bruce L. Kubert; past presidents have included Walter Damrosch, Norman Dello Joio, and—from 1961 to 1975—Olga Koussevitzky.

CLASSICAL REVIEWS

(Continued from page 107)

up with all the top-banana razzmatazz one could wish for. At times, Hearn reins in his husky, uncertain baritone for some surprisingly smooth phrases, but his undisguised instrument has little intrinsic allure. Besides, it would fool no one for an instant, and it is a measure of the performer's success that it does not have to. Crooned or roaring, his inflections are always on the nose, and serve a far richer, preciser creation than he has had handed to him by the

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BRITTEN: Vocal and Orchestral Works. Jill Gomez: City of Birmingham Symphony, Simon Rattle. ANGEL DS 37919.

CHARPENTIER: Les Antennes “O”; In Nativitatem. Les Arts Florissants, William Christie. HARMONIA MUNDI FRANCE HM 5124.

HANDEL: Concerti grossi, Op. 6 (12). English Concert, Trevor Pinnock. ARCHIV 2742 002 (3).

HAYDN: Arias; Cantata; Cavatina. Teresa Berganza, Raymond Leppard. ERATO NUM 75038.

HAYDN: Sturm and Drang Symphonies (6). L'Estro Armonico, Derek Solomon. CBS MASTERWORKS 13M 37861 (3).

JANÁČEK: The Cunning Little Vixen. Lucia Popp, Dalibor Jelička; Vienna Philharmonic, Charles Mackerras. LONDON LDR 72010 (2).

MENDELSSOHN: String Quartets (complete). Melos Quartet. DEUTSCHE GRAMMOPHON 2740 267 (4).

MOZART: Le Nozze di Figaro. Kiri Te Kanawa, Samuel Ramey; London Philharmonic, Georg Solti. LONDON LDR 74001 (4).

MOZART: Piano Concertos Nos. 20, 27. Clifford Curzon; English Chamber Orchestra, Benjamin Britten. LONDON CS 7251.

PUCCINI: Turandot. Katia Ricciarelli, Plácido Domingo; Vienna Philharmonic, Herbert von Karajan. DEUTSCHE GRAMMOPHON 2741 013 (3).

ROMAN: Drottningholm Music. National Museum (Stockholm) Chamber Orchestra, Claude Ghenetay. POLAR POLS 361.

SCHUMANN: Kreisleriana; Fantasy, Op. 17. Michael Levinas. ADES 14044.

SHOSTAKOVICH: Symphony No. 5. Concertgebouw Orchestra, Bernard Haitink. LONDON LDR 71051.

SHOSTAKOVICH: Symphony No. 10. Berlin Philharmonic, Herbert von Karajan. DEUTSCHE GRAMMOPHON 2532 030.

STRAVINSKY: Songs. Phyllis Bryn-Julson, Robert Tear; Ensemble Intercontemporaine, Pierre Boulez. DEUTSCHE GRAMMOPHON 2531 377.

SZYMANOWSKI: Orchestral Works. Polish Radio National Symphony, Jacek Kasprzyk, Jerzy Semkow; Polish Radio Symphony (Krakow), Antoni Wit. EMI GERMANY IC 165-43210/2 (3).

VERDI: Aida. Katia Ricciarelli, Plácido Domingo; La Scala Chorus and Orchestra, Claudio Abbado. DEUTSCHE GRAMMOPHON 2741 014 (3).

Collaborationists.

Elizabeth Parrish, who plays the plot device named Jacqueline and joins Hearn in leading “The Best of Times,” conveys through the medium of her ruined twanging the sense of felt experience, as he does. It is the quality that made Piaf, the Little Sparrow, the supreme chanteuse of an age. Other than Hearn and Parrish, no one in the cast displays anything like it. John Weiner gulps his bland and boring way through Jean-Michel's drippy material; and three supporting players chime in with Barry for a

Other Nominees

VERDI: Falstaff. Katia Ricciarelli, Renato Bruson; Los Angeles Philharmonic, Carlo Maria Giulini. DEUTSCHE GRAMMOPHON 2741 020 (3).

VIVALDI: Four Seasons. Simon Standage; English Concert, Trevor Pinnock. ARCHIV 2534 003.

WAGNER: Lohengrin. Anna Tomova-Sintov, René Kollo; Berlin Philharmonic, Herbert von Karajan. ANGEL SELX 3829 (5).

WAGNER: Tristan und Isolde. Margaret Price, René Kollo; Dresden State Orchestra, Carlos Kleiber. DEUTSCHE GRAMMOPHON 2741 006 (5).

ZEMLINSKY: String Quartets (4). APOSTEL: Quartet No. 1. LaSalle Quartet. DEUTSCHE GRAMMOPHON 2741 016 (3).

VENETIAN MUSIC FOR VOICE AND INSTRUMENTS. Teresa Berganza, J.E. Dahler, Y. Inamura. CLAVES D 8206.

KIRA

ANDRIESEN: De Tijd. Royal Conservatory (Hague) Ensemble. Reinbert de Leeuw. DONE-MUS 8201.

BERKELEY: Flute Concerto. James Galway; London Philharmonic, Lennox Berkeley. RCA ENGLAND RS 9011.

BURTON: Requiem. London Symphony Chorus, London Sinfonietta, Richard Hickox. ARGO ZRDL 1007.

DEL TREDICI: In Memory of a Summer Day. Phyllis Bryn-Julson; St. Louis Symphony, Leonard Slatkin. NONESUCH 79043-1.

DUTILLEUX: Métaboles; Timbres, espace, mouvement. Orchestre National de France, Mstislav Rostropovich. ERATO STU 71516.

NICULESCU: Symphony No. 2; Heteromorphie. Remus Georgescu; Iosif Conta. ELECTRECORD ECE 02036.

REICH: Tehillim. Steve Reich and Musicians, George Manahan. ECM 1-1215.

SANDSTRÖM: Requiem. Swedish Radio Symphony Chorus and Orchestra, Leif Segerstam. CAPRICE CAP 2015 (2).

SESSIONS: Concerto for Orchestra. Boston Symphony, Seiji Ozawa. HYPERION A 66050.

SOLER, J.: Diaphonia. Netherlands Wind Ensemble, Edo de Waart. ENSAYO ENY 955.

TIPPETT: Triple Concerto. London Symphony, Colin Davis. PHILIPS 6514 209.

XENAKIS: Cendrèes; Jonchaies. Gulbenkian Foundation (Lisbon) Chorus, Orchestre Nationale de France, Michel Tabachnik. ERATO STU 71513.

patter song à quatre called “Cocktail Counterpoint,” which receives the keyed-up, witless performance it deserves. The album represents all this with digital fidelity, and spares the listener any noticeable input from Leslie Stevens, the deadly gamine whose discombobulated dancing and squawky conversation might have been chosen (though no doubt they were not) for the express purpose of turning anyone in the theater not already so inclined off women for good, or for the duration of the show. At least they do not let her sing. M.G.

General Index to Articles 1983

Compiled by Mildred
Camacho-Castillo and
Janet Wolf

TEST REPORTS: Home Audio

Amplifiers (Power and Integrated)

ADS Atelier A-2 integrated. September.
Audionics CC-3 power. July.
Sansui AU-D22 integrated. March.
Tandberg TIA-3012 integrated. July.
Technics SU-V9 integrated. January.

Cartridges (Phono)

ADC TRX.2. December.
Audio-Technica AT-122EP. March.
Bang & Olufsen MMC-1. April.
Boston Acoustics MC-1vdH. January.
Dynavector QV-23R. January.
Monster Cable Alpha-1. September.

Compact Disc Players

Hitachi DA-800. December.
Kyocera DA-01. September.
Magnavox FD-2000SL. July.
Mitsubishi DP-101. May.
NEC CD-803. July.
Sony CDP-701ES. October.

Headsets

Sony MDR-CD7. July.

Preamplifiers

Apt Holman 2. October.
Sherwood S-6020CP. January.
Yamaha C-70. April.

Receivers

Akai AA-R42. April.
Denon DRA-700. September.
Pioneer SX-50. December.
Technics SA-410. July.
Vector Research VRX-9500. January.

Speakers

Acoustat Model Two/MH. November.
Acoustic Research AR-1MS. November.
Allison Model Nine. March.
Bose 301 Series II. May.
Design Acoustics PS-10. January.
EPI T/E-100. November.
Jamo CBR-903. September.
JBL L-86. December.
JBL L-250. April.
KEF Coda III. October.
Koss M-80 DynaMite. June.
Phase Technology PC-60/50. June.
Polk SDA-1. January.
Pyramid Metronome 11. November.
Realistic Optimus T-300. June.
Snell Type E. June.
Wharfedale Mach 9. November.

Tape Decks

Aiwa AD-F990 cassette. September.
Akai GX-91 cassette. March.
Denon DR-M3 cassette. February.
Harman Kardon CD-191 cassette. August.
JVC DD-99 cassette. February.
Luxman KX-101 cassette. February.
Nakamichi BX-1 cassette. February.
Nakamichi Dragon cassette. April.
Onkyo TA-R77 cassette. August.
Revox B-710 Mk. II cassette. February.
Sherwood S-250CP cassette. October.
Sony TC-FX1010 cassette. February.
Teac V-95RX cassette. January.
Teac Z-6000 cassette. May.
Yamaha K-1000 cassette. August.

Tuners

Carver TX-11. January.
NAD Model 4150. May.
Pioneer F-90. October.
Sony ST-S555ES. December.
Tandberg TPT-3001A. July.

Turntables

AR turntable. December.
Bang & Olufsen Beogram 8002. April.

Oracle Alexandria. October.
Sota Sapphire. May.
Technics SL-5. March.

Miscellaneous

Ace Audio Model 4100b bandpass filter.
June.
Audio Interface CST-40 moving-coil step-up
transformer. April.
AudioSource EQ-One equalizer. June.
Benchmark ARU ambience recovery unit.
March.
DBX NX-40 noise-reduction unit. August.
Fosgate Research 101A Tate-II surround-
sound decoder. November.
Realistic Bass Enhancer. January.
Signet XK-35 tonearm. May.
Technics SV-100 PCM adapter. August.

TEST REPORTS: Car Stereo

Alpine 7347 tuner/cassette deck. July.
Blaupunkt Tucson tuner/cassette deck. July.
Fujitsu Ten CE-4432EX1 receiver/cassette
deck. May.
Jensen RE-530 receiver/cassette deck. May.
Kenwood KRC-1022 tuner/cassette deck with
KAC-801 power amplifier. May.
Magnum 2002 FM antenna amplifier.
October.
Nakamichi TD-1200 tuner/cassette deck.
July.
Pioneer KE-7200 receiver/cassette deck.
October.

TEST REPORTS: Video

Audio Control Video Soundtracker-1 audio
signal processor. June.
Jensen AVS-1500 Audio+Video receiver.
June.
Jensen AVS-3250 color video monitor. July.
Jensen AVS-5190 shielded loudspeaker.
December.
Kloss T-1 TV tuner. September.
Mitsubishi AM-1031 TV receiver. December.
Proton 600T TV tuner. July.
Proton 600M color video monitor. September.
RCA VJP-900 VCR. October.
Sanyo AVM-196 video monitor. October.
Sanyo VCR-7300 Beta Hi-Fi VCR.
November.
Sony SL-2700 Beta Hi-Fi VCR. August.

AUDIO AND VIDEO

Car Stereo

A Basic Guide to Mobile Music. Gary Stock. May.
Answers to Readers' Questions About Sound on
Wheels. Gary Stock. (The Audiophile)
January.
Car Stereo Special: All Systems Go for '84. (New
Gear for 1984) Gary Stock. October.
Choosing a Front End. Gary Stock. (The Audiophile)
March.
How HF Lab-Tests Car Components. Edward J.
Foster. (Sound Views) May.
How HF Road-Tests Car Components. Robert
Long. May.
How to Protect Your System from Theft. Gary
Stock. May.
Much Ado About Noise. Gary Stock. (The Auto-
phile) November.
Roundup of the Latest Car-Stereo Equipment. Gary
Stock. May.
Learning from a Pro: Tips on Car Stereo Installa-
tion. Gary Stock. July.
Triamplification: Getting Better Performance from
Your Car-Stereo Speakers. Gary Stock. (The
Audiophile) January.

Compact Disc

CD Sound: Trouble in Paradise? E. Brad Meyer.
(Sound Views) July.
European Report—What's Next for the CD? Peter
Dobbin. July.
HF Music Critics Take on the Compact Disc. Allan
Kozinn. January.
How HF Tests Compact Disc Players. Michael
Riggs (Basically Speaking) July.
Inside the Compact Disc System. Peter Mitchell.
July.
(Also see "Compact Disc Reviews")

Computers

The Alpha and the Apple—A Musical Team. Paul
D. Lehrman. September.
High Cs From ICs—Making Music on Your Home
Computer. Myron Berger. June.
Let Order Prevail—Computerize Your Record-Fil-
ing System. Roger C. Parker. June.
Loudspeakers and Computers: The Quiet Revolu-
tion. Peter Mitchell. November.
Music-Synthesis Software: A Beginner's Guide.
Lida A. Silverman. December.
Say Hello to SID—Making Music via the Commo-
dore 64 Sound Interface Device.
Paul D. Lehrman. December.
Visualizing Sound with an Audio Spectrum Ana-
lyzer and Color Computer. Peter Mitchell. Sep-
tember.

Digital Audio

A New Era for Radio—Satellite Home-Music Deliv-
ery. Charline Allen. October.
Signal Processing Enters the Digital Age. Michael
Riggs. June.

Electronics

A Question of EQ—All About Equalizers. E. Brad
Meyer. June.
Grand Central for Signals. Michael Riggs. (Basical-
ly Speaking) March.
How HF Tests Power Amps. Michael Riggs. (Basi-
cally Speaking). December.
How HF Tests Preamps: Part 1. Michael Riggs.
(Basically Speaking) October.
How HF Tests Preamps: Part 2. Michael Riggs (Ba-
sically Speaking) November.
How to Interpret Tuner Specifications. Michael
Riggs. (Basically Speaking) May.
Picking the Right Mike for Live Recordings. Alexan-
der N. Retsoff. (Retsoff's Remedies) August.
Selecting the Right Receiver. E. Brad Meyer. Octo-
ber.

Record-Playing Equipment

Cartridge and Arm: Making the Best Match. Michael
Riggs. (Basically Speaking) January.

Speakers

Breathing New Life into Old Speakers. Alexander
N. Retsoff. (Retsoff's Remedies) June.
How HF Tests Loudspeakers. Michael Riggs. (Ba-
sically Speaking) June.
How to Tell If Your Speakers Are Out of Phase.
Alexander N. Retsoff. (Retsoff's Remedies)
April.
Loudspeakers and Computers: The Quiet Revolu-
tion. Peter Mitchell. November.
Will Microprocessors Lead Us to the Perfect Loud-
speaker? Robert Berkovitz. (Sound Views)
June.

Tape

Choosing the Right Audio and Video Tapes. Alex-
ander N. Retsoff. (Retsoff's Remedies)
February.
How HF Tests Cassette Tape. Michael Riggs. (Ba-
sically Speaking) August.
How Tape Recording Works. Michael Riggs. (Basi-
cally Speaking) February.
How to Make Great Cassette Recordings. Peter
Mitchell. February.
The New Tapes: A Change for the Better? Robert
Long. (Sound Views) August.
Which Cassette Tapes Perform Best? Robert Long.
August.

Video

- A New Dimension for Video Sound: Surround-sound Realism at Home. Ralph Hodges. November.
- A Rooftop Rx for TV Ills. Alexander N. Retsoff. (Retsoff's Remedies) October.
- How Beta Hi-Fi Works. Peter Mitchell. August.
- JVC GX-S9U Color Video Camera. Edward J. Foster. (Hands-On Report) January.
- Kloss Model One-A Monitor. Edward J. Foster. (Hands-On Report) May.
- Stereo TV Now—Receiving Satellite Stereo Broadcasts. William Mowrer. November.
- Toshiba CA-045 Color Monitor/Receiver. Edward J. Foster. (Hands-On Report) February.
- Two Interactive LaserDiscs: "Murder, Anyone?" and "The Master Cooking Course." Edward J. and Sandra Foster. (Hands-On Report) April.
- Video Switchboxes: Showtime Video Ventures Model 5000S and Channel Master Model 0770. Edward J. Foster. (Hands-On Report) March.
- Videotape Buyer's Guide. Myron Berger. August.

Miscellaneous

- A Renaissance in Audio: True Innovation Is Here Again. Peter Dobbin. (Sound Views) January.
- A Talk with Dr. Matti Ojala. Robert Long. (Sound Views) April.
- ADS Avant-Garde Atelier Stereo System. Christine Begole. (Audio/Video Environments) June.
- Building an Audio Cabinet Yourself. Christine Begole. (Audio/Video Environments) April.
- Assembling a Serious System: The Argument for Separates; A Recordist's Reference Setup. Robert Long; E. Brad Meyer. December.
- Design for Living—and Listening. Christine Begole. (Audio/Video Environments) May.
- Five Electronic Drum Machines Compared. J. B. Moore. (Input Output) March.
- How Radio—Especially FM—Works. Michael Riggs. (Basically Speaking) April.
- Kenwood New Life Audio Ensemble. Christine Begole. (Audio/Video Environments) January.
- Loudspeaker Pioneer Dr. Amar Bose. Peter Dobbin. (Sound Views) March.
- 1984 Product Preview. Peter Dobbin. August.
- Prescriptions for Audio Indecision—How to Buy a Stereo System. Harold A. Rodgers. March.
- Special CES Report: The New 1984 Components. Electronics, by Michael Riggs. Tape and Tape Equipment, by Robert Long. Loudspeakers and Record-Playing Gear, by Ralph Hodges. Video and Digital Audio, by Michael Riggs and Peter Dobbin. September.
- Spring New Product Guide: HF Editors survey the scene at the Winter Consumer Electronics Show. Michael Riggs, Peter Dobbin, Robert Long, William Tynan, Susan Elliott. April.
- Spring Stereo Component Preview. Peter Dobbin. March.
- Taking Control of Your Stereo System. Robert Long. March.

MUSIC AND MUSICIANS

- Byrne, David: Talking Head. Steven X. Rea. September.
- Fagen, Donald. Sam Sutherland. January.
- Gould, Glenn: A Tribute to (See also Records and Recordings). Part 1: David Hamilton. January. Part 2: Harris Goldsmith. February.
- Joel, Billy: "Don't Call Me a Brat!" Steven X. Rea. February.
- McGarrigle, Les Soeurs. Steven X. Rea. June.
- Newman, Randy: Randy Newman's Coming-Out Party. Sam Sutherland. March.
- Rollins, Sonny: "I'm Still Reaching." Crispin Cioe. May.
- Schnittke, Alfred: Kremer and Goldsmith on (and Each Other). February.
- Simon, Carly: Chez Carly. Steven X. Rea. November.
- Thompson, Richard: Who Is Richard Thompson? Sam Sutherland. December.
- Vaughan, Stevie Ray: Premier Blues Guitarist. Steven X. Rea. August.

Widespread Jazz Orchestra—No Longer Depressed! Crispin Cioe. July.

ESSAY REVIEWS

- Beethoven's String Quartets (complete). Talich Quartet. Harris Goldsmith. June.
- Brahms Birthday Bash: Deutsche Grammophon "complete" edition. Part 1. Harris Goldsmith. December.
- Carter, Elliott: Early and Late. Symphony No. 1; Holiday Overture; Pocahontas: Suite. American Composers Orchestra, Dunkel. Syringa; Concerto for Orchestra. New York Philharmonic, Bernstein. Night Fantasies; Piano Sonata. Jacobs, Rosen. David Hamilton. September.
- Cats. Original Broadway cast recording. Lebowsky. Original London cast recording. Rabinowitz. Matthew Gurewitsch. August.
- Charles, Ray: Wish You Were Here Tonight. John Milward. April.
- Charting the Prima Donna Sweepstakes. Kiri Te Kanawa. Mozart, Puccini, Verdi: Opera Arias. Canteloube: Chants d'Auvergne. September.
- Clapton, Eric and Lee, Albert: Dueling Guitarists. Steven X. Rea. May.
- Coleman, Ornette: Broken Shadows. Don Heckman. January.
- Expanding the Early-Music Frontiers. Spielmann und Kleriker; Sequentia. Power; Hilliard Ensemble. Schein; Helling, Basel Ricercare Ensemble, Piguet. Tilney. Nicholas Kenyon. March.
- The Finnish Touch. Kokkonen: The Last Temptation. Sallinen: The Red Line; The Horseman. Matthew Gurewitsch. November.
- From the Competitions, More Young Pianists. Thai Son; Ploblocka; Pogorelich; Faerman; Lonquich; Rubackyte, Cartier-Bresson; Orth. Bach, Beethoven, Brahms, Chopin, Schoenberg, Schubert. Harris Goldsmith. March.
- Gaye, Marvin and Prince: The King and the Prince. Midnight Love; 1999. John Milward. February.
- Gluck's Orfeo ed Euridice: Three Backward Glances. Various recordings. Nicholas Kenyon. August.
- Going Walkabout. Vivaldi, Holst, Bach, Strauss and Mozart on cassette. R.D. Darrell. February.
- Goldsmith, Harris: Schubert Piano Works. Goldsmith. R.D. Darrell. May.
- Good Neighbors to the North (Canadian recording project). Elmer Iseler Singers: Spectra. Baker: Washington Square (excerpts). Weinzwieg: Private Collection; Contrasts. Grimes, et. al.: Chaconne à son goût; All Wounds. Antonin Kubalek: Sonics. York Winds: Folia. Robert Markow. April.
- Gregor, József: A Lesson Well Learned. The Great Buffo Scenes. Savaria Symphony Orchestra, Pál. Kenneth Furie. March.
- Harnoy, Ofra: Artistry of a Musician. Debut Recital; Arioso; Cello Encores. Harris Goldsmith. March.
- Haydn Symphonies: Authenticity Comes of Age. Symphonies (6), 1766–68. L'Estro Armonico, Solomons. No. 6, in D (Le Matin); No. 7, in C (Le Midi); No. 8, in G (Le Soir). Capella Clementina, Müller-Brühl. No. 42, in D; No. 43, in E flat (Mercury). Monadnock Music, Bolle. John W. Barker. May.
- The Jazz Saxophone: Hot Winds of Change. Tim Berne Sextet; Jemeel Moondoc Sextet; Arthur Blythe; Sam Rivers. Don Heckman. October.
- Jones, Rickie Lee: Girl at Her Volcano. Steven X. Rea and Don Heckman. September.
- Kodály, Zoltán: The Other Hungarian Centenary. Choral and Orchestral Works. Budapest Philharmonic Orchestra, Kodály. Paul Henry Lang. March.
- Lee, Albert and Clapton, Eric. (See Clapton, Eric.)
- Melba, Nellie: The American Recordings, 1907–16. Melba. Tim Page. November.
- Minis, Maxis, and Eps of Recent Vintage. Steven X. Rea. July.
- Mozart, An Adult's Garden of. Così fan tutte, K. 588; Don Giovanni, K. 527. Glyndebourne Festival

Chorus and Orchestra, Busch. Conrad L. Osborne. August.

- Mozart Piano Concertos: State of the Performance Art. Various recordings. Harris Goldsmith. April.
- Mozart Serenading Notschibikitschibi. Serenade No. 10, in B flat, K. 361. Various recordings. Wind Serenades (3); Opera Suites (2). New York Philomusica Winds. R.D. Darrell. October.
- Mozart's Symphonies: Classical or Romantic? Various recordings. John Canarina. July.
- A New School of Jazz Piano. Ira Stein & Russel Walder; Dennis Moorman; Sharon Davis. Don Heckman. March.
- Nicholas Nickleby—Original television soundtrack recording. Royal Shakespeare Co. orchestra, Rabinowitz. Matthew Gurewitsch. May.
- Prince and Gaye, Marvin. (See Gaye, Marvin.)
- Rifkin's Bach: A Mass of Evidence. Mass in B minor, S. 232. Kenneth Cooper. January.
- Roll Your Own Jazz. Joseph LoDuca; Pete Christlieb; Jonny Holtzman; Montana; Gary Windo. Crispin Cioe. June.
- Schubert's Songs—Further Explorations. Songs (93). Various singers and accompanists. David Hamilton. April.
- Smetana Operas. Dalibor; The Kiss; The Bartered Bride. Peter G. Davis. August.
- Turandot Without Turandot. Ricciarelli, Karajan. Matthew Gurewitsch. June.
- Wagner: Chéreau's Ring, Syberberg's Parsifal. David Hamilton. June.
- Wagner: Remembrance of Rings Past. Das Rheingold. Die Walküre. Siegfried. Götterdämmerung. Der Ring des Nibelungen. Operatic excerpts. Orchestral Selections. Parsifal: Selections. David Hamilton. November.

RECORDS AND RECORDINGS

- Compact Disc Preview. October.
- Gould, Glenn: A Tribute to Part 1: Glenn Gould on Recording. The Goldbergs Revisited. James Oestreich. January. Part 2: An Appraisal. Harris Goldsmith. Recording Gould. Various. February.
- HF's Music Critics Take on the Compact Disc. Allan Kozinn. January.
- International Record Critics Awards: The Sixteenth Annual. James R. Oestreich. December.
- Let Order Prevail—Computerize Your Record-Filing System. Roger Parker. June.
- Messiah Discography, Part 1: Reduplication Without Redundancy. January. Part 2: Further Reduplication. Teri Noel Towe. February.
- 1984 Annual Preview of Forthcoming Recordings. September.
- Verdi Performance: Restoring the Color. Will Crutchfield. June.
- Wagner Recordings: The Early Operas. Der fliegende Holländer and Tannhäuser. Kenneth Furie. May.
- Wagner Recordings: The Love Stories. Lohengrin and Tristan und Isolde. Kenneth Furie. July.
- Wagner Recordings: Passing the Torch. Die Meistersinger and Parsifal. Kenneth Furie. October.

COMPACT DISC REVIEWS

- ABBA: Greatest Hits, Vol 2. November.
- Beethoven: Symphonies: No. 5, in C minor, Op. 67; No. 6, in F, Op. 68 (Pastoral). Leonore Overture No. 3, Op. 72b. Philharmonia Orchestra, Ashkenazy. July. Symphony No. 7, in A, Op. 92. Berlin State Orchestra, Sultner. November.
- Boccherini (arr. Grützmacher): Concerto for Cello and Orchestra, in B flat. Netherlands Chamber Orchestra, Inoue. December.
- Brahms: Concerto for Violin and Orchestra, in D, Op. 77. Berlin Philharmonic Orchestra, Karajan. September.
- Buckingham, Lindsey: Law and Order. November.
- Collins, Phil: Face Value. August.
- Ry Cooder: Bop Till You Drop. December.
- Davis, Miles: The Man With the Horn. July.

DiMeola, Al; McLaughlin, John; DeLucia, Paco: Friday Night in San Francisco. July.
 Fame: Original Motion Picture Soundtrack. September.
 Gabriel, Peter. October.
 Handel: Water Music: Suite in F. Royal Fireworks Music. Acad. of Ancient Music, Hogwood. August.
 Haydn: Concerto for Cello and Orchestra, In D, H. Vllb. 2. Netherlands Chamber Orchestra, Inoue. December.
 Hubbard, Freddie: Back to Birdland. December.
 Jackson, Michael: Off the Wall. August.
 James, Bob & Klugh, Earl: One on One. July.
 Joel, Billy: The Nylon Curtain. The Stranger. August.
 Jon and Vangelis: The Friends of Mr. Cairo. August.
 Marsalis, Wynton. December.
 Men At Work: Cargo. December.
 Morrison, Van: Beautiful Vision. Into the Music. October.
 Newman, Randy: Trouble in Paradise. December.
 Norman, Jessye: Sacred Songs. Royal Philharmonic Orchestra, Gibson. November.
 Offenbach: Overtures (5); Les Contes d'Hoffman: Barcarolle Berlin Philharmonic Orchestra, Karajan. August.
 Pepper, Art; Farrell, Joe; Cables, George: Darn That Dream. December.
 Prokofiev: Symphony No. 5, in B flat, Op. 100. Israel Philharmonic Orchestra, Bernstein. November.
 Oldfield, Mike: Tubular Bells. September.
 Petri, Michaela: Recorder Concertos (4). Academy of St. Martin-in-the-Fields, Brown. November.
 Quarterflash. August.
 Rowland, Kevin & Dexys Midnight Runners: Too-Rye-Aye. August.
 Roxy Music: Avalon. October. Manifesto. November.
 Scaggs, Boz: Silk Degrees. November.
 Scarlatti, A.: Sinfonie di concerto grosso (6). Symphonies: No. 1, In F; No. 2, in D; No. 3, in D minor; No. 4, in E minor; No. 5, in D minor; No. 6, in A minor. July.
 Shepp, Archie/Dollar Band: Duet. October.
 Tchaikovsky: Symphony No. 6, in B minor, Op. 74 (Pathétique). Los Angeles Philharmonic, Giulini. July.
 Rush: Signals. September.
 Various Artists: Real Hot Jazz. September.
 Wagner: Tannhäuser: Overture and Bacchanale. Overtures to Die Feen and Der fliegende Holländer. Concertgebouw Orchestra, de Waart. September.

VIDEO REVIEWS
 Beethoven: Concerto for Violin and Orchestra, in D, Op. 61. Perlman, Philharmonia Orchestra, Giulini. December.
 Duran Duran: Girls on Film; Hungry like the Wolf. August.
 Dvořák: Concerto for Cello and Orchestra, In B minor, Op. 104. Rostropovich, London Philharmonic, Giulini. December.
 Heifetz, Jascha; Piatigorsky Gregor. (Documentary-Interview). August.
 Midler, Bette: Divine Madness. December.
 Nesmith, Michael: Rio Crulsin'. August.
 Pearce, Jan; Anderson, Marian; Segovia, Andrés. August.
 Puccini: La Bohème. Royal Opera House Chorus and Orchestra, Gardelli. July.
 Rae, Jesse: Rusha. D.E.S.I.R.E. August.
 The Rolling Stones: Let's Spend the Night Together. July.
 Rubenstein, Arthur (with Heifetz, Piatigorsky). August.
 Rundgren, Todd. August.
 Rush: Exit Stage Left. July.
 Saint-Saëns: Concerto for Cello and Orchestra, No. 1, in A minor, Op. 33. Rostropovich, London Philharmonic Orchestra, Giulini. December.
 The Utopia Sampler. August.
 Verdi: Aida. Arena di Verona Corps de Ballet, Chorus and Orchestra, Guadagno. July.

ASSEMBLING A SERIOUS SYSTEM
(Continued from page 53)

which brightens things further. And most record producers, especially in popular music, add even more boost in the upper octaves with equalizers.

When you start making your own tapes with a couple of microphones and two-track equipment you will almost certainly find that your recordings are both more natural-sounding and less bright than their commercial counterparts. So the monitors that sound best with your recordings may be harsh and unpleasant with many commercial records and tapes. My recommendation is to choose the best speakers for your tapes and use an equalizer as needed for commercial recordings: Considering what has been done to them, the equalizer can only improve things.

The most important characteristic for a monitor is that it clearly reveal differences in microphones and their placement. You can check for this quality before you've made tapes of your own by noting which speakers seem to change their sonic character the most—frequency balance, stereo imaging, and so on—from recording to recording. This is a sign that the speaker is revealing

things about the recordings, not about itself. In fact, if it's hard to pin down the speaker's characteristic sound, and if it keeps surprising you, you're on the right track. A corollary of this is that the system should sound unspectacular most of the time. Speakers that bowl you over are doing something of their own to all source material. They may be hard to resist, but grit your teeth and keep looking.

Listen for a speaker's ability to elicit detail. It should be relatively easy, for example, to follow a single instrument in a small ensemble. But beware—some speakers achieve this by coloring parts of the frequency range. An individual instrument should, therefore, be both identifiable apart from the ensemble and sound reasonably like itself.

One final point. Even the best speakers and room add colorations to the sound, but the ear can learn to compensate for many of them so that it becomes possible to "listen through" to the source. On a good set of monitors you can evaluate the source without much effort, instead of constantly striving to ignore the speakers. A system that seldom calls attention to itself will serve you long and well. **HF**

RICHARD THOMPSON

(Continued from page 94)

pragmatic, out of necessity, and aesthetic, out of choice. I decided it was time to go into the studio and make music in which everybody played in the same room at the same time—to actually record performances.

Even though I had always tried to do that, I had gotten caught in the trap of perfectionism. "Shoot Out the Lights" was a good example of the only kind of recording I'm interested in doing now—not spending a lot of time at it, and getting it right as much as possible live. These days, you too often hear a sound that is of fantastic quality over the radio, but that unfortunately contains no music. It's a case of improving the sound at the expense of the performance.

Backbeat: How did you arrive at the instrumentation on "Hand of Kindness"? You've used brass in the past, but this time you added some really gutsy saxes.

Thompson: Each record tends to come along as just a different experiment. There's no real sequence in my mind from one to the next. On this one, it was a good idea to bring in a horn section on a couple of tracks, and having brought them in, it was interesting to use them on most of the record.

Backbeat: Will the same ensemble be used for the tour?

Thompson: We'll probably have the same line-up as on the record, with a couple of

saxes and accordion. And we'll probably use a bigger rhythm section.

Backbeat: One element of your recent success that I hesitate to bring up is its relation to your private life. I can't help wondering how it must have felt to finally receive recognition, only to have the most widely-read pieces, especially that profile in *Time*, focus more on your separation from your wife than on your music.

Thompson: Well the *Time* piece was a little sensational, I thought. It was handy in the sense that it had a wide readership, so I didn't have to go around explaining to people that my marriage had just broken up—most people had already read about it. Obviously, I would rather people were more interested in the music.

Backbeat: Is it too soon to ponder what the next album will entail?

Thompson: I feel very inclined to make a real pop record: short songs—everything under three minutes—with snappy lyrics, recorded live in the studio.

Backbeat: One last thing. I have to congratulate you on the surprising news that you now have a fan club in the U.S.

Thompson: [Laughing] yes, there is one. It's quite good, too, really very well organized.

Backbeat: I assume they'll conduct it in good taste, with no official lunchboxes or pencil cases.

Thompson: You might get a T-shirt, though. **HF**

READER-ACTION PAGE

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-1283 unless otherwise noted, to the addresses listed below. If an address does not appear, literature is available through the company's dealers only.

Advertising Index

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Akai America LTD,
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Audio-Technica U.S. Inc.,
1221 Commerce, Stow, OH 44221, Att: Gail Schantz

BASF,
Crosby Dr., Bedford, MA 07130

Carver Corporation,
P.O. Box 664, Woodinville, WA 98072

Commodore Business Machines Inc.,
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21314 Lassen St., P.O. Box 2329, Chatsworth, CA 91311-1158, Att: Tom Dimas

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J&R Music World,
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RCA Home Electronics,
P.O. Box 1976, Mail Station 32-312R, Indianapolis, IN 46206

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Regency,
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TDK Electronics Corp.,
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Teac Corp. of America,
7733 Telegraph Rd., Montebello, CA 90640

Yamaha Electronics Corp. USA,
6660 Orangethorpe Ave., Buena Park, CA 90620, Att: Advertising Dept.

Page No.	
24	Acoustat
21	Acoustic Research
33	Aiwa America, Inc.
45	Akai America, Inc.
8	Angel Records
3	Audio-Technica U.S. Inc.
12	BSR
6	BASF
4	Carver Corp.
54	Commodore Business Products
77	Custom Woodwork
13	DAK
41	DAK
51	DAK
57	Denon America, Inc.
102	Design Acoustics
Cover IV	Discwasher, Inc.
64	Fisher Corp.
31	Harman Kardon
22	Hitachi Sales Corp. of America
99	Illinois Audio
97	J&R Music World
2	Koss
95	LaBelle Camera & Stereo
104	LAM Development
7	Magnepan Incorporated
19	Maxell Corp.
25	McIntosh Laboratories
Cover III	MEMTEK
49	Mitsubishi Electronic Sales
103	NAD
38	Nakamichi U.S.A. Inc.
Cover II	NEC Home Electronics, Inc.
43	Onkyo
16,17	Pioneer High Fidelity
87	Polk Audio
75	RCA Records
59,60	RCA
63	RCA
52	Regency Electronics
37	Sansui Electronics Corp.
89	Signet
14,15	Sony Corp. of America
26,27	Sony Corp. of America
29	Sony Corp. of America
104	Sound Reproduction
101	Stereo Corp. of America
11	TDK Electronics Corp.
34	Teac Corp. of America
85	Teac Corp. of America
5	Technics
8	Wisconsin Discount
9	Yamaha

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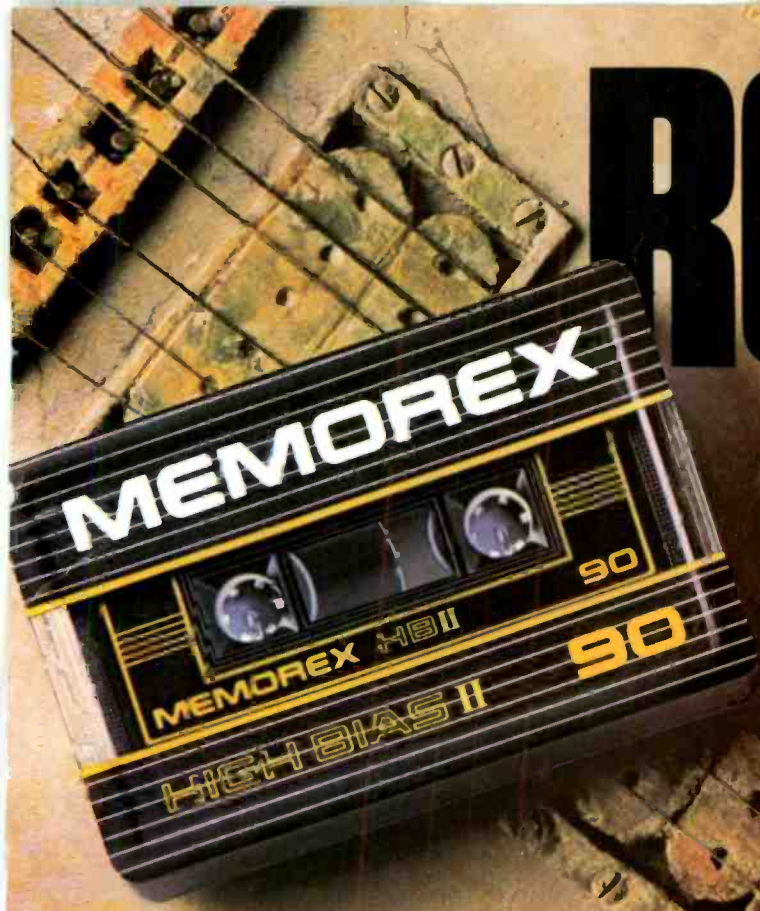
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