

July 1979 \$1.50

**BACKBEAT FEATURES:** The Disco Sound: How Four Top Pros Mix the Hot Records **EX** Exclusive Interview: Steve Forbert—Star of the "New Folk Revival"

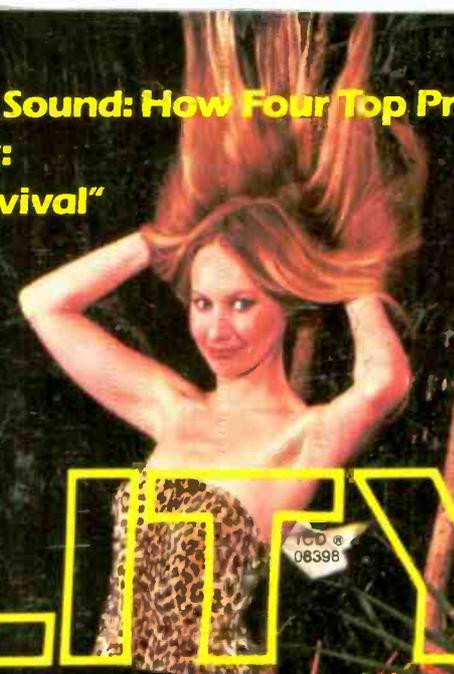
# HIGH FIDELITY

The Final Component  
**Your Listening-Room  
Acoustics—Seven  
Ingredients of Success**

Ten Lab/Listening Reports  
**Five New Offbeat  
Speakers from \$500  
to \$900/pair**

R HISSAN  
37 CLINTON ST  
ONEONTA N Y  
13820

Typical popular-priced  
...  
a choice deck  
with individuality...  
...  
...amp...  
...value  
semiautomatic turntable



100 08398



**AND IT'S WHAT GOES  
INTO HPM SPEAKERS THAT  
MAKES THEM SOUND GREAT ON  
EVERY PART OF THE MUSIC.**



**HPM 60**

**HPM 100**

**HPM 150**

**HPM 40**

Most speaker companies try to impress you by describing the "wonderful" sound that comes out of their speakers.

At Pioneer, we think the most believable way to describe how good HPM speakers are is to tell you what went into them.

**THE HPM SUPERTWEETER:  
SPEAKER TECHNOLOGY RISES TO NEW HIGHS.**

In many speakers, you'll find that the upper end of the audio spectrum is reproduced by an ordinary tweeter.

In HPM speakers, you'll find that the high frequencies are reproduced by a unique supertweeter.

It works by using a single piece of High Polymer Molecular film, (hence the name HPM) that converts electrical impulses into sound waves without a magnet, voice coil, cone, or dome.

And because the HPM supertweeter doesn't need any of these mechanical parts, it can reproduce highs with an accuracy and definition that surpasses even the finest conventional tweeter.

As an added advantage, the HPM film is curved for maximum sound dispersion. So unlike other speakers, you don't have to plant yourself in front of an HPM speaker to enjoy all the sound it can produce.

**MID-RANGE THAT ISN'T  
MUDDLED.**

For years, speaker manufacturers have labored over mid-range driver cones that are light enough to give you quick response, yet rigid enough not to distort.

Pioneer solved this problem by creating special cones that handle more power, and combine lower mass with greater rigidity. So our HPM drivers provide you with cleaner, and crisper mid-range. Which means you'll hear music, and not distortion.

**WOOFERS THAT TOP EVERY OTHER BOTTOM**  
Conventional woofers are still made

with the same materials that were being used in 1945.

Every woofer in the HPM series, however, is made with a special carbon fiber blend that's allowed us to decrease the weight of the cone, yet increase the strength needed for clarity. So you'll hear the deepest notes exactly the way the musician recorded them.

And because every HPM woofer also has an oversized magnet and long throw voice coil, they can handle more power without distorting.

**OTHER FEATURES YOU  
RARELY HEAR OF.**

Every HPM speaker has cast aluminum frames, instead of the usual flimsy stamped out metal kind. So that even when you push our speakers to their limit, you only hear the music and never the frames. In fact, our competitors were so impressed, they started making what look like die cast frames, but aren't.

HPM speaker cabinets are made of specially compressed board that has better acoustic properties than ordinary wood.

Their speakers have level controls that let you adjust the sound of the music to your living room.

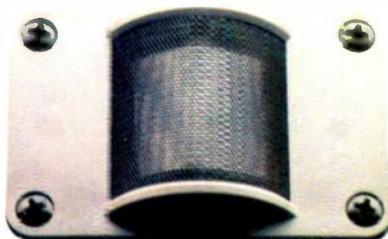
And these features are not just found in our most expensive HPM speaker, but in every speaker in the HPM series.

All of which begins to explain why, unlike speakers that sound great on only part of the music, HPM speakers sound great on all of it.

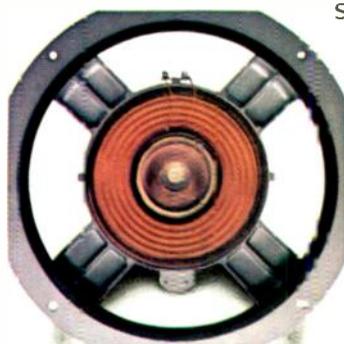
At this point, we suggest you take your favorite record into any Pioneer Dealer and audition a pair of HPM speakers in person.

If you think what went into them sounds impressive, wait till you hear what comes out of them.

**PIONEER**  
We bring it back alive.



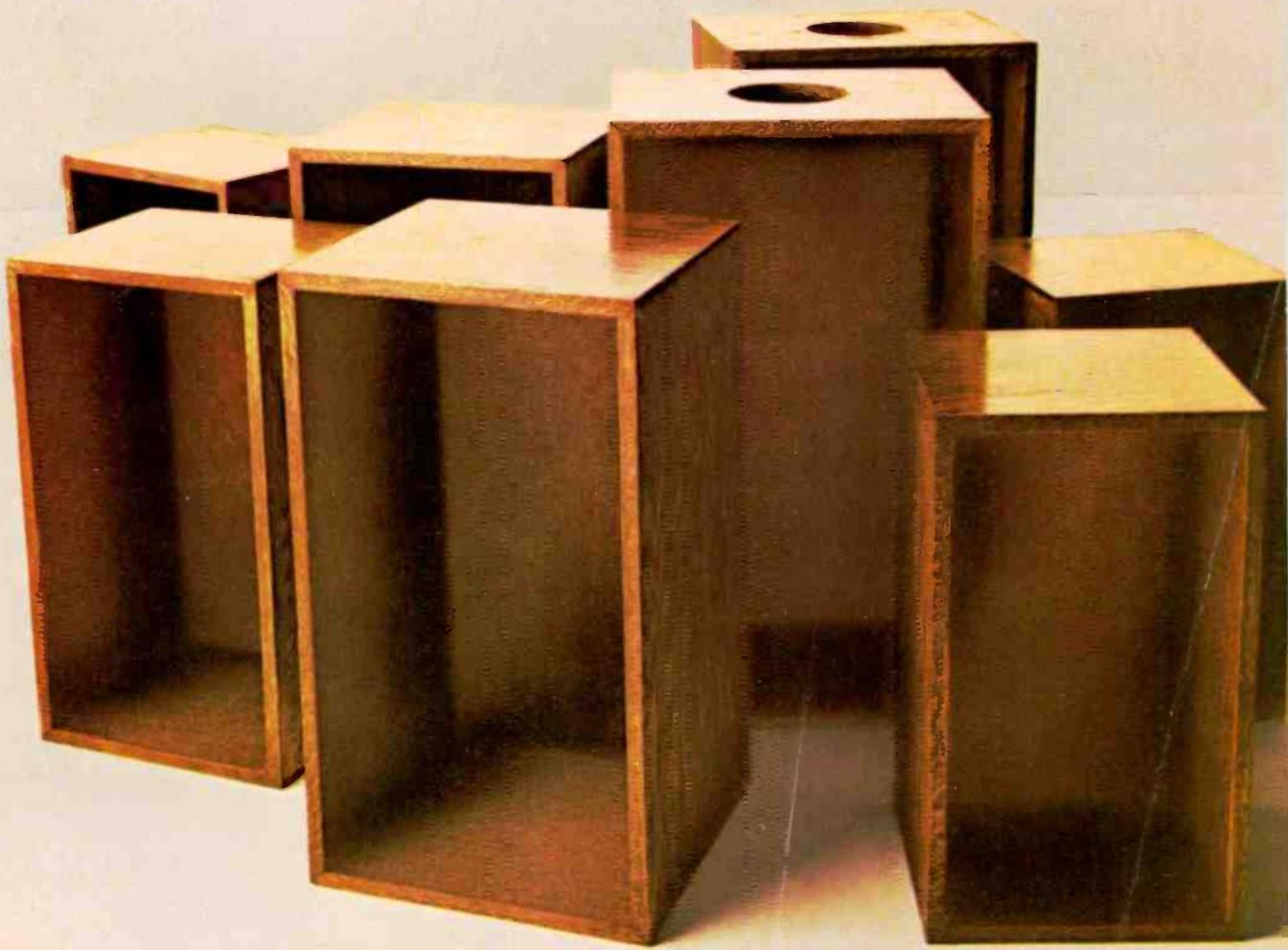
The High Polymer Molecular Supertweeter. So incredible, we named a whole line of speakers after it.



You'll never hear a sound out of these die cast aluminum speaker frames.



Level controls that let you adjust the sound to your listening area.



175385

900000

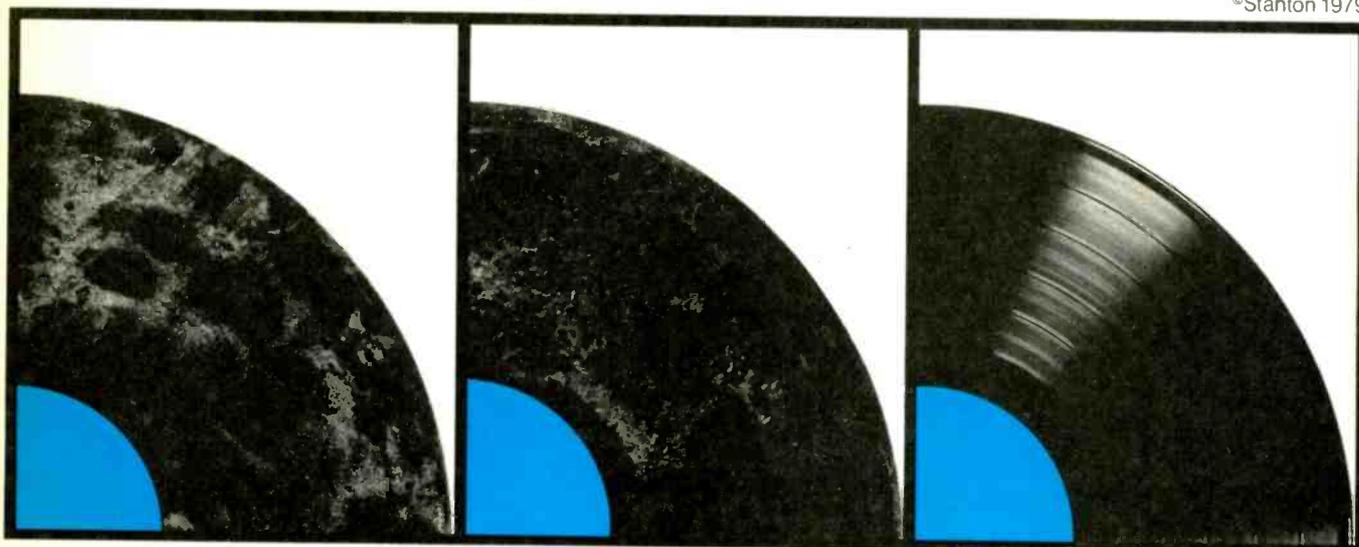
**WHAT COMES OUT  
OF A SPEAKER IS ONLY  
AS IMPRESSIVE AS  
WHAT GOES INTO IT.**

A Revolutionary Record Care Breakthrough  
From Stanton...

# Permostat™

eliminates record static  
permanently with only  
**one** application!

©Stanton 1979



UNTREATED RECORD

BRAND X

PERMOSTAT

Stanton introduces Permostat, the only record care product that eliminates record static permanently with just a single application. Permostat is a new and uniquely formulated fluid, which with just one application to a record totally eliminates static without any degradation in sound quality... and prolongs the life of your record.

Static electricity draws airborne dust particles onto the record where they can be pushed along the groove creating various degrees of audible distortion. Now, Permostat eliminates this problem permanently.

To demonstrate Permostat's unique anti-static qualities, Stanton engineers constructed a dust chamber to perform accelerated dust pickup tests. In this test, three records were suspended vertically

within the chamber, the first untreated, the second treated with anti-static products currently available (piezo electric guns, fluids, cloths and conducting brushes) and the third treated with Permostat.

Under test conditions, only the Permostat treated record showed no visible evidence of dust pickup and no residual charge.

Each Permostat kit provides protection for 25 records (both sides). Just spray it on, buff it in and eliminate static for the life of your records.

Now available at your local dealer.

**Suggested Retail:**  
**Complete Kit...\$19.95**  
**Refill...\$15.95**

For further information contact: Stanton Magnetics Inc., Terminal Drive, Plainview, New York 11803



# STANTON

THE CHOICE OF THE PROFESSIONALS™



# HIGH FIDELITY

**Leonard Marcus**  
Editor

**Shirley Fleming**  
Editor, Musical America

**Robert Long**  
Audio-Video Editor

**Kenneth Furie**  
Classical Music Editor

**Susan Elliott**  
Editor, Backbeat

**Rebecca Abbott**  
Associate Editor

**Lynda Carlotta**  
**Cynthia Pease**  
Assistant Editors

**Isabel Parker**  
Editorial Assistant

**Edward J. Foster**  
Consulting Audio Editor

**Edward Greenfield**  
European Editor

**Robert S. Clark**  
Editorial Director

**Abram Chipman**  
**John Culshaw**  
**R. D. Darrell**  
**Alfred Frankenstein**  
**Harris Goldsmith**  
**David Hamilton**  
**Dale Harris**  
**Paul Henry Lang**  
**Gene Lees**  
**Irving Lowens**  
**Robert C. Marsh**  
**Fred Miller**  
**H. C. Robbins Landon**  
Contributing Editors

**Sarina Bromberg**  
Art Director

**Wayne Armentrout**  
Production Director

**David Lee**  
Circulation Director

**John D. Kallman**  
Circulation Manager

**William P. Johnson**  
Circulation Service Manager

**Warren B. Syer**  
Publisher

**HIGH FIDELITY** is published monthly at The Publishing House, Great Barrington, Mass. 01230 by ABC Leisure Magazines, Inc., a subsidiary of American Broadcasting Companies, Inc. Copyright © by 1979 ABC Leisure Magazines, Inc. The design and contents are fully protected by copyright and must not be reproduced in any manner. Second-class postage paid at New York, New York, and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa, and for payment of postage in cash. Yearly subscription in U.S.A. and Possessions \$11.95; elsewhere \$15.95. Single copies \$1.50. Subscribers: Send subscriptions, inquiries, and address changes to High Fidelity, 1 Sound Ave., Marion, Ohio 43302. Change of address: Give old and new addresses, including ZIP Code. Enclose address label from last issue and allow five weeks for change to become effective. **Postmaster: Send Form 3579 to High Fidelity, 1 Sound Ave., Marion, Ohio 43302. Postal Identification Number 243820.**

## Audio/Video

- 6 High Fidelity News**  
Bose electronics  
Cizek speakers  
Whither metal-tape cassettes?
- 25 Soundings**  
RFI and the nickel fix  
by Edward J. Foster
- 28 Autophile**  
Alpine hits the high road  
by Robert Angus
- 34 Too Hot to Handle**
- 39 Equipment Reports**  
Harman Kardon HK-3500 cassette deck  
Fisher RS-2007 receiver  
ADC 1700DD turntable  
Rotel RA-2030 amplifier  
Sherwood S-7450CP receiver  
**Special Speaker Section:**  
JBL L-110  
KEF 105  
Rogers LS3/5A  
Speakerlab 30  
Visonik Euro 7
- 115 The Listening Room**  
The final component  
by Alan Fielding

## Backbeat

- 62 Steve Forbert**  
Takes a bite of the big apple  
by Stephen Holden
- 64 Producing Steve Forbert**  
by Steve Burgh
- 68 Input Output**  
by Fred Miller
- 72 Discotech I**  
How they fix the mix  
by Crispin Cioe
- 79 Pop-Pourri**  
Space-age pop  
by Stephen Holden
- 80 Einstein on the Beach**  
by Don Heckman

- 80 Backbeat Records**  
Evelyn "Champagne" King  
Patti Smith  
Bill Evans
- 103 Music In Print**  
Natalie Cole  
The Who  
Hall and Oates
- 104 Jazz Spinoffs**  
by Don Heckman and  
John S. Wilson

## Music/Artists

- 121 Rigor Antiquarii**  
The great "performance-practice" muddle  
by Paul Henry Lang
  - 127 Bach on the Piano?**  
Yes!  
by Harris Goldsmith
  - 128 Gigli "Complete"**  
Some reflections on what might have been  
by David Hamilton
  - 134 Classical Records**  
Solomon's Beethoven  
Busoni sonatas  
The Freni/Pavarotti Tosca
  - 138 Critics' Choice**
  - 157 The Tape Deck**  
Two leaps forward for music-cassettes  
by R. D. Darrell
- ## Et Cetera
- 60 Editorial**  
by Robert S. Clark
  - 93 Reader-Service Cards**
  - 108 Letters**
  - 158 Advertising Index**

# Q • How close can hi-fi get to an authentic musical experience?

## A • Slip on new Audio-Technica Stereophones and hear for yourself.

If you want to find out how good the new Audio-Technica Stereophones really are, don't just compare them with other headphones. Put them up against the very finest *speaker* systems. But don't just listen to the equipment. Listen to the *music*. And be ready for a surprise!

Judged on the basis of flatness of response, freedom from distortion, transient response, sensitivity, and independence from room acoustics, these new dynamic and electret condenser models are perceptibly better sounding than speaker systems costing hundreds of dollars more.

And if you think that great performance can only come from heavy, bulky stereophones, get ready for another surprise. Our heaviest model is less than 7½ ozs. and our lightest is an incredible 4¾ ounces light. Comfort that lasts an entire opera if you wish.

For all the facts, send for our catalog. But for the revealing truth about stereophone performance, listen and compare at your nearby Audio-Technica showroom. It will be a great *musical* experience.



**Model ATH-7**  
Our finest Electret Condenser with LED peak level indicators  
\$149.95

**Model ATH-1**  
The moving coil dynamic stereo-  
phone that weighs just 4¾ oz.  
\$29.95

**audio-technica**  
INNOVATION □ PRECISION □ INTEGRITY

AUDIO-TECHNICA U.S., INC., Dept. 79H-1 33 Shlawassee Avenue, Fairlawn, Ohio 44313  
Available in Canada from Superior Electronics, Inc.

Circle 4 On Page 93

## 4 HIGH FIDELITY

### ART CREDITS

Cover photographed at Treemania, 736 Sixth Ave., New York, N.Y., by John Barrett. Sheena is Rhonda Couliet.

- 48 Courtesy Macy's at Thirty-fourth St., New York, N.Y. by Bob Brody.
- 62 Dave Gahr
- 64 Steve Burgh
- 67 Chuck Pulin
- 72 Howard Millard
- 76 Howard Millard
- 15 Steven Guarnaccia
- 21 Tom Leigh
- 23 Tom Leigh
- 25 Tom Leigh
- 26 Tom Leigh
- 29 C. Mishkri
- 30 C. Mishkri
- 34 Alfredo Valente/EMI
- 36 J. Heffernan/Metropolitan Opera
- 40 Rumjana Bojadjev/Monitor
- 45 Lauterwasser/DG
- 48 Georges Meran/Peters

### SOLUTION TO HIFI-CROSTIC NO. 44

[Roger] Sessions  
Questions About Music

Since the composer was naively regarded as a mysterious and romantic figure who worked under a quasi-supernatural force called "inspiration," people seldom focused on the fact that his craft has to be cultivated not through "theory," but through practice.

### ADVERTISING

**Main Office:** Robert J. Ur Sr., Director of Advertising Sales, The Publishing House, Great Barrington, Mass. 01230. Telephone: 413-528-1300.

**New York:** ABC Leisure Magazines, Inc., 130 E. 49th St., 15th floor, New York, N.Y. 10022. Seymour Resnick, National Advertising Manager, 212-826-8381. George Dickey, Record Advertising Manager, 212-826-8383. Ruth Elliott, Eastern Advertising Manager, 212-826-9223. Janet Cermak, Administrative Assistant, 212-826-8390. Classified Advertising Department, 212-826-8393.

**Midwest:** ABC Leisure Magazines, Inc., 190 N. State St., Room 632, Chicago, Ill. 60601. Telephone: 312-782-1173. William P. Gordon, Midwest Advertising Manager.

**Los Angeles:** ABC Leisure Magazines, Inc., 2020 Avenue of the Stars, Suite 245, Century City, Calif. 90067. Telephone: 213-553-2000. Andrew Spanberger, Western Advertising Manager; Janet Endrijonas, Associate Western Advertising Manager.

**Tokyo:** Japan Advertising Communications, Inc., New Ginza Bldg., 7-3-13 Ginza, Chuo-ku, Tokyo 104, Japan. Telephone: (03) 571-8748. Shigeru Kobayashi, President.

**HIGH FIDELITY** and **HIGH FIDELITY/MUSICAL AMERICA** are published monthly by ABC Leisure Magazines, Inc., a subsidiary of American Broadcasting Companies, Inc. Warren B. Syer, President; Herbert Keppler, Senior Vice President, Photographic Publishing Division; Leonard Levine, Vice President, Advertising; Warren Tuohy, Vice President, Finance; David Lee, Circulation Director; Cathleen Aloisi, Personnel Director. Member Audit Bureau of Circulation. Indexed in Reader's Guide to Periodical Literature. Current and back copies of High Fidelity and High Fidelity/Musical America are available on microfilm from University Microfilms, Ann Arbor, Mich. 48106. Microfilm copies of these magazines (1973 forward) are available through Bell & Howell Micro Photo Division, Old Mansfield Road, Wooster, O. 44691.

**Editorial correspondence** should be addressed to The Editor, High Fidelity, Great Barrington, Mass. 01230. Editorial contributions will be welcomed, and payment for articles accepted will be arranged prior to publication. Unsolicited manuscripts should be accompanied by return postage.

Circle 52 On Page 93 ▶

# Technics SILVER EDITION

When you consider the prices of many metal-tape cassette decks, it's hard to consider them at all. But consider this: With Technics RS-M63 you not only get metal tape recording, you also get three heads and double Dolby† for only \$450.

That means you'll get a lot of performance, too. Take the RS-M63's extended frequency response. With standard CrO<sub>2</sub> tape it's incredibly high; with metal tape it's simply incredible.

Wow and Flutter	Frequency Response	S/N
0.05% WRMS	20Hz-20kHz (metal)	E7 dB Dolby in
	20Hz-18kHz (FeCr/CrC <sub>2</sub> )	
	20Hz-17kHz (normal)	

The RS-M63's separate HPF record and playback heads not only result in a very wide frequency response, they also work together so you can check the quality of your tape while recording it. There's also a sendust/ferrite erase head, powerful enough to erase highly resistant metal tape.

When it comes to Dolby NR, the RS-M63 offers plenty of versatility. Because there are separate Dolby circuits for recording and playback. And that means you can monitor your tapes with the benefits of Dolby Noise Reduction.

To help you make recordings with plenty of dynamic range, the RS-M63 adds fluorescent (FL) bar-graph meters. They're completely electronic and extremely fast with a device attack time of just five millionths of a second. They're also accurate. So accurate that deviation from the 0 VU level is no more than 0.1dB. And that means the recording levels you see are the recording levels you get.

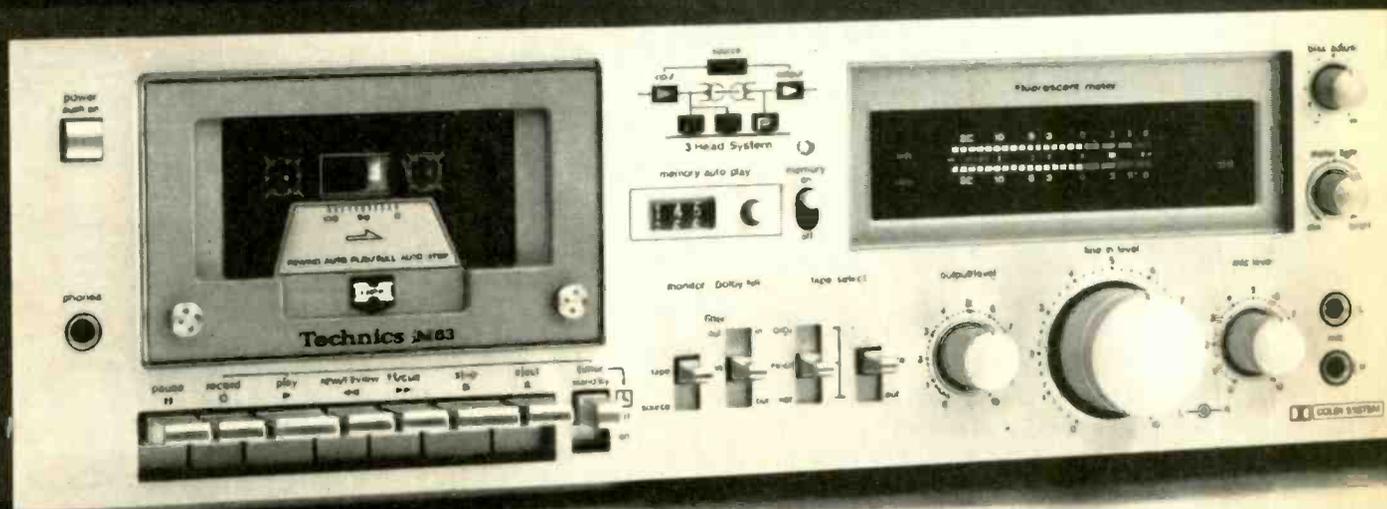
The RS-M63 also has separate three-position bias and EQ selectors for normal, chrome and ferrichrome tapes. A separate metal tape selector. Fine bias adjustment. And memory features including auto rewind, auto play and rewind auto play.

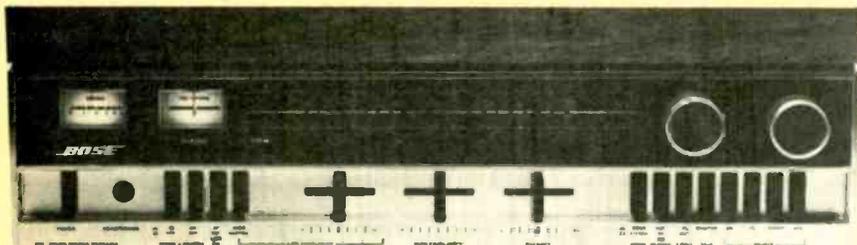
The RS-M63. The only deck to consider when you consider its performance and its price.

\*Technics recommended price, but actual retail price will be set by dealers.

†Dolby is a trademark of Dolby Laboratories.

## Everyone's talking about metal tape recording, 3 heads and double Dolby. Technics lets you hear it all for \$450.\*





## Bose returns to electronics

The Bose 550, one of two receivers that represent the company's first new electronics in several years, is rated at 40 watts (16 dBW) per channel and features what Bose calls source and room compensation instead of conventional tone controls. The low-frequency control has two settings: NARROW boosts or cuts frequencies near 150 Hz, WIDE acts on frequencies below 250 Hz. Though it may be used with any speaker, the 550 incorporates an equalizer that works automatically with the Bose 901 Series III or IV. Price of the receiver is \$349.

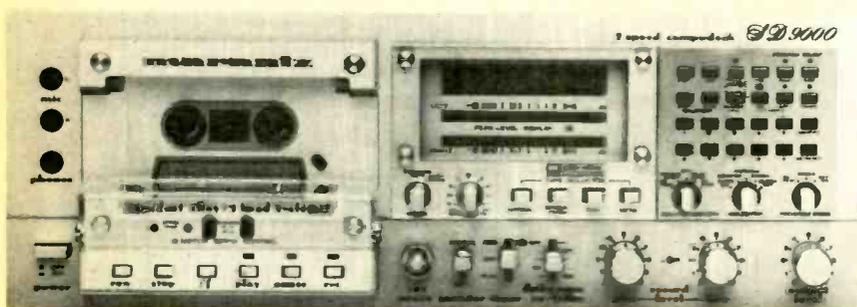
**Circle 141 On Page 93**



## Cizek speakers are Classic

Heading Cizek's new Classic Series speakers is the KA-1, a bookshelf model said to have a power-handling range of 15 to 200 watts (11 3/4 to 23 dBW). The system's drivers, 6 1/2-inch woofer and 1-inch dome tweeter, are mated via a newly developed crossover. Nominal impedance of the system is 4 ohms; rated frequency response is  $\pm 1$  dB from 100 Hz to beyond audibility and  $-3$  dB at 70 Hz. The KA-1s cost \$590 per pair.

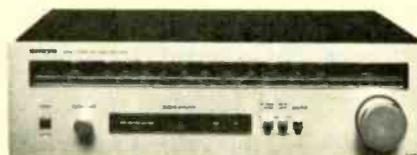
**Circle 142 On Page 93**



## A metal-ready two-speed deck

Among the products that Marantz expects to deliver later this year is the SD-9000 two-speed Dolby cassette deck. This front-loading deck also offers metal-tape capability and incorporates microprocessor programming and selection circuitry. Its many other features include a multipurpose clock, built-in time, mike/line mixing, output level control, multiplex filter, peak LED display, and removable head cover. The SD-9000 is expected to be priced at \$775.

**Circle 144 On Page 93**



## Onkyo's tuner: second-generation servo-lock

Onkyo's T-4040 FM/AM tuner offers circuitry that defeats the servo-lock at a touch of the tuning knob. LEDs indicate all major functions, including signal strength. Provided along with a stereo noise filter (for the FM mode only) are a muting/lock switch and an adjustable output level control. Rated harmonic distortion, for stereo FM, is 0.3%; frequency response is 30 Hz to 15 kHz,  $\pm 1/2$ ,  $1/2$  dB. The T-4040 costs \$229.95.

**Circle 148 On Page 93**



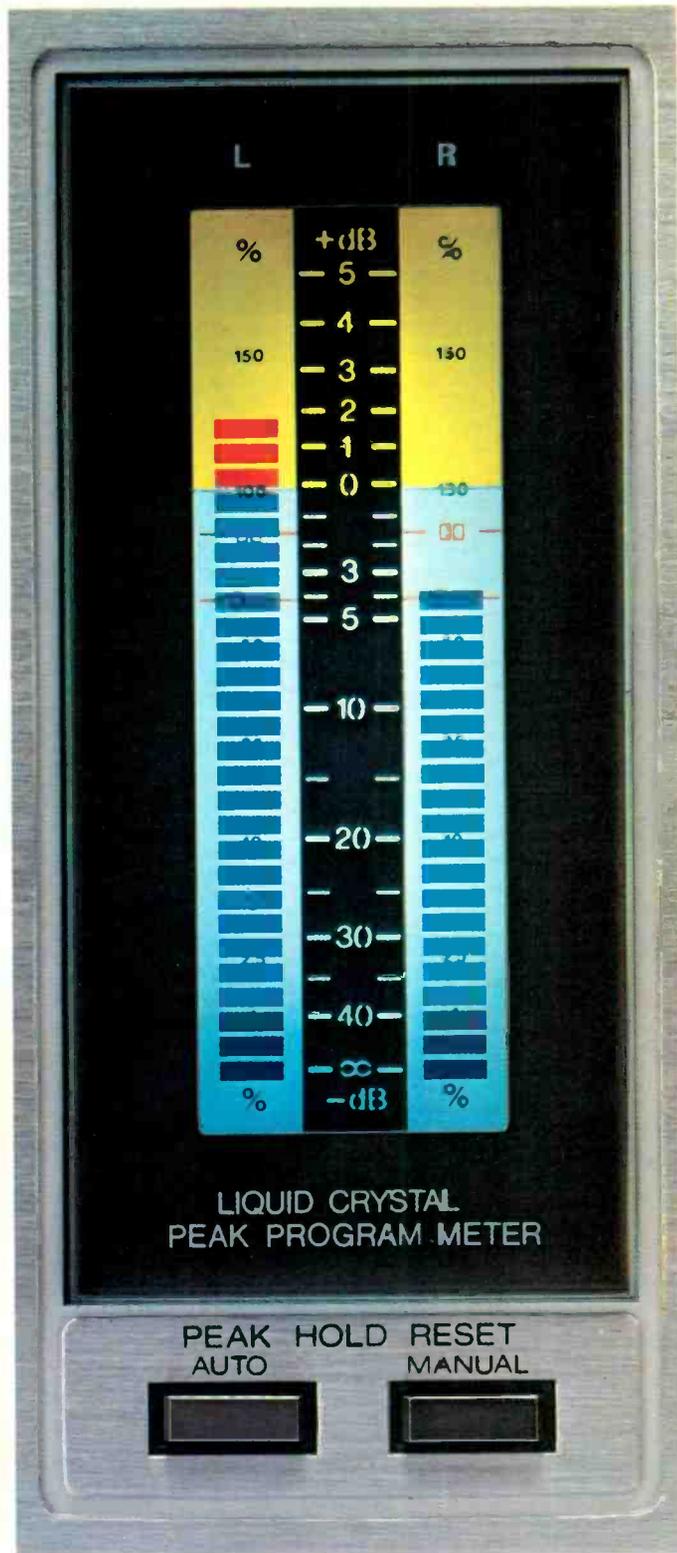
## Diamond Differential amp

The AU-919 integrated amplifier employs Sansui's Diamond Differential DC circuit to avoid the compromise that usually must be made between high negative feedback levels and high slew rate. The amp is rated to deliver 110 watts (20 1/2 dBW) into 8 ohms from 5 Hz to 20 kHz with no more than 0.008% total harmonic distortion. Slew rate is said to be 200 volts per microsecond. A switchable phono input allows use of moving-coil pickups. The rack-mountable AU-919 costs \$800.

**Circle 146 On Page 93**

Continued on page 11

# EYE FIDELITY.



Any audio professional will tell you. The fidelity of your recording depends on the quality of your recording level meter.

That's why Sony Audio created the fastest, most accurate, most versatile, most reliable, brightest, and easiest-to-read recording level display meter in tape deck history. Period.

Our Liquid Crystal Peak Program Meter IC responds in an incredible 1 millisecond. That gives you the quickest measurement possible, even on the most sudden transient signals.

To demonstrate, clap your hands in front of a microphone. Watch any ordinary VU meter as it tries to respond. Not very much will happen. Now try the same thing with our LCD meter and you'll see that total burst of sound completely displayed.

And speaking of displays, you get a Double Indication System which displays peak levels in two ways: Auto mode, which holds peak levels for approximately 1.7 seconds, or Manual mode, which maintains peak level readings over the entire length of your recording.

Unlike other displays, our LCD meter gives you 33-step accuracy over a wide -40 to +5dB range. It changes color above 0dB, so you never miss an overload reading. And it even has an element life span of more than 50,000 hours.

Finally, the tremendous brightness and logical design of the LCD meter make precise comparisons between left and right channels easier. In any kind of light.

But not only does Sony Audio have the LCD meter. We've got the cassette deck to deserve it.

The TC-K60.



With our own hesitation-free brushless/slotless BSL motor, our own newly developed Dolby\* IC, our own Ferrite-and-Ferrite head, and our own microprocessor-controlled Automatic Music Sensor that lets you preselect any of up to nine recorded program segments.

Enough talk. The TC-K60 with Liquid Crystal Peak Program Meter is one Sony Audio product you've got to see for yourself.

So look. Then listen.

You'll never be satisfied with anything less.

# SONY<sup>®</sup> AUDIO



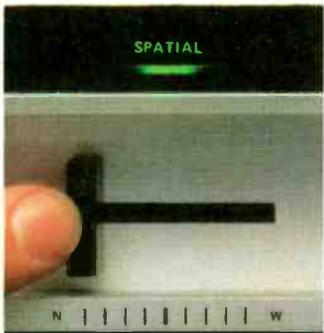
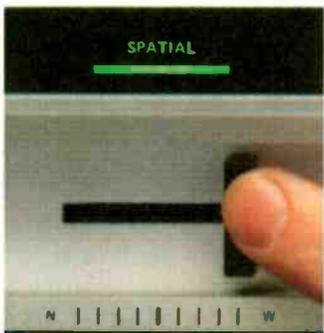
**Introducing the Bose® Spatial Control™ Receiver.  
The first and only receiver to let you control the spatial image of sound.**



### The Importance of Spatial Properties of Sound

Imagine you are at a live performance. The music which reaches your ears comes not only directly from each instrument, but from every surface which reflects the sound. This combination of reflected and direct sound creates the spatial image of sound; it provides the ambience that makes music sound lifelike.

The Bose® Spatial Control™ Receiver is the first and only receiver that creates, in your living room, a variable spatial distribution of sound, allowing you to adjust the spatial image for different kinds of music.



### Controlling the Spatial Image

When you are listening to orchestral music, move the spatial slide control to the wide position. Special circuitry directs middle and high frequencies to the rear outside drivers and the front drivers of the Bose 901® Series III or IV loudspeakers. This creates a broad, dispersed pattern of reflections. You experience the breadth and spaciousness of a symphony orchestra.



Should you be listening to a soloist or small group, slide the control toward the narrow position. Now more sound energy is directed to the inside rear drivers to create the focused sound image you associate with intimate performances.



### Built-in Bose 901 Equalizer

The Bose 901 Series IV equalizer, built into the Spatial Control™ Receiver, gives you substantial savings when purchasing 901 loudspeakers since you don't need to buy a separate equalizer.

The third speaker connection terminal on each Bose 901 Series III or IV loudspeaker makes it possible to control different sets of drivers independently. It is the key to varying the spatial properties of sound.

The Spatial Control™ Receiver is a complex combination of a stereo preamplifier and equalizer, switching circuits, compensation circuits, and four main power amplifiers. Bose-developed logic circuitry, using CMOS components, controls the complex interconnections among these elements, for ease of operation and great versatility.

Simply program the receiver for your speakers by setting the switches on the rear panel; the rest happens automatically as you operate front panel switches. Programmability gives you several options. For example, the spatial slide controls can also be used as a balance control between two sets of speakers, one equalized and the other unequalized.

### Six Power Amplifiers Offer Extraordinary Versatility

Four Direct-Coupled Fully Complementary power amplifiers drive the different arrays of 901 drivers when the receiver is in the spatial mode. Two fully independent power amplifiers drive the headphones with an unequalized signal, regardless of the speakers in use. Each amplifier is individually accessible; you can, for example, enhance the realism of your system with a time delay accessory, without adding a separate amplifier.

### Source and Room Compensation Controls Give More Accurate Overall Frequency Response

Bose has made precise measurements of the acoustic properties of different rooms and recording techniques and found that conventional tone controls are simply inadequate to compensate for the problems that occur in typical listening environments. The unique Source and Room Compensation Controls found on the Spatial Control Receiver approach the effectiveness of a more complicated graphic or parametric equalizer but are as easy to use as standard tone controls.

The Source and Room Compensation Controls embody the basic characteristics of the 901 Series IV equalizer controls and extend their range of control to lower frequencies. In acoustically "dead" rooms, they help restore brilliance and clarity to the high frequencies. They can also largely eliminate boominess in poorly mixed records without affecting bass fundamentals and they can restore much of the fullness lost when room surfaces absorb excessive sound energy.

### The Result: Unparalleled Performance and Versatility

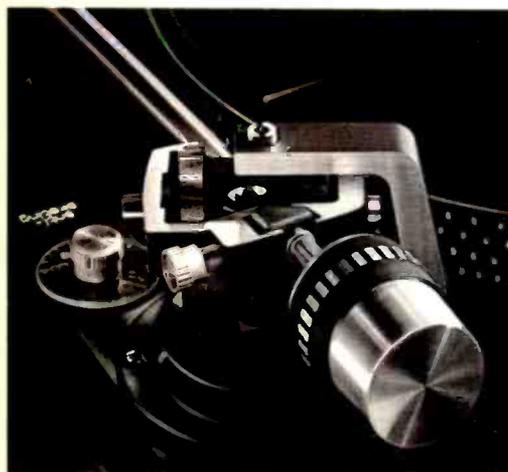
The Bose Spatial Control™ Receiver offers discriminating listeners an unequalled system for the realistic reproduction of sound. No other receiver lets you control the spatial aspects of recorded music. No other receiver has been designed to take full advantage of the unique sound-producing characteristics of the world-renowned Bose 901 loudspeaker system. And no other receiver gives you such extensive control over the acoustic variables found in widely different room environments and recordings. No other receiver offers the total listening experience of the Bose Spatial Control™ Receiver.



**BOSE**

100 The Mountain, Framingham, MA 01701

# We'll match the tonearm on our lowest-priced turntable against the tonearm on their highest-priced turntable.



We'd like to be very clear about what we have in mind. By "their" we mean everyone else's. And, our lowest-priced turntable is the new CS1237.

The CS1237's tonearm is mounted in a four-point gyroscopic gimbal—widely acknowledged as the finest suspension system available. The tonearm is centered, balanced and pivoted exactly where the vertical and horizontal axes intersect.

From pivot to tonearm head, the shape is a straight line, the shortest distance between those two important points. (Curved tonearms may look sexier, but at the cost of extra mass, less rigidity and lateral imbalance—none of which is consistent with good engineering practice.)

Tracking force is applied by a flat-wound spring coiled around the vertical pivot, and this force is maintained equally on each groove wall whether or not the turntable is level. The tonearm's perfect balance is maintained throughout play.

By contrast, tonearms which apply tracking force by shifting the counterweight forward are actually unbalanced during play and prone to mistracking. For example, on warped records the stylus tends to dig in on the uphill side of the warp and to lose contact on the way down.

Vertical-bearing friction in the CS1237 tonearm is astonishingly low—less than 8 milligrams. It can track as low as 0.25 gram—which means it will allow *any* cartridge to operate at its own optimum tracking force.

There's still more. The counterweight is carefully damped to attenuate tonearm resonances. Anti-skating is separately calibrated for all stylus types. Cueing is damped in both directions to prevent bounce. And because the CS1237 can play up to six records in sequence, the stylus angle can be set for optimum vertical tracking in either single-play or multiple-play.

To find any other tonearm that seriously matches the CS1237's, you have two choices.

You can consider one of the more exotic separates. But you'll find they cost as much as the entire CS1237. (Price: less than \$180, complete with base and cover.)

Or you might compare it with one of the higher-priced Dual turntables. You'll find a few additional refinements, but no difference in design integrity or manufacturing quality. Which is why no other turntable quite matches a Dual. Any Dual.



For the life of your records

**Dual**

United Audio, 120 So. Columbus Ave., Mt. Vernon, NY 10553

## Ben Bauer

Last March 31, Benjamin B. Bauer, former vice president and general manager of the CBS Technology Center and a major figure in the development of HIGH FIDELITY'S equipment testing program, died of a heart attack in Stamford, Connecticut. A prodigious inventor, Bauer had been awarded seventy-five U.S. patents, from the single-transducer cardioid (directional) dynamic microphone—whose acoustical phase-shift principle is still widely used and which he invented when only twenty-four—to the SQ matrix for four-channel recording and playback and the recent Ghent quadriphonic microphone. He first came to prominence in audio circles as director of engineering for Shure Brothers and was later a president of the Audio Engineering Society.

Bauer was the third head of the CBS installation, formerly CBS Laboratories, to die within a period of less than sixteen months. Kenneth Moore, Bauer's successor for only six months, died February 21; their most prominent predecessor, Dr. Peter Goldmark, was killed in an automobile accident on December 7, 1977.

## Those elusive metal-tape cassettes

Last fall it appeared that super-cassettes, prerecorded on the new metal-particle tapes, were just around the corner. In subsequent months we had discerned no move in that direction, despite the interest of at least one duplicator in offering such a product. Announcements of the equipment availability for making such copies seem to have been premature, and as far as we can discover no tape manufacturer has yet sold (or even made plans to sell) a single pancake of metal-particle tape for the purpose.

Meanwhile, the supply of finished, blank metal-tape cassettes continues to be very meager. A few retail stores have been able to showcase them, but even equipment manufacturers that need them if decks capable of handling the new oxide are to pass muster and reach the same dealers find that adequate stocks are almost impossible to round up. By the time you read this, however, the situation may be easing up; TDK has announced retail distribution in Japan, and first shipments to this country are scheduled for about the time this issue appears.

## The Stanton approach to static control

Permostat, a new compound to prevent (rather than just ameliorate) static-electric buildup on discs, is being sold here by Stanton Magnetics. Its tests of the fluid, which is applied to the record with a

plush "brush," show that it not only neutralizes existing static charge, but prevents any from forming. And, Stanton adds, accelerated record wear tests show better results with Permostat than without. The protection is said to be permanent as long as the disc is not washed; that will remove the antistatic film.

Tests comparing it to piezoelectric antistatic "guns" (which generally produce both negative and positive charges and rely on the record's charge to attract

We know this new Matreecs speaker has guts...



Model MA-130  
12" 3-way system with isolated midrange

## We make the guts.

Listen to Matreecs. You'll not only hear the difference—you'll practically feel it: the power of the bass, the caress of the mid-range, the tingle of the bell-like highs.

Sound this good doesn't come by accident—but by attitude. At Matreecs, we care about craftsmanship—enough to make our own drivers, assembling them component by component with hand-crafted care; enough to use only aluminum voice coils; to do our own magnetizing; and to incorporate Liqui-Flex™ ferro-fluid precisely where it improves performance.

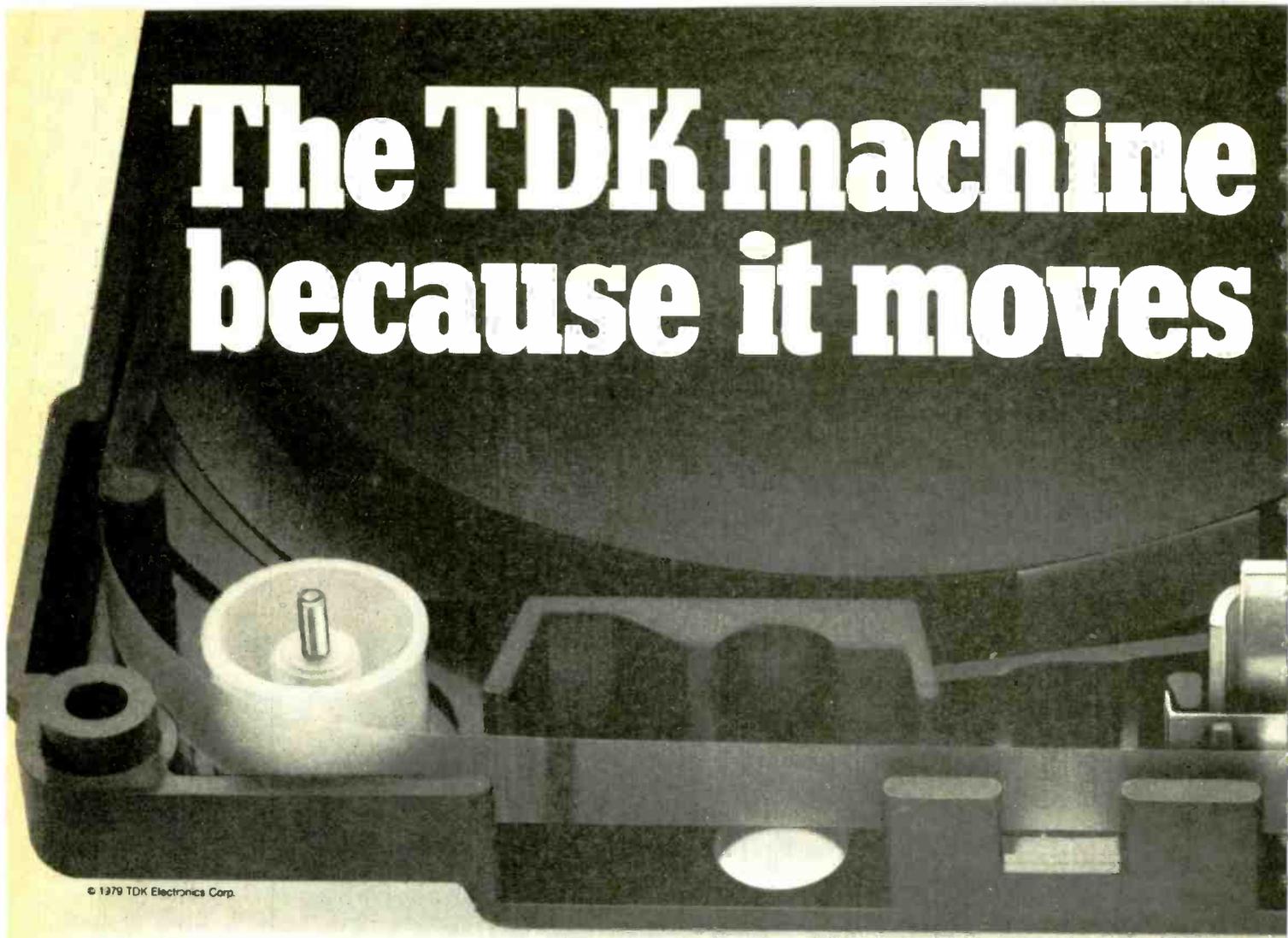
We care enough about our richly grained walnut vinyl enclosures to double-seal every joint for total acoustic isolation. We care about design specifications enough to develop excellent dispersion, smooth response from 35 to 22,000 Hz, higher efficiency, and power handling capacity of 75 watts RMS.

With our gutsy approach, we aim to please your eyes, your ears and your pocketbook. We've got six models, priced from \$50 to \$180 suggested retail. Matreecs...at the best hi-fi dealers.



**matreecs industries inc.**  
805 WOODMAN AVENUE WINSLOW, ILLINOIS 61089

# The TDK machine because it moves



© 1979 TDK Electronics Corp.

At TDK, we're proud of our reputation as the leader in recording tape technology. We got that reputation by paying attention to all the little details other manufacturers sometimes skim over. But there's more to a cassette than just tape. There's a shell to house that tape, and a mechanism that has the function of transporting the tape across the heads. Unless that mechanism does its job evenly and precisely, the best tape in the world won't perform properly, and you won't get all the sound you paid for.

The TDK cassette shell and mechanism are every bit as good as our tape. And when you begin to understand the time and effort we've spent in perfecting them, you'll appreciate that our engineers wouldn't put TDK tape in anything less than the most advanced and reliable cassette available.

**The Shell** Our precision-molded cassette shells are made by continuously monitored injection molding that creates a mirror-image parallel match, to insure against signal



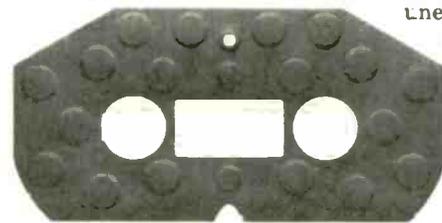
overlap, channel or sensitivity loss from A to B sides. We make these shells from high impact styrene, which resists temperature extremes and sudden stress better than regular styrene or clear plastic.

**The Screws** Our cassettes use five screws instead of four for warp-free mating of the cassette halves. We carefully



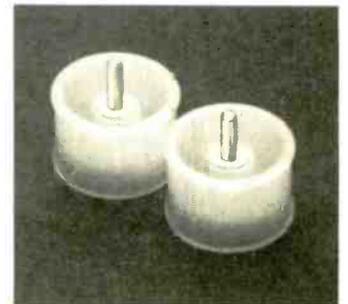
torque those screws to achieve computer-controlled stress equilibrium. That way, the shell is impervious to dust, and the halves are parallel to a tolerance of a few microns.

**The Liner Sheet** Our ingenious and unique bubble liner sheet makes the tape follow a consistent running angle with gentle fingertip-like embossed cushions. It prevents uneven tape winding and minimizes the friction that can lead to tape damage. Also our cassettes will not squeak or squeal during operation.



**The Rollers** Our Delrin rollers are tapered and flanged, so the tape won't move up and down on its path across the heads. This assures a smooth transport and prevents tape damage.

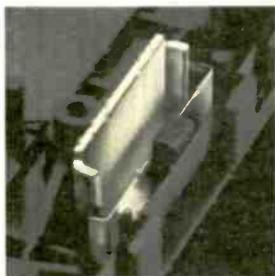
**The Pins** In every cassette we make, we use stainless steel roller pins to minimize friction and avert wow and flutter and channel loss. Some other manufacturers "cheat" by using plastic pins in some of their less expensive cassettes. We don't.



# sounds better better.

## The Pressure Pad

Our sophisticated pressure pad maintains tape contact at dead center on the head gap. Our interlocking pin system anchors the pad assembly to the shell and prevents lateral movement of the pad, which could affect sound quality.



**The Shield** We use an expensive shield to protect your recordings from stray magnetism that could mar them. Some manufacturers try to "get by" with a thinner, less expensive shield. We don't.

**The Window** Our tape checking window is designed to be large enough for you to see all the tape, so you can keep track of your recordings.

**The Label** We've even put a lot of thought into the label we put on our cassettes. Ours is made from a special non-blur quality paper. You can write on it with a felt-tip pen, a ballpoint, whatever. Its size, thickness and placement are carefully designed and executed so as not to upset the cassette's azimuth alignment.

**The Inspections** When it comes to quality control, TDK goes to extremes. Each cassette is subject to thousands of separate inspections. If it doesn't measure up on every one of these, we discard it. Our zeal may seem extreme, but it is this commitment

to quality which allowed us to offer the first full lifetime warranty in the cassette business—more than 10 years ago. In the unlikely event that any TDK cassette ever fails to perform due to a defect in materials or workmanship, simply return it to your local dealer or to TDK for a free replacement. It took guts to pioneer that warranty, but our cassettes have the guts—and the reliability—to back it up.

**A Machine for All Your Machines** Now that we've told you how we move our tape, let us remind you about our tape. SA, the first non-chrome high bias cassette, is the reference tape most quality manufacturers use to align their decks before they leave the factory. It's also the number one-selling high bias cassette in America. For critical music recording, it is unsurpassed. AD is the normal bias tape with the "hot high end." It requires no special bias setting, which is why it is the best cassette

for use in your car, where highs are hard to come by, as well as at home. Whatever your recording needs, TDK makes a tape that offers the ultimate in sound quality. But it's our super precision shell and mechanism that make sure all that sound gets from our tape to your ears, year after year. TDK Electronics Corp., Garden City, NY 11530



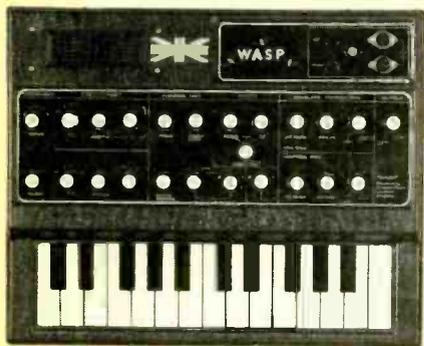
 **TDK**  
The machine for your machine.

whichever is needed for neutralization) were repeated for our benefit to demonstrate the extent of the improvement the "ion guns" actually affords. When exposed to large quantities of airborne dust, records that had been pulled from their sleeves without treatment and those that had been neutralized by a piezoelectric device both attracted massive layers of dirt; pretreatment with Permostat left records as pristine-looking after the dusting as before. It was an unusually impressive demonstration.

**Circle 145 On Page 93**

## A Wasp flies in from Britain

AIM Ltd. has a new miniature synthesizer called the Wasp. It features two oscillators, adjustable filter, two envelope generators, and a two-octave keyboard. The Wasp, which can be powered by a battery or AC adapter, is supplied with a headphone jack, an interconnect jack for use with up to 50 (!) more Wasps, and, of course, a main output jack to feed an amplifier. The suggested list price is \$695.



## Sony announces two new lines

Last spring, Sony Industries created the Audio Lab designation for its high-end specialist equipment, including the PCM-1 digital processor, the TA-N88B Class D switching amplifier, the TA-N86B three-mode (Class A, Class B, mono) power amp, and the TA-E86B dual-mono preamp. Shortly thereafter, Sony Audio announced that it would introduce a complete line of microcomponents here in June, making it the first company to do so since the Technics and Mitsubishi micros sampled in our June issue.



## In case the drummer doesn't show

Rotel of America offers a stereo amplifier designed for disco use. In addition to all the standard cross-fade, preview, and talkover features, the RZ-8 has a built-in rhythm generator and "echo chamber." There are two stereo turntable inputs, two line inputs, and three microphone inputs, each with its own impedance selector. The unit can be rack mounted. Retail price is \$620.

**Circle 150 On Page 93**



## Denon offers automated turntables

Two single-play turntables from Denon, the DP-50F (shown here) and DP-40F, come with a servo-controlled tonearm that is operated from the front panel; START, STOP, and REPEAT may be engaged with the dust cover closed. The S-shaped arm is statically balanced and its motion magnetically powered. A dial on the front panel adjusts antiskating bias. The DP-50F offers preset cueing buttons for 12- and 7-inch discs, an illuminated strobe, and a standby mode at a price of \$690; the simpler DP-40F costs \$495.

**Circle 147 On Page 93**



## Lots of power from Crown's new amp

Each channel of the Crown SA-2 power amplifier has its own power supply and associated circuitry. The output devices are regulated by a self-analyzing circuit that limits output when a built-in "computer" signals that the power transistors are approaching the limits of safe operation. The signal-level display of the amp extends to 42 dB below full output, rated at 220 watts (23½ dBW) per channel, or 700 watts (28½ dBW) strapped for mono use, into 8 ohms. The price of the Crown SA-2 is \$1,595.

**Circle 143 On Page 93**

# WHICH NEW HIGH BIAS TAPE WINS WITH MAHLER'S FOURTH SYMPHONY?



Original manuscript sketch for the first movement of Gustav Mahler's Fourth Symphony. Courtesy of The Newberry Library, Chicago.

Choose eight measures of Mahler's Fourth that are really rich in the high frequencies. The type of passage that high bias tapes are designed for.

Record it on your favorite high bias cassette, using the Chrome/CrO<sub>2</sub> setting. Then again on new MEMOREX HIGH BIAS.

Now play back the tapes.

We're convinced you'll have a new favorite.

New MEMOREX HIGH BIAS is made with an exclusive ferrite crystal oxide formulation. No high bias tape delivers greater high frequency fidelity with less noise, plus truer response across the entire frequency range.

In short, you can't find a high bias cassette that gives you truer reproduction.

**MEMOREX**

Recording Tape and Accessories.  
Is it live, or is it Memorex?



**MEMOREX 90**

**NEW**

EXTENDED HIGH  
FREQUENCY  
OUTPUT

**HIGH BIAS**

Memorex's

minutes  
tion



## Teac offers a retrofit

Owners of Teac's C-1 cassette deck can have it adapted to record on metal-particle tapes at any of the company's three factory service stations located in California, Illinois, and New Jersey. The modification involves replacing the erase head and altering the bias circuitry. It takes about two to three weeks, according to Teac, and costs \$150 including shipping. Arrangements with the service station should be made in advance of shipping the deck.

## A versatile guitar processor

Electro-Harmonix' Attack Decay is an AC-powered processor suggested for use by guitarists and electric bassists to produce tape-reverse effects, slap echo, complex envelope modulation, and "sharp chops," plus synthesized violin,



cello, string bass, toy piano, banjo, and horns. Five pots on the faceplate control SENSITIVITY, HARMONICS, ATTACK, DECAY, and BLEND. A footswitch bypass is included; jacks are provided for DIRECT and EFFECT outputs. The Attack Decay costs \$89.

Circle 147 On Page 93

## Empire imports tape

The so-called EMI tape line, made by the Britain-based EMI group and long

a staple of European home and studio recording, will be distributed in the U.S. and Canada under a recent agreement with Empire Scientific. Empire, originally identified with phono cartridges and turntables, recently expanded into record-care and similar products, including the Watts line, which it now distributes here. As a result of the EMI contract, it is adding blank audio and video cassettes to its lists.

## Osawa introduces midpriced cartridge

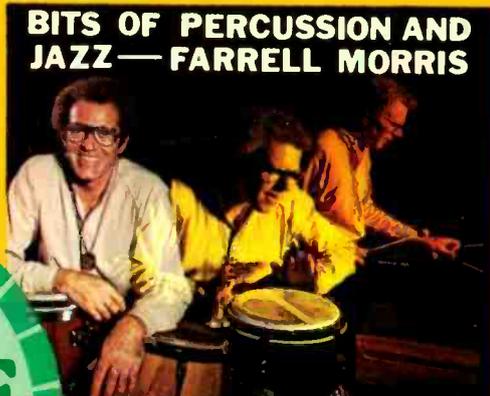
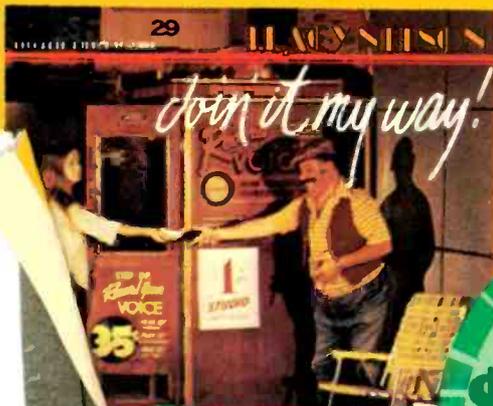
Filling in the middle of Osawa's line of phono cartridges is the 110MP, an induced-magnet design with an elliptical stylus bonded to a cantilever damped by synthetic rubber. Rated frequency response of the cartridge is 20 Hz to 20 kHz, with separation of 25 dB at 1 kHz. Price of the 110MP is \$45.

Circle 151 On Page 93

# FIRST TIME EVER!

Direct-To-Disk

Digital



**\$1.00 OFF**

## ANY AUDIO DIRECTIONS ALBUM!

We want to give you the chance to hear just how great our Direct-To-Disk and Digital recordings are!

Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

DEALER: Your Audio Directions Distributor will credit your phonograph record account in the amount of one dollar for each valid coupon it receives \_\_\_\_\_ days after the expiration date shown. This coupon is valid when received by you from a consumer purchasing one Audio Directions album. Consumer \_\_\_\_\_ any sales tax. Good only in U.S.A. Cash value 1/20¢. Offer not transferable. Any other use constitutes fraud.  
 CONSUMER: Present this coupon to a participating dealer for a one dollar discount off his regular retail price of any Audio Directions album. Coupon \_\_\_\_\_ presented on or before the expiration date shown. Only one coupon per album. Good only in U.S.A. This offer void where prohibited by law.

EXPIRES JULY 31, 1979



# Record Ecology

—for the person who needs everything

DiscKit is a milled walnut tray and dust cover that includes Discwasher brand products in the kit at a savings (\$50 versus \$55 separately).

DiscKit includes: 1) The Discwasher System Record Cleaner with D3 Fluid, 2) the Zerostat anti-static pistol and test light, and 3) the SC-1 Stylus Cleaner.

But you'll save more than money. You'll save your rec-

ords from imbedded micro-dust, your cartridge stylus from abrasion and your ears from a lot of static.

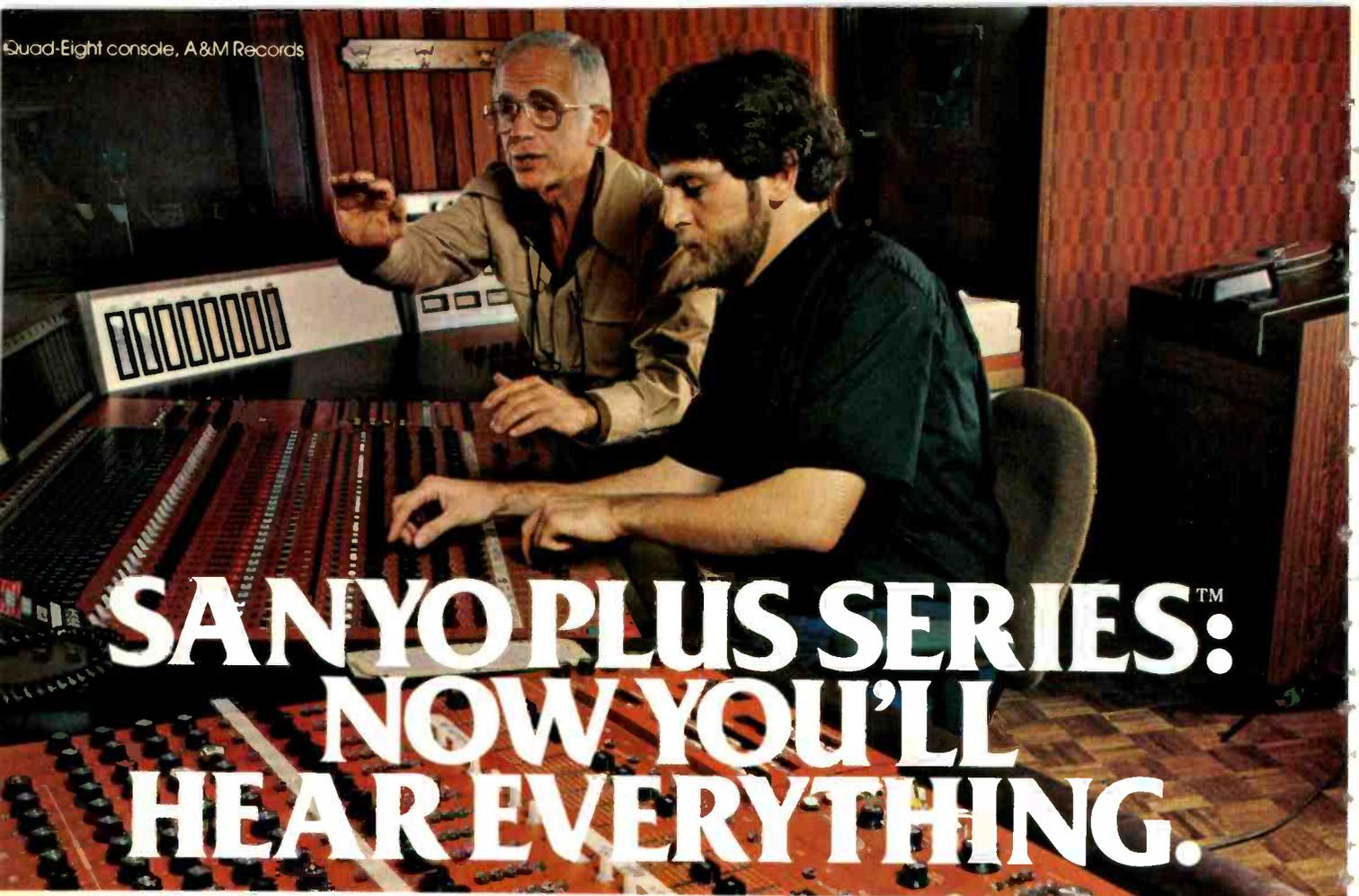
Record Ecology from Discwasher—a substantial bargain.

(Walnut tray and dust cover are available separately as

the Discorganizer, \$12.50.)

All from Discwasher, Inc., 1407 N. Providence Rd., Columbia, Missouri 65201.





# SANYO PLUS SERIES: NOW YOU'LL HEAR EVERYTHING.™

Today's studio technology is putting sounds on record that most home stereos simply can't cope with.

So instead of hearing everything the way it went down at the recording session, you miss the subtle nuances that make the music come to life.

The refined technology of Sanyo PLUS SERIES components lets you hear every

detail captured in your recordings — without perceptible noise, distortion, or coloration to spoil the sensation of living, breathing music.

Hear the gloriously true-to-life sound of Sanyo soon at better audio dealers.



Mind-boggling are the ways of bureaucracy. Last year, news of Senator Barry Goldwater's bill (S. 864) to give the Federal Communications Commission authority over consumer-electronics susceptibility to radio frequency interference (RFI) prompted HIGH FIDELITY to send me to testify before the Senate subcommittee on communications. Essentially, our concerns were and are twofold: We neither look with favor on bureaucratic "fixes" for technical problems nor deem it fair that high fidelity consumers be penalized – both economically and technically – to eliminate a problem not of their making. Our position is based upon an extensive FCC study, which convinced us that, for the most part, RFI is traceable to CB operation at illegally high power levels.

Following the committee's instructions to the letter, I arrived at its June 1978 hearings armed with 100 copies of my 19-page report, having shipped another 15 on ahead for its predigestion. With the exception of Harry J. Dannals, president of the American Radio Relay League (an amateur-radio organization), and one Washington ham-radio operator, all the witnesses seemed opposed to the legislation. Ham-radio operators are understandably concerned with being blamed for RFI they did not create, but I was astounded by the ignorance of high fidelity technicalia demonstrated by the ARRL president, who dramatically waved a five-cent capacitor over his head and assured the good senators that it would solve all the problems!

Testimony by the chairman of the FCC indicated the commission's understanding of the economic impact of the proposed legislation. If the FCC were required to certify the RFI immunity of each consumer product, the regulatory bottleneck would be horrendous, and manufacturer certification could be prohibitively expensive for small companies. But absent from his testimony was a clear recognition that illegal transmitters are the main source of RFI and that his commission currently has the authority (if not the manpower) to clamp down on them.

All this occurred more than a year ago. This past January, Senator Goldwater invited previous witnesses to a progress-report hearing. This time, the TV boys were there in force, assuring the senator that they had complied voluntarily with his wishes by festooning their new sets with RFI filters. By some miracle, the filters seem to work retroactively: The FCC already reports a dramatic decrease in the number of RFI complaints. More germane for audiophiles (and certainly easier to swallow) was Senator Goldwater's assertion that he would not reintroduce his bill in the current session of Congress, but would continue "encouraging" consumer electronics manufacturers to reduce RFI susceptibility.

There is a difference between RFI as it affects television (TVI) and its behavior in stereo gear. Filters are indeed effective in eliminating some TVI. The Citizen's Band lies below the VHF TV band, and CB harmonics fall into TV Channels 2, 5, 6, 9, and 13. If the CB transmitter generates a "clean" signal, free of distortion, it should cause no interference in a well-designed TV tuner. If the interfering signal is strong enough to overload a TV tuner, and thus cause harmonics and interference, a high-pass filter at the TV antenna input will keep it out. If the CB transmitter itself generates harmonics, however, no amount of filtering at the TV will help.

Except for tuners, stereo equipment is not designed to receive RF signals, and most high fidelity FM tuners have sufficient selectivity to reject interfering signals without additional traps. RFI usually is picked up on the low-level phono leads or via the speaker leads. Placed across the phono-input terminals, Mr. Dannal's five-cent capacitor would upset phono-cartridge loading and reduce performance with many high-quality pickups to the level of a cheap compact; across the output terminals of some power amps, the capacitor could cause instability. And in neither case is the "fix" certain to eliminate RFI. There are ways to minimize a component's RFI susceptibility so that it will withstand somewhat greater levels of RF, but they are much more sophisticated (and expensive) than the inclusion of an extra capacitor and not always consistent with best sound quality.

But creative engineering characterizes high fidelity componentry, and it is all to the good that such creativity has now been directed against potential RFI problems. Government-mandated universal "fixes" fly in the face of creativity and give us cause for alarm. Undoubtedly there are some cases of RFI that, despite Senator Goldwater's "encouragement," defy cure; but they will not be cured by legislation either. To the extent that they are traceable to illegal transmitter operation – and we believe that most are – the FCC would be better directed to enforce the rules it already has on the books. **HF**

## RFI and the Nickel Fix

Pushing simplistic solutions can do more harm than good, as our envoy to Washington sees it.

by Edward J. Foster



# Bravo!

## That's the Jensen R430 Car Stereo Receiver. That's the thrill of being there.

Bravo indeed for the superlative performance of the 60 watt Jensen R430 Car Stereo Receiver. The top-of-the-line of six receivers that boast a compliment of features found only on better home receivers.

Features like a separate trunk-mounted Power Amplifier unit as well as a twin amplifier section in the main unit.

The advanced Bi-Amp capability of the R430 makes it possible to selectively send high frequency power information to a car's front speakers, and low frequency info through the Power Amp to the rear speakers. This bi-amplification allows for greater volume and less distortion.

Jensen has refined the R430 with other unique features like feather-touch electronic switches. And an automatic tape alarm.

Dolby® Noise Reduction processes out tape hiss and improves the dynamic range of Dolby-encoded tapes and FM broadcasts.

A Fader control adjusts levels front to back; separate Balance control adjusts left to right. There's even a Loudness Compensation function and for the extra-sensitive FM tuner, Interstation Muting.

But all the features in the world don't mean a thing if they don't combine to do one thing a receiver is built to do... recapture and deliver to you all the power and intensity that went into the original performance.

That's the thrill of being there.

That's the Jensen R430 Car Stereo Receiver.

# JENSEN

The thrill of being there.

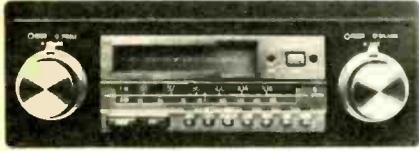
For more information, write Jensen Sound Laboratories,  
4136 N. United Parkway, Schiller Park, Illinois 60176.

® "Dolby" and "Dolby System" are registered trademarks of  
Dolby Laboratories, Inc.

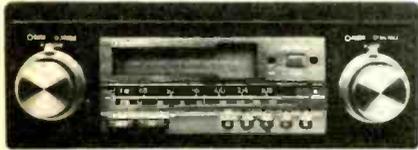


# Alpine Takes the High Road

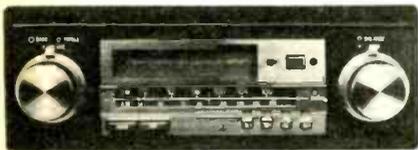
by Robert Angus



Alpine Model 7201



Alpine Model 7202



Alpine Model 7203

**Out of the closet.** Press kits bulging with glossy photographs showing the latest car stereo goodies cross my desk every day. Most receive only cursory attention, but the other day one arrived from Alpine Electronics that I looked over very carefully indeed. Alpine isn't just another manufacturer or importer, but don't feel bad if the name rings no bells. Most people have never heard of the company, though the chances are that you already own one or more of its products.

The name is a bit misleading. Alpine Electronics' car stereo units never saw the Matterhorn. Like most other highway componentry, they're made in Japan—by Alpine's parent company, Alps/Motorola. As the name implies, A/M has lots of experience turning out car audio equipment for Motorola in the U.S.

But that's not A/M's only claim to fame. If you own one of the B.I.C. two-speed home cassette decks, you own an Alps/Motorola product. Your TV set may very well contain a VHF or UHF tuner manufactured by Alps, or your cassette deck may contain one or more of its magnetic heads. Alps also produces many less glamorous parts used by other manufacturers in their products.

And last season, it surprised the rest of the Japanese television industry with the introduction of a low-cost (\$900) color camera, which it offered to supply to other manufacturers for sale under their brand names. In other words, Alpine is the kind of company that has the re-

sources and the imagination to be more than just another supplier of car stereo equipment.

At first glance, its initial automotive offerings don't look appreciably different from other good-quality units. Power output for all five models is rated at 8 watts and 0.8% distortion; FM specs include sensitivity of 1.4 microvolts, selectivity of 75 dB, capture ratio of 1½ dB, and channel separation of 35 dB. The cassette section is rated for wow and flutter of 0.13%, frequency response with chrome tape of 40 Hz to 15 kHz—good figures, but all obtainable elsewhere.

Features include automatic local/distance switching, automatic cassette eject when you turn the ignition off, a touch-pressure cassette seating and eject system, switchable chrome tape EQ, memory logic electronics, and a noise switch. The rewind/fast forward locks so you don't have to hold it; there are a loudness contour, a stereo indicator, a mute switch, and an auto replay feature on all five models.

Model 7201 is a basic stereo FM/AM receiver with side-entry cassette deck; Model 7202 adds Dolby and separate fader and balance controls. Model 7203 has a noise-eliminator switch and chrome/ferrichrome equalization in addition to Dolby and separate fader and balance controls. Models 7212 and 7213 are identical to Models 7202 and 7203 with the addition of auto reverse.

The people at Alpine have made it clear that this is only the beginning—and that presumably has the people at B.I.C. nervous. Besides talking about a car deck with metal-tape playback capability (which sounds very much like B.I.C.'s Alps-built C-1), the company plans to offer cassette decks for the home. B.I.C. officials, naturally, are wondering how much of the engineering they did on their two-speed series may show up in Alps models later this year.

B.I.C. stole a march on the rest of the industry when it introduced its first two-speed cassette decks late last year. Japanese equipment makers were forbidden the second speed under the terms of their licensing agreements with Philips, which holds the basic cassette-format patents. The question now is whether Alpine will be the first Japanese manufacturer to follow the B.I.C. lead. (Yamaha already has shown two-speed prototypes.)

Alps/Motorola started life (as Katoka Electric) in 1948, making rotary switches. As it grew during the 1960s, it began building car radios for Motorola and others and, in 1967, established Alps/Motorola with the American company. Three years later, it entered into another joint venture with one of Korea's largest consumer electronics factories; in 1971 it did the same with Nortronics to manufacture recorder heads in Japan. Then came the B.I.C. contract, the \$900 color video camera, and (at the end of 1978) the plan to become a significant factor in the rapidly expanding U.S. highway high fidelity market.

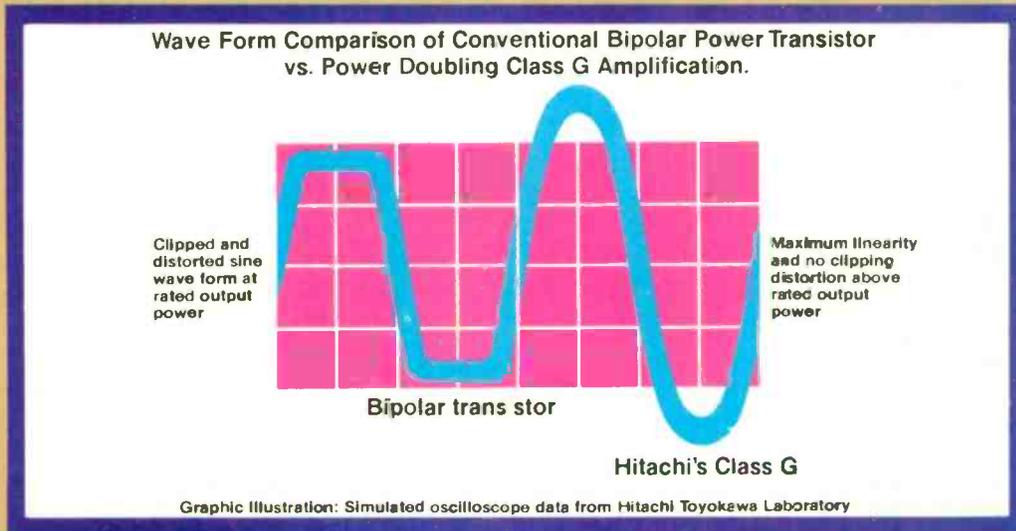
**Metal's coming.** Alpine isn't the only car stereo manufacturer that may be offering a player engineered for metal tape. Already Sanyo is making the claim for a number of its existing models, and most other manufacturers, when they talk about new or existing car decks, will perform deal with the question.

In theory, every car cassette deck will be able to play back the metal tape, since the salient compatibility problem with current circuitry lies in the high bias and erase currents required for recording only. As things stand now, the standard playback equalization for metal tape is likely to be 70 microseconds, the same as for chromium dioxide and ferrichrome cassettes. But as every auto audiophile knows, you can play chrome cassettes perfectly satisfactorily with 120-microsecond EQ, in the car—with road noise masking any increase in hiss levels and the added brightness of the recording actually making the music sound better than playback that is correctly equalized. Preliminary tests with metal tape suggest that for car use it sounds even better than chrome when both are played with the 120-microsecond equalization.

It's not going to take the marketers long to discover this simple truth. For the time being, when manufacturers say that a deck is metal-tape-ready, they seem to mean that it has 70-microsecond playback equalization. There is some indication that metal tape may prove more abrasive than chrome or standard tapes on the soft mumetal or laminated heads used in less-expensive car decks. For that reason, some new models (including the B.I.C. C-1) are using permalloy, ferrite, or sendust.

Continued on page 33

# The world's most powerful 35 watt receiver.



## Power Doubling Class G

SR-604

The beauty of the SR-604 stereo receiver:

In normal operation, it delivers 35 watts per channel, both channels driven at 8 ohms, from 20-20,000 Hz, with no more than 0.05% total harmonic distortion. But when it's confronted with a demanding musical peak, it switches over to power doubling Class G amplification, becoming a super power auxiliary amplifier delivering a massive 70 watts per channel.

The result? Clean, unclipped musical peaks and outstanding dynamic range. You'll also like what it does to the tuner section, in critical areas like sensitivity, selectivity and signal-to-noise ratio performance.

The amazing SR-604—super-power, low distortion, all the good things you're looking for in stereo.



# HITACHI

The New Leader in Audio Technology

Hitachi Sales Corp. of America 401 West Artesia Blvd. Compton, Calif. 90220



# 84 reasons to get to a Pioneer dealer

A lot of people pick out a car stereo with their eyes closed. Because, for them, what they hear is all that counts.

rest, we've gathered 83 more reasons (besides great sound) why you should be down at a Pioneer dealer now, instead of reading this ad.

three-ways and tweeters.

**36. Supertuner FM circuitry.** The inspired bit of electronic engineering that makes our FM signals come in so crisp and clear.

**37. Success with women.** (Or men, as appropriate.)

Pioneer tank top. Shows what you got.



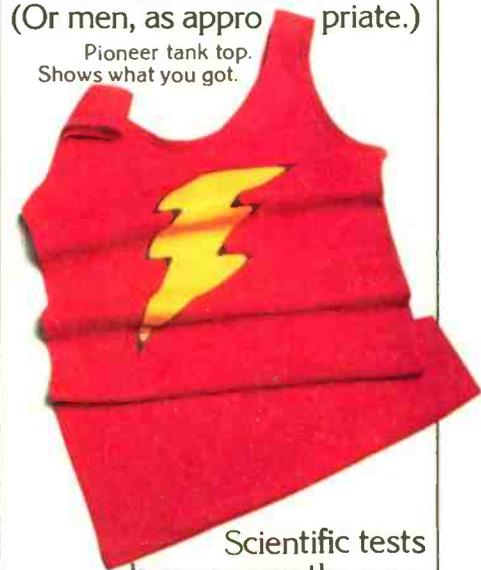
KE-5000. A digital electronic tuner/cassette deck.

Which is all right with us. Because when sound decides, Pioneer wins every time. Maybe that's why we're number one in car stereo.

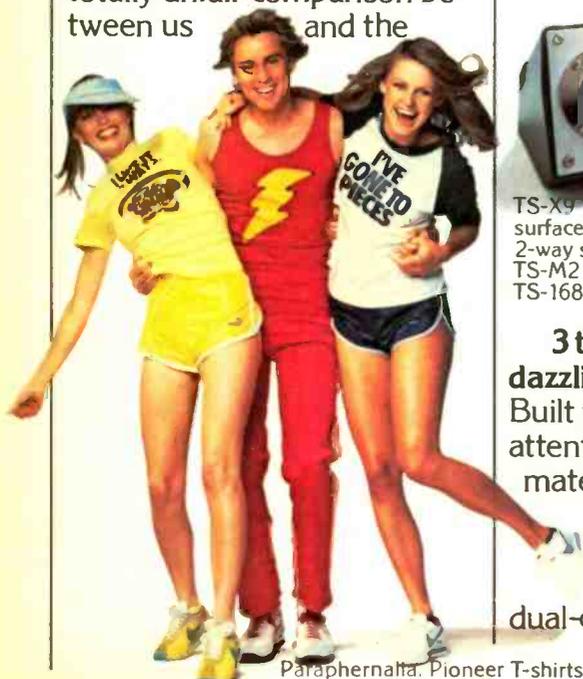
A lot of other people, though, come into the market with both eyes open. Fine with us, too. Because what you see will win you over.

So in the interest of a totally unfair comparison between us and the

**Reason #2. The KE-5000. Does everything but drive your car.** A totally electronic AM/FM Supertuner® car stereo with cassette deck. Has a digital station display. Digital electronic tuning. It automatically seeks out and locks on to a station. Even has a digital clock. So you won't be late for work.



Scientific tests have proven the awesome amorous effects of a Pioneer Supersystem. Please do not take unfair advantage of this feature.



Paraphernalia. Pioneer T-shirts and visors. Wear the colors.



TS-X9 surface mounted 2-way speaker. TS-M2 tweeter. TS-168 flush mounted 3-way speaker.

**3 through 35. An ear-dazzling array of speakers.** Built with extraordinary attention to design and materials. 32 different deck-mounts, surface-mounts, door-mounts, dual-cones, two-ways,

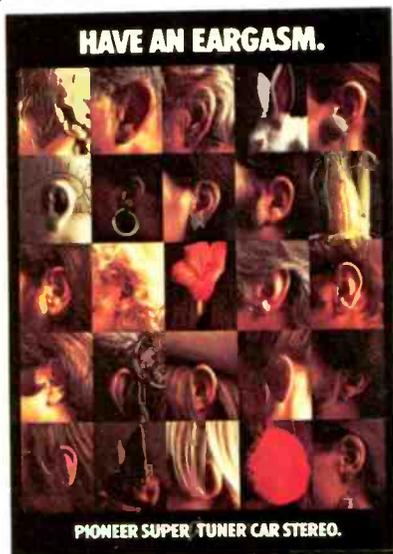


Steve Tillack displays himself and his collected works.

# t your ears down ler.

**38 through 59. Integrated supersystems.** We offer 21 different systems with built-in amplifiers. In-dash or under-dash. AM/FM & Cassette. AM/FM & 8-Track. AM/FM only. FM/Cassette combo. Or 8-Track or Cassette alone. Now that's freedom of choice.

**60. Autosound fashions.\*** Owning a Pioneer Car Stereo requires a suitable wardrobe. Check out our T-shirt and tank-top collection. Featuring Pioneer I.D. on the flip side, so people will know where your sound is coming from.



Your walls can have ears. This poster now in fifth printing.

**61. The highway library.\*** There's an impressive body of literature to go with Pioneer Car Stereo. Our renowned resident auto stereo authority, Steve Tillack, has authored four best-sellers on the subject.

**62. Dolby.\*\*** Found in several of our models, Dolby eliminates tape hiss.



Get in touch with a whole other dimension in sound.

**63. Bodysonic.** Car stereo you can feel in your bones. The first major breakthrough in autosound since stereo itself. Test feel it.

**64. Audio decor.\*** There's a whole collection of Pioneer-aphernalia. Including our much-beloved Eargasm poster, a celebration of aural ecstasy.

**65. Have a fit.** With the world's broadest line of quality car stereo, Pioneer fits in perfectly whether you drive a Rolls or a VW.

**66 through 84. Pioneer component car stereo.** Build a car stereo that puts most home systems to shame. 18 different separates—tuners, cassette decks, and seven-band graphic equalizer. Plus amplifiers powerful enough to drive the hottest string of speakers.



GM-120 component amplifier. 30 watts per channel. KPX-9000. A component tuner/cassette with pre-amp. CD-7 component 7-band graphic equalizer

O.K. We've been reasonable enough. Now you've got to hear Pioneer. Go to a Pioneer dealer. It'll be the most rational thing you ever did.



Find your nearest dealer, toll-free: (800) 447-4700. In Illinois: (800) 322-4400.

**PIONEER®**  
The best sound going.

# Wharfedale. Remember the name.

In the future you'll be hearing a lot about Wharfedale. Maybe you already remember the name. Because Wharfedale has been making some of the world's finest speaker systems since the turn of the century.

We're the best-selling brand in Britain. And in many other parts of the world. Now some of our best speakers are available in America. They're called the Wharfedale E's.

The E's achieve that elusive combination of clarity, strong bass response and extremely high

efficiency. They can make an inexpensive 20-watt receiver sound like 200.

No matter how loudly you play them, the E70, E50, new E90, and compact new E30 retain their highly musical character. With crisp, tight, accurate reproduction of the entire frequency range. And none of the roughness or harshness that causes listening fatigue with other speakers.

How did we do it? We spent a king's ransom on research using computerized design technology. The result is a series of speakers

with the perfect combination of performance characteristics. In your choice of cabinet size.

Visit a Wharfedale dealer and audition our magnificent E's. It's an experience you won't soon forget.

The new E90 measures 45-3/8" H x 15-3/16" W x 14-3/4" D and has a frequency range of 43 - 18,000Hz  $\pm$ 3dB. The E70 is 32" x 13-1/2" x 14" with frequency response from 50 to 18,000Hz  $\pm$ 3dB. The E50 measures 25" x 13-1/2" x 13-1/2" with a frequency response of 55 to 18,000Hz  $\pm$ 3dB. The new E30 is 22-3/4" x 13-3/16" x 10-5/16" with a 63 to 18,000Hz  $\pm$ 3dB frequency response. Efficiency is 94dB at 1 watt and 1 meter for the E30, and 95dB for the other models.



RANK HI FI Inc., 20 Bushes Lane, Elmwood Park, New Jersey 07407 (201) 791-7888



**Illuminating graphics.** Fujitsu Ten's latest is a five-band graphic equalizer/preamp ( $\pm 12$  dB at 60, 250, 1,000, 3,500, and 15,000 Hz) on which an illuminated red line shows the frequency response curve you've plotted. The CA-200F costs \$145 and claims response from 20 Hz to 40 kHz, total harmonic distortion of 0.1%, and signal-to-noise ratios of 60 dB or more. It includes a fader control that adjusts volume of front and rear speakers individually, a level attenuator system switch, and remote control for tape reversing and search tuning. Although the model is designed specifically for use with Fujitsu's own component line, it can be used in virtually any mobile system.

**Pulling it in.** Audiophiles are willing to spend hundreds of dollars for an extra tenth of a microvolt of sensitivity or 1 or 2 dB more FM signal-to-noise ratio or selectivity. But then they try to save money by connecting their tuner to a folded dipole or TV antenna at home or to a cheap AM car antenna. The result, of course, is that only in exceptional circumstances is the home or car tuner actually able to deliver the performance built into it.

At \$88, Harada's TX-20 is by no means the cheapest antenna you can buy. It's a powered retracting model using a 10-pole motor that enables it to operate smoothly and easily even in cold weather when icing is a problem. Its watertight design has a noiseless clutch and chrome-plated stainless steel mast. The TX-20 is suitable for CB and AM as well as for stereo FM, according to the manufacturer.

The motor can be activated by the car ignition, the radio ON switch, or a CB ON switch. The antenna retracts completely when not in use; if the mast is damaged, it can be replaced easily without dismantling the entire assembly. Body and cables are shielded against electrical interference either from the car's ignition or from outside sources. Mounting heads are available for GM, Ford, and Chrysler cars, and there is a universal mount that fits many foreign models.

Who needs a retractable antenna? You may, if you live (or park your car) in an area where vandalism is common. And while ice, high winds, and snow aren't likely to occur for another few months, they do put a premium on a retractable with plenty of power. **HF**

# Scotch® Recording Tape... it sounds like money well spent.



Scotch® Recording Tape. The truth comes out.



# STEREO DISCOUNTERS FREE!

Stereo Discounters new Hi-Fi Catalog is now available — FREE! Featuring 80 pages of top quality, brand name Hi-Fi equipment from our \$6 million inventory — at guaranteed lowest prices!

Write for your free catalog or call TOLL FREE for prices:

**1-800-638-3920**

Over 100 famous name manufacturers — \$6 million inventory. 11 TOLL FREE WATS lines for best service. Fast service, lowest prices, widest selection — Guaranteed by the Hi-Fi mail order leader!



Send for our free 80-page Hi-Fi Catalog and compare our selection and prices.

HF7-79

Name \_\_\_\_\_  
Address \_\_\_\_\_  
State \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

Stereo Discounters  
3730 Santa Barbara Ct., Balto., Md. 21227

**Car Stereo Systems and Accessories, Cameras, Records and many more special features**

**Q.** I would appreciate your comments concerning an apparent problem with some B.I.C. changers. I have owned both a Model 980 and a Model 960 in which the tonearm frequently skips the entry grooves of LPs. This occurs in the automatic mode and when using the cueing lever manually as well. The arm appears to exhibit considerable resistance, causing the stylus to bend laterally in the entry groove. This is very annoying sonically and hard on the stylus. What can be done?—David Hollman, Mount Clemens, Mich.

**A.** The B.I.C. Models 960 and 980 have a brake mechanism that prevents the arm from moving laterally until the stylus is very close to the groove. The mechanism eliminates side drift caused by the antiskating bias during the cue cycle. Apparently, the brake is not releasing soon enough and the arm is being restrained as the stylus enters the groove. This can occur, for example, if in the cartridge being used the distance between stylus and mounting surface is greater than normal. A simple adjustment can be made to reset the release point. B.I.C. will provide details and the adjustment tool.

**Q.** Your lab report on the Kenwood KX-1030 cassette deck [May 1978] was the key factor in my buying it, so I hope you can help me with its bias and EQ settings. The EQ switches on other decks usually have three settings labeled 70, 70, and 120 microseconds. Is mine the same except that the CHROME and RESERVE settings represent 70 microseconds and NORMAL represents 120? Why do manufacturers even bother with three EQ settings if two are the same?

In the tests of twenty-one C-90 cassettes in your August 1976 issue, you used the terms "standard," "high," and "chrome" bias. Would that be the same, respectively, as NORMAL, RESERVE, and CHROME on the KX-1030 bias switch? For each of the tests, you show the recommended bias and EQ for the specific tape in question. On TDK's AD you have high bias; TDK, however, recommends NORMAL bias. Where should I set my deck? Maxell recommends high-level bias for its UDXL-II, but in your terminology that would be a RESERVE and not a CHROME setting on the KX-1030, right?—Michael J. Crossley, Camarillo, Calif.

We regret that, due to the volume of reader mail we get, we cannot give individual answers to all questions.

**A.** The RESERVE on the Kenwood KX-1030 is intended for a ferrichrome tape. The playback equalization is the same (70 microseconds) for both chrome and ferrichrome tapes, and some manufacturers therefore mark both of these switch settings "70  $\mu$ s." But there is a difference (and one that Kenwood has recognized with its nomenclature) in recording equalization for the two tape groups.

In our 1976 cassette-tape roundup, we used the terms "standard" and "high" bias to distinguish between two groups of ferric tapes that were common at that time. Since then, tape formulations have changed and more of the premium ferric products have gravitated toward what, in 1976, we called high bias. But chrome and similar tapes (such as ferricobalts) require even higher bias than any of the current regular ferrics. As a result, some manufacturers of nonchrome tapes that require the chrome bias have adopted the high-bias rubric for this group. (Memorex is the most obvious example.)

Our 1978 cassette-tape tests did cover ferrichrome tapes as a group, distinguishing them from the ferrics and the chrome/ferricobalts. Specifically, on the Kenwood KX-1030, a ferricobalt such as Maxell UDXL-II should perform best with CHROME bias and EQ; TDK AD, a ferric in what we have called the high-bias group, will probably perform best with Kenwood's NORMAL bias and EQ.

**Q.** Why do you cling to the Shure V-15 Type III cartridge in your reviews of turntables and arms? Do you consider it superior to the Type IV?—Jack Dalton, Columbia, S.C.

**A.** For listening, we prefer the Type IV. Its built-in damping system would, however, inhibit clear measurements of tonearm resonance in measuring separate arms and turntable ensembles. Staying with the Type III not only gives us the data we need, but allows performance comparison with tests run right back to the time we started using that cartridge for this purpose in 1973.

**Q.** I own two KLH Model 6 speakers and recently purchased a pair of Micro-Acoustics MST-1 auxiliary tweeters to go along with them. While I am pleased with this combination, I find that I still have to make large boosts in the midrange with my graphic equalizer. Is it possible to replace the tweeters in the KLHs with midrange drivers to create a three-

way combination? How would I go about doing this? What type of midrange should I select? Will I need to make changes in the crossover?—Robert Bienstock, New York, N.Y.

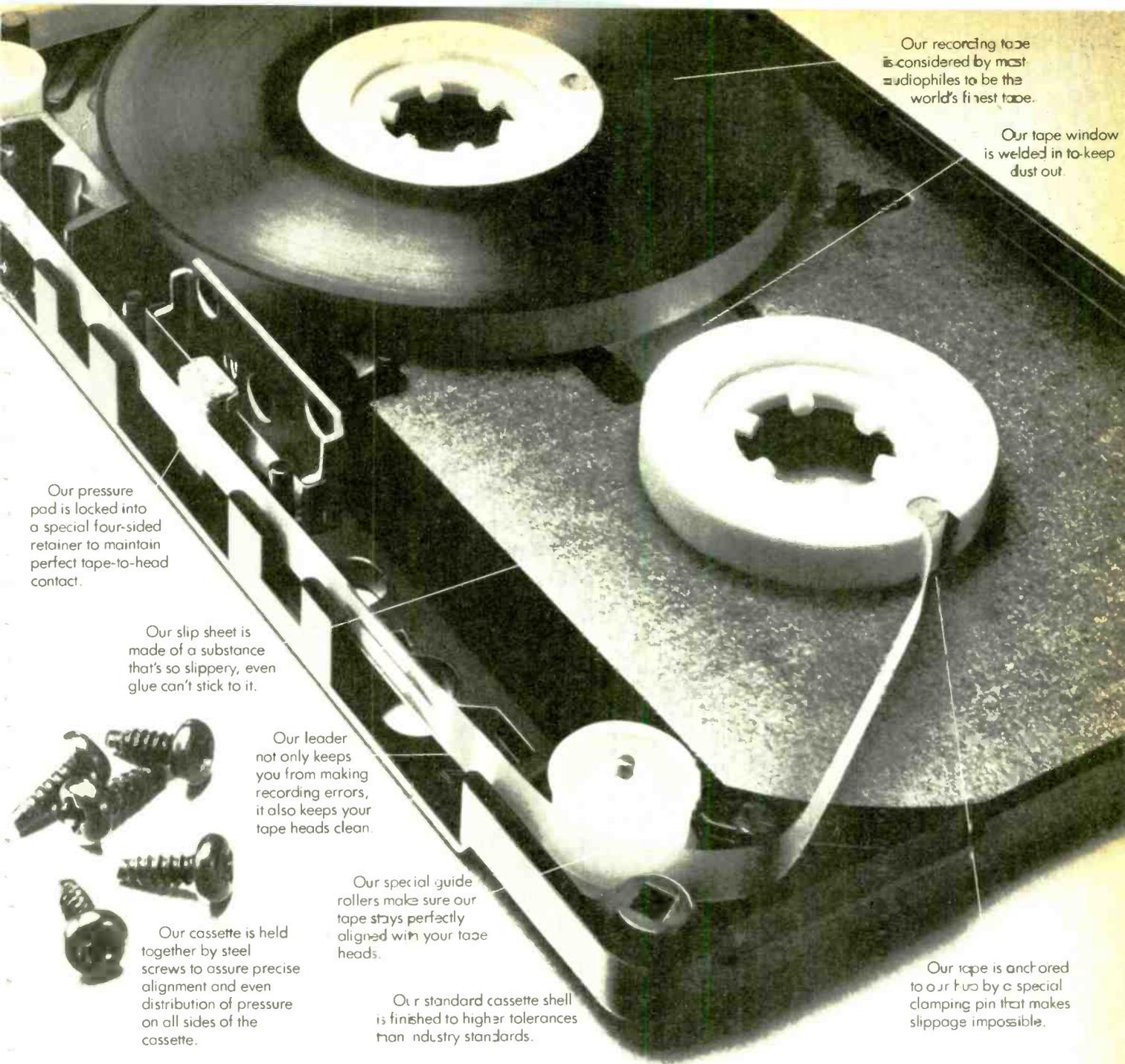
**A.** Sounds to us like you're doctoring a dead horse. The KLH Model 6 was a good speaker in its day, but its day was quite some time ago. If you're not satisfied with its sound, buying a new system should be less trouble and give you better results than trying to find a midrange and crossover that will mate smoothly with the KLH woofer and the Micro-Acoustics tweeter array.

**Q.** I own a JVC KD-85 cassette deck. In an effort to improve on my recording, I purchased a Pioneer RT-707 open-reel model. After making A/B comparisons with the decks on Maxell and TDK tape, I have come to the conclusion that for normal listening the cassette deck has come of age.

The KD-85 reproduced both a direct-cut disc and FM hiss better than the reel deck at 3 $\frac{3}{4}$  ips. At 7 $\frac{1}{2}$  ips the reel deck improved, but I honestly could not assert that it had any better reproduction. Is it possible that technology will produce cassettes that will soon replace open reels, or is my Pioneer in need of a checkup?—Bill Agreste, Norfolk, Va.

**A.** We'd agree that the cassette has come of age and can give 3 $\frac{3}{4}$ -ips open-reel equipment a good run for its money. However, your poker game was played with a stacked deck. The cassette had the benefit of noise-reduction circuitry; the open-reel deck did not. And are you sure the Pioneer RT-707 was properly adjusted for the tape you used? (The "reference" tape suggested by Pioneer is Scotch 206, although our experience suggests that there may be better choices.)

At 7 $\frac{1}{2}$  ips, the open-reel deck should be clearly superior to the cassette, but only if the program material is so difficult to record that it will tax the capabilities of the cassette. Specifically, music with a wide dynamic range and lots of high-frequency energy will record better on an open-reel tape than on a cassette. For many less demanding recording jobs, however, it'll be hard to tell the difference. **HF**



Our recording tape is considered by most audiophiles to be the world's finest tape.

Our tape window is welded in to keep dust out.

Our pressure pad is locked into a special four-sided retainer to maintain perfect tape-to-head contact.

Our slip sheet is made of a substance that's so slippery, even glue can't stick to it.



Our leader not only keeps you from making recording errors, it also keeps your tape heads clean.

Our cassette is held together by steel screws to assure precise alignment and even distribution of pressure on all sides of the cassette.

Our special guide rollers make sure our tape stays perfectly aligned with your tape heads.

Our standard cassette shell is finished to higher tolerances than industry standards.

Our tape is anchored to our hub by a special clamping pin that makes slippage impossible.

# There's more to the world's best tape than the world's best tape.

Our reputation for making the world's best tape is due in part to making the world's best cassettes.

In fact, we put more thought

and more work into our cassettes than most manufacturers put into their tape.

We do all this, because at Maxel

we believe in a simple philosophy. To get great sound out of a cassette takes a lot more than just putting great tape into it.

**maxell**



Maxell Corporation of America, 20 Oxford Drive, Moonachie, N.J. 07074.

**Your deck isn't ready for  
the ultimate cassette tape.**



# Introducing the first line of decks that are.



25-18,000 Hz  $\pm$  3dB at -20VU with metal tape, 70dB signal-to-noise ratio. 6dB hotter output than ferrichrome.

The reason we can offer you SIX metal tape-compatible decks with specs like these, is all in our heads. Sen-Alloy heads. With better high frequency characteristics than the Sen-Dust most of our competitors use, Sen-Alloy just happens to record and erase metal tape perfectly.

So while our competitors have had to struggle with little problems like designing heads that could handle metal tape, we've had a head start towards packing our metal decks with more state-of-the-art features.

Our new "X-cut" Sen-Alloy record head extends bass response to lower than your woofers may go: 25Hz!

Our unique double-gap Sen-Alloy erase head gets 60dB erasure on metal tape at the critical 400 Hz level.

Our B.E.S.T. computer automatically finetunes deck bias, equalization and

sensitivity to tape in less than 30 seconds.

Spectra-Peak and Multi-Peak L.E.D. indicators react 100 times faster than meters so you can make perfect, undistorted recordings.

How much does it cost to replace the weak link in your system with a JVC metal deck?

As little as \$299, and no more than \$750, suggested retail price.

After all, now that your ears are ready for metal tape, your pocket-book ought to be too.

For the name of your nearest JVC dealer, call

800-221-7502 toll-free (in NY State call 212-476-8300). Or write to US JVC Corp., 58-75 Queens Midtown Expressway, Maspeth, NY 11378.



Shown: **KD-AB** 2hd, 2mot, MPI L.E.D.'s, B.E.S.T., X-cut SA rec/play head, SA erase head, solenoid controls, Super-ANRS. Freq. resp., 25-17K\*; S/N, 60dB\*\*; w8f, 0.35%. **KD-A5**, 2hd, 2mot, MPI L.E.D.'s, SA rec. erase hds, sol cont., Super-ANRS, freq. resp. 30-16K\*; S/N, -60dB\*\*; w8f 0.04%. **KD-A6** 2hd, 2mot, X-cut SA Rec/play & SA erase hds 2 x 10. MPI L.E.D.'s; Super-ANRS, pitch cont., 25-17K\* freq. resp. S/N, -60dB\*\*, w8f 0.04%. **Not Shown: KD-77**, 3 SA hds, 2mot, sol contr, Super-ANRS. **KD-A7**, 2hd, 2mot, X-cut SA rec/play & SA erase hds, sol cont., 2-clr fluores. 10-bank SpectroPeak mtrs., Super-ANRS. **KD-A3**, 2hd, 2mot, MPI L.E.D.'s, SA rec, erase hds, Super-ANRS.

\* $\pm$  3dB @ -20VU!

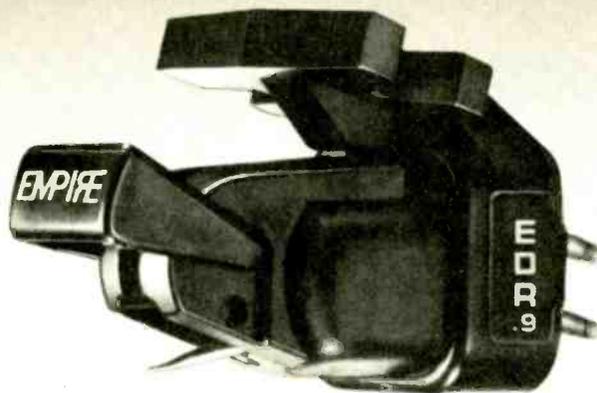
\*\*Without noise reduction. (ANRS adds 10dB @ 5kHz)

# JVC®

US JVC CORP.

## Now you're ready for JVC.

Circle 24 On Page 93



## INTRODUCING THE EMPIRE EDR.9 PHONO CARTRIDGE. IT SOUNDS AS GOOD ON A RECORD AS IT DOES ON PAPER.

It was inevitable . . .

With all the rapid developments being made in today's high fidelity technology, the tremendous advance in audible performance in Empire's new EDR.9 phono cartridge was bound to happen. And bound to come from Empire, as we have been designing and manufacturing the finest phono cartridges for over 18 years.

Until now, all phono cartridges were designed in the lab to achieve certain engineering characteristics and requirements. These lab characteristics and requirements took priority over actual listening tests because it was considered more important that the cartridges "measure right" or "test right"—so almost everyone was satisfied.

Empire's EDR.9 (for Extended Dynamic Response) has broken with this tradition, and is the first phono cartridge that not only meets the highest technological

and design specifications—but also our demanding listening tests—on an equal basis. In effect, it bridges the gap between the ideal blueprint and the actual sound.

The EDR.9 utilizes an L. A. C. (Large Area Contact) 0.9 stylus based upon—and named after—E. I. A. Standard RS-238B. This new design, resulting in a smaller radius and larger contact area, has a pressure index of 0.9, an improvement of almost six times the typical elliptical stylus and four times over the newest designs recently introduced by several other cartridge manufacturers. The result is that less pressure is applied to the vulnerable record groove, at the same time extending the bandwidth—including the important overtones and harmonic details.

In addition, Empire's exclusive, patented 3-Element Double Damped stylus assembly acts as an equalizer. This eliminates the high "Q" mechanical resonances typical of other stylus assemblies, producing a flatter response, and lessening wear

and tear on the record groove.

We could go into more technical detail, describing pole rods that are laminated, rather than just one piece, so as to reduce losses in the magnetic structure, resulting in flatter high frequency response with less distortion. Or how the EDR.9 weighs one gram less than previous Empire phono cartridges, making it a perfect match for today's advance, low mass tonearms.

But more important, as the EDR.9 cartridge represents a new approach to cartridge design, we ask that you consider it in a slightly different way as well. Send for our free technical brochure on the EDR.9, and then visit your audio dealer and listen. Don't go by specs alone.

That's because the new Empire EDR.9 is the first phono cartridge that not only meets the highest technological and design specifications—but also our demanding listening tests.  
Empire Scientific Corp.  
Garden City, N.Y. 11530 **EMPIRE**

## NEW EQUIPMENT REPORTS

A Consumer's Guide

Preparation supervised by Robert Long and Edward J. Foster. Laboratory data (unless otherwise noted) supplied by CBS Technology Center and Diversified Science Laboratories.

**IN THIS ISSUE:** Harman Kardon HK-3500 cassette deck, Fisher RS-2007 receiver, ADC 1700DD turntable, RoteI 2030 amplifier, Sherwood S-7450CP receiver, JBL L-110 speaker, KEF 105 speaker, Rogers LS3/5A speaker, Speakerlab 30 speaker kit, and Visonik Euro 7 speaker.



## A Solid, Flexible Cassette Deck

**Harman Kardon HK-3500 stereo cassette deck in metal case. Dimensions: 16½ by 7½ inches (front), 10½ inches deep plus clearance for controls and connections. Price: \$549. Warranty: "limited," one year parts and labor. Manufacturer: Harman Kardon, 55 Ames Court, Plainview, N.Y. 11803.**

Though, historically, Harman Kardon has been primarily an electronics company, its cassette decks have been among its most interesting products. There haven't been many decks—nothing like the perennial parade of introductions elsewhere—but when the Harman Kardons do arrive, they generally are striking in their freshness as well as their technical quality. The 3500, which now tops the line, is a good example.

It is, for one thing, exceptionally versatile in its controls. Dolby tracking and bias current both have fine-tuning controls that permit adjustment for a wide variety of tapes, and a built-in dual-frequency oscillator makes best use of these adjustments. Mike/line mixing is permitted by the level controls, each of which has separate elements for balancing of channels and is fitted with a preset escutcheon to aid in fast, accurate fade-ins. Two pairs of line inputs, of different sensitivity, offer a choice of working ranges so that offbeat output levels in associated equipment won't force the LINE control to be used at either extreme of its rotation.

Then there are niceties like recording mute, which kills the input signal so that the timing between numbers will be more flexible than use of PAUSE alone to kill radio announcements would allow. Dolby noise reduction can be had with or without

# THE DIGITAL READOUTS ON THE NEW SANSUI RECEIVERS ARE NOT WHAT COUNT.





G-4700



G-5700



G-6700

# ARTZ-LOCKED TUNING DOES.

life like, crisp and clean.

## ELECTRONIC LED POWER METERS

The all-new peak power level LED display gives you an instantaneous reading of the power output of each channel, so you can continuously monitor the power you're sending to your speakers. This electronic indicator responds much faster and more accurately than any conventional needle-type meter.

## ALL THE EXTRAS, TOO

The new Sansui receivers are high technology through and through. So we've designed them with special protection devices to prevent any mishap. Protective circuits save the output transistors from excessive current and keep too much direct current from your speakers.

And we haven't forgotten about the con-

trols and features that make it possible for you to fine-tune the music. Like the bass and treble controls, which operate with an absolute minimum of distortion. And tone defeat switch plus audio muting on our top three models. The volume controls with 41 click-stops, and ultra-smooth tuning knobs, are large and centrally placed for ease of operation. Taping, too, is simple, with versatile and complete facilities.

Everyone is proud of a great-sounding, high performance receiver. But you should be proud of its looks as well. With Sansui, you will be.

Ask your authorized Sansui dealer to show you one of our Double-Digital receivers. Ask him to turn it on. You'll see that your music never had it so good. And you never heard it better. That's something you can count on.

### G-7700

- 120 watts per channel, min. RMS, both channels driven into 8 ohms, from 20 to 20,000Hz with no more than 0.025% Total Harmonic Distortion.
- Power Amplifier Frequency Response: DC to 200,000Hz +0, -3dB
- FM Sensitivity: 9.8dBf (1.7uV IHF T-100)
- FM Signal-to-Noise Ratio: 76dB
- FM Spurious Response Ratio: 90dB

### G-6700

- 90 watts per channel with no more than 0.025% THD under the same conditions.
- Power Amplifier Frequency Response: DC to 200,000Hz +0, -3dB
- FM Sensitivity: 10.8dBf (1.9uV IHF T-100)
- FM Signal-to-Noise Ratio: 75dB
- FM Spurious Response Ratio: 70dB

### G-5700

- 75 watts per channel with no more than 0.03% THD under the same conditions.
- Power Amplifier Frequency Response: DC to 200,000Hz +0, -3dB
- FM Sensitivity: 10.8dBf (1.9uV IHF T-100)
- FM Signal-to-Noise Ratio: 75dB
- FM Spurious Response Ratio: 70dB

### G-4700

- 50 watts per channel with no more than 0.05% THD under the same conditions
- FM Sensitivity: 10.8dBf (1.9uV IHF T-100)
- FM Signal-to-Noise Ratio: 75dB
- FM Spurious Response Ratio: 70dB

## SANSUI ELECTRONICS CORP.

Lyndhurst, New Jersey 07071 - Gardena, Ca. 90247  
 Sansui Electric Co., Ltd., Tokyo, Japan  
 Sansui Audio Europe S.A., Antwerp, Belgium  
 In Canada, Electronic Distributors

Circle 39 On Page 93

*Sansui*



# OUR PATENTED DIGITALLY QUARTZ-LOCKED TUNING SYSTEM

## DIGITAL READOUTS

While digital readouts may improve the looks of a receiver and make it easier to use, only digital circuitry can improve the receiver's performance. That's why all the new Sansui Double-Digital receivers use our patented Digitally Quartz-Locked Tuning System, too.

## DIGITALLY QUARTZ-LOCKED TUNING

To meet its rated distortion specifications, a receiver's tuner section must be perfectly center-tuned. The slightest mistuning causes distortion of the final signal to increase rapidly. And even if a tuner is accurately tuned initially, it may drift away from the desired frequency within a short time.

Sansui's Digitally Quartz-Locked Tuning System automatically provides optimum tuning that not only remains perfect while you listen, but stays on the same center frequency even if the receiver is turned off and back on again later.

Conventional quartz-controlled tuners use an analog phase reference circuit that may lose accuracy as a result of harmonic interference. Sansui's patented digital tuning system

actually counts the vibrations of a quartz-crystal time-base and compares it to the tuned-in frequency for instant corrections.

When you listen to any of the new Sansui Double-Digital receivers, you'll immediately hear the difference that perfect tuning makes.

You'll also see the difference in the specs. The tuning sections are extremely sensitive, with unusually high signal-to-noise and spurious response ratios.

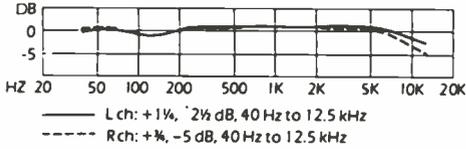
## PURE POWER DC AMPLIFICATION

A great receiver needs more than a superb tuner section. The amplifier must be first rate, too. That's why Sansui uses our own unique Pure Power DC amplification system in all of our Double-Digital receivers.

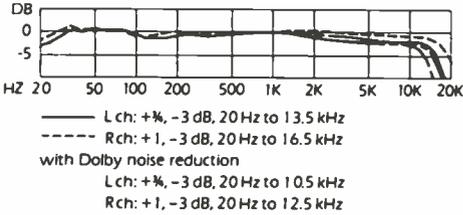
While some other receivers have low Total Harmonic Distortion (THD), a Sansui DC receiver can achieve lowest Transient Intermodulation Distortion (TIM) simultaneously. That's because our high slew rate, fast rise time DC circuits provide sufficient drive current to respond instantaneously to even the most fleeting musical transients. The music reproduction is remarkably



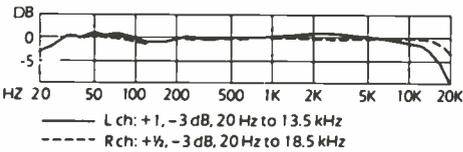
PLAYBACK RESPONSE (TDK test tape; -20 dB DIN)



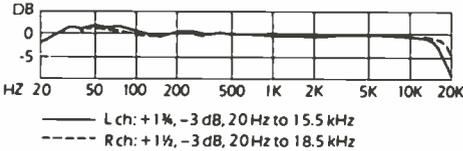
RECORD/PLAY RESPONSE, "CHROME" TAPE (-20 dB)



RECORD/PLAY RESPONSE, FeCr TAPE (-20 dB)



RECORD/PLAY RESPONSE, FERRIC TAPE (-20 dB)



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

	"chrome"	ferric
playback	60 1/2 dB	57 1/2 dB
Dolby playback	67 1/2 dB	66 dB
record/play	57 dB	53 1/2 dB
Dolby record/play	64 dB	61 1/2 dB

METER READING FOR DIN 0 DB +1 1/2 dB

METER READING FOR 3% DISTORTION (at 333 Hz)

"chrome" tape	+4 dB
ferrichrome tape	> +6 dB*
ferric tape	+5 dB

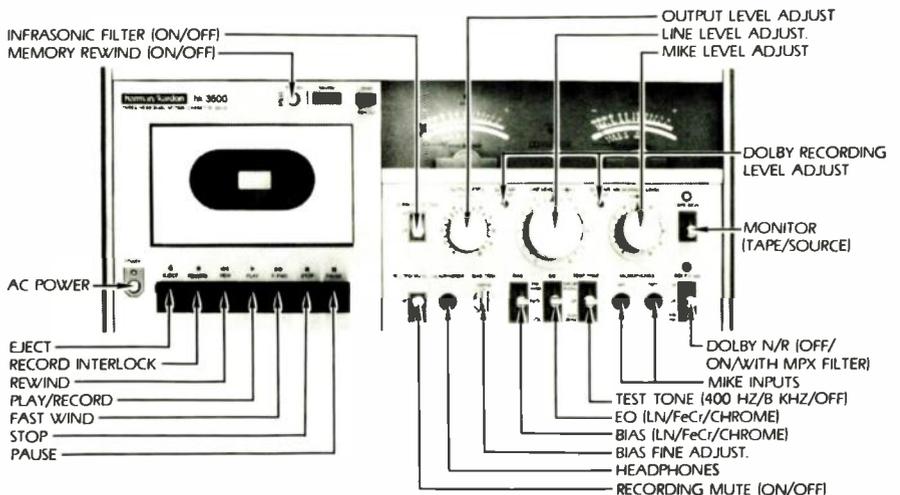
\*beyond the end of the meter scale

the multiplex filter—which measurably (though only just audibly, and only with signals that have appreciable energy at 10 kHz and above) lops off a bit of the top-end response. Because of the exceptionally extended bass response of the deck, a switchable infrasonic ("subsonic") filter was included to block any record warp information that otherwise would increase distortion and perhaps force lower than optimum recording levels. And the speed adjustment, accessible through a back-panel opening covered by a removable rubber plug, allows pitch alteration by well over a half-tone in either direction and returns to normal at an easily felt detent.

A key design feature is the monitoring system: separate recording and playback elements in the main head, separate encode and decode elements in the Dolby system, and the TAPE/SOURCE switch. Not only does the system allow aural evaluation of recorded signals during recording, but it simplifies the bias and Dolby-tracking adjustments. Without it, the test-tone recordings would have to be rewound, played, evaluated, and adjusted for; with it, the adjustments can be judged immediately.

It is not, however, quite as brisk a business as it might at first appear. While we have found no tape whose sensitivity is too low to be encompassed by the Dolby adjustment, some, like Memorex High Bias, require the full clockwise rotation. More important, bias adjustment with the 8-kHz tone is not altogether unequivocal. The manual says to stay within 3 dB of maximum output, which is not easy with the reference tone at 20 dB, where the meter calibrations are fairly cramped. The monitoring feature to the rescue! You can use musical signals that are fairly complex and sustained—or FM interstation noise, though its unpredictable effect on Dolby circuits precludes setting bias with the noise reduction on. You can hear the increase in distortion as you move toward underbiasing and the dulling of the sound as the bias becomes excessive—even before the meter tells you unequivocally that you are off-target. We found that we could get just about the best that any tape in our varied collection could give by correlating visual and aural evidence and by checking bias and Dolby tracking alternately a few times before accepting our adjustments as optimum.

The specific tape brands suggested by Harman Kardon and used by DSL in measuring the deck are Maxell UDXL-I ferric in the LOW-NOISE settings, UDXL-II ferrico-balt as our "chrome," and BASF Pro-III ferrichrome. All the measurements were made with the bias control in its detented center position. (Note that if you switch from UDXL-I to, say, Ampex Grand Master—which requires considerably less bias—as your ferric, you must return the bias knob to the detented position each time you use UDXL-II, since the knob "tunes" all three positions of the main bias switch.) As often happens in comparing tapes in our deck tests, we find the sound with the ferrichrome as extended as that with a chrome or a chrome substitute, but a bit "grittier." The distortion curves (which we recently expanded to include all the "tapes of record") show why: The ferrichrome curve, though lowest of the three in midbass, is highest from the mid-range up. Response is excellent in all the tests; though the curves show a consistent droop of the right channel below the left at the extreme top end, the "imbalance" never made itself known in our listening tests and, in other respects, the channels are very well matched. Noise, flutter, and speed all are very well controlled.





# ALL ABOUT AUDIO

everything you ought to know to get the best sound from your system

## Dictionary of Audio & Hi-Fi

By Howard W. Sams Editorial Staff

Contains the definitions of over 2,000 audio and hi-fi terms relating to mono, stereo and quadraphonic sound. 168 pgs. #21084 . . . \$5.95

## Easy Speaker Projects

By Len Buckwalter

Explicit, nontechnical instructions on how to make speaker systems from simple shelfboard to more advanced ones. Ill. with photographs. 96 pgs. #21104 . . . \$3.95

## Official Guide to High Fidelity (2nd Edition)

By the Institute of High Fidelity

Comprehensive sound system book to help you attain the best of the sound of music. Will familiarize reader with components for superior high-fidelity music reproduction. 208 pgs. #21531 . . . \$5.50

## From Tin Foil to Stereo (2nd Edition)

By Oliver Read and Walter Welch

Traces the history of the phonograph from Edison's crude tin foil phonograph up through modern video discs. Contains dozens of rare and historic photographs. 608 pgs. Softbound #21205 . . . \$9.95  
Hardbound #21206 . . . \$19.95

## How to Build Speaker Enclosures

By Alexis Badmaieff and Don Davis

A "do-it-yourself" information source on construction of high-quality, top-performance speaker enclosures. Detailed drawings on infinite-baffle and bass-reflex types and more. 144 pgs. #20520 . . . \$4.95

## 99 Ways to Improve Your Hi-Fi

By Len Buckwalter

Simple, helpful projects to enhance hi-fi enjoyment. Covers installation, fm stereo, phonos, amplifiers and more. 128 pgs. #20876 . . . \$3.50

## Hi-Fi Stereo Handbook (5th Edition)

By William F. Boyce

Informative handbook for hi-fi enthusiasts and technicians. Will help in planning, selecting and installing hi-fi equipment to suit any taste. 488 pgs. #21564 . . . \$11.95

## Electric Guitar Amplifier Handbook (4th Edition)

By Jack Darr

Explains all functions of guitar related to electronic circuitry. Contains complete schematics of the most popular commercial amplifiers. 384 pgs. #21443 . . . \$10.50

## Stereo High-Fidelity Speaker Systems

By Arthur Zuckerman

For both audiophile and neophyte, gives broader understanding of design and development of stereo high-fidelity speaker systems. Includes shopping tips for best equipment. 160 pgs. #21514 . . . \$5.95

## ABC's of Hi-Fi and Stereo (3rd Edition)

By Hans Fantel

Amplifiers, tone arms, turntables, cartridges, tuners, speakers, record changers and tape recorders! All are discussed in detail. A must for present or prospective hi-fi and stereo owners. 112 pgs. #21044 . . . \$3.95

SAVE 10% when you order 3 or more!

Examine any book(s) at NO RISK for 15 Days!

323

## Clip Out-Mail Today!

**YES**—Please send me the book(s) indicated below. If I'm not completely satisfied, I may return any or all within 15 days of receipt for full credit or refund. Add sales tax where applicable.

21084     21205     21564  
 21104     21206     21443  
 21531     20520     21514  
 20876     21044

I have checked 3 or more titles and deducted my 10% savings.

Name \_\_\_\_\_ (Please Print)

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip Code \_\_\_\_\_ Total: \$ \_\_\_\_\_

Check  Money Order  Master Charge

Visa/BankAmericard

Exp. Date \_\_\_\_\_

Account No.: \_\_\_\_\_

Interbank No.: \_\_\_\_\_ (Master Charge only)

Signature: \_\_\_\_\_

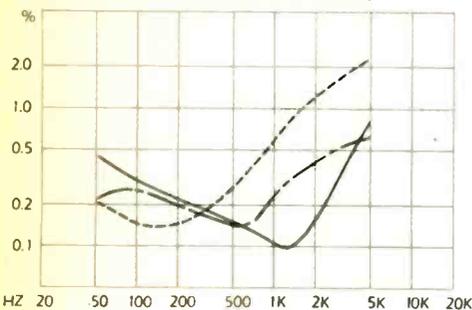
Minimum credit card purchase: \$10.00

BS55

MAIL TO:  
**Howard W. Sams & Co., Inc.**  
4300 W. 62nd St.  
Indianapolis, IN 46206

Prices subject to change 6 months after issue date

DISTORTION (third harmonic; at -10 dB DIN)



— "chrome" tape  $\leq 0.79\%$ , 50 Hz to 5 kHz  
 - - - ferrichrome  $\leq 2.16\%$ , 50 Hz to 5 kHz  
 . . . ferric tape  $\leq 0.59\%$ , 50 Hz to 5 kHz

ERASURE (333 Hz; re DIN 0 dB) 63 dB

CHANNEL SEPARATION (at 333 Hz) 52 dB

SPEED ACCURACY 0.27% fast at 105 VAC  
 0.37% fast at 120 VAC  
 0.30% fast at 127 VAC

SPEED ADJUSTMENT RANGE +9.9, -8.4%

WOW & FLUTTER (ANSI/IEEE weighted peak)

	average	maximum
playback	$\pm 0.04\%$	$\pm 0.07\%$
record/play	$\pm 0.05\%$	$\pm 0.07\%$

SENSITIVITY (re DIN 0 dB; at 333 Hz)

high line	225 mV
low line	66 mV
mike	0.15 mV

MIKE INPUT OVERLOAD (clipping) 7.1 mV

OUTPUT (from DIN 0 VU) 1.42 V

The meters are calibrated from -40 to +6 dB—an excellent range, in our opinion. They also respond well to transients, coming within 3 dB of true values for pulses of only 4 milliseconds and overshooting by only 1 dB when "slapped" hard. With meters that accurate, the peak LEDs above them seem almost redundant, though they will respond to pulses of only 2 milliseconds. But the system takes a little getting used to: While the LEDs remain in sync with the music, the meters lag a little behind fast-changing signal levels, however accurate the ultimate indication.

If you work with the deck, you may notice one peculiarity. When the recording elements of the head are live, their signal feeds through somewhat to the playback elements. You should be aware of two practical, if minor, consequences of this fact. First, if you are preadjusting levels with the deck in PAUSE and ready to record, you must be sure to monitor SOURCE. If the monitor switch is at TAPE (which, with the tape stopped, normally has no output), you can mistake the feed-through for the real signal—though it is some 30 dB down in level and noticeably distorted—and crank up the gain accordingly. When you release the PAUSE, the real signal comes booming through. Second, when you are recording speech and monitoring the tape, you may hear a ghostly pre-echo of feed-through in the "holes" between syllables; music, in which reverberation tends to fill whatever sonic holes exist, gives very little opportunity to hear the effect. This feed-through in no way affects the tape itself or normal playback, but casual discovery of the phenomenon could mislead the user into assuming malfunction.

The controls allow you to go back and forth between the fast-wind modes ad lib, but you can get from them to playback (or recording) only via STOP—a sensible precaution, in our view, against jammed or stretched tapes. Sources can be metered (though not monitored via the deck) even in the stop mode when you want to preset levels. The PAUSE is very swift and leaves minimum audible evidence of its use. A recording pilot between the meters starts blinking when you press PAUSE; the counter's reset button doubles as an illuminated tape-motion indicator.

All this adds up to the kind of deck we have come to expect from Harman Kardon. Excellent capability combines with a freshness of approach that makes using the product an all-around pleasurable experience. Moreover, it's reassuring to know that someone has really thought about design alternatives; re-examination doesn't assure improvement, but without it there can't be improvement at all. While there is nothing essentially radical about the 3500, anyone who has used it will understand that it is far from a "me too" product.

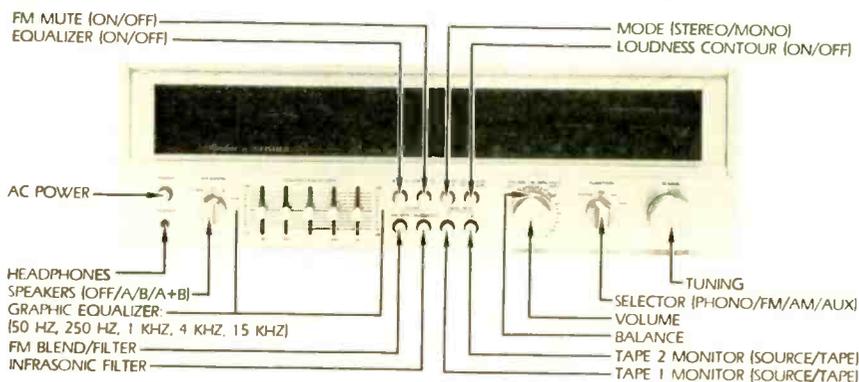
Circle 134 On Page 93

## A Studio Standard Receiver

### Tuner Section

MONO FREQUENCY RESPONSE  
 $\pm 1$  dB, 20 Hz to 15 kHz

STEREO FM RESPONSE, CHANNEL SEPARATION  
 Frequency response  $\pm 1$  dB, 20 Hz to 15 kHz  
 Channel separation  $\geq 35$  dB, 20 Hz to 2 kHz  
 $\geq 25$  dB, 20 Hz to 11 kHz



**Fisher RS-2007 stereo FM/AM receiver, in case with simulated wood-grain cabinet. Dimensions: 20 1/2 inches (front), 14 3/4 inches deep plus clearance for controls and connections. AC convenience outlets: 1 switched (60 watts max.), 1 unswitched (120 watts max.). Price: \$550. Warranty: "limited," two years parts and labor. Manufacturer: made in Japan for Fisher Corp., 21314 Lassen St., Chatsworth, Calif. 91311.**

Fisher has long been known for feature-packed receivers, and the RS-2007 certainly fits that description, with such extras as a five-band graphic equalizer (included, as well, in Fisher's other Studio Standard Series receivers), dual power meters,

Circle 35 On Page 93 ▶

# THE BETTER YOUR HIGH FIDELITY SYSTEM, THE NOISIER IT WILL SOUND.



It's a strange, but true fact—the better your hi fi equipment, the more hiss, hum and rumble you will hear. Just as a quality high fidelity system provides richer music through its wide frequency response and greater dynamic range, it also has a better ability to reproduce irritating flaws contained in the source material. You can make a major improvement in your system by eliminating much of the hiss, hum and rumble that's inherent in the source material itself.

Many noise reduction systems have some success, but only one can silently remove 10dB of the hiss, hum and rumble that is contained in unencoded records, tapes and FM. That one system is the Phase 1000 Series Two.

As you reproduce recorded music, the 1000 Series Two analyzes the millions of incoming waveforms to find signals similar to a sine wave—a highly "correlated" waveform with periodic repetition. Like a guitar note. Or a piano note. Or a vocal note.

The 1000 Series Two electronically analyzes the signal to find fundamental musical tones, and their harmonics. Where these are missing, there is no music. The 1000 can then safely assume there is noise.



THE PHASE 1000 SERIES TWO

If the 1000 Series Two identifies a fundamental waveform, it instantly orders one of its silent bandpass gates to open. If no music is present, the gates remain shut. The 1000 removes a full 10dB of hiss, hum and rumble—without affecting music!

The 1000 Series Two overcomes another flaw—dynamic compression. Live music has great dynamic range, with as much as 100dB between the loudest and the quietest passages. But tape recorders have limited range, so studio engineers compress the dynamic range to less than 50dB. FM broadcasters compress the signal even more, in order to facilitate transmission. The 1000 is the only Noise Reduction System that can correct this compression on unencoded material. It expands dynamic range by a full 7.5dB, for a more open, lively sound.

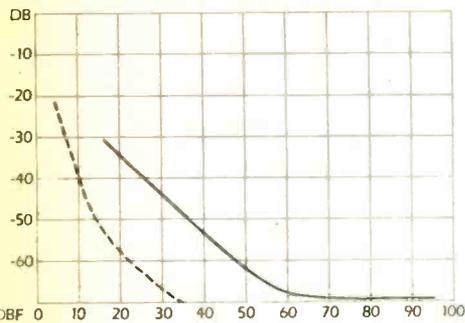
The Phase 1000 Series Two may very well improve your sound more than any

other single component you could add, regardless of the quality or price of your hi fi system. The 1000 is an improved version of the Phase Linear Autocorrelator, now with second generation, low noise, high slew rate integrated circuitry for quiet, distortion-free performance. It's easy to utilize with any stereo receiver, integrated amp or preamp/amp, and is a valuable addition to Dolby\* and dbx systems. (These systems are very effective in preventing noise from being added in the re-recording stage, but don't reduce noise in the original recording.) When you play conventional records through the 1000, you cut tape hiss. (Expensive direct-to-disc records are cut directly onto a master, primarily to avoid the taping stage with its inherent hiss.)

Ask your Phase dealer to play any record, tape or tuner through the 1000 Series Two. Then listen to the music. Not the noise.

*Phase Linear*  
THE POWERFUL DIFFERENCE

FM SENSITIVITY &amp; QUIETING



— stereo noise (quieting)

- - - mono noise (quieting)

Stereo sensitivity (for 50-dB noise suppression)

36% dBf at 98 MHz; for 1.1% THD+N

[35% dBf at 90 MHz; 36% dBf at 106 MHz]

Mono sensitivity (for 50-dB noise suppression)

14% dBf at 98 MHz

Muting threshold 14% dBf

Stereo threshold 16% dBf

Stereo S/N ratio (at 65 dBf) 68½ dB

Mono S/N ratio (at 65 dBf) 73% dB

CAPTURE RATIO 2% dB

ALTERNATE-CHANNEL SELECTIVITY 60% dB

HARMONIC DISTORTION (THD+N)

at 100 Hz stereo 0.25% mono 0.090%

at 1 kHz 0.18% 0.095%

at 6 kHz 0.26% 0.090%

STEREO PILOT INTERMODULATION 0.13%

IM DISTORTION (mono) 0.047%

AM SUPPRESSION 57 dB

PILOT (19 kHz) SUPPRESSION 66% dB

SUBCARRIER (38 kHz) SUPPRESSION &gt;85 dB

**Amplifier Section**

RATED POWER 18% dBW (75 watts)/ch.

OUTPUT AT CLIPPING (both channels driven)

8-ohm load 19% dBW (92½ watts)/ch.

4-ohm load 19% dBW (84½ watts)/ch.

16-ohm load 17% dBW (58½ watts)/ch.

DYNAMIC HEADROOM 1½ dB

HARMONIC DISTORTION (THD+N; 20 Hz to 20 kHz)

at 18% dBW (75 watts) ≤0.044%

at 0 dBW (1 watt) &lt;0.075%

FREQUENCY RESPONSE (at 0 dBW)

+0, -½ dB, 10 Hz to 20 kHz

+0, -3 dB, 6 Hz to 41.5 kHz

RIAA EQUALIZATION +½, -1 dB, 20 Hz to 20 kHz

INPUT CHARACTERISTICS (re 0 dBW; A-weighted)

sensitivity S/N ratio

phono 0.28 mV 77 dB

aux, tape 15.9 mV 82 dB

PHONO OVERLOAD (1-kHz clipping) 320 mV

PHONO IMPEDANCE 51.3k ohms at 1 kHz (complex)

DAMPING FACTOR (at 50 Hz) 64

and a "panel logic" display to indicate which of six functions are in use. More important, these features are easy to manipulate (or to ignore, if you've a mind to); you are not just left adrift in a sea of mysterious controls.

Most obvious of these extras is the equalizer. Designed as a multiband tone control, rather than as an instrument for fine-tuning system response, it puts about two octaves on each of its sliders, which control both channels simultaneously. Its simplicity of control and its presence on the receiver's own front panel rather than in a separate box make it both easy and inviting to use. In our listening tests, we found ourselves frequently making slight adjustments to obtain the best sound from one record or another; the capacity for subtle adjustment, in fact, encouraged us to use the equalizer rather more often than we might have used conventional tone controls. Fisher evidently expects that approach; the equalizer is "on stream" when its button is in the normal (out) position. All continuous controls except the tuning knob have detents: every 2 dB for the equalizer sliders, approximately every 1 dB for the volume knob, and at the center for the concentric balance control. Feel is pleasant and positive for all knobs and switches except the flywheel tuning knob, whose slight backlash gives it a rubbery quality.

In other respects, FM tuning is a pleasure. The dial's markings, though too sparse for precise tuning by eye, are easily visible even when the tuner is below eye level. The channel-center meter reads the tuning point quite accurately for minimum distortion, and the signal-strength meter is nicely calibrated, giving a clear reading on any signal strong enough for even marginal reception. FM sensitivity is fairly high. In listening to the relatively weak stations that the high sensitivity pulls in, adjacent-channel neighbors of roughly equal strength can produce a slight "ticking" of breakthrough when the next-door channel signal approaches full modulation.

The muting cuts in and out smoothly, without thumps or clicks, though it has little resistance to fluctuating signal strength and therefore can sputter in and out on borderline stations and can unmute prematurely on strong ones, allowing a brief burst of distorted sound before the center frequency is reached. The multiplex filter (blend) progressively reduces separation above 2 kHz by about 6 dB per octave. Surprisingly, it does relatively little to reduce audible noise and distortion on weak stereo signals. Ultimate quieting is rather better than specified. AM suppression, though perhaps better than that of many receivers in this price range, did allow some noise (for example, from electric motors) to get through with weak stations in our listening tests. In case you need it for Dolby broadcasts, there is a 75/25-microsecond FM equalization switch on the back panel.

AM performance is, as in most component receivers, disappointing in view of the apparent imminence of stereo AM broadcasting. Frequency response is limited, even on wideband stations, and the AVC allows wide variations in sound volume from one station to another. On the other hand, interference rejection seems excellent.

The amplifier section meets its power rating comfortably, with about half the rated distortion and with 1½ dB of dynamic headroom. In practice, the sound is clean right up to the point where the meters indicate close to full power, and sometimes even beyond. As usual, they really read volts into 8-ohm loads, not true power. They are fairly accurate at full power (where, if anywhere, accuracy counts), but the readings at lower levels are far from the mark.

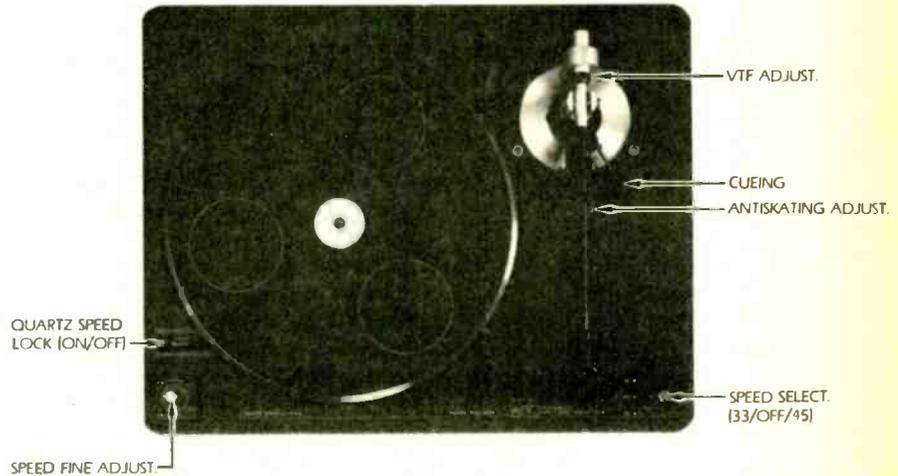
The phono section has ample headroom. How closely the effective RIAA equalization will approach the ideal with any given cartridge is hard to say, since the impedance presented to it by the input is complex. Though, in listening, we noted no evidence of mismatch with our test cartridges, a low-inductance model (making it relatively insensitive to loading) might be the best choice. The equalizer controls meet or surpass their rated ±10-dB range. (In practice, you may rarely need the full range.) The actual center frequencies of the bands are close to those marked on the panel (50 and 250 Hz, 1, 4.5, and 15 kHz), and overlap between bands is moderate.

The loudness compensation is fine at background-music levels, but we considered it a bit overrich with the VOLUME turned up. This effect will be more prominent, of course, with high-efficiency speakers than with less efficient ones, for which the VOLUME would have to be higher. The circuit includes some high-frequency compensation (about 6 dB per octave above 7 kHz) as well as the usual low-frequency enhancement (rising below 1,600 Hz and shelving at about +10 dB below 100 Hz). The equalizer section makes it easy to touch up the loudness contour. The unusually sharp "subsonic" filter has no audible effect but visibly limits woofer cone excursions due to infrasonic signals, which is exactly what the filter's there for. The two tape monitors allow dubbing in one direction: from TAPE 1 to TAPE 2.

The RS-2007 seems to embody a Fisher tradition that reaches back into the Forties: that engineering must be at the service of music listening. At its inception, the approach seemed elitist; in the intervening decades, it has spawned the high fidelity industry as we know it and has come to seem anything but elitist. Considering its price, power rating, and extra features, the RS-2007 may be too much receiver for Everyman. But it aims squarely at the music listener rather than the engineer in every element of its design, with the exception of the power meters (a subject on which we repeatedly have expressed our possibly jaundiced view). The equalizer section is particularly successful in this respect. As a whole, we find the receiver both a pleasure to listen through and a pleasure to use.

Circle 140 On Page 93

## A Fine First Semiautomatic from ADC



SPEED ACCURACY (at 33 or 45 rpm)  
no measurable error at 105, 120, or 127 VAC

SPEED ADJUSTMENT RANGE  
at 33           -3.2 to +7.8%  
at 45           -5.9 to +9.0%

WOW & FLUTTER (ANSI/IEEE weighted peak)  
± 0.05% average; ± 0.09% max. instantaneous

TOTAL AUDIBLE RUMBLE (ARLL)       -60 dB

TONERARM RESONANCE & DAMPING  
vertical       8.2 Hz; 4½-dB rise  
lateral        7.0 Hz; 2-dB rise

ARM FRICTION           negligible in either plane

MIN. STYLUS FORCE FOR AUTO TRIP   230 mg

**ADC 1700DD, a two-speed (33 and 45 rpm) automated single-play turntable assembly, with base and removable dust cover. Dimensions: 18½ by 15 inches (top plate), 6¼ inches high with dust cover closed; clearance of 15½ inches vertically and 1¼ inches at back with cover set in vertical position. Price: \$249.95. Warranty: "limited," 2 years parts and labor. Manufacturer: ADC Professional Products, Div. of BSR Consumer Products Group, Route 303, Blauvelt, N.Y. 10913.**

The dichotomy between separates and integrated componentry is delineated with special clarity when you are deciding between an "integrated" tonearm/turntable combination and the separate species of each. In many ensembles, the arm is distinctly less impressive (usually because of relatively high mass) than its independent cousins. But choose the latter, and you must both undergo the sometimes traumatic hassle of mounting the arm and forgo all (or almost all) automatic features. Thus, it was with considerable interest that we approached the ADC 1700DD, a semiautomatic turntable with an antiresonance base and a low-mass shell and arm closely akin to the ADC LMF-2 separate.

When we reviewed the carbon-fiber LMF-1 arm (January 1978) we found it to be a highly competent separate: The virtually identical LMF-2's removable headshell affords greater convenience in swapping cartridges at the expense of a slight increase in mass. The arm on the 1700DD resembles the LMF-2: a straight, tapered, aluminum tube with ADC's removable, offset headshell of molded carbon fiber. The stylus force and antiskating settings offer greater ranges than those of the separates—to 3½, as opposed to 1½ grams.

The tracking-force gauge is accurate within 0.1 gram to a 2-gram setting, and though it indicates 3 grams when the actual stylus force is 2.8 grams, the resulting error of 5% or less in the most-used range (1–2 grams) is negligible. Over its useful range, the antiskating force varies linearly with the setting and creates an outward thrust equivalent to 15% of the tracking force.

The 1700DD is fitted with 41-inch cables that, together with the tonearm wiring, constitute a capacitive load of 195 picofarads on the cartridge—somewhat greater than average, suggesting best match with a preamp of low input capacitance or a cartridge that will be "happy" with a greater-than-average capacitive load. You adjust stylus overhang by loosening the mounting screws and positioning the cartridge so that the distance between the stylus and the center of the mounting slots is 10

**New Measurement Standards:** In making comparisons between current reports and those published in the past, readers are cautioned to pay particular attention to the reference levels and similar test criteria cited. S/N ratios for electronics, in particular, are measured very differently now that we have adopted salient features of the new IHF amplifier-measurement standard. While we believe that the new technique (which also implies a saner approach to loading of all inputs and outputs) will result in measurements that more perfectly reflect audible, in-use effects, they cannot be compared directly to the numbers resulting from the former, more conventional lab measurements.

millimeters (approximately  $\frac{3}{16}$  inch). No overhang gauge is provided. A tonearm-height adjustment is tucked away at the back of the arm mount.

The motor, whose speed is phase-locked to a quartz crystal, drives the platter directly. No inaccuracy in either drive speed could be measured at any test line voltage. With the lock off, the pitch adjustment range runs from about a quarter-tone flat to a half-tone sharp at 33 and from about a half-tone flat to three-quarters of a tone sharp at 45. Lighting displays show which of the two speeds you have selected and whether the phase-locked loop is engaged. (A strobe also is supplied, though it seems largely redundant.)

Weighted peak flutter of the magnitude measured here—better than  $\pm 0.1\%$ —can rarely be heard and is likely to be submerged in the speed perturbations of the average (imperfect) record pressing; off-center spindle holes and record warp can easily create much greater levels of “flutter.” Suffice it to say that we could not hear the ADC’s flutter in piano music—a stringent “real-life” test. Weighted rumble measures good to very good and also went unnoticed in our listening tests.

Tonearm resonance (measured, as always, with the Shure V-15 Type III cartridge) is well placed in frequency—especially in the more important vertical plane—and the arm damping seems adequate. With the Shure V-15 Type IV, we find the ADC arm to be exceptionally adept at tracking warped records, checked with the tonearm-resonance tests of the Shure ERA IV disc, the stylus and arm behave extraordinarily well. Thus—however jazzy the carbon-fiber arm of the LMFs may have seemed—the switch to aluminum has not compromised performance.

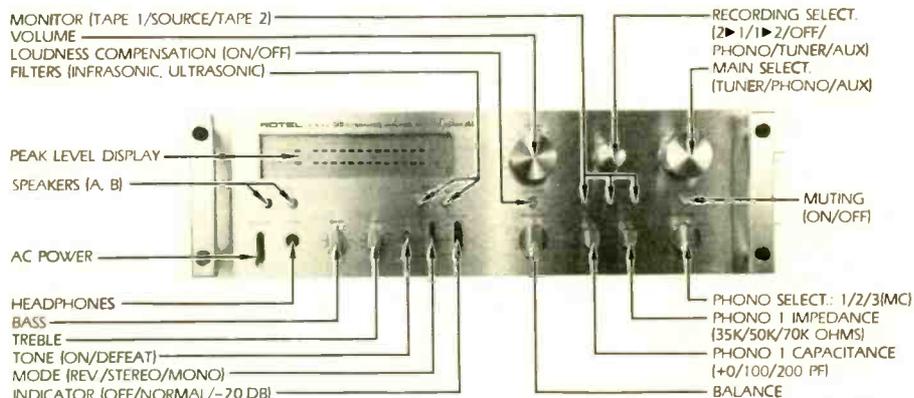
Between uses, the ADC 1700DD’s power switch can be left on in either speed. As you move the arm from the rest (where it can be clamped) the drive comes to life. You must position and lower the arm manually (with or without the cueing feature), but at the inner spiral the arm lifts and returns to the rest, and the unit turns itself off. A switching “pop” is likely to occur whenever power is applied or shut off.

The cueing action is superb: well damped in both directions and with virtually no sidedrift. The isolation feet seem very well matched to the mass of the system. The dust cover can be raised and lowered and the surface on which the 1700DD rests can even be pounded strenuously without disturbing the stylus. The undersized record mat facilitates disc removal, though it fails to support the disc’s outer bead.

The strong points of the ADC 1700DD vastly outweigh its very minor weaknesses. Specifically, flutter and rumble are inaudible, and the suspension provides excellent isolation; the tonearm gives a near-ideal support for a high-quality cartridge, rivaling many a separate. These constitute the sine qua non of record-playing performance. What puzzles us is how ADC can offer an entire semiautomatic system, with an arm and drive of this quality, at a price barely more than that of the LMF-2 arm alone. But why look askance at so handsome a gift horse?

Circle 131 On Page 93

## An Integrated Amp “Does It All”



**Rotel RA-2030 stereo integrated amplifier in metal rack-mount enclosure. Dimensions: 19 by 5¼ inches (front), 17½ inches deep plus clearance for controls and connections. Price: \$680. Warranty: “limited,” two years parts and labor. Manufacturer: Roland Electronics, Japan; U.S. distributor: Rotel of America, 1055 Saw Mill River Rd., Ardsley, N.Y. 10502.**

RATED POWER	19 dBW (80 watts)/ch.	
OUTPUT AT CLIPPING (both channels driven)		
8-ohm load	20 dBW (98 watts)/ch.	
4-ohm load	21½ dBW (140 watts)/ch.	
16-ohm load	17½ dBW (58 watts)/ch.	
DYNAMIC HEADROOM	1 dB	
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)		
at 19 dBW (80 watts)	≤ 0.021%	
at 0 dBW (1 watt)	≤ 0.013%	
FREQUENCY RESPONSE (at 0 dBW)		
	+0, -½ dB, < 10 Hz to 27.2 kHz	
	+0, -3 dB, < 10 Hz to 79.3 kHz	
RIAA EQUALIZATION	± ½ dB, 20 Hz to 20 kHz	
INPUT CHARACTERISTICS (re 0 dBW; A-weighted)		
	sensitivity	S/N ratio
moving-coil phono	21 µV	75½ dB
fixed-coil (MM) phono	0.22 mV	79½ dB
aux. tape	14.9 mV	81½ dB
PHONO OVERLOAD (1-kHz clipping)		
moving-coil (MC)	28 mV	
fixed-coil (MM)	280 mV	
PHONO IMPEDANCE		
phono 1 (MM)	34.4k, 48.1k, & 65.4k ohms; 220, 310, 7.410 pF	
phono 2 (MM)	49.4k ohms; 170 pF	
phono 3 (MC)	42 ohms	
DAMPING FACTOR (at 50 Hz)	94	
ULTRASONIC FILTER	-3 dB at 26 kHz; 12 dB/oct.	
INFRASONIC FILTER	-3 dB at 15 Hz; 12 dB/oct.	

After years of simmering on the back burner, the design needs of the tape-recording enthusiast are beginning to influence a broad range of amplifiers and receivers. We see an increase in selectors for the program to be taped, independent of that for audition. In the Rotel RA-2030, independent program selection is but one example of a complex, rational, flexible control system.

The three separate phono inputs use gold-plated jacks. One is earmarked specifically for a moving-coil pickup and provides the additional gain and low input impedance necessary for these "insensitive" cartridges. The other two are for fixed-coil pickups and thus bypass the moving-coil pre-preamp. PHONO 2's input termination seems reasonable for many moving-magnet or moving-iron designs; PHONO 1 offers a choice of three termination resistances and three capacitances to accommodate pickups that require higher capacitive loads than average. Since the minimum capacitance is on the high side, however, the typical fixed-coil cartridge is likely to perform best with PHONO 1's minimum capacitance setting or with PHONO 2. In all cases, the phono preamp is equalized accurately and provides more-than-adequate headroom for the type of cartridge likely to be used. Noise level is notably low, and the sensitivity is appropriate to the task.

Note that the combination of PHONO SELECTOR and the two overall selectors (for recording and listening), plus the tape-monitor buttons, offers far greater flexibility than usual; about all Rotel has overlooked is that it doesn't permit recording from one phono input as you listen to another. An OFF position disconnects the tape-recorder inputs and prevents the distortion that can occur when decks connected to the tape jacks are turned off. Thus no resistive isolation network is needed between the source program and the tape-recorder feed, the TAPE source impedance is minimized, and high frequencies are better preserved through the recording chain—a most welcome bit of foresight. The output at the TAPE jacks is identical to the AUX or TUNER input levels; in PHONO, it is well chosen to provide a suitable recording level from average discs.

The infrasonic ("subsonic") filter induces a smooth and steep rolloff below 15 Hz. Since it has virtually no audible effect on the music, it may simply be left in the circuit to reduce the possibility of overload from warps or other disturbances. The high-cut "supersonic" filter duplicates the smooth, sharp rolloff of the infrasonic filter but at ultrasonic frequencies. Presumably its purpose is to reduce the possibility of transient-intermodulation distortion since the cutoff frequency is too high to take a noticeable bite out of audible hiss. But the RA-2030's already very low high-frequency inter-modulation distortion renders the ultrasonic filter a mere flourish.

In the practical sense, the Rotel is free of distortion. At the 0-dBW level, harmonic components lie below our ability to find them at frequencies greater than 100 Hz; they inch up only to 0.013% at 20 Hz and are predominantly of the "soft" second-order type. At rated power (19 dBW, or 80 watts), only negligible amounts of the second harmonic can be found from 40 Hz to 4 kHz. Traces of third and fourth harmonics appear closer to each end of the audible band, but their total never exceeds a minuscule 0.021%.

Tested on both a continuous and a dynamic basis, the amplifier delivers 1 dB of headroom over its 8-ohm rating, which is to say that it will pump out about 100 watts per channel without distress. With 4-ohm loads, it produces almost twice the 8-ohm-rating output power. Being close to the theoretical limit, this suggests a generously designed power supply and perhaps explains the RA-2030's substantial size and weight for an amp in this class.

Catering to the current vogue, an LED indicator displays the output of each channel. We find the break point between its two sensitivity ranges poorly chosen: In typical use, the peak output level frequently exceeds the 2¼-watt (4½-dBW) upper limit of the more sensitive range but, with approximately equal frequency, drops below the 1¼-watt (1-dBW) minimum indication of the NORMAL mode. Yet the indicators respond uniformly to all audio frequencies and are reasonably accurate in their markings. In NORMAL, the 0-dB LED corresponds closely to the onset of clipping, and the display responds fairly rapidly (to within 1 dB on a 17-millisecond pulse) and without overshoot. It might be noted that, though there are thirteen LEDs for each channel, they differentiate only nine power levels.

Used with a cartridge requiring a 220-picofarad load and mounted in an arm with 100-picofarad leads, the sound is admirably clean and open whether we choose PHONO 2 (for a total loading of 270 picofarads) or PHONO 1 set for no additional

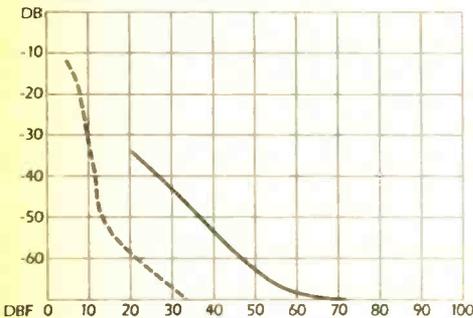
## Sherwood Keeps the Moderate-Price Faith

### Tuner Section

MONO FM FREQUENCY RESPONSE  
+½, -1¼ dB, 20 Hz to 15 kHz

STEREO FM RESPONSE, CHANNEL SEPARATION  
Frequency response +½, -2 dB, 20 Hz to 15 kHz  
Channel separation ≥ 26 dB, 20 Hz to 4.5 kHz  
≥ 26 dB, 20 Hz to 11 kHz

### FM SENSITIVITY & QUIETING



— stereo noise (quieting)  
- - - mono noise (quieting)  
Stereo sensitivity (for 50-dB noise suppression)  
36½ dBf at 98 MHz, for 0.33% THD+N  
(37¼ dBf at 98 MHz; 36½ dBf at 106 MHz)  
Mono sensitivity (for 50-dB noise suppression)  
13½ dBf at 98 MHz

Muting threshold 20½ dBf  
Stereo threshold 20½ dBf  
Stereo S/N ratio (at 65 dBf) 69½ dB  
Mono S/N ratio (at 65 dBf) 74½ dB

CAPTURE RATIO 1 dB

ALTERNATE-CHANNEL SELECTIVITY 54½ dB

HARMONIC DISTORTION (THD+N)

	stereo	mono
at 100 Hz	0.12%	0.11%
at 1 kHz	0.082%	0.082%
at 6 kHz	0.16%	0.095%

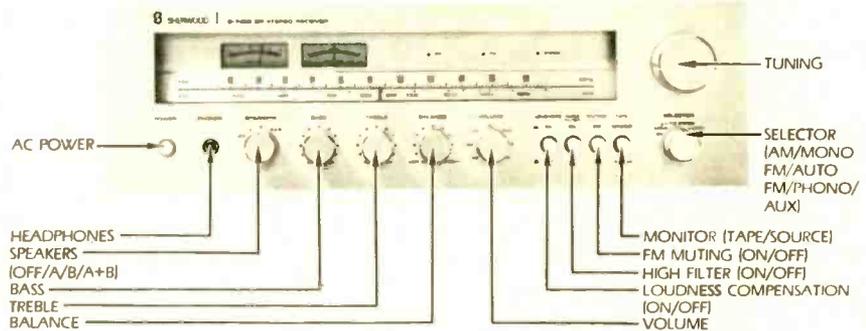
STEREO PILOT INTERMODULATION 0.15%

IM DISTORTION (mono) 0.097%

capacitance (320 picofarads total). The loudness contour gives reasonably plausible balance at low listening levels, and the tone controls—each of which is of the shelving type—are quite accurately calibrated in dB of boost and cut.

The Rotel RA-2030 makes an imposing impression on the shelf and offers an unusually wide range of control flexibility plus virtually flawless sound. The multiplicity and grouping of the controls require some assimilation, but they permit access to a design in which—if we are to judge, for example, by the generous headroom built into the power supply—little has been spared to implement its exceptional intentions.

Circle 132 On Page 93



**Sherwood S-7450CP stereo FM/AM receiver, in walnut-grain vinyl-clad particleboard case. Dimensions: 18¼ by 5¼ inches (front), 12½ inches deep plus clearance for controls and connections. AC convenience outlets: 1 switched (100 watts max.), 1 unswitched (150 watts max.). Price: \$325. Warranty: "limited," three years parts and labor. Manufacturer: made in Korea for Sherwood Trading Corp., 4300 N. California Ave., Chicago, Ill. 60618.**

Sherwood's components have always been notable for their clean, crisp styling, and its S-7450 is no exception, with an elegance of line (echoed, in several respects, by elegant performance) that belies its pricing. The CP model suffix specifies Sherwood's Certified Performance Series, for which performance documentation is supplied with each sample. As you'd expect for receivers in this price class, power is only moderate, at 14½ dBW (30 watts) per channel. But that rules out only inefficient speakers, not good performance. With 1¼ dB of clipping headroom and 2 dB of dynamic headroom, the S-7450 can follow complex music cleanly at levels equivalent to almost 50 watts. Distortion, frequency response, and the like are all well within specification.

Those features that contribute to sound quality have been reasonably well thought-out, too. The tone controls leave the midrange (between about 375 Hz and 3 kHz) relatively unaffected, with a mildly shelving characteristic in the bass control to avoid bass boom. There is ample range for bass and treble adjustment. The noise filter nibbles audibly into the program material, but its slope (12 dB per octave) is steep enough to be effective. The phono input is fairly flat and quite quiet—as are the high-level inputs. Input and output impedances, sensitivities, and levels seem carefully chosen, and distortion is kept well in hand, at less than 0.1% in any significant measurement.

The two channels can be mixed for mono listening only in FM and, of course, AM; there is no mono setting for PHONO or AUX. The loudness contour switch, which introduces a VOLUME-dependent boost in the bass plus a much smaller one at the extreme high end, has very little effect unless speaker efficiency and/or phono-cartridge output is relatively high. (Sherwood has, incidentally, forsaken its long-standing habit of making LOUDNESS the standard position of its VOLUME/LOUDNESS switch.) The placement of the volume control, though in a group of equal-sized knobs, automatically recommends itself to the right-handed user. Its detents are marked in 1-dB steps; the BALANCE has a center detent, and the bass and treble are detented at each of 10 numbered graduations, corresponding roughly to 3-dB steps in the ranges of maximum effect. One detail of the control setup strikes us as unfortunate: the large tuning knob, which obscures the SELECTOR's input markings when viewed from above, though AM and FM pilots on the dial face confirm these two settings.

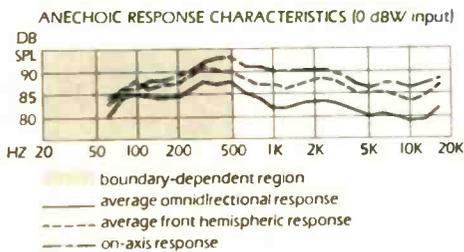
The tuning dial is clearly calibrated every even 200 MHz, which means

AM SUPPRESSION	52½ dB
PILOT (19 kHz) SUPPRESSION	77½ dB
SUBCARRIER (38 kHz) SUPPRESSION	>85 dB

**Amplifier Section**

RATED POWER	14% dBf (30 watts)/ch.
OUTPUT AT CLIPPING (both channels driven)	
8-ohm load	16½ dBW (45 watts)/ch.
4-ohm load	18½ dBW (65½ watts)/ch.
16-ohm load	14½ dBW (28½ watts)/ch.
DYNAMIC HEADROOM	2 dB
HARMONIC DISTORTION (THD+N; 20 Hz to 20 kHz)	
at 14% dBW (30 watts)	≤0.058%
at 0 dBW (1 watt)	<0.044%
FREQUENCY RESPONSE (at 0 dBW)	
	±½ dB, 10 Hz to 20 kHz
	+½, -3 dB, <10 Hz to 70 kHz
RIAA EQUALIZATION	
	±½ dB, 25 Hz to 20 kHz
	+½, -1½ dB, 20 Hz to 20 kHz
INPUT CHARACTERISTICS (re 0 dBW; A-weighted)	
	sensitivity S/N ratio
phono	0.48 mV 78 dB
aux. tape	28.5 mV 85 dB
PHONO OVERLOAD (11-kHz clipping)	160 mV
PHONO IMPEDANCE	47.8k ohms, 260 pF
DAMPING FACTOR (at 50 Hz)	48
HIGH FILTER	-3 dB at 7.5 kHz; 12 dB/oct.
LOW FILTER	-3 dB at 15 Hz; 18 dB/oct.

# A Bookshelf Speaker With a Heritage



AVERAGE OMNIDIRECTIONAL OUTPUT (250 Hz to 6 kHz)	84 dB SPL for 0 dBW (1 watt) input
CONTINUOUS ON-AXIS OUTPUT (at 300 Hz)	112 dB SPL for 20 dBW (100 watts) input
PULSED OUTPUT (at 300 Hz)	126½ dB SPL for 34½ dBW (2,604 watts) peak
"NOMINAL" IMPEDANCE	6.0 ohms
APPROX. TWEETER CONTROL RANGE (re "flat")	+3, -4 dB, 3 to 7 kHz (see text)
APPROX. MIDRANGE CONTROL RANGE (re "flat")	+2, -5 dB, 1.2 to 3 kHz

that U.S. stations will be found in the spaces between calibration lines, never on the lines. The calibration is fairly accurate: within a half a channel width (100 kHz) across the band. The signal-strength meter has a fairly limited range, being readable for signal levels between roughly 30 and 60 dBf. The tuner can handle far weaker signals; 50 dB of mono quieting (at 13½ dBf) and the stereo and muting thresholds (20½ dBf) all are below the useful range of the meter. The tuning knob has little backlash, but there is a slight time lag between your turning the knob and the tuner's response.

FM performance is a bit better than average for this price class in many key respects. Channel separation is a commendable 30 dB or better out to 7 kHz. Mono FM frequency response is reasonably flat (and similar between the two channels), though careful A/B comparison with another tuner reveals a slight dullness in the Sherwood's sound. Sometimes a mild thump occurs as the tuner mutes itself, and the muting can be overridden at times by strong signal on an adjacent channel. All in all, however, the section's behavior is at least as good as we expect in a moderately priced receiver.

A few rear-panel details are worth noting: There are both pin and DIN connections for the single tape monitor. (The unusually comprehensive and comprehensible instruction manual suggests that best fidelity will be obtained by forgoing the DIN socket's convenience, presumably because of reduced shielding and potentially increased crosstalk.) The phono ground is placed at the opposite end of the input section from the phono input, a mild inconvenience. An FM de-emphasis switch has positions for the European standard (50 microseconds) as well as for the U.S. (25 microseconds with Dolby noise reduction and 75 without it). The speaker outputs are fused for protection against amplifier malfunction, but the high fuse values (3.5 amps per channel) and the Sherwood's modest power suggest that in normal use they'll probably never burn out.

Overall, the S-7450 projects intelligent moderation: neither a profusion of features nor a paucity, no area of performance overemphasized at another area's expense. This is, to us, the hallmark of good design in the face of the price squeeze that the designer must face in this class of equipment. While it doesn't prompt exclamations over any particular aspect, it obviates potential exclamations over any decided limitation. And that's far more important in an inexpensive receiver.

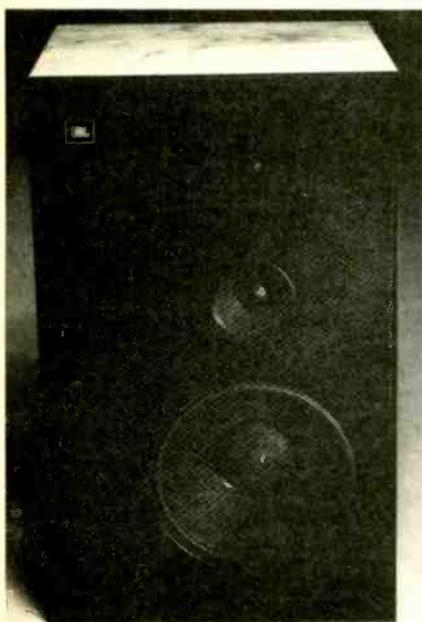
**Circle 139 On Page 93**

**JBL Model L-110 loudspeaker system in walnut-veneer cabinet. Dimensions: 14½ by 23½ inches (front), 11½ inches deep. Price: \$410. Warranty: "limited," five years parts and labor. Manufacturer: James B. Lansing Sound, Inc., 8500 Balboa Blvd., Northridge, Calif. 91329.**

In basic outline, the L-110 is a classic JBL "bookshelf" model (though, typical of the genus it personifies, it will fit on few bookshelves). It is a three-way system with a vented woofer enclosure, a cone midrange, and a dome tweeter. Its personality is warm and appealing, and its sound finely delineated. Yet it is not a rehash of old ideas. The bottom-end "bloom" (to put it kindly) that once was typical of vented models, particularly in this size, has been tightened up, and the response flattened out by contrast to the "presence bump" that some once deemed characteristic of the "West Coast sound." It is, in a word, a modern speaker with a sense of tradition.

JBL rates it at 8 ohms, and indeed the measured values stay very close to this figure from below 100 Hz to beyond 20 kHz (implying good transfer characteristics even with a fussy amplifier), and the CBS nominal rating (6 ohms) is the minimum value at any frequency in the audio band. Thus many amps will not take paralleled pairs of L-110s amiss, though the combined impedance will fall to 3 ohms at some frequencies. The relatively high efficiency puts no premium on amplifier power, yet the speaker handled both the 20-dBW (100-watt) continuous tone and the full power the test amplifier could deliver to it (over 2½ kilowatts peak) in the pulse test—for an ear-shattering 126½ dB SPL in the latter—without serious distortion, measurable loss of input/output linearity, or other sign of distress. The output-power rating of the driving amplifier is of very little importance, given this combination of sensitivity and ruggedness (though JBL warns against serious underpowering because of the tweeter-threatening harmonics that a clipped drive generates).

Distortion at more reasonable levels is very well controlled, and the less annoying second harmonic predominates at its maxima. When the lab drove the L-110 to 100 dB SPL at 300 Hz, the third harmonic remained under 1% from 60 Hz up, while the second generally remained below 1% from 75 Hz up; both average well below 0.5% throughout the midbass, midrange, and treble. With the drive at 0 dBW, all the



## Proof of the Cooke's (Plum) Pudding

figures fall even farther. The 300-Hz pulses are very well reproduced; at 3 kHz, the scope trace shows a series of low-level "echoes" that may, indeed, represent reflections from the grille trim but that are not pronounced enough to warrant concern.

Response was measured in the CBS anechoic chamber with the tweeter and midrange controls at their midpoints—the standard setting when the manufacturer indicates no "normal" or "flat" position, and JBL's suggestion as a starting point from which departures can be made for "most pleasing overall results." The test yielded a distinct lower-midrange emphasis (the "humps" centered at around 400 Hz), but for which omnidirectional response would be within about  $\pm 3$  dB to beyond both frequency limits for the curves. Increasing both controls raises the entire upper range by a few dB without adding more than a fraction of a dB in the 400-Hz range, and much of our listening was conducted with them two-thirds to three-quarters of the way up. Decreasing the treble from its midpoint, incidentally, introduces a severe high-end roll-off and makes the L-110 sound very old-fashioned indeed.

On the basis of the curves, the bass appears a little weak by contrast to the upper ranges and might prompt setting the speakers on the floor to get the woofers near a surface to which they can couple. JBL recommends a vertical placement, with the woofers down, but the manual makes no other specific recommendations. With the L-110s raised off the floor (and vertical), however, we considered the bass excellent. There still is a little extra gutsiness to the sound, even in this position, that can be considered either attractive or a bit exaggerated, depending on the listener's taste. Below 63 Hz (where our curves end) the rolloff is more gradual than it is just above, and the bass therefore is more solid and extended than you might assume from the bottom end of the curves.

Dispersion is exceptionally good, which keeps the tonal balance consistent over a wide listening area. The stereo image, which we judged to be good, also holds up well as you move about in the room. These properties usually are regarded as desiderata of speaker design in this country (though not elsewhere, as witness two other reports in this issue), as are the open, airy quality of the sound and even what we have called its gutsiness. JBL has built on the values that have made its speakers so successful in the past and given us, in the L-110, a contemporary model that surely will delight a great many listeners.

**Circle 136 On Page 93**

**KEF Model 105 loudspeaker system in wood enclosure. Dimensions: 16 $\frac{1}{2}$  by 40 inches (front), 18 inches deep at base. Price: \$950. Warranty: "limited," five years parts and labor. Manufacturer: KEF Electronics, Ltd., England; U.S. distributor: Intratec, Div. of British Aerospace, Inc., 13850 McLearen Rd., Herndon, Va. 22070.**

Ray Cooke, the doyen of KEF, is an ardent proponent of modern computer-assisted analysis techniques in loudspeaker design, and the Model 105 represents the culmination of some groundbreaking work in this field that, if not unique with the company, is characteristic of its individualistic energy. We have tested a few speakers employing KEF drivers in recent years, but this is the first KEF-designed system we have chosen. Consequently we looked forward to this report. And the 105 turns out to be a plum.

It is a floor-standing system with separate chambers for its three drivers. The tweeter and midrange chambers constitute a single assembly that mounts atop the woofer's enclosure via a swivel spindle allowing horizontal angling, along with what appears to be a rack-and-pinion adjustment for vertical angling. The supplied leads run from the floor up through a tube within the woofer enclosure and attach to binding posts behind the woofer; leads from the terminal board (which also holds a series of fuses, for which spares are supplied) connect via banana plugs to jacks above the woofer and power it.

KEF strongly recommends purchase of matched pairs, distinguished by identical serial numbers with A and B suffixes. The woofers and midrange/tweeter assemblies are packed one system to a carton; a third carton contains both grille structures. Once the systems have been assembled and the leads attached, you must aim the upper assemblies. To do this you turn dials at the back of the tweeters to LISTENING WINDOW and apply a reasonably constant signal. (The manual suggests FM interstation noise.) This lights an LED located on each system between tweeter and midrange, and recessed behind a slot so that it is visible only in the area toward which these drivers' on-axis sound is projected. Thus you should be able to see both LEDs from the listening



position; if you can't, you must adjust the angle of the midrange-tweeter sections. That done, you can either turn the LEDs off or switch them to fire at 40, 50, 60, 80, 100, 125, 150, or 200 watts of peak input power—whichever is closest to the clipping point of your amplifier—to signal when it is running out of steam.

The importance of aiming the upper assemblies correctly is a direct concomitant of the 105's inherent design philosophy: that, insofar as possible, the sound should be directed straight from the drivers to the listening ears, offering minimum opportunity for the room to color the sound or blur or otherwise distort the stereo image. Hence dispersion is not considered a virtue, and the listening area is deliberately limited (though the 105's casters make it easy to rearrange it). This attitude, accepted in Britain, is in sharp contrast to the American penchant for wide dispersion—let alone the so-called omnidirectional designs that deliberately bounce much or most of their sound off room boundaries.

KEF's design puts a severe strain on the CBS test technique, which encircles the speaker with a spherical net of thirty-six microphones to catch the entire radiated energy from the model under test. Normally it does so; exhaustive tests—albeit generally with speakers designed for maximum, rather than minimum high-frequency dispersion—have shown that tightening the net by adding mikes does not significantly raise the technique's ability to catch extra lobes of beaminess that would otherwise slip through. But the mikes are one meter from the enclosure, and the "on-axis" mike is midway between the top and the bottom of the overall height. In that position, not even maximum adjustment of the beam angle will bring the mike within KEF's "listening window."

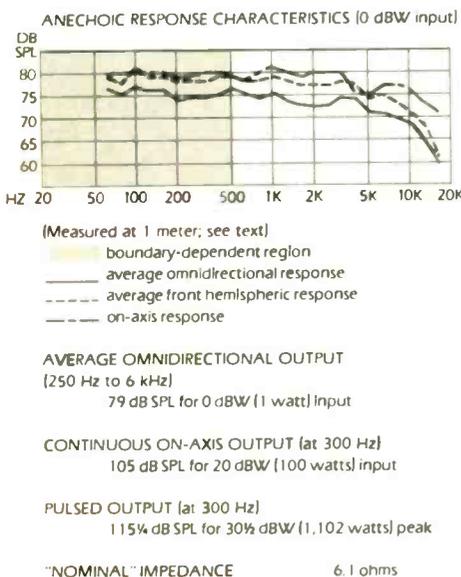
Furthermore, in such a speaker the on-axis response is considered the criterion of merit; using the CBS technique (which in this respect follows U.S. design thinking) it is the total energy radiated into the room, as expressed by the average omnidirectional curve, that is usually considered the most useful and, in most speakers, gives us the best correlation with listening quality. In this instance, it seems to us that the design has managed to beam some high-frequency energy through a "hole" in the CBS net since we simply can't hear the top-end rolloff that the curves suggest.

Though the on-axis mike is not looking into the window, it still delivers an anechoic response curve that is both flatter and smoother than those of many speakers typical of the sort used in proving out the test technique. And the 105 sounds exceptionally flat and smooth as long as it is used appropriately. Peripatetic listeners will, of course, hear changes in tone color and stereo imaging as they move out of the window, but the changes are much less than we might have imagined, considering the design intent. The sound is certainly listenable from an "incorrect" vantage; it's just no longer superb if you aren't sitting where KEF tells you to.

The sealed woofer enclosure suggests, and the data document, that the 105 is not very efficient; a fair amount of power-amp muscle is needed to get its full potential impact. And the speaker can take it. It wasn't even breathing hard in the 20-dBW (100-watt) continuous-tone test, and it handled pulses to peak power of just over a kilowatt before showing discomfort. Since it tops off at around 115 dB of sound pressure level, the dynamic range is excellent for any home application where sufficient amplifier power is available. And even at close to 100 dB SPL the harmonic distortion averages only about 1%, with relatively little (generally 0.5% or less) third harmonic content. At the acoustic output equivalent to a 0-dBW (1-watt) input at 300 Hz, the third harmonic remains below 0.5% from below 60 Hz, and the second harmonic averages about the same as the third.

Which is to say that the sound is clean. It is also wonderfully detailed and solid, with excellent stereo imaging, missing only a little of the depth delivered by some speakers that are exceptional in this respect. The bass is extremely impressive—capable of shaking the room when the signal demands it, but without the blur that induces the effect even when it isn't called for in speakers whose woofers are less well controlled. Transients, consequently, are cleanly defined, with real impact. And there is very little coloration to the sound. Soprano tone blurs a bit in the upper range on fortissimos and piano passages, for example, take on some roughness in the same range—but very little compared with many speakers.

Some low-level "echoes" visible in scope photos made during the high-frequency pulse test may relate to this observation. Normally we would attribute the delayed energy to diffraction from the cabinetry, but this is an area with which KEF has taken exceptional pains (as witness the rounded edges of the midrange/tweeter assembly and the damping foam atop the woofer enclosure). Perhaps the test frequency

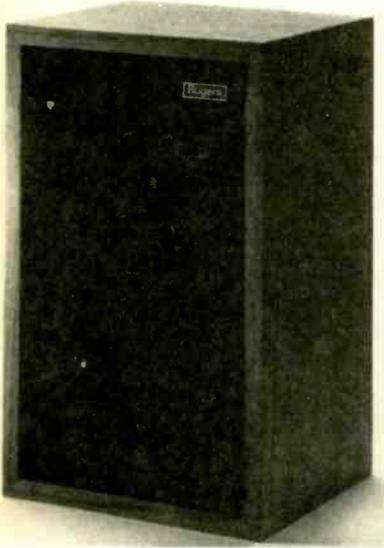


(3 kHz) shows the KEF at its worst since the impedance curve (which fluctuates a good deal across the frequency range) here drops abruptly from its maximum (over 20 ohms) to about 9 ohms. In any event, the transient response is better than these "echoes" (small though they are) would suggest, and the sound generally so smooth and flat as to seem, if anything, a little remote by contrast to "punchier" (usually meaning less accurate) speakers.

For many listeners the 105 will be a serious contender for "world's greatest speaker." In this country, where we are so accustomed to hearing the virtues of wide dispersion extolled on the ground that first arrival (the direct radiation) will take care of the stereo imaging thanks to the Haas effect and that an off-axis listener should be almost as well served as those whose seating is ideal, the British approach may come as something of a shock. All we can say is that the 105 is superb, and its delights should not be forgone for mere want of conceptual familiarity. The serious listener owes it to himself to give KEF's premier model a fair hearing.

Circle 133 On Page 93

## Ultracompact "BBC Monitor": Up from the Underground



**Rogers LS3/5A speaker system, In wood cabinet. Dimensions: 7½ by 12 inches (front), 6½ inches deep. Price: \$499 per pair finished in teak or walnut veneer; \$550 per pair finished in rosewood or studio black veneer (sold only in matched pairs). Warranty: "limited," five years parts and labor. Manufacturer: Swisstone Electronics Ltd., England; U.S. distributor: Reference Monitor International, Inc., Suite 309, 4901 Morena Blvd., San Francisco, Calif. 92117.**

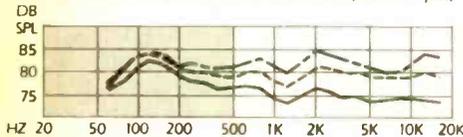
The reputation that preceded the LS3/5A—via the so-called underground high fidelity press—was formidable: It appeared the virtual equal in all but ultra-deep bass reproduction of speakers that may run roughly ten times the price and bulk. So we decided to hear for ourselves, and what we hear is astonishing. Though the system is on the borderline between a mini and an extremely compact bookshelf design, the quantity and quality of its bass are sufficient to satisfy many listeners and the remainder is smooth and uncolored by anyone's standard.

The design is the result of collaborative work of Rogers and the BBC toward the building of a small but true "monitor" speaker—a word that in this context (and for once) has real meaning. If a monitor is to be used as an evaluative tool, it must be as accurate as possible; in a studio control room, which typically is smaller and deadier than a home listening environment, placing the speakers so that they will deliver their most accurate sound to the listener/engineer has far higher priority than decor. So flat on-axis response in small spaces (where little sound is lost due to propagation distances) is the overriding concern. And these monitors are spec'd at  $\pm 2$  dB on-axis of the tweeter throughout the operating range from 45 Hz to 20 kHz in anechoic environments.

The CBS measurement substantially confirms that spec even though the anechoic chamber is not rated as low as 45 Hz and the CBS technique does not put the "on-axis" mike exactly on the tweeter's axis. (To allow, as much as possible, for any combination of multiple drivers without prejudicing its technique toward any one design preconception, the lab puts its axis through the physical center of the entire system.) In a system this small, the two are close together, so this similarity of result is not surprising. With a speaker intended to deliver its "payload" toward the front, divergence between on-axis and omnidirectional curves is to be expected; indeed the omnidirectional measurement is well outside the  $\pm 2$ -dB rating, but the divergence is very gradual and the sound remarkably free of beaming in the usual sense of a nasty high-end roughness that appears when you move about the listening space.

The greatest limitation of the LS3/5A for home use, as we see it, lies in none of these areas, but in its dynamic range. It is an unusually inefficient system (basically, there is no other way to get flat response from a tiny speaker) and therefore soaks up a lot of amplifier power in trying to fill listening rooms larger than it is designed for. And its impedance is high, reducing the moderate-power distortion but hastening the clipping point as power demands rise in most driving amplifiers. Rogers rates it at 15 ohms; above the CBS rating point (which here occurs at about 170 Hz) the impedance rises to beyond 32 ohms in the upper midrange, with the 15-ohm rating an apparent average of its wide swings. In the 20-dBW (100-watt) continuous-tone test, which produced 101 dB of sound pressure level, there was no real sign of distress, though for the distortion tests the lab found it more appropriate to back off to 92 dB SPL (from its usual 100) at 300 Hz for the high-level measurement. Even so, the second harmonic

ANECHOIC RESPONSE CHARACTERISTICS (0 dBW Input)



(Measured at 1 meter; see text)

boundary-dependent region  
average omnidirectional response  
average front hemispheric response  
on-axis response

AVERAGE OMNIDIRECTIONAL OUTPUT  
(250 Hz to 6 kHz)  
76 dB SPL for 0 dBW (1 watt) input

CONTINUOUS ON-AXIS OUTPUT (at 300 Hz)  
101 dB SPL for 20 dBW (100 watts) input

PULSED OUTPUT (at 300 Hz)  
108½ dB SPL for 27½ dBW (568 watts) peak

"NOMINAL" IMPEDANCE 7.9 ohms

measured above 1% from about 500 Hz down; the more objectionable third harmonic stayed substantially below 1% down to 150 Hz. In the low-level (0-dBW) test, distortion measurements all were below 1% well into the bass. Overall, this bespeaks a design whose distortion is well controlled at moderate listening levels but seems to dislike being pushed. And indeed the pulse test produced excessive distortion by the time output had reached 108½ dB SPL—which is loud, but not nearly as loud as most home speakers can be driven comfortably.

In the listening room, too, we find that the really excellent balance, clarity, and stereo imaging of moderate listening levels all are compromised when we try for flat-out listening in a medium-sized (but fairly live) room. But when we set up for a more intimate listening arrangement—and, particularly, when we adhered to Rogers' dictum that the listener must remain on the tweeters' axes—we consider the sound exceptional. Some slight false brightness shows up on male voices, but both the overall sound and its detail strike us as very natural. It's true that the deep bass is not there, but in much program material (and, of course, depending on the listener) it often goes unmissed. (Rogers and others offer subwoofers, if you would prefer to go that route.) But if both your listening space and your musical tastes tend toward the intimate, it's hard to see how the LS3/5A could be improved upon.

Circle 137 On Page 93

## A Comeback for Kits?



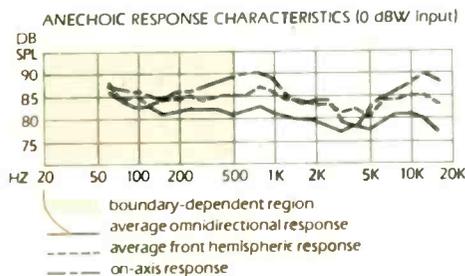
**Speakerlab Model 30 speaker kit. Dimensions: 13 by 31 inches (front), 11¼ inches deep; base adds 2½ inches at front, 1¼ inches at back. Price: \$330 with walnut-veneer enclosure; also available with walnut-grain vinyl finish (\$285) or with plans instead of enclosure (\$245). Warranty: "limited," five years parts and labor, with special 60-day return and factory-help provisions. Manufacturer: Speakerlab, 735 N. Northlake Way, Seattle, Wash. 98103.**

Speakerlab is a very unusual company. In a day when kits in general are fading from the high fidelity consciousness, the folks in Seattle seem to have made a hit with their sizable line for listeners who prefer to assemble, build, or even design their own loudspeakers. We say "folks" advisedly since, whether you study their literature, phone them, or visit their plant (they also have a chain of retail component stores in the Northwest), you are very much aware that you're dealing with people—individuals, not just a corporation. In the process of preparing this report, for example, we called the order department without identifying ourselves as HF and found that the voice at the other end could quote things like driver impedances without even taking a breath and even offered some cogent suggestions about enclosure finish. We suspect that this sort of with-it-ness, unique in our experience of such departments, has contributed a lot toward Speakerlab's success.

Consistent with that attitude, the kits are covered by a "satisfaction guaranteed" policy: If, within 60 days of receiving a kit, you decide that you've overreached yourself, you don't like its looks or sound, or whatever, you can send the whole thing back for a refund and pay only the shipping charges. If in the midst of building you founder, the factory will come to your rescue—again, for the price of shipping. And you can hedge your bets by choosing a version of your favorite model (the choice runs from a mini to a near neighbor of the classic Klipschorn) that requires as much or as little work as you think you're up to. Some even come completely assembled. We chose the Model 30 (Speakerlab's newest and second-biggest full-range) with an unfinished walnut-veneer enclosure to give our constructor the full workout short of carpentry, but we could have gone with a vinyl-clad version requiring no furniture-style finishing.

The enclosure comes fully assembled but for the grille, the front panel, and its braces. We asked our builder to try the oil finish supplied by Speakerlab. He departed from the instructions to the extent of using 0000 steel wool instead of sandpaper and of applying more coats of oil and rubbing each off sooner for maximum penetration and minimum surface buildup. He pronounced the result almost as attractive as his usual varnish (some finishers avoid straight oil on the theory that it will trap dirt and dull the grain over the years, but any standard furniture finish can be applied to the cabinet) and was glad he had stuck with the oil (which is easier to repair) when he saw the scratches that accumulated during our testing.

The kit includes virtually all you'll need to finish the system except a caulking gun to hold the silicone cement used to glue and seal the cabinet parts, crossover/terminal board, and driver mounts (none of which require screws) and a staple gun, which seems the best way of attaching the cloth to the popoff grille frame. The time



AVERAGE OMNIDIRECTIONAL OUTPUT (250 Hz to 6 kHz) 80½ dB SPL for 0 dBW (1 watt) input
CONTINUOUS ON-AXIS OUTPUT (at 300 Hz) 107½ dB SPL for 20 dBW (100 watts) input
PULSED OUTPUT (at 300 Hz) 122 dB SPL for 34½ dBW (2,814 watts) peak
"NOMINAL" IMPEDANCE 4.7 ohms
APPROX. TWEETER CONTROL RANGE (re "flat") -1 & -4 dB, 5.5 to 17 kHz
APPROX. MIDRANGE CONTROL RANGE (re "flat") -1 & -4 dB, 1.2 to 3.2 kHz

**Report Policy:** Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Technology Center, a division of Columbia Broadcasting System, Inc., and 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 constructed as applying to the specific samples tested; **HIGH FIDELITY**, CBS Technology Center, and Diversified Science Laboratories assume no responsibility for product performance or quality.

required to finish the outside—including the front and back panels, grille frame, and base assembly, for which a flat black finish is provided—will vary with the method, but in no case should it run more than about three hours plus drying times. Final assembly involves no soldering since all connections are snap on and can be done deliberately in less than an hour plus curing time for the cement between assembly stages. There certainly was nothing about the process that should daunt the reasonably handy.

What you appear to be building is a four-way system incorporating a conventional domed tweeter and cone midrange driver plus an 8-inch woofer and 10-inch subwoofer that share the remainder of the enclosure (which would normally presuppose interference between the two); but appearance deceives. The bass system—designed and patented by, and named after, engineer Mila Nestorovic—parallels the drivers in their upper range but gradually converts to a passive radiator system, in which the larger woofer is undriven, as frequency drops. According to Nestorovic, this gives you the best of both bass worlds: the tight, smooth bass of acoustic suspension without its tendency toward overdamping at very low frequencies, and the extended response of a loaded-vent system without its peaky response or tendency toward "flapping" of the passive radiator at ultralow frequencies—typically, in trying to play warped records.

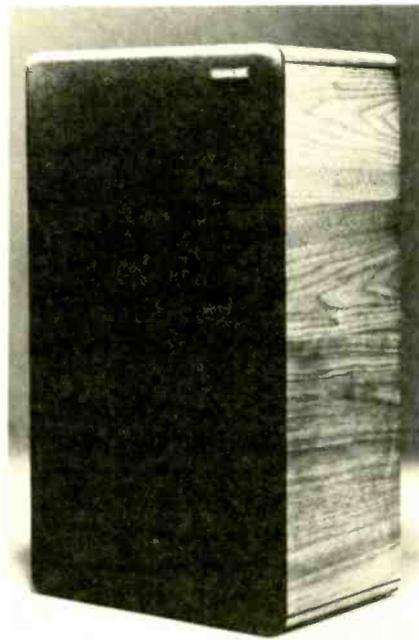
The result is impressive. The bass is rich and firm—and seemingly unrestricted. Overall, the Model 30 sounds vivid, full, and excitingly forward. The sound could be smoother; solo soprano tone can spread or blur on loud notes in the upper range, for example, though piano runs stay clear and open (which they don't when roughness is severe). And with a good recording, the stereo image is distinct and open, with plenty of depth. Considering the care that Speakerlab says it has taken with such things as phase integrity in the design, we had expected sound that impressed with its accuracy (which sometimes carries with it a certain laid-back quality), but it is the drama instead that gets to us.

The CBS data show the efficiency to be moderate and the dynamic range excellent. The continuous tone test produced no complaint at 20 dBW (100 watts); when the amplifier gave up (at almost 3 kilowatts peak) in the pulse test, the speaker was beginning to distort, though at that level it was delivering more than 120 dB of sound pressure level. The impedance curve is well controlled, averaging 8 ohms (Speakerlab's rating) over the band and never falling below the CBS nominal rating (4.7 ohms at 130 kHz) nor rising above 16 (except slightly, at the upper bass-resonance peak). Though the curve lies a little below 8 ohms through much of the midrange and midbass, paralleled pairs probably would not present too low a load for most amps. In the distortion tests, the third harmonic runs around 1% and is only marginally higher in the high-level (100-dB) test; the second harmonic is generally well below 1% with the 0-dBW drive but considerably above 1% in the treble (above 1 kHz) at 100 dB SPL. The 3-kHz pulse photos show evidence of diffraction "echoes."

Of the three anechoic response curves, that for average front hemispheric response probably comes closest to suggesting the listening quality of the 30: its wide-range response, some roughness in the lower treble, and a moderate prominence in the upper midrange. With proper placement (we preferred to use the supplied bases), away from the walls, the bass seems smoother than indicated by the omnidirectional curve, which usually provides the best correlation. All three ranges can be adjusted by three-position switches on the back. Those for the treble and midrange reduce response in these ranges (from the "0-dB" settings in which the speaker was measured) by margins that might be called very slight and slight. The bass control is even subtler. It has a NORMAL damping position (in which the tests were made), plus MINIMUM and MAXIMUM, which were almost identical in deep-bass response. The intent, however, is to control response to infrasonic signals rather than audible response as such. Since we had no trouble with warp-induced woofer flutter in NORMAL and considered organ pedals excellently reproduced in MAXIMUM—and could hear only the very subtlest of differences among the three—we did most of our listening with this, and the other two switches, at their reference settings.

Speakerlab claims that to equal the 30's performance you would have to spend at least \$500 on an assembled speaker. We would agree, with the stipulation that admiring this particular brand of sound is a prerequisite. A great many listeners will do so, in our opinion, though some will doubtless find the drama of its forwardness and big, solid bass suspect, preferring the neater, more reticent quality of, say, some European speakers. Perhaps Speakerlab has invented the Puget Sound.

# A Continental Speaker Comes to the U.S. (via California)



**Euro 7 loudspeaker system in walnut-veneer enclosure. Dimensions: 13½ by 24 inches (front), 9¼ inches deep. Price: \$300. Warranty: "limited," three years parts and labor. Manufacturer: Heco-Hennel & Co., West Germany; U.S. distributor: Visonik of America, Inc., 1177 65th St., Oakland, Calif. 94608.**

Visonik's Euro 7 raises the question: Can a speaker that frankly identifies itself as European in design find happiness today in our once inward-looking market? Traditionally, Americans have regarded European systems as cold and shrill, while Europeans have tended to find American speakers blowsy and inaccurate. But times are changing, and so are speakers. The high-end rolloff, once considered necessary for natural "thirteenth-row" reproduction here, has been disappearing, and listeners the world over have learned that bass can be both tight and extended—with neither the "slop" of some old-fashioned American designs nor the bloodless constriction with which Europeans once contented themselves.

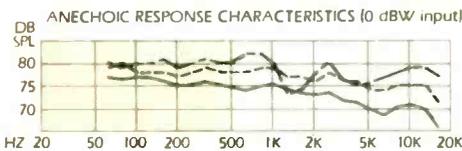
One "un-American" aspect of this speaker is apparent at first glance: It is shallow enough to fit on a bookshelf. And its sound is, indeed, distinctly on the lean, neatly groomed side, with extended highs and tightly controlled bass. Some Americans doubtless will find it a little antiseptic, though a more objective description might be that it's a hair brighter in overall tonal balance than most of the speakers we are used to.

Visonik rates the Euro 7 quite conservatively at 4 ohms. The impedance curve drops to that value near 3 kHz and to a little below it around 12 kHz, but in the midrange (where much of the energy is in typical music) it rises to about 16 ohms. Since it is below 8 ohms through much of the midbass, however, you might be wise to heed Visonik's implied advice to avoid paralleled pairs with amplifiers not suited to driving loads below 4 ohms—particularly since the Euro 7 needs a good deal of power to play loud, as indicated by the 0-dBW (1-watt) broad-band noise test. The speaker passed through the 20-dBW (100-watt) continuous-tone test without serious complaint and did not show signs of flagging until peak input in the pulse test was close to 3 kilowatts!

Distortion at the 0-dBW level measures in the neighborhood of a moderate 1% (except, of course, in the extreme bass) but with a greater proportion of the third harmonic than the less abrasive second. As the input level rises, the third harmonic content remains similar above about 400 Hz (the region where it is most pronounced at the lower level) but rises in the bass; the second harmonic also rises markedly throughout the range and, when output reaches 100 dB at 300 Hz, is well above 1% below 150 Hz and throughout the treble. Pulses are well reproduced at 300 Hz, though scope photos show appreciable overhang at 3 kHz. In consequence, complex musical passages, especially at high volume levels, are not as cleanly reproduced as we might have hoped and midrange tone sometimes seems slightly "etched." But voices are convincingly reproduced, with the balance of partials that give individual singers their character well preserved—thanks, in part, no doubt, to the smooth omnidirectional response measured in the anechoic chamber. The effect is somewhat forward, and the otherwise good stereo imaging slightly on the shallow side.

Some American listeners will, we suspect, still consider this sort of sound an acquired taste, though loudspeakers (and tastes) throughout the world have been considerably internationalized in the last decade. Both also have gone through marked improvement, and the Euro 7 is among the beneficiaries of that progress. It produces a tightly focused, up-front sound that will please many with its immediacy.

**Circle 135 On Page 93**



- boundary-dependent region
- average omnidirectional response
- - - average front hemispheric response
- · - · on-axis response

**AVERAGE OMNIDIRECTIONAL OUTPUT**  
(250 Hz to 6 kHz)  
78% dB SPL for 0 dBW (1 watt) input

**CONTINUOUS ON-AXIS OUTPUT** (at 300 Hz)  
106 dB SPL for 20 dBW (100 watts) input

**PULSED OUTPUT** (at 300 Hz)  
120½ dB SPL for 34½ dBW (2,814 watts) peak

"NOMINAL" IMPEDANCE                      4.3 ohms

## Newness and Renewal

With a great deal of pride we deliver to you the issue you hold. For the editorial staff—the departmental editors, the production people, and all associated hands—and for our colleagues in the business of publishing **HIGH FIDELITY** and **MUSICAL AMERICA**, the new graphic format embodied in these pages represents months of planning, experimenting, cogitating, opining, temporizing, worrying, disagreeing and sometimes agreeing, and finally finding consensus and applying the required shoulders to the wheel. We admit that we have a lot of ego capital invested in the results and that our view of them is therefore hopelessly proprietary, but we really like what we see. And we are convinced that you, our readers, will be the beneficiaries.

Why, you may ask, mess with a good thing? In the treadmill world of late-twentieth-century America, to remain stationary is to lose ground. So it was that, some time back, many of us began to share a conviction that the manner in which HF addressed the eye was inconsistent with the manner in which it addressed the mind. When we began to analyze it, that perception took concrete form in a number of aims, and what you see here is the realization of them. We decided to improve legibility and enhance the pictorial and illustrative aspects of our vocation, to bring the several elements of our coverage together in a natural and gratifying order, to make the editorial and advertising pages—and thus the publication's totality—more nearly contemporaneous in graphic feeling. By these means the experience of reading HF will be reanimated for our faithful followers and the character of the magazine more clearly impressed on the newcomer to it. I urge all of you—old friends, recent converts, casual acquaintances, the merely curious—to write to us with your reactions. But if we had to sum up our view of what we have achieved in a single formulation, it would be that we have discerned a new unity in the diver-

sity of our coverage and in our several distinct reading constituencies, and that such a unity underlies our outward changes.

All of this may create anxiety in some, visions of familiar landmarks toppling, bastions crumbling—all the comforting expectations heretofore aroused by finding HF in your mailbox or at your newsstand now to be consigned to the scrap heap. Forget it. We are surely not quite the same, but our publishing philosophy and our journalistic standards are firmly rooted in the magazine's past. Our change is in editorial presentation, not editorial posture: We hereby renew our covenant with the alert and well-informed consumer of audio goods, the music lover whose aural excitations create appetites satisfied only by increased knowledge, widened scope, and further refinement of taste, and the semi-pro and serious hobbyist who wants to stay abreast of the latest technological wonders of the musical-instrument marketplace and the recording studio.

In this issue, you will find two new columns of opinion: "Soundings," the candid reflections of our audio-video editors on the triumphs and follies of the remarkable (or at least always attention-getting) world of home-entertainment electronics; and "Pop-pourri," in which, this month, Stephen Holden, critic, novelist, and canny observer of the contemporary scene (his name will be familiar to readers of *Rolling Stone* and *The Village Voice*), assesses some of the kaleidoscopic forces that animate rock and pop. And—just as over the past several years we have embraced such emerging phenomena as video tape and video disc technology and the car-stereo boom—further innovations are inevitable. We will also continue to search for more effective editorial formats through which to deliver on our commitment to our readers. But all of this will come to you along with the standbys: lab/listening reports on leading sound-reproduction and signal-processing equipment, news

of the audio industry, classical and popular record reviews that shun formula and offer real penetration and guidance, practical cures for the common ills that beset componentry, and feature articles that instruct and delight as they examine the issues and the figures in the audio and musical firmaments. Not to mention "The Tape Deck," "Behind the Scenes," "HiFi-Croctic," **BACKBEAT's** "Input Output" and "Breakaway," **MUSICAL AMERICA's** "Artist Life" and "On Education," and all the other contributions of our regulars.

The road to the publication of this issue has been a long one, and a list of those whose toil and inspiration have smoothed it—from our art director Sarina Bromberg, the creative fountainhead of our fresh graphic style, to the editorial and production teams, and to the advertising and circulation staffs of the magazine, who lent us their support and counsel—would fill a column itself. Some of us felt that as the ultimate decisions about the new format closed in, so many oddly assorted factors gathered themselves together into such satisfying outcomes that they seemed almost fore-ordained. Perhaps. What *was* fore-ordained was that the editors of **HIGH FIDELITY** and **MUSICAL AMERICA**, and the writers to whom we entrust assignments, should persist in ranging widely in pursuit of information and insight, in scrutinizing received ideas and jostling orthodoxies, in disappointing stock responses and provoking fresh ones, and through it all doing what we can to sustain the battered canons of literacy. Stay tuned: The best is yet to come.

Robert S. Clark  
Editorial Director

# tech talk:

45 watts RMS minimum per channel, into 8 Ohms.  
From 20 to 20,000 Hz. With not more than 0.08% THD.

# explained.

The easiest way to decipher amplifier specs like those above is to look at the first and last figures. What's in between can be said for just about any good stereo. It's there because the Federal Trade Commission requires it. What you need to know is this. The higher the wattage, the more power you get. The lower the THD, the less distortion you get.

But good specs aren't everything. Compare this MCS Series® 45 Watt System to other audio systems, and you'll find it's just as important to look for great features. Like the tape dubbing switch on our amplifier, that lets you hook up two tape decks and record from one to the other. The signal strength and FM tun-

ing meters on our tuner. The Dolby® noise reduction system on our cassette deck. The DC servo motor in our direct drive turntable. And our bass-reflex 3-way speaker system.

You don't even have to understand the technology to know what you're getting. It all translates into sound. The MCS Series 45 Watt System complete with rack, only \$999.

Full 5-Year Warranty on speakers. Full 3-Year Warranty on receivers, turntables, tape decks, tuners and amplifiers. If any MCS Series® component is defective in materials and workmanship during its warranty period, we will repair or replace it—just return it to JCPenney.



**MCS®**  
Series

IT MAKES EVERYTHING CLEAR.

Sold and serviced at JCPenney

# BACKBEAT



## Steve Forbert Takes a Bite Out of the Big Apple

by Stephen Holden

*The author has just published his first rock & roll novel, Triple Platinum, for Dell.*

One story Steve Forbert tells about his early days as a rock & roll singer in Mississippi amusingly illustrates the kind of image mongering that's dogged him since being hailed by *The New York Times* as a shining light in "The New Folk Revival" a year and a half ago.

"I was booked to play a club in Laurel. That's an actual town in Mississippi, about fifty miles south of my hometown of Meridian. It's got a big Masonite plant. I was in a group called Pudd'nhead Wilson, named for Mark Twain's novel. The club owner didn't particularly care for that, so when we drove down to the gig, instead of finding our name on the marquee we see 'White Fox.' And we thought, did we make a mistake? So we went in and asked the owner, 'What's with the White Fox?' And he says, 'Oh, I didn't like that name Pudd'nhead Wilson. Don't make no sense. You all're gonna be White Fox.' So we played and told everybody at the beginning and all during every show that we're Pudd'nhead Wilson and not White Fox."

Forbert, whose late-'78 debut album, "Alive on Arrival," was greeted with enthusiastic reviews and went on to a modest commercial success, has been compared to everyone from Bob Dylan to Elvis Presley to Rod Stewart. Is he folk, or is he rock? A poet in rock & roll drag or the opposite? Pudd'nhead Wilson or White Fox? The Dylan comparison springs from the intelligence of Forbert's lyrics and the fact that he often performs his own material solo, playing guitar and harmonica. But cognizant of the less than scintillating commercial track records of other Seventies "New Dylans" like Elliott Murphy, Loudon Wainwright III, and John Prine, Forbert understandably balks at the comparison, insisting that his roots are really in classic rock & roll and country music.



"Elvis Presley, Jimmie Rodgers, Chuck Berry, Hank Williams, Jimmy Reed, and Robert Johnson," he recites. "It may sound ordinary to hear those names over and over, but those people are great. It goes back before Dylan. I don't think about literature. I don't write a lot of poetry. I'm not crazy about printing lyrics with an album. It's the whole song, the way it all fits together. I don't care what kind of stance you take, it's not going to last two minutes if you don't have the whole song."

Forbert has a point. If his songs have an uncommon intellectual vigor, his stage manner is that of a classic rock & roller. He has the swagger, the sneer, and the amused-by-it-all humor of a boyish Elvis, while lacking that performer's cartoonishly intense sexuality. His voice is a light rock & roll tenor—husky, throaty, with a southern twang—whose grain at times suggests Rod Stewart. Occasionally his stage manner borders on the precious, but most of the time he seems natural and at ease, projecting a self-assurance and enthusiasm that are amazingly consistent for someone so young. (Forbert is only twenty-four—a babe in a singer/songwriter league whose heavyweights are now mostly over thirty.)

Born and brought up in Meridian (also Jimmie Rodgers' hometown), Forbert is ambiguous about the details of his family background. He says he always knew he wanted to be a performer and started playing guitar when he was eleven. In high school, while singing in different rock & roll bands, he realized that sooner or later he would have to go solo.

"I think that a band should be democratic," he maintains. "And I found that I'm not very democratic about vocals. I guess you could say I'm a hog for the microphone."

Forbert began serious songwriting in 1972. Though he cites the work of Salinger and Fitzgerald and *The Picture of Dorian Gray* as writing that he admires, he disclaims literary seriousness, saying that his first love, even beyond performing, is songwriting. Idols in that area include everyone from Rodgers & Hammerstein to Smokey Robinson. In discussing song lyrics, he'll quote from Neil Young's *Tired Eyes* one minute and Stephen Sondheim's *Send in the Clowns* the next.

"Leaving Meridian was one of the easiest things I ever did," Forbert says about his decision to come to New York in June, 1976. "The store I was working in went out of business. I got my last paycheck and figured now's as good a time as any to leave. I thought there'd be a scene—coffeeshops and places where you could play by yourself. But there weren't that many. I went all over the place—Staten Island, the Bronx, Queens, everywhere. Starting out wasn't too bad. Everybody was in the same boat doing those Folk City hoot nights.

Initially he supported himself with messenger and mailroom jobs, and on hot summer nights he'd play on streetcorners in the Village. But after just a year and a half his sole source of income was performing. He now lives in New York's East Village and has no plans to uproot.

For several months he played off and on at CBGB, New York's punk-rock mecca, opening for acts like Talking Heads and John Cale. But Forbert is careful to point out that he feels no stylistic affinity whatsoever to the New Wave. At CBGB, he met Danny Fields, the Ramones' manager, who eventually signed him for management to his and partner Linda Stein's firm, Coconut Productions. Not long after, a favorable review in *The New York Times* sparked record company interest. Spirited bidding by Warner Bros., Arista, and CBS followed, and Forbert decided to go with Nemperor, the CBS custom label run by lawyer/impresario Nat Weiss.

"I wanted my first record to be very simple, very straight, and it came out pretty much the way I wanted," he says of "Alive on Arrival." In an era of expensive, high-gloss albums, it has the refreshingly unvarnished semi-live sound of late-Sixties/early-Seventies folk/rock records. Its simplicity is very much in keeping with Forbert's artistic personality. The album's theme is arrival—of two different sorts: The country boy discovering the big city, and a young man's acquiring a kind of wisdom that might be called disillusionment. The most detailed coming-to-the-city songs, *Big City Cat* and *Grand Central Station/March 18, 1977*, have a cocky know-it-all Huck Finn Hits the Big Apple view of New York that's dead-on in its observation. "Hell, it's some kinda lunatic followin' me/He's down by the john so I can't take a pee/I'm s'posed t' be happy, I'm here where it's at/I'm a face in the crowd, I'm a big city cat."

**Forbert has been compared to everyone from Bob Dylan to Elvis Presley to Rod Stewart.**

**"Even when I'm happy, there's something in the back of my mind about how brief it is."**



Forbert's lyrics alone don't scan gloriously, and they're not meant to. On record and in performance, however, he phrases them with an off-the-cuff, here-comes-the-punchline sense of humor that makes them come alive. The song structure—two-chord and three-chord folk ballads for guitar—complement the diction to communicate a confident, unpretentious amiability in which folkisms like “a-talkin’” don't seem awkward or out of place. In fact, such devices help downplay the songs' seriousness, allowing Forbert to slip in dark observations without sounding portentously rhetorical. The finest songs on the album—*Goin' Down to Laurel*, *Steve Forbert's Midsummer Night's Toast*, *It Isn't Gonna Be That Way*, and *You Cannot Win if You Do Not Play*—carry the understated moral resonance that comes from a clearly focused this-is-the-way-life-is view of the world. If forced to describe Forbert's sensibility, I'd call him a New South folk realist storyteller.

The songs are quite obviously autobiographical. In *Goin' Down to Laurel*, his first single, and *It Isn't Gonna Be That Way*, the album's finest song, Forbert shows the ability to step back from his own artistic mythmaking and observe himself and his surroundings with an almost cruel detachment. This facility helps explain his precociously skeptical view of romantic love: “You've traveled so far, the wind in your face/ You're thinkin' you've found the one special place/ Where all of your dreams will walk out in line/ And follow the course you've made in your mind/ Well, it isn't gonna be that way.”

“Some people have suggested that *It Isn't Gonna Be That Way* is sung to a girl about a love affair. They're right,” Forbert laughs. “I like love songs as much as anybody, but I haven't written many. I don't really believe in happiness anyway. Even when I'm happy, there's something in the back of my mind about how brief it is. That doesn't sound very pleasant. But, you know, the best is yet to come, isn't it?”

Even limited success has brought its share of problems. “Things have been going well for me in a lot of ways,” Forbert muses. “But it's not all of sudden, everything is peachy keen and terrific. There's a lot of responsibility that goes with it. With all the touring, I just don't have enough time. I've got a number of songs I'm working on. But I don't have the time I need to think things through. Still, touring hasn't been as bad as I thought. My throat has held up, and I find that if I can sleep a good sleep every three days, I can go along fine.” After a spring tour of Europe, Forbert plans to cut his second album. Material is no problem, since he has a backlog of at least sixty songs. The LP should be out by the end of the year.

Though he is softspoken in conversation and on the stage, Forbert's songs show a considerable capacity for anger. “Here's to all the shitty jobs that I despise/ Here's to two-bit guarantees and other lies,” he sings in *Steve Forbert's Midsummer Night's Toast*, the closest he's come to mounting a Dylanesque tirade. But where Dylan and the Sixties folkies insisted on affixing moral blame, Forbert accepts the unfairness of life as an unpleasant fact. Whereas the last generation of folksingers invoked Old Testament judgment on specific targets, Forbert's rage is the universal human complaint against death and taxes. Raised a Southern Baptist—he sang in the church choir for years—he claims not to be religious, and he shares none of Dylan's or Jackson Browne's eschatological infatuation. “I see that everywhere,” he shrugs. “But so what? It's just death. That's something we know will happen.”

Forbert initially bristles at the suggestion that *It Isn't Gonna Be That Way* is a cynical song. “What about the verse? ‘You'll just have to live and see what you find/ And take it from there and follow the signs/ You think you can live an' dream your own fate/ You think you can wish and walk through the gate.’ Isn't that optimistic?”

#### Optimistic?

“Well, disillusion is part of my trip,” he hedges. “Henry Miller says the purpose of the artist is to inoculate the world with disillusion. On one hand I agree. On the other hand, there's entertainment: *You Cannot Win if You Do Not Play* means exactly what it says. Those are my two forces, and I feel both of them very strongly.” Armed with talent and this kind of Mark Twain perspective, how can Steve Forbert fail to achieve rock & roll glory? ❧

## Producing Steve Forbert

by Steve Burgh



Forbert with his producer

The first time I saw Steve Forbert was in the spring of 1977. I was playing guitar with a local act at Kenny's Castaways in New York, and he was the warmup. Clad in the standard folkie outfit of denim jacket and pants, worn flannel shirt, and cowboy boots, he looked like another early Dylan imitation, complete with harmonica rack and acoustic guitar. But as I listened to him that night and several other times throughout the year at Kenny's, it became apparent that he was more energetic, more determined than most of the other acts I'd seen around Bleecker Street. I couldn't hear his lyrics—the sound system left a lot to be desired—but his kinetic performing style and strong rhythm feel made their point.

I'd heard that Steve was looking for a producer for a demo tape, so one night I approached him and offered my services. Two weeks later he came to my apartment and we played through some of his original tunes, all of which impressed me. He mentioned that he had signed a contract with Nemperor Records (distributed by Epic) and was looking for a producer who had experience but who wasn't an already-established “big name.” “That's me,” I said. Sure enough, a few days later he called to say he definitely wanted me. I

*Steve Burgh is a producer, guitarist, and songwriter who has recorded with David Bromberg, Steve Goodman, John Prine, Willie Nelson, Billy Joel, and many others. He is currently producing singer/writer Carolyn Mas's first album.*

# MORE QUALITY IN REVERSE.

**AKAI's GX-635D. The first 10½" reel-to-reel deck with auto-reverse record and playback.**

Auto-reverse record and playback on a 10½" deck. With virtually the same excellent quality recording in both directions.

But that's just for starters.

The GX-635D features three precision made motors. An AC servo direct-drive capstan motor and two reel motors. Combined with six long-lasting heads, including four of our exclusive GX glass and crystal ferrite heads; two for recording and two for playback. AKAI's GX Heads are guaranteed\* for 150,000 hours — the equivalent of nearly 17½ years' worth of continuous play.

And there's more.

The real-time tape counter is calibrated in

minutes and seconds. Also, feather-touch solenoid functions controls. A flashing pause lamp that won't let you forget. A pitch control good for ±6%. And a timer start switch for both record and playback that can start the music without you — in either direction — with the use of an external timer.

We've even got a dual-process Dolby<sup>®</sup>-equipped model, the GX-635DB.

Either way, it's a deck serious audiophiles will want to put through its paces at an AKAI dealer. Or write AKAI, P.O. Box 6010, Compton, CA 90224, for more information.

The GX-635D. A brand-new tape deck that stops the others in their tracks — coming and going.

**GX-635D: Wow/Flutter — less than 0.03% WRMS at 7½ ips; S/N Ratio — 62 dB DIN; Frequency Response — 30-27,000 Hz (± 3 dB using WR tape).**

## AKAI

You never heard it so good.





**Until now, you had to buy a Lamborghini  
to hear an Alpine car audio.**

*In introducing Alpine: the car audio that Lamborghini selected to be standard equipment on their \$85,000 sports machine. Alpine audio systems are pure-bred, high-technology designs for the car listening environment. The new Alpine systems offer more features, and more combinations of features, than ever before available on in-dash car audio. Features like memory logic electronics, music sensor, Dolby,<sup>®</sup> key-off eject, cassette glide, loudness contour and a CrO<sub>2</sub>-FeCr switch. These systems also offer high power—20 watts-per-channel RMS—along with low distortion and unbelievably low wow and flutter (.09% on many models).*

**ALPINE**

*At the heart of Alpine's line there are two types of "master" units: the Integral Component and the Micro Integral. Each type houses an FM/AM Stereo Tuner and Cassette Deck. The Micro Integral models also feature an amplifier and are completely self-contained. Alpine accessory equipment includes Digital Time Delay (for concert hall-like ambience) and Graphic Equalizers. And Alpine offers Loudspeakers which handle the enormous clean power of Alpine car audio systems. Consult your Alpine dealer for professional planning to suit your particular needs. Alpine: We're new, and everything we do is new. Alpine Electronics of America, Inc.*

Dolby is a registered trademark of Dolby Laboratories, Inc.



got very excited. We met at CBS and spoke to Nemperor's president, Nat Weiss (who, coincidentally, had managed my first rock band, Jacobs Creek), to discuss the details.

Over the next month or so, Steve and I met several times to decide which of his songs would go on the album. This was his first, and he wanted to do it live—no overdubbing, no punching-in to repair tracks, no edits, no nothing. "I want it to be like Elvis' Sun sessions," he said. "Maybe just a string bass, guitar, and a little rhythm." Visions of a very bare, noncommercial record danced in my head, along with Nat Weiss's voice saying over and over again, "Don't bring me a folk album!"

On the other hand, I'd been presented with a real challenge: how to show Steve the ropes in the studio, make him feel at ease so he could perform at his best, and make a record that would satisfy him artistically but also appeal to listeners who'd never heard of a young skinny kid from Mississippi.

**T**he musicians, studio, and engineer were all crucial to this. Steve wanted to work in New York, and that suited me fine. I have a preference for A&R Studios, and after he looked several others over, he agreed to work there. We decided on Room R-1, a topnotch 24-track facility. I chose Glenn Berger as engineer because he is young, bright, experienced, and a lot of fun, and I knew Steve and he would relate well.

Selecting musicians was more diffi-

cult. Steve was uptight about "big name" studio players, at least the ones he'd heard of, and shied away when I mentioned a well-known guitarist. He insisted that I do all the lead guitar work, which presented me with yet another challenge: play live and produce at the same time! The players I selected included string bassist Brian Torff (Stéphane Grappelli's and George Shearing's bassist), electric bassist Hugh McDonald, keyboard player Robby Kondor (not that experienced in the studio, but a fine young player), pedal steel player Harvey Shapiro, and drummer Barry Lazarowitz. Lazarowitz is a versatile studio pro, but Steve hadn't heard of him so it didn't seem to bother him. When Barry began to tune his drums, though, Forbert had a fit: "So loud!"

After several rehearsals it was time for the moment of truth. The first day in the studio was spent selecting the right microphones for Steve's voice (and harmonica) and acoustic guitar and getting him accustomed to his new surroundings. We ran down a couple of tunes, but it was mainly a warmup. The following Monday we began working with the musicians. A few tunes—*Tonight I Feel So Far Away from Home*, *Isn't Gonna Be That Way*, and *Goin' Down to Laurel*—fell into place right away, but most of them we recorded several different ways. Since it was live, I couldn't just add a part after the fact. If something felt wrong, we had to try the whole thing over again until it worked. Steve was still very shy about the musicians and kept trying things with fewer

parts than the take before. Slowly he began to accept the electric bass and the drums (and later David Sanborn's alto sax on *Big City Cat*), although he still wanted them to play next to nothing on some tunes. I kept reminding him that the record was for an audience as well as for himself.

**F**inally, I came up with an idea. One night I brought in my old cherry red Fender Stratocaster electric guitar. Steve played it for thirty seconds and fell in love. After that, he really opened up and began to rock, making the last few days in the studio a breeze. We laid down one great track after another (*Settle Down*, *Big City Cat*, *Thinkin'*) and wrapped up the last session at 4 a.m. with *You Cannot Win if You Do Not Play* in one take.

It was not over yet, however. When we started mixing, Steve wanted to hear his guitar way out in front of the band, with no echo or reverb on anything—not even on his voice. We tried it, and, as I suspected, it just didn't have enough impact. He finally conceded that bringing out the drums and adding echo was a lot better, and we assembled our master tape. Ted Jensen at Sterling Sound did the disc mastering, and, after we rejected at least six test pressings from the CBS plant (because of noise and warpage—sound familiar?), "Alive on Arrival" was ready to roll.

Steve has come a long way since that first night at Kenny's, and I think the chances are good that we'll be hearing from him for many years to come. ☺



## The Latest from Moog & The First from Ursa Major

by Fred Miller



The Multimooog

**The Multimooog.** Rather than offering innovations in sound production, Moog's newest offspring is designed for greater versatility than its predecessors. No STARWARS SPACESHIP or BIONIC-BASSOON presets here; rather the ease of operation usually associated with simpler instruments and the routing and modifying characteristics of earlier (and bigger) patch-cord / matrix-system synthesizers. The Multimooog is very similar to the Micromooog—which has been around for a while—both cosmetically and electronically. But the Multi is clearly more flexible than its smaller brother.

The front panel of the Multimooog is a little on the complex side but it's all explained thoroughly in the excellent owner's manual. In fact, Moog and the manual's author, Tom Rhea, are to be commended not only for providing detailed functional information, but for explaining why the numerous switches, dials, and patches do what they do. I wish all manufacturers were as considerate of their clients. It would be impossible to describe here the full range of the Multimooog's capabilities, so I'll simply point out a few goodies. The basic signal derives

from the two independently tunable oscillators (marked A and B), which can be mixed or operated separately. The FILTER section contains a low-pass CUTOFF, EMPHASIS (amplitude of resonant frequency), and a CONTOUR-AMOUNT pot, which provides switchable negative and positive contouring of the signal. The adjacent FILTERCONTOUR section is an envelope generator that produces a rising-and-falling control signal that is routed to the FILTER section; ATTACK and RELEASE controls, and a FILTER-SUSTAIN switch as well, are tied into it. Another envelope generator, labeled LOUDNESS CONTOUR, also has ATTACK and RELEASE controls and a SUSTAIN switch.

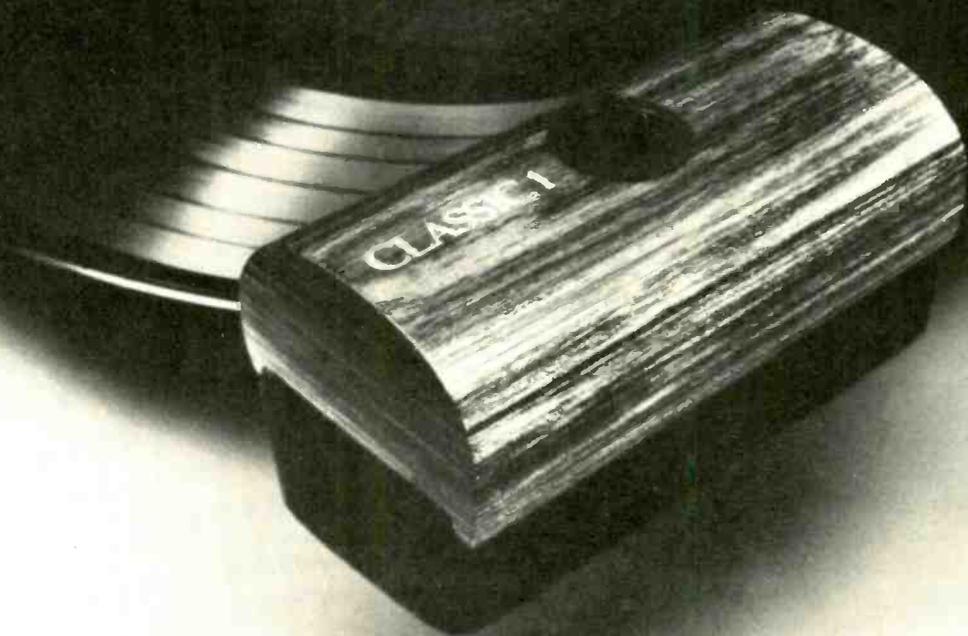
The lower row of controls on the front panel contains the complex KEYBOARD TOUCH and MODULATION sections, which offer a wide variety of routing possibilities that involves not only the keyboard but its force sensors (the entire keyboard is force-sensitive: by pressing a key beyond a certain point, you activate an additional control circuit), the sample and hold circuit, the ribbon controller, and the modulation wheel. This unusual routing flexibility—from virtually any source to vir-

tually any section of the instrument—is controllable from a number of points: keyboard, wheel, ribbon, or another control input. GLIDE controls a glide time of from one millisecond to 5 seconds, and VOLUME determines output volume. Enlarging the Multimooog's selection and modification capability even further is a section of three-position switches that includes OSCILLATORS (on, off, or drone), FILTER MOD [ification] (off, weak, strong), and FILTER MODE (normal, full, tone). Four more switches appear at the left of the control panel and operate with respect to the glide control, keyboard triggering, and ribbon routing. The ribbon controller, modulation wheel (a variable attenuator for all control voltages fed to it), and power LED are at the left of the panel. The keyboard encompasses three and a half octaves; the entire unit weighs 26 pounds.

The Multimooog's back panel has an unusually extensive patching capability. LO and HI audio outputs patch to either stage amps or home components, respectively. The STRIG (switch trigger) output plug triggers the contour generators of a patched slave synthesizer. KBD and RIBBON jacks provide an external source with the voltages from the force-sensor mechanism under the keyboard. GLIDE and MODULATION quarter-inch mono phone jacks are provided for remote footswitch operation. Inputs include FILTER, OSC A and B, STRIG, AUDIO, and TOUCH MODE EFFECTS, all of which are designed to receive signals from an outside source, such as another synthesizer (FILTER, OSC A and B) a microphone (AUDIO), or another Multimooog (STRIG). The ACCESS POWER input supplies 15 volts DC for all standard Moog accessories. The power section has a switch for adjusting operating voltage (115 AC or 230 AC), an ON/OFF switch, and a three-conductor detachable AC cord. FINE TUNE tunes both oscillators to a predetermined or prerecorded pitch for maximum accuracy.

We spent several hours with the Multimooog, following the manual's exercises and suggested setups. Its overall performance was excellent, and once you become familiar with it, it's fairly easy to use. The manual recommends letting it warm up for five minutes before use to let the oscillators stabilize, but in my eagerness, I played it before reading that section and didn't notice any drifting. The FINE TUNE control is flexible enough to meet any situation, the extensive patching possibilities are a bonus, and the basic setup for "get-

# discover . . .



## The inside story of a classic.

Introducing a new type of record cleaner. Meet the CLASSIC 1, the only cleaner of its kind. Developed to satisfy you, the discriminating audiophile.

Neutralizing the static charges that attract and hold destructive micro-particles of dust and dirt on your record's surface is one of the major problems in record care.

Ordinary cleaners attempt to reduce static charges by applying fluid directly to the surface of the record or cleaning unit. Direct application of fluid involves an inherent risk of harmful residue build-up and should be avoided except in the case of abnormally dirty or greasy records. In fact, normal maintenance should not involve wetting the record.

At last, the CLASSIC 1 has the answer to safe and effective cleaning. Not only are static charges reduced, but the problem of residue formation is eliminated. Cleaning is safe and effective because inside the CLASSIC 1 is



the exclusive MICRO STOR SYSTEM which utilizes a humidification/cleaning process rather than a 'wet' technique.

The secret to the MICRO STOR SYSTEM is a permeable matrix of many thousands of tiny glass beads which retain the cleaning fluid. Through capillary action, a vapor penetrates the velvet surface creating a field of humidity sufficient to reduce static charges. Disc contaminants can now be removed safely and easily without wetting the record and risking residue build-up.

Discover the ultimate in record care. The CLASSIC 1, a Sound Saver product.

Available at finer audio dealers . . .

ting a sound" is very simple—a happy event for the novice. The oscillators stay stable over extended periods (eight to ten hours) and our composer/keyboardist in residence felt that they sounded richer than those of other synthesizers he has used. Overall he felt that the Multimoog was more diversified than most synthesizers, and he was especially fond of the ease with which it could be programmed. He used the unit's bass to replace an electric bass on a disco record he's working on, noting that it had the same fullness as the stringed instrument, but a greater degree of clarity—an essential ingredient for a clean disco mix. He mentioned that the brass and string presets on other units sounded better than what he was able to get on the Multimoog, but thought its versatility and durability would make it a perfect instrument for taking on the road.

Though the waveforms available with the Multimoog are not extensive, the two basic forms, triangle and square, are variable through filtering and may be modified to a sharp rectangular wave (pulse) or to a sine wave. All in all, at \$1,495 the Multimoog seems to have almost everything most performers would require for a live or studio situation.

**Circle 122 on page 93**

**U**rsa Major Space Station SST-282. With the virtual ocean of special-effects devices on the market today, it is a rare pleasure to find one that is unquestionably worthy of a close second look.

Though the Space Station is primarily a digital delay device for signal processing onstage and in the studio, to categorize it only as such does it an injustice. Whereas most digital delay lines (DDLs) that cost from half to more than twice as much will give you a variety of delay times and possibly a feedback controller to create reverberation, the SST does much more. Let's begin with the "taps." Put simply, taps are like faucets. Each tap on a DDL is an output, fixed or adjustable, for a delayed signal. I know of a couple of units that offer as many as five taps; the Space Station offers eight "audition taps"—four pairs—which can be chosen independently or in combination and sent with the direct signal to the stereo outputs.

The Space Station also has sixteen "audition delay programs." Four buttons on the front panel—marked ROOMS 1, 2, 3,

and 4—permit the signal to be auditioned in any of four modes that approximate rooms of different sizes. The range is from a 70-millisecond delay in ROOM 1 to a 255-millisecond delay in ROOM 4. When these are used in conjunction with the feedback controller, they produce a smooth reverberation with no audible bumps in the decay time. Or they can be used without feedback for vocal doubling or thickening or for multiple echoes. The COMB push-buttons, to the right of the ROOMS switch in a set of filters to create a succession of peaks and nulls (cancellations) in response by processing the original signal and several generations slightly delayed from the original. This effect can be created with standard flangers but not as precisely as on the SST. The combed signal can be regenerated and fed again through the combs or through ECHO. The resultant sounds can be truly spacelike—in fact, the possibilities are virtually infinite.

The section labeled DELAY CLUSTERS has five switches for effects ranging from a loudness-enhancing delay of under 40 milliseconds (FATTY) to a very discrete delay of 250 milliseconds (ECHO). These can be used in a number of different situations. SPACE REPEATS 2, 3, and 4 provide two, three, or four repetitions of the original signal, with selectable delay times of up to 255 milliseconds, and can be set for successive repeats that move from left to right, L-R-L-R, or L-C-R at the stereo outputs. They can also be used to bounce normal reverberation from left to right, creating a ricochet effect as the reverb dies away. Another ECHO pushbutton controls an effect similar to a tape loop's, but the digital processing allows more precise spacing—and, of course, there is no tape noise.

The Space Station has some other nice touches. With its user-controllable high and low filters and nine-input mixer, you don't need to tie up the faders on a

console or use elaborate patching. You can also blend the original signal with the ones you've created and then equalize the output, so you'll need one less input module than you would in a straight mix. (After lifting the signal to be processed from a tape recorder, bring the equalized outputs of the Space Station back to two unused pots and patch to buss.) The SST is a mono-in/stereo-out device with peak-reading LED level indicators to help the user optimize the amplitude of the input signal. It has high-impedance inputs and low-impedance outputs, and it's nineteen inches wide.

We put the Space Station through its paces with a simple bass-drum track and came up with a dozen separate effects, some of which I'd never heard before. We used it on vocals, percussion, and grand piano and, as an instrument by itself, with only a click track to trigger it. The space voices sounded great, particularly when used in conjunction with the SPACE REPEATS, which are repeatable at will—you don't "lose the setting." As for straight reverberation, we compared it directly with a \$6,000 reverberation plate and found it sounded at least as good, if somewhat different in character. As a tape slap, it was indistinguishable from a tape recorder, except—as noted earlier—quieter and more versatile.

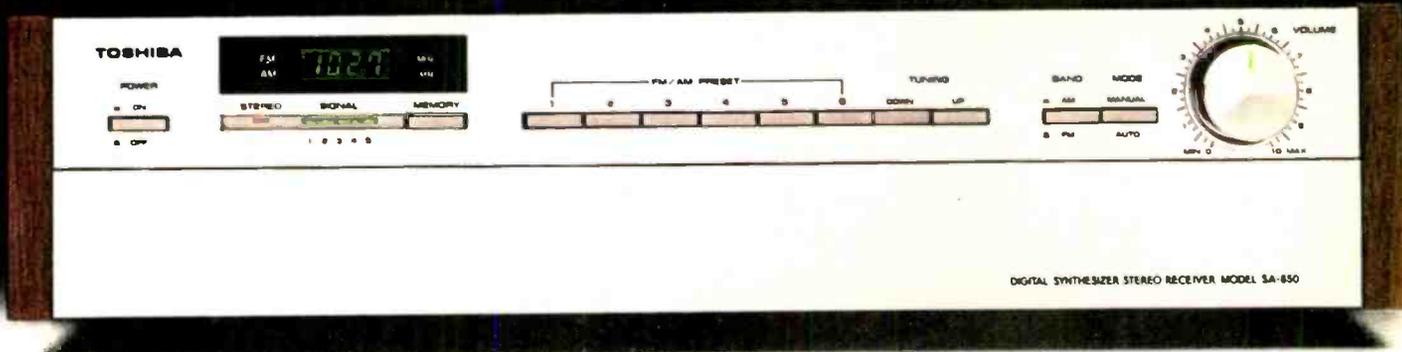
Specifications for the Space Station SST-282 include a frequency response of from 20 Hz to 7 kHz (you won't miss it, believe me), dynamic range of 80 dB minimum from 20 Hz to 20 kHz, and distortion and noise at 0.2% maximum including quantizing noise; the digital sampling rate is 16 kHz. XLR connectors are used at the single input and dual outputs. The price is \$1,995.

Ursa Major, the manufacturer, is a small outfit, and the unit may be a little difficult to come by, but it is worth the wait. The Space Station is something else. 

**Circle 121 on page 93**

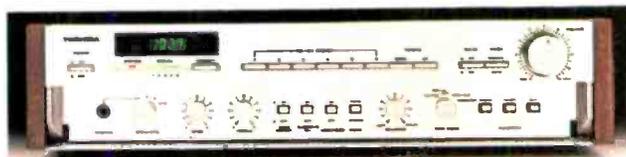


**The Space Station**



# TO BUILD A BETTER RECEIVER, WE LEFT OUT A FEW UNNECESSARY PARTS.

What you see here is a sophistication in high fidelity design that's never been achieved in a stereo receiver. The new Toshiba SA 850.



Look for conventional tuning devices, like a tuning knob, or an FM/AM band, or signal strength and center tuning meters.

You won't find any.

The reason is Toshiba's unique digital-synthesized tuning. The most advanced and precise system of tuning available today.

Toshiba was the first to develop digital synthesizer circuits in a receiver, and now we've utilized them again.

Choose either automatic or manual tuning.

Consider ordinary tuning systems obsolete. The Toshiba SA 850 allows you to tune automatically or manually with the ease of push-button selection.

You get LED digital read-out. And 5 LED signal strength indicators.

In the automatic FM mode, the tuner will scan until it stops at

the next listenable station. Also, 6 FM and 6 AM stations can be pre-set for instant recall tuning at the touch of a memory button. The quartz digital synthesizer locks into each station's assigned frequency with absolutely no possibility of drift. You get FM synthesizer accuracy of 0.0025%!

FM stereo S/N ratio is 68 dB. FM selectivity is a high 80 dB. Frequency response is 20 to 15,000 Hz, +0.2 - 0.8 dB.

If power is what you want, then power is what you'll get.

Full complementary direct-coupled power amplifiers provide 50 watts rms per channel into 8 ohms from 20 - 20,000 Hz. And with a THD of only 0.03%. A figure that receivers many times more powerful can't match.

This is achieved by low distortion differential amplifier technology and a triple secondary power trans-

former with twin 10,000  $\mu$ F capacitors that virtually eliminate noise and hum.

Precisely what you look for in a preamp section.

We give you provisions for attaching two tape decks. And full monitoring controls, plus duplication switching between the decks.

Our special subsonic filter switch eliminates rumble and other low frequency noise.

A great-looking body and price.

Behind our sleek, slide-away cover is a full range of controls, including tone / defeat switch and a dual speaker selector.

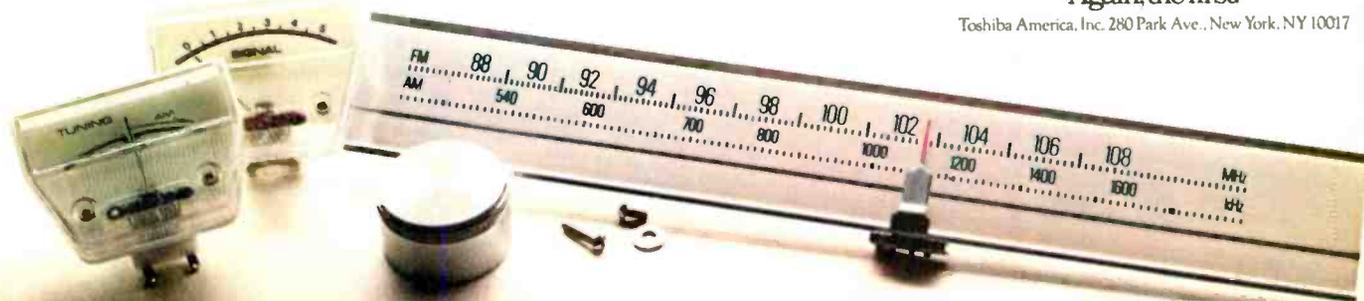
The entire unit has a clean, sophisticated look. So you can indulge your eyes as well as your ears.

But we've saved the best part for last. This digital-synthesized receiver actually costs only \$519.95,\* less than you'd pay for a digital-synthesized tuner alone.

Now, that's the part we thought you'd like us to leave in.

**TOSHIBA**  
Again, the first.

Toshiba America, Inc. 280 Park Ave., New York, NY 10017



## DISCOTECH I:

*How the Big Boys Fix the Mix*

by Crispin Cioe



Even the most casual listener can't help but notice the current infiltration of the disco beat into virtually all types of music from rock to r&b to country. And though it is known (perhaps even notorious) for its heavy reliance on elaborate studio techniques, the major consideration in disco production is still the dance floor. Even with the advent of disco radio, it's the dancing experience that determines its sound, and this stands in marked contrast to rock and pop production values. Let's face it, the arresting quality of, say, the Rolling Stones' *Brown Sugar* (considered to be their most "perfect" single from a production standpoint) is the band's performance. The record works because it successfully re-creates the sound of Mick and the boys rocking out. A successful disco side, however, is one that creates an environment to move within and "gets people off" on the dance floor. Disco is a participatory experience; rock, even at its most blaring volume levels, is a spectacle—an event to witness.

Recently, I've been observing and talking with disco engineers, deejays, remixer, and producers, and, if I've learned anything, it's that disco is a wide-open area. Contrary to cynics' claims that "it's all the same," its artistic possibilities embrace many different styles, approaches, and personalities. Not all disco tunes are conceived as such—many start out as rock songs and are later remixed specifically for disco play. A remixer usually works with the song's master tape, making changes in equalization and instrument balance, adding special effects and/or percussion, and, in some cases, editing. *Miss You*, *What a Fool Believes*, and *Do Ya Think I'm Sexy?* (by the Stones, the Doobie Bros., and Rod Stewart, respectively) were all remixed for disco, and all three have been hits during the last twelve months, due in large part to disco acceptance.

**From the top: Bob Clearmountain at the Power Station, Marc Berry at Vanguard Studios, Boris Midney at Eras Recording (note the infinite baffling and the bass traps behind him).**



*Room ambience just doesn't fit into the disco picture.*

Jim Burgess, one of the best-known disco deejays in the country, has had such success as a remixer that he works in clubs only occasionally now and is currently working on an album of his own. At this year's *Billboard* Disco Forum, he was named Top National Disco Deejay and Remixer of the Year. Born in Florida, Burgess studied classical piano from the age of four, sang opera professionally in his teens, and majored in music in college. He recently told me that he started working as a spinner in Tampa four years ago "as a lark. I thought it would be a summer job. But then I got an offer to work in Atlanta, and I ended up in New York, working at 12 West and then at Infinity for a year before it burned down. As a deejay, I guess I helped develop a style that the late Jim Stewart first pioneered at 12 West. This involves long blends from one record to the next. I determine segue cuts mathematically, in terms of beats-per-minute. I don't really get involved with a lot of special effects while a record is playing, like flanging. [Flanging is achieved by playing two copies of the same record concurrently and slowing one turntable manually, to get a slight delay effect.] The secret of a good deejay is record flow and texture. I do change the EQ around in a record that's playing, either because the record needs it or to surprise people by boosting the highs in some instrument at a certain point, for example. But the biggest thing I learned while being a deejay was song structure."

Indeed, Salsoul Records gave Burgess his first remixing assignment a year and a half ago, and since then he's worked on at least forty such projects, including *Do Ya Think I'm Sexy?*, Rod Stewart's biggest hit to date. Burgess remembered that "I had the flu when Warners gave me the master to remix, and they wanted it done in an afternoon. We did the mix in thirty passes." (He means that they ran the tape down thirty times to perfect each instrument's sound and/or place in the mix.) "Basically, I changed the balance in the rhythm tracks of the song, which had more of a rock sound on the bottom. For example, the bass had to come up, and I believe we used a Kepex [noise gate] on the snare, to make it cleaner sounding. At

the end of the song I extended the vamp by recycling a few bars and pushed up the cowbell to make the instrumental section more effective."

I spent an afternoon at Sigma Sound Studios in New York City, watching Jim and engineer Gerry Block remix a disco song from a project called *Love Deluxe*, originally produced at London's Trident Studios by Ellen Hawkshaw. In this situation, it was obvious that Jim had studied conducting and played in orchestras, because he has the ability to "see" a piece of music as a score, even without one in front of him. He told me that the record needed to be shortened from seventeen minutes to nine, and that he was going for a "cleaner, more balanced sound." Specifically, the first change was made in the congas, which Jim described as too "damp-sounding—they sound as if they're overdubbed." They worked on this and then turned to the synthesizer, which had been electronically flanged. Here, Jim decided to shorten the decay on the echo to "put a little distance behind it. When there isn't much else happening in the mix, you don't want too much emphasis on this kind of sound effect, or it becomes obvious and dominates."

Likewise, they spent a couple of hours going over instruments and parts that either stuck out in the mix or had the wrong tone for the song. The decay on the Syndrum [an electronic drum that sounds like a pigeon's cooing] was shortened, the echo on the shaker came down, and the cellos were mixed to blend better with the clavinet. Finally they edited the song, chopping down a couple of long percussion breaks that Burgess felt might be "boring" to an American audience. Burgess works closely with Block (a veteran disco engineer, having been involved with the first two Village People albums, among others), but it was clear that the former had a very definite concept in mind for this mix. They added no instruments to the song, although Jim recalled that "with the Doobies' single, we added seven tracks of percussion."

Jim keeps both discos and radio stations in mind when he mixes but added that "I really just go for a clean sound. The bottom has to be clean—each instru-

ment—and the highs must be clear and crisp. I also take the tape to the disc mastering plant myself, to make sure that the disc comes out the way I mixed the tape. Sometimes we've had to master a record six or seven times to get it right."

Bob Clearmountain, another renowned remixer, works out of the Power Station, a relatively new but prospering Manhattan studio. While Burgess got his start as a disco deejay and must translate his remix ideas to an engineer, Bob is an engineer by profession. His credits include the remix on *Miss You* last year, and he also works with Chic on all their albums and related production projects, including *Le Freak*, which was ubiquitous last year.

The amiable Clearmountain, who referred to himself as "a refugee from Connecticut bar bands," said he doesn't go to discos very often. "But," he said, "I have friends who call and tell me what people are dancing to. I worked on a lot of disco projects as an engineer before I was asked to remix *Miss You*, but it still shook me up at first, because my roots as a musician are in rock & roll. I thought, 'Oh my god, the Stones going disco?' But then I realized they've always made dance music."

"As for the mix of *Miss You*, I kept the bass drum going alone through the beginning of the instrumental break. Then I picked up the Wurlitzer electric piano part and then the guitar licks, bringing them in one by one to create an extended instrumental that builds slowly rather than happening all at once. The whole idea of this kind of 'breakdown' in disco is to create a sudden quiet and pulse, when the dancers can hear themselves on the floor. Then, the instruments come in one by one, and the energy has a chance to build to an even greater peak.

"With a song like *Miss You*, I see myself working as a film director, editing scenes for maximum effect and pacing. For instance, in the harmonica solo, I took out sections and rearranged it so it would build to a better climax. For the song's ending, I decided that it would be good to bring back the chorus, since, after the long break, the listener might have forgotten it. In terms of actual sound and EQ, I worked on the drums and bass quite a bit. To the

bass drum I added high midrange (3,000 Hz) and low (100 Hz) frequencies, to make it punchier. I added highs (10,000 Hz) and lows (100 Hz) to the snare to make it fatter, more present. I compressed the bass and added midrange (700 Hz) to make it less muddy, more pointed, and rolled off low bottom (60 Hz), which helped it blend with the bass drum. I compressed the vocal and added a slight overall compression, which makes everything louder. Basically, I mix by feeling, just going for the sounds I hear. And I like to experiment. . . . When I'm recording something, I generally prefer live playing in the studio. The more that musicians play together live, the better it is."

Though disco production and procedures vary immensely from one producer, artist, or engineer to the next, there is one aspect that figures prominently in Chic's funk disco, in Donna Summer's orchestral shimmers (created by Giorgio Moroder), and in the futuristic Eurodisco of Voyage. And that aspect is a "present" environment. Room ambience, traditionally an important factor in rock production, just doesn't fit into the disco picture. Whereas a rock, jazz, or pop drummer will generally play his whole kit throughout a song to get a good groove going, most disco producers record each drum separately on an individual track. Again, the distinction relates to objectives. A good rock album usually makes the listener feel like the band was all in one room, playing together. A good disco album, with its emphasis on superarticulated rhythms, creates a netherworld in the disco itself, a "present environment" tied to the dance floor, rather than to wherever the music may have been recorded. Disco may be the ultimate musical fantasy in pop culture today, but it's a fantasy rooted in the body and its expression through dance.

This concern with "presence" has led some producers and engineers to seek total control of the recording environment. Marc Berry, an engineer for New York's Vanguard Records (which has recently gotten into the disco business with the Players Association and Poussez) generally starts his tracks by putting two to four bars of steady bass drum on a tape loop, which he runs (and records) for the song's duration—sometimes up to fifteen minutes. Having already set the tempo

(anywhere between 126 and 144 beats per minute), he then overdubs rhythm guitar or keyboards to define the song's form and structure—where bridges and turn-arounds occur, etc. He'll then record the snare separately, then the cymbal splashes. For the hi-hat cymbal, Berry frequently records one open-close eighth-note pattern and one straight sixteenth-note pattern, which he may use together or separately.

On the snare he uses two mikes, with padding and heavy limiting to keep the level consistent, and a noise gate for minimum leakage. The toms are recorded with the bottom skins off and EQ boosted at 5,000 Hz for better attack and "so you can hear the skins. I also have the drummer use the opposite ends of the sticks when he hits the toms."

Marc isolates all instruments except strings and horns for minimum room ambience, maximum separation, and maximum punching leverage. He also tends to synthesize the bass (usually with an Arp Odyssey) "for consistency mainly. But if the song is very funky, I'll use a player."

Unlike Clearmountain, Marc goes to discos frequently. He says that much of the material he's been working on lately puts emphasis on "the groove, rather than melody, so that the groove really becomes the musical hook for the dancer/listener." In terms of his own production and engineering style, he likes to feature special effects as hooks, looking for original ways to process signals. He played me a new example of phased handclaps, which involves flanging the repeat of digitally delayed claps. "These are the kinds of things that grab people's attention on the dance floor," he said.

Producer/composer/performer Boris Midney represents another facet in the disco spectrum, an area a friend of mine has dubbed "art-disco." Midney's two albums thus far, "USA-European Connection" and "Beautiful Bend," have both gone to No. 1 on the disco charts. This year he opened his own impressive forty-eight-track studio in New York—called Eras Recording—and when I visited him there he explained the roundabout process by which he became a top disco producer.

"I was born and raised in Russia and started studying classical piano at

four. When I was twenty-six, I came to America to continue playing and studying. I play saxophone also and got very involved in jazz in New York, where I've played with Coltrane and Ornette Coleman. But also, at home in Princeton [New Jersey], I became fascinated with recording, starting on a four-track, borrowing money, and gradually expanding to eight and then sixteen tracks. I began scoring films and theme songs for television, and then I started getting business from New York, because I had sixteen different keyboards in the studio."

He then opened Alpha studio in Philadelphia ("you know, Philly has some very funky musicians"), where several big hits were cut, including Evelyn "Champagne" King's *Shame*. Prospective clients began asking Boris for demos of his studio's sound. He finally decided to produce an album of his own music for that purpose. "What I'd always been into, even before disco had a name," he said, "were funky rhythms combined with beautiful strings. I took the tape I'd made to the Loft in New York, and deejay David Mancuso began to play it. TK Records heard it, and within a few days we had made a deal." That tape became "USA-European Connection."

Eras Recording has a high-tech design look, and its most striking physical feature is the "infinite baffling" (made from a maze of three-foot slats) on the rear wall of the control room and on the studio ceiling. There are big bass traps behind the board, which is a forty-eight-track Harrison with automated mixing (the ability to store mixing information as the mix progresses and then to recall the information later). Boris uses Telefunken tape recorders. A great deal of attention has been lavished on the huge, custom-made monitor speakers, which are spring-suspended over the board, aimed like giant X-ray machines at the listener. Though their size alone is somewhat intimidating, their sound is incredible. Each bass speaker is driven with 800 watts. High volume levels do not bother the ear at all because the sound is *felt* more than it is heard. It's like wearing a bodyphone. As an Eras engineer put it, "the room has no reflections, no resonances—nothing except what's coming out of those speakers." By contrast, Burgess and Block at

# LUX R-1070



## DON'T JUST HEAR ABOUT LUX SUPERIORITY... LISTEN TO IT — THE R-1070 TUNER/AMPLIFIER

Lux starts its outstanding performance by featuring a Direct Current "Realtime" amplifier section for brilliant highs, sonorous lows and clear, clean transients. Our Realtime Processing eliminates time lags in the audio waveform by removing all coupling capacitors which are the major cause of phase shift and transient distortion.

The Lux R-1070 incorporates a special output configuration called EBT (Emitter Ballast Transistor) which displays excellent linearity and removes all forms of DC drift (the only drawback of Direct Current).

In the preamp, Lux's Negative Feedback tone controls shape sound and eliminates Phase Distortion. Also featured is an automatic variable loudness control for low level listening.

Lux FM tuner design includes a dual gate MOSFET in the front end and a specially designed Phase Lock Loop MPX IC insuring low stereo distortion, excellent separation and high S/N characteristics.

Another tuner feature, the IF bandwidth selector, provides optimum performance by increasing selectivity (narrow bandwidth) and S/N ratio (wide bandwidth).

Combine these features with a power output of 75 watts per channel, minimum RMS, both channels driven at 8 ohms from 20-20,000Hz with no more than 0.015% THD.

Remember that specifications constitute but one part of product excellence, the more important factor being the listening experience.

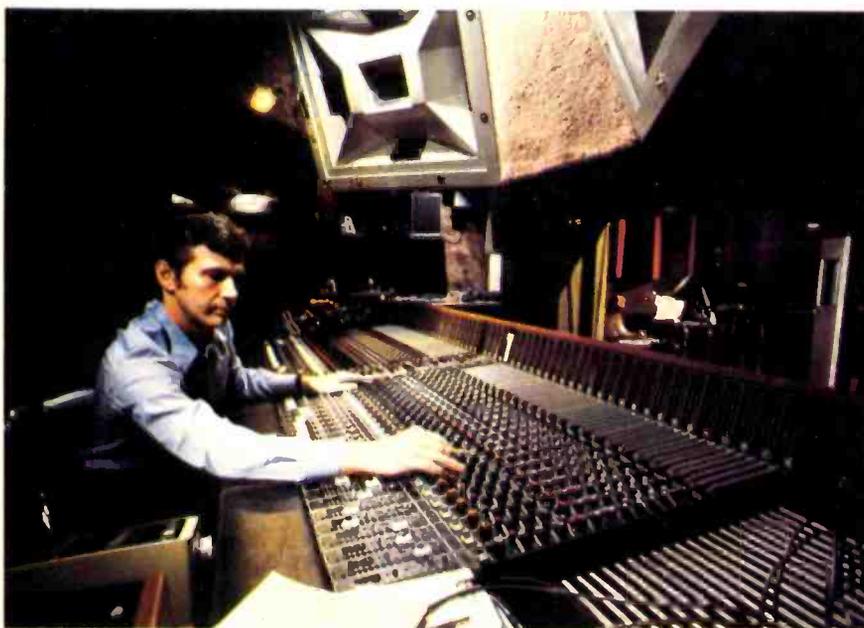
Visit your Lux dealer for this listening experience. And while you're there, look at other Lux tuner/amplifiers in this series...the R-1030 with 30 watts output, the R-1040 at 40 watts, R-1050 at 55 watts and R-1120 at 120 watts.

Lux superiority is available in all components to fit your own special needs and budget—and incorporates sonic excellence in design to provide you with the best in listening.

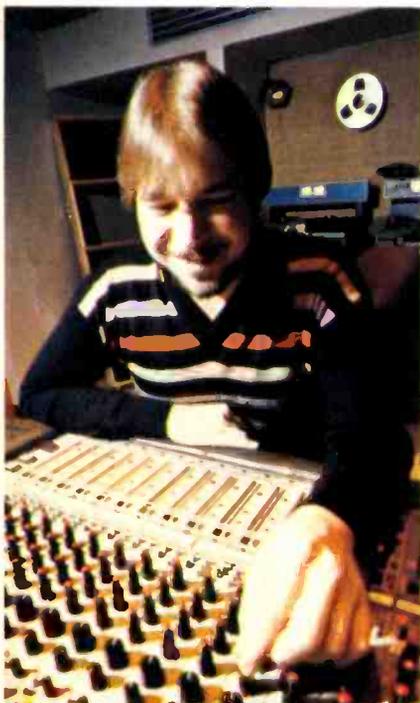


**LUX AUDIO OF AMERICA, LTD.**

160 Dupont Street  
Plainview, New York 11803  
In Canada: Lux Audio of Canada, Ltd., Ontario.



Midney's huge, custom-built speakers are spring suspended over his 48-track board



Deejay Jim Burgess does a remix at Sigma Sound. . .



assisted by engineer Gerry Block

Sigma Sound mix on a twenty-four-track automated board, but with tiny, modified ADS 300 speakers, because, as Block said, "if the balance sounds right on them,

you know it's right."

Midney has designed his studio to be sonically "dead" all the way around. When he struck a low chord for me on the

nine-foot Steinway grand, its fullness and resonances were incredibly palpable. Movable baffles create small isolation rooms for the drums and congas, and they can also be used to alter the room sound and create room ambience, of a sort, when needed.

Midney's "Beautiful Bend" album features inventive, slightly avant-garde washes of strings, juxtaposed with his own fluid alto sax solos and Larry Washington's thick and rich congas. The album struck me as original when I first heard it, and Boris told me that "I never repeat my own techniques. When you do, you lose freshness. It was always my dream to write songs longer than 3½ minutes, to take a symphonic approach. When you give people good quality and innovation, they are in a 'listening position' and are more receptive to what follows, especially while dancing."

He showed me a large manuscript notebook in which he sketches out his ideas for a project. He'll often work things out himself on drums, bass, and piano, changing parts as he goes, experimenting with grooves on the rhythm section level. "We do a certain amount of mixing as we progress through a session," he said. "I try to get subtly different sounds on all the instruments. To me, disco is emotional, feeling music, in a way that most rock hasn't been for years. I'm not working in formulas, however. For example, I've been producing a self-contained band lately, and my primary question—since they're all good musicians—is, 'Are they original?' You see, I don't believe in so-called 'natural sounds.' As soon as you put a mike in front of an instrument, the result on tape is immediately 'unnatural.' What I am concerned with are beautiful and original sounds and the feelings they create." Midney's studio, being one of the few forty-eight-track facilities in this country at the moment, has understandably been swamped with requests for recording time.

Like rock in the late '50s, disco seems to be poised on the brink of tremendous long-term expansion. And it will be bringing with it a plethora of new talent, some of whom we've talked with here. Next month we'll be focusing on the disco recording session and the artist/producer relationship. In the meantime, shake your groove thing, yea, yea. 🎧

# Unboxed Sound

## minimum diffraction loudspeakers™ by Avid.

In the quest for accuracy, cabinet loudspeakers, regardless of price, still generally suffer from a common failure—they still sound like loudspeakers, or more precisely their sound obviously comes from a box.

### Your brain hears the box.

Without going too deeply into psycho-acoustics, cabinet speakers tell us their sound is emanating from a box because the brain has been conditioned to recognize the characteristics...size, shape, etc....of any sound source.

What creates the boxy effect? Diffracted or reradiated sound waves, those that bounce off the sharp edges of the speaker and grille assembly, are the clues interpreted by the brain as "box-like."

### Less diffraction, less box.

The problem is graphically illustrated in the drawings. By eliminating sharp cabinet edges and grille panel obstructions, you reduce diffraction effects...which means you reduce the boxiness of the sound. And that's exactly what we've done with our new line of Avid Minimum Diffraction Loudspeakers.™

### To open the box, we closed the cover.

The solution was deceptively simple.

By engineering the drivers, cabinet enclosure and, importantly, the grille assembly to create a totally integrated acoustic system, we reduced cabinet diffraction and the boxy sound quality inherent in typical cabinet loudspeakers.

Our new tweeter and midrange drivers have specially engineered coupling devices (we call them Optimum Dispersion Couplers™) which transmit sound waves with minimum diffraction.

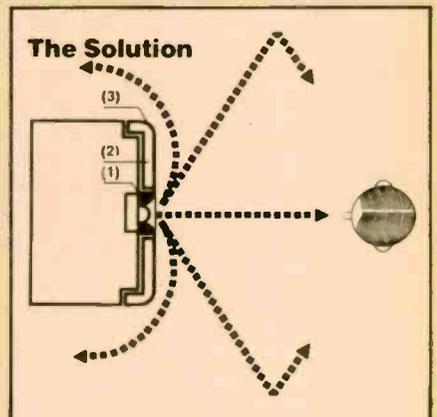
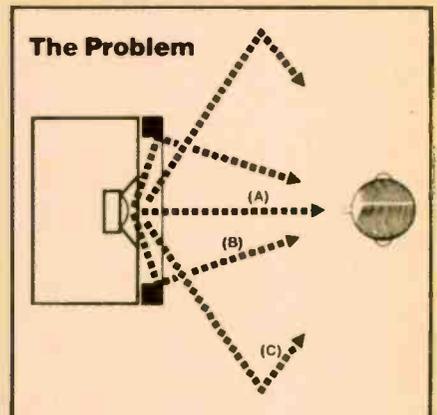
"Solid front" grille panels perfectly mate with each coupler eliminating grille panel diffraction. And, the grille panels have rounded edges creating a smooth, gradual transition from the grille to the cabinet, significantly reducing cabinet edge diffraction—a major cause of boxy sound.

These three simple, but audibly significant, features, coupled with Avid's critically acclaimed accuracy, assure you a new level of performance and sense of reality.

Of course there's a lot more to the Avid story—like our new drivers and Q-Span testing. Write us for literature and a full description. We invite your comparison.



Unwanted cabinet/grille diffraction effects (B) give listener clue as to the size/shape of sound source—in this case a box. First arrival signals (A) locate source, while brain uses delayed room reflections (C) to identify listening environment.



The careful integration of special engineered Optimum Dispersion Couplers™ (1), and solid front grille panels (2) with rolled edge design (3), significantly reduces unwanted cabinet diffraction effects—a principal contributor to "boxy" sound. These design principals are incorporated in all Avid Minimum Diffraction Loudspeakers™.

**AVID**

10 Tripps Lane  
East Providence  
R.I. 02914

# FISHER INTRODUCES THE RECEIVERS THAT LISTEN TO YOU.

Ever since 1937, when Fisher introduced the world to the first high fidelity system, we've been constantly looking for ways to make sound even better.

One of our biggest improvements came in 1959 with the world's first stereo receiver — the famous Fisher 500.

Now, we proudly announce our latest major advance: the all-new RS2000 Studio Standard series — the receivers that listen to you.

**Sound the way you like it.** With the RS2000 series, you're not limited to only simple bass and treble controls like other receivers. Instead, you tell the receiver exactly how you want the sound tailored by setting its built-in graphic equalizer's slide controls. By boosting or cutting each of the five equalizer controls, you can transform ho-hum sound into the most exciting you've ever heard. You get sound that exactly matches your taste, your moods, and your environment.

Say you want to really feel the drums on a disco record. Just push up the 50 Hz (low bass) slider, and you get just the effect you want — without disturbing the tonal color of voices and other instruments. Want to really bring a vocalist "up front"? Add a little 1 kHz (midrange) boost. And so on. In a few seconds, you can make such a dramatic improvement in the sound of all your records, tapes, and FM broadcasts that you won't want a receiver without this fabulous built-in feature.

**There's logic to our front panel.** Most sophisticated receivers keep you guessing when it comes to operating the controls. Not the Fisher RS2000 series. We've engineered a unique "Panel Logic" system with an illuminated, computer-like display that tells you at a glance what the receiver is set up to do.

The RS2010, below, has great performance specs like superb 1.7  $\mu$ V (9.8 dBf) FM sensitivity, and plenty of power (100 watts min. RMS per channel, into 8 ohms, 20-20,000 Hz, with no more than 0.09% total harmonic distortion). Other models are available from 30 to 150 watts per channel.

Listen to the Fisher RS2000 series receivers. Once you do, you'll never be satisfied with the sound of a receiver without an equalizer.

The RS2010 is about \$700\* at selected audio dealers or the audio department of your favorite department store.

For a copy of the new Fisher guide to high fidelity, send your name and address and \$2 to: Fisher Corporation, Dept. H, 21314 Lassen St., Chatsworth, CA 91311.

\*Manufacturer's suggested retail value. Actual selling price is determined solely by the individual Fisher dealer.

 **FISHER**

The first name in high fidelity.



## Space Age Pop by Stephen Holden

This past year, the cycle of American popular music that began a quarter of a century ago with the birth of rock & roll and culminated in the late Sixties drew to a close with the disco deluge. Martin Scorsese's brilliant movie *The Last Waltz* served as a moving epitaph to an era in which electrified American roots music evolved briefly into an art form. The film romantically portrayed the rock elite as a dying breed of hard though ravaged pioneer poets, wise beyond their years, exhorting a religious vision of American democracy in the full knowledge that their ritual was obsolete.

Of course, rock isn't dead, only assimilated. It was part of a broader technological/cultural revolution that has also reached the end of a cycle. The rise of rock was the inevitable result of high fidelity and guitar amplification, and of the mass media fusing isolated regional/ethnic wellsprings into an exportable national pop music. In the Sixties, high fidelity grew from a luxury into a ubiquitous environmental fact. The song became a subliminally perceived sound artifact, and the recording studio expanded into a starship console.

Since Western Europe boasts no vital folk traditions that haven't already been absorbed into its symphonic tradition, we can expect no European mythology to animate our pop. And while rock neopurism has produced the New Wave, the movement is too self-consciously aestheticized for mass appeal. It's also too downbeat. Rock's popularity had a lot to do with its optimistic vision. In the New Wave, that vision has narrowed to a stance of defiant self-assertion in a world assumed to be hopelessly dog-eat-dog.

With rock stripped of its religious aura, pop's utopian impulse has been picked up by disco. But disco is itself part of the larger emergent international "space age pop" defined by Donna Summer, the Village People, the Bee Gees, and Abba. Though this European-oriented style has plenty of Afro-American trimmings, its vision is futuristic. Whereas rock used technology to resurrect the past, and its rhythms were blues-based and rooted in the rural work song, space age pop fantasizes a future in which human beings and machines are interchangeable; not only the sound, but the rapid regularity of its pulse is electronic.

Rock always implied a standoff battle between man and machine. Jimi Hendrix and the Who eloquently underscored the irony of using technological amplification to defy technocracy by literally assaulting their instruments. Whereas rock reveled in earthy "gutsy" sound, space age pop revels in high-frequency astral display and shows no interest in aping rock's amplified naturalism.

**T**he essential instrument of space age pop is not the guitar, but the synthesizer—the musical equivalent of the computer. Instead of the solo performer pitted against his instrument, the new maestro is the producer, a sort of computer programmer who can select the sounds he wants from an automated console. Whereas rock valued spontaneity as a sign of naturalness, space age pop values calculation as a sign of efficiency. The spiritual assumptions underlying rock were a trust in emotion and a belief that the path to self-realization lay in the rediscovery of our past; our ability to handle technology was tacitly understood.

Space age pop is no less utopian, though its vision is almost the complete opposite of rock's hip pastoralism. It conjures up a sensuous heaven in which we are biologically perfect specimens living happily ever after; a technological phantasmagoria where the machines take care of themselves. Disco is its religious ritual—an erotic rite exalting physical/technological efficiency—and its myths, like Superman, are commercially manipulated images of the man/machine ideal not rooted to the life cycle.

In this brave new world, Donna Summer and the Village People are larger-than-life erotic totems—human toys in perfect working order—and life is an advertiser's dream come true, a science fiction *La Dolce Vita*; we are all literally "living dolls." Abba and the Bee Gees preside over the spiritual side of this utopia as hip surrogate parent/teacher/older sibling figures, angelic overseers in this combination day-care center/disco toyland. Here there's no violence, illness, old age, or death. In fact, there's no real tragedy at all, and everyone is a star. Superman meets the Bionic Woman in the Star Wars Computer Disco, and they clone themselves unto eternity. We are no longer human. ♪

## THE B&W DM2/II. A CLASSIC IN EVOLUTION.



Despite the almost daily claims of revolutionary breakthroughs, loudspeaker design is basically an evolutionary process.

Consider the new B&W DM2/II, for example. When its predecessor, the original DM2, was introduced several years ago, it was widely acclaimed as a classic of impeccable design and outstanding performance.

### In pursuit of excellence.

Since that time, however, B&W's unparalleled research and development program has yielded new and fascinating insights into virtually every aspect of speaker design and performance.

From these uniquely innovative studies has emerged a completely new design of surpassing accuracy, the B&W DM2/II.

Each driver of the DM2/II has been designed for exceptionally smooth response over its entire operating range. The crossover is a computer calculated nineteen element network employing true third order Butterworth filters that result in significantly lower intermodulation distortion and exceptional phase and amplitude characteristics.

### Listening. The final proof.

Listening to the B&W DM2/II is, quite simply, a revelation. It produces completely natural, uncolored sound of extraordinary clarity and depth. Moreover, its modest size and elegant appearance permit advantageous placement in almost any listening area.

As with all B&W loudspeakers, each DM2/II is individually tested and shipped with its own proof of performance chart recording.

However, the ultimate proof of performance is in the listening. Your B&W dealer invites you to audition this classic contribution to the evolution of speaker technology and decide for yourself.

For additional information write: Anglo-American Audio Co., Inc., P.O. Box 653, Buffalo, N.Y. 14240. In Canada: Remcron Electronics Ltd.

## B&W Loudspeakers. The next step up.

# Philip Glass: Too Cerebral to Be Musical?

by Don Heckman



Philip Glass

## Philip Glass & Robert Wilson: *Einstein on the Beach*

Philip Glass & Kurt Munkacsi, producers.  
*Tomato Tom 4-2901 (four discs)*

Is the record-buying audience ready for 163 undiluted minutes of Philip Glass's music? Tomato Records seems to think so, and with the damn-the-torpedoes-full-speed-ahead attitude with which they have begun to release John Cage's and other, similarly unusual composers' recordings, the company has just issued a boxed, four-record set of the music from Glass's remarkable theater collaboration with Robert Wilson, *Einstein on the Beach*.

Glass is perhaps the best-known composer in what passes these days for the avant-garde, and he has developed a respectable audience among many young fans of "fusion" and "crossover" music. This may well be because the repetitive, trancelike qualities of his pieces create a comfortable environment for drug-motivated tripping of one sort or another. But what seems like interminable length in much of his work is appropriate for Wilson's massive theater pieces, some of which run continuously for days at a time.

For those who were present at the performances of *Einstein* (it toured Europe in 1976 and had two soldout performances at the Metropolitan Opera later that year), the recording will surely evoke the bizarre, dreamlike images intrinsic to Wilson's work. For those who did not see it (as I did not), the music must stand on its own. To help things along, a handsome, well-written booklet describing the work and analyzing its musical elements (in a section written by Glass) will fill in some of the gaps.

Listening on a gut basis alone—without preknowledge, without reading the accompanying material—*Einstein*, like Glass's other pieces, is an emotionally engulfing experience, at times lulling, at times irritating in the extreme. There are, to be sure, more contrasting elements here—from spoken narrations to changing instrumental textures—than in previous works. But casual listeners who are unwilling to commit their psyche to the full wash Glass demands will find it hard to stay with him.

Yet Glass would have us believe that he is concerned with reaching a large audience. He writes that he is reaching for an "... idiom which is, hopefully, accessible to a general public. ..." His percep-

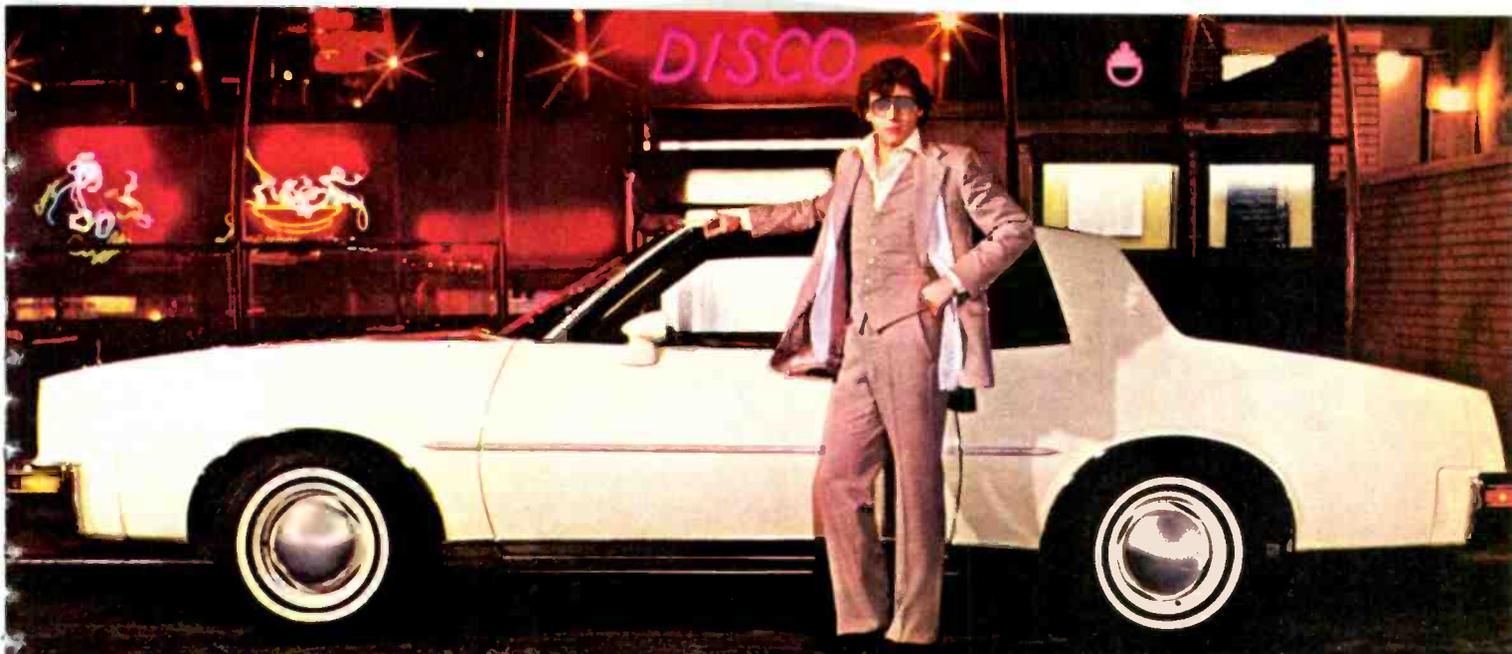
tion of accessible, however, is not exactly on a level of *Mork and Mindy*, for instance. But we could use a few more composers who sing to the accompaniment of their own muses. And, while he may not be particularly commercial these days, I have no doubt that the techniques he uses eventually will find their way into forms that a wider audience can understand—though not necessarily in their present context.

My problem with *Einstein* is these very techniques. It would be inaccurate to call Glass a minimalist, though he does start with minimal elements. Compared to some of the true minimalists, he is a composer in the traditional sense. He takes his rudimentary elements—fragments of rhythmically derived melody, fundamental (and often quite ingenious) harmonic sequences, and passacaglia-like long tones—and submits them to mercilessly repetitive examinations. Over and over they are played, notes are added, then taken away; rhythms conflict, then combine, then creep into conflict again; textures change and evolve. A trancelike effect may well be what Glass intends, but too often it sounds overly controlled and obsessively intellectual. The methodology, in short, is too obvious and too important. Techniques, methods, and theory, should be the foundation from which music grows. In Glass's case they seem to represent an end in themselves.

What I do like about *Einstein* is, curiously, its most traditional elements. Glass is not afraid of melodies and often produces delightful, albeit short, ones. He is perfectly willing to use dramatic-the-matic elements for character identification and description. (The train music that evolves into a spaceship at the work's climax would do Duke Ellington or, for that matter, Harry Partch proud). He understands the powerful dramatic impact that can be produced by sudden changes of rhythm and melody. These are qualities we would expect in Verdi or Puccini: to find them in a contemporary composer identified with the avant-garde is, to say the least, refreshing.

My reservations aside, I suspect that *Einstein on the Beach* will be a significant contemporary work. An initial part of that significance will derive from its presence on a nationally distributed label and its acceptance by a number of the more widely circulated music critics.

Continued on page 83



## THE SPARKOMATIC SOUND. CAR STEREO FOR THE TRAVELIN' MAN WITH EARS OF EXPERIENCE.

Until now, comparing car stereo to home stereo was like night to day. Auto sound equipment was completely in the dark. Powerless to produce serious audio reproduction. Hopelessly lacking in high fidelity specs. For a travelin' man with *ears of experience*, this was the pure "pits".

But that's all over now. Now that Sparkomatic has introduced its radically new High Power Car Stereo series. With exacting high performance high fidelity credentials. Tuners with exceptional FM sensitivity; credible multipath signal rejection; superb separation; integrated cassette or 8-track with virtually inaudible distortion and unnoticeable wow and flutter.

The power: a bone shaking 45 watts.

Sparkomatic's SR 3300 High Power AM/FM Stereo with Auto Reverse Cassette has some other impressive high fidelity touches as well. Like *feather touch* electronic controls and sophisticated tape handling capabilities. All told, a component-looking package that delivers faithful high fidelity pleasure in its *purist* form.

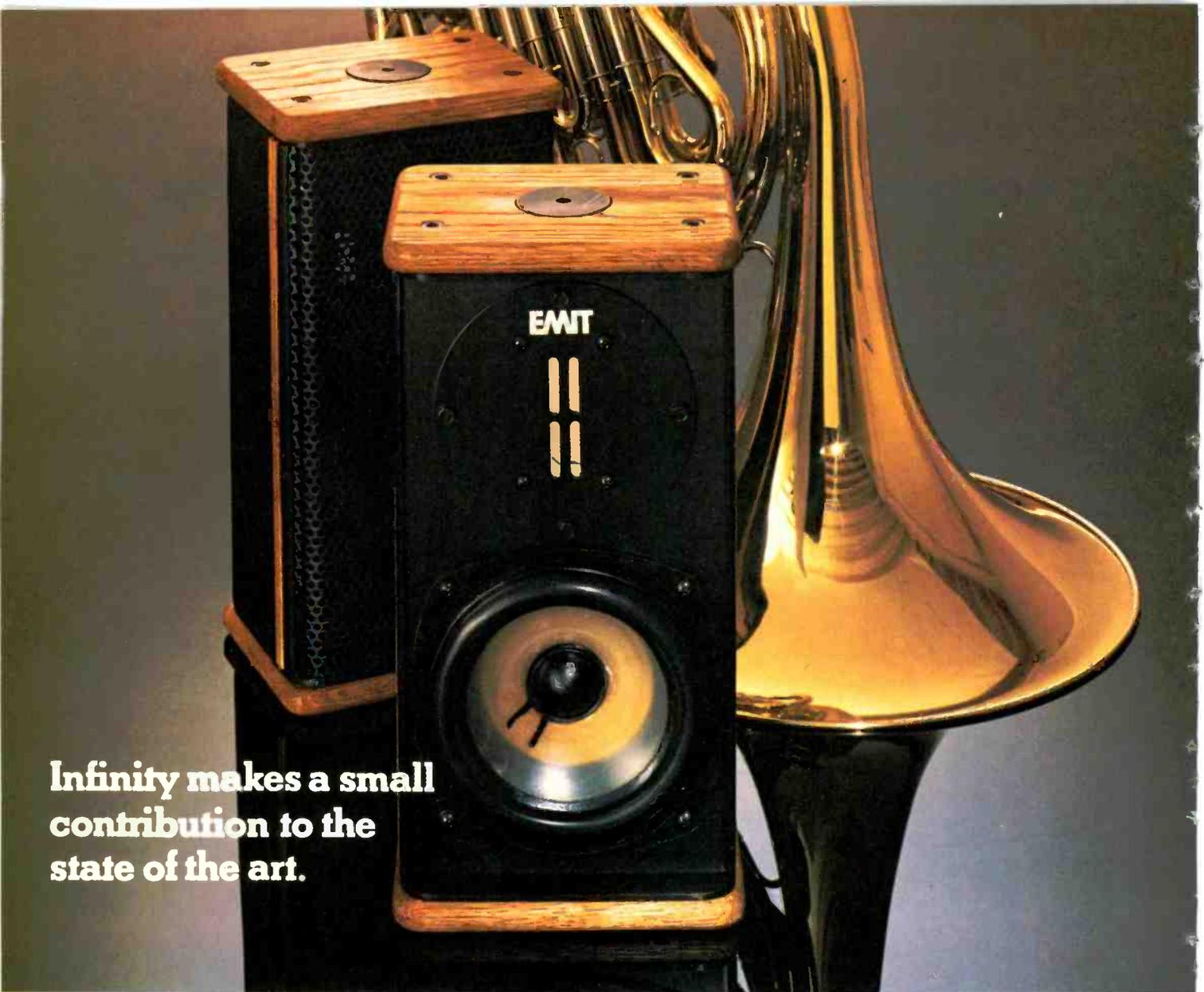
And Sparkomatic High Fidelity Speakers complete a car sound system that produces the highest form of *erotic* experience.

Visit a Sparkomatic dealer and get a Sparkomatic high power car stereo demonstration soon.

**SPARKOMATIC**

For the Travelin' Man™

For our free catalogs on Car High Fidelity write: "For The Travelin' Man", Dept. HF, Sparkomatic Corporation, Milford, PA 18337



**Infinity makes a small contribution to the state of the art.**

## **InfiniTesimal!™**

Here's everything you'd expect from Infinity. (Except the size, 11 x 6½ inches.)

Here's the unparalleled clarity, warmth and smoothness of our larger speakers; inner details you never heard before from favorite recordings; and imaging so accurate you could actually place where people are coughing in the audience.

### **The dual-voice-coil advantage in an advanced 5-inch woofer.**

Our exclusive Infinity/Watkins Woofer<sup>†</sup> uses dual-voice-coils to smooth out and extend bass response. And it lets your amplifier develop more power at low frequencies than any other mini

speaker. All this—and our highly-acclaimed EMIT™ Electromagnetic Induction Tweeter, too!

### **The end of paper cones and their distortion**

Because paper and exotic plastic cones create vibrations of their own, adding unacceptable colorations to the music, InfiniTesimal introduces a superior new cone material: polypropylene.

It adds essentially no sound of its own, being almost perfectly acoustically inert. Its low mass and ideal damping characteristics result in dramatically improved musicality.

InfiniTesimal. In total—a small, magnificent 2-way system with

unusual musical warmth, focus and transient attack. At about \$175\* each, a mini-speaker of uncompromising quality and accuracy for your home or vehicle.

True Infinity sound. From a definitely finite space.

<sup>†</sup> Manufactured by Infinity under license from Watkins Engineering, Inc.

\*Suggested retail price, optional with dealers. Slightly higher east of the Mississippi.

 **Infinity™**

*We get you back to what it's all about. Music.*

A toll-free call to (800) 423-5244—or from California, (800) 382-3372—will get you the nearest Infinity dealer's name and address.

© 1979 by Infinity Systems, Inc., 7930 Deering Ave., Canoga Park, CA 91304. (213) 883-4800.

**Flash and the Pan**

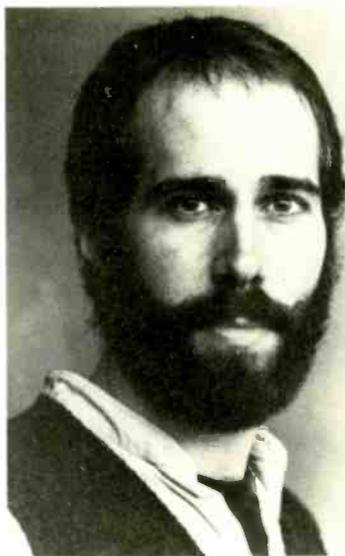
Harry Vanda & George Young,  
producers. Epic JE 36018  
by Ken Emerson

Not for nothing is one of the bands that Harry Vanda and George Young currently produce named A.C./D.C. These Aussies are past masters of having it both ways. As the leaders of the Easybeats, they had a delightful international hit, *Friday on My Mind*, way back in 1966, and the album they released in the States the following year was at one and the same time a celebration and a sendup of the pop music of that trendy time. Vanda and Young were most conspicuously under the influence of the Kinks (whose producer, Shel Talmy, they shared), but they stole stratagems from all the shock troops of the British Invasion. The guitars made little pretense of being in tune or the vocals of being on pitch, and the nah-nah-nahs in the background sounded suspiciously like derisory nyaah-nyaah-nyaahs. One song—*Made My Bed, Gonna Lie in It*, which began, “Tried so hard to be a man”—even hinted darkly at the sexual ambiguity that has come into full flower on “Flash and the Pan.”

The music is manic on “Flash and the Pan,” and the lyrics are depressive. Vanda and Young, who wrote all but one of the songs and play every instrument except drums, cheerfully exploit every pop-music cliché coined in the last fifteen years while Young’s muffled, deadpan vocals pile perversity upon apocalyptic perversity. The contradiction is creepy and catchy at the same time, suggesting an unholy alliance between Lou Reed and 10cc.

Keyboards—synthesizer, rollicking piano, and an organ that is sometimes churchy, sometimes cheesy—predominate in the instrumental mix, and the arrangements are unfailingly engaging. The swooping violins on *Hey, St. Peter* are especially witty as they parody a giddy disco climax. But the most striking song, *Walking in the Rain*, is the starkest. Only a distant electric bass, ominous synthesizer chords, and a percussive “chick-chick” that could be footsteps dramatize the description of an alienated homosexual cruising for disaster.

As its title suggests, “Flash and the Pan” may be a one-shot performance by two producers already at work on other projects, but the album casts an eerie and captivating glow.



Hall—a virtuoso guitar rocker

**John Hall: Power**

John Hall, producer  
Columbia ARC JC 35790

**Orleans: Forever**

Orleans & Roy Cicala, producers  
Infinity Inf 9006

**by Crispin Cioe**

Orleans always had a niche of its own in the pop/rock pantheon, especially with songs like *Dance with Me* and *Reach*. Although never a consistent Top-20 hit-maker, the band came across with an appealing and sincere lushness through its own brand of blue-eyed soul cum latter-day rock & roll hoedown. Combining beauty with commercial viability, you’d have thought Orleans had it knocked.

But oddly enough the band broke up in 1977, with founder John Hall re-emarking on a solo career. (He made one solo album in 1970.) Now, both he and a re-formed Orleans have new albums, and, in retrospect, it’s not so odd that they parted company. Hall’s credits as a writer (*Half Moon*, for Janis Joplin), producer, and musician (touring and recording with Taj Mahal) prior to Orleans made the band largely a forum for his compositions and strong guitar work. Yet it was clear that others in the band also wrote and wanted to grow. Ultimately the double standard could not prevail.

The new Orleans, one of Infinity’s first signings, retains a good deal of its original lushness, especially on the single, *Love Takes Time*, which has already cracked the pop charts. It’s all there on this tune: the rich, layered keyboard fab-

rics, the optimistic lyrics and believably sweet harmonies. Even without Hall’s compositions, Orleans knows how to retain its traditional identity with ease. And yet, the focus of the rest of “Forever” tends to wander, mainly because in true democratic spirit, it features songs and lead vocals by various group members. Pianist Bob Leinbach tends toward real New Orleans r&b, and his *Keep on Rolling* is convincing that way. He shows a more than passing acquaintance with Professor Longhair, the dean of this rolling piano style. New member and multi-instrumentalist R. A. Martin has been a studio musician on some of Gamble & Huff’s Philadelphia productions. He weighs in with a lyrical rock/soul influence in his singing and writing (*The Flame and the Moth*), and in his brawny, melodic sax solo. A couple of collaborations, most notably *I Never Wanted to Love You* (by Leinbach, Larry Hoppen, and Marilyn Mason), are very much easy-listening ballads.

The group can certainly handle these different styles, but by the same token, it hasn’t yet transcended its eclecticism and influences to emerge with a new style (not that I was unhappy with its “classic” style). Still, it is growing musically while smartly retaining recognizable links to its past, and if it continues to do so, it will soon reach the same bracket as those current champions of smooth rock, the Doobie Bros.

John Hall doesn’t have an easily identifiable sound to fall back on, so he has cast his lot farther afield on his solo effort. Stylistically, “Power” runs the gamut from heaved-up guitar funk (along the lines of Dave Mason’s more recent work) to rock/reggae fusion (on *Heartbreaker*). Hall’s voice is pleasant enough, although somewhat limited in range. On the title cut, he blends beautifully with James Taylor and Carly Simon, and his reading of the updated *Half Moon* reveals more of the spunky, cheerful energy he and wife Johanna intended in its conception. As writers, the couple deals sensitively with issues like drug burnout on *Cocaine Drain* and the threat of nuclear energy on *Power*: “I know that lives are at stake/Yours and mine and our descendants in time/With so much to gain and so much to lose/Everyone of us has to choose.”

Hall’s trump card is still his guitar playing. He is a virtuoso rocker, playing with a fluid ferocity that has become the hallmark of upstate New York-based rock



## fact: the IV does more... much more!

Era IV begins! The new Shure V15 Type IV phonograph cartridge is an altogether new phono cartridge system that exceeds previous performance levels by a significant degree — not merely in one parameter but in totality. The Type IV offers:

- Demonstrably improved trackability across the entire audible spectrum.
- Dynamically stabilized tracking overcomes record-warp caused problems, such as fluctuating tracking force, varying tracking angle, and wow.
- Electrostatic neutralization of the record surface minimizes clicks and pops due to static discharge, electrostatic attraction of the cartridge to the record, and attraction of dust to the record.
- An effective dust and lint removal system.
- A Hyperelliptical stylus tip configuration dramatically reduces both harmonic and intermodulation distortion.
- Ultra-flat response — individually tested.

### V15 Type IV SUPER TRACK IV™ Stereo Dynetic® Phono Cartridge

For complete details on this remarkable new cartridge write for the V15 Type IV Product Brochure (ask for AL569) and read the exciting facts on the V15 IV for yourself.



Shure Brothers Inc.  
222 Hartrey Ave., Evanston, IL 60204  
In Canada:

A. C. Simmonds & Sons Limited  
Manufacturers of high fidelity components, microphones, sound systems, and related circuitry.



**Hunter—too much parody**

musicians. His solos and fills, often voiced in lightning-fast thirds, are always attention-grabbers. Like Orleans, when Hall's singing and direction coalesce, he'll be eligible for major recognition.

#### **Ian Hunter: You're Never Alone with a Schizophrenic**

*Mick Ronson & Ian Hunter, producers  
Chrysalis CHR 1214  
by John Storm Roberts*

Mott the Hoople was one of the more intelligent British bands of its time, and there's a good deal of that intelligence in former leader Ian Hunter's third solo album, which comes after a two-year silence. "You're Never Alone with a Schizophrenic" is fairly typical late-'70s fare, with loving but faintly parodic evocations of the instrumental and melodic styles of the '50s and '60s coupled with sour and disillusioned lyrics. The effect is a strange boundary-blurring, like a haute-cuisine hamburger.

For sustained and simple power, the best track is *Standin' in My Light*, a pseudo-tough and bitter piece backed by heavy drumming, long organ chords, and slightly bluesy piano. The same "you can't hurt me even though you broke my heart" overtones are even stronger in the following cut, *Bastard*, to which heavy blues/rock keyboards give a nagging toothache edge. Impressive. *Ships*, whose sound echoes *Whiter Shade of Pale* and whose melody echoes contemporary Beatles, almost makes it. But too much parody both



**Royce and Jeannie Kendall**

in the arrangement and in the lyric writing bring it down. A pity, for Hunter is particularly good when performing the slower material.

The uptempo cuts are more parodic, more glib, and less ambitious. The oo-oo Beach Boys harmonies of *When the Daylight Comes* have charm. So do the Fats Domino piano and sax of *Just Another Night* and *Wild East*. But their lyrics aim for the meaningful and too often fail to make it.

A return to classic styles can often bring about a renaissance, but this doesn't happen here. In too many tracks, the Golden Age sensibility upstages the 1970s material, so that Hunter ends up used by what he's trying to use. In fact, "You're Never Alone with a Schizophrenic" works best when Hunter acts as revivalist, not as creator.

#### **The Kendalls: Just like Real People** *Brien Fisher, producer. Ovation OV 1739* **by Todd Everett**

It's not often that you find a father and daughter recording together these days, and, if the Kendalls are any indication, the practice bears further investigation. This isn't a close-harmony duo, and father Royce Kendall's contributions are not particularly obvious. Instead, Jeannie's strong, airy mountain voice (not unlike Dolly Parton's) is the focal point, and Royce's vocal bobbing in and out of the background sounds a little like what bluesman Jimmy Reed's wife used to do.

# fact: viscous-damping straightens out all your records



*your favorite record may be a tangle of warps*

Your phono cartridge "sees" such records as twisted, heaving surfaces, jolting up and down 0.5 to 8 times a second. Even records that look flat have warps, and a warped record can change the cartridge-to-record distance, the tracking force, and the vertical tracking angle. Warps produce frequency "wow" and distortion, and can dangerously overload speakers and amplifiers.

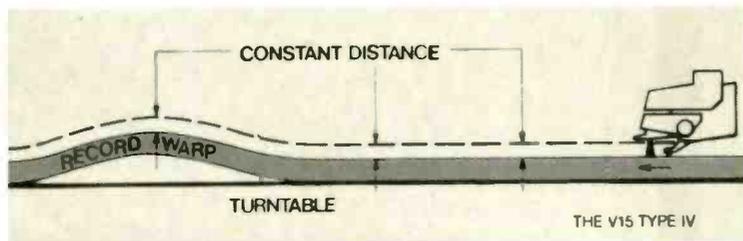
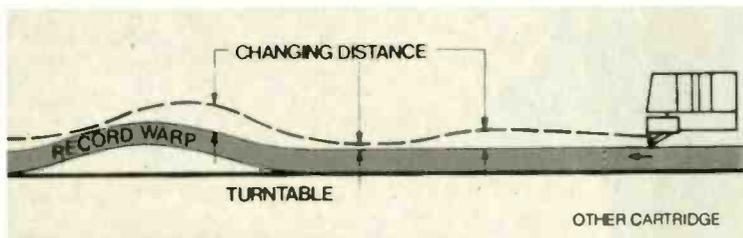
What's more, somewhere between 5 and 15 Hz, every tone arm-cartridge system has a resonance frequency—a frequency at which a warp will produce an exaggerated response that may result in mistracking and in extreme cases, cause serious damage to both the record and stylus.

The Shure V15 Type IV is the first cartridge in the world to incorporate effectively the principles of viscous damping. The Dynamic Stabilizer acts something like a "shock absorber," carrying the cartridge over surface irregularities without distortion, without bottoming out, and without risk of damage to records or stylus. It even protects the stylus should it be dropped accidentally onto the record.

## the role of the Dynamic Stabilizer:

The V15 Type IV's Dynamic Stabilizer makes certain you hear the recorded information, not the warps. The viscous-damping system of the Dynamic Stabilizer resists rapid changes in the cartridge-to-record distance. This remarkable Shure innovation eases the stylus over warps without affecting the tracking force on warped or unwarped portions of the record. And the tone arm-cartridge resonance is attenuated to a subaudible level. As a further bonus, the Dynamic Stabilizer cushions the stylus from accidental impacts.

Get the straight talk today at your dealer's showroom. Ask for a free demonstration of the V15 Type IV.



**V15 Type IV**  
the viscous-damped cartridge by...



Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204, In Canada: A. C. Simmonds & Sons Limited  
Manufacturers of high fidelity components, microphones, sound systems and related circuitry.

The duo's material is culled from the usual Nashville new guard (Sonny Throckmorton, Don Schlitz, Bob McDill), the old new guard (Jerry Foster, Bill Rice), and Miss Kendall herself. It's simple, generally hummable, and direct—particularly the sexy, inviting *I Had a Lovely Time*.

All of this is set off by a tasteful production approach that uses acoustic lead guitar and some of the clearest, cleanest picking to be heard on any Nashville record in recent years. The players, like the writers, are an appealing combination of the new and the established: guitarist Fred Carter Jr. (whose work brightened many Simon and Garfunkel records, among others), keyboardist Ron Oates, and steel guitarist Sonny Garrish. Whoever decided to give Carter the extra choruses on *Love Is a Hurting Thing* deserves his own 1979 Country Music Association award.

The Kendalls kicked around for several years before coming up with the hit *Heaven's Just a Sin Away* a couple of years ago. Since then, they've had a number of fine, underproduced, and tasty successes. May that number multiply, and may father Royce never listen closely enough to discover what daughter Jeannie is singing about.

#### Evelyn "Champagne" King:

##### Music Box

T. Life, producer. RCA AFL 1-3033

by John Storm Roberts

No, Granny, everything doesn't sound the same these days, disco fever or no disco fever. There are still black producers like T. Life who can create a very tight, very irresistible, very commercial sound that is full of disco trimmings but also preserves black music's drive and humanity.

Of course, it helps to have a singer whose voice can do the same kinds of things. Evelyn "Champagne" King's can, and she pays it out dime by dime without wasting any of it. She makes *Music Box* seem tight and relaxed at the same time, as if squaring a circle. She puts gusto into *Let's Start All over Again* and backs it with intelligence. And she approaches both with initial reserve, allowing room for that slow building process that creates a stand-out. On *Steppin' Out*, the LP's best track, she casts off the wraps to reveal her dy-



Evelyn "Champagne" King



Parker—coming into focus at last

namic, emotional, and sonic range, as well as the special rhythmic sense that separates the singers from the mere vocalists. *Steppin' Out* is just marvelous: it even survives the stupidity of having been split into two parts, one to a side.

"Music Box" provides evidence that, despite the regurgitated schlock by dollar-happy garbage heads, despite the

growth of a middle-class soul that sounds like a Kleenex commercial, despite endless flatulent productions and cotton-candy chic, the soul of the music hasn't disappeared. It just takes some tracking down. Which, being realistic, it always did.

#### Graham Parker and the Rumour: Squeezing Out Sparks

Jack Nitzsche, producer. Arista AB 4223  
by Crispin Cioe

There is brilliance in Graham Parker. But while he's made some great music in the past ("Heat Treatment" was, for me, the strongest rock & roll LP of 1976) his "image" has never been very clear. "Squeezing Out Sparks," his Arista debut, obviously is meant to refocus the image in sharper detail via Jack Nitzsche's pared-down production, thick with Martin Belmont's rhythm guitar. What emerges is, indeed, a clear portrait of the artist as a slightly older young man—a reintroduction to an unflinching, authentically raw and emotional talent.

Self-castigation (but not self-pity) and irony are the primary colors in Parker's scheme of things, with the Rumour (which includes past members of Brinsley Schwarz and Ducks Deluxe) never letting the power slip from his dense lyric patterns. *Nobody Hurts You*, for example, is a vivid portrayal of how Parker has clashed with the music business and its machinations. The song is rife with lines like, "Hey baby, I'm out of favor/ Can't always be/ The right flavor." But the singer isn't feeling sorry for himself, for in the chorus he drives his real point home: "Nobody hurts you harder than yourself." This lyric coupled with Schwarz's nagging, insistent guitar line make for great rock & roll pure and simple.

In fact, the ultimate achievement of the Parker/Rumour axis is its ability to combine compact, eloquently worded verses with anthemic rock choruses. Even on the album's sole ballad, where Parker describes an abortion incident, he manages to make an effective contrast of clumsy verse ("It's just a mistake I won't have to face/ Don't give it a name, don't give it a face") with starkly real chorus ("You can't be too strong"). The real gem, though, is *Discovering Japan*. Here Schwarz's playing and Parker's oblique,

# Ohm's Law 7:

## Big bass sound can come from small bookshelf loudspeakers.

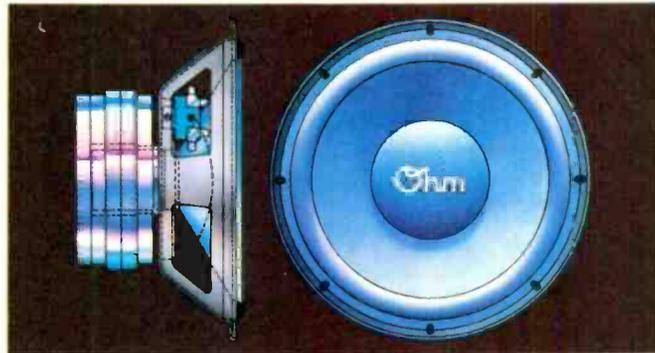
Among loudspeaker manufacturers, traditional wisdom has it that you need a big woofer in a big cabinet for really deep bass.

Once again, Ohm has defied the traditional laws of loudspeaker design.

The Ohm L is a compact, reasonably-priced, vented loudspeaker which rests comfortably on a bookshelf.

Yet, its bass response is absolutely flat to 42 Hz. And it can be driven to loud levels with as little as 15 watts rms. (That's only *half* as much power as a comparable acoustic suspension system needs.)

But there's more to an Ohm L than superlative bass and high efficiency in an easy-to-live-with size. Using time/phase matched drivers, and Ohm's phase consistent crossover, the L achieves a highly coherent sound that many expensive, widely-advertised "phase aligned" systems can only envy.



*The Ohm L woofer; output capacity unmatched by any other 8" woofer we've tested.*

Here's what the audio critics have said about the Ohm L:

#### High Fidelity Magazine:

"In listening tests, the Ohm L's aspirations ex-



ceeded those expected of its price class by a notable margin. The overall sound is solid, yet transparent and detailed. Deep bass is tight, with a sense of ease that is maintained to relatively high listening levels...Stereo imaging is excellent - to the point where the sound seems totally detached

from the speakers."

#### Sound Advice:

"This speaker also rates high in depth, ambient reproduction, and airiness... the L is a very musical speaker, does a good job with the delicacy of orchestral and choral music, has great dynamic punch, is quite efficient (8 watts for 100 dB at 3'), sounds good in a small room... and absolutely blooms in a large room (output to spare)."

#### Stereo Review:

"The Ohm L, though diminutive beside many of the floor-standing or oversize 'bookshelf' speakers we have seen, sounded in every way like a full-size system. Blindfolded, one would never guess its compact dimensions." (Copyright 1977 by the Ziff-Davis Publishing Co. Reprinted from *Stereo Review* June, 1977 by per-

mission. All rights reserved.)

#### Sound (Canada):

"...This is a loudspeaker which, despite its small size, manages to sound large...The high frequencies are crisp and one listener remarked that one could count the wires on the brushes. The low frequencies are well-controlled and there is a very good compromise between sensitivity, damping, and low bass. The lows are strong without deteriorating into the one note variety and deep without becoming lost by overdamping."



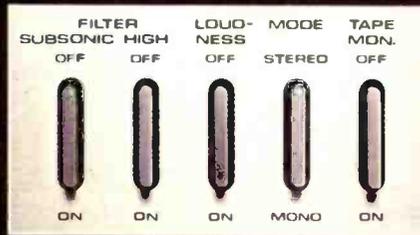
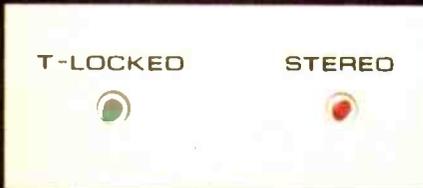
For 13 complete reviews, and full specifications, please write us at Ohm Acoustics Corp., 241 Taaffe Place, Brooklyn, N.Y. 11205.

**We make loudspeakers correctly.**

# NIKKO RECEIVERS ARE BUILT AS THOUGH THEY'RE ONE-OF-A-KIND.

At Nikko, we make sure that every single receiver we make will live up to our specifications, as well as your expectations. Which is why we have what we call the "200% Quality Control" program. Now, almost all companies have a "random" testing program. But that's not good enough for us. We check every unit before it leaves our factory. Then we test each and every Nikko receiver again, before it's shipped to one of our carefully-selected dealers. This relentlessly-thorough program is your assurance that you'll get all of the exceptional performance and reliability we build into our products.

How can Nikko afford to spend so much time on individual quality control in these days of mass production? We can't afford not to, because we back each receiver with a transferable three-year limited warranty on parts and labor.



But the "200% Quality Control" program is only one side of Nikko. The other side is what you can see and hear: meaningful features, superb sound and outstanding value.

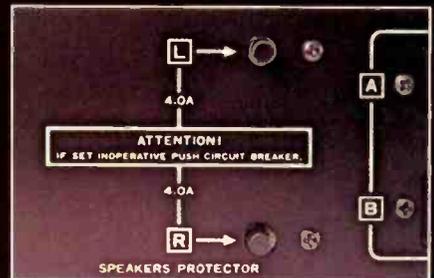
Consider our new NR-819. This advanced receiver employs a fully complementary, capacitor-free output circuit and delivers 45 watts per channel, minimum RMS, at 8 ohms, from 20 Hz to 20 kHz, with no more than 0.05% total harmonic distortion.

Its phono preamp utilizes high-speed circuitry for phenomenal transient response characteristics and low TIM. A subsonic filter cleans up the bass response and helps the amplifier operate more efficiently.

FM tuning is easy and precise thanks to an FET front end, a Phase Locked Loop for maximum stereo separation and Nikko's T-Locked circuitry, which automatically tunes in a station for minimum distortion.

The NR-819 also features the insurance of a sophisticated speaker protection circuit that utilizes Nikko's famed circuit breakers.

There are no shortcuts to top quality and performance. So before you buy any receiver, think about the persistent quality control and advanced engineering that go into every receiver Nikko builds. It should convince you that we take our stereo as seriously as you do.



Call toll-free 800-423-2994 for your nearest Nikko dealer.

Nikko Electric Corp. of America/16270 Raymer St., Van Nuys, Calif. 91406 (213) 988-0105/320 Oser Ave., Hauppauge, N.Y. 11787 (516) 231-8181/Canada: Superior Electronics, Inc.

## Nikko Audio

© 1979 Nikko Audio





Luther Rabb—no mere spinoff



Roxy Music: Manzanera, Thompson, Skinner, Ferry, Tibbs, Mackay

fractured style are propelled forward by Steven Goulding's drumming, perfectly capturing the buzzing, slightly headachy emptiness that ultramodern life-styles impose on the individual.

Any comparisons between Graham Parker and Elvis Costello, vocally or stylistically, are totally bogus. Parker is a rock & roll original working his own turf, and "Squeezing Out Sparks" should establish the fact once and for all. Great albums always write their own reviews, and this one was easy.

**Luther Rabb: Street Angel**

Samuel F. Brown III, producer  
MCA 3079

by John Storm Roberts

Luther Rabb is War's new bassist, and though his basic ethos—heavy-metal funk with a persistent leavening of light-heartedness and humor—is similar, "Street Angel" is no mere spinoff. What makes it so splendid is Rabb's sense of melody, rhythm, timing, and balance, all of which are just as relevant to disco as to any worthwhile genre. There's a lot more basic musicality here than good solos and strong lead singing.

The A side is by far the better of the two. The opening, *Whatever*, services a memorable hook with blazing r&b funk

brass, jerk-kick rhythm section, blues-inflected lead, and sustained backup vocals. *Make a Little Move* is a little lighter and more trivial, but its disco-oriented bass drum and backup vocal and strings blend nicely with tight bass and guitar out of the War zone, and its hook is even trickier. Equally beguiling is *No Bandido!*, a somewhat more Latin disco piece with another charmingly inconsequential hook and a rather more standard verse. *Seattle's Disco Groovin' Tonight* moves from a marvelous synthesizer opening and charmingly ridiculous birdlike noises from the backup singers into a splendid repeated jazz/blues.

The other side contains perhaps the best track of all, *Everybody Love*. It's an extraordinarily melodic duet with Brenda Lee Eager that turns fairly common and banal balladic elements into an adhesive whole. *Square Dance* is as amiably loony a piece as its title promises. The remaining tracks—including the title cut—are far less distinctive. Still, these days six out of nine is a pretty good value.

**Roxy Music: Manifesto**

Roxy Music, producers. Atco SD 381 14  
by Sam Sutherland

In the three years since Roxy Music disbanded to pursue divergent solo projects, the rock community has vindicated

their earlier work as truly seminal '70s music, not just avant-garde posing: Whereas this British ensemble's first records once seemed willfully abrasive and self-consciously artsy to mainstream pop fans, they now stand as prophecies of, and prototypes for, the best elements of current New Wave and art rock styles. Brian Eno, who left the band in 1973, has emerged as a powerful shaper of both instrumental and production styles for a host of American and English artists from David Bowie to Devo and Talking Heads; similarly, Bryan Ferry has transcended his trashy matinee idol persona and artless vocal mien to stand as a true influence on Talking Heads' David Byrne, Mark Mothersbaugh of Devo, and lesser-known rockers like Deaf School and Duncan Browne. Less obvious but perhaps more crucial is the apparent impact of Roxy Music's point of view on their younger successors, who have taken the band's balance of ironic detachment and stylized decadence-as-romance to the stature of archetype.

The realigned group that recorded this studio reunion revolves around Ferry, guitarist Phil Manzanera, and reed player Andy Mackay. While Eno's legacy survives in the atmospheric use of electronics and an often hypnotic rhythmic pulse, on balance "Manifesto" sounds deceptively conservative alongside the work of Roxy Music's musical followers. Manzanera's

growth as a guitarist, like Mackay's as a sax stylist, has imbued the band's playing with a broader range and subtler attack, while Ferry's underlying affection for classic pop song form as well as vocal stylings (increasingly apparent on his solo albums, especially "The Bride Stripped Bare"), likewise points up the band's evolution to its current power and economy. That growth, coupled with the canonization of their style, lends "Manifesto" a potent stateliness, rather than the once idiosyncratic verve that seemed Roxy Music's aural signature in the past.

The title song opens the album with a bristling stutter of bass and guitar and yields to a monolithic undertow of rhythm section, keyboards, and melodic lead guitar. This *Manifesto* offers no startling new shift in sensibility; rather, it encapsulates the defiant humanism that has always burned behind Ferry's various pop masks, an individualistic credo that explains the band's barbed contempt for the cheery mindlessness of pop conventions.

Equally characteristic of Roxy's strengths, but gentler in approach, are three Ferry ballads that may be his best works to date as a writer. *Dance Away* uses the same cinematic sense that opened the band's most successful single, *Love Is the Drug*, but whereas that song worked toward a comic effect, here the goal is more straightforward. *Drug* began with Ferry's footsteps moving toward his car, the cough of the ignition, and the squeal of tires; *Dance Away* echoes that sense of detail with the sudden snap of a match and the sharp intake of the singer's breath as he draws on his cigarette. Whereas the earlier song found him prowling for love on a disco floor, now Ferry is dancing only to obliterate the pangs of lost love. Evoking that loss are some of his most carefully balanced romantic lyrics, especially when he passes his lover with her new paramour and sees her "dressed to kill/ And guess who's dying..."

*Spin Me Round* and *Still Falls the Rain* are equally graceful works that assume a more meditative stance. The first, which closes the album, is an effective demonstration of both Ferry's and Roxy Music's delicacy with slower songs; its sighing choral answers and luminous celesta tracings recall John Cale's classic "Paris 1919," as high a compliment as I can pay any band.

"Manifesto" isn't dour, though.



The Patti Smith Group: getting down to accessibility

*Trash* pulses with sly, lip-smacking eroticism, while *Ain't That So* further revises our expectations of this band through its percolating percussion and Manzanera's sultry slide guitar. Production, by the band, is consistently sharp-edged without overstating technical effects. Whether or not the band views this as the start of a second career or a one-shot epitaph, "Manifesto" is arguably their best album.

#### Patti Smith Group: *Wave*

Todd Rundgren, producer  
Arista AB 4221

by Ken Emerson

Figuratively speaking at least, Patti Smith has finally shaved her armpits. The title of her new album, "Wave," doesn't refer to a crest of "new" or "no" music that Smith is riding; instead, it's a good-bye to all that put people off from buying her last album, "Easter," even though they purchased enough copies of *Because the Night* (on which she collaborated with Bruce Springsteen) to make that rousing single a respectable hit. The discrepancy between single and album sales probably bugged Smith as much as it did Arista's president, Clive Davis.

"Wave" includes a thumping rendition of the Byrds' *So You Want to Be (a Rock 'n' Roll Star)*, and Smith has always wanted to figure in the constellation of rock stars she used to worship from afar. But in the past she demanded stardom on her own terms. Now, for the first time, she

has acceded to the standards of a mass audience and airplay. "Wave" contains no dirty words that I can make out, no talking in rapt, garbled tongues, and the performances are airbrushed by Todd Rundgren's production. As a result, it is the least ecstatic and inspiring of Smith's four albums, though also her most accessible and enjoyable.

*Frederick* may not soar like *Because the Night*, but it's a pleasant flight assisted by blithe synthesizer bumbles. *Dancing Barefoot* is more ominous but equally tuneful, borrowing as it does snatches from the melody of Blue Oyster Cult's (*Don't Fear*) *the Reaper*. And *Broken Flag*, sort of an *Onward, Christian Soldiers* for the avant-garde, is an uplifting anthem that transcends its stodgy arrangement.

Although the smooth professionalism of "Wave" may attract new listeners, doubtless it will dismay old fans of Smith's raw edges. "We carve," she wrote in the booklet accompanying "Easter," "a position of danger between construction and chaos." Apart from an audacious and haunting monologue addressed to the late Pope John Paul I on the shores of eternity, the new album takes no risks—it's all workmanlike construction and no chaos. For the most part, Smith plays the role of a singer here, not a seer, and the field of her visionary music has contracted to the point where she seems, like the shaven Samson, "eyeless in Gaza, at the mill with slaves."

# Introducing the ADC 1700DD turntable. The quality begins with the tonearm...



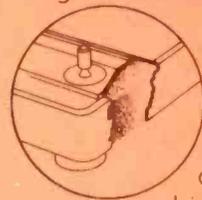
## ...and keeps on going.

The tonearm you'll find on the ADC 1700DD reduces mass and resonance to new lows. So the music you hear comes out pure and clean.

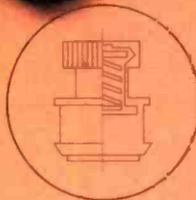
Our engineers have combined the latest advancements of audio technology to create the amazing 1700DD, the first low mass, low resonance turntable.



The famous LMF carbon fibre tonearm was the model for the sleek black anodized aluminum tonearm found on the ADC 1700DD. The headshell is molded carbon fibre, long known for its low mass to high tensile strength ratio. The viscous cueing is a gentle 4mm/sec., and the tempered spring anti-skate adjustment is infinitely variable to 3.5 grams. The pivot system uses stainless steel instrument bearings, which are hand-picked and perfectly matched to both the outer and inner races for virtually frictionless movement. All this makes it the best tonearm found on an integrated turntable.



The base on the ADC 1700DD turntable is constructed of a highly dense structural foam which absorbs and neutralizes resonance and feedback. The speed selection control is an electronic microswitch which will respond to your lightest touch.



Supporting this resonance-cancelling base are energy absorbing, resonance-tuned rubber suspension feet. These suspension feet help to stabilize the base while controlling resonance.

The motor in the ADC 1700DD is also present standard of excellence: Direct Drive Quartz Phase-Locked-Loop. A quartz crystal is used



in the reference oscillator of the motor. An electronic phase comparator constantly monitors any variance in the speed, making instantaneous corrections. Even when out of the Quartz-Locked mode, the optical scanning system keeps drift at below 0.2%. Wow and flutter are less than .03%. Rumble is an incredible -70dB Din B.

The result of all these breakthroughs is pure, uninterrupted enjoyment.

We invite you to a demonstration of this and the other remarkable ADC turntables at your nearest franchised dealer.

Or write for further information to: ADC Professional Products, a division of BSR Consumer Products Group, Route 303, Blauvelt, N.Y. 10913. Distributed in Canada by BSR (Canada) Ltd., Ontario.



**ADC. We build breakthroughs.**

A BSR Company

# ONKYO'S Exclusive Accu-Bias



## BECAUSE ALL TAPES AREN'T CREATED EQUAL

You see, all tapes aren't created equal. All manufacturers' tapes require slightly different bias than the average 3-position setting for optimum performance, i.e., widest and flattest frequency response and lowest harmonic distortion. Even the same type of tape from the same manufacturer varies in its bias requirements. Batches differ. Processing has its ups and downs.

The newest, hottest audio tape is metal particle. It can give performance level equal to or better than open reel tapes. But, it's so new that bias standards aren't set. When they are, who's to say that the same manufacturer to manufacturer variability will not apply to the metal particle tape?

That's why Onkyo invented automatic ACCU-BIAS.

Onkyo's automatic ACCU-BIAS uses logic circuitry centered around built-in reference generators to determine the optimal settings for bias *for any tape you use... every time you use it.*

And it's all automatic. With Onkyo's automatic ACCU-BIAS you just tell the logic circuits the kind of tape you're using... Metal, High or Normal. Push the automatic ACCU-BIAS button, engage play and record. Within seconds the automatic ACCU-BIAS computer determines and sets the exact bias,

stops, rewinds and is ready for you to make a perfect recording.

That's not an average setting. Nor a compromise setting. But the precise setting for *any* cassette you use every time you record. So, unless you want a factory technician to make your decisions for you, there's only one way to go.

Onkyo's TA-2080 with automatic ACCU-BIAS.

What kind of performance can you expect with ACCU-BIAS and metal particle tape? Frequency response of 20-20,000Hz. And a S/N ratio of 62dB with Dolby\* out.

Other features that add to the flexibility are 2 sendust alloy heads, plus a special laminated erase head for new metal tapes, feather touch solenoid transport, PLL DC servo motor drive, dual capstans, line mic mixer and 10 segmented peak level LED in columnar array between VU meters.

Another feature is the "Fadeout" which gradually erases portion of the tape during playback while you listen for those times when the tape runs out before the music... easing and simplifying editing chores.

Overall specifications and features make Onkyo's TA-2080 something special. Automatic ACCU-BIAS makes it even more. Check it out at your Onkyo dealer and see what it means by Onkyo's motto of being a step ahead of state-of-the-art.

\*Dolby is a trademark of Dolby Laboratories, Inc.

Artistry in Sound

# ONKYO®

Eastern Office: 42-07 20th Avenue, Long Island City, NY 11105 (212) 728-4639

Midwestern Office: 935 Sivert Drive, Wood Dale, IL 60191 (312) 595-2970

West Coast Distribution Center: Damark Industries, Inc., 20600 Nordhoff Street, Chatsworth, CA 91311 (213) 998-6501

Canada: Sole Distributor, Tri-Tel Industries, Ltd., Ontario, Canada

On the card opposite, circle the number indicated at the bottom of the ad or at the end of the editorial mention of the product you're interested in. [Key numbers for advertised products also appear in the Advertising Index.]

Type or print your name, address, and zip code on the card. Postage is prepaid.

Mail the card today. You'll soon receive free product literature and specifications from manufacturers.



### Three Great Buyer's Guides From HIGH FIDELITY Order Now!



1979  
HIGH  
FIDELITY'S  
Test  
Reports  
\$3.95  
Circle  
161

1979  
Buying  
Guide to  
Stereo  
Components  
\$2.95  
Circle  
162

1979  
Stereo  
Test  
Reports  
\$2.95  
Circle  
164

To order, circle the number on the attached card that matches the number of the Buyer's Guide you want. Enclose payment plus \$1.00 for postage with your order and mail to:

**HIGH FIDELITY**  
One Sound Avenue  
Marion, Ohio 43302

(Enclose payment. No credit orders.)



Martha Wash, Sylvester, Izora Rhodes: Two Tons o' Fun plus one

**Sylvester: Stars**  
Harvey Fuqua & Sylvester, producers.  
Fantasy F9579  
by Crispin Cioe

The main reason disco has been slow to be accepted as a "valid" art form is that too much of it needs a dance floor to be emotionally convincing. Donna Summer, Gloria Gaynor, and Cardi Staton are among the few singers that can sound truly expressive within its thump-thump-thump-thump musical format. Add to that select list San Francisco-based Sylvester. His third album on Fantasy, "Stars," is completely within a disco framework and is also a fully realized, eloquently soulful statement.

Sylvester is emerging as disco's first major male star, and, like that of his aforementioned female counterparts, his music confidently mixes the contemporary with the rootsy. His distinctive soprano is a near-falsetto head voice (slightly reminiscent of Eddie Kendricks' when he was with the Temptations), and he sings in a florid, full-bodied coloratura style that dates back to his youth on the national gospel circuit. His backup singers, Martha Wash and Izora Rhodes (accurately dubbed Two Tons o' Fun), have equally deep gospel roots. Together the trio brings a wild ecumenical flavor to the music.

True to disco standards, "Stars" has just four long cuts. But each uses its length to fully explore its own mood, making each song as palatable for listening as

it is for dancing. *I (Who Have Nothing)* is by far the most devastatingly effective rendering of that Leiber-Stoller chestnut since Ben E. King's 1962 original. It begins with a churchy, faintly haunting piano set against nothing but the thumping bass drum, perfectly effecting the gospel/disco fusion that Sylvester embodies. Patrick Cowley adds tasty synthesizer touches, while coproducer Harvey Fuqua (a Motown staffer in the '60s) keeps the rhythm tracks stately and refreshing, never relying on overlong and obvious string or rhythm breaks. On *Body Strong*, which is essentially a disco chant, the combination of robust, soaring vocals, gospel-inflected chord changes, and synthesizer fillips renders "You make, you make, you make my body strong" more than a mere catchphrase.

The shortest cut, *I Need Somebody to Love Tonight*, is a relaxed, misterioso groove that compares favorably with David Bowie, circa *Low*. Bass, sequencer, and guitar set up an interlocking pattern of countermelodies. Cowley's synthesizer weaves in and out, and, by the time Sylvester's vocal arrives, the mood has been firmly established. Structurally, it's all very subtle.

I've heard "Stars" three ways now: live, through the speakers at Studio 54, and sitting on my couch at home. It holds up equally well under all three conditions, which means it can be watched, danced to, and listened to. If this is where disco's headed, then I say more, more, more.

## BLANK TAPES

### CASSETTE TAPES

Ampex Grand Master II C-90	\$3.11
Ampex Grand Master I C-90	\$2.79
BASF Studio C-90	\$2.69
BASF Pro I C-90	\$2.88
BASF Pro II or III C-60	\$2.10
BASF Pro III or III C-90	\$2.99
Fuji FR I or II C-90	\$2.96
Mazda UD C-60	\$1.97
Mazda UD C-90	\$2.85
Mazda UD C-120	\$3.78
Mazda UDRL I or II C-60	\$2.50
Mazda UDRL I or II C-90	\$3.47
Scotch Low Noise Dynarange C-90	\$4.99
Scotch Master I C-90	\$2.84
Scotch Master II or III C-90	\$3.29
Sony Low Noise C-90	\$1.64
Sony Hi-Fi Stereo C-90	\$2.42
Sony Ferrichrome C-90	\$3.58
TDK D C-60	\$1.20
TDK D C-90	\$1.66
TDK D C-120	\$2.10
TDK D C-180	\$2.99
TDK AD C-60	\$1.74
TDK AD C-90	\$2.52
TDK AD C-120	\$3.48
TDK SA C-60	\$2.22
TDK SA C-90	\$3.18

### REEL TO REEL

Ampex Grand Master	\$6.17
Mazda UD 35-90 1800 ft	\$5.49
Mazda UDRL 35-90B 1800 ft	\$6.75
Mazda UD 35-180 1600 ft (10%)	\$15.30
Scotch 112 1800 ft	\$4.35
Scotch 207 1800 ft	\$5.19
TDK S-1800 1800 ft	\$4.32

### VIDEO TAPES

BETA FORMAT	
TDK L-500 (2 Hour)	\$13.75
Sony L-250 (3 Hour)	\$18.95
Sony L-500 (2 Hour)	\$13.95
Scotch L-500 (2 Hour)	\$13.50
Zenith L-500 (2 Hour)	\$13.95
Ampex L-500 (2 Hour)	\$12.95

### VHS FORMAT

Scotch VK-250 (4 Hour)	\$17.95
JVC T-120 (4 Hour)	\$16.75
TDK T-120 (4 Hour)	\$19.50
Fuji T-120 (4 Hour)	\$17.95
RCA VR-250 (4 Hour)	\$16.95
RCA VR-125 (2 Hour)	\$14.95
Panasonic NVT-120 (4 Hour)	\$18.95
Panasonic NVT-60 (2 Hour)	\$14.95

MINIMUM ORDER 12 TAPES 100% GUARANTEED

## CARTRIDGES

### audio-technica

AT-2055	\$129.50
AT-1555	\$89.90
AT-14 SA	\$48.95
AT-12 SA	\$4.90
AT-10	\$12.30

### STANTON

8815	\$72.50
881EE-5	\$55.00
881EE	\$47.50
880EE	\$74.90
500E	\$12.60

### EMPIRE

2000Z	\$59.90
2000T	\$31.50
2000EIII	\$19.50
4000DI	\$19.90

VIS TYPE IV	\$89.90
VIS TYPE III	\$64.95
M95HE	\$34.95
M95ED	\$29.75
M95E	\$21.00
M44E	\$13.80
M70EJ	\$9.90

### PICKERING

XSV3000	\$49.95
XV19/1200E	\$39.95
XV19/750E	\$32.50
XV19/425E	\$21.75
XV19/400E	\$22.45

## CAR STEREO

### JENSEN

#### SANYO

J1001 6x9 20 Oz	\$94.98
3" midrange, 2" tweeter	
C-9945 6x9 20 Oz	
Trusdal	\$59.98 pr
C-9991 4x10 20 oz	
Trusdal	\$59.98 pr
C-9740 6x9 20 oz	
Coaxial	\$39.98 pr
C-9999 5 1/4 20 Oz	
Trusdal	\$58.98 pr
C-9994 4x10 20 Oz	
Coaxial	\$39.98 pr
C-9852 5 1/4 20 oz	
Coaxial	\$38.98 pr
C-9851 4 10 oz	
Coaxial	\$32.98 pr

### PIONEER

CASSETTE-IN-DASH WITH RADIO	
RP-1000	\$128.70
RP-5005	\$142.95
RP-8000	\$157.30
RP-5003	\$157.30
RPX-9000	\$189.99
RE-2000	\$189.95
RE-2002	\$214.50
RE-3000	\$242.90
RE-5000	\$284.90
CASSETTE UNDERDASH	
RP-712	\$64.90
RP-792	\$18.62
RP-373	\$82.50
RP-750 w/FM Stereo	\$102.75
RP-500 w/Supertuner	\$124.95
RP-666	\$97.95
RP-886	\$114.95
RP-600	\$134.95
8-TRACK IN-DASH W/RADIO	
TP-6001	\$99.95
TP-7000	\$144.40
TP-7004 5, 6	\$142.90
TP-9004 5, 6	\$157.30

### 8-TRACK UNDERDASH

TP-252	\$42.95
TP-727	\$74.95
TP-200 w/FM Stereo	\$71.50
TP-900 w/Supertuner	\$128.75

### POWER AMPS

AD-360 (70 watts)	\$142.90
GM-120 (120 watts)	\$128.75
CD-7 (17 band graphic eq)	\$128.75
GM-12 (15 watts)	\$32.75
GM-40 (40 watts)	\$53.90
AD-312 (12 watts)	\$36.50
AD-320 (20 watts)	\$49.90
AD-30 Equalizer	\$93.78

### SPEAKERS

TS-M2 Tweeter with Adjust. Level	\$29.95 pr
(20 watts)	
TS-165 6 1/2" Coaxial Door Mounts	\$45.95 pr
(20 watts)	
TS-694 6x9 Coaxial 20 oz	\$57.95 pr
(20 watts)	
TS-695 6x9 3 way 20 oz	\$89.95 pr
(40 watts)	
TS-86 2-Way Surface Mounts	\$69.95 pr
(20 watts)	
TS-85 2-Way Surface Mounts	\$39.95 pr
(40 watts)	

We carry the full line of car equipment by such names as Sanyo, Craig, Marantz, Pioneer, Jensen and Audiovox. Write for free catalog.

## ACCESSORIES

DISC WASHER Complete System	\$10.95
Discart	\$24.95
Discorganizer	\$8.95
16 oz. D3 Reel	\$10.95
Zenit Anti-Static Gun	\$14.95
SC-1 Stylus Cleaner	\$4.95
FUZZBUSTER II RADAR DETECTOR	\$87.90
BEAM BOX FM ANTENNA	\$36.50
HEADPHONES	
Koss Pro-4AA	\$39.90
Koss Pro-4AAA	\$48.00
Koss Pro-4C	\$35.97
HD-420	\$50.88
HD-430	\$78.40
Sennheiser HD-400	\$26.28
Sennheiser HD-414	\$44.88
Sennheiser HD-424	\$65.28

## RECORDS

### Pop, Rock, Jazz, R&B

All 7.98 List	\$4.49
All 8.98 List	\$5.49
All 9.98 List	\$5.99

We do not charge for credits or 8-track, please specify. Minimum order: 4 records or tapes. WE STOCK THE COMPLETE SCHWANN CATALOG.

HOW TO ORDER: For shipment within 48 hours, send money order or certified check. Two weeks delay on personal checks. Please add \$3.50 per order for shipping & handling (\$5.50 for orders outside U.S.). N.Y.S. residents add tax. No C.O.D.'s. All merchandise 100% guaranteed, brand new & factory fresh.



33 PARK ROW, DEPT. HF, NEW YORK, N.Y. 10038

ORDER TOLL FREE (800) 221-8180

CALL OR WRITE FOR FREE 120 PAGE CATALOG



Alan Tarney and Trevor Spencer—every track a clever crazy quilt

**The Tarney Spencer Band:  
Run for Your Life**  
David Kershbaum, producer  
A&M SP 4757  
by Ken Emerson

Lacking a musical culture of their own (*Tie Me Kangaroo Down, Sport* hardly counts). Australians from the Easybeats to Olivia Newton-John and the Bee Gees have often had a flair for manipulating pop-music conventions with a detachment begotten by distance. On their first album, last year's "Three's a Crowd," singer cum multi-instrumentalist Alan Tarney and drummer Trevor Spencer came on like a latter-day addition to the Scottish tradition of pop duos like Stealer's Wheel

and Gallagher & Lyle. They've set their sights higher on "Run for Your Life." This time around, they've drawn a bead on the Beatles and Fleetwood Mac. Thus *No Time to Lose*, the opening cut, compares contrasts, and finally combines the stately guitar chords of George Harrison and Eric Clapton with a trotting chorus right out of Lindsey Buckingham.

But the Tarney Spencer Band (all two of 'em) is far too eclectic ever simply to ape their antecedents. As if to acknowledge the secondhand nature of their music, they cover *Lies*, the Knickerbockers' 1965 imitation-Beatles hit, but they syncope the rhythm so that the song sounds utterly unlike the Fab Four (much less the Knickerbockers). *Far Better Man* purloins

# Gruesome Twosome.



## Performance. Power. Period.

Mitsubishi Car Audio. It's Power by the Pair. The CV-21 Control Power Amplifier has 20 watts RMS per channel and features separate volume, treble, bass and fader controls and high/low inputs. It can be used as a control amplifier with a tuner or tape deck, or as a power booster for existing car stereo radios.

For the ultimate in control, it's the CV-23 Graphic Amplifier/Equalizer. It is a perfect match with car audio components or existing car stereos.

The CV-23 features 30 watts RMS per channel, fader and balance controls, two-channel LED power indicators, selector switch, high/low inputs and a 6-position graphic equalizer for complete sound contour control.

Well defined lows. Transparent mid-ranges. Shimmering highs.

The CV-21 and the CV-23 are the Gruesome Twosome.

 **MITSUBISHI**  
**CAR AUDIO**  
SOUND US OUT

# McIntosh

## "A Technological Masterpiece..."



McIntosh C 32

### "More Than a Preamplifier"

McIntosh has received peerless acclaim from prominent product testing laboratories and outstanding international recognition! You can learn why the "more than a preamplifier" C 32 has been selected for these unique honors.

Send us your name and address and we'll send you the complete product reviews and data on all McIntosh products, copies of the international awards, and a North American FM directory. You will understand why McIntosh product research and development always has the appearance and technological look to the future.

Keep up to date.  
Send now - - -

McIntosh Laboratory Inc.  
Box 96 East Side Station  
Binghamton, NY 13904

Name \_\_\_\_\_

Address \_\_\_\_\_

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

If you are in a hurry for your catalog please send the coupon to McIntosh. For non-rush service send the Reader Service Card to the magazine.

Circle 27 On Page 93



Paul McCartney's bass line from *Rain* but uses it to underpin chipper Crosby, Stills & Nash harmonies. Every track is a clever crazy quilt. *Live Again*, for example, sports a vaguely reggae rhythm, synthesized echoes of Caribbean steel drums, a disco kick-drum, and bustling, jazzy traps. *A Heart Will Break Tonight* begins with a wimpy, tremulous vocal that smacks of Bread's David Gates, but it is oddly accompanied by muted kettledrums and followed by a startling, oogity-boogity chorus of classic rock & roll piano triplets.

Although the ingenuity of "Run for Your Life" is delightful, the album is more impressive than exciting. In a word, it lacks oomph. Even when he overdubs harmonies, Tarney's vocals sound thin, and a real live band might create more electricity than he and Spencer can conjure up by their lonesomes in the studio. Ultimately their record is an elegant exercise, a series of deft miniatures. If they ever blow their music up to life-size and infuse it with some meaningful emotion, Tarney and Spencer will no longer be talents to trifle with.

## ||| JAZZ |||

### Ernie Carson and His Capital City Jazz Band: *Brother Lowdown*

George H. Buck Jr., producer. GHB 95  
by John S. Wilson

Despite some listeners' impression that Ernie Carson sounds like Wild Bill Davison, Frank Powers states in his "Brother Lowdown" liner notes that Carson's true roots are in the rough and rugged West Coast tradition of Lu Watters and Turk Murphy. True as this may be, one can hear a variety of sources coming together in this cornetist's lively, bristling attack. Most noticeable on this disc is the similarity of his urgent, jabbing punch to Muggsy Spanier's.

Carson is in fine form—crisp and crackling, growling, swaggering—and he is surrounded by some particularly worthy companions: Charlie Bornemann, a trombonist with a big, gruff sound and a loose and easy manner; Robbie "Dusty" Rhodes, a pianist with a romping ragtime attitude; and banjo player Bill Rutan. Rutan also sings, sometimes with a nasal slur

that takes him to the borders of Jolson on an easy '20s song like *My Sunny Tennessee*, and sometimes with a muttering grumble, as on the tongue-twisting *Borneo*. This last is a fascinating, oddly structured tune remembered today only because Bix Beiderbecke recorded it.

All of the material is adventurous. Two Lu Watters numbers, *Emperor Norton's Hunch* and *Big Bear Stomp*, are as close to traditional as Carson comes. They're followed by a wonderful, rarely played 1938 Irving Berlin tune, *My Walking Stick*, on which Carson swings and sings with a dry but exuberantly outgoing voice. *Polish Love Song* sounds as though it might have been a polka transformed into a New Orleans march; and *I'm Looking at the World Through Rose-Colored Glasses* provides a bit of high-spirited vaudeville for Bill Rutan's voice and banjo. Fats Waller's *Georgia Bo Bo* does not work out very well, despite the fact that Louis Armstrong once made a celebrated record of it, and Herman Foretich's clarinet seems relatively thin and wan in this company. But for the most part, "Brother Lowdown" is good times all the way.

### Duke Ellington: *Unknown Session*

Irving Townsend, producer  
Columbia JC 35342

### Duke Ellington and His Orchestra: *Up in Duke's Workshop*

Duke Ellington, producer  
Pablo 2310 815

Sometimes Duke Ellington would call a session to hear things he had written or just to make use of musicians on salary when the band was laying off. These two discs are culled from those odds-and-ends sessions, and since Duke squirreled them away over the years, none of this material has been released before. "Unknown Session" is devoted to one session held on July 14, 1960, when Duke led a small group that included Ray Nance, Lawrence Brown, Johnny Hodges, and Harry Carney. "Up in Duke's Workshop," like the earlier "The Intimate Ellington" on Pablo, is a miscellany played in this instance by the big band in various manifestations between 1969 and 1972.

The Columbia set focuses primarily on Ellington the melodist by looking back at some of his loveliest songs but avoids

# The sound is familiar. The PRICE is the SURPRISE!

## REALISTIC® Minimus-7

This amazing little hi-fi speaker costs only about a third as much as some mini speakers, but we think they compare very favorably. How could they? Well, we gave ours a heavy-magnet large-excursion 4" woofer, a soft-dome wide-dispersion 1" tweeter, a precise L-C crossover network, and a diecast aluminum enclosure. The result is astonishing bass and crisp highs from a 7-1/6" tall system that fits on any bookshelf. Audio response is 50-20,000 Hz and power capacity is 40 watts RMS. All for only 49.95\* each.



Now listen to this! Just 14.95\* buys you a pair of the fully adjustable mounting brackets pictured here, so you can install two Minimus®-7s in your car. Or van or pickup or RV. Discover Minimus-7, the mini-size, maxi-value speaker for home or mobile use. Sold only at Radio Shack.

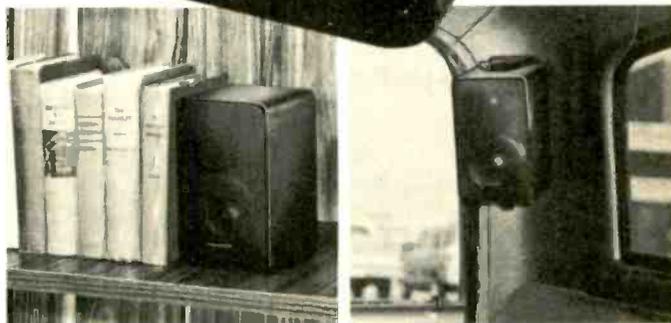
\*Retail prices may vary at individual stores and dealers.

These two cards honored  
at most Radio Shack stores



# Radio Shack®

A Division of Tandy Corporation • Fort Worth, Texas 76102  
Over 7000 Locations in Nine Countries



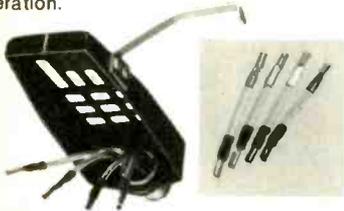
Use 'em on a shelf

Use 'em in your vehicle

The better your ear,  
the more you  
need new  
Audio-Technica  
**VITAL  
LINKS!**

Every wire, every connection in your stereo system is a source of trouble, a chance for losses which can keep your system from achieving its full potential.

Introducing three new Vital Link wire sets from Audio-Technica... each a positive step toward ideal performance and trouble-free operation.



Start at the cartridge with the AT609 Head Shell Wire Set. Color-coded, insulated wires with 14 strands of pure silver Litz wire, terminated in corrosion-free gold terminals. No losses, no intermittents. Easy to install. Just \$6.95 and worth every penny.



Between turntable and amplifier (or any two stereo components) use new AT610a High Conductivity Cable. A stereo pair 60" long, plus an independent ground wire with lugs. Each gold-plated plug is color-coded. Both resistance and capacitance are far

below ordinary cables. Only \$9.95.

For the most critical installations use our AT620 Super-conductivity Cable Set. Two individual cables, each 48" long, with heavily gold-plated plugs. Inside the wire shield is a second conductive layer of polypropylene shielding. Special foam dielectric keeps capacity low, while superb conductivity is assured by using Litz-wire inner conductors with maximum surface area which reduces high frequency losses. The set lists for \$29.95.



From phonograph cartridge to loud-speaker, each audio system is a chain, no stronger than its weakest link. Connect your system with Vital Link cables from Audio-Technica. At your A-T dealer now. Or write for our complete audio accessory catalog.



**audio-technica**

INNOVATION □ PRECISION □ INTEGRITY  
AUDIO-TECHNICA U.S., INC.  
Dept. 79H-2, 33 Shilawasseg Avenue  
Fairlawn, Ohio 44131  
In Canada: Superior Electronics, Inc.

Circle 5 On Page 93



the obvious. The only exception is *Mood Indigo*, but even this is heard in new dress as a solo showcase for Brown, who was not featured as frequently as some of the other Ellington stars in the band's heyday. In fact Brown carries most of the first side with his warm, dark tone, singing through *Black Beauty* and *All Too Soon* and developing *Creole Blues* (one of *Creole Rhapsody's* themes) in a high lyrical voice. Carney also gets more solo space than usual, while Hodges, one of Duke's most ubiquitous soloists, plays a relatively secondary role. Still, the set stays within the lush, romantic mood that was Hodges' particular domain.

The Pablo disc is colored by the thick-textured ensembles that Duke was creating at the end of the '60s and in the '70s, along with the Latinesque rhythms that he used more and more frequently. The combination is epitomized on *Dick*, with the presence of organist Wild Bill Davis and trombonist Malcolm Taylor bringing an added dimension of ruggedness to the band. Though most of "Duke's Workshop" is unfamiliar, all of it has the Ellington touch. One exception is an arrangement of *Love Is Just Around the Corner*, which (according to Stanley Dance) had been in the Ellington book "a long time" when it was recorded in 1970. But the ensemble writing has a bulky, solid sound that—except for some wonderfully brassy, gritty shouts interjected by trumpeter Cootie Williams—would not suggest Ellington. J.S.W.

**Bill Evans, Toots Thielemans:  
Affinity**

Helen Keane, producer  
Warner Bros. BSK 3293

I've often felt that Bill Evans is the last unreconstructed romantic left in jazz—the last player who can unembarrassedly milk a harmony for every last rich drop of feeling. But I forgot about Toots Thielemans, that underrated virtuoso of the guitar, harmonica, and—that most unexpected of jazz instruments—the lips-puckered whistle. Toots is a romantic, too. He has to be. No one could have composed such an enduring bit of jazz nostalgia as his classic *Bluesette* without the benefit of a heart filled with moonbeams and roses.



**Bill Evans—a romantic sorely in need of a new producer**

So, for better or worse, what we have on "Affinity" is an encounter between two romantics. It easily could have become mired in treacherous sentimentality, but instead it is a classic (and class) example of how jazz players can bring life and spirit to musical attitudes that have virtually been given up for dead. The best tunes, in fact, are those that seem to present the most moribund possibilities: *I Do It for Your Love*, *This Is All I Ask*, *The Days of Wine and Roses*, *Body & Soul*. One could hardly imagine a list more calculated to make the average listener grab for the latest Rolling Stones record. No matter, Evans and Thielemans do things with melody and harmony and feeling that Mick Jagger couldn't do with a 100-megawatt sound system.

But there are problems. Apparently unwilling to let these two superb players carry the recording on their own, producer Helen Keane has added drums, bass, and saxophonist Larry Schneider to a few of the tracks. It was a poor and totally unnecessary decision. Aside from Marc Johnson's excellent (and discreet) bass, Evans and Thielemans need additional help like Jimmy Carter needs more peanuts. The solution is easy enough: Simply lift the needle and move on to the next track when you hear the first few notes of braying-mule saxophone. For Evans, the solution is a bit trickier, but a new producer might help. D.H.



# MADE FOR EACH OTHER.

Earphones are made for ears. Yours. That's why the Beyer DT 440 has sound so natural and is so light and comfortable you don't even know it's there, even after many hours.

At 9.6 ounces, it is one of the lightest headphones available. And its weight is evenly distributed among the sponge-padded ear-cups and air-filled headband.

There's no great weight suspended from your head, and your ears never get squeezed.

Some people complain about the isolation of headphones that close them off from the world. So we built the DT 440 with a high velocity open design, to allow a natural mixture of recorded music and environmental sound.

How does it sound? Most

people say "spectacular." A great combination of impact and intimacy. The overall sound is wonderfully smooth and transparent. With clean, rich bass response. Powerful, lifelike midrange. Crystal-clear, undistorted highs. And perfect stereo imaging.

For sound — and for comfort — nothing beats a Beyer. We'd like to make one for you.

DT 220

DT 302

DT 441

ET 1000 / N 1000



**Beyer**   
**Dynamic**

**BURNS AUDIOTRONICS, INC.**  
5-05 Burns Avenue, Hicksville, NY 11801  
(516) 935-8000



Lionel Hampton, circa 1960

**Art Tatum-Lionel Hampton-Buddy Rich: The Tatum Group Masterpieces . . . Again!**

Norman Granz, producer  
Pablo 2310 775

Benny Green has referred to Norman Granz's current series of reissues as a "Napoleonic campaign to get as much of Art Tatum on tape as would satisfy posterity." But this set, unlike the "Tatum Group Masterpieces" that preceded it, is not a reissue. Except for one cut, *Body and Soul*, the material on "Again!" has never been released before, adding seven new performances (including two takes of *Love for Sale*) to the Tatum repertoire.

One of them, a roaring, uptempo *This Can't Be Love*, ranks with the best of Tatum's records. On it, he and Hampton swing hard and chase each other for chorus after chorus, with Tatum becoming more involved as the challenges tighten. Their pursuit is climaxed by a chorus in which they virtually race each other, kicking their heels as they come down the stretch. And just as they get there, Rich takes off on a burst of drumming that erupts into a spasm of musical and vocal excitement. Apparently, the musicians felt that moment could not be topped, since in the anticlimactic chorus that follows they have relatively little to say.

The rest of the pieces are ballads



Tony Williams—a summit meeting of jazz titans

taken at that easy pace in which Tatum plays as though he were relaxing in a rocking chair but thinking exciting thoughts. In this mood, Hampton tends to stay close to the melody, at times (as on *Lover Man*) clutching it so tightly that only Tatum's filtering runs can loosen his grip. The two takes of *Love for Sale* were included apparently to fill out the disc. The solos on the shorter one virtually repeat part of those on the longer, which, overall, is the better of the two: Tatum has an extra solo chorus on it and provides Hampton's solos with unusually airy support. J.S.W.

**Tony Williams: The Joy of Flying**

Tony Williams, producer  
Columbia JC 35705

Drummers—from Gene Krupa to Max Roach to Tony Williams—all share one problem when they come out front to guide the band: Drums are not a lead instrument. Krupa solved the problem by putting together a dynamite big band to frame his percussion work; Max Roach formed a productive liaison with trumpeter Clifford Brown. And now Williams, recognizing the problem, has gotten together with some of the brightest lights in contemporary jazz—Jan Hammer, George Benson, Herbie Hancock, Cecil Taylor, Stanley Clarke, Tom Scott, Brian Auger, and others.

The results are as mixed as the qualities of the musicians. With Hammer's synthesizers, Williams plays in an aggressive, hard-pounding style similar to that of his jazz/rock salad days in the early Seventies. With Clarke, Hancock, and Scott he is looser, apparently more relaxed, and content to provide powerful energy for the other players. With a large ensemble (which includes the Brecker Brothers, Dave Sanborn, and most of the other New York City jazz faces) Williams demonstrates—for anyone who cares—that he, too, can play competent, studio-style jazz drums.

He is much better on *Coming Back Home*, where Benson plays the kind of guitar solo one rarely hears on his own recordings these days. He is equally good on the entirely different *Open Fire*, playing with Mario Cipollina, Ronnie Montrose, and Brian Auger in a high-powered track recorded "live" in concert in Japan. And he is at his best and most creative in a startling duet with pianist Taylor titled *Morgan's Motion*. To be sure, there are a few moments when Williams sounds almost as confused with Taylor as the audience frequently is. But for the most part, he accepts Taylor's energetic musical challenge and responds in kind. It's a kind of summit meeting of jazz titans, and it, more than anything else, makes "Joy of Flying" worth your time. D.H.

by Elise Bretton

**Natalie Cole: Songbook.**

*Cherry Lane, 29 songs, \$7.95.*

Natalie Cole's printed repertoire has undergone considerable cosmetic surgery at the hands of Drs. Okun and Fox, stalwarts of the Cherry Lane operating rooms. Removing the wrinkles of overnotation from last year's "Our Love" (a collection of Marvin Yancy/Chuck Jackson songs, most of which had attained chart status as a result of Cole's recordings) has given new life to these soul/disco favorites (*I've Got Love on My Mind, Inseparable, No Plans for the Future*). The good doctors have even supplied several pages of performance notes. With the new, two-line piano-vocals supplemented with a discography, a biography, and photographs, the sales prognosis looks good.

**10cc: Bloody Tourists.**

*Warner Bros., 13 songs, \$6.95.*

**The Who: Who Are You.**

*Warner Bros., 9 songs, \$6.95.*

Neither the Who nor 10cc works on an assembly-line basis: Quality control is the hallmark of both. On this month's excursion with 10cc, we travel on Air Jamaica (*From Rochdale to Ocho Rios*) and London's Bakerloo subway line (*Shock on the Tube*) at breakneck speed, touching down at Tokyo in between. A strange itinerary, but it works. "Who Are You" is heavily cargoed with Pete Townshend's personal creative traumas (*Guitar and Pen, New Song*), but he and copilot John Entwistle manage to get us off the ground before we have time to complain to the FAA (Folio Administration Agency, what else?). Both collections are turbulence-free and should provide enjoyment for professional and home musicians alike.



**Kenny Rogers**

**Kenny Rogers: The Gambler.**

*Cherry Lane, 11 songs, \$6.95.*

**Crystal Gayle Songbook.**

*Big 3, 36 songs, \$6.95.*

**Country Music's Greatest Hits.**

*Times Books, 93 songs, \$16.95.*

Country music aficionados will rejoice in these three issues. "The Gambler," adapted from Kenny Rogers' excellent album, has the advantage of those natty, two-line piano-vocal arrangements by Milt Okun and Dan Fox, two gentlemen whose music editing always depletes my stock of superlatives. The "Crystal Gayle Songbook" is more universal in concept, with such old friends as *I Still Miss Someone, Don't It Make My Brown Eyes Blue, and Talkin' in Your Sleep.*

"Country Music's Greatest Hits," which has a flat-lying spiral binding, is designed for family participation. It must be stressed, however, that these are nuclear-family country tunes—no Hank Williams, Roy Acuff, or Tex Ritter. Included are such numbers as *I Fall to Pieces, Ruby, and Don't Take Your Love to Town.*

**Seals and Crofts: Takin' It Easy.**

*Warner Bros., 10 songs, \$6.95.*

**Hall and Oates: Along the Red Ledge.**

*Cherry Lane, 10 songs, \$6.95.*

Herewith two tasty offerings from two expert duos, each garnished with color candids. (The camera always seems to catch these dedicated musicians concentrating on the half-finished song for tomorrow's session.) "Takin' It Easy" is soft, bayou-moody, "Along the Red Ledge" more urban and insistent. Material by outside writers is included, as are individual contributions by Messrs. Seals, Crofts, Hall, and Oates. The collaborative credits per duo are somewhat unusual: Hall and Oates write lyrics in tandem, Hall is the composer; Seals and Crofts both write music, but Seals alone is credited with words. All four provide a delicious slice of contemporary rock life.

**100 Nice 'n' Easy Feelings.**

*Columbia Pictures, 100 songs, \$8.95.*

This plump volume of standards contains a well-chosen grouping of mostly mid-'70s soft rock. Included are *Isn't She Lovely, A Fifth of Beethoven, After the Lovin', Three Times a Lady, Theme from "Mahogany,"* and a myriad of other fine songs. Editor Tom Debrecht has taken pains with the piano parts to ensure playability without panic. The folio is marked "Vol. I of the American Music Library"; of its kind, it is excellent, and I applaud the entire project.

**Kansas: Two for the Show.**

*Warner Bros., 12 songs, \$7.95.*

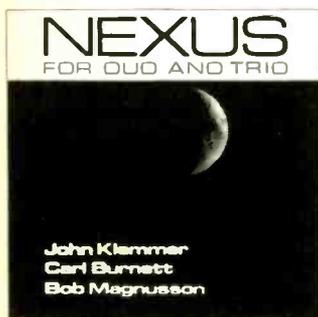
Five of these songs made their debut in last year's "Point of Know Return" folio; the other seven are of even earlier vintage. The sole raison d'être for this reissue seems to be the new copyright owner's desire to cash in on his recent acquisitions. Despite the transcriber's heroic efforts, the notated music does not swing easily; Kansas composers Livgren, Walsh, et al. should be heard rather than seen in print.

## Jazz

by Don Heckman  
& John S. Wilson

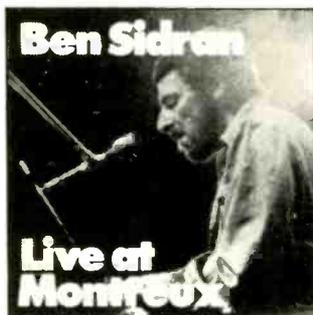
**John Klemmer:**  
**Nexus for Duo and Trio**  
*John Klemmer, producer.*  
Arista/Novus AN2 3500 (two discs)

John Klemmer has made his reputation with a tenor saxophone and an Echoplex. This time around he appears unelectrified, accompanied only by drummer Carl Burnett and bassist Bob Magnusson. But the two-disc collection, which consists mostly of standards, is an exercise in self-indulgence. Unaided by his Echoplex, Klemmer seems to feel he must substitute endless flurries of notes for his more familiar cascades of sound. Before the first of these four sides was concluded, I found myself aching to hear three pure and simple minutes of Coleman Hawkins working his way through *Body and Soul*. D.H.



**Ben Sidran:**  
**Live at Montreux**  
*Ben Sidran, producer*  
Arista AB 4218

Pianist Ben Sidran's performance at the 1978 Montreux Jazz Festival is not much more than a pleasant diversion. Not aiming for any



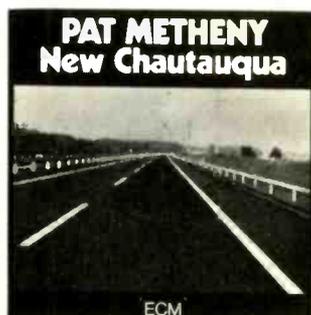
particular aesthetic profundities, he zeroes in on a modest target of pieces that range from standards (*Someday My Prince Will Come*) and rock pieces (*Come Together*) to Zappa-esque originals (*Eat It and Song for a Sucker like You*). His piano playing is crisply functional, but hardly up to the performance level of his sidemen—the Brecker Brothers, Steve Khan, Tony Levin, and others. D.H.

**Warren Bernhardt:**  
**Floating**  
*Warren Bernhardt, producer*  
Arista Novus AN 3011

Pianist Warren Bernhardt has been a darling of New York jazz/rock fans for years. Unfortunately, his unquestionable improvisatory powers are missing in this collection. Considering the extremely personal quality of his meanderings, it seems odd that the better moments here come on *Songs to My Father* and *Metrics*, both of which were written by vibist Mike Mainieri. D.H.

**Pat Metheny:**  
**New Chautauqua**  
*Manfred Eicher, producer*  
ECM 1-1131

Pat Metheny describes this LP as something he's "always wanted to do... an album where I took responsibility for every note." And so



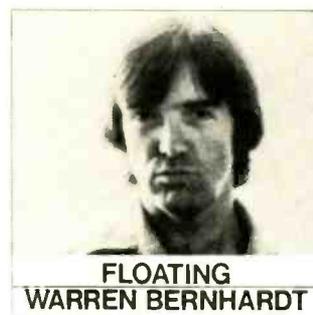
he does via extensive overdubbing of six- and twelve-string electric guitars, acoustic guitar, fifteen-string harp guitar, and electric bass. It's a stunning technical achievement—a whirlwind of musical sound and fury. How much it signifies, however, is something else. Once the initial astonishment over Metheny's mechanical skills wears off, surprisingly little musical fascination remains. D.H.

**Slide Hampton: World of Trombones**  
*Roger Pola, producer*  
West 54 WLW8001

Slide Hampton has put together an ensemble of nine trombones and given it a wide range of material. A fascinating arrangement of 'Round Midnight features a solo, duo, and a trio that interact like an adventurous jigsaw puzzle. Sometimes the group goes jamming, riding a strong rhythm section; sometimes its rich sonorities are reminiscent of Stan Kenton in his *Concerto to End All Concertos* period. But when it tries to cope with the fast phrasing of Charlie Parker's *Donna Lee*, its grave concentration produces an elephant dance. J.S.W.

**Remo Palmier**  
*Carl E. Jefferson, producer*  
Concord Jazz CJ 76

Remo Palmier's dark,

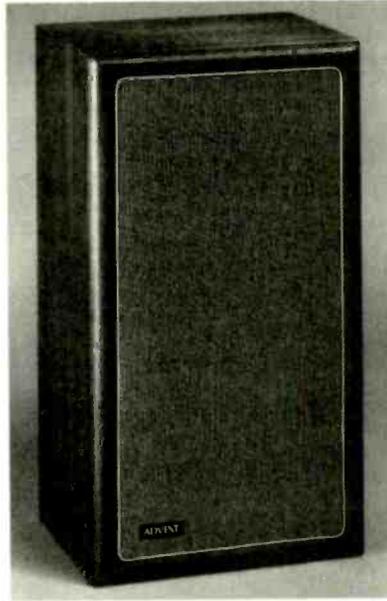


mellow tone on guitar and his relaxed attack set him apart from today's prevalent hectic guitar twangers. He is a romantic—as heard on a long, hauntingly moody development of Henry Mancini's *Two for the Road*—but he's a jazz romantic who conjures up memories of Wes Montgomery with the backbeat funk of Quincy Jones's *In the Heat of the Night* and on his own *Side Track*. His beautifully polished guitar work is ably supported by Lou Levy on piano, Ray Brown on bass, and Jake Hanna on drums. J.S.W.

**Milt Jackson:**  
**Soul Believer**  
*Ray Brown, producer*  
Pablo 2310 832

Milt Jackson's venture into singing on this disc is not an attempt at something new, since he sang professionally with a gospel quartet before becoming an instrumentalist. But his vibes have outstripped his voice since then. He can summon up a swinging intensity on a blues or project a grainy sincerity on a ballad, but on the next piece his voice turns thin, drained of color or texture. The contrast between his sure touch on vibes and the uncertainty of his singing suggests that if he were not Jackson the vibist, he would have little chance to show off Jackson the singer. J.S.W.

*(The New Advent Loudspeaker.)*



# The Standard.

The New Advent Loudspeaker is the newest version of this country's most popular and imitated speaker system. (More than eight hundred thousand original and New Advents have now gone into people's homes.) It is the standard of value in loudspeakers, the speaker most often used as a reference by the people who make and sell audio equipment.

Here are what we feel are the basic reasons for its popularity:

- For a fraction of the expected price, the New Advent covers the entire ten-octave range of music, with exceptional smoothness and low distortion.
- It provides the final half-octave of lowest bass response, supplied by very few speakers at any price. (This half-octave isn't present on all music and recordings, but when it is, the audible difference New Advents make is something to hear.)
- Its extended high-frequency response and excellent dispersion make for the kind of clarity and musical definition that helps bring music alive in your living room.
- Its power handling allows enjoyment of realistic sound levels in good-sized listening rooms. It can be used safely for music listening

with high-powered amplifiers and receivers, yet its efficiency is more than adequate for comfortable listening with moderately powered amplifiers and receivers. (People can and do start off with as little as 15 watts per channel to drive New Advents, graduating later to as much as 150 watts in no-holds-barred systems.)

- Its performance on any kind of music—rock, classical or anything in between—isn't at the expense of another. Its carefully chosen (and maintained) frequency balance across the audible range is designed to produce natural, convincing sound with the whole range of music and recording techniques found on recordings and broadcasts.

- Its quality is maintained by painstaking manufacture and testing. The drivers (designed and built by Advent) are individually response-tested before installation in their cabinets. And after manufacture every finished system is given a thorough response check before shipment. Speakers with very small deviations from the standard are rejected.

- Its price<sup>†</sup> (\$155 to \$190, depending on cabinet finish and how far it has been shipped), makes it one

of the few genuine bargains in audio equipment. (In its "Utility" cabinet version, at the lower end of that price spread, it is a superbargain by any standard.)

Behind all these factors is the basic design intent of the New Advent: to supply everything that has real importance for the great majority of critical listeners—with no corners cut, at the lowest possible cost.

If you are looking for exceptional performance, value, and enjoyment in a speaker, you owe it to yourself to hear the New Advent. We think you will have no trouble hearing why so many people buy and enjoy it.

For more information, including a list of Advent dealers, please send us the coupon.

Thank you.

To: Advent Corporation, 195 Albany Street, Cambridge, MA 02139

Please send full information on the New Advent Loudspeaker.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

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

**Advent Corporation, 195 Albany Street, Cambridge, Massachusetts 02139.**

<sup>†</sup>Suggested price, subject to change without notice.



# Stop Listening To Paper.

And start listening to music as you've never heard it before.

Completely free of the spurious vibrations caused by conventional paper cone speakers.

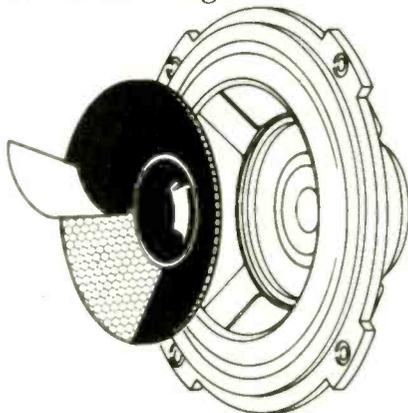
Mitsubishi has eliminated those vibrations by eliminating the paper.

Instead, we build our woofer cones with an aluminum honeycomb core in a sandwich of glass fiber.

Unlike paper cones, the honeycomb structure is rigid enough to maintain its shape, yet light enough to be

exceptionally responsive.

So it can put out sound without adding to it.



And since the glass fiber is non-porous, it gives our air suspension speakers a perfect seal, and a lower resonance frequency for better bass response.

We've also added a flux normalizing ring that reduces distortion by 20dB. And automatic overload protection.

The end result is a speaker capable of a level of performance literally unheard of until now.

If our honeycomb speakers sound too good to be true, test listen to them and judge for yourself.

It's what you won't hear that will impress you.

 **MITSUBISHI**  
AUDIO SYSTEMS

Mitsubishi's Honeycomb Speakers. MS-10 10" 2-Way Bookshelf. MS-20 12" 2-Way Bookshelf. MS-30 12" 3-Way Bookshelf.  
For more information write Melco Sales, Inc., Dept. 45 3030 East Victoria Street, Compton, California 90221.

Circle 29 On Page 93



We build  
a speaker  
that sounds  
like music

It can accurately reproduce the 120+ dB peaks that are found in some live music. That's more than just being able to play music loud. It can accurately reproduce the music bandwidth—from below 25Hz to 20kHz. And the Interface:D's vented midrange speaker reproduces midrange sounds with the clarity and purity that allows precise localization of sound sources—both lateral and front-to-back.

The Interface:D is the only commercially available speaker we know of that can meet these criteria. Audition them at your Interface dealer.

**Ey**  
**Electro-Voice®**  
a gulton company  
600 Cecil Street  
Buchanan, Michigan 49107

**Interface:D™**

#### Translating Schubert

Permit me to reply to a grave though unintentional injustice implicit in Andrew Porter's review of the new *Die schöne Müllerin* recording [April]. The injustice lies in the fact that Mr. Porter makes it appear as if the three translations he mentions are the most worthy of consideration. It has been in print for only a little over a year, so perhaps he does not know what is incomparably the finest and most singable English version of the work, that by the British poet Basil Swift.

No less an authority than the great accompanist Gerald Moore introduced Swift's *Franz Schubert Song Book*. Moore and other leading musicians have testified to the surpassing musical accuracy and literary clarity of these translations. As a classical musician, I can vouch for this. Dr. Peter Jona Korn, director of the Richard Strauss Konservatorium in Munich, has written that they are the best yet.

When there are claims and counter-claims, there is one effective way of determining the truth: examine and compare. In fair play, I ask your readers to compare Swift's translations with those mentioned by Mr. Porter, especially his version of "Ungeduld"—the great test piece of translation.

Nicholas Pietroforte  
Los Angeles, Calif.

Mr. Porter replies: I confess that I do not know Basil Swift's Schubert translations but confess, too, that my curiosity to see them was diminished by Eric Sams's review of them in last January's *Musical Times*. After giving examples of faulty accentuation, scansion, and declamation, of missing rhymes, and of wrong meanings and inappropriate diction ("the vital sparks of the Lied form are too often dimmed or even extinguished by an English style which seems to me more dated and obscure than the original text"), Mr. Sams—who knows English diction, German poetry, and Schubert songs better than most men—concludes that the Swift versions could "prove a serious embarrassment to all performers."

In any case, Mr. Pietroforte's inference that the three translations I mentioned are those I deem "most worthy of consideration" is unfounded. Any short list I drew up from the dozens (scores? hundreds?) of Schubert English translations available would include those of Richard Capell and of A. H. Fox Strangways and Stuart Wilson.

#### Pat on the Back for AR

Your readers may be interested in my recent experience with Teledyne Acoustic Re-

---



---

## In Next Month's Issue

The Stacked Cassette Deck:  
Which Features  
Do You Really Need?

China Chronicles:  
Audio & Music in the  
People's Republic  
*An Exclusive Report*  
by Leonard Marcus

Julius Rudel on  
Conducting French Opera

Alan Rich Reviews  
Sondheim's *Sweeney Todd*

---



---

search. Having written requesting a recommended method of cleaning the top plate of my ten-year-old AR turntable, I found that the suggested cleaning agent removed its original finish. When AR's service manager was advised of this, he offered to install another top plate at no charge. As a result, I now have a practically new unit—because the factory also replaced the tonearm and other parts.

C. L. Parrish  
Melbourne, Fla.

#### Hornet's Nest

John Culshaw's statement in "Hornet's Nest" [April] that "Wagner's meaning lies in his music" rather than in the words of *The Ring's* text merely echoes the misconception among musicologists about the verbal and dramatic dimension of this work. Considered strictly as a literary work, it is one of the masterpieces of the nineteenth century. If literary significance depends largely on a dense interplay of meaningful verbal and actional patterns, then *The Ring* yields enormous returns to extended study. In a short letter I can only suggest the topics that the serious literary student might pursue (and perhaps even the serious musicologist).

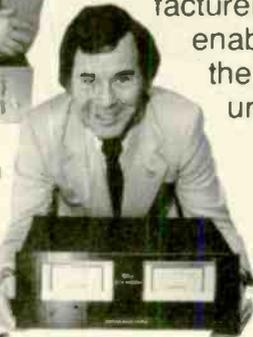
# Even competitors agree.

When competitive companies agree on a basic concept, it must be sound. That's why the standards for measuring high fidelity components developed by the Institute of High Fidelity are so widely used by manufacturers. These helpful guidelines enable manufacturers to present their product specifications in a uniform way. As a result, you can rapidly compare hi-fi components because everyone's "audio watts," "microvolts," and "dBs" mean the same thing. They help you and your audio dealer talk on the same wavelength when you're discussing the difference between hi-fi and not so hi-fi products.

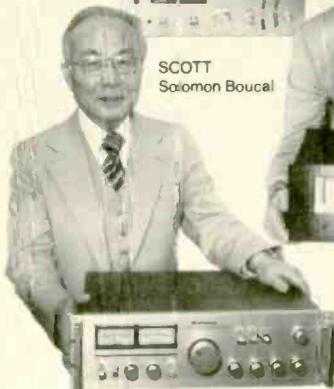
IHF measurement standards are now in effect for tuners, amplifiers, and headsets. Additional standards are now being developed for speakers, tape recorders, turntables and cartridges. Look for them in manufacturers' literature and in retail advertising. Then you can buy real high fidelity with complete confidence. Institute of High Fidelity, Inc., 489 Fifth Avenue, New York, N.Y. 10017



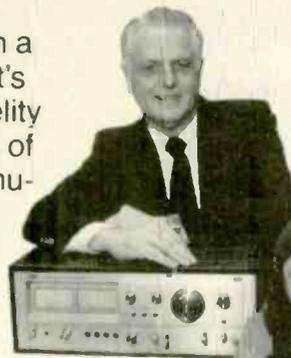
SCOTT  
Solomon Boucal



MARANTZ  
Fred Tushinsky



KENWOOD  
Bill Kasuga

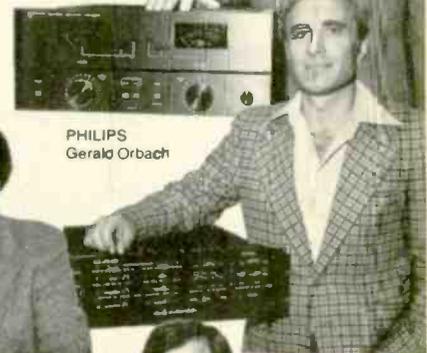


US JVC  
George Meyer

THRESHOLD  
Nelson Pass



YAMAHA  
Stewart Greenberg



PHILIPS  
Gerakl Orbach



TECHNICS  
Jeff Berkowicz



ONKYO  
Mark Friedman



HARMAN/KARDON  
Richard Aquilina



SAE  
Malcolm Schreer



SANSUI  
Ken Hoshino



LUX  
Jerry Kaplan



NIKKO AUDIO  
John Schroeder



HITACHI  
Jerry Henricks



PIONEER  
Bernie Mitchell

PHASE LINEAR  
Bob Morrill

SONY  
Frank Leonard

Shown above are just a few of the many manufacturers using IHF measurement standards.

# High Fidelity's Buying Guides

Featuring:

## High Fidelity's Test Reports 1979 Edition

Available Now—By mail or  
at your Newsstand

Here's a convenient way to order the many useful and informative publications available from HIGH FIDELITY in the comfort of your own home. It's easy! Just circle the item(s) you wish and give us your name and address on the coupon below along with your check.

### No. 201 STEREO TEST REPORTS, 1979 Edition.

A 176-page reference guide to stereo components, including performance evaluations of amplifiers, tuners, receivers, tape decks, turntables, tone arms, cartridges, headphones, equalizers and accessories. **\$2.95** on newsstands. **\$3.95** by mail, postpaid.

### No. 202 HIGH FIDELITY'S BUYING GUIDE TO STEREO COMPONENTS, 1979 Edition.

Over 2,500 audio and video products are listed with full specifications and prices for intelligent comparison. A must for anyone about to purchase practically any component or accessory. **\$2.95** on newsstands. **\$3.95** by mail, postpaid.

### No. 203 HIGH FIDELITY'S BUYING GUIDE TO SPEAKER SYSTEMS, 1979 Edition.

Complete buying guide to more than 750 speaker systems. If you can't find your dream speakers here, they probably don't exist! Plus, several features on Speaker Performance: What's Really Important? **\$1.95** on newsstands. **\$2.95** by mail, postpaid.

### No. 204 HIGH FIDELITY'S TEST REPORTS, 1979 Edition.

How to get more for your money . . . more than 230 manufacturers' products evaluated. Experts help you choose receivers, amplifiers, tuners, speakers, headphones, turntables, pickups, tape equipment and system accessories. **\$3.95** on newsstands. **\$4.95** by mail, postpaid.

First of all, most of the thirteen distinct episodes of the cycle include versions of a single dramatic action, which might be called simply Gaining Possession. This action comes in two forms: wooing and stealing. The central concern of the whole cycle is to show how these two ways humans relate to one another—through love or through power—come to mingle with and corrupt each other. Wotan wants both love and power, and the comment of *The Ring* is that, ultimately, this is impossible.

Secondary patterns that interlace with these include the following: 1) There are repeated occurrences of character A using character B to perform an action, which usually backfires on A; and 2) The accretive characteristics of the German language allow Wagner to create a text full of repeated phonemes and morphemes, linking many words as kinds of quasi-puns (just as the transformation of musical leitmotifs into one another creates something of the same thing).

Michael McCanles, Professor  
Dept. of English,  
Marquette University  
Milwaukee, Wis.

#### S.O.S.

The University of St. Thomas Music Department Library was severely damaged by fire on December 3, 1978. The department is making an appeal for records and scores that are necessary in an undergraduate music library. If you can help, please contact me.

Sister Jane Conway, S.S.M.  
University of St. Thomas  
3812 Montrose Blvd.  
Houston, Tex. 77006  
(713) 522-7911, ext. 240

#### Bozak Booster

It was a distinct pleasure to read the equipment report on the Bozak LS-300 speaker [April]. The "musical" sound you mention is what sold me twenty-seven years ago, particularly the string tone.

As a season-ticket holder for the San Diego Symphony with seats in row L of the orchestra, I can state that the Bozak sound is indeed much the way the music sounds from there. The perspective, balance, definition, and detail all are there. If anything, the sound at home puts me where the conductor stands.

Albert Sadler  
San Diego, Calif.

#### Identity Crisis

In the past, Paul Henry Lang has staunchly opposed women singing male roles (even those written for women, like Handel's Solomon) and countertenors singing anything. Now, with his review of *Acis and Galatea*

[April], he takes up arms against the menace of "unmanly" tenor singing. How heartening, in these troubled times, to see such a firm defender of the Butch standard! Men are men, women are women, and Prof. Lang isn't about to let anyone forget it.

As for those of us who never took the Butch standard too seriously in the first place and who are willing to keep our minds and ears open as performers continue in their attempts to re-create music of past eras, we'll continue to enjoy performances of baroque music sung by countertenors, "falsettists," and tenors who fail to meet Prof. Lang's standards of "masculine" vocalism. (And while we're at it, let me put in a good word for the string playing of the English Baroque Soloists and the Quartetto Esterhazy, which he finds so disagreeable.)

Nicholas Deutsch  
New York, N.Y.

Prof. Lang replies: The four-part setting upon which Western music was based for centuries was modeled on the natural range of the human voice—soprano, alto, tenor, and bass. In the baroque era the providers of music created a fifth category, the castrato and his cult. This artistic lunacy was eventually abandoned under the merciless spoofing of the opera buffa, but I almost suspect that some of the stalwart partisans of absolute historical accuracy in performance would secretly love to reinstate these freaks. Since they place pitch above theatrical verisimilitude (and statute books being in the way), they substitute women, who with their gloriously feminine voices impersonate Julius Caesar or Alexander the Great. But remember that, while the castrato was a soprano, his voice was not feminine, but "neuter" and white. It seems to many of us that, since a substitution must be made, using tenors or basses in these parts is both musically and dramatically preferable.

As for Handel, when he turned to the oratorio he gave up the opera seria routine of using castratos or women (when a castrato wasn't available and he didn't want to go to the trouble of rewriting the part) in men's roles. Just what caused him to make an exception by giving Solomon to a mezzo is unclear, but it is well known that Handel was always willing to compromise, to meet the exigencies of a particular production; he was both composer and impresario. Yet for a woman to sing Solomon or Julius Caesar is as damaging to a dramatic work as it would be for a bass to sing Cleopatra or the Queen of Sheba.

My objection to the countertenor is on purely musical grounds. An English specialty not welcomed anywhere else until its recent revival but now very much a la mode, he is really an outré tenor who trespasses into the

#### HIGH FIDELITY

1 Sound Ave.  
Marion, OH 43302

Here's my check for \$ . . . . . Please send me, postpaid, the books I've circled below.

201    202    203    204

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

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

Payment must accompany order. Please allow 4 to 6 weeks for delivery. D9GF3

# Scott puts out.



Scott's unique gold warranty card.

**SCOTT**  
Warranty Identification Card

Warranty Number: 42631  
Model: PRO-1380 Speakers (21)  
Serial Number: 776582/776982  
Expiration Date: September 1, 1984

Individualized with your warranty, model and serial numbers, and expiration date. Scott's fully transferable, five-year parts and labor-limited warranty is your assurance of lasting pleasure.

A Scott exclusive. By carefully controlling the variation of impedance over the entire listening range, Scott speakers give you maximum amplifier power output and minimum speaker distortion.



## Because Scott puts more in.

Deeper, richer lows. Crisper, clearer highs. And an accuracy across the entire tonal spectrum that's second to none. That's what you get with Scott Controlled Impedance speakers.

No matter what your listening preference, Scott speakers will make your whole sound system sound better.

At Scott, there's no such thing as an "off-the-shelf" component. Unlike many other makers, Scott custom designs and acoustically tailors every speaker component to give you accurate frequency response, high efficiency, and extra power handling capacity. After all, the sound you get out depends on what we put in.

But listen for yourself. And you'll hear just how much Scott speakers really put out.

For more information on Scott speakers, or on our entire audio line, see your nearest Scott dealer or write H.H. Scott, Inc., Corporate Headquarters, 20 Commerce Way, Dept. 1S, Woburn, Massachusetts 01801. In Canada: Paco Electronics, Ltd., Quebec, Canada.

**SCOTT**  
The Name to listen to.<sup>®</sup>  
Makers of high quality high fidelity equipment since 1947.

# WHY PAY MORE!

**PIONEER**

SG 9500  
**\$215**



10 Band/Channel  
Graphic Equalizer

**KENWOOD**

KA 701  
**\$281**



New DC Hi Speed  
Amplifier

**Technics**

D2  
**\$98**



Direct Drive



**CAR  
STEREO**

We carry the full line of Pioneer,  
Sanyo, Clarion, Marantz, and more.

CALL Weekdays 9-6  
Saturdays 9-5

**WDS**  
WISCONSIN DISCOUNT  
STEREO

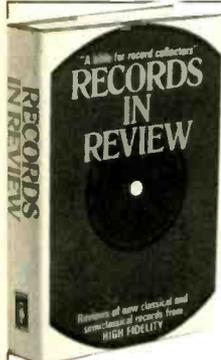
2517 whalen lane madison, wisconsin 53713

Over 60 Brands like:

Technics	Maxell	Sony	Cerwin
Pioneer	Empire	Teac	Vega
Marantz	Altec	Akai	JBL
Kenwood	Sharp	Dual	Audio
Sansui	Sanyo	Koss	Technica
Jensen	Shure	TDK	Clarion

**TOLL FREE  
800-356-9514**

Circle 56 On Page 93



announcing...  
**Records  
in Review  
1979  
Edition**

## Records in Review, 1979 Edition, 15 Day Trial Examination Form

Yes! Please send me \_\_\_\_\_ copy(ies) of the brand new 1979 Edition of **Records in Review** for 15 days trial examination. If dissatisfied in any way, I may return the book(s) for a full credit or refund within 15 days. I pay only \$15.95 per book, plus \$1.00 for shipping.

I enclose \$ \_\_\_\_\_  Charge to  Master Charge  BankAmericard

My credit card number is \_\_\_\_\_

Master Charge Interbank \_\_\_\_\_



Card Expires \_\_\_\_\_ Signature \_\_\_\_\_

Mail to: Wyeth Press, Box 550, Great Barrington, MA 01230

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Allow 4 to 6 weeks for delivery

7/79

## 112 HIGH FIDELITY

range naturally belonging to women. At that range no man's voice can have any resonance and warmth—hence the typical countertenor hooting.

Finally, I consider lifeless and vibrationless string playing also an affront to music. I grew up in the opera pit, and I can tell a good violin from one afflicted with TB. If Mr. Deutsch, who seems to be a good-natured adversary, reads my article on performance practice in this issue, he will get more detailed answers to his implicit questions.

### Van Beinum on Disc

Music lovers fortunate enough to have heard Eduard van Beinum perform regard him as one of this century's master conductors. Philips' "The Art of Eduard van Beinum," warmly reviewed by Abram Chipman [April], should widen appreciation of his thoughtful yet dynamic interpretations. I hope that Philips will follow Mr. Chipman's advice and reissue the conductor's recordings of Brahms and Mahler.

Meanwhile, several other wonderful discs are available. London Records has re-released Van Beinum's *Symphonic fantastique* and *Roman Carnival Overture* (RS 23205) and the Mahler Fourth Symphony with Margaret Ritchie (RS 23211; also found in Vox VSPS 16). Sine Qua Non markets a collection of his Beethoven overtures (SQN 7734). And record collectors with access to import stores may be lucky enough to find his stereo *Water Music* on Philips Fontana or *L'Arlesienne Suite No. 1* with excerpts from *Rosamunde* and *A Midsummer Night's Dream* on French Decca's Classique Royal label.

Van Beinum's musicianship is equally evident on his recordings as an accompanist. Turnabout has issued his 1947 concert performance with Dinu Lipatti of Busoni's piano arrangement of Bach's Harpsichord Concerto No. 1 (THS 65111). Much better sounding is the stereo disc of Beethoven's First and Fourth Concertos with Robert Casadesu on piano, on Odyssey (32 16 0056). The Elgar Cello Concerto with Anthony Pini is on Everest (314).

David J. Saemann  
Wayne, N.J.

**HIGH FIDELITY** welcomes correspondence from its readers that falls within the scope of our coverage—music, recordings, audio componentry, and aspects of the general cultural milieu that relate to these. Letters may be edited in order to sharpen their sense and style and to pare their length, and we suggest therefore that correspondents confine themselves to 400 words. Please keep 'em comin' to the Editor, High Fidelity Magazine, The Publishing House, Great Barrington, Mass. 01230.

Circle 10 On Page 93 ▶

# Restore the impact of "live" ...easy as 1-2-3.



No matter how accurate your stereo system is, it's only as good as the records and tapes you play on it—and they leave much to be desired. The recording process does some terrible things to live music, and one of the worst is robbing it of dynamic range, the key element which gives music its impact.

Fortunately dbx has developed a whole line of linear dynamic range expanders which can restore lost dynamic range.

**1BX.** The 1BX is the most sophisticated one-band expander on the market. Its RMS level detector incorporates an infrasonic filter to prevent mis-tracking caused by turntable rumble and record warp.

**2BX.** The 2BX divides the frequency spectrum into two bands and expands each separately. It doesn't allow the bass to influence the vocals or mid-range instruments, and in strongly percussive music, that's important.

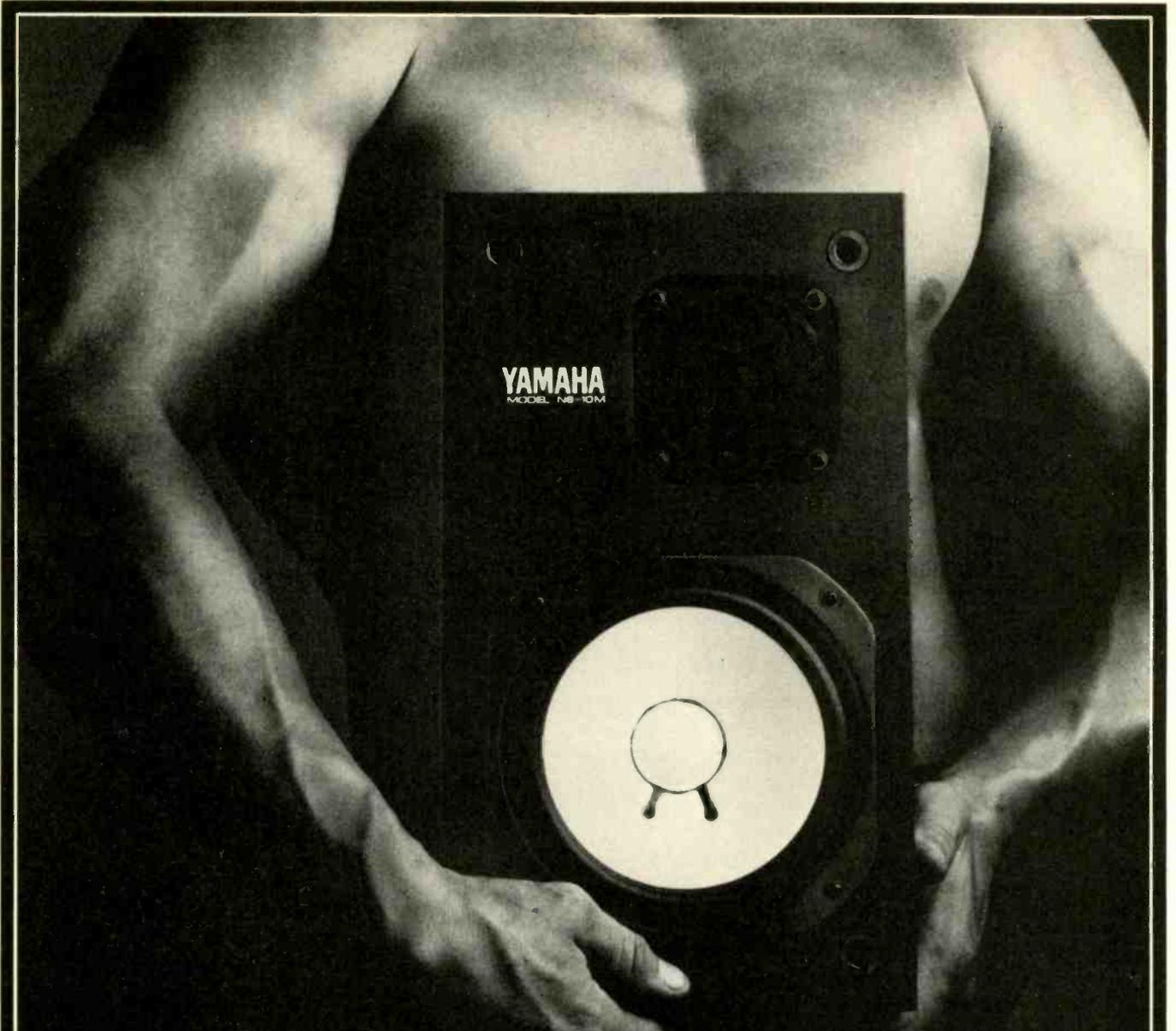
**3BX.** The 3BX is the state-of-the-art, but with the introduction of the 3BX-R Remote Control option, it's more flexible and more fun than ever. The 3BX divides music into three frequency bands. Low bass will not influence the midrange. And midrange crescendi will not boost low level highs, so operation is virtually inaudible. For complex musical material, the 3BX is the best way to restore dynamic range.

All dbx expanders have design features in common. All utilize true RMS level detection. All feature a program-dependent release time, for natural, life-like sound. All are true stereo expanders that maintain rock-solid stereo imaging. And all dbx linear expanders have a pleasant benefit—up to 20 dB of noise reduction.

The 3BX is still the standard. But now there is a family of dbx expanders designed to bring any system one step closer to "live."

**dbx**  
**UNLOCK YOUR EARS.**

dbx, Incorporated, 71 Chapel Street, Newton, MA 02195 (617) 964-3210.



YAMAHA  
MODEL NS-10M

## Incredibly smooth, well-defined, powerful. Yet small.

Presenting Yamaha's new NS-10M Mini-Monitor. With wide, even dispersion, high sensitivity and accuracy, the sound is distinctively Yamaha: a rich, solid sound with a tight, firm bass that respects every nuance of tonal shading.

What you're going to wonder, is where it's all coming from. Because for the sound, the Mini-Monitor is amazingly small. Weighing in at 13 lbs., the speaker measures only 15.4" high, 8.5" wide. Inside, a 7" cone woofer and a 1.5" dome tweeter produce 90 dB SPL with 1 watt at 1 meter.

The Mini-Monitor was made in the image of the NS-1000. It has an identical finish, and like its bigger brother, is sold in mirror-image matched pairs. At low volume levels the sound is virtually the same. It's a primary monitor with the NS-1000 look and sound, for places the NS-1000 won't fit.

Our new Mini-Monitor with the powerhouse sound is currently contending with the heavyweights at your Yamaha Audio Specialty Dealer. And holding its own, thank you.



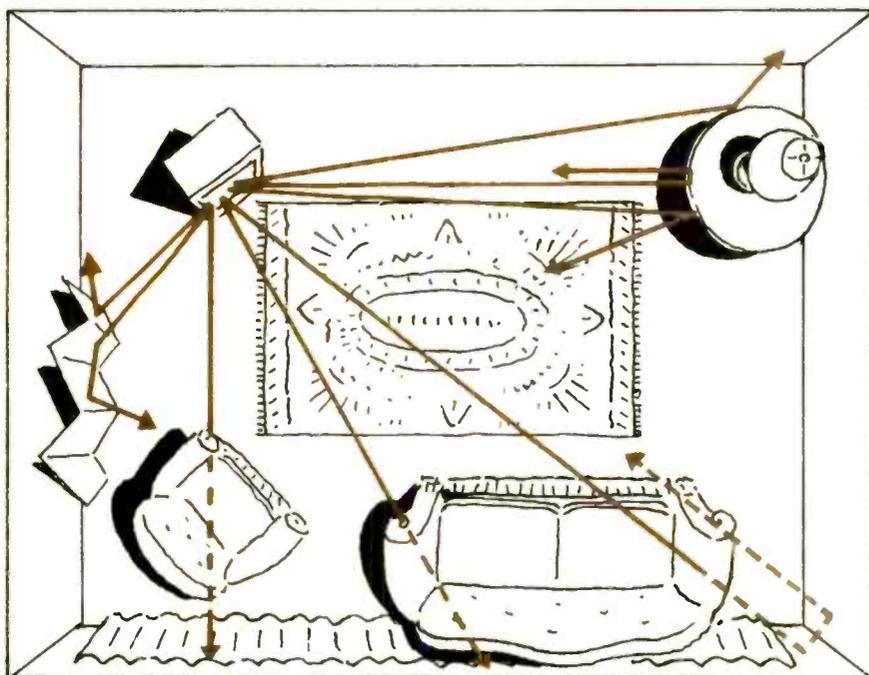
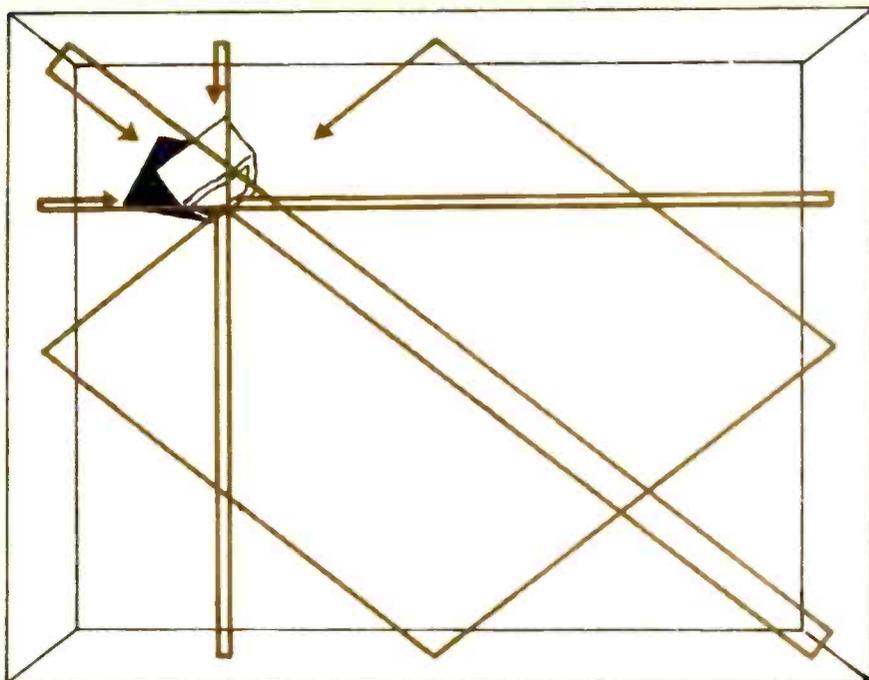
Audio Division, P.O. Box 6600, Buena Park, CA 90622

If you can't find your nearest Yamaha Audio Specialty Dealer in the Yellow Pages, just drop us a line.

# The Listening Room: The Forgotten Component

*It's not just the hardware you're listening to: You're hearing the room too.*

by Alan Fielding



Standing waves that form in rectangular rooms because sound waves bounce off parallel surfaces are broken up by furnishings or room irregularities that either absorb or disperse the sound. Good listening rooms generally do both. Canny deployment of decorative and functional objects therefore has much to do with how good or bad the room will sound, even if it falls well short of ideal acoustic proportions to begin with.

Many stereo shoppers, after giving due care to their choices, take the equipment home, plunk the receiver and turntable down on some convenient flat surface, put the speakers where they are not in anyone's way, hook the whole thing up, and consider themselves "in business." They don't really think about the room or the position of the system in it—after all, what difference can it possibly make as long as nothing blocks the speakers? Besides, some might object, the way we listen has to fit the rest of our life-style. Well, friends, it certainly does make a difference—and a big one. If you're serious about listening to music, you'll have to face the fact that putting your stereo system in an unsuitable room is as silly as setting up a Ping-Pong table that measures 9 by 5 feet in a 10-by-8 room.

---

*Alan Fielding has been a key editor for a leading American audio journal.*

## Seven ingredients in successful listening-room acoustics:

### 1. Choose an irregularly shaped room if you can.

Your listening room is part of the audio chain, between the loudspeakers and your ears; every sound that reaches you must pass through it—and be altered by it. It should be no surprise, then, that your choice of a room may have more influence on the final sound than your choice of loudspeakers. This is an inconvenient truth, since it's normally far easier to change speakers than to change rooms, but there are steps that can be taken to improve less than desirable acoustics. And, of course, acoustic options are open to anyone who is building a house from scratch or heavily remodeling one.

Like any component, a listening room must have reasonably flat frequency response in order to avoid screechy highs or boomy lows. Then, too, it must be free of distortion in the form of loose panelboard or other objects free to buzz and rattle along with their favorite notes. And just as transient response is important to a phono cartridge or speaker, it is important to a room. If the room sound takes too long to build up—and depending on the way in which sound is delivered from the speakers to the listener within the room—sudden attacks, like those of percussion or brass, are dulled; if the sound takes too long to die away, the “hangover” that results may garble the utterances of even the finest stereo system. Finally, it is a good idea, especially in an urban setting, to make a listening room as soundproof as possible. It can be extremely frustrating when the system cannot be played as loud as you would like for fear of waking the kids or eliciting complaints from the neighbors.

When a loudspeaker (or any other source of sound) starts to transfer its output into a closed space, the sound waves are reflected from and between the boundaries of the space. In some ways, conditions in the room resemble those in an organ pipe; the frequencies whose wavelengths “fit” most neatly into the dimensions of the space are reinforced. These are called the “natural frequencies” of the room and constitute its natural “modes” of vibration. Conversely, there are frequencies to which the room is particularly inimical; they, in effect, reflect back to the source out of phase—zigging when the source is zagging, so to speak—and thus at least partially cancel themselves.

A closer look at the details of the way a perfectly reflective room (which certainly is not the same thing as a perfect room) might behave suggests the means by which the behavior of real rooms can be adjusted. Assume that a ray of sound leaves the source and bounces around the room, losing none of its energy in the process, and finally arrives back at the source just in time to cancel the radiation then emerging. The net transfer of energy into the room at this frequency is now zero. But if the wave's energy is partially absorbed in the room, the cancellation cannot be complete. Thus energy will flow into the room to equal the amount absorbed. If absorption is total, the source delivers its full output. A room that is totally absorptive at all frequencies (an anechoic chamber) allows sound to propagate exactly as if no boundaries existed—as if it were outdoors.

**T**he first natural mode of a room of normal residential dimensions is usually at a low bass frequency. For example, the first few modes of a rectangular space 23 by 13½ by 8½ feet fall at roughly 25, 43, 48, and 49 Hz. Higher modes are progressively closer in frequency, eventually overlapping to become quasi-continuous. While the broad trend of all modes in any given region of the higher frequencies affect the coloration of a room (its “brightness” or “warmth”), individual modes are of interest chiefly at low frequencies.

The number of modes to be found in a space of any given dimensions depends essentially on its volume. Thus, a nonrectangular space has

about as many modes as a rectangular one of similar volume. But they are distributed in a more complex way, and the fact that they are less likely to coincide exactly (and thus doubly or triply reinforce certain frequencies) in nonrectangular rooms makes spaces of this type particularly advantageous—something that should be kept in mind when extensive remodeling or building is contemplated. I once realized a major acoustic improvement by removing the floor of an unused attic to create a cathedral ceiling for the listening room below. In general, an irregular room shape creates less reinforcement at the natural frequencies; it effectively broadens the “tuning” of the room modes and makes them more likely to coalesce.

What we have been considering, albeit in highly simplified form, is the “steady-state” response of the room—its behavior when a continuous signal is turned on for a long time and the pattern of sound waves is allowed to stabilize. Its behavior during the initial buildup and terminal decay of the sound is considerably more complex and difficult to predict. Fortunately, if the buildup time and decay time (sometimes called the reverberation time) are kept short enough, the details of such behavior are unimportant.

A good case can be made for listening rooms with fairly high sound absorption. (In any event, a totally anechoic room is not really practical: Besides being acoustically unnerving for any activity but listening, it would require that the walls be covered with massive glass-fiber battens extending well out from the walls.) Absorption at high frequencies is easily supplied by such normal furnishings as carpets, scatter rugs, upholstered chairs and sofas, and wall hangings, as long as these are strategically placed. Part of the strategy involves the needs of your loudspeakers. In some designs, these needs are quite specific, and any caveats that the manufacturer offers along with the speakers should be heeded scrupulously. In so-called omnidirectional designs, for example, reflection of the sound off walls and ceilings is a necessary part of the propagation “game plan” and will be inhibited by excessively absorptive surfaces or incorrect speaker placement. Conversely, some speakers—typically, the British “monitor” designs, among others—are predicated on the theory that the direct speaker-to-ear wave is the important one and that diffusion and reflection are basically undesirable in the quest for the best possible stereo imaging and minimum coloration; too reflective a room obviously works against their design intentions. The vast majority of speakers, however, are considered to be general-purpose designs and delivered without any particular instructions for best use. It is essentially to the problems of getting best sound from these speakers that this article is addressed.

**A**bsorptive material, it turns out, is far more effective when distributed randomly throughout a space rather than concentrated in one area. Thus several small scatter rugs are likely to be as effective as a single wall-to-wall carpet—or even more so. Similarly, wall hangings are best if there are quite a few of them and if they are of moderate size. Overstuffed furniture, throw pillows, and draperies (particularly if ample enough to hang in folds) all contribute to absorption at mid and high frequencies, reducing the effect of the room on musical transients. Ceiling treatment, too, is most effective when applied in irregular patches. In a word, experiment.

Rooms with long parallel walls may be subject to flutter echo, a condition in which an impulse (such as a handclap) reflects back and forth between the walls and is stretched out into a series of rapid “slaps.” This can sometimes be relieved by covering most of one of these walls with absorptive material. Flutter can also occur between floor and ceiling; carpeting normally controls the effect.

Random arrangement and shape of the absorptive and reflective

**2. Use sound-absorbing decor.**

**3. Heed speaker manufacturers’ positioning advice.**

**4. Scatter additional absorbers about.**

## 5. Provide sufficient amplifier power.

surfaces—like irregular room shape—also contribute to the diffuseness of the reflected sound. That is, sound bouncing off the walls tends to reach the listening area approximately equally from all directions. This virtually assures that the room sound will not be able to confuse the loudspeakers' stereo image, which will be formed, as it should, by the direct radiation.

Despite the apparent advantages of making a listening area highly absorptive, the method has its price—one that has led some to recommend moderation or even abstemiousness in its use. The problem is that a stereo system playing in a highly absorptive or "dead" room will not sound nearly as loud as one playing in a reflective or "live" room, where the reverberation reinforces the direct sound from the speakers. This can be a serious matter if amplifier power is meager. If it is, your best listening position probably is within 6 feet of the loudspeakers, in order to keep the sound level at the listener's ear reasonably high. The best solution, however, is to use an amplifier with enough power—and speakers with enough power-handling capacity—to produce adequate listening levels without much reinforcement from the room. This should give you the cleanest sound your system can produce. (It is, in fact, one rationale for the use of a superamp.)

Yet there are those who find the acoustics of a dead room dull and unpleasant. To a certain extent, this is one of those unarguable matters of taste; but relatively heavy absorptive treatment has certain practical advantages that accrue even when the room is not being used for music: 1) The level of noise (whether generated internally or externally) is lower. 2) Less sound "leaks" out of the room to cause problems elsewhere. 3) Two or more conversations can take place with reduced aural competition. 4) The overall acoustics tend to be "intimate," favoring sounds that originate nearby over those from far away. And, obviously, real-world priorities must address such ancillary considerations in addition to pure sound reproduction.

So far, we have said very little about taming the acoustic effects of the room at low frequencies. Materials suitable for low-frequency absorption are hard to come by and do not fit happily into a domestic environment. Yet the room modes at low frequencies are the farthest apart and cause the greatest unevenness in the sound. Moreover, such room modes are inevitable concomitants of the room dimensions.

But the most common problem at low frequencies—and one that can be solved to a substantial degree—involves not the room modes, but the distance between the sources of bass sound (woofer cones) and the room boundaries. The sound radiates equally in all directions, reflects from the nearest boundaries, and returns to the woofer. When the wavelength of the speaker's output equals four times the distance from the woofer to a boundary, cancellation reduces the radiated power by half; when the distance corresponds to half a wavelength, reinforcement doubles the power. This sonic behavior is not unlike that of room modes, except that here the frequencies of cancellation and reinforcement can be changed by moving the loudspeaker with respect to the room boundaries.

Some manufacturers have taken advantage of this effect by designing speaker systems so that woofers are located directly against one, two, or all three of the nearest boundaries, allowing the woofer and its reflected "images" to operate in unison at all frequencies and reinforce each other. This not only eliminates a serious source of room coloration, but also boosts the efficiency of the woofer. The only disadvantage of this technique is that the room modes associated with the boundary or boundaries with which the woofer is coupled will likely be exaggerated.

Most loudspeakers are designed in the form of a "box" with the drivers arranged on one of the long faces, and it is difficult to place them so

that the woofer is in suitable proximity to, say, the floor and the nearest wall without angling the more directional output of the tweeter (and midrange driver, if any) away from the listening location. Experience, backed up by a modicum of theory, has shown that such speakers perform best—that is, give the flattest frequency response—when located well away from the nearest room boundaries to increase the length of the reflective paths from the speaker to the floor and walls and thus lower the frequencies at which cancellations and reinforcements occur. It is important to remember that the speaker must be moved away from the floor (or ceiling) as well as the walls, which often necessitates placing it on a stand or suspending it. Sometimes a small speaker whose woofer gives up gracefully rather than attempting to reproduce bass tones beyond its muscle can be positioned so that the principal response anomalies created by the room boundaries are below its cutoff point.

For larger speakers whose aspirations include bass drum sounds and organ pedal tones, the situation is more difficult and calls for more elaborate strategy. One trick that has worked successfully is to place the speaker so that the distance from the woofer to the wall behind it is just about twice that between the woofer and the floor. Now a cancellation and a reinforcement coincide in frequency and nullify each other. It is important that the distance not be doubled *exactly*, for this raises the possibility that double or triple cancellations or reinforcements will occur at higher frequencies.

**M**ore than anything, this example serves to suggest some of the complexity of the situation and explain why the best positions for speakers usually are found by trial and error. Often an inch or two one way or the other makes the difference between success and failure. It is virtually impossible to predict where a given pair of speakers will sound their best in a room, but in all likelihood they will be on stands and several feet away from the nearest walls. Again, however, it is important that you observe any placement instructions the manufacturer provides with the speakers. A corner horn will have weak bass if it is moved out of the corner, and the sound and stereo imaging of most dipole radiators (typically, but certainly not exclusively, the full-range electrostatics) can be severely compromised by placing them too close to the wall behind them.

Minimizing reflective effects at low frequencies means sacrificing constructive reinforcement, just as it did at high frequencies. This type of positioning means the speaker will have less deep bass, but what there is will be the cleanest you can get. Here, too, the day is saved by high power capability in both the amplifiers and the speakers—which, for really high quality results, must tolerate enough bass boost to compensate for the low-frequency rolloff if it occurs at an audible frequency. And since typical absorptive materials in the home soak up more highs than lows, the bass may still predominate and require a *cut*. The use of low-frequency equalization in an attempt to compensate for room modes is, incidentally, doomed to failure; such means are effective only in correcting broad trends.

Obviously, the best listening room is one that has been designed for the purpose from scratch, and for this there is little that can substitute for competent professional services. The task of design and construction does not necessarily lie beyond the abilities of a do-it-yourselfer, but it is difficult and requires a great deal of knowledge and experience—and research. But even those of us who content ourselves with less radical tailoring of the listening environment have effective methods at hand. Careful choice and arrangement of furnishings, as well as the stereo system, can result in astounding improvements. Many listeners have never really heard their music systems at all—their rooms are in the way. **HF**

**6. Judge woofer-to-boundary distances carefully.**

**7. Judiciously use tone controls and equalizers.**

ADC has four Sound Shaper frequency equalizers that will improve your sound system. No matter how good it is. And at a cost that's lots less than trading in your components.

ADC Sound Shapers will improve your speakers. By extending mid bass hump while simultaneously extending the true bass response.

ADC Sound Shapers will improve the relationship between your cartridge and speakers. From one of partial incompatibility to total compatibility.

They'll also eliminate rumble (low frequency overload), tape hiss and record scratches.

And that only scratches the surface of what ADC Sound Shapers can do. For instance, the walls, carpeting and furniture of your listening room physically bounce sound around so that some spots have less sound than other spots.

Lots less. ADC Sound Shapers will bring these "dead" spots to life.

Perhaps best of all, though, is a Sound Shaper's ability to let you re-equalize what a recording engineer mixed. If a horn section is overwhelming a piccolo, for example, you just slide the appropriate frequency lever. Presto, more piccolo. You can also vanquish a voice. Or boost a tuba.

Sound Shapers segment the entire spectrum of sound. To let you re-shape a sound track to your personal musical preferences. It's all the control you've ever dreamed of but never dreamed possible.

To get into equalizers, start with our Sound Shaper One which operates in five frequency ranges. Or our Sound Shaper One Ten which gives you greater control by operating in ten frequency ranges.

For more professional equalizers, there's our Sound Shaper

Two Mk II which functions in twelve frequency ranges with a two-channel LED meter. And there's our new Sound Shaper Three Paragraphic Equalizer.

It combines all the advantages of a graphic equalizer with all the advantages of a parametric equalizer. Twelve primary frequency controls per channel. Plus twenty-four ancillary control positions per channel. The Sound Shaper Three is the ultimate in controlling and creating with your stereo system.

Take the ultimate step up in sound, without trading in a thing.

ADC Professional Products, a division of BSR Consumer Products Group, Route 303, Blauvelt, NY 10913. Distributed in Canada by BSR (Canada) Ltd., Ontario. ®Sound Shaper is a registered trademark of Audio Dynamics Corporation.

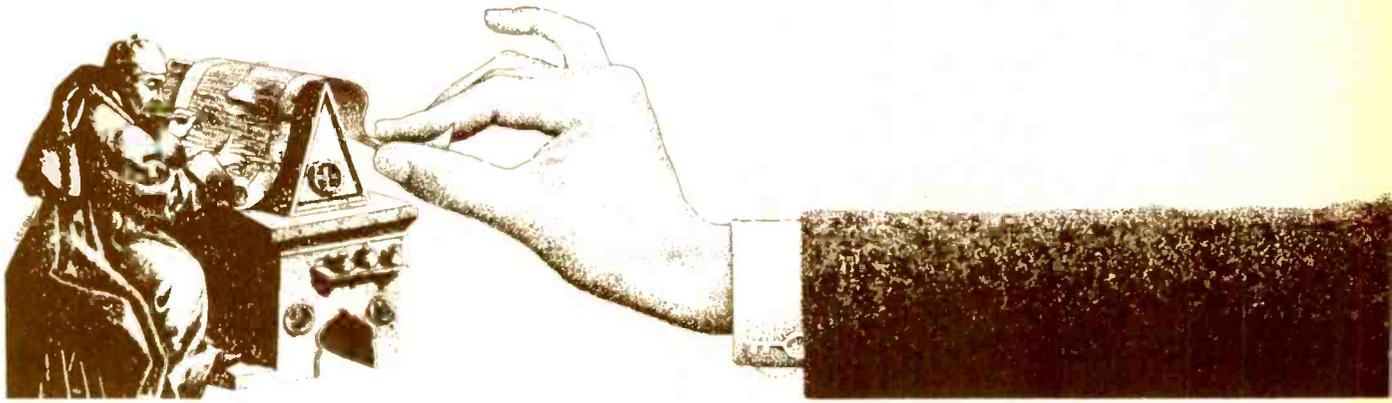
# HOW TO TRADE UP YOUR RECEIVER, TUNER, AMP, TURNTABLE, CARTRIDGE AND SPEAKERS WITHOUT TRADING IN A THING.



**ADC SOUND SHAPERS**  
A BSR Company

# Rigor Antiquarii: The Great "Performance-Practice" Muddle

by Paul Henry Lang



Over the past two decades or so it has not been easy to be a historian or critic of music. The skill, intensity, and scope of research in performance practice has forced the taking of sides; the dissemination of scholarly theories and doctrines, salutary and enlarging in itself, now threatens artistic freedom. What was first a discovery and then an exuberance is now becoming a deadening orthodoxy.

It was musicology that early in this century introduced the idea of objective, historically correct performance practice based on archival, iconographic, and other evidence, thus giving it the stamp of scholarly legitimacy. From the beginning there have been, and there still are, eminent and sincere scholars who believe that the exploration and reconstruction of the music of the past is a matter of pure scholarship, unconcerned with practical music-making. They take pride in the severe orderliness and caution of their procedures and the precision of their technical language, some carrying their devotion to learning to such extremes as to remind one of the French nobleman who had the *grand cordon* of the *Ordre du St. Esprit* fashioned in oilcloth so that he could wear it in his bath.

We recall that *legere* means not only to read, but also to collect, and indeed the musical philologist resembles the entomologist in his passion for collecting and classifying; neither the natural history of the smallest beetle nor that of the smallest musical configuration can be overlooked. But the musical entomologist collects not insects, but the fruits of the human intellect, and he deals not with a science, but with an art. The musicologist must at all times guard his sense of values, he must not permit his zeal to extend mechanically to little and large without discrimination, to build systems and establish genera based on tentacles or legs—or mordents or *notes inégales*.

Nor should scholars forget that their duty is to present purely and transparently what is hybrid and obscure. Yet many monographs are inaccessible even to nonspecialist musicologists, let alone performing artists, and many important editions of old music are so strictly "scientific" as to be unusable by the working musician. As recently as 1949, when the marvelous florilegium of a hundred unknown works constituting the third volume of Al-

*The philological, historical view that suffuses the culture of our times demands that the enjoyment of a work of art be founded on historical insight and evaluation, and that the work of art be presented exactly as the artist created it. That this basically just demand, when applied to the reproduction of musical works of art, suffers many restrictions imposed by practical necessity is just as sure as it is doubtful how far the general public, having to adapt itself to the claims of the learned, may be capable of this enjoyment. At any rate, it is much to be desired that the tone should not be set by the scholars.*

—Otto Jahn

---

*Paul Henry Lang, a distinguished musicologist and a contributor to this journal for more than a decade, is preparing a book on performance practice for publication by Norton. This article is an adaptation of a portion of that book.*

---

*"Many scholarly monographs are inaccessible even to non-specialist musicologists . . . and many important editions of old music are so strictly 'scientific' as to be unusable by the working musician."*

fred Einstein's great work on the Italian madrigal was being published, the plea of this writer that modern clefs be used was rejected. Since few performing organizations are willing or able to struggle with a number of clefs long unused, knowledge of this wondrous music is largely confined to the experts. However, if scholarly *amour-propre* could not be budged by persuasion, it has been effectively overcome by the iron laws of economics: Publishers can no longer afford to issue duplicate editions, one for scholars and one for performers, so nowadays such scores are published in a form usable by both.

To the genuine scholar the works of a composer are living and inviolate. Slowly, quietly, and after much study he achieves intimacy with them; in discussing them he recounts his own inner experience. Many, especially among practicing performers, see in him a fiddler without a bow, innocently rummaging around in the archives like a medieval monk reading Scripture. Yet he does not deal with dead documents, but rather with living actualities to which he must give new breath. When his labor provides editions of old music that, though impeccably scholarly in substance and preparation, are understandable and usable by the lay musician, the latter, armed in addition with solid and readable literature on the subject, is able to restore this music to life.

Because the role of the musicologist in this reconstruction is not clearly defined, however, the utilization of his work is often premature or misguided, or goes beyond its legitimate application. There is little reverse flow from practical experience to research, so that researchers (unless they are active performers) rarely have the opportunity to make corrections and improvements. Typically, a scholarly idea is taken up by the practitioner with enthusiasm but incomplete understanding and used in a way not justified by findings. Even research not done with a specific practical aim in mind is often appropriated by the zealots looking for legitimization—a surrender of musicianship to the written rule, for such research directs our attention to some possible source of historical authority rather than to the work of art itself.

But musical life is too complicated to permit the scholar to stay within the confines of the archives, assembling bibliographies, most of which are of small use to the reader, or lengthy "critical reports" often of interest only to himself. Poor is the artist in whom there is no critical understanding, but even poorer the critic and scholar who has no artistic sensibilities; qualities as hard to define as taste and intuition are what in the end may determine a scholar's stature. He must make the truth believable. Intuition, as Albert Einstein once said, is as vital a force as imagination and expert toil.

In fact, the most unsettling aspect of the movement dedicated to authentic performance practice is the unquestioned primacy accorded intellectual activity over artistic. As I have said elsewhere, the historian of the arts must be humble before the artist because he has only one foot in the camp of beauty. He must always remember Aristotle's dictum that "poetry is higher than history, for poetry expresses the universal but history only the particular."

There can be no doubt that the believers in the sole validity of historical accuracy in the performance of old music proceed with seriousness and devotion and that this devotion is dangerously disarming. Ironically, while they profess to combat the sins perpetrated and perpetuated by romanticism, their very devotion is to a new romanticism similar to the nineteenth-century beatification of Greek art as the sole measure of beauty. Still, romantic as they are, their frames of reference remain essentially archival, and the polarity of tradition vs. modernity that they create has led to unfortunate antagonisms. It should be clear that doing away with modern aids to perform-

ance is not a solution; on the contrary, modern thinking, by transcending erstwhile limitations, can offer an acceptable convergence.

**T**he relations between the ur-performance faction, who approach music the way archaeologists study the potsherds of vanished civilizations, and those who strive for halfway-to-heaven solutions—and the differences in their outlooks, concerns, ambitions, and achievements—would seem to require a treaty to insure coexistence. It would be wrong to deny the danger of differences on fundamental issues, because a highly restricted elitism threatens to shut out the vast majority of the public, not to speak of musicians. Should we summarily dismiss all performers who play Bach or Scarlatti on the Steinway and wait until there is a harpsichord in every front parlor? Shall we lay aside the Boehm flute until everyone can play the recorder; ignore valves that make trumpets and horns more secure and versatile; condemn out of hand the conductor who assigns the *masculine* roles in baroque operas to men rather than to vibrantly *feminine* sopranos or altos and hope that the statute books will be changed so that we can again have castratos? [For a consideration of Bach on the piano, see Harris Goldsmith's essay review on page 127—Ed.]

The ideal "strict" performance threatens to produce an artistic and cultural segregation, placing the correct historical performance with all its appurtenances apart from everyday musical life and surrounding it with an aura of near-fanaticism. Its partisans are trying to create ideal types of both performance and hearing, which of course do not agree with the realities of either. This divorce from our everyday musical life is well reflected by the esoteric names (preferably in Latin) of the organizations dedicated to the performance of old music: Collegium Musicum, Concentus Musicus, Schola Cantorum Basiliensis, Pro Musica Antiqua, Musica Reservata, and so forth. In their total commitment (which can even embody yearnings for the primitivistic) they are unable to see the virtues of the other camp, and they want to establish an ideological conformity in musical life. Whether consciously or unconsciously, what is being done is to tear this old music from the soil it grew in and set it down unpruned in a new environment, a glass-walled nursery. But this music, like any other music, must affect us directly, we must touch it, smell its perfume—it must be made accessible to us.

Willi Apel, in the *Harvard Dictionary of Music*, states that "a work such as Bach's *St. Matthew Passion* should be performed by about twenty players and a similar number of singers; it should be played at moderate speed," and so forth. Now Apel is a distinguished scholar, but on what authority can he make such a categorical statement? Even earlier composers were acutely aware of room acoustics. Indeed, Cavalli recommended that the size of the room should determine the size of the performing body. The *Bach Passion* in a smallish church is one thing; in Carnegie Hall it is quite another. But aside from size, Apel must surely be aware of Bach's envious praise of the large *professional* orchestra in Dresden. The zealous performers reared in the new faith go even further. Concentus Musicus' Nikolaus Harnoncourt, knowing from historical records the exact number of performers Bach had at his disposal, recorded the great choral-instrumental works with exactly that number of players and singers, even though we know that Bach was dissatisfied with his less than meager forces and desperately tried to improve and augment them, as his urgent petition to the authorities in 1730 attests. The Thomaskirche's musical establishment was not a baroque norm—far from it, because wherever we look in the eighteenth century we see sizable bodies of performers. The famous Kreuzkantorei had a fine chorus of forty and a corre-



---

*"If absolute authenticity were to be observed, no clefs would be changed, no accidentals indicated, and no barlines drawn. . . . But then every singer in a chorus would have to hold the degree of doctor of philosophy in musicology."*

sponding group of instrumentalists; the Paris opera orchestra counted fifty players in Rameau's time, and by the second half of the century the number had risen to seventy-two; San Giovanni in Bologna had "nearly a hundred performers"; and in Florence, Burney heard a Te Deum "performed by a band of two hundred voices and instruments." Even somewhat earlier than that, the San Carlo opera in Naples had an orchestra considerably larger than the one in the pit of the New York City Opera in the 1970s. As to Apel's recommendations concerning tempo, dynamics, and expression, once more we cannot establish binding standards. Mattheson, a clear-headed and knowledgeable commentator on the baroque era, says: "When it comes to these matters, every individual must reach into his bosom and *feel* what his heart decides."

The models of performance established by such organizations as *Concentus Musicus* have been overrated for various reasons. Their procedures may apply in some cases, they may have confirmation from archival sources (if we disregard the propensity of the early theorists to write what they wished for rather than what was in fact the case) or from generalized local conditions. But reality is more fragile, less stable, and above all more diverse. It has become clear that the so-called authentic performances, with weak original instruments and small complements of players, cannot be transferred from the recording studio and its cleverly manipulated microphones, or from the congenial small auditorium, into a concert hall large enough to accommodate more than a token audience so that the resuscitated old music can become an integral part of our musical life. But the economic and sociological aspects of this dilemma are topped by an aesthetic paradox: The more secure and polished these performances have become, the more it has become obvious that they do not represent historical reality so much as an ideal rendition that never existed.

We must in any case beware of the fiction of the "definitive" performance, for in performance nothing is final and nothing is permanent. David Boyden, who made a lifelong study of the violin, its history, its technique, and its literature, mentions "the mess of inconsistencies" that he found everywhere in this archival research. It made him conclude that there is no such thing as one set of rules, that precedence must be given to "musical necessities," and "*every case must be decided on the musical merits of the situation*" (italics mine).

**D**uring the last two decades or so, the playing on old instruments, and on excellent modern replicas of the old ones, has considerably improved, but the historical aim of using original instruments, though justified and attractive within certain limits, easily becomes self-defeating. The theory and practice of historically correct performance practice is well advanced, but its advocates seldom consider how these performances are *heard*. The sight of instruments no longer in general use, and the sound of those whose shape is familiar but whose sound differs from what we are accustomed to hearing from them, gives the music an aura of exoticism, and this will remain so long as it is modern instruments that we hear for the vast bulk of the music that is performed. The intention of being strictly faithful to history can result in an aesthetic impression false to history, because the exoticism is an accretion; our response cannot be identical with that of a contemporaneous audience—we hear with twentieth-century ears. When, in addition, the performers suppress their individuality (which is often the case) we are likely to hear an interesting demonstration rather than participate in an undisturbed aesthetic experience.

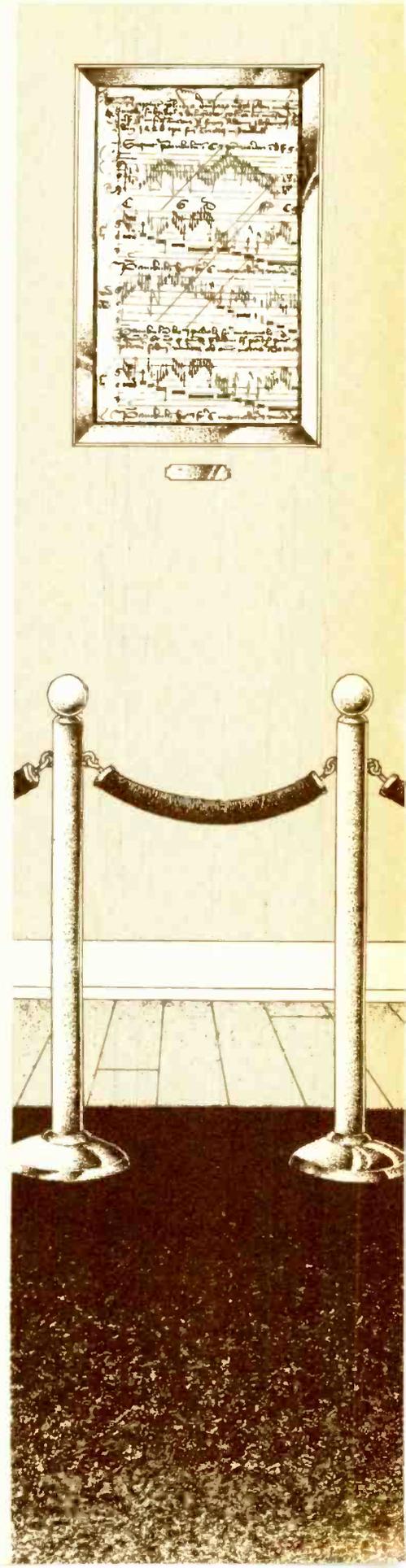
All this indicates that our real aim should be to try to *approximate*

the musical effect on, and experience of, the original listeners. This emphatically requires not only thorough historical study, but also an acknowledgment of the validity of our own aesthetic norms and ideals of live sound. And these studies will convince us that the concept and ideal of sound is ever-changing and cannot be recalled beyond a modest degree without falling into speculative antiquarianism. Our aesthetic concept of the sound of a balanced ensemble and a good mixed chorus is opposed to the pallid strings, the weakened winds, the unnatural voices of falsettists and countertenors, and even the immature and neutral voices of boys when used in the great dramatic works. Germicidally clean performances, the rigorous enforcement of the sacred cosmetics of ornamentation and embellishment, the asceticism that is opposed to creativity—if they prevail unconditionally and indisputably, they may isolate the intransigent reformers, and with them an immense and infinitely rich literature of music, from living art. Boyden put it with penetrating insight in *The Musical Quarterly*: "The most satisfactory solutions are doubtlessly those in which the performer has been able to enhance the beauty of his performance by utilizing historical knowledge in a way that is intuitively and musically convincing to him. There is nothing drearier than 'historical' performances that lack musical conviction and imagination."

This is most certainly not to deny that the composer has sovereign rights over his music. These rights have often been disregarded in the past. As Frederick Neumann says: "Respect for the composer's wishes and a reverential attitude toward tradition and authenticity of performance are modern concepts." Bach doctored Palestrina, Schütz fixed up Gabrieli, Mozart reorchestrated Handel. Gluck's *Orfeo* was revived in 1769 with additions by J. C. Bach, though its composer was still living and active. Mattheson reports as a matter of course in his *Ehrenpforte* that he prepared Orlandini's opera *Nerone* by "rearranging the order of arias, setting all the recitatives anew, and adding a number of my own compositions." And it was not only the eighteenth century that was guilty of such impious acts. Later we have Berlioz bowdlerizing Gluck, Mahler recomposing Weber, Grieg adding spice to Mozart's piano sonatas, Casella modernizing Vivaldi—the list is endless. Our historical sense rightly rejects such falsifications.

At the same time it is true that the "old" composer rarely regarded his work as inviolate: He often worked over a composition several times. And, especially in the baroque era, he did not write down everything in detail because he was either his own performer or could count on a veritable "co-author," a musician thoroughly familiar with the reigning conventions. In addition, the audience brought to the performance a consensus, a rapport with the conventions of the day, and this familiarity was also counted upon by the composer.

We are now attempting to fill in for ourselves the omitted details, to restore, with the aid of contemporary treatises, the grace notes and other ornamentation, to spike da capo arias with our embellishments, and so forth. This can and should be done, with tact and moderation, but not regardless of every other consideration, for performance practice is not like taxidermy—we cannot use glass eyes and tongues made of plastic. Yet in many instances the purportedly authentic embellishments of twentieth-century minds are just that—glass and plastic. We cannot determine with precision to what extent our concept, our projection of the *Zeitsstil*, is genuine or even adequate, because the relationship among composer, performer, and audience can be quite different from the aforementioned consensus. We cannot hear even later composers, such as Beethoven, quite as his contemporaries did, because in the intervening time our musical knowledge and techniques, listening habits, and concepts of sound have all vastly changed.





As every argument based solely on internal evidence of style falls short of certainty, so performance based mainly on archival evidence risks the danger of becoming independent of reality and existing for its own sake. It seems to freeze and encapsulate the archival findings rather than embody and transcend them. Likewise, the industrious search for authenticity threatens to become an abstract business divorced from the actuality of life and the enjoyment of art. It bureaucratizes the performance of music. So long as we insist on operating on categorical historical accuracy to the exclusion of artistic intuition, dictating the "right" concept as "thus and no other way," we make performance practice an objective in itself. But it cannot be an objective; if it matters, it can matter only as it affects the performer who plays and the audience that listens. When it becomes a mere "body of knowledge," as it is respectfully called in the university, it is a dead body. And when the scholarly approach proves inadequate we must break through the carapace of theoretical and historical facts to look for an artistic solution.

It must be remembered that the composer, even when he accepts restrictions imposed both by practical considerations and conventions, always strives toward an optimum, the realization of an idea that may transcend the capabilities of his material, so that sometimes he may write in a way that seems awkward to his contemporaries, or even impossible to execute. It is this optimum that we must search for and divine, and if our artistic instinct tells us that in order to recapture it we must more or less deviate from historical details, so be it; for the reality of a composition is not always what is on paper. This calls for interpretive latitude in reconstructing the art of the past.

From the foregoing it should be clear that performance practice is not as exact a discipline as astrology or heresiology; it is, and will remain, a conjectural subject because it deals with traditions that are only partially verifiable. The realization of the mute graphic score inevitably deals with a portion of the past that includes not only the music, but all manner of socio-cultural ramifications impinging on it, ramifications that cannot be directly abstracted from the score. When the score adheres too closely to customs that have altogether disappeared, we are compelled to make adjustments, not only in the performances, but also in the critical editions of old music. If absolute authenticity were to be observed, no clefs would be changed, no accidentals indicated, and no barlines drawn, and, as Martin Geck amusingly but logically remarks, works published in partbooks would not be printed in score. But then every singer in a chorus would have to hold the degree of doctor of philosophy in musicology. And should we expect our organists to play sixteenth-century music—as Bermudo tells us it was done—from juxtaposed partbooks?

Our duty is to perform the works of the past in the way they are most accessible to our experience. We must find organic ties with this music, connect it with our language of musical expression, both spiritual and technical. If we fail to do so, we could end with a withdrawal into an elitism and conventionality that would gradually make older music into fossils. We who are still wedded to a humanistic approach to the arts have the responsibility for continuing to work so that our tremendous heritage will not be stifled, but nourished.

These are issues about which there is room for disagreement. Yet all who labor in this field of performance practice are really pursuing the same end: how to make old music live again, for the value of all music lies in the experience of it. Success will come when we are able to forgo the restrictive category "old music" and make it an integral part of our musical experience. **HF**



**Recent Record Releases**

The following listings are excerpts from the "New Listings" section of the May Schwann Record and Tape Guide. Some listings contain a cross-reference (\*) to other works on the recording. Letters in brackets refer to language used in vocal music (G, German; E, English, etc.). Cassette editions are indicated by the symbol  $\angle$ . Quadriphonic discs are indicated by a Q following the record number.

**ARGENTO, DOMINICK**

Royal Invitation, or Homage to the Queen of Tonga (1964)  
Mester, Louisville Orch.  $\dagger$  Druckman  
Lou. 764

**BACH, JOHANN SEBASTIAN**

Chaconne (from Violin Partita No. 2)  
Rubinstein (arr. Busoni)  $\dagger$  Franck: Prélude, Chorale; Mozart: Rondo, K.511  
RCA ARL1-3342;  $\angle$ ARK1-3342

**Organ Music**

Wunderlich: Fantasia & Fugue in g, S.542; Pastorale in F, S.590; Chorale Prelude, Kommst du nun, Jesu, S.650; Trio Sonata No. 6 in G, S.530; Prelude & Fugue in C, S.547  
Audio Fi. 50083

**Partita in a for Flute, S.1013**

Voorhorst  $\dagger$  Fl Son.; Trio Son., S.1039  
2-Sera. S-6110

**Partitas (6) for Harpsichord, S.835/30**

No. 5 in G, S.829  
Kipnis  $\dagger$  Partita 6  
Ang. S-36099  
No. 6 in e, S.830  
Kipnis  $\dagger$  Partita 5  
Ang. S-36099

**Pastorale in F for Organ, S.590**

Wunderlich (see Organ) Audio Fi. 50083

**St. Matthew Passion, S.244**

Giebel, Haefliger, Berry, Jochum, Concertgebouw Orch., Netherlands Radio Cho. [G]  
4-Phi. Fest. 6770018;  $\angle$ 7650018

**Sonatas (7) for Flute, Harpsichord, S.1030/35, 1020**

Voorhorst, Uittenbosch (Nos. 1,3,5,6)  $\dagger$  Partita, S.1013; Trio Son., S.1038  
2-Sera. S-6110

**Suites (6) for Cello Unaccompanied, S.1007/12**

Gendron 3-Phi. Fest. 6770005;  $\angle$ 7650012

**Toccatas for Harpsichord, S.910/16**

Pinnock (S.911, 913/6)  
DG ARC-2533403;  $\angle$ 3310403

**Trio Sonata in G for 2 Flutes & Continuo, S.1039**

Voorhorst, Arita, Uittenbosch  $\dagger$  Partita, S.1013; Fl Son. 2-Sera. S-6110

**BEETHOVEN, LUDWIG VAN**

Concerti (5) for Piano & Orchestra  
No. 3 in c, Op. 37  
Pollini, Böhm, Vienna Phil.  
DG 2531057;  $\angle$ 3301057

No. 5 in Eb, Op. 73, "Emperor"  
De Larrocha, Mehta, LA Phil. Lon. 7121

Sonatas (5) for Cello & Piano (complete)  
Starker, Buchbinder  $\dagger$  Var. Op. 66, G.157/8 3-Tel. 3635450;  $\angle$ 3435450

**Sonatas (32) for Piano**

No. 13 in Eb, Op. 27, No. 1  
Ashkenazy  $\dagger$  Son. 14, 16 Lon. 7111

No. 14 in c $\sharp$ , Op. 27, No. 2, "Moonlight"  
Ashkenazy  $\dagger$  Son. 13, 16 Lon. 7111

No. 16 in G, Op. 31, No. 1  
Ashkenazy  $\dagger$  Son. 13, 14 Lon. 7111

No. 20 in G, Op. 49, No. 2  
Demus  $\dagger$  Piano; Son. 25 2-Van. 735/6

No. 25 in G, Op. 79  
Demus  $\dagger$  Piano; Son. 20 2-Van. 735/6

**Sonatas (10) for Violin & Piano**

No. 1 in D, Op. 12, No. 1  
Perlman, Ashkenazy  $\dagger$  Son. 10  
Lon. 7013;  $\angle$ 5-7013

No. 10 in G, Op. 96  
Perlman, Ashkenazy  $\dagger$  Son. 1  
Lon. 7013;  $\angle$ 5-7013

**Symphonies (9)**

No. 5 in c, Op. 67  
Jochum, Concertgebouw Orch.  
Phi. Fest. 6570166;  $\angle$ 7310166

Variations in F, Op. 66, for Cello & Piano  
Starker, Buchbinder  $\dagger$  Cello Son.; Var. G.157/8 3-Tel. 3635450;  $\angle$ 3435450

**Variations (12) in G, G.157, for Cello & Piano**

Starker, Buchbinder  $\dagger$  Cello Son.; Var. Op. 66, G.158 3-Tel. 3635450;  $\angle$ 3435450

Variations on Mozart's "Bei Männern", G.158, for Cello & Piano  
Starker, Buchbinder  $\dagger$  Cello Son.; Var. Op. 66, G.157 3-Tel. 3635450;  $\angle$ 3435450

**BOCCHERINI, LUIGI**

Symphonies (6), Op. 12  
Leppard, New Phil. 3-Phi. 6703034

**BOYKAN, MARTIN**

String Quartet No. 2  
Pro Arte Qr  $\dagger$  Gideon CRI S-401

**BRAHMS, JOHANNES**

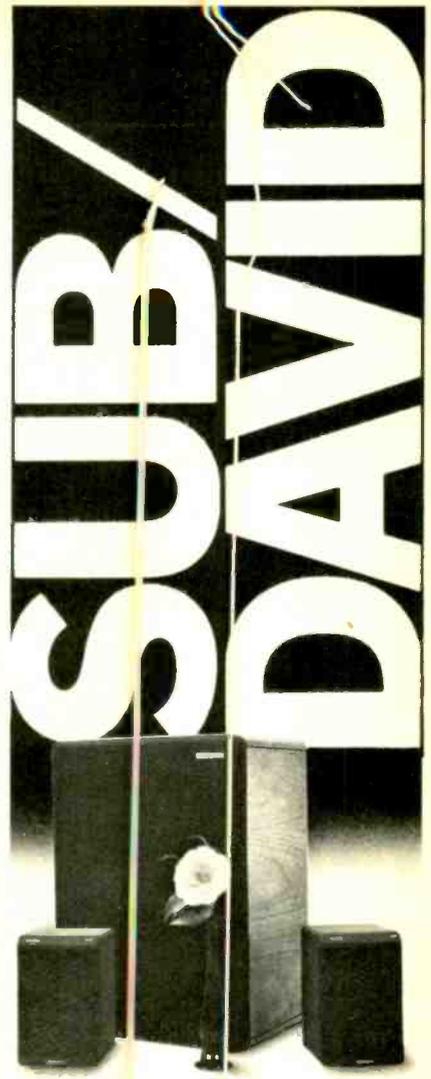
Alto Rhapsody, Op. 53  
Ludwig, Böhm, Vienna Phil., Singverein [G]  $\dagger$  Tragic; Haydn Var. DG 2536396  
Concerto in D for Violin, Op. 77  
Stern, Mehta, NY Phil.  
Col. M-35146;  $\angle$ MT-35146

Tragic Overture, Op. 81  
Böhm, Vienna Phil.  $\dagger$  Alto; Haydn Var. DG 2536396

Variations on a Theme by Haydn, Op. 56a  
Böhm, Vienna Phil.  $\dagger$  Alto; Tragic DG 2536396

**BRITTEN, BENJAMIN**

Peter Grimes



Once, it took two big speakers to get good bass reproduction in a sound system.

Now, you can get accurate, deep bass with a Visonik sub-woofer. When combined with a pair of full range, ultra-compact DAVID<sup>®</sup> speakers, the result is SUB/DAVID—a three-speaker stereo system that covers the widest sound spectrum possible.

Check out the Visonik SUB-1, or slightly smaller SUE-2, with a pair of DAVIDs at your local Visonik HiFi dealer. Be sure to ask him about the ease and versatility of placement, which is another advantage.

SUB/DAVID systems are available at these and other fine stores.

● Auc air's Sound Track  
Woonsocket, Rhode Island

● Hartsdale Radio & TV  
Hartsdale, N.Y.

● Stereo Lab  
New London & Groton, Conn.

**VISONIK<sup>®</sup>**  
**HIFI**  
You'll hear more from us.<sup>™</sup>

Harper, Vickers, Summers, Davis, Royal  
Op. [E] 3-Phi. 6769014; /7699089  
**Spring Symphony, Op. 44 (1949)**  
Armstrong, Baker, Tear, Previn, London  
Sym. & Cho. [E] Ang. S-37562

**BUSNOIS, ANTOINE**  
Missa "L'homme armé"  
Turner, Pro Cantione Antiqua [L] † Bin-  
chois DG ARC-2533404; /3310404

**CHOPIN, FRÉDÉRIC**  
Concerto No. 2 in f for Piano, Op. 21  
Argerich, Rostropovich, Nat'l Sym. †  
Schumann:Con. DG 2531042; /3301042

**CRUMB, GEORGE**

**Lux Aeterna, for Soprano & Chamber En-  
semble (1971); Four Nocturnes (Night  
Music II), for Violin & Piano (1964);  
Dream Sequence (Images II), for  
Chamber Ensemble (1976)**  
DeGaetani, Wernick, Penn Contemp Play-  
ers [L]; Rosenblith, Hagen; Kaplan,  
Aeolian Ch. Players Odys. Y-35201

**DRUCKMAN, JACOB**  
Lamia, for Soprano & Orchestra (1976)  
DeGaetani, Mester, Spurlock, Louisville  
Orch. † Argento Lou. 764

**FAURÉ, GABRIEL**  
Sonatas in A, Op. 13, e, Op. 108 for Violin

& Piano  
Grumiaux, Crossley Phi. 9500534

**FRANCK, CÉSAR**  
Prélude, Chorale et Fugue for Piano  
Rubinstein † Bach:Chaconne; Mozart:  
Rondo, K.511  
RCA ARL1-3342; /ARK1-3342

**GABRIELI, GIOVANNI**  
Canzoni for Brass Choirs  
Willcocks, Wilbraham Brass Soloists (sep-  
timi toni) † Motets; Schütz: Psalms  
Sera. S-60324(Q)

**Motets**  
Willcocks, King's Coll. Cho. [L]: Omnes  
gentes, plaudite manibus; O magnum  
mysterium; Buccinate in Neomenia tuba;  
O Domine Jesu Christe; Angelus ad pas-  
tores ait; Hodie completi sunt; Hodie  
Christus natus est † Canzoni; Schütz:  
Psalms Sera. S-60324(Q)

**GIDEON, MIRIAM**  
Nocturnes, for Soprano & Chamber Ensem-  
ble (1975); Songs of Youth & Madness  
(Hölderlin), for Soprano & Orchestra  
(1977)  
Raskin, DeMain, Da Capo Ch. Players  
[E]; Raskin, Dixon, Amer. Composers  
Orch. [E,G] † Boykan CRI S-401

**GIORDANO, UMBERTO**  
Andrea Chénier (excerpts)  
Scotto, Domingo, Milnes, Levine, Nat'l  
Phil., Alldis Cho. [E]  
RCA ARL1-2144; /ARK1-2144

**GIULIANI, MAURO**  
Concerto in A for Guitar & Strings, Op. 30  
Yepes, Garcia Navarro, English Ch. Orch.  
† Rodrigo:Fant. DG 2530975; /3300975

**HANDEL, GEORGE FRIDERIC**  
Ode for St. Cecilia's Day  
Palmer, Rolfe Johnson, Harnoncourt, Con-  
centus Musicus, Stockholm Bach Cho.  
[E] Tel. 642349; /442349

Sonatas, Op. 1 (Nos. 1,2,4,5,7,9,11) (7) for  
Flute; Sonatas (3) for Flute, "Halle"  
Robison, Cooper, Eddy 2-Van. 71229/30

**HAYDN, FRANZ JOSEPH**  
Missa Sancti Nicolai; Missa brevis in F  
Preston, Acad. Ancient Music, Christ  
Church Cho. [L] Oiseau DSLO-538

Sonatas for Piano  
Kalish (Nos. 20, 23, 40) † Var. in Eb  
None. 71362

**Trios for Violin, Viola, Cello**  
Schroder, Moller, Van Asperen (Vol. 1)  
3-Tel. 3635331

**Variations in Eb for Piano, H.XVII, No. 3**  
Kalish † Piano Son. None. 71362

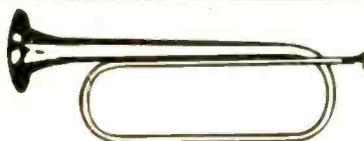
**LALO, ÉDOUARD**  
Namouna (ballet) (suites)  
Froment, Radio Luxembourg Orch.  
Turn. 34724(Q)

**LASSUS, ORLANDUS (ROLAND DE)**  
Chansons  
Ravier, Paris Polyphonic Ens. (Vol. 2) [F]  
Tel. 642281

SUPERSOUNDS LTD.

presents  
The new

**DELOS**  
**DMS** Digital  
Master  
Series



Recorded and mastered digitally  
by Soundstream Inc.  
Engineered and Mastered  
by Stan Ricker  
Pressed in Japan on  
Supervinyl

A trio of reasons why this trio of recordings epitomizes  
true audiophile quality.

**American Brass Quintet**  
plays Renaissance,  
Elizabethan and Baroque Music

**The Sound of Trumpets**  
Gerard Schwarz cond. / trumpet soloist  
The NY Trumpet Ensemble

**The Classic Trumpet Concerti  
of Haydn / Hummel**  
Gerard Schwarz, cond. / trumpet soloist



D/DMS 3001 **THE CLASSIC  
TRUMPET CONCERTI OF  
HAYDN/HUMMEL**

Schwarz's liquid gold sound  
and a cadenza which could "lift  
Haydn's wig" (Schonberg NY  
Times)

D/DMS 3002 **THE SOUND OF  
TRUMPETS** Dazzling fanfares  
and melodies you'll hum all day...  
if you can stop playing the disc.

D/DMS 3003 **AMERICAN  
BRASS QUINTET** ABQ'S  
"Stunning virtuosity" (NY Times)  
in music that dances and sings

Be the first to own these  
spectacular new Delos Digital  
Master Series releases. To  
reserve your first edition advance  
copy(s) just fill in the coupon

My order for copies of: \_\_\_\_\_ D/DMS 3001 \_\_\_\_\_ D/DMS 3002 \_\_\_\_\_ D/DMS 3003  
Total of \_\_\_\_\_ albums @ \$ 16.50 ea (tax & shipping incl.)  
Send to: Supersounds Ltd., 2210 Wilshire Blvd. / Suite 315 / Santa Monica, Ca. 90403  
(213) 454-2696 **Special Offer** expires July 31, 1979. Regular list \$17.98.

Name \_\_\_\_\_

Address \_\_\_\_\_ Zip \_\_\_\_\_

Telephone \_\_\_\_\_

Check  Mastercharge  Visa Expires \_\_\_\_\_

#

Dealer Inquiries Invited, Supersounds Ltd., Distributors of finest audiophile recordings.

DAVID  
DAVID  
DAVID



DAVID®—from Visonik® Made with German precision for demanding listeners.

These newest DAVIDs maintain the tradition for sound quality that has made the DAVIDs famous, while improving efficiency, power handling and dispersion with its unique grille design.

The smallest DAVID, the 5000, is ideal for home or car. Progressively fuller sound and power handling capability are achieved with the 6000, 7000 and 9000 studio monitors where an LED signals overload risk in the tweeters. All DAVIDs do everything large speakers do—and better.

DAVIDs are available at these and other fine stores.

- **Fred Locke Stereo**  
Conn. & Upstate N.Y.
- **New England Music**  
Portland, Waterville,  
Lewiston & Bangor, Maine
- **Sound City**  
New York City

**VISONIK®**  
**HIFI**  
You'll hear more from us.™

**JULY 1979**

**E3**

**MAHLER, GUSTAV**

**Songs of a Wayfarer**

Hermann, Morris, Symphonica of London  
† Sym. 5 2-Peters PLE-100/1

**Symphony No. 5 in c♯**

Morris, Symphonica of London † Songs of  
a Wayfarer 2-Peters PLE-100/1

**Symphony No. 6 in a**

Levine, London Sym.  
2-RCA ARL2-3213; /ARK2-3213

**MOZART, WOLFGANG AMADEUS**

**Concerti (25) for Piano & Orchestra**

**No. 17 in G, K.453**

Ashkenazy, Phil. Orch. † Con. 21  
Lon. 7104; /5-7104

**No. 20 in d, K.466**

Bishop-Kovacevich, Davis, London Sym. †  
Con. 23 Phi. 9500570; /7300703

**No. 21 in C, K.467**

Ashkenazy, Phil. Orch. † Con. 17  
Lon. 7104; /5-7104

**No. 23 in A, K.488**

Bishop-Kovacevich, Davis, London Sym. †  
Con. 20 Phi. 9500570; /7300703

**Concerti (7) for Violin & Orchestra**

**No. 2 in D, K.211**

Stern, Schneider, English Ch. Orch. † Con.  
4 Col. M-35111; /MT-35111

**No. 4 in D, K.218**

Stern, Schneider, English Ch. Orch. † Con.  
2 Col. M-35111; /MT-35111

**Rondo in a for Piano, K.511**

Rubinstein † Bach:Chaconne; Franck:  
Prélude, Chorale

RCA ARL1-3342; /ARK1-3342

**Trios (piano) (7),**

K.254,442,496,502,542,548,564

Beaux Arts Trio  
3-Phi. Fest. 6770017; /7650017

**PENDERECKI, KRZYSZTOF**

**Concerto for Violin & Orchestra (1976)**

Stern, Skrowaczewski, Minnesota Orch.  
Col. M-35150

**PROKOFIEV, SERGEI**

**Luutenant Kijé Suite, Op. 60**

Abbado, Chicago Sym. † Scythian  
DG 2530967; /3300967

**Scythian Suite, Op. 20**

Abbado, Chicago Sym. † Lt. Kijé  
DG 2530967; /3300967

**PUCCINI, GIACOMO**

**Tosca**

Freni, Pavarotti, Milnes, Rescigno, Nat'l  
Phil. [1] 2-Lon. D-12113

**ROCHBERG, GEORGE**

**Violin Concerto (1974)**

Stern, Previn, Pittsburgh Sym.  
Col. M-35149

**RODRIGO, JOAQUIN**

**Fantasia para un gentilhombre for Guitar**

Yepes, García Navarro, English Ch. Orch.  
† Giuliani DG 2530975; /3300975

**SCHUBERT, FRANZ**

**Piano Music, Four Hands**

Emil & Elena Gilels: Fantasia in f, D.940;  
Andantino Varié in b, D.823; Grand

EURO  
EURO  
EURO



Visonik EURO speakers offer an unparalleled combination of sonic excellence and visual design.

They were conceived and constructed with quality—not price—as the major design criterion.

Both the two-way EURO 5, and larger 3-way EURO 7, are meticulously crafted using the finest German-made components mounted in hand-rubbed walnut veneered enclosures.

Stop in, look and listen to the EUROS at these Visonik dealers.

- **Carston Studios**  
Danbury, Conn.
- **Campus Hi-Fi**  
Manchester, N.H.
- **Hi Fi House**  
Worcester, Mass.

**VISONIK®**  
**HIFI**  
You'll hear more from us.™

HARVEY'S  
AUTOSOUND & CB CENTER  
YOUR  
**STEREO**

CALL TOLL FREE TO ORDER  
**1-800-638-6900**

HOURS

Mon., Tues., Thurs., Fri.: 10-9  
Wed. & Sat.: 10-6

**ON THE GO**  
CENTER

8848 Orchard Tree Lane • Towson, Maryland 21204

**Big Savings On AUDIOVOX**

**DGC-20**



Total electronic tuning. Locking fast forward. Digital read-out displays AM/FM and AM/PM. 12 station push-button. Local/distance switch. Rewind.

**\$259**

**ID-600B**



"In-Dash" Cassette Stereo Tape Player With Manual Tuning AM/FM/Stereo Radio. Locking fast forward and eject control plus new side-load cassette mechanism. Local/Distance reception switch and push-button band selector.

**\$85**

**COMP-60** HiFi Component Hi-Performance Speaker System. Two deep basket 20 oz. magnet 6 1/2" Woofers plus two 3 1/2" dome tweeter/Mid Range speakers with 10 oz. magnets. Adapters allow woofers to fit 6x9, 6x8, and 5x7 openings.

**\$69**



3-Way Speaker System. Woofer, Mid Range, and Tweeter. 2-6"x9" 20 oz. ceramic magnet speakers. Foam rolled air suspension. 1 1/4" aluminum voice coil.

**\$47.50**

**TRYVOX 20**



6" Round 3-Way Speaker System. Independent Woofer, Mid Range, and Dome Tweeter. Powerful 20 oz. ceramic magnet. Foam rolled air suspension w/1" voice coil. Maximum input 15 watts. Nom. 7 watts. 8 ohm impedance.

**\$44.00**

**TRYVOX 25**



**CAS-600A**

"Super Power" Stereo Cassette Player With AM/FM/Stereo Radio and Dolby. Combined 40 watts of power with independent Bass and Treble tone controls. Dolby noise reduction. Four-way balance. Locking fast forward. Auto and manual eject. Locking rewind.

**\$188**

We Also Stock: BASF, Blaupunkt, Clarion, Craig, Jensen, JLL, Maltel, Maxell, Panasonic, Phillips, Pioneer, Sanyo, Speco, TDK, Ultralinear, Fuzzbuster, Empire, Audio Technica, Shure and Many More.

**FREE**

**CAR STEREO**

**& CB CATALOG. JUST**

**MAIL IN THE COUPON OR**

**OR CALL 301-821-0792**

**HARVEY! Please send your FREE car/ stereo/CB Catalog**

NAME

ADDRESS

CITY STATE ZIP CODE

**HARVEY'S AUTOSOUND & CB CENTER**

8848 Orchard Tree Ln. • Towson, Md. 21204 • 301-821-0792

**E4 HIGH FIDELITY**

Rondeau in A, D.951; Écossaises

DG 2531079

Quintet in A (piano), Op. 114, "Trout", D.667

Eastman Trio, Thomas, Van Demark † Adagio; Nocturne; Son. D.28; Trios (piano) 1,2 3-Vox SVBX-5110

Sonata for Piano, Violin, Cello (Trio in Bb), D.28

Eastman Trio † Adagio; Nocturne; Qn D.667; Trios (piano) 1,2

3-Vox SVBX-5110

Symphony No. 4 in c, "Tragic", D.417

Giulini, Chicago Sym. † Sym. 8

DG 2531047; /3301047

Mehta, Israel Phil. † Sym. 8

Lon. 7067; /5-7067

**SCHUMANN ROBERT**

Concerto in a for Piano & Orchestra, Op. 54

Argerich, Rostropovich, Nat'l Sym. † Chopin: Con. 2 DG 2531042; /3301042

**Songs**

DeGaetani, Guinn [G]: Wer nie sein Brot mit Tränen ass; Singet nicht in Trauertönen; Heiss mich nicht reden; An die Türen will ich schleichen (all from Op. 98a) † Vocal Duets None. 71364

**Vocal Duets**

DeGaetani, Guinn [G]: Unterm Fenster; So wahr die Sonne scheint; Tanzlied; In der Nacht; Er und Sie; Familien-Gemälde; Die tausend Grüsse; Ich bin dein Baum; Liebhabers Ständchen; Ich denke dein; Schön ist das Fest des Lenzes; Wiegenlied † Songs None. 71364

**SCHÜTZ, HEINRICH**

**Psalms**

Willcocks, King's Coll. Cho. (No. 150) [L] (& Scheidt: In dulci júbilo) † G. Gabrieli: Canzoni; Motets Sera. S-60324(Q)

**SHOSTAKOVICH, DMITRI**

Quartet No. 9 in Eb, Op. 117

Fitzwilliam Qr † Qr 10 Oiseau DSLO-30

Quartet No. 10 in Ab, Op. 118

Fitzwilliam Qr † Qr 9 Oiseau DSLO-30

**TCHAIKOVSKY, PIOTR ILYICH**

Concerto in D for Violin & Orch., Op. 35 Stern, Rostropovich, Nat'l Sym. (& Meditation, Op. 42/1)

Col. XM-35126; /XMT-35126

Symphony No. 4 in f, Op. 36

Markevitch, London Sym.

Phi. Fest. 6570153; /7310153

Rostropovich, London Phil.

Ang. S-37296(Q)

**VIVALDI, ANTONIO**

Motets (2)

Ameling, Negri, English Ch. Orch. [L]

Phi. 9500556

Sonatas for Violin & Continuo

Spivakov, Turovsky, Dizhur (Op. II/3; in C) † Trio Son. Odys. Y-35212

Trio Sonatas for 2 Violins & Continuo

Spivakov, Sheinyuk, Turovsky, Dizhur (Op. I/8, 9) † Vn Son. Odys. Y-35212

## Bach on the Piano? Yes!

by Harris Goldsmith



Arthur Loesser (above) and Wilhelm Kempff: cherishable Bach

### Why does Brendel fall short of Gould, Kempff, and Loesser in their recordings of Bach?

With the ascendancy of musical purism, and in particular its advocacy of "authentic" instruments (see Paul Henry Lang's article in this issue), playing Bach on the piano has come to be viewed as a sin indulged in by generations of hedonists who knew no better. Now that the original-instrument cult, emboldened by its appropriation of the baroque era, is taking aim at those who persist in playing Beethoven and Schubert on modern grands, it seems to me time for concerned musicians to speak up in protest. An assortment of Bach-on-the-piano recordings—one blissfully untouched by the strictures of "scholarship," one obviously harmed by its edicts, and two resourceful enough to modify its excesses—provides an interesting test case.

In the articulate interview accompanying his Philips disc, Alfred Brendel says many of the right things. Foremost among them are: 1) that historical and modern performances can and should coexist; 2) that "romanticizing" of Bach's music is actually appropriate to such works as the fantasies (this has, in fact, become common practice among harpsichordists, who use Paderewski-like breaking of hands and rhythmic distensions to

achieve expressive effects denied by the instrument's lack of dynamic gradations); and 3) that until recently Brendel—awed by the Bach performances of his mentor, Edwin Fischer, and both mindful and distrustful of the "historical" contingent—avoided playing any Bach in public.

So, too, have many other performers. Brendel's playing, however, is especially scarred by the controversy, and his Bach recital gave me little pleasure. He stresses extremely sharp articulation and rhythmic precision, and after a while everything begins to sound tight and stolid. Where is the lilt in the *Italian Concerto*, the demonic impetus in the *Chromatic Fantasy*, the churchly graciousness in the *Busoni chorale prelude arrangements*?

Another quality that bothers me is Brendel's inconsistent sonority. The treble is hard and pingy; the midrange is weighed down with a booming bass. There is color aplenty, but it suggests the aural equivalent of a neon sign blinking on and off predictably. It sounds to me as if Brendel, whose Romantic keyboard heritage and patrician leanings might have produced enjoyable Bach in the *Lipatti tradition* had he followed his instincts, has instead been made intellectually self-conscious and inhibited by an attempt to straddle the two traditions.

Glenn Gould, whose usual undoing comes with trying to be different, more often than not is heard at his best in Bach. There are so many "traditions" in this music, with re-

spect to instrumental timbre, embellishment, and tempo, that the exhibitionist in him is subordinated to his considerable musical and pianistic gifts. But even taking into account Gould's success in previous Bach recordings, this first volume of *toccatas* must rank as one of the loveliest things he has given us.

Granted, his embellishing can be distracting and his tempos often languish (as in the introduction to the *D major Toccata*, taken at virtually half Fischer's animated pace), but for once the sound is nuanced and without

#### BACH: Keyboard Works.

Alfred Brendel, piano. PHILIPS 9500 353, \$8.98.

Chorale Preludes (arr. Busoni): *Ich ruf' zu dir, Herr Jesu Christ*, S. 639; *Nun komm' der Heiden Heiland*, S. 659. *Chromatic Fantasy and Fugue*, in D minor, S. 903. *Fantasy and Fugue*, in A minor, S. 904. *Fantasy in A minor*, S. 922. *Italian Concerto in F*, S. 971.

#### BACH: Toccatas, Vol. 1.

Glenn Gould, piano. [Andrew Kazdin, prod.] COLUMBIA M 35144, \$7.98.

Toccatas: No. 1, in F sharp minor, S. 910; No. 2, in D, S. 912; No. 3, in D minor, S. 913.

#### BACH: Keyboard Works.

Wilhelm Kempff, piano. [Rudolf Werner, prod.] DEUTSCHE GRAMMOPHON 2530 723, \$8.98.

English Suite No. 3, in G minor, S. 808. *French Suite No. 5*, in G, S. 816. *Toccata in D*, S. 912. *Capriccio in B flat* (on the departure of a beloved brother), S. 992.

#### BACH: Well-Tempered Clavier, Books I-II, S. 846-93.

Arthur Loesser, piano. [Kenneth Hamann, prod.] TELARC 3029-5, \$39.90 (five discs, manual sequence) [recorded 1964; previously issued by Cleveland Institute of Music].

hardness. Moreover, Gould's rhythmic precision—at least as machine-perfect as Brendel's—is in evidence only where it needs to be, in the moto perpetuo passages. Lyrical interludes are graciously shaped, with notes falling in place unpredictably enough to keep the listener in enjoyable anticipation. This music-making has a rhetorical effect, and a fascinating lecture it is.

Producer Andrew Kazdin deserves credit for achieving some of the most mellifluous, richly colored, and forceful piano sound accorded this problematical artist. Gould's vocal obbligatos are, however, as obtrusive as ever.

Wilhelm Kempff's Bach recordings have been variable. His *Goldberg Variations* (DG 139 455) was attacked for, among other things, its lack of ornaments; while I do not regard it as one of his best recordings, I can discern in its sparseness a desire to remove the work from the world of rococo harpsichordists. More recently, I was altogether won over by Kempff's disc of Bach, Handel, and Gluck arrangements (DG 2530 647, September 1977); the purists would deny us what I described as Kempff's "interesting cross-pollination of baroque Lutheran organ tradition and secular Romantic pianism."

The Kempff Bach recital at hand is equally cherishable. The style is pianistic without any apology or modification. Like Fischer a generation ago and Mieczyslaw Horszowski today, the great pianist clothes Bach's music in a rich, ringing, down-to-the-bottom-of-the-keys sonority, and the polyphony is none the worse for the heft. Of course, Kempff's sane, gracious interpretations differ temperamentally from his illustrious colleagues'. His D major Toccata is moderate and healthy, not nearly so mercurial as Fischer's. Horszowski's recent New York concert performance of the G minor *English Suite* had a propulsive energy in the Preludio and a charming irascibility in the Gavotte (with those dissonant seconds stressed as I've never before heard them) that contrast instructively with Kempff's sweeter disposition. (Vanguard, incidentally, has just recorded Book I of the *Well-Tempered Clavier* with Horszowski; I hope we can look forward to speedy completion of Book II—and whatever else that octogenarian master chooses.) Pay the purists' cavils no heed. If the central portion of the *Capriccio on the departure of a beloved brother* contains some strangely anachronistic harmonies, this music is largely improvisational anyhow. Much more important is the lilt, the clarity, and the frequent vivacity of Kempff's work—the feeling that he understands the musical line and the spiritual message better than many a scholar up on the latest *Pralltriller* and *Nachschlag*. DG's reproduction is rich and plangent.

Arthur Loesser, who died in 1969, was a true renaissance man. His book *Men, Women, and Pianos* is a classic, and he was for many years renowned as a music critic (*Cleveland Plain Dealer*) and a pedagogue (he directed the piano department of the Cleveland Institute of Music). In addition, Loesser—the older brother of Broadway's Frank Loesser—was a miraculous pianist. In my opinion, he could have been the equal of any of his great contemporaries, and it must be remembered that he was a friend of such pianists as Rachmaninoff and Paderewski. His effort on behalf of many lesser composers is happily preserved in his 1967 Town Hall recital, "*Sic Transit Gloria Mundi*" (IPA 102), and a two-disc set culled from Cleveland Institute recitals (IPA 5003/4) shows him to have been a superb performer of Haydn, Mozart, Beethoven, Chopin, Schumann, and Prokofiev (and also a pragmatic one—he makes an enormous cut in Schumann's arguably diffuse and overlong F minor Sonata, Op. 14).

As anyone talking to Loesser would have quickly learned, he had a special reverence for Bach. He undoubtedly considered this integral recording of the *Well-Tempered Clavier*, made in his own studio in 1964, as his special manifesto about music and piano playing. Happily, this set—originally issued by the Cleveland Institute and now released commercially by Telarc—is worthy on both counts. What makes this playing so noteworthy is its freedom from pretension. Loesser loved this music dearly, but he did not love it to death. He seems to delight in its essence, and his tempos are mostly breezy and forward-moving.

Like Gould and Kempff, Loesser knew when to insist on rhythmic precision and when to let the voices flow freely. He takes relatively few liberties here. Sometimes he restrikes a tied note when it threatens to evaporate harmonically (as the artist says in his notes, this idea was espoused by Quantz, a close friend of Bach's second son), and some of the fugue endings are reinforced with lower octaves in a manner analogous to harpsichordists' use of the sixteen-foot stop. But what impresses me most about the playing is its vitality and its diversity of sonority. Some of the quieter pieces evoke, not the sound of the harpsichord, but rather that of a clavichord, confiding and intimate. Many of the more energetic pieces have a thrilling dynamic range and a distinctive "twang" that conjures up the timbre of a hammerflügel. Loesser's tone, as I remember it from the concert hall, had a crystalline sparseness, which the recording exaggerates in a way remarkably appropriate to Bach. The recording is beautifully reprocessed by Telarc and superbly pressed by Teldec in Germany. **HF**

## Italian EMI Attempts a "Complete" Gigli

*What might we learn from a truly systematic presentation of the tenor's sprawling discography?*

by David Hamilton

In July 1914, at the Parma Conservatory's vocal competition, the judges' report on contestant No. 75 read as follows: "Age: 24. Appearance: handsome. Intensity of voice: strong, a tenor, lirico-spinto. Timbre: sympathetic, warm. Intonation: optimum. Interpretation: warm, expressive, very effective." To this was added a grade (nine points out of a possible ten) and a comment: "At last we have found The Tenor!"

Beniamino Gigli (1890-1957) did, in fact, turn out to be The Tenor. He sang in public for more than forty years, and made records for nearly as long: more than 350 78-rpm sides of arias, duets, and songs, as well as complete recordings of seven operas and Verdi's Requiem. Outside the studio, beginning in the 1930s and continuing right up to his Carnegie Hall farewell recitals, in April 1955, a number of Gigli's opera and concert performances were recorded in part or whole.

Given that history, it is not surprising that—even though no particular anniversary is at hand—Italian EMI has set about publishing an "Edizione Integrale" of Gigli's recordings. The first volume, containing eighty-three operatic arias and duets, has appeared already; a second set will comprise "Canzone e Romanze," a third "Inediti" (Unissued): an inaccurate title for a collection that will include the (already widely and legitimately circulated) 1955 Carnegie Hall recordings, additional studio recordings of songs (some of them in fact previously published), and excerpts from film soundtracks and live performances (most of them known heretofore only in the recorded underground).

According to Italian EMI's prospectus for the series, "These three immensely important record sets contain all the recordings made by Beniamino Gigli in sound studios, concert halls, and opera houses, from 1918 to 1955 . . . with the exception of the complete

---

### BENIAMINO GIGLI: Complete Edition, Vol. 1: Opera Arias.

Beniamino Gigli, tenor; various accompaniments. EMI (Italy) 3C 153 03480/6, \$62.86 (seven discs, mono) [from HMV originals, 1918-51] (distributed by Peters International).

operas already published by EMI." That sounds pretty all-encompassing. Unfortunately, it is not true. Let's ignore the fact that by no stretch of the imagination will the "In-editi" volume comprise more than a fraction of the Gigli material now floating around—nor, perhaps, should it, for much of this stuff is duplicative in repertory and drawn from the tenor's last years. But there are other, more significant and avoidable omissions.

First off (as you will learn only after buying the set and reading the preface to the booklet inside), only the tenor's EMI recordings are included. The others, more than eighty sides sung for Victor—all of his recordings during the crucial decade 1921–31—are omitted. This is mystifying, because most of them are now in the public domain in Europe; indeed, quite a few of them are included in the three Seraphim "Art of Beniamino Gigli" LPs available in the U.S. (60054, 60280, and 60314). (Still more, now out of print from American RCA, can be found on Italian RCA: operatic selections on TVM 1-7203 and 1-7204, songs on TVM 1-7212.)

Beyond that, some sloppy staff work has caused two further omissions in this first volume. In 1934, when HMV recorded *Pagliacci* in Milan, the side including Beppe's serenade was made twice; one version, sung by Giuseppe Nessi, was used in the complete set, and another, sung by Gigli as a *jeu d'esprit*, was issued on a single. The latter recording should be in the "Edizione Integrale" but isn't, though it was reissued by another branch of EMI some years back, on COLH 144.

Then there's a substitution: The track that's supposed to contain the 1933 recording of the "Addio alla madre" from *Cavalleria rusticana* actually contains the 1940 version, from the complete recording. (As far as I can tell, the other cases where this might have happened are all okay.) Specialists might also wonder what happened to the Largo from Handel's *Serse*, but that will be along in Vol. 2, for the Italian EMI people don't think *Serse* is an opera (though they think *Naughty Marietta* and Millöcker's *Gasparone* are!).

The EMI brochure also promises that "the records in the three boxes . . . are in strict chronological order, to offer a detailed panorama of the evolution of Beniamino Gigli's voice and interpretations." That's a praiseworthy aim, and I don't think many would mind that it's compromised by putting the operatic and song recordings in separate boxes, for many purchasers will not want both types of repertory. But the sequence of selections in the operatic volume violates "strict chronological order" so frequently and obviously that one wonders why the claim is even made. It rather looks as if some effort was made to group together roughly contempo-

aneous recordings of selections from the same opera—which might have been a nice thought under certain circumstances but surely is incompatible with chronology, and is not in any case carried out consistently. (A further gripe about organization: The list of contents in the booklet is arranged under rubrics such as "Record No. 4, Side 1"—but on the labels we find only a consecutive numbering, from Side 1 to Side 14. That means a little arithmetical operation every time you try to find a tune—and those side numbers are so close to the outer edge of the label that they usually don't show through the window in the sleeve!)

Under the pompous heading "Today's Science at the Service of History," the brochure describes the technical background of the new set. That heading might better have read "Yesterday's Science . . ." for the central technical fact about this edition is that it draws upon the same tapes used for previous EMI reissues of Gigli recordings between 1957 and 1964. "These tapes, which can be called original [sic!!!], have now been taken up again by EMI and 'worked over' in such a way as to restore to Gigli's voice all its essential qualities—brilliance, resonance, and power—without compressing the sound so as to be able to insert one or two more pieces on each side."

In plain language, this means that the "Edizione Integrale" has been mastered at a higher level than, say, Angel's COLH series reissues of the same recordings; it sounds louder, and has fewer tunes per side. In other respects—surface flaws in the original 78-rpm material, added resonance, and the like—it is identical to its predecessors; no advantage has been taken of fifteen years of progress, mechanical and electronic, in transfer techniques. But then the few sides that had not previously been issued on EMI LPs and have consequently been freshly transferred show little evidence of technical progress either.

This last category comprises the "rarities" of the set, titles that may be new even to those who have been collecting Gigli on LP for several decades. Let me enumerate them (the titles marked with an asterisk will also be found in a new, less comprehensive British EMI set, of which more anon): the Lament from Gilea's *L'Arlesiana* (a 1936 Berlin recording); the original 1940 *Siciliana*\* from *Cavalleria* (for which an inferior 1946 remake was substituted in postwar sets—and in all LP transfers—when the original matrix was damaged); the *Improvviso* from *Andrea Chénier* (a June 1941 single, different from the complete recording made five months later); the Micaëla/José duet\* from *Carmen*, a 1942 recording in Italian, with Gigli's daughter Rina; a waltz from Millöcker's *Gasparone* sung in Italian (Berlin 1943); 1946 recordings in Italian of



As Turiddu in *Cavalleria*

"Ah, fuyez, douce image"\* from *Manon* and "Pourquoi me réveiller"\* from *Werther*; and Victor Herbert's "Ah, sweet mystery of life," sung in English (sort of) in 1947.

Further from the brochure: "Many Gigli records transferred to tape in the past had to be rejected because the tonality of the piece was incorrect . . ." but that's no longer a problem "thanks to the exceptional technical means available to [EMI]." Big deal—their equipment runs to a variable-speed tape machine. Actually, I've encountered few pitch problems on earlier EMI issues. On HQM 1194 (and presumably its American near-equivalent, Seraphim 60314), the *Lucia* arias (from Victor originals) are a semitone too high, which is obviously wrong. And on the same LP, the 1918 *Faust* aria comes out in the written key, although it very much looks as if, both in 1918 in Milan and in 1921 in New York, Gigli took both this piece and "Spinto gentil" from *Favorita* down a semitone to avoid high C (a note that he only sings once—and very gently, at the end of the 1919 "O soave fanciulla" from *La Bohème*—on records before the 1930s, when full-voiced high Cs occur with some regularity). As far as I can tell, everything in the Italian EMI set is pitched correctly, but I would have preferred commentary on specific titles, indicating the playing speeds of the original 78s.

Readers may recall that, in discussing the first installments of RCA's "Complete Caruso" (October 1978), I urged the inclusion of "voluminous" supporting material with such comprehensive publications. In some respects, EMI has done better. Its Gigli booklet contains a modicum of discographic data (matrix and take numbers, first catalog numbers, identification of accompaniments—though not all complete or accurate to the last detail, alas), an essay on "Gigli and the Opera" by Rodolfo Celletti, and complete texts and English translations for all the selections. (If the translations are less than idiomatic, and sometimes less than intelligible, one still appreciates the effort.) The translations are set out in a peculiar order, with no table of contents, nor is there any information about the dramatic context of the selections, about the background of obscure works, about the singers who join Gigli in the duets.

This strikes me as insufficient, even shortsighted. A "Complete Gigli" has two possible rationales. At the lowest level, it can serve the desire of archives and private collectors to own in convenient and compact form all of the tenor's recordings. More challenging, and more rewarding, would be to underline the potential of these recordings, heard and studied as a series, to cast light on the singer's life and career, on the musical and social milieu in which he worked, on the



As Don Alvaro in *Forza*

changes of taste that he lived through (and perhaps affected)—matters beyond the reach of any number of single-disc selections, assembled according to whatever criterion of "best" you might wish to apply.

Heard in sequence, the Gigli recordings do speak vividly to such points, at the same time raising still further questions that might have been answered in the accompanying literature had that been conceived on a more ambitious scale. Celletti only begins to touch on the musical, historical, and biographical significance of these recordings (he is certainly hampered by the great gaping hole where the years 1921–31 should be). I've just listened, in sequence, to the operatic recordings (including most of those omitted Victors), a sizable percentage of the songs, and a hefty sampling of the performance recordings (more, for certain, than will be included in Italian EMI's third volume). Though I am not now and have never been a card-carrying Gigli enthusiast, I found the experience absorbing, stimulating, educational—and sometimes even enjoyable.

I cannot possibly "review" these hundreds of selections in any useful detail. Instead, I'd like to discuss some of the points that came up during my panoramic listening survey. To emphasize the significance of the Victor recordings, let me begin with what I will call The Caruso Syndrome.

During Gigli's formative years, Caruso sang infrequently in Italy. Celletti mentions "the vigorous, but stentorian and baritone, tenor heard in some performances of *Pagliacci* by slightly perplexed audiences in Rome and Milan, in 1915"—perplexed, because this wasn't at all the tenor they remembered. The records had circulated, naturally, but in his memoirs Gigli claims not to have heard any of them (or any phonograph records whatsoever) until autumn 1918, just before making his own first records; Carlo Sabajno, manager of the Gramophone Company's Italian branch, played him the older tenor's 1905 recording of "Com'è gentil" from *Don Pasquale*: "I listened to it with humility and awe."

In the fall of 1920, Gigli went to New York, where Caruso had been reigning for more than a decade. Curiously, Gigli doesn't mention hearing Caruso in person that fall, but he notes that Gatti-Casazza asked him to fill in for the ailing tenor after the latter sang his last performance on Christmas Eve: "That name was beginning to haunt me . . . I did not want to live in his shadow." (Gigli and his ghost are suckers for the clichés of melodrama.) Vain hope—in New York, the public was conditioned to regard opera as a kingdom ruled by an Italian tenor; after Caruso's death in the summer of 1921, the succession was musical New York's primary concern. Gatti

apparently kept after Gigli to sing Canio, the quintessential Caruso role, but the tenor declined; he didn't sing the part in an opera house until 1942, eight years after recording it. Contrariwise, though Enzo in *La Gioconda* had been a Gigli specialty in Italy since his 1914 debut, he waited until 1924 to sing it in New York, whereupon "the critics praised me; but Caruso's supremacy in the rôle, they said, remained unsurpassed." It was a no-win game.

I think you can hear those pressures at work in the recordings. Take Enzo's "*Cielo e mar*." The 1918 Milan recording is sung by a wonderfully poised voice, a liquescent timbre maintained over the whole range, clear forward diction with almost no undesirable aspirates in melismatic passages. It's interpretively impressive, too: a steady tempo, occasionally relaxed with sensitivity but always firmly recovered, accelerating naturally for the coda. The line is cleanly sculpted, with a springy impulse that carries it up to bounce off partial climaxes with renewed energy for the bigger ones to come. This singing combines musical instinct, animal vitality, and vocal mastery in uncommon proportion.

In 1921, Gigli did the aria for Victor (Seraphim 60314)—or part of it, anyway; as with all of Caruso's three recordings, one stanza is omitted. Though close to the Milan performance in detail, this one remains prosaic and moodless, probably because the cut upset Gigli's conception of the aria's shape. In 1927, he recorded the aria complete, with the preceding recitative, for a Vitaphone film short (the Vitaphone recordings are the earliest important group of "unpublished" Gigli material; they will not figure in the Italian EMI series, unfortunately). This is quite different: a more measured tempo, bigger and more emphatic articulations, a grander dynamic scale—more a self-conscious "grand statement" than the cry of an impatient lover. Though the basic tonal quality is similar, the singing has changed, too: The melismas are pumped along with obtrusive aspirates ("*so-hohohoho-hoo-gni d'or*") and the climax is achieved with greater pressure, a harder sound than before. The Victor electrical version of 1929 (on Italian RCA TVM 1-7204, where it is misdated 1927) carries these tendencies still further.

I'm not suggesting that Gigli in any way "imitated" Caruso's performance—which, aside from its incompleteness, is in fact still slower than any of Gigli's, and does not allow the indicated slight accelerando of the coda to ruffle its imperturbable majesty. But there is a perceptible trend in Gigli's New York recordings toward conceiving his interpretations on a larger, more overtly emotional scale than before. It recalls Martinelli's story (cited in John Steane's *The Grand Tradition*) about how Elisa-

beth Rethberg altered her *dolce* (and correct) version of the climax of Aida's "*O patria mia*" when it became clear that American audiences expected a ringing high C; as Steane observes, "It suggests something about the cultural setting which was not entirely helpful to the artistic growth of a singer." Sometimes Gigli's interpretations simply become fussy ("*Dai campi, dai prati*" from Boito's *Mefistofele*, the 1927 version on Italian RCA TVM 1-7203), sometimes downright hysterical (the *Lucia* Tomb Scene, especially in the later recording with Pinza, on the same record). Both strike me as ill-conceived responses to the demand for a "bigger" tenor than Gigli was yet ready to be.

And of course there was The Sob, to which Celletti calls particular attention: "The desire to 'imitate Caruso' caused irreparable damage to other tenors of the day. . . . Young Gigli was more clever; he limited himself to imitating Caruso's expressive sob, but did not modify his method of singing in the least." But in Gigli's practice The Sob passed beyond a mere expressive device to enhance an aria; it became an extramusical guarantee to the audience of the singer's sincerity—sometimes it seems as if the aria is there solely to justify The Sob, or its expansion into the juvenile blubbery we hear after the 1940 *Ladoletta* aria.

Even though The Sob becomes a central fact about Gigli's emotional home base, it isn't consistently present on the surface. It certainly recedes for a while when the locus of his recordings passes from New York to London. At his last Victor operatic session, in December 1930, Gigli, with Rethberg and Pinza, recorded the *Lombardi* trio that Caruso had done with Alda and Journet (like Gatti, Victor never stopped trying those Enrican shoes on Gigli); in full vestitive turmoil, he gussies the line up with swoops and sobs, all the more embarrassing in the context of his stylistically sensitive partners (Seraphim 60280). The following summer in London, we hear the same voice, but coming from—as it were—a different head altogether: reposeful, professional, in control. Beginning with these recordings (especially the dream from *Manon* and "*Je crois entendre encore*" from *The Pearl Fishers*, both sung in Italian), we observe a tendency to locate virtually entire arias in that honeyed *mezza voce*; during the next decade, as Gigli also cultivates a more forceful declamatory technique and takes on dramatic roles, his singing concentrates more and more on these two extremes—the Croon and the Belt, we might say—crowding out the middle ground. But what spelled disaster for others kept him going.

After Gigli left the Met, he signed a contract with the Italian government to sing eighty performances a year, in any Italian theaters he chose. That government was, of

course, the Fascists, and Gigli seems to have become its unashamed, if unofficial, troubadour. His comment on Toscanini, written without evident embarrassment in the 1950s, gives one pause: "His political sympathies were alien to me, and I could never understand the way in which he allowed them to regulate his life. To me, Italy was Italy, no matter what the regime." Between these two men, of course, stretched the great abyss that divided *Risorgimento* and Vatican; Toscanini's father was one of Garibaldi's Redshirts, while Gigli learned to sing first from the priests in the Cathedral of Recanati. At any rate, EMI apparently plans to steer clear of Gigli's Mussolini Syndrome, for the tenor's 1937 recording of "*Giovinezza*"—the Fascist anthem that Toscanini refused to conduct—is not listed among the contents of the "Edizione Integrale." Evidently the sound of *Il Tenore* pledging allegiance to *Il Duce* ("*Giuro fede a Mussolini*") over a bumptious background of trumpets and chorus still embarrasses someone, though I should think the greatest menace this recording offers is of deluding youngsters into thinking that after all the Fascists may have been only a comic-opera aberration. Not so. Look, *ragazza*, "complete" means Everything, warts and all.

A plebeian by birth and unchanging nature, Gigli enjoyed his role as "The People's Singer," not foreseeing that it would lead to some uncomfortable months after the Liberation. His celebrity was further enhanced from 1935 onward by participation in several very successful German-Italian film co-productions. Not a few of his studio recordings were tied in with these films, and I wish EMI had provided some information about this; in the present volume, for example, I suppose the dreadful experiment of singing the *Pagliacci* Prologue (up a minor third) is a by-product of the 1943 German film *Lache, Bajazzo*. (The actual soundtracks incorporated recordings, of course, and some of the operatic sequences are promised for Vol. 3, including some surprisingly restrained sequences from *Otello*.)

With the arrival of the film period comes, perhaps coincidentally, an improvement in Gigli's way of singing songs. Back in the Twenties, he simply put each song in a pigeonhole—loud, soft, fast, slow—and served it up plain; these records are unvaried and often unpleasant. Later, there comes to be some contact with the subject matter, some effort to introduce variety, to build a climax instead of pushing out the whole tune full tilt. On records, even at his best, Gigli never comes near to Tito Schipa's way with a song, making love to the words as well as to the notes (this is not a criticism of Gigli's diction, for, barring a rare suspicion of a lisp, the words are always well

"The early Milan recordings are comparable to the early Caruso recordings . . . fluent mellifluous, spontaneous tenor singing."

formed). Most of the songs he recorded are trash: tearful tangos, trumpeted tarantellas, adipose *Ave Marias*, lachrymose lullabies, served up against backgrounds of twanging mandolins, wheezing concertinas, or swooping strings, with the UFA Heavenly Chorus backing up the film production numbers. There may be a single LP worth of decent stuff here; only incurable Gigli addicts are likely to find Vol. 2 of this series digestible.

And yet Gigli did sing songs effectively in recital, with an audience present, as is documented by numerous underground recordings. Not any more tastefully than in the studio, perhaps, but certainly more beguilingly, with more involvement, with tangible theatrical flair. And he did this successfully until a great age. Even after 1950 (when he turned sixty), when his work in the studio can sound unsteady and flabby, he was storming up and down Italy, not to mention Europe and South America, singing strenuous operatic roles and full-length recitals with endless encores. Of course, whatever the program may have announced—*Aida* or *Feilora* or *Cav 'n' Pag* (he sang both on the same evening for a single fee) or simply a concert—the real show was another performance of "Beniamino Gigli vs. Father Time." It usually took him a while to warm up, but eventually he would begin to sound like Gigli again, and the public rejoiced. My colleague Michael Steinberg tells of an *Elisir* in Naples in 1953 when, after the inevitable encore of "*Una furtiva lagrima*," the crowd started calling for Bixio's "*Mamma*," a favorite Gigli movie hit; eventually a piano and accompanist were wheeled on-stage and Gigli sang "*Mamma*," after which the opera was resumed. Clearly nobody was upset by this; they had come to hear Gigli, and, for a while at least, he had sounded like the records they knew and loved.

You can hear some of this in the Carnegie Hall recital recordings, though earlier examples are better, and I hope the recital excerpts in Vol. 3 will give some idea of this warming-up process by which Gigli made time appear gradually to recede. The punishing schedule that this certainly not impoverished old man pursued up to his sixty-fifth year is puzzling, but less so when one hears

the actual performances, which are ever so eager to please. Belying the relentlessly self-congratulatory tone of the memoirs, we hear in the singing an insatiable need for approval. Perhaps the audiences functioned as substitutes for his mother, of whose death in 1930 at the ripe old age of eighty-three he wrote, "My losing her was the supreme tragedy of my existence"—the formulation is more ghostwriter cliché, but personal feelings about his family are rare in the later parts of Gigli's memoirs.

Future psycho-biographers investigating The Mamma Syndrome should probably look at the films, too; several, including the source of that dreadful Bixio song, appear to be mother-oriented. And along with this is The Daughter Syndrome. Rina Gigli made her debut in 1936, shortly before a marriage that her father expected to put an end to thoughts of a singing career. The memoirs tell us little more, but Rina turns up on the 1942 *Carmen* duet recording, a brittle, unwinning lyric soprano, and then frequently in her father's postwar appearances; it's hard to avoid the suspicion that they were offered to impresarios as a package deal. And though Gigli cannily winds down his operatic recordings in the later Forties, very cautious about what he's committing to posterity, in January 1951 comes a major indiscretion: five duets with Rina, ranging from *Elisir* ("*Chiedi al rio*") to *Otello* (the Act I duet). Though later that year he would sing remarkably well on a strenuous South American tour, the Rina sessions caught him at a low ebb, and we might wish they had not taken place.

Gigli's recorded legacy differs from that of his superstar predecessors, including Caruso, because it includes a number of complete recordings of operas; though not in the Italian EMI series, these are all readily available in Seraphim editions and are central to any evaluation of his art. Single discs give us only the emotionally pregnant moments of opera, and arias sometimes have to be sung differently when taken out of context, as comparison between Gigli studio and "live" recordings, sometimes only days apart, often demonstrates. Complete recordings remarkably expand our picture of the singer, showing his command of a variety of intensities and moods. Two of Gigli's complete sets strike me as outstanding, the best place to start a collection of his work: *La Bohème* (Seraphim IB 6038, recorded May 1938) and *Andrea Chénier* (IB 6019, November 1941), though the others are by no means negligible; for example, the 1943 *Ballo*—IB 6026—gives us a Riccardo who, though unaristocratically tearful later on, fills the opening scene with an incomparable animal vitality.

(Warning: Italian EMI has recently circulated a "complete" *Carmen*, sung in Italian,

with Gigli, Rina, Ebe Stignani, and Gino Bechi, taken from the prerecorded soundtrack of a movie version that was never actually filmed. Made in June 1949, it shows an off-form Gigli who dissolves into hysterical blubbing in the final scene—a dismal affair, from which only Stignani and Bechi emerge with any credit whatsoever.)

His is a mixed legacy, for sure. The early Milan recordings are comparable to the early Caruso recordings as demonstrations of fluent, mellifluous, spontaneous tenor singing, and in some ways nothing later is quite as good. On direct confrontation with the Milan series, even the best recordings from the 1930s show vocal slackening, while the definitive surfacing of that plebeian personality from behind the relative anonymity of the first recordings is at best a mixed blessing. It would be easy to dismiss him for the aggressive self-regard and the otiose self-pity, but the vocal authority isn't at all dismissable, and with it goes an animal instinct that responds in ways not always unmusical or undramatic. However much one may be put off by his misplaced populism, it isn't possible to get around Gigli; everyone should be familiar with some of the best—and, probably, some of the worst—of his operatic records.

To do that right now, short of acquiring the Italian EMI box, isn't so easy. Older collectors who have the four out-of-print Angel COLH singles devoted to Gigli, plus all of the current Seraphims, will be missing only the "rarity" titles I listed earlier, and they may wonder about spending so much to add so little. If you have, or can get, only the Seraphims, you will find that they don't include many of the most central Gigli recordings. In this respect, I had high hopes for the British EMI set mentioned earlier (RLS 729, three discs), but it too is missing such things as the wonderful 1918 *Mefistofele* solos, the 1931 *Pearl Fishers* aria, the 1932 *Cavalleria* duet with Dusolina Giannini, while including the ghastly *Don Giovanni* arias, an unstylish Caccini "*Amarilli*" (an alternate unpublished take that doesn't differ significantly from the familiar one), and a German-language version of a typically awful Bixio song (neither of these last two items appears to be included in the Italian Vol. 2, leaving one to wonder if EMI's various branches ever talk to each other). As I write, a sequel to the British set has been announced (RLS 732, three discs), devoted entirely to postwar recordings and almost entirely to songs, a dismal prospect. Seraphim would do well to reissue those four COLH singles.

And the next time some record company sits down to plan a complete edition, perhaps they will first have a good long, serious, well-advised think about how to do it right before plunging in. **HF**

# Here It Is! 1979 Edition High Fidelity's Test Reports



The 1979 edition of High Fidelity's Test Reports is packed with more than 200 test reports of currently available stereo and four-channel equipment and accessories, including:

**ALSO  
AVAILABLE AT  
YOUR LOCAL NEWSSTAND.**

**Receivers • Headphones • Amplifiers • Tape Equipment  
Turntables & Pickups • Speakers • Tuners . . . and more!**

This new book is bigger and better than ever before! 330 pages of in-depth analyses with charts, tables, pictures and prices, plus a guide to technical audio terms.

Order now.

Be sure to enclose cash with order.

High Fidelity's Test Reports  
1979 Edition

D9GF1

1 Sound Avenue, Marion, Ohio 43302

Please send me \_\_\_\_\_ copies of the 1979 High Fidelity's Test Reports at \$3.95 each, plus \$1.00 postage and handling, total \$4.95

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

(add tax where applicable)

reviewed by  
 Scott Cantrell  
 Abram Chipman  
 R. D. Darrell  
 Peter G. Davis  
 Robert Fiedel  
 Alfred Frankenstein  
 Harris Goldsmith  
 David Hamilton  
 Dale S. Harris  
 Philip Hart

Paul Henry Lang  
 Irving Lowers  
 Robert C. Marsh  
 Karen Monson  
 Robert P. Margan  
 Conrad L. Osborne  
 Andrew Porter  
 H. C. Robbins Landon  
 Patrick J. Smith  
 Paul A. Snook  
 Susan Thiemann Sommer



Solomon  
 Stunning technical work

**BACH:** Keyboard Works. For a feature review, see page 127.

**BEETHOVEN:** Concerto for Piano and Orchestra, No. 2, in B flat, Op. 19.\* Sonata for Piano, No. 26, in E flat, Op. 81a (Das Lebewohl).

Solomon, piano; \*Philharmonia Orchestra, André Cluytens, cond. SERAPHIM 60308, \$3.98 (mono) [from RCA LHMV 12 and LM 1733, 1952].

**BEETHOVEN:** Concerto for Piano and Orchestra, No. 4, in G, Op. 58.

Solomon, piano; Philharmonia Orchestra, André Cluytens, cond. SERAPHIM 60309, \$3.98 (mono) [from RCA LHMV 1056, 1953].

**BEETHOVEN:** Concerto for Piano and Orchestra, No. 5, in E flat, Op. 73 (Emperor).

Solomon, piano; Philharmonia Orchestra, Herbert Menges, cond. SERAPHIM 60298, \$3.98 (mono) [from RCA LM 2108, 1955]. Tape: 4XG 60298, \$4.98 (cassette).

**BRAHMS:** Concerto for Piano and Orchestra, No. 1, in D minor, Op. 15.

Solomon, piano; Philharmonia Orchestra, Rafael Kubelik, cond. TURNABOUT THS 65110, \$4.98 (mono) [from RCA LHMV 1042, 1953].

My introduction to Solomon's artistry was through his exquisite recordings of Chopin's E flat Nocturne, Op. 9, No. 2, *Berceuse*, and D flat Nocturne. With certain larger-scaled works, however, I felt disappointment; for all the straightforwardness and technical finish, they seemed lacking in involvement and even, at times, in perception. More than twenty years later, I am surprised to find my impressions little changed.

The three Seraphim concerto discs complete the reissue of Solomon's Beethoven cycle, the stereo Nos. 1 and 3 having been in the catalog for some years as S 60016 and S 60019. The brightly phrased, kinetic *Emperor* was always one of my favorites, and the reissue's clean sound preserves its robust features intact. The G major Concerto, however, is slightly bland and aloof, and it is blemished by Solomon's use of the tasteless Busoni versions of Beethoven's cadenzas. The B flat Concerto, while much happier than the G major, is on the lightweight and slack side, although its brisk, well-projected tempos are close to those of Schnabel/Dobrowen (deleted) and Fleisher/Szell (in Columbia M4X 30052). The new masterings of the B flat and G major Concertos reveal much woodwind detail I did not recall in André Cluytens' admirably gauged accompaniments.

I remembered Solomon's Brahms D minor Concerto—newly issued by Turnabout as a sequel to the cherishable B flat with Issay Dobrowen (THS 65071, August 1977)—as terribly sluggish, but on rehearsing the tempos proved no slower than the Arrau/Giulini (Seraphim S 60264) and certainly more animated than the Arrau/Haitink (Philips 6500 018) or the Barenboim/Barbiroli (Angel, deleted). Solomon's technical work here is

stunning—the first-movement double octaves are as close to flawless as you will ever hear—and the prevailing coolness does not preclude an underlying coherence and sensitivity. Rafael Kubelik conducts sympathetically, although I don't sense the extraordinary meeting of minds evident in the B flat Concerto with Dobrowen. (Turnabout, incidentally, has also issued Solomon's excellent Tchaikovsky First Concerto with Dobrowen, which I reviewed in its German reissue in November 1976; THS 65108 throws in Liszt's *Hungarian Fantasia* as a bonus.)

At the time of his stroke in 1956, Solomon had recorded eighteen of the thirty-two Beethoven sonatas. Eleven of them are now available domestically: Nos. 26 and 27 as fillers for Seraphim's Second and First Concertos, respectively; Nos. 21 and 28–32 in a three-disc Turnabout set, THS 65068/70; and the *Pathétique*, *Moonlight*, and *Appassionata* on a Seraphim single disc, 60286. These are beautifully sculpted, symmetrical performances, but my old complaint remains: Solomon is too often willing to quell inner strife to maintain surface perfection; he compromises many important textual points—long pedal markings, swells, subito pianos. He also uses the corrupt text, with its wrong bass note, in the first-movement recapitulation of the *Lebewohl* Sonata.

Whatever my reservations, it is good to have Solomon's Beethoven sonatas back in circulation; the work of masters ought to be accessible. In that connection, it should be noted that all eighteen sonatas were gathered in a 1976 British EMI set, RLS 722, in superior pressings and packaging. H.G.

#### BEETHOVEN: *Fidelio*, Op. 72.

CAST:

Leonore	Kirsten Flagstad (s)
Marzelline	Marita Farrell (s)
Florestan	René Maison (t)
Jaquino	Karl Laufkoetter (t)
Prisoners	Emery Darcy (t), John Gurney (bs)
Don Pizarro	Julius Huehn (b)
Don Fernando	Herbert Janssen (b)
Rocco	Alexander Kipnis (bs)

Metropolitan Opera Chorus and Orchestra, Bruno Walter, cond. MET 6 (three discs, mono, manual sequence) [recorded in performance, February 22, 1941]. Available with a contribution of \$125 (including Opera News subscription) to Metropolitan Opera Fund, Box 930, New York, N.Y. 10023.

**F***idelio*, like *Nabucco* (or, at least, the scene by the banks of the Euphrates from Act III), is simultaneously an opera and, when the need arises, a public occasion. Both works give powerful and therapeutic expression to complex communal emotions. *Nabucco* unites people by making them understand the universality of human misfortune, *Fidelio* by offering them hope in a beneficent providence. *Fidelio*, in addition, is a direct ethical statement, an assertion of the great Enlightenment

imperatives, Liberty, Equality, Fraternity. Unlike so many late-eighteenth-century and early-nineteenth-century views of human perfectibility, it has never dated. The optimism of its belief in the essential nobility of mankind is tempered by its awareness of the heroic struggle involved in making virtue prevail.

*Fidelio* is a call to decency that the events of the last half-century have, alas, made more pertinent than ever. During the mid-1930s, Toscanini's performances at Salzburg, just across the border from Nazi Germany, were more than musical experiences, they were also acts of moral defiance; at a time of political darkness and spiritual despair they showed, in the words of W. H. Auden, an affirming flame. Similarly, the *Fidelios* conducted by Furtwängler at Salzburg over a period of three summers, starting in 1948 (ten years after the Anschluss and three years after the end of World War II), transcended aesthetic considerations—though the musical quality of these performances was extraordinary—and became, in effect, tokens of fraternal reconciliation and national rededication. Thus, too, though Furtwängler was no longer alive to lead the performance, the opera was the only possible choice for the opening of the rebuilt Vienna State Opera in 1955.

For reasons of this sort, it is almost impossible to understand the significance of Bruno Walter's *Fidelio* at the Met in 1941 without seeing that it was both a distinguished musical occasion and an impassioned response to the state of the contemporary world. The almost legendary status of this production derives from the emotions of that appalling and inspiring time, which saw the Nazis triumphant everywhere in Central Europe, France defeated, and Britain isolated and under constant attack from the air. And it is surely on account of the historical resonance of Walter's performances, no less than their musical virtues, that people are being asked to pay \$125 (a price that includes a subscription to *Opera News*) for this dim-sounding, though perfectly listenable, off-the-air recording. The richly illustrated booklet that accompanies the set is produced in conformity with the luxurious standards once achieved under Dario Soria for RCA's lamented Soria series, and makes all the proper points. Anyone with a taste for the past—and a tolerance for the aural imperfections that inevitably accompany such opportunities to experience it—will find this souvenir moving and absorbing.

A lot of its fascination derives from the leadership of Walter, then in his sixty-fifth year, who confers upon it a lifetime's experience. There is about the performance a large-scale sweep, an authority and inevitability, which are very striking. Every moment of his conducting bespeaks a grasp of the opera's entire design. Nonetheless, for all its cohesive-

ness, his view of *Fidelio* may strike some as a trifle easygoing. I myself wish there were more of the impetuosity one hears Walter unleash so thrillingly in the orchestral outbursts that punctuate the opening section of Leonore's "*Abscheulicher!*". Even more memorable in this respect is the exultant reading of the *Leonore* Overture No. 3, which Walter, in the tradition of his mentor, Gustav Mahler, interposes between the rescue of Florestan and the final jubilation. Perhaps it was impossible for him at this stage of his career, when he enjoyed only limited contact with the opera house, to draw from his vocalists the same kind of fervor he drew from his orchestral players, but only in the joyous finale (buoyed by the superb *Leonore* No. 3 he had just achieved?) does Walter infuse the excellent musicianship of the vocalists with the kind of spontaneity that makes for a great performance.

The singers are a mixed bag. René Maison, Julius Huehn, and Marita Farrell were seasoned, dependable performers. None could be called remarkably expressive; all have obtrusive technical limitations; and they have, in any case, been eclipsed over and over by subsequent Florestans, Pizarros, and Marzellines. The Jaquino, Karl Laufkoetter, from 1936 to 1946 the Met's leading *Spieltenor*, sounds two decades older than his forty years. Herbert Janssen, one of the most distinguished baritones of the '20s and '30s, does not here live up to either his reputation or the standard he achieves on many recordings. As the emblem of retributive justice, Don Fernando, a role that seems too low for him, he projects—doubtless for technical reasons—little of the requisite nobility. I must also register disappointment with Alexander Kipnis, not on vocal grounds (though he had just celebrated his fiftieth birthday), but on stylistic ones. In what is essentially a buffo role, his manner, to my ears, is too crudely assertive, too ungenial. So far as I'm concerned, his black and voluminous bass was meant less for comic or even genre roles than for tragic and heroic ones.

That leaves Kirsten Flagstad, who in no way disappoints. Has there in the last half-century been another voice that possessed such power, such tonal refulgence, such nobility, such ease of emission and evenness of scale? After more than thirty years her "*Dich, teure Hülle!*" in the vast reaches of the Albert Hall still sounds in my ears. During her first period at the Met (1935-41) and at Covent Garden (1936-39), she was sometimes accused of lacking warmth and interpretive commitment. I hear no sign of these failings here, only the breathtaking embodiment of Beethoven's noble concept of redemptive womanhood. The voice, one of the phenomena of twentieth-century music-making, rings out

*Continued on page 138*



Kirsten Flagstad  
A prodigious vocalist; a great artist

# Philips' Peter Grimes Offers a Choice

by Kenneth Furie



Jon Vickers, Adam Wollach, and Heather Harper in the Met production of Peter Grimes

Jon Vickers' Peter Grimes is the closest identification of an operatic performer and role in recent memory, and it's doubly fortunate that Philips has gotten it down on disc. Fortunately first for the Britten discography, which is well served by the addition of this interesting portrayal, and fortunate too for the Vickers discography. Grimes is the central role in the tenor's repertory; it thrives on the alienation and paranoia that seem to me to underlie all his operatic assumptions.

Vocally too the role is one of Vickers' happiest, rarely taking him into the precarious terrain above A flat and making abundant use of his powerful midrange and of his ability to punch out notes around the break. Even more than his demonstrative interpretive approach, Vickers' dramatic-tenor vocal configuration

distinguishes his Grimes from that of the role's creator, Peter Pears, which is preserved in the 1959 London recording conducted by the composer. The difference is evident immediately, in the coroner's inquest into the death of Grimes's apprentice.

Although Peter's testimony never takes him above the break, there are important passages that depend on the D and E flat just below it (for example, the line "I don't like interferers!"—p. 10 of the Boosey and Hawkes vocal score). Only when Swallow delivers the verdict of accidental death, coupled with the chilling "advice" that Peter not get another apprentice, does he rise to F ("Like ev'ry other fisherman I have to hire an apprentice; I must have help," p. 19), and here Vickers' vocal resources enable him to express Grimes's life-or-death desperation. There is both validity and eloquence in Pears's determination to keep the character's anguish internal, rigorously concealed from public view, but it's useful to note that his decision was surely related to his vocal capabilities.

The recording finds Vickers in fine shape, with the top much freer than it has often been in recent years; note the robust B flat after Grimes strikes Ellen in Act II ("So be it, and God have mercy upon me!," p. 205). At full voice he is overwhelming. His soft singing causes me some concern, tending even more than usual to a disembodied, falsettolike sound. As is frequently true with Vickers, it's hard to say what is technical expedience and what interpretive choice, but some of those

quieter passages do seem overcalculated. The great entrance monologue during the Act I storm, "Now the Great Bear and Pleiades" (pp. 139-41), is awfully neatly manicured for such an intense utterance—could this have something to do with the fact that some two-thirds of the monologue is set right on the break?

I don't want to leave a negative impression; Vickers communicates. I wish the rest of the cast matched his understanding of Britten's prosody, which can sound ridiculous if the notated rhythms are simply executed arithmetically. Heather Harper is reasonably adept in this regard, and after a vocally rough Prologue and Act I—where the middle and bottom of the voice are harsh and gray—she is reasonably sympathetic, as far as she goes. I still hope to encounter an Ellen who gets beneath the surface of this peculiar relationship, in which Peter functions as the Schoolmarm's Good Works Project.

Jonathan Summers makes a ha-ha-ho-ho hash of the syncopations early in the Act I Balstrode/Grimes scene ("Why not try the wider sea," p. 88), but he does better later on and is quite solid in sustained line singing. He discloses an encouragingly secure top F in Act II, Scene 1 ("I warn you we shall waste our time," p. 243). Summers is new to the role, and so his shortcomings perhaps matter less than the solid start he's made. It's harder to understand the veteran Elizabeth Bainbridge's flat rendering of Auntie's testy response to Balstrode's joking disparagement of her "relations" in Act I, Scene 2 ("Loud man," p. 124—

## BRITTEN: Peter Grimes, Op. 33.

### CAST:

Ellen Orford	Heather Harper (s)
Nieces	Teresa Cahill, Anne Pashley (s)
Auntie	Elizabeth Bainbridge (ms)
Mrs. Sedley	Patricia Payne (ms)
Peter Grimes	Jon Vickers (t)
Bob Boles	John Dobson (t)
Rev. Horace Adams	John Lanigan (t)
Captain Balstrode	Jonathan Summers (b)
Ned Keene	Thomas Allen (b)
Swallow	Forbes Robinson (bs)
Hobson	Richard Van Allan (bs)

Chorus and Orchestra of the Royal Opera House, Covent Garden, Colin Davis, cond. PHILIPS 6769 014, \$26.94 (three discs, manual sequence). Tape: 7699 089, \$26.94 (three cassettes).

### COMPARISON:

Lon. OSA 1305 Pears, Watson, Pease, Britten

and in particular the dotted rhythms of "A joke's a joke and fun is fun!").

One of the most remarkable aspects of *Grimes* is the vividness of its characterizations, which the thirty-one-year-old Britten accomplished largely through his mastery of nineteenth-century operatic conventions. For example, he establishes the small but important role of the carrier Hobson by casting his refusal to fetch Grimes's new apprentice as a little song ("I have to go from pub to pub," p. 53)—rather nicely done by Philips' Richard Van Allan. In general, the writing of these roles is shrewdly practical, making generous use of a limited range of vocal qualities for each character.

The one puzzlement to me is the meddlesome Mrs. Sedley, whose obsession with Grimes's imagined crimes in Act III is expressed in sustained writing that's mighty low for a mezzo-soprano (as Britten bills her; Auntie is billed as a contralto): Her attempt to enlist Ned Keene begins with six bars of repeated low Gs ("For two days I've kept my eyes open," p. 309), which would be low for a contralto. Granted, this speech is marked *senza voce* (without voice), but it still has to be heard—and when, a few minutes later, she turns to soliloquy ("Crime which my hobby is," p. 319), she is back down on A flat and A.

Philips' Patricia Payne, who comes close to being a contralto, is well cast as Mrs. Sedley; she's not a very interesting singer, but she can at least manage those low-lying passages. I wish comparable care had been devoted to the casting of the Methodist fisherman Bob Boles; all of his writing points to the ability to churn out lots of sound in the area right below and above the break—say, from C or D up to A. This is no mean requirement, but Boles needn't be able to do much else, and the sound needn't be pretty (he's *supposed* to be obnoxious). But it must be loud and penetrating. The ideal would be an anglophone Gerhard Stolze; the Met's Paul Franke is a good facsimile, and Frank Little was effectively cast in the 1977 Chicago production.

Covent Garden's John Dobson is an ordinary wispy comprimario tenor, which would be okay for the quiet sanctimoniousness of the rector—in which role John Lanigan's voice clearly shows the nearly twenty years that elapsed between the two recordings—but is disastrous for such crucial moments as Boles's drunken preaching after the "Grimes is at his exercise" ensemble ("People! No! I will speak!" etc., pp. 220-28). Boles differs from the other villagers in that his ignorance and narrow-mindedness are more extreme, closer to the surface, and more aggressive; the others have no use for him under normal circumstances, but he can catalyze their worst instincts. Dobson leaves a hole in the performance; London's Raymond Nilsson is much preferable.

London's supporting cast, while hardly ideal, is generally sharper than Philips'. Even

Thomas Allen, next to Vickers probably the most effective member of the Philips cast, digs into the relatively straightforward role of the quack apothecary Ned Keene with less relish than the young Geraint Evans did for London. Philips' Forbes Robinson is now too woolly vocally to make a convincing Swallow; again, London's Owen Brannigan is preferable.

Colin Davis' conducting is impressive in some important ways, but his concerns don't seem to extend to individual characterization; the singers sink or swim on their own. And so the recording doesn't benefit, at least in this regard, from being made in conjunction with live performances, a procedure that is exemplary in theory but useless in practice if the performances in question have no life to begin with (cf. Claudio Abbado's DG operas). Davis also has a tendency to let the musical line slacken in quieter, less dense sections, something that never happens in the composer's performance.

In 1959, Britten was still a relatively inexperienced conductor (he was in fact conducting *Grimes* for the first time), and it's tantalizing to imagine what this performance might have been like if it had happened at the time, say, of the wonderful *Billy Budd* recording (1968). But Britten's *Peter Grimes* still seems to me more consistently maintained than Davis', and it represents an interestingly different approach—chillier, more concentrated, emotionally more contained (at least on the surface).

Davis is most impressive in the extensive ensembles. Here the performance experience of the Covent Garden forces counts for a great deal; they know this music better than any other chorus and orchestra. These ensembles are central to *Grimes*, and they could hardly be better done—or better recorded. The more active sections of the great sea interludes are also well done. Almost all the orchestral work that depends on the winds is first-rate; the strings, in particular the violins, could be more forceful and more precise.

Philips' packaging is serviceable but disappointingly unambitious: trilingual presentation of a mediocre background essay by Eric Walter White, of artist bios, and of the libretto. The latter carefully indicates, but does not explain, some striking (although small) deviations from the published text that are made in this performance. The booklet contains no photos from the Covent Garden production. As noted, the sound is well balanced in the ensembles; I wish the solo voices had more presence elsewhere, but why blame the recording team?

For most listeners, the more extroverted approaches of Vickers and Davis will make the new recording more immediately appealing. I'm pleased to find that the old recording hasn't been rendered obsolete, that we are offered some genuine aesthetic options. A work of *Grimes*'s stature deserves no less. **HF**

# Introducing the ANGEL 45 rpm 12" Album

Janáček: Sinfonietta  
Chicago Symphony Orchestra

Ravel: Boléro  
J. Strauss, Jr.: Beautiful Blue Danube  
Berlin Philharmonic Orchestra  
Karajan

HOLST:  
THE PLANETS  
SUITE  
London Symphony Orchestra  
Previn

GERSHWIN:  
RHAPSODY IN BLUE  
RAVEL: LA VALSE  
London Symphony Orchestra  
Previn

Respighi:  
The Pines of Rome  
London Symphony Orchestra  
Gardelli

Wagner: Preludes-Lohengrin,  
Die Meistersinger & Parsifal,  
Flying Dutchman-Overture.  
Berlin Philharmonic • Karajan

ELGAR: POMP & CIRCUMSTANCE  
MARCHES 1 & 4  
WALTON: CROWN IMPERIAL;  
ORB & SCEPTRE  
London Philharmonic  
Beutl

Music of Kotelbey  
In a Persian Market • The Clock and the  
Dresden Figures • In a Monastery Garden •  
In a Chinese Temple Garden •  
In the Mystic Land of Egypt  
Philharmonia Orchestra • Landberg

Rimsky-Korsakov:  
Capriccio Espagnol  
Glinka:  
Russian and Ludmila-Overture

Night

STRAVINSKY:  
THE  
FIREBIRD  
SUITE  
Chicago  
Symphony  
Orchestra  
Giulini

At 45 rpm, Angel Records has revealed a sonic range commensurate with that of the master tape itself. Cutting the record at this measurably larger groove geometry offers you these listening advantages:

- ✓ Greater high frequency clarity
- ✓ Enhancement of mid-range definition
- ✓ Better bass response below 100 Hz
- ✓ Superior dynamic peaks

Simply stated, the Angel 45 rpm disc gives you more and better sound. A new total-into-sound experience.

10 albums comprise Angel's initial 45 rpm release. Each performance selected on the merits of exceptional sound quality of the original 33 1/3 rpm edition. An even more striking listening experience now awaits you.

SS-45007 SS-45002 SS-45000 SS-45001 SS-45005  
SS-45008 SS-45009 SS-45012 SS-45011 SS-45003



# Critics' Choice

The most noteworthy releases reviewed recently

**BEETHOVEN:** Symphony No. 6. Jochum. Angel S 37530, Apr.

**BRAHMS:** String Quartets (3). Alban Berg Qt. Telefunken 26.35447 (2), Apr.

**CHOPIN:** Etudes, Opp. 1, 25. Costa. Supraphon 1 11 2188, May.

**CHOPIN:** Preludes, et al. Ashkenazy. London CS 7101, Apr.

**CLEMENTI:** Symphonies (4). Scimone. Erato STU 71174 (2), May.

**HANDEL:** Alexander's Feast. Palmer, Johnson, Harnoncourt. Telefunken 26.35440 (2), May.

**MASSENET:** Le Jongleur de Notre-Dame. Vanzo, Boutry. Angel SBLX 3877 (2), June.

**MILHAUD:** Protée Suite No. 2; Les Songes. Abravanel. Angel S 37317, June.

**MOZART:** Vocal Works. Blegen, Zukerman. Columbia M 35142, May.

**RAVEL:** Vocal and Instrumental Works. DeGaetani, Kalish, et al. Nonesuch H 71355, June.

**RZEWSKI:** The People United Will Never Be Defeated! Oppens. Vanguard VSD 71248, Apr.

**SAINT-SAËNS:** Violin/Orchestra Works. Hoelscher, Dervaux. Seraphim SIC 6111 (3), May.

**SCHUBERT:** Alfonso und Estrella. Mathis, Schreier, Suitner. Angel SCLX 3878 (3), May.

**SCHUBERT:** Symphonies (8), et al. Karajan. Angel SE 3862 (5), May.

**SCHUBERT:** Symphonies Nos. 4, 8. Giulini. DG 2531 047.

**Symphony No. 9.** Jochum. Quintessence PMC 7100. Schippers. Turnabout QTV 34681. May.

**STRAUSS, R.:** Don Quixote; Don Juan. Haitink. Philips 9500 440, Apr.

**STRAVINSKY:** Petrushka (1947 version). C. Davis. Philips 9500 447, June.

**SWEELINCK:** Harpsichord Works. Koopman. Telefunken 36.35360 (3), May.

**TANEYEV:** Symphony in B flat; John of Damascus. Fedoseyev. ABC/Melodiya AY 67043, June.

**TCHAIKOVSKY:** The Sleeping Beauty. Bonynge. London CSA 2316 (3), May.

**VERDI:** La Battaglia di Legnano. Ricciarelli, Carreras, Gardelli. Philips 6700 120 (2), Apr.

**VIEUXTEMPS:** Violin Concertos Nos. 4, 5. Perlman, Barenboim. Angel S 37484, May.

**VIVALDI:** Concertos, Op. 9 (La Cetra). Brown. Argo D99D 3 (3), Apr.

**GERHARD HÜSCH:** Songs by Schubert, Loewe, Brahms. Preiser LV 257, June.

**SUPERMAN.** Film score by John Williams. Warner Bros. 2BSK 3257 (2), June.

with a beauty and truthfulness I find overwhelming—not merely in key places like the high B flat that concludes the defiant cry "Töt' erst sein Weib!" ("First kill his wife!") or the high B natural that brings "Abscheulicher!" to its heroic climax (though this, for all its glorious sound, is slightly sharp), but also such details as the diminuendo on "Florestan!" in the duet "O namenlose Freude" and the pathos she brings to her spoken reaction to the sound of the prisoner's voice, "Ja, sie dringt in die Tiefe des Herzens" ("Yes, it pierces to the depths of one's heart"). Flagstad is remembered by many as a prodigious vocalist; she was also a great artist. One could go a lifetime without hearing the equal of this performance, of which every word is worth following, even by means of the accompanying Met libretto (which is full of misprints).

Those in search of a great historical performance should also investigate the 1950 Salzburg *Fidelio*, majestically conducted by Furtwängler, who had at his disposal a far finer orchestra (the Vienna Philharmonic) and cast than the Met could muster in 1941: in addition to a radiant Flagstad, the extraordinary Julius Patzak as Florestan, the young and still attractive Elisabeth Schwarzkopf as Marzelline, Anton Dermota as Jaquino, and Paul Schoeffler as Pizarro. The sound is also very much better than that of the older performance, and the cost, of course, very much cheaper. It is available, oddly enough, on the Bruno Walter Society label (IGI 328). D.S.H.

**BEETHOVEN:** Quintets for Strings: in E flat, Op. 4; in C minor, Op. 104.

Suk Quartet; Karel Spelina, viola. [Jan Vrana, prod.] SUPRAPHON 1 11 2128, \$8.98.

The quintets recorded here, reworkings of earlier compositions, are not to be confused with the C major Quintet, Op. 29, which was originally written for string quintet—a work of great power and originality still not heard as often as it ought to be.

The C minor Quintet, Op. 104, is an almost verbatim transfer of the C minor Piano Trio, Op. 1, No. 3, undertaken in much the same spirit as the string-quartet refashioning of the E major Piano Sonata, Op. 14, No. 1. The quintet arrangement is, in fact, even more conservative: In the case of the piano sonata, Beethoven raised the pitch a semitone to F, added some new figurations, and adapted certain figurations to forms more suitable for strings (in the last movement's opening theme, for instance, he changed triplets to duplets); in this case, he made only a few modest changes in filigree, using the two violas mainly to supply the harmonic filler assigned to the keyboard in the original version. For all the solid expertise of the recasting, the work sounds more audacious in its original piano-trio format—it really needs the piano's sonority.

The E flat Quintet is a different matter.

Like the C major Piano Sonata, Op. 2, No. 3, for which Beethoven used much thematic material from a juvenile piano quartet to produce a far superior work, this quintet expands on the earlier E flat Octet for Winds (which wasn't published until years after its composition, producing the absurdly high opus number 103). Although possessive wind players will disagree, I consider the string quintet much more rewarding artistically.

The Supraphon performances put these works in the best light. The Czech musicians are a wonderfully cohesive group, playing with sure reflexes, keen and intense tone, superb intonation, and coiled-spring articulation. There is an authentically Beethovenian vigor in the way their rhythms scamper, and, as with the best chamber music performances, one has the impression of players who form a unanimous ensemble and yet still send off sparks as individuals. The cleanly etched, superbly balanced recording preserves this focus and lets the instrumentalists' sounds speak directly to the listener.

This may be an esoteric disc, but it is also a superb one—far superior to the earlier editions of these works, the Endres Quartet Op. 4 for Vox and the long unavailable Pascal Quartet Op. 104 for Concert Hall. H.G.

**BEETHOVEN:** Symphony No. 7, in A, Op. 92.

Philadelphia Orchestra, Riccardo Muti, cond. [Christopher Bishop, prod.] ANGEL S 37538, \$7.98. Tape: 4XS 37538, \$7.98 (cassette).

Muti's best qualities as a Beethovenian are heard in the last two movements. The scherzo, taken at a true presto, is rhythmically taut and bracing; although the trio has one or two debatably excessive ritardandos, it is nevertheless suitably brisk and angular, much better than most. The finale—again, full of thrust and very brisk—sounds forth with controlled excitement.

There are problems in the earlier movements. After an imperious introduction, there is a sudden, unconvincing speedup at bar 23, and the carefully pointed *Vivace* seems a bit lumbering and is further sapped of energy by dubious legato phrasings at key points. Similarly, the *Allegretto* is slightly shapeless and oversensuous. Muti's observance of all repeats, even the one in the trio the second time around, adds to the feeling of turgidity.

Angel has produced a gleaming sound that preserves the Philadelphia Orchestra's traditional creamy luxuriance but adds clarity of articulation. The violins in the finale are well focused, and the trumpet/timpani thrusts, sometimes blunted in previous Philadelphia recordings, emerge with notable assertiveness. The internal balance is fine, and the pressing well up to Angel's recently improved standards. H.G.

# Schwann 1979 Artist Issue available now

Completely Revised and Bigger Than Ever

The 1979 *Artist Issue* is a virtual encyclopedia of valuable information, containing over 300 pages and some 25,000 entries. It is available in both economical soft-cover or durable clothbound editions. In either case, you will want to reserve your *Artist Issue* now. This volume is revised only every three years. Ask your record and tape dealer to reserve a copy, and save shipping charges.

If your dealer cannot supply you, send the coupon below, but PLEASE try your dealer first. If you do not wish to cut your publication, use plain paper, giving the information requested.



The *Artist Issue* is an indispensable compilation of all the classical record and tape listings in both the January 1979 *Schwann-1* and the latest semi-annual *Schwann-2* arranged by artist. Categories include:

- Orchestras, trios, quartets, etc.
- Conductors
- Instrumental soloists
- Choral groups
- Operatic groups
- Vocalists

**Schwann** \$4.95

1979 Edition

**ARTIST ISSUE**



**Schwann Artist Issue 1979**  
Single Copy Sales Dept.  
2160 Patterson St.,  
Cincinnati, Ohio 45214

Please reserve  hard-cover copy(ies) of  
*Artist Issue* 1979 at \$14.95 each, plus \$1.00 for shipping.

D9GF1

Please reserve  soft-cover copy(ies) of  
*Artist Issue* 1979 at \$4.95 each, plus \$1.00 for shipping.

Enclosed is \$ \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

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

Your issue will be shipped 30 to 60 days from receipt of your order.

**BERIO: A-Ronne; Cries of London.**

Swingle II, Luciano Berio, cond. [James Mallinson, prod.] DECCA HEADLINE HEAD 15, \$8.98 (distributed by London Records).

Luciano Berio's *A-Ronne* is based on a polyglot text by Edoardo Sanguineti. ("A" and "Ronne," respectively, the first and last letters of the old Italian alphabet, form the first and last sounds in Sanguineti's poem.) Berio has not, however, set the text to music, at least in any normal sense. Rather, it is variously spoken, whispered, shouted, chanted, sung, etc. Berio remarks in his liner notes: "In fact this is not a case of musical composition in the usual sense of the term, even if the procedures which often organize its course are musical (use of inflections and intonations, development of alliterations and of transitions between sound and noise, occasional use of elementary melodies, polyphonies, and heterophonies). The musical sense of *A-Ronne* is basic: That is, it is common to any experience, from daily speech to theater, where changes in expression imply and document changes in meaning."

What one hears is an extraordinary array of vocal sounds, organized into segments that have their own acoustical and dramatic character. Where actual singing is heard, it is intended to be experienced as only one particular kind of vocal sound, of no greater importance than any other, although I personally find these "musical moments"—some of which are quite extended—of such striking effect that they inevitably stand out in high relief from their more prosaic surroundings. But all of the sounds used have one thing in common: They consist of standard vocal gestures, verbal and musical "figures of speech."

According to Berio, Sanguineti's poem is repeated during the course of the piece "about twenty times and almost always from beginning to end." Yet one often hears only isolated textual fragments, juxtaposed with and against one another. This mirrors the structure of the poem, which is entirely made up of quoted fragments from several languages. Although *A-Ronne* is both sonically and dramatically fascinating, I find that it loses some of its effect after repeated listenings. One becomes increasingly conscious of the absence of bodily and facial expressions, as well as a more concrete dramatic context, normally associated with the kinds of sounds Berio is working with.

*A-Ronne* is a reworking of an earlier piece written in 1974 for radio performance and scored for five actors. *Cries of London* is also a revision of a 1974 composition, and it is also concerned with vocal characterization. But there all similarity ends. This second work is entirely sung, and it features a relatively simple and straightforward musical style, with even a pronounced folklike character. Based on a text assembled by the composer from old



**Stoika Milanova**  
A pillar of violinistic strength

London street vendors' calls, it is organized as a cycle of seven songs. The first song is a sort of formal announcement ("These are the cries..."), set quite simply in a quasi-modal style. Its text is then used again for the third and fifth songs, with the latter also bringing a full musical repetition. The second, fourth, and sixth songs, settings of the cries themselves, are rather more complex from a musical point of view. Finally, the seventh song makes use of textual and musical materials drawn from the entire cycle, which now appear in more fragmentary form, almost like distant echoes. It is an extremely attractive, if minor, work, one that exhibits Berio's considerable talent for writing relatively simple music that nevertheless sounds fresh and offers its listeners something to sink their ears into.

Although the liner notes do not say so, I suspect that these pieces were reworked with Swingle II (a resurrected version of the old Swingle Singers) in mind. In any event, the group performs them with astonishing virtuosity. R.P.M.

**BRAHMS: Chamber Works with Violin.**

Stoika Milanova, violin; Dora Milanova, piano; Vladislav Grigorov, horn\*. MONITOR MCS 2158/9, \$7.96 (two discs, automatic sequence).

Sonatas for Violin and Piano: No. 1, in G, Op. 78; No. 2, in A, Op. 100; No. 3, in D minor, Op. 108. \*Trio for Violin, Horn, and Piano, in E flat, Op. 40.

This set, made for the Bulgarian Balkanton label, has its points as an inexpensive edition of the Brahms violin sonatas. Stoika Milanova (who previously recorded the G major Sonata and the horn trio, with Malcolm Frager and Hermann Baumann, for Harmonia Mundi) is a pillar of violinistic strength, with a darkish, alto-oriented sound, a rock-steady bow arm, and unfaltering left-hand work. She is not a particularly lyrical or colorful player, and, while I admire the strength of her playing, some may be put off by a lack of tender insinuation. Sister Dora gets through the demanding keyboard parts with aplomb, but on these discs she doesn't have an especially resilient or resonant tone. (She is heard to far more colorful, flattering advantage on the Milanova sisters' digitally recorded Denon recital of Ravel, Debussy, and Prokofiev, OX 7070.)

The one disappointing performance here is that of the horn trio, whose first movement in particular sounds uncomfortably metronomic and briskly perfunctory. Horn player Vladislav Grigorov, an adept technician, has a woolly, vibrato-laden tone. This reading bears no comparison with the Milanova/Baumann/Frager one, which was tonally luminous and better paced, and recorded with a fuller ambience and wider dynamic range. That was one of the finest modern recordings of this beautiful trio, and it was coupled with an equally outstanding account of the Op. 114 Clarinet Trio; I hope this disc will be restored to the catalog. H.G.

**BRAHMS: Piano Concerto No. 1—See Beethoven: Piano Concerto No. 2.****BRUCH: Concerto for Two Pianos and Orchestra, Op. 88a.\* Fantasy for Two Pianos, Op. 11; Swedish Dances, Op. 63.**

Martin Berkofsky and David Hagan, pianos; \*Berlin Symphony Orchestra, Lutz Herbig, cond. [Heinz Jansen, prod.] TURNABOUT TV 34732, \$4.98.

COMPARISON—concerto:

Ang. 5 36997

Berkofsky, Twining, Dorati

The first recording of the two-piano concerto was reviewed in September 1974, and here is an alternative version—with one of the same pianists! The performances are quite different, and each has advantages not to be found in the other. Angel has a smoother-sounding orchestra, while Turnabout—with its closer miking of the pianos (Bechsteins, we are told)—has a thrusting, spiky clarity. And while my reaction may be influenced by the more detailed Turnabout recording, I suspect that Berkofsky has become more experienced with

the piece and that he enjoys a closer rapport with his present partner, David Hagan.

There is also the question of coupled material. Angel features Berkofsky in some early Bruch solo-piano material; the new disc offers works for piano duet. Since none of this music is available elsewhere, either live or on records, Bruch devotees will find it necessary to own both releases, particularly as the playing is sympathetic throughout **H.G.**

**BUSONI: Sonatinas for Piano (6).**

Paul Jacobs, piano. [Marc J. Aubort and Joanna Nickrenz, prod.] NONESUCH H 71359, \$4.96.

**F**erruccio Busoni remains something of an enigma in the history of twentieth-century music. For many he is still recognized primarily for his Bach transcriptions and for his fame as a pianist and conductor. But Busoni was also a composer of unusual talent, originality, and technical accomplishment. And he wrote extensively on various musical subjects. His best-known treatise, *A Sketch of a New Aesthetic of Music*, exerted considerable influence on musical thinking during the first quarter of this century. Indeed, this short volume proved to be extraordinarily prophetic of musical developments.

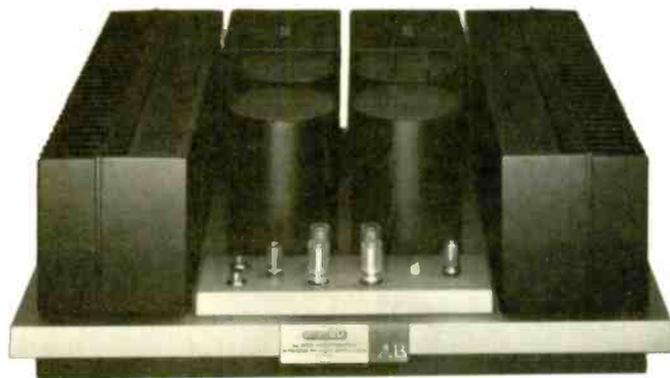
Yet as pianist Paul Jacobs points out in his excellent liner notes for this new disc, Busoni does not fit comfortably into our picture of the evolution of music in the years immediately following the turn of the century. Busoni wrote the *New Aesthetic* in 1906, at a time when the traditional Western tonal system was rapidly reaching a state of total collapse; and he presents there, admittedly in only general terms, a truly utopian vision of a new and all-encompassing tonal world capable of incorporating a far wider range of intervallic relationships (including—at this early date!—micro-tonal ones) than had previously been used.

But he sees these fresh possibilities in terms of an entirely new level of musical consciousness—one that is, in his words, "purer" and more "spiritual" and, above all, one that is completely independent of the programmatic foundations of so much nineteenth-century music. Compared with Schoenberg and Stravinsky, for example, he was well ahead of his time. For although both of these composers were also exploiting new pitch relations at this time, they did so in order to create highly "expressionistic"—and still essentially programmatic—musical conceptions. Only in the early 1920s did each turn to his own individual brand of neoclassicism and a compositional point of view much closer to the one espoused by Busoni some years before.

Busoni's six sonatinas for piano were written between 1910 and 1920, and thus they occupy a particularly crucial historical position. Moreover, they embody, perhaps more clearly than any of Busoni's other works, the principles outlined in his *New Aesthetic*. All are

characterized by great economy and restraint. Textures are crystal clear, and there is much emphasis on contrapuntal construction, with many explicitly fugal passages. Busoni's harmonic inventiveness, involving unusual modal combinations through which he produces consistently novel effects while still adhering to a basically triadic foundation, is especially striking, as are his fascinating rhythmic experiments with combinations of conflicting beat subdivisions.

The most radical of the sonatinas is the second, composed in 1912, with its proselike larger rhythm (there are no measures in the traditional sense), remarkable formal concentration, and unusual harmonic progressions. In the later works, one feels some loss in both intensity and originality. Yet all of the sonatinas display an absolutely unique construction: Each appears to evolve in its own personal way, shaping itself out of its opening material with a kind of sleepwalker's logic.



**series20**

**It takes guts to be more expensive than McIntosh.**

McIntosh might be considered an expensive extravagance by the average high fidelity consumer. However the true audiophile perceives reliability, proven engineering and classic styling as necessities rather than luxuries.

The true audiophile also appreciates outstanding specs and the state of the art technology that distinguishes Series 20 from the field. Consider the Ring Emitter Transistor out-put stage in the Series 20 M-25 Class AB Power Amplifier that provides incredible high frequency performance.

Consider the Series 20 F-26 FM Tuner's parallel balanced linear detector that delivers the lowest distortion available.

When you realize how exceptional Series 20 is, you'll marvel at how inexpensive expensive can be.

**series20**

20 Jewell Street, Moonachie, N.J. 07074

If you would like full information on Series 20, please send us the coupon below.

To: Series 20  
Dept. H7  
20 Jewell Street  
Moonachie, New Jersey 07074

Please send me the specs for the following circled Series 20 components.

M-22 Class A Stereo Power Amplifier	D-23 Multi-Amp Elec. Crossover Netwk.	M-25 Class AB Stereo Power Amplifier
F-26 Advanced Quartz FM Tuner	A-27 Class AB Integrated Stereo Amplifier	F-28 Quartz FM Tuner
PLC-590 Quartz PLL Servo- Controlled Turntable	PA-1000 Carbon Fiber Tone Arm	U-24 Program Source Selector

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_



Albert Spalding  
A robust Dohnányi performance

And each reveals a tight thematic unity, despite many brief contrasting segments. These characteristics even apply to Nos. 1 and 6—the former partly based on material from an earlier work, the piano pieces *An die Jugend* completed in 1909, the latter a fantasy based on themes from Bizet's *Carmen*.

We are fortunate to have all six of these works made available in these beautiful and authoritative readings. Jacobs maintains just the right balance between intensity and lyrical restraint (an opposition that reflects Busoni's dual Italo-Germanic background), and he never fails to achieve the clarity required to produce the essential transparency underlying even the most texturally complex passages. R.P.M.

**DOHNÁNYI: Sonata for Violin and Piano, in C sharp minor, Op. 21.\* ENESCO: Sonata for Violin and Piano, No. 2, in F minor, Op. 6.'**

\*Albert Spalding and 'Georges Enesco, violin; 'Ernst von Dohnányi and 'Celiny Chaillez-Richez, piano. [Don Gabor, prod.] VARESE SARABANDE VC 81048, \$7.98 (mono) [from REMINGTON originals, 1951-52; \*not previously released].

Remington, the long-defunct first LP budget label, has been resurfacing selectively of late—first in the Turnabout Historical Series and now on Varèse Sarabande. The catalog included some performances by masters in their twilight years (such as these by Enesco, Spalding, and Dohnányi and the Barere recordings reissued by Turnabout and Varèse Sarabande) and some performances by lesser luminaries whose work takes on greater importance today as a link with a now vanished tradition (the Brahms F minor Piano Sonata by the composer's friend Etelka Freunde might bear reissue on this count). Remington also had a fair quantity of material played by scraggly orchestras under undistinguished conductors, and some of this too is resurfacing—I am not sure what purpose is served, for example, by the resurrection of Thor Johnson's Dvořák Symphony No. 8 with the Cincinnati Symphony (VC 81044), its 1953 stereo sound notwithstanding.

The Spalding/Dohnányi account of the latter's C sharp minor Violin Sonata is especially welcome since this robust, surging performance has never been issued before. Orion has a fine modern recording by Diana Steiner and David Berfield (ORS 76244, June 1977), but the decently recorded Spalding/Dohnányi reading has an extra measure of animation, eloquence, and authority.

The performance of Enesco's Second Sonata is also admirable but more problematic. Enesco had recorded the sonata on 78s (there is an LP transfer on Monitor, MC 2049, which I haven't heard), when his playing, as I recall, was technically more assured and he had the distinguished collaboration of Dinu Lipatti. (Incidentally, Enesco played the piano at the

work's premiere, with Jacques Thibaud doing the fiddling.) Of course the sound of the Remington version is superior; the sonata itself is an oddly eclectic creation, less harshly dissonant than Enesco's Third Sonata and replete with suggestions of Prokofiev's D major Flute Sonata, Ravel's *Tzigane*, and the composer's own incipient *Romanian Rhapsodies*. H.G.

**GLAZUNOV: The Seasons, Op. 67. Concert Waltzes: No. 1, in D, Op. 47; No. 2, in F, Op. 51.**

Philharmonia Orchestra, Yevgeny Svetlanov, cond. [David Mottley, prod.] ANGEL S 37509, \$7.98 (SQ-encoded disc). Tape: 4XS 37509, \$7.98 (SQ-encoded cassette).

COMPARISONS—*The Seasons*:

Lon. CS 6509 Ansermet/Suisse Romande  
Sera. S 60292 Irving/Concert Arts Orch.

Once the most popular of post-Tchaikovsky Russian ballets, *The Seasons* has lost favor in recent years—at least on records, where this complete version seems to be the first in the last decade to challenge the long standard ones by Ansermet and Irving. Svetlanov's approach is less refined but lustier than Ansermet's; less balletic but more grandly dramatic than Irving's. It benefits greatly from the impact and presence of current audio technology; indeed, the recording is so effective in stereo that quadraphonic playback adds relatively little to its expansiveness.

Both the ballet score and the two stylistically kindred concert waltzes now seem just about as old-fashioned as—I was about to say daguerreotypes until I remembered that the photographic process dates from the 1830s and Glazunov's ballet, unbelievably, only from 1899-1900. In any case, the aging is of the lushly Romantic melodism and harmonic idiom only: As one listens, especially to so splendidly sonorous a recording as this, one is forced willy-nilly into lively admiration of the composer's polished craftsmanship in scoring for maximum tonal richness. Even so, I'd rather recommend the present disc to nostalgic oldsters than to sophisticated youngsters. R.D.D.

**HANDEL: Sonatas for Flute and Continuo (10).**

Paula Robison, flute; Kenneth Cooper, harpsichord; Timothy Eddy, cello. VANGUARD VSD 71229/30, \$15.96 (two discs).

Sonatas, Op. 1: No. 1b, in E minor; No. 2, in G minor; No. 4, in A minor; No. 5, in G; No. 7, in C; No. 9, in B minor; No. 11, in F. Halle Sonatas: No. 1, in A minor; No. 2, in E minor; No. 3, in B minor.

COMPARISON:

Odys. Y2 32370 Rampal, Veyron-Lacroix  
ABC 67005/3 Brüggen, Van Asperen

The Robison/Cooper/Eddy ensemble's fresh illuminations, recently devoted to the complete Bach flute sonatas (Vanguard VSD 71215/6, March 1977), now are turned on the "complete" Handel flute sonatas: the seven Op. 1 works specified for flute or recorder plus the three student sonatas written when Handel was still a youngster in Halle.

For these latest sessions, the bewitching Robison commands slightly less consistently limpid tonal qualities, but as always she brings disarmingly distinctive grace and personality to her performances. And as always she is admirably supported by her colleagues, both of whom are more outspoken than most unduly subservient continuo players.

As with the Bach flute sonatas, the principal competition for this release comes from Jean-Pierre Rampal, and again the flawless French precisionist is unquestionably the more exquisitely pure-toned. But he certainly is a less empathic Handelian (or baroque) stylist, nor does he radiate a sense of personal zest comparable to Robison's. His performances lack a continuo cellist's support of Veyron-Lacroix's elegant harpsichord playing.

The new set, then, clearly is my preferred modern-flute edition. I should remind Handelian connoisseurs that there are quite different and no less rewarding attractions in Frans Brüggen's period-instrument flute-and-recorder versions of most of these (and other) sonatas in the three-disc ABC Classics/Seon Handel collection (March 1977). R.D.D.

**MONTEVERDI: Madrigals, Book VII.**

Sheila Armstrong and Norma Burrowes, sopranos; Sandra Browne and Patricia Kern, mezzos; Anne Collins and Alfreda Hodgson, altos; Ryland Davies and Alexander Oliver, tenors; Benjamin Luxon, baritone; Robert Lloyd, bass; John Alldis Choir, English Chamber Orchestra, Raymond Leppard, harpsichord and cond. PHILIPS 6747 416, \$26.94 (three discs, manual sequence).

Monteverdi's seventh book of "madrigals," published in 1619, is an astonishing document of the composer's versatility and genius. Opening with a florid operatic recitative, a celebratory prologue reminiscent of the introduction to *Orfeo*, and closing with an elegant ballo, the collection is a virtual compendium of the new music of its time. To call these delightful pieces "madrigals"—as indeed the composer and his contemporaries did—is somewhat misleading for listeners today who associate the term with an unaccompanied ensemble of solo voices. Monteverdi's seventeenth-century madrigali concertati are rather chamber works, usually for one to four solo voices accompanied and supported by a continuo part, here realized by harpsichord and baroque cello.

This repertory, which has received little recognition on recording, emerges as a fascinating combination of soloistic melodic statement and polyphonic elaboration subtly molded to the nuance of the texts in an amazing range of expression, tempos, and style. The delicate beauty of the intertwining sopranos of "O come sei gentile" and "Io non pur vezzosetta" and the infectious joy of "Chiome d'oro" with its compact, sunny ritornellos for two violins are emotionally a world apart from the almost abrasive intensity of "Interrotte speranze" and "Non vedrò mai le stelle" for two ten-

ors. Although some of the pieces, like the ebullient love song "Con che soavità" for solo soprano, include instrumental ensemble, most often Monteverdi relies on his consummate skill as a composer for the human voice to make his points.

If you know and like the elegant chamber antiphons of Monteverdi's *Vespers*, the pastoral charm of *Orfeo*, or the dramatic ensembles of *Ulisse* and *Poppea*, you will find much to enjoy and treasure in this collection.

But new listeners should be cautioned that this is not a recording to hear at a single sitting. Rather, start by dipping into the inside of the set and sample such miniature masterpieces as "Al lume delle stelle" for four voices or the tender "Soave libertate" for two before approaching the longer—and sometimes less interesting—pieces.

By and large the performances maintain the high levels set in the earlier volumes of Philips' series (Books III-IV, 6703 035, Febru-

What is it that has the audio industry talking to itself? It is . . .

# Phase-R

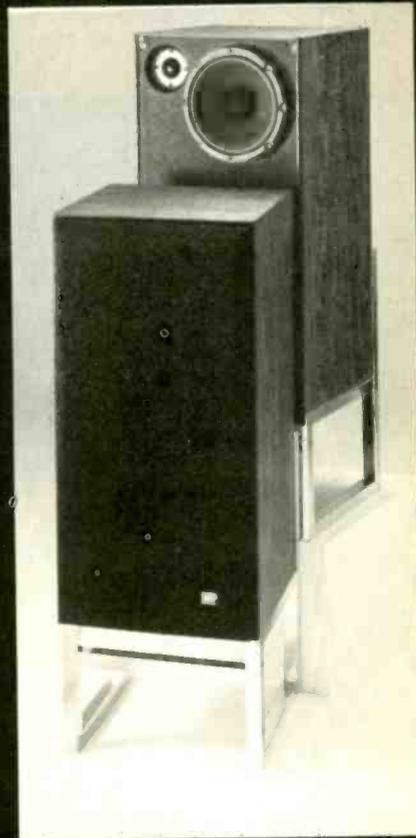
Phase-R literally brings a recording to life, the only purpose for loudspeakers. Phase-R's incredible ability to provide what the industry has long pursued, a life size, three dimensional staged image with every instrument and vocalist in their proper place, both front to back and side to side, just as the original performance. Just as unique is Phase-R's ability to deliver real world explosive intensity and incredible dynamic range, from as little as 30 watts RMS.

All this is done because of Phase-R's precision components and contemporary loading such as:

- Time Phasing
- Mirror Imaging
- Non Resonant
- Low Defraction
- Low Baffle Reverberation
- Phase-R's Compression Line Bass

All in one well conceived design that features:

- High Density Fiberwood Material
- Tongue and Groove Construction
- Multiple Internal Structural Braces
- Matched 2½% Tolerance Crossovers
- Extra Large Inductors Featuring 18 Gauge Wire
- Metalized Polyester Capacitors
- Special High Power Resistors
- And More . . .



They are unique at an affordable price without peer in their class!

Sold at the best Hi Fi stores nation wide

**phase research**  
3207 Oradell, Dallas, Tx 75220  
(214) 352-2613

ary 1974; Books VIII-X, 6799 006, September 1972, recently deleted). The accompanying booklet does not make it clear just who is singing in which piece—the problem is not as serious as it might be, since many works are for equal pairs of voices—but the singers are all vocally solid and experienced in the style. Confined to the harpsichord and sans orchestra, Leppard's gutsy approach works well with this repertory, and if the performers' enthusiasm sometimes leads to uncoordinated attacks, this is still preferable to pussyfooting around in the interests of precision. Nevertheless, he does occasionally overstep the dimensions of this finely wrought music, as in his positively carnivorous interpretation of a piece of pornographic bedroom fluff, "*Eccomi pronta ai baci*." The sound is crisp and up front, the Philips pressing excellent. S.T.S.

**MOZART: *Davidde penitente*, K. 469.**

Eva Csapó and Giséla Koban, sopranos; Aldo Baldin, tenor; Württemberg Chamber Orchestra, Dieter Kurz, cond. [Heinz Jansen, prod.] CANDIDE CE 31107, \$4.98.

The so-called *contrafacta* (literally "counterfeits")—that is, existing compositions equipped with a new text—litter the catalogs, causing headaches to the scholars and often

bewilderment to the public. It was an accepted practice for many reasons, obviously the main reason being expediency for lack of time. Still, it is difficult to explain why composers of the stature of Bach and Handel, who could compose new music faster than it takes to adjust an old piece to a new text, should resort to this cumbersome operation, as they did on a large scale. To be sure, borrowing, both from oneself and from others, was a standard procedure and there was no opprobrium attached to it. However, nineteenth-century scholars were very uncomfortable about the custom and made a moral issue of the practice; Handel especially came in for censure, though the sainted Bach used the device just as frequently. The entire *Christmas Oratorio* is a *contrafactum*, and so in large measure is the B minor Mass. Indeed, as new research proves, it may turn out that the entire Mass is a compilation; the ten original numbers remaining in the colossal score have recently been reduced to eight!

*Davidde penitente*, though billed at its first appearance as "a new cantata composed for the occasion," is nothing but portions of Mozart's C minor Mass, K. 427 (1782-83), rather carelessly adjusted to a text by Da

Ponte; only two numbers and a cadenza at the end were added for the hasty performance in 1785 for the Vienna Tonkünstler Societät's benefit concert. A *contrafactum* whose original is not generally known gets by without any difficulty, though the prosody is usually awkward, but when the borrowed piece is thoroughly familiar, one inevitably harks back to it, compares, and in general is distracted.

In the case of this performance, since scarcely one word of the new text is intelligible and *Candide* did not even bother to print it, one simply reverts to the C minor Mass; the two new arias do not justify the recording. They are very good opera arias with attractive wind writing, but being in an altogether different style, they strike one as mere inserts in a severely polyphonic composition.

The lusterless performance only adds to the feeling of superfluity. The singers are fair, the chorus is good, and the orchestra plays valiantly if with little color, but the conductor, Dieter Kurz, does not quite fathom this music. He keeps good order, but at the expense of dynamic variety and flexibility of pace.

Though some of the movements come across in a good routine way, the great opening number (the Kyrie in the Mass) is slow and tepid, while the tremendous "*Qui tollis*," which should fall with the vehemence of a trip-hammer, is too tame. The phrasing is at times a little tentative, and the *colla parte* trombones are too prominent, muddying the choral sound.

Well, let's list the new arias among the many fine concert arias and go back to the C minor Mass; a fully satisfactory recording of this mighty torso is still wanting. P.H.L.

**MOZART: *Don Giovanni*, K. 527.**

CAST:

Donna Anna	Anna Tomova-Sintov (s)
Donna Elvira	Teresa Zylis-Gara (s)
Zerlina	Edith Mathis (s)
Don Ottavio	Peter Schreier (t)
Don Giovanni	Sherrill Milnes (b)
Leporello	Walter Berry (b)
Masetto	Dale Duesing (b)
Commendatore	John Macurdy (bs)

Walter Taussig, harpsichord; Vienna State Opera Chorus, Vienna Philharmonic Orchestra, Karl Böhm, cond. [Werner Mayer, prod.] DEUTSCHE GRAMMOPHON 2709 085, \$26.94 (three discs, manual sequence) [recorded in performance at the 1977 Salzburg Festival]. Tape: 3371 042, \$26.94 (three cassettes).

COMPARISONS:

DG 2711 006	Bohm/Prague Nat. Theater
Phi. 6707 022	Davis/Covent Garden
Ang. SDL 3605	Giullini/Philharmonia

Karl Böhm's earlier recording of *Don Giovanni* seemed to me stodgily conducted and unsatisfactorily cast, and I find the new one even less successful. His conducting of the opera has become stylistically insecure: There is no flow to the present performance and therefore no shape. A lot of it is simply too slow; such instances of overdeliberateness as the quartet "*Non ti fidar*," Elvira's "*Ah! chi mi*



Sherrill Milnes—well, his is a forceful Don Giovanni anyway

*dice mai*," and the second part of "*Là ci darem*" work against the character of the music and the dramatic ends it is meant to serve. Worse yet is Böhm's coarseness of texture, rhythm, and emphasis. There is about the performance as a whole an air of fake—and certainly unconvincing—excitement, a spasmodic and restless atmosphere, which relies on such things as the overuse of sforzandos and which encourages the singers to rant.

Most tiresome in this respect are the Leporello, Walter Berry (far less secure vocally, and even linguistically, than in the Klemperer set, Angel SDL 3700), and the Ottavio, Peter Schreier (no better acquainted with the Italian text and still whiter of voice than in Böhm I). As one might have anticipated, Sherrill Milnes is hardly an unassertive Don Giovanni, yet he is by no means as un-musically aggressive as Berry. On the other hand, his is not a fascinating portrayal. In his striving for dramatic forcefulness, he has sacrificed elegance, charm, sensuousness, and variety—all qualities a Don Giovanni ought to possess.

Anna Tomova-Sintov is more convincing than Böhm I's Birgit Nilsson, but that does not make her a suitable Anna. Although she is more fluent than Nilsson and can handle the final section of "*Non mi dir*" with hardly any distress, she sounds vocally underweight and shows little gift for characterization. Teresa Zylis-Gara, the Elvira, is constricted and hoaty in sound, and her diction is poor. Edith Mathis and Dale Duesing are a tolerable Zerlina and Masetto, but John Macurdy is a weak Commendatore (he sounds positively infirm next to Martti Talvela in Böhm I).

DG's recording, which derives from live performances at the 1977 Salzburg Festival, is good, if sometimes very close to the singers; the audience is silent except at the end of each act. The libretto is printed with translations into English, French, and German. The new set gets all the music (a "standard" text, excluding the Zerlina/Leporello scene) on three rather than the usual four discs without loss of fidelity, but my *Don Giovanni* recommendations remain Colin Davis' on Philips and Carlo Maria Giulini's on Angel. D.S.H.

MUSSORGSKY: *Pictures at an Exhibition*. SHOSTAKOVICH: *Preludes, Op. 34*: Nos. 1, 4, 10, 12, 14-16, 19, 22, 24.

Lazar Berman, piano. [Werner Mayer, prod.] DEUTSCHE GRAMMOPHON 2531 096, \$8.98. Tape: 3301 096, \$8.98 (cassette).

COMPARISON—*Pictures*:

Odys. Y 32223 Richter

When Berman feels free to follow his natural instincts—that is, with no compulsion to philosophize, as in his unfortunate recording of Schubert's B flat Sonata, D. 960 (Angel S 37495, April)—he can be a very satisfying performer. This disc is a case in point.

Berman's *Pictures* may lack some of the

feverish purity, demonic coloration, wit, and tensile organization of Richter's unforgettable 1958 Sofia performance, but within its own limits the playing is robust, sensitive, and even—in such lighter episodes as "Tuileries" and the "Unhatched Chicks"—quite refined. In the massive sections the piano sounds forth boldly. This is not a performance that electrifies, but in its wholesome, large-scaled way it offers much to admire. And Berman does observe some textual niceties, such as the two B flats instead of C, B flat at the end of "Samuel Goldenberg and Schmuyle."

From the first Shostakovich prelude, with its shadowy echoes of Chopin's D flat Nocturne, through the assortment of tin-soldier marches, doll's dances, and such, all the way to No. 24 (remarkably like that satirical masterpiece, the Polka from Shostakovich's *Age of Gold* ballet), Berman unflinchingly finds the right mood, the right rubato, the right shaping. I regret only that he did not record the entire set of twenty-four preludes, for it would be difficult to imagine a more suitable performer or richer-sounding reproduction.

The processing is excellent, with superior dynamic range and nary a pop or click. H.G.

MUSSORGSKY: *Pictures at an Exhibition* (orch. Ravel). STRAVINSKY: *The Firebird: Suite* (1919 version).

Philadelphia Orchestra, Riccardo Muti, cond. [Christopher Bishop, prod.] ANGEL S 37539, \$7.98. Tape: 4XS 37539, \$7.98 (cassette).

The Philadelphians play efficiently and respectfully for Muti, who gives honest, competent readings of both scores. In *Pictures*, though, his "Old Castle" is somewhat perfunctory, the rubato in "Tuileries" is soft and mushy rather than impudent and giddy, and "Bydlo" is a distant second, in awesome dynamic terracing, to Giulini's Chicago Symphony recording (DG 2530 783, with Prokofiev's *Classical Symphony*). In addition to Giulini, the list of conductors who have characterized *Pictures* more imaginatively includes Leibowitz, Markevitch, Cantelli, and Ansermet.

In the *Firebird Suite* as well, Muti could take lessons in rubato. His stretching of the "Dance of the Princesses" sounds mannered next to the sensuous playfulness of Stokowski/London Symphony (London SPC 21026, with works by Mussorgsky and Tchaikovsky) or Bernstein (Columbia MS 6014, with Tchaikovsky's *Romeo and Juliet*). They and Abbado (DG 2530 537, with *Jeu de*



Lazar Berman—following his instincts with success in *Pictures*

## 47st. photo

## THE COMPLETE HOME VIDEO CENTER announces its Super Video Sale

<b>PANASONIC</b>	<b>VIDEO TAPE</b>
PV 1500	Super Specials
7 day program..... 939.00	4 hr VHS..... 15.95
PV 1100	RCA VK 250..... 17.95
4 hr program..... 739.95	TDK 120 VHS..... 17.50
<b>RCA VCT 400</b>	<b>BETA TAPES</b>
7 day programming	Sony L-500..... 12.95
RCA VCT 201	Scotch L-500..... 11.95
4 hr programmable	<b>RCA COLOR CAMERA</b>
Priced too low to mention	w/Canon Zoom Lens
<b>JVC</b>	& Elec Viewfinder
Latest Portable	<b>SUPER LOW PRICE</b>
recorder & cameras	<b>LARGE PROJECTION</b>
<b>IN STOCK</b>	<b>TV's</b>
<b>QUASAR</b>	Sony KP-5000
4 hour..... 739.00	Panasonic CT-6000
7 day program..... 895.00	and others
<b>BETAMAX</b>	at unbeatable prices!
Sony SL-8600..... 809.00	Video Lighting Unit 89.50

## Technics

<b>STEREO RECEIVERS</b>	<b>CASSETTE DECK</b>
SA-300 35w pr/ch..... 194.50	RS-641..... 239.95
SA-400 45w pr/ch..... 236.50	<b>SPEAKERS</b>
SA-500 55w pr/ch..... 269.50	SBX10..... 93.50 pr.
SA-700 100w pr/ch..... 404.50	SBX30..... 184.95 pr.
<b>TURNTABLES</b>	SBX50..... 257.50 pr.
SL-3200 Direct Drive..... 108.95	We also carry
SL-3300 Direct Drive..... 129.50	Marantz, Jensen
SL-230 Belt Drive..... 112.95	Craig & Panasonic
Shure M91ED..... 13.50	Car Systems.
(with purchase of turntable)	

JUST OUT!!  
47th Street Photo's  
NEW 156 Page discount  
catalog \$3.00



**47st. photo inc.** 67 West 47th St  
New York, N.Y. 10036 212-260-4410 ext. 73  
Phone orders only Call Toll Free  
800-223-5661 or 800-221-5858 Ext. 73  
Shipping add'l, minimum \$4.50

Circle 15 On Page 93

# FREE

details.  
A DIFFERENT KIND OF RECORD CLUB

## TREMENDOUS SAVINGS

on every record and tape in print—  
no "agree-to-purchase" obligations of any kind.  
**DISCOUNTS OF 43% TO 73%**  
off mfg. suggested list...special catalog  
features hundreds of titles and artists.

## ALL LABELS AVAILABLE

including most imports through special custom  
ordering service—guarantees satisfaction.

## SCHWANN CATALOG

lists thousands of titles:  
classical, pop, jazz, country, etc.

## DISCOUNT DIVIDEND CERTIFICATES

Dividend Gifts—certificates  
redeemable immediately for extra discounts.

## NEWSLETTERS

informational news and happenings in the  
world of music...special super-sale listings.

## DISCOUNT ACCESSORY GUIDE

Diamond needles, cloths, tape cleaners, etc.

## QUICK SERVICE

same day shipping on many orders,  
rarely later than the next several days.

## 100% IRON-CLAD GUARANTEES

on all products and services—your total  
satisfaction is unconditionally guaranteed.

Discount Music Club is a no-obligation membership club  
that guarantees tremendous discounts on all stereo  
records and tapes and lets you buy what you want...when  
you want...or not at all if you choose.

These are just a few of the money-saving reasons to write  
for free details. You can't lose so why not fill out and  
mail the coupon below for immediate information.

**DISCOUNT MUSIC CLUB, INC.** DEPT. 8-0779  
650 Main Street, New Rochelle, N.Y. 10801

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

Circle 11 On Page 93

cartes) brought more heft and excitement to the music. Muti, incidentally, omits the brief bridge passage between "King Kashchey's Dance" and the "Berceuse."

The sound is warm and natural in balance, though a bit drab at both frequency extremes. There are more impressive *Pictures* recordings dating back to the early Sixties, and I find more impact and atmosphere in Ansermet's 78-rpm *Firebird*. A.C.

## MUSSORGSKY: Songs.

Yevgeny Nesterenko, bass; Yevgeny Shenderovich and Vladimir Krainev, piano. [Mikhail Pakhter, prod.] COLUMBIA/MELODIA M 35141, \$7.98.

\*Songs and Dances of Death; \*Sunless; \*King Saul; \*Song of the Flea.

Nesterenko's *Songs and Dances of Death* is by far the most mellifluous performance of Mussorgsky's cycle in the current catalog. It is also one of the most eloquent and powerful. The Russian bass, well remembered in this country for his 1975 appearances with the Bolshoi Opera, has a striking voice, richly resonant, easily produced, even in sound from top to bottom. Except for a few moments when his *mezza voce* lacks full support, his singing gives unalloyed pleasure.

So does his interpretive skill. In this recording, each of the four miniature dramas in which Death asserts his power—over a sick child, a young woman, an old drunken peasant, and a pair of contending armies—is vividly and variously projected. Every detail of Nesterenko's interpretation seems to have been freshly conceived. In the second song, Death is more authoritative toward the young woman than usual, his manner being passionately imperative rather than cajolingly seductive. In the third song, Death addresses the old man confidentially, like a fellow drunk. In the last song, Death adopts a proud, even haughty, tone as he announces the end of the battle. The final vision of Death stamping on the armies' graves, so that they will never rise again, is awesome in its chilling majesty, Nesterenko rising to a climax of vocal magnificence no other current version can match.

*Sunless*, a cycle of six melancholy songs, is no less memorable, no less engaging, despite the mood of despair that informs each one of them. The two separate songs are on the same level: "King Saul" is a wonderful piece of sustained singing; "The Flea" is properly wry.

There is no competition for this recital. George London's and Kim Borg's *Songs and Dances of Death* have commendable features but pale by comparison. (The superb Galina Vishnevskaya sings the cycle in Shostakovich's orchestral version.) Pianists Yevgeny Shenderovich and Vladimir Krainev are worthy partners.

Transliterated texts and literal translations are provided (except for "King Saul," where instead of a translation of Kozlov's

original text we are given the Byron poem that he adapted). Excellent sound. An irresistible record. D.S.H.

## PROKOFIEV: Symphony No. 5, in B flat, Op. 100.

Cleveland Orchestra, Lorin Maazel, cond. [James Mallinson, prod.] LONDON CS 7099, \$8.98.

## COMPARISONS:

DG 139 040 Karajan/Berlin Phil.  
Col. MS 7005 Bernstein/N.Y. Phil.

In combining the smoothness of Karajan with the monumental scale of Bernstein in this symphony, Maazel creates problems for the performance. The tempos sound controversially slow, at least in the opening movement and the subsidiary episodes of the scherzo. Although he is well within the "legal limits" of the score and, in fact, manages the piece's temporal scales with perceptiveness and sure control, the dissipated accents, scaled-down dynamics, and rather limp articulation rob the music of wit, rhythmic intensity, and the kind of rawly acrid textures I associate with Prokofiev. Some of this is a function of the recording (made in Cleveland's Masonic Auditorium), which is puffy, even elephantine in the bass.

In the absence of the Ansermet and Szell recordings, I guess I'd go with Bernstein. A.C.

## PUCCINI: Tosca.

## CAST:

Floria Tosca	Mirella Freni (s)
Shepherd	Walter Baratti (boy s)
Mario Cavaradossi	Luciano Pavarotti (t)
Spoletta	Michel Sénéchal (t)
Scarpia	Sherrill Milnes (b)
Sciarrone	Paul Hudson (b)
Sacristan	Italo Tajò (bs)
Cesare Angelotti	Richard Van Allan (bs)
Jailer	John Tomlinson (bs)

Wandsworth Boys' Choir, London Opera Chorus, National Philharmonic Orchestra, Nicola Rescigno, cond. [James Mallinson, prod.] LONDON OSAD 12113, \$17.96 (two discs, automatic sequence).

## COMPARISON:

Ang. BL 3508 Callas, Di Stefano, Gobbi,  
De Sabata/La Scala

The primary *raison d'être* of this *Tosca*, I assume, is Pavarotti's Cavaradossi, a role he has recently added to his repertory with great public, if not necessarily artistic, success. Freni, after all, despite her increasing inclination to heavier roles, is hardly likely to tackle Tosca in the theater—not, at any rate, if she has an instinct for self-preservation. And Milnes has already bequeathed his Scarpia to posterity on RCA ARL 2-0105, in the company of Leontyne Price and Plácido Domingo.

Pavarotti's characterization is still very much at the inchoate stage. All the signs of his recent vocal evolution are evident here—the steady disappearance of his lower voice, the haze that tends to cover his middle at anything less than forte, the tightening sound of his top

notes—but they are not so egregious as they have been in the opera house of late, especially when he was singing Cavaradossi. The real drawback to his performance is that there is no characterization in evidence, nor any trace of spontaneity. Instead we have tenorizing—the autonomous presentation of a vocal personality, the exploitation of sound for its own sake, the abandonment of expressive purpose. And even with the advantages provided by the microphone, Pavarotti's voice clearly possesses insufficient tonal amplitude for the role.

So, of course, does Freni's for hers. She is today, in my opinion, what she has always been, a lyric soprano, and Tosca is simply beyond her capacities. What she lacks, above all, is a solid middle, the fullness of sound that would enable her to project the drama of Tosca's heated exchanges with Cavaradossi and Scarpia. Beyond the question of vocal weight, she does not have the temperament for this sort of part; by nature she was destined for more fragile operatic heroines than the redoubtable Floria Tosca.

Milnes, an unsatisfactory Scarpia on RCA, is no more satisfactory here, sounding so vocally strenuous, so eager to impress himself upon the music, as to create an overriding impression of hokum. His very first line, "*Un tal baccano in chiesa! Bel rispetto!*" ("Such an uproar in church! Fine respect!"), is ludicrously overstated, but even that pales before his grotesquely melodramatic delivery of "*la Regina sarebbe grazia ad un cadavere!*" ("the Queen will hardly be able to pardon a corpse!") in Act II.

The supporting cast is variable. I do not care particularly for Richard Van Allan and Michel Sénéchal, the Angelotti and Spoletta, but Italo Tajo is a pleasingly unexaggerated Sacristan and Walter Baratti as the Shepherd Boy is wonderfully appropriate in timbre—I am inclined to rate his the best performance in this album. About the worst it is harder to decide, but certainly conductor Nicola Rescigno is a strong contender, being slow, slack, and fragmentary; in his hands the opera falls to pieces.

The recording and pressings are first-rate. Every so often the production indulges in unnecessary sonic gimmicks—like the sound of the Sacristan taking snuff, or of the window being closed in Act II, the latter in particular an effect that Puccini's music makes sufficiently clear already. Text and translation are included, along with an essay by William Weaver.

This strikes me as an unnecessary addition to the catalog, which already has a plethora of far from satisfactory *Toscas*. The best recording by far remains the Angel mono performance with Callas, Di Stefano, and Gobbi, with Scala forces under the authoritative leadership of De Sabata. D.S.H.

RAMEAU: *Zéphire*.

CAST:

Cloris	Michèle Pena (s)
Diane	Isabel Garcisanz (s)
Zéphire	Philip Langridge (t)

Cathérine Caumont, harpsichord; Maitrise Gabriel Faure, Elisabeth Brasseur Men's Chorus, Ensemble Instrumental de France, Jean-Pierre Wallez, cond. [Ivan Pastor, prod.] PETERS INTERNATIONAL PLE 078, \$7.98.

**Z**éphire is an opera-ballet, a unique French genre intended for both eye and ear. Without the visual element the music seems

rhapsodic, but it is consistently on a high plane: The dance pieces are enchanting, the vocal ones most attractive, and Rameau, the master orchestrator, constantly delights with his felicitous and airy combinations. Roger Blanchard's "realization" of the score, which consists mostly of writing out the ornamentation, is not at all a bad job (his uninformative sleeve notes did not inspire confidence). And the orchestra, chorus, and soloists in this performance all are first-class.

# Cleaning your records is only half the battle.

What do you suppose happens when the hardest substance found in nature—diamond—is dragged through the soft, intricate vinyl canyons of a phonograph record at a force which produces acceleration that exceeds 1000 G's!

Friction and wear.

From the very first time you play a record, a process of decay takes place. The delicate high frequency sounds are the first to be impaired. Then the midrange. With every play, details are lost and noise becomes more pronounced, eventually rising to a hailstorm often punctuated sharply by clicks and pops. And the better your equipment, the more annoying the disturbance.

Regular cleaning of your records is important and necessary—to remove the dust and oily films that can further mar performance—but it's simply not enough. The best way to preserve the music on your rec-

ords is Sound Guard® Record Preservative.

Sound Guard is a revolutionary dry lubricant that virtually eliminates record wear. It's so thin that it will not affect the sound of a new record. It's so effective that a treated record may be played 100 times with no audible degradation of performance or increase in surface noise.

A built-in anti-static property helps keep dust off your records between cleanings.

It's true that it requires a little extra effort and expense to protect your records with Sound Guard. But when you add up the investment you've made in your stereo system and record collection, you really can't afford not to do it.

Sound Guard. Everything else is a lot of noise.



Sound Guard preservative Sound Guard™ cleaner. Sound Guard™ Total Record Care System. Sound Guard is Ball Corporation's registered trademark. Copyright © Ball Corporation, 1979. Muncie, IN 47302.



Order Toll Free!

Except N.Y. &amp; Hawaii

SCA

800-221-0974

FOR ORDERS ONLY!

Mon. & Thurs. 9 AM-7 PM, Tues., Wed., Fri., Sat. 9 AM-5 PM  
E.S.T.STEREO  
**HOT-LINE**

AKAI Technics



CHECK US OUT!

- ✓ Our prices are the lowest
  - ✓ Discounts on over 60 major brands.
  - ✓ Reliability: one of the oldest audio mail-order houses in the U.S.A.
  - ✓ Rated #1: by a leading trade publication.
  - ✓ Large inventory: we buy in volume getting the best deals from the manufacturers, you get the best deal from us.
- GIVE US THE OPPORTUNITY TO BEAT THE BEST DEAL YOU'VE BEEN ABLE TO FIND.

— QUOTES AND INFORMATION —

(212) 253-8888. 9AM-5PM, MON.-SAT., N.Y. TIME

Write or Call us now for the lowest price quotes and a Free price flyer.

STEREO CORPORATION  
OF AMERICAHF-1629 Flatbush Ave.  
Brooklyn, New York 11210

Circle 49 On Page 93

7-HF

name \_\_\_\_\_

address \_\_\_\_\_

city \_\_\_\_\_

state \_\_\_\_\_

zip \_\_\_\_\_

**MAIL THIS COUPON  
AND WE'LL SEND  
YOU THE BEST  
SPEAKER CATALOG  
YOU EVER READ!**

No kidding. Speakerlab's catalog took longer to write than some of our competitors have been in business. In fact, we created an industry by "building great kits so you can afford great speakers." Our catalog is an invaluable

manual of speaker function and design. And, it will introduce you to the finest speaker kits made anywhere...with the strongest money-back guarantee. Find out for yourself...FREE. FREE. that is. Mail the coupon now.



**Speakerlab**  
Dept. 7-HF 735 N. Northlake Way  
Seattle, WA 98103

The vocal parts are extremely difficult, especially because of the consistently high tessitura, but these singers never flinch. Philip Langridge must often climb into the counter-tenor range, but he does so without even losing his resonance and tenor timbre. Michèle Pena has a bright soprano that carries well, yet she can sing exquisite pianos. Isabel Garciasanz, in a smaller role, is equally satisfactory. The two duets are beautifully balanced.

Conductor Jean-Pierre Wallez is on top of his job both technically and stylistically. The preciousness and pining usually exhibited in French pastoral works of this era are held to a minimum, Rameau's fastidiously elegant part-writing comes across nicely, and the many tempo alterations, also typical of this genre, are carried out with good taste. The accompaniments are faithful, and the dance pieces—here melancholy, there vivacious—are a sheer delight. The only flaw is that the harpsichord is often inaudible, but the continuo cellist is unusually good and knows his role exactly.

This is a splendid entertainment, the real *grand divertissement* it was intended to be, and as such it is a rare treat. P.H.L.

#### SCARLATTI, A. and D.: Harpsichord Works.

Judith Norell, harpsichord. [Judith Sherman, prod.] SINE QUA NON SUPERBA SA 2018, \$6.98. Tape: C 2018, \$6.98 (cassette).

A. SCARLATTI: Partita in D minor. D. SCARLATTI: Sonatas: in A minor, K. 175; in D minor, K. 213; in A minor, K. 217; in A minor, K. 218; in D, K. 298; in D minor, K. 519; in F minor, K. 519.

The prime value of the disc debut of this versatile conductor/harpsichordist is the side devoted to Alessandro Scarlatti's D minor Partita. The labeling is somewhat confusing; I take this to be the same, or at least substantially the same, work as the *Toccata sul primo tono* recorded by Luciano Sgrizzi in his 1974 Erato all-Scarlatti program. Both works, in any event, include the remarkably varied and bravura twenty-four variations on the famous *Folia* theme. These variations, and indeed the whole partita, are magisterial display music admirably suited as vehicles for Norell's executant dexterity and power.

On the Domenico Scarlatti side she is perhaps too much the bravura virtuoso. The slower, quieter sonatas, especially K. 213 and K. 217, are attractively, even eloquently played, but the livelier others are vehemently assaulted. Matters aren't helped by the extremely high modulation level with which the Taskin-replica instrument by William Dowd is recorded.

Oddly enough, the cassette edition markedly tames the fierce high frequencies—more pleasant aurally, but at the cost of making the metallically jangling harpsichord sound almost more like a piano. R.D.D.



Jean-Pierre Wallez  
A splendid Rameau entertainment

#### SCRIBIN: Piano Works.

Vladimir Sofronitzky, piano. WESTMINSTER GOLD WG 8358, \$3.98 (mono) [recorded in concert, February 1960].

Preludes, Op. 11: No. 2, in A minor; No. 5, in D; No. 9, in E; No. 15, in D flat; No. 16, in B flat minor; No. 21, in B flat; No. 22, in G minor; No. 24, in D minor. Preludes: in C, Op. 13, No. 1; in G, Op. 13, No. 3; in A, Op. 15, No. 1; in G sharp minor, Op. 16, No. 2; in G flat, Op. 16, No. 3; in E flat minor, Op. 16, No. 4; in C sharp minor, Op. 22, No. 2; in B, Op. 22, No. 3. Mazurka in E minor, Op. 25, No. 3. Satanic Poem, Op. 30. Etude in C sharp minor, Op. 42, No. 5. Album Leaf in E flat, Op. 45, No. 1. Fragilité, Op. 51, No. 1. Poems: in B, Op. 51, No. 3 (*Wingid*); in C, Op. 52, No. 1; in B, Op. 52, No. 3 (*Langwid*); Op. 59, No. 1. Sonata No. 9, in F, Op. 68.

Vladimir Sofronitzky (1902-63) was one of a group of pianists—including Heinrich Neuhaus, Samuel Feinberg, and Alexander Goldenweiser—much esteemed in the Soviet Union but little known to the West. I recall some years ago being unimpressed by Sofronitzky's recording of Beethoven's Op. 111 Sonata, which I found blunt, un insightful, and unflowing in sonority, but since he was a son-in-law of Scriabin, with whom he undoubt-

edly consulted on interpretive matters, his views on that composer have automatic interest.

The present collection, taped in recital toward the end of Sofronitzky's life, shows him to have been one of the least neurotic of Scriabin interpreters, a little on the order of Simon Barere but without that artist's touch of febrility. Comparing his performances of the Ninth Sonata and the almost Straussian Op. 42, No. 5 Etude with those of Horowitz proves instructive; Sofronitzky doesn't command the uncanny Horowitz ability to clarify horizontal strands of sound (e.g., the spiky ostinato running along with the surging melody in the etude), but his more generalized, heavily pedaled pianism has an admirable and full-toned simplicity and a warm yet unsentimentalized lyricism far more appealing than what I recall hearing in the Beethoven.

The on-location mono sound, while somewhat overreverberant, is more than adequate. H.G.

**SHOSTAKOVICH: Preludes, Op. 34 (excerpts)**—See Mussorgsky: Pictures at an Exhibition.

**SIBELIUS: Four Legends, Op. 22.**

Philadelphia Orchestra, Eugene Ormandy, cond. [John Willan, prod.] ANGEL S 37537, \$7.98. Tape: 4XS 37537, \$7.98 (cassette).

COMPARISONS:

DG 2530 656 Kamu/Helsinki Radio Orch.  
Lon. CS 6955 Jalas/Hungarian St. Sym.

For his first Angel recording, Ormandy repeats the success of his pioneering Columbia LP of this music in 1953. The famous Philadelphia sound is perfect for these boldly and colorfully scored tone poems: The strings are rich and athletic; the brasses stab and snarl menacingly and exultantly; the woodwinds (uncharacteristically!) play with delicacy, impishness, and refinement.

Some listeners may find Ormandy's current "Swan of Tuonela" a bit pressured, and Okko Kamu (DG) scaled down the tension more movingly after the final climax of "Lemminkäinen and the Maidens of Saari." In addition, both Kamu and Jussi Jalas (London) offer filler works with their *Legends*—the *Karelia Suite* and *In Memoriam*, respectively. But the fact remains that no version other than Ormandy's two has combined dramatic temperament with clarity and spaciousness of sound. Indeed, no stereo rival even offers a world-class orchestra. Angel's production is top-drawer. A.C.

**SMETANA: Má Vlast.**

Czech Philharmonic Orchestra, Václav Talich, cond. REDIFFUSION HERITAGE COLLECTION HCN 8001/2, \$17.96 (two discs, mono, manual sequence) [from PARLIAMENT PLP 111, recorded 1956-57] (distributed by Qualiton Records).

Czech Philharmonic Orchestra, Václav Neumann, cond. [Eduard Herzog and Pavel Kühn, prod.] SUP-RAPHON 4 10 2021/2, \$17.96 (two SQ-encoded discs, manual sequence).

Orchestre de la Suisse Romande, Wolfgang Sawallisch, cond. [Charles Gerhardt, prod.] RCA RED SEAL CRL 2-3242, \$13.98 (two discs, automatic sequence).

(With DVORÁK: Scherzo capriccioso, Op. 66; Slavonic Rhapsody in A flat, Op. 45, No. 3) Dresden State Orchestra, Paavo Berglund, cond. [Suvi Raj Grubb, prod.] ANGEL SB 3870, \$15.98 (two discs, automatic sequence). Tape: 4X25 3870, \$15.98 (two cassettes).

Smetana's six-movement symphonic masterpiece was composed over the years 1874-79 and first performed as a whole in 1882, only two years before his death. It begins with *Vyšehrad (The High Castle)*, an arresting bardic evocation of Czechoslovakia's ancient glories, with a seminal opening motif from which many of the cycle's thematic materials are derived and which reappears proudly toward the end of *Vltava* (the delectable tone

## Choose your car stereo as carefully as you choose your home system.



If you have a quality stereo component system in your home, you shouldn't settle for anything less in your car.

The Compo car stereo from Fujitsu Ten is a true separates system, not just a booster. Choose between two different power amplifiers for 40 or 80 RMS watts of power. The auto-reverse cassette deck with Dolby\* has a special playback head for great frequency response. The AM/FM/MPX tuner features motor-driven automatic search, along with FET front end and PLL/IC for stable reception. Even a six-function remote control amplifier.



And our 2-way hermetically-sealed speaker system is designed to accurately reproduce every note under difficult acoustic conditions.

We suggest you compare Compo spec for spec against the competition the same way you'd compare an amplifier or tuner for your home system. You'll discover how 25 years of making car stereos leads to making the best.

Write for additional information on Compo and our complete car stereo and speaker line, plus the dealer nearest you.

### Compo™: The best separates on wheels.

**TEN FUJITSU TEN CORP. OF AMERICA**

19281 Pacific Gateway Drive, Torrance, CA 90502.  
In Canada: Noresco Canada Inc., Ontario

\*Dolby is the trademark of Dolby Laboratories, Inc.

**BIGGEST SAVINGS—  
SAME DAY DELIVERY  
CALL 301-488-9600**



- We have more of the components and manufacturers you are looking for.
- Our prices are the lowest you'll find anywhere.
- Your phone order is shipped the same day you call.
- In most cases you'll enjoy your equipment within 72 hours.
- We stand behind everything we sell with a "No Lemon" guarantee and a trained customer service department.
- Our Audio Advisors will help you select the right equipment at the best prices for the quickest delivery.

Call (301) 488-9600 for information on equipment, prices and ordering, or send for free brochure, tips on buying hi-fi equipment by mail, test reports and a \$2.00 merchandise certificate.



**International  
Hi-Fi Distributors**

Moravia Center  
Industrial Park, Dept. 7-H  
Baltimore, Maryland 21206

Circle 22 On Page 93

poem most familiar in the river's German name, the *Moldau*) and again at the end of the entire work. It also serves as a kind of composer's signature: Its first two notes, B flat and E flat, are in German nomenclature B and Es, the initials of Bedřich Smetana.

After the musical tracing of the Vltava's course through the Czech countryside, down the St. John rapids, and broadly past the city of Prague, the third tone poem recounts the legend of *Sárka*, a Czech Amazon, and her revenge on a drunken lover and his army (symbolizing the horrors of civil strife). The fourth tone poem, best known next to *Vltava*, is *From Bohemia's Woods and Fields*, a rhapsodic paean to the pastoral Czech countryside. And the closely linked monothematic fifth and multi-march sixth, *Tábor* and *Blaník*, take their names from the main stronghold of the ancient Hussite warriors and the magic mountain where, after their defeat by outside forces, they sleep while awaiting awakening and the return of freedom to an enslaved Czechoslovakia.

*Má Vlast* is much more than a romantic national epic. Its cyclic, sometimes grandiloquent Lisztian influences are obvious. But the Beethovenian symphonic integration of the whole work and its often tautly woven contrapuntal textures are strictly classical in both aim and craftsmanship. To know this masterpiece by only one or two of its parts is never to realize its full stature, to remain content with no more than a tantalizing taste of its distinctively piquant flavor. And as one who empathically claims, on the basis of musical affinities alone, Czechoslovakia as My (other) Country, I've come to share the native belief that Smetana's music sounds completely "right" only in the authentically idiomatic performances of Czech-born interpreters.

Ever since the first Talich/Czech Philharmonic 78s of early 1930, recordings of the complete *Má Vlast* have been largely confined to Czech-born conductors—in America most notably Rafael Kubelik, whose 1952 Chicago Symphony version for Mercury (still in print as a Golden Import, SRI 2-77006) was influential in arousing connoisseur interest in the entire work. Kubelik's stereo remakes, with the Vienna Philharmonic and the Boston Symphony, remain in the catalog; while the latter (DG 2707 064) still boasts the finest orchestral playing of any account, the generally admirable recording has some odd quirks, the timbres just aren't Czech, and the conductor doesn't quite recapture the infectious high spirits of the Chicago set.

The two new non-Czech versions, both well played and recorded, make strong individual appeals that are sure to satisfy many listeners. Yet I can't conscientiously recommend them except with the reservation that, for all their other merits, they lack idiomatic authenticity. Nevertheless, the Finnish-born Paavo Berglund's Dresden version is a disarmingly



Václav Talich  
A well-nigh definitive *Má Vlast*

romanticized, if sometimes mannered, interpretation, richly and warmly recorded in not especially close miking—admirably processed in both disc and cassette editions. And it has the advantage of sequencing that fits *Tábor* and *Blaník* together on Side 3, leaving a free side for two Dvořák fillers: an exceptionally capricious account of the *Scherzo capriccioso* and a charmingly poetic *Slavonic Rhapsody* No. 3.

Wolfgang Sawallisch's Suisse Romande rendition is the most authoritative non-Czech *Má Vlast* I've encountered—more strikingly dramatic than Berglund's. It's also more dramatically recorded: If sonically less warm, it is more brilliant, more closely miked, and more transparent in its climactic moments, and it boasts a wider dynamic range. It is marred by somewhat noisy disc surfaces.

For me, the field narrows to new and old all-Czech versions. Václav Neumann's Czech Philharmonic set, which supersedes his admirable Leipzig Gewandhaus edition (London CSA 2222, deleted), is of course interpretatively idiomatic and tonally authentic, consistently precise and scrupulously attentive to details, and it sounds vivid yet natural in either stereo or slightly more expansive quad playback. It's scarcely Neumann's fault that his relatively mild personality projection is overshadowed by the incomparably powerful one of Václav Talich (1883-1961).

It didn't surprise me that the mono Talich/Czech Philharmonic performances of 1956-57 would remain well-nigh definitive; what I wasn't expecting was the vivid, if hard-toned, sonic presence of this reissue. Talich's muscularity and dramatic conviction make even the best of the other versions seem a bit soft; this recording is not only a historical milestone, but my emphatic first choice. R.D.D.

**Goo, Screw & Save  
YES, KITS!**

Choose from The World's Largest Selection of Speaker Kits including FRIED, DALESFORD EXPORT, JANSZEN ELECTROSTATS & SEAS.

Here's just one example:

**FRIED dB/2  
MONITORING  
SYSTEM**

**\$475**

per side  
complete kit

(\$780 per side, if pre-assembled)



The dB/2 combines the B/2 mini's with the new Fried line tunnel sub-woofer for a superb no compromise system. The new 10" high force factor Bextrene woofer produces 108 dB at 40Hz, and is flat to 30Hz. Power handling 25-200W

No matter how good your other components, you won't hear high definition sound if your speakers can't reproduce it!

FREE MINI-CATALOG — OR SEND \$1.50 FOR NEW SPEAKER MANUAL/COMPLETE CATALOG (\$1.50 Refunded with Purchase)

**SoniKit** "The Speaker Specialists" 1173 S— 65th Street  
Oakland, CA 94608

For Free Mini-Catalog, Use Reader Service Number Below.

Here's my \$1.50 check—send my Spkr. Manual/Catalog

HF5

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Circle 57 On Page 93

**STRAVINSKY: The Firebird: Suite—**  
See Mussorgsky: Pictures at an Exhibition.

**TELEMANN: Sonatas for Two Flutes**  
(6), Op. 2.

Michael Debost and James Galway, flutes. [Eric Macleod, prod.] SERAPHIM S 60321, \$3.98.

The prospect of nearly an hour of unaccompanied duo-fluting is likely to repel most nonspecialist listeners, but there are unexpected rewards for everyone who sticks with the present program beyond the undeniably inconsequential opening "Soudé" movement of the first sonata.

First of all, Telemann explores the art of two-part counterpoint—especially in such exhilarating fugal movements as those in the third and fourth sonatas—with a magisterial skill worthy of Bach. But Telemann looks forward as well as backward: These sonatas stand exactly astride the baroque and rococo eras. While the counterpoint may be that of the Bach inventions, and the form that of the Corellian slow/fast/slow/fast sonata, the playfulness, catchy rhythms, and witty charm are those of the new galant style.

Then there is the sheer tonal appeal—irresistible to flute specialists and hard to resist even by generalists—of two such gifted, yet markedly different virtuosos, each playing in his own distinctive way while adjusting timbres and phrasing into perfect equilibrium with his partner's. The clean, closely miked Pathé-Marconi recording admirably captures the subtlest tonal differentiations between them, though my Seraphim pressing has rough surfaces and considerable amplification roar. R.D.D.

**VIVALDI: L'Olimpiade.**

CAST:

Argene	Mária Zempléni (s)
Aristea	Klára Takács (ms)
Megacle	József Horváth (t)
Aminta	György Káplán (t)
Licida	Lajos Miller (b)
Alcandro	István Gáti (b)
Clistene	Kolos Kováts (bs)

Anikó P. Szabó, harpsichord; Budapest Madrigal Chorus, Hungarian State Orchestra, Ferenc Szekeres, cond. [Jenő Simon, prod.] HUNGAROTON SLPX 11901/3, \$23.94 (three discs, manual sequence).

There are those who must win recognition again and again, while lesser talents are constantly carried on the shoulders of popularity. Vivaldi, once the universally admired Venetian master of the avant-garde, died forsaken and in misery in faraway Vienna, to be virtually ignored for 200 years. Today he is again acclaimed, though mostly as a highly original, path-breaking composer of instrumental music. It is only of late that we began to realize—and this splendid recording is definite proof—that, except for Handel, he was the leading master of late baroque opera. He was far above the suave Hasse, who, though little performed after his death, has never lost his legendary reputation.

*L'Olimpiade*, composed in 1734, is a

Metastasio opera—indeed one of the imperial court poet's most favored librettos, set to music by half a hundred composers, among them Pergolesi, Hasse, Piccinni, and Christian Bach. The "Italian Sophocles," who dominated opera for two generations as no other librettist ever did, was steeped in the lore of classical antiquity, and while his books possessed little true dramatic force, the beauty and purity of their language and their elevated moral sentiments were evocative of music. This is particularly true in the versified arias, but a strong melodic incentive invades even the secco recitatives. Metastasio knew better than anyone else that the intimate relationship between words and music is one of the chief operatic ideals, and the composers loved those aria texts where every syllable was in the right place for singing, yet in verses that were fastidiously elegant, pregnant, with the quality of an epigram.

Given our long-standing view of Vivaldi as exclusively an instrumental composer, one is constantly astonished by his admirable vocal writing, both for solo and chorus; all the roles are eminently singable and in the great Italian tradition. Particularly noteworthy is Vivaldi's abstention from empty vocal fireworks; he composes burnished melodies, which he does not break up with meaningless ornamentation. (It may be noted here that the intelligent and well-led Hungaroton performers respect his intentions by refraining from unnecessary vocal condiments.) Vivaldi not only followed Metastasio's shapely verse, but set it to music that sensitively suits the mood and expressive content.

There are some self-borrowings in *L'Olimpiade*, and at times Vivaldi uses not only an aria from an earlier opera, but also the text to which it was composed. This somewhat weakens Metastasio's carefully thought-out dramaturgical plan, but then, the practice was widespread during the baroque era. There are some lost numbers, too, but on the whole the present shape of the opera is quite satisfactory. The variety of the arias is great. Some are in dance rhythms (as are some of the choruses), others are dramatic—the king even has an old-fashioned rage aria—or again amorous and lyric; even the few simile arias are so well placed that they fit into the continuity. Interestingly, in the key arias Vivaldi likes to turn to the minor mode.

The Red Priest was ahead of his time, a fact emphatically demonstrated in the ensembles, which in his day rarely exceeded two voices. The quintet in Act III (No. 22), gradually involving the protagonists, is a piece perhaps unique in the opera seria before Mozart. Metastasio, the inveterate classicist, restored to opera the chorus as commentator, in the manner of the Attic tragedy, and Vivaldi makes unprecedented use of it. An example is No. 25 in the third act, where the chorus responds with half-suppressed Aeschylan

**B&F Speaker Kit Fit**

4-Way SPEAKER KIT. Full-sized cabinet with giant-sized sound. Earthy lows and brilliant highs from a system that includes a pair of 3 1/2" piezoelectrics, an 8" MR and a 12" passive radiator (WR). Size: 25 1/2" H x 14 1/2" W x 11 1/2" D. This system is for really big sound requirements. Our price is absurdly low because of our super industry contacts and also because of vinyl imperfections, dinged corners, etc. **SAVE \$99.88/PAIR** BUT WHAT A PRICE FOR SECONDS! Do it yourself and refinish for a handsome system with immense savings. List price for a pair like this \$389.50. Save 75% 9110123... 85 lbs/pair... \$99.88/pair



Another kit fit for complete sound repro is the 3-Way "Bookshelf" system that measures 19 1/2" H x 11 1/2" W x 7 1/2" D. Kit includes 10" re-arranging passive rad (WR), 8" MR, 3 1/2" piezoelect horn T. Freq resp 30 Hz to 25 KHz power (10/90) RMS Watts. Save 75% off list price of \$200/PAIR. Our underground price is \$138.88/PAIR. 9130224... 96 lbs/PAIR... \$138.88/PAIR

**SAVE \$800 ON A PAIR OF TOP-QUALITY SPEAKERS with the Pres-4 Studio System Kit. This system comes from a broken home—or should we say "broke" home? Manufacturer had real cash flow problems, so if you have the cash you can save BIG. Cabinet is real walnut and they are IMACULATE. No scratches. Speakers: freq resp 28 Hz to 25 KHz. Power 10/200. X-over freq 1000 Hz. 12" PR woofer, 10" woofer driver, 5" MR, 3 1/2" piezo. Assembled dimensions: 42" H x 15" W x 15 1/2" D. Save 75% on these excellent sound kits. These are firsts, NOT SECONDS! 9310105... 150 lbs/PAIR... \$348.88/PAIR**



SPECTRUM "Q" SPEAKERS \* Ferro fid damped

Ref. No.	FAR	FR	MgWt	Pow	Di	VCD	EACH/PAIR
Y0541	1.3k	22k	9oz	50	4 1/4	6.88/11.88	
70203	2	22	9	100	4	11.88/21.88	
30248	2	40	piezoT	3 1/2		7.88/14.88	
30331		40	piezoT		2x5	14.88/27.88	
70448	3	15	4	5	1.5/8 9/16	3.00/5.00	
*B0111W	5	12	9	70	5	10.88/18.88	
*0540	5	12	9	70	5	10.88/18.88	
5MRS	8	12	3	35	5 9/16	8.88/15.88	
B011CW	36	3	20	75	8	12.88/22.88	
Y0006	35	7	12	60	8	15.88/25.88	
B0114	27	2	40	100	10	32.88/59.88	
B0115	24	2	20	75	10	17.88/33.88	
B0116	20	2	40	100	12	34.88/67.88	
B0124	21	2	26	50	12	29.88/55.88	
B0117	34	2	12	60	12	17.88/33.88	
B011u	Passive Radiator				12	12.88/23.88	
B011s	Passive Radiator				10	8.88/15.88	
B012u	Passive Radiator				8	6.88/11.88	

**B&F** SURPLUS IS YOUR BEST BUY! Dept HF7  
119 Foster St. Peabody, Mass. 01960  
(617) 531-5774

Use Major Credit Cards to Charge by Phone \$10 min on all charge orders. No C.O.D.s. Please add postage. In Manchester, NH, visit our store "The Towne Dumpe, next to Woolco on So. Willow. Great buys on electronic parts. SEND TODAY FOR OUR FREE CATALOG!

Circle 6 On Page 93

**TOP DISCOUNT AUDIO**  
1150 N. Powis Road, West Chicago, IL 60185

RECEIVERS  
SPEAKERS  
TUNERS  
AMPLIFIERS  
TAPE DECKS

CARTRIDGES  
CHANGERS  
AUTOMATIC  
COMPACTS  
HEADPHONES

**Your National Headquarters for Name Brand Electronics by Mail**

- ★ Full Manufacturer Guarantee Applies to All Sales!!
- ★ Orders Shipped in Factory-Sealed Cartons—Most Within 24 Hours
- ★ Multi-Million \$\$\$ Inventory

**TOP DISCOUNT AUDIO**  
1150 N. Powis Rd., West Chicago, IL 60185  
(312) 293-1825

MasterCharge and VISA Welcome  
Call or Write for the LOWEST PRICES Around!

MR. (First) (Initial) (Last)  
(Number and Street)  
(City) (State) (Zip Code)

Phone Order Hours: M-W-F 8AM-4:30PM, T-TH 8AM-8PM, Sat. 9AM-Noon  
WE CARRY THE TECHNICS PRO SERIES—Call for Quotes!

## Hi-Fi Buys

ON PIONEER Technics

KENWOOD SANSUI

AND OTHER FAMOUS BRANDS



**KENWOOD KR-4070**  
AM/FM RECEIVER  
40 watts RMS, at 8 ohms,  
no more than .05% THD.



**PIONEER**  
HPM-100



**Technics SL-230**  
Automatic single-disc FG  
servo belt-drive turntable.



**SANSUI AU-717**  
85 watts per channel  
with no more than 0.025%  
total harmonic distortion.



**PIONEER**  
RT-707  
OPEN REEL, AUTO REVERSE  
PLAYBACK TAPE DECK

CALL TOLL FREE

**800-638-0935**

MON.-FRI. 9-8, SAT. 9-4

Orders shipped within 48 hrs. • Phone and COD orders accepted • Use Visa, Master Charge, or NAC • Call or write for quotes • Catalog available upon request • All equipment factory sealed with full warranty.



**Hi-Fi Buys**



1362 HOLTON LANE  
LANGLEY PARK, MD. 20783  
**(301) 434-5330**

Circle 17 On Page 93

# SAVE!

MONEY • TIME • FREIGHT

QUALITY STEREO EQUIPMENT  
AT LOWEST PRICES.

YOUR REQUEST FOR QUOTA-  
TION RETURNED SAME DAY.

FACTORY SEALED CARTONS—  
GUARANTEED AND INSURED.

SAVE ON NAME BRANDS LIKE:

AKAI	PIONEER
B.I.C.	SANSUI
DUAL	SONY
KENWOOD	TEAC
MARANTZ	TECHNICS

AND MORE THAN 50 OTHERS  
BUY THE MODERN WAY  
BY MAIL—FROM

**illinois audio**

12 E. Delaware Place  
Chicago, Illinois 60611  
312-664-0020

Circle 20 On Page 93

shock and anger to the offense committed against the king. The final chorus is also a real choral piece, not the usual "coro" made up of the protagonists; it jubilantly sings the *lieto fine*. "Let sorrow give way to laughter."

What a pleasure to hear a baroque opera with the roles well distributed between men and women! It is possible, of course, that one or two of the men's roles were originally composed for castratos and hence are transposed, though the excellent and scholarly notes would almost certainly have mentioned this fact. The accompaniments and the independent instrumental pieces (there is a spanking good overture with a remarkably symphonic texture) are fine, the ritornels elaborate and full of musical red meat, and Vivaldi's handling of the orchestra (strings, recorders, oboes, bassoons, and horns) delights the ear.

The performance is glossy and glowing throughout. Mária Zempléni (Argene), a fine soprano, sings angelically, but it is Klára Takács (Aristea) who is given the dramatic role. She is a passionate singer with a great big voice that she can tame skillfully for the ensembles and the less agitated passages. She can sing in soprano territory with confidence, power, and brilliance, but in the lower ranges the color changes to that of a dark alto—she seems almost a different person.

Of the two tenors, György Káplán (Aminta) has a nicely equalized voice and takes the high notes with security, poise, and color (no falsettos for him)—all this with attractive feeling. József Horváth (Megacle) is somewhat less satisfactory. Though he sings well, both his voice and his temperament are monochrome. This is a bit unfortunate because Megacle represents the idealized hero, wrestling with the conflict between friendship and love; the role thus requires particular delicacy and empathy. The three low-voiced men are stunning. Kolos Kováts (Clistene), possessor of a cavernous yet smooth, well-focused, and warm bass voice, is majestic as the king; Lajos Miller (Licida), a temperamental baritone with an attractive heroic tinge, enunciates beautifully; and baritone István Gáti (Alcandro) is equally good, sonorous, and musical. In general, I must say that I have seldom heard a cast so unanimously faithful to pitch.

The chorus is perfect, the orchestra fleet and precise. Ferenc Szekeres conducts with exemplary skill, verve, and constant care for his singers. The continuo is good, though the cello is a little too prominent. The secco recitatives are occasionally a little tight—there should be more "conversational" flexibility; on the other hand, the conductor has the singers freely cut into each other's line endings even before the harpsichord can catch up with them, which is an excellent dramatic device seldom employed in such recordings, though it is plainly proper.

The sound is very good if perhaps a

mite too open and forward. Hungaroton maintains its praiseworthy tradition of supplying not only an elegant brochure, with the full libretto in four languages, but first-class scholarly commentary without irrelevant anecdotes. P.H.L.

### WAGNER: Die Walküre: Act II, Scenes 3 and 5. Siegfried Idyll.

CAST—Die Walküre:

Brünnhilde	Ella Flesch (s)
Sieglinde	Lotte Lehmann (s)
Siegmund	Lauritz Melchior (t)
Wotan	Alfred Jerger (b)
Hunding	Emanuel List (bs)

Vienna Philharmonic Orchestra, Bruno Walter, cond. TURNABOUT THIS 65163, \$4.98 (mono) [from HMV originals, 1935].

On Thursday, June 20, 1935, in the Musikvereinsaal in Vienna, Lotte Lehmann, Lauritz Melchior, and Emanuel List began recording Wagner's *Die Walküre*, with the Vienna Philharmonic conducted by Bruno Walter. By Saturday, Act I was finished, and they spent the rest of the day recording the Act II scenes involving Sieglinde; Ella Flesch and Alfred Jerger joined them for the brief parts of Brünnhilde and Wotan at the end of the act.

But they didn't come back on Sunday or Monday to continue. For some reason, the project remained hanging at that point, and I've never come across a clear explanation of what happened, beyond mutterings about "wrenching political events." But there were no such events in Austria in 1935, and everything points to an intention to continue, perhaps even to do Act III. Walter kept on making records with the Vienna Philharmonic until mid-January 1938, two months before the Anschluss; obviously, there was no problem there. The Act I recording was issued in 1936 and quickly attained the status of a classic (it is still available on Seraphim 60190), while Act II remained incomplete and unpublished.

Only after the Anschluss was the project picked up and the remainder of the act recorded—but in Berlin, with the State Opera Orchestra conducted by Electrola's musical director, Bruno Seidler-Winkler. Melchior was still persona grata in Germany, and he was joined by Marta Fuchs as Brünnhilde, Margarete Klose as Fricka, and the twenty-nine-year-old Hans Hotter as Wotan. (All of Sieglinde's and Hunding's music had already been recorded in Vienna, of course.) The composite Vienna/Berlin Act II was then issued in HMV's international series and in America on Victor, though the version prepared for the German market omitted the Vienna sides with their non-Aryan conductor.

All this history is offered in order to explain, first, the origin of the fragments now reissued by Turnabout, and, second, the reasons why some may find them frustrating. This selective republication may please fans of Walter, Lehmann, even List, but a reissue of the rest of Act II as well would have been more

satisfactory for admirers of Melchior (a numerous brood, I suspect), Fuchs, Klose, Hotter, and (possibly an empty category) Seidler-Winkler.

This latter gentleman could scarcely have been convicted of excessive energy in his portions of the act, and Fuchs's inability to rise to the climax of the *Todesverkündigung* is also a liability, though she is vividly sensitive to the words and often very touching earlier on. When Klose and Hotter came to record this music again later—Klose in Furtwängler's 1954 Vienna *Walküre*, Hotter in the Solti set—they were hardly in so fresh voice. Of course the Hotter of 1965 was a more profound artist, but the comparison is fascinating, despite the five nibbling cuts, totaling about 100 measures, made in his monologue in 1938. And then there is Melchior, in his only commercial recording of the *Todesverkündigung*; though the performance doesn't really get off the ground, this is surely the voice for the music.

Back to what Turnabout *has* reissued, which is every bit as good as the familiar Act I: Lehmann equally vivid in repose and in hysteria, Melchior on his best studio behavior, the orchestra in generally fine form despite one rather exposed failure of ensemble in the violins. We may be inclined to doubt the suitability of Fleisch and Jerger for their entire roles; they pass muster for these few lines. The sound, balanced somewhat to the disadvantage of the woodwinds, is acceptable for the period.

Though the transfer of the *Walküre* material seems good, I am less happy with the overside *Siegfried Idyll*, recorded the day before the *Walküre* sessions began. I don't blame Turnabout for the balance (again, the strings are overly favored), for the limited dynamic range (surely inherent in the source), or for the extraneous noises around measure 128 (sounds to me like the putting-on of mutes)—but the violin tone is exceptionally unattractive, and there are brief but inexcusable losses of signal.

Too bad; it's a nice performance, gently and lovingly played by the superb orchestra. For most people, I imagine Walter's similar, much better-sounding 1953 New York Philharmonic recording (Odyssey Y 34621) will afford more pleasure. The 1959 Columbia Symphony version (Odyssey Y 30667, stereo) is a shade slack by comparison, and the solo wind playing has less personality than in either of the earlier versions. Incidentally, Walter actually made six recordings of this piece; in addition to the four enumerated in Richard Freed's liner note, there were two still earlier ones with the old Royal Philharmonic—one acoustic, one electric.

As with other vocal recordings in the Turnabout Historical Series, no texts or translations are provided, though the liner note includes a summary of the plot. D.H.

Continued on page 156

**THE ODDS ARE SOUND REPRODUCTION & DISTRICT SOUND HAVE THE LOWEST PRICES ON AUDIO COMPONENTS.**

Now two of the largest audio mail order firms have joined forces giving you twice the Buying Power, and twice the stock. Fast shipments, fully insured, factory sealed cartons from both warehouses.



Get our Low Prices on hundreds of components listed in our new FREE catalog

**District Sound inc.**



**Sound Reproduction inc.**

2316 RHODE ISLAND AVENUE, N.E.  
Washington, D.C. 20018 (202) 832-1900

7 Industrial Road  
Fairfield, N.J. 07006 201 227-6720

Circle 12 On Page 93



**Next time you plan a trip to Europe, make sure you visit the unique country.**

- Where can you find: Europe's blondest blondes?
- Europe's highest geysers?
- Europe's greatest glaciers?
- Europe's largest waterfalls?

And where can you find moonlike craters where the astronauts trained? More volcanos than anywhere else on earth? Historic landmarks of the world's oldest continuous parliament? Celebrations marking Europe's youngest republic?

The answer to all of these questions is—ICELAND. Next time you plan a trip to Europe, make sure you visit Iceland.

The only thing it may cost you is time well spent. Because you'll save enough money on Icelandic's lowest jet fares to Luxembourg or Chicago to pay for your stopover in Iceland. Or, you can hop over from New York or Chicago for longer tours. See an erupting volcano. Take a cross-country pony trek.

Next time you plan a trip to Europe, ask your travel agent about Icelandic Airlines. Or phone Icelandic Airlines, for folders about Iceland and lowest jet fares to Europe. In New York State, phone (212) 757-8585. Elsewhere in U.S., phone (800) 555-1212 for local toll free number.

Circle 19 On Page 93

## HIGH FIDELITY CLASSIFIED

MAIL TO: 130 East 59th St., New York, N.Y. 10022. Phone: 212-826-8393

**GENERAL:** All copy subject to publisher approval. First line caps. Users of P.O. Box MUST supply permanent address and telephone number before ad can run.

**CLOSING DATE:** 1st of second month preceding cover date.

**CLASSIFIED RATES:** Per word: 1x-\$1.60; 3x-\$1.55; 6x-\$1.50; 12x-\$1.40. MINIMUM 15 words. Words in caps-10 extra each. Box numbers: \$2.00 additional per insertion to cover cost of handling and postage. Display: 1 inch-\$275; 2 inch-\$550; 3 inch-\$825. Also 6 and 12 consecutive issue discount rate.

**PAYMENT WITH ORDER:** Send check, M.O., MASTERCHARGE or VISA No. and expiration date to: Classified Dept., HIGH FIDELITY, 130 E. 59th St., New York, NY 10022.

### FOR SALE

**AUDIOPHILES WANTED!** Put your knowledge to use, earn an excellent spare time income. We need campus Dealers to sell name brand stereo equipment at substantial discounts in your area. No investment necessary. For information and application please write: ABCO, Dept. CR, 1201 East Main Street, Meriden, Conn. 06450.

## WRITE US AND WE'LL SEND YOU THE BEST CATALOG YOU EVER READ!

No kidding. Speakerlab's catalog took longer to write than some of our competitors have been in business. In fact, we created an industry by

"building great kits so you can afford great speakers." Our catalog is an invaluable manual of speaker function and design. And, it will introduce you to the finest speaker kits made anywhere...with the strongest money-back guarantee. Find out for yourself...FREE, FREE, that is. Write now. Right now.



**Speakerlab**  
Dept. C-HF, 735 N. Northlake Way  
Seattle, WA 98103

**HI-FI ENTHUSIASTS WANTED!** Earn more than just spare money in your spare time. We need campus representatives to sell name brand stereo components at discount prices in your area. No investment required. Serious inquiries only, please. Contact: Mail Order Dept., K&L Sound Services Co., 75 No. Beacon St., Watertown, Mass. 02172. (617) 926-6100.

**SAVE up to 80% BY MAIL on:** SCOTCH, TDK, BASF, MAXELL, MEMOREX, CAPITOL MUSIC TAPE, CERTRON (over 180 different reel & cassette tapes to choose from), top brand recorders; America's largest collection of taping accessories, too. Same day service. **FREE catalog.**

America's Recording Tape Specialists

**SAXITONE TAPE SALES**

1776 Columbia Rd., Washington, D.C. 20009  
(202) 462-0800

**STEREO REPRESENTATIVES NEEDED!!! LOWEST POSSIBLE PRICES!!! OVER 100 BRANDS!!! KRASCO Rep. 998 Orange Ave., West Haven, Conn. 06516**

## A SINGER'S DREAM!

**REMOVES VOCAL FROM MOST STEREO DISCS**  
The Thompson Vocal Eliminator can actually remove most or all of a solo vocalist from a standard stereo record and yet leave the background music virtually untouched! Not an equalizer! We can prove it works over the phone. Write for a brochure and demo record below. **COST: \$195.00**

**ECHO Ambiance**  
We do it **BETTER** for **LESS**.  
Whether your interest is in using ambience for a concert hall effect or as an echo chamber for studio recording use, we manufacture a broad line of sophisticated analog delay Echo and Reverberation devices at prices which only direct sales make possible. Prices range from \$159 to \$495.  
Write for a brochure and demo record. Include \$1 to cover costs (refundable with order).  
Write to: **LT Sound, Dept HF, P.O. Box 1061, Decatur, GA 30031 (404) 284-5155**

**COLLEGE DEALERS**-Write for Details on College Program. Fast shipments, low prices, excellent profit. Sound Reproduction, 7 Industrial Road, Fairfield, New Jersey 07006.

**SAVE 50% BUILD YOUR OWN SPEAKER SYSTEM.** Write McGee Radio Electronics, 1901 McGee Street, Kansas City, Missouri 64108.

**ANTI-SKATING FOR AR TURNTABLES** Proven counterweight design. Install yourself in minutes. \$7.95 postpaid. Audio Innovational Products, P.O. Box 1607, Portsmouth, N.H. 03801.

**CERTIFIED AUDIO CONSULTANT HOME STUDY HI-FI Course** available. Send \$5.00 for information. Includes AUDIO TECHNICAL YEAR BOOK with 29 sample lessons and application for membership in the Society of Audio Consultants. Write SAC, P.O. Box 552, Dept. HF, Beverly Hills, CA 90213.

**AUDIO BARGAINS-FREE LIST. STEREO COST CUTTERS.** BOX 8014 (HF 779) CANTON, OHIO 44711. (216) 452-6332.

**HIGH-END AUDIO AT LOW LOW PRICES!** Aiwa, Allison, Audio Pulse, Bose, dbx, Cizek, ESS, Luxman, Micro Selki, SAE, Technics Pro and many more! All factory fresh with full warranty. For discount price call 212-254-3125. Or send \$2.00 for our catalogue and price list to DIRECT DISCOUNTS LTD., P.O. Box 841, N.Y., N.Y. 10003.

**GERMAN GRUNDIG RADIOS AND STEREO SALES AND SERVICE.** MAIL INQUIRIES INVITED. SQUIRES, MAX-ATAWNY, PA 19538.

**AUDIOPHILES' HIGH FIDELITY COMPONENTS!** Bose, Tandberg, Revox, Nakamichi, Yamaha, ADS, Denon, Allison, Hafler, B&O, Ohm, GAS, Genesis, Rogers, Crown, Lux, Infinity, Advent, SAE, Nikko, others. Low, low prices! AUDIO AMERICA (Virginia) 804-793-3820. Hours: 10am-6pm. Call today for literature and LOW PRICES!

**MULTI-TRACK AND SEMI-PROFESSIONAL AUDIO EQUIPMENT**-BEST PRICES! Prompt Delivery! DBX, TEAC/Tascam, Sound Workshop, AKG, Delta-Lab, Phase Linear, Uni-Sync, Others. Dept. HF, WDI, P.O. Box 340, Cary, NC 27511 919-467-8122.

**KOETSU** is here. The legendary handmade moving coil cartridge is now available in the U.S. For the complete story, write: Sumiko, Inc., Box 5046, Berkeley, CA 94705.

**LOUDSPEAKERS REBUILT TO ORIGINAL SPECS.** HI-FI Auto-M.I. Fast-Economical-Guaranteed. Sonic Speaker Svc., 4957 W. Diversey, Chicago, Illinois 60639.

### MISCELLANEOUS

**DIAMOND NEEDLES and Stereo Cartridges** at Discount prices for Shure, Pickering, Stanton, Empire, Grado, Audio Technica and ADC. Send for free catalog. LYLE CARTRIDGES, Dept. H, Box 69, Kensington Station, Brooklyn, New York 11218. For Fast Service, call TOLL FREE 800-221-0906.

**PROTECT YOUR ALBUMS.** WHITE CARDBOARD REPLACEMENT JACKETS 35c. PLASTIC LINED INNER SLEEVES 15c. POSTAGE \$1.25. OPERA BOXES, 78 SLEEVES AVAILABLE. FREE CATALOG. CABCO 301-3, BOX 8212, COLUMBUS, OHIO 43201

The Best New Stereo Systems Deserve The Best New Stereo Records (Tapes too)! You need the Monthly SCHWANN RECORD CATALOG available from record shops everywhere or, for a sample copy PP, Send \$2.50 to: ABC-SCHWANN, Single Copy Sales, Dept., 2160 Patterson St., Cincinnati, Ohio 45214.

**SLIPCASES** for HIGH FIDELITY Magazine. Simulated blue leather. Holds 6 High Fidelity issues. \$4.95 single case, \$14 for 3 cases, \$24 for 6 cases. USA orders only. Allow 6 weeks for delivery. HIGH FIDELITY Library Cases, Box 5120, Philadelphia, PA 19141.

Free Promotional Albums, Concert Tickets, Stereos, Etc. Information: Barry Publications, 477 82nd Street, Brooklyn, N.Y. 11209.

**PENFRIENDS.** USA, ENGLAND. Make lasting friendships through correspondence. Send Age, interests. Free reply. Harmony, Box 1HF, Brooklyn, N.Y. 11223.

**STARTLING REVELATIONS!** Your true character and future explicitly revealed. Send \$5.00 with signature sample and birthdate to SCIENTEL, Box 720, Adelaide St., Toronto, Canada M5C 2J8.

### NEW EQUIPMENT FOR SALE

**BRITISH AND EUROPEAN EQUIPMENT DIRECT TO YOU.** Most quality makes of equipment available at advantageous prices. For price list and price quotes send International Reply Coupon. Send \$2 for the brochures you require. Audio T, Dept A, 190 West End Lane, London, NW6 1SQ, England. Phone 01-794 7848. Visitors welcome.

## Buy with confidence

**AKAI AA-1125** Send for Quotes & Price List on AKAI & Over 60 Other Famous Brands

**AM/FM STEREO RECEIVER**  
Continuous Power Output of 25 Watts/Channel  
Min. RMS at 8 ohms from 20 to 20,000Hz with no more than 0.3% Total Harmonic Distortion, 2 Tape Inputs, 1 Phono Input, Phase Lock Loop Multiplex Section, Tape Dubbing.

**ARSTON**  
146 Old Brookfield Road, Danbury Conn. 06810  
(203) 744-6421 (212) 369-6212

Mon.-Fri. 9:00-5:30  
Sat. 9:00-3:00

**SANSUI and PICKERING!** BELOW mail order prices! Send to: GSH Super Savings, P.O. Box 86, Eden, N.C. 27288 (919) 627-1919.

**TOP-RATED CARTRIDGES UP TO 70% OFF!** We feature Acutec, ADC, Grado, Nagatron, Ortofon, Sonus, Stanton, et al. Unbelievable prices! Call 212-254-3125 for prices, or write to DIRECT DISCOUNTS LTD., P.O. Box 841, N.Y., N.Y. 10003.

**BUY DIRECT** and save. British and European Hi-Fi. Attractive prices. Send Reply Coupon for Quote, \$3 bills for brochures. Goodwins, 7 The Broadway, Wood Green, London N22, Phone 888-0077. VISA/Mastercharge. Visitors welcome.

### TAPES & RECORDS

**RARE OPERA, SYMPHONIC MUSIC ON OPEN REEL TAPE.** Historic performances. EUROPEAN, DOMESTIC. Free Catalogue. Underhill, Box "U," Bellport, NY 11713.

"SOUNDTRACKS, SHOW, NOSTALGIA & JAZZ-FREE Catalog & Offering List-A-1 Record Finders, P.O. Box 75071-H, L.A. CAL. 90075."

SCOTCH RECORDING TAPE, LOWEST PRICES. TAPE CENTER. Box 4305C, Washington, D.C. 20012.

RAREST CLASSICAL, SOUNDTRACKS, SHOWS, PERSONALITY LPs. Huge catalog 50c. Grammy's Attic, Box 181, Bluffton, SC 29910

"LIVE OPERA TAPES. Reels-Cassettes. Unbelievable treasures since 1926. Over 5,000 selections. Free DELUX Catalog. MR TAPE, Box 138, Murray Hill Station, NYC 10016."

TDK, MAXELL, MEMOREX, CASSETTES, REELS, 8-Track Free Catalog, New Guaranteed. S&S AUDIO, P.O. BOX 94485, Schaumburg, IL 60194

SEARCHING? WRITE DISCONTINUED RECORDS, 444 South Victory, Burbank, California 91502.

SHOW ALBUMS—Rare, out-of-print lps, 64-page list \$1.00. Bakers Wife or Nefertiti—original cast LP \$9.95. Broadway-Hollywood Recordings, Georgetown, CT. 06829.

1930-1962 RADIO PROGRAMS, \$1.00 HOUR! Professional 200 page catalog, \$1.25. AM Treasures, Box 192HF, Babylon, N.Y. 11702.

**NOTICE:  
Record Raters  
Wanted**

(No experience required) Each month you will receive nationally released albums to rate. **There is no extra charge for the LP's you receive** — all you pay is a small membership fee which covers all costs of the LP's including postage and handling. In return for your opinion you will build a substantial album collection - "first come basis." For application write:

**E.A.R.S. INC.**  
Box 10245 Dept. HF  
5521 Center St., Milwaukee WI 53210  
"Guaranteed" © 1979 E.A.R.S. INC.

**BLANK TAPE SALE**

TDK SA C90	3.05	Ampev Grandmaster II 90	2.69
TDK AD C90	2.45	Ampev Grandmaster II 90	3.09
TDK D C90	1.59	Discwasher Complete System	10.49
TDK SA C60	2.15	Soundguard Record Pres Kit	4.59
BASF Pro II IC 90	2.79	TDK L 1800	5.13
BASF Pro II or IIC 90	2.89	TDK LB 1800	6.31
BASF Studio I or IIC 90	2.59	Ampev Grandmaster 1800 R. Reel	5.95
Scotch Master II or IIC 90	3.15	Scotch 207 7R 1800	5.09
Scotch Master IC 90	2.69	BASF Studio 1800 H. Reel	6.49

All tapes can be assorted. No minimum order. Shipping 3.00 per order. Or write for free catalog of over 250 products, including lowest prices in US on complete line of Maxell products. All tapes 100% guaranteed. 412-283-8621.

TAPE WORLD 270 Spring St. Butler, PA 16001

CLASSICAL RECORDINGS FOR COLLECTORS. LISTS, SEND \$1.00. ARS MUSICA, 13 Dante St., Larchmont, N.Y. 10438.

VIENNESE LIGHT MUSIC SOCIETY—Strauss, Lanner, etc. on Dolby Cassettes, KC Company, Box 793, Augusta, Maine 04330.

BASF TAPE: Largest discounts, fastest service. All tapes guaranteed! INTERGALACTIC ENTERPRISES, 1789 Carr, Troy, Michigan 48098.

BARGAINS! RECORDS, TAPES: blank, prerecorded. CLOSE-OUT PRICES! Catalog \$1.00 (refundable). Tower, Box 12, Lewes, Del. 19958.

OPEN REEL TAPES. Top Quality. 100% money-back guarantee. Major labels. Classical, pop, rock, quad—direct disk & video. Bank cards accepted. Catalog/order information, \$1. No other fees, obligations. THE REEL SOCIETY, P.O. Box 55099-H, Valencia, CA 91355.

LIVE OPERA ON REEL/CASSETTE. THOUSANDS OF PERFORMANCES, WORLDWIDE SINCE 1930's. The ONLY service that provides the personal attention demanded by the Vocal Art. Free Gifts, Magnificent Free Catalogue. LIVE OPERA, Box 3141, Steinway Station, L.I.C., N.Y. 11103.

RECORD HOUND, Box 88H, Eagleville, PA 19408. Fills want lists? Doggone right!!! 33 1/3 specialist. Fast, friendly service.

FREE CLASSICAL CASSETTE WITH EVERY TWO PURCHASED!... FREE CATALOG—EKR Classics, GPO BOX 1977HI, NYC 10001.

SCHUBERT/DYER-BENNET. The splendid Tully Hall performance of the Dyer-Bennet translation of "Schone Mullerin" (Characterized by Andrew Porter as "A Schone Mullerin" which came to life!) now available in a meticulously produced studio recording (stereo—two discs) directly from Dyer-Bennet records, Monterey Stage, Great Barrington, MA 01230. \$17.50 postpaid.

FREE CATALOG LP'S. FACTORY SEALED \$2.50 to \$4.00. Modern Designs, 1731 N.E. 51st St., Pompano Beach, Fla. 33064.

OPERA AND CLASSICAL RECORDS NEW SHIPMENT imported from Russia. Melodia. Free Catalog. Znanie, 5237 Geary Blvd., San Francisco, Ca. 94118.

SUPER-FI RECORDS! All types, labels. Catalog \$1. COSMIC CHORDS PO Box 4873 Boulder, Colo 80306.

UNIQUE RECORD KEEPING FOR YOUR HOME RECORDINGS. SEND SASE FOR FREE SAMPLES. AUDIOCO, DEPT. HF7, 11 CHURCH ST., BOSTON, MASS 02116

CUT-OUT RECORDS, HUGE STOCK. ALL NEW! No catalog. Cohn 2205 Maryland, Broomall, Pa. 19008.

SAVE! ORDER MINIMUM 20 BLANK TAPES—CUT any current advertised price 5c. 100% guaranteed. Add \$2.50 shipping. Similar savings on car stereos. TAPESHACK, 864 East 7th Street, Brooklyn, NY 11230.

SOUNDTRACK, ORIGINAL CAST, PERSONALITY LP'S. LARGE free catalog includes out of print and imports at discount prices. STAR 219, Box 7, Quarryville, PA 17566.

ON OPEN REEL from master tapes. Argo, Telefunken, Vanguard, Unicorn, MHS. Catalogue \$1.00. Barclay-Crocker, Room 1470-H, 11 Broadway, NYC 10004.

RARE OUT-OF-PRINT LPs. Factory Sealed—Over 25,000 in stock. List-\$1.00 Record Warehouse, Box 4617, Rochester, New York 14613.

SOUNDTRACKS, Shows, Personalities. Good prices and auction. FREE LIST. Bothy Press, Music Department, 320 East New Street, Lancaster, PA 17602.

BACH—SAINT MATTHEW PASSION conducted by RALPH VAUGHAN WILLIAMS \$21.94 plus 50c postage. Cavlar, Box 391 Station "Z", Toronto M5N 2Z5 Canada.

SHOWS/SOUNDTRACKS: Out-of-print rarities; plus imports. Cheshire Records, Box 8344, Van Nuys, California 91409.

**BUSINESS OPPORTUNITIES**

CABLE FM BROADCASTING: Unique no investment/experience business. Home operation possible. Excellent income. "CAFM," Box 130-D-7, Paradise, CA 95969.

**PUBLICATIONS**

THE BLIND AND OTHER PHYSICALLY HANDICAPPED can know the joy of reading over 50 outstanding periodicals, completely free of charge. Write CHOICE MAGAZINE LISTENING, Dept. HFC, Box 10, Port Washington, NY 11050 or call 516-883-8280.

OPERA LOVERS, obtain all Puccini's operas world premieres and Met premieres leading roles original casts. Find out who, where, when. Send \$2.00 to OPEREC, Box 36154, Houston, Texas 77036.

TERRIFIC EQUIPMENT SWAPS NATIONWIDE! 5 issues \$2. "Electronics Trader", Box 73-HF, Folly Beach, SC 29439.

**EMPLOYMENT**

ELECTRONICS ENGINEER—requires experience in servicing audio equipment, tape recorders, receivers, turntables, amplifiers, etc. Excellent company benefits and salary. Send resume including salary history/requirements to: Denise Johnson, National Public Radio, 2025 "M" Street N.W., Washington, D.C. 20036. AA/EOE.

**Classified Dept., HIGH FIDELITY,  
130 East 59th Street, New York, NY 10022  
Telephone: 212-826-8393**

Name \_\_\_\_\_

Address \_\_\_\_\_

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

Telephone \_\_\_\_\_

Payment enclosed \$ \_\_\_\_\_ for \_\_\_\_\_ issues,  Check  M.O.

MASTERCHARGE  VISA Card # \_\_\_\_\_ Expiration \_\_\_\_\_

Bank # \_\_\_\_\_ Signature \_\_\_\_\_

Please run following ad copy for \_\_\_\_\_ issues starting next available

issue: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## For Musicassettes: Two Leaps Forward

by R. D. Darrell

### Technological progress:

#### I. First super-chromes.

After years of slow, however steady, musicassette advances, we suddenly have double leaps ahead. One is the first challenge to the five-year pre-eminence of Advent's deluxe chrome-based tapings: the new Connoisseur Society/In-Sync Laboratory series using just-developed super-chrome tape (BASF Pro II, duPont Crolyn II), 70-microsecond equalization, and 15-ips masters custom-duplicated by Julius Konins' Cassette Productions, Inc. The initial release consists of eight cassettes, listing at \$10.98 each, with program notes on mail request.

An ideal introduction to the series is Ivan Moravec's 1970 Chopin program (C 4007—with its earlier Scherzo No. 1 replaced by the pianist's Ballade No. 1). Always outstanding for the superb recording of its beautiful Bösendorfer piano tone, it's now arrestingly transformed into the very epiphany of home-reproduced pianism.

Super-chrome's potential is most evident in an expanded dynamic range, with thrilling "bite" and weight. These advantages are dramatically present in the Connoisseur/In-Sync release of Rachmaninoff's four piano concertos, plus filler solos, starring the young French virtuoso Jean-Philippe Collard with Toulouse's Orchestre du Capitole under Michel Plasson (C 4001 through 4004). The individual readings face formidable competition, at least in Nos. 2 and 3, and the competent but reticent accompaniments reflect none of the soloist's distinctive individuality. But for realistic piano/orchestral thunders, floor-shaking solidities, and clarion "ring," I doubt that any nonpro audiophile has ever heard before, at home, anything to match what he can hear here. I'm looking forward to the three other debut programs on hand and the many more releases to come. Yet I'm not going to neglect the pioneering Advents, still unsurpassed in their approximation of Dolby reels' elimination of surface noise.

#### II. First digital-recording cassette.

Practically stop-press news is the path-breaking cassette edition of a digitally recorded program: the live 1979 New Year's Concert by Willy Boskovsky and the Vienna Philharmonic (London LDR5 10001/2, \$19.96), which proudly proclaims that the latest audio advances aren't exclusive to discs. The sonics are indeed astonishing: as lucidly authentic and almost as dynamically far-ranging as in the best direct-to-disc releases, but also with some of the most spectacular impacts yet (the explosive gunshots in *Auf der Jagd*) and most fire-crackling transients (the shattering audience applause after every selection and the final *Radetzky* March clapping-along).

Straussians may be incompletely enraptured, however, for Boskovsky is uninhibitedly extraverted and vehement—fine for the nine high-voltage Strauss family polkas, less so for their five (and Ziehrer's one) waltzes. And *Wine, Women, and Song* is unforgivably bereft of its long poetic introduction. But audiophiles' delight will be unalloyed—except, perhaps, by regrets that the further advantages of super-chrome aren't exploited here and by the sobering remembrance that the full potentials of digital recording remain unrealizable until digital playback means for both tape and disc become a reality.

#### More opera-box choices.

The problems of choosing among competitive new and old complete-opera musicassette sets and of shelving their variously sized boxes continue to proliferate. At least we have the luxury of choices! New releases are appearing so fast that it's impossible to keep up with them in detail. But since they've all been extensively reviewed recently in their disc editions, here is some brief consideration of the factors of most interest to tape collectors.

Quite different appeals determine the choice between two new Verdi *Ottellos*. London's square-box set (OSA5 13130, \$26.94), with Margaret Price, is in general attractively performed, vividly recorded, and well processed, but there is little sense of personal involvement even by conductor Georg Solti. The RCA Red Seal version (CRK 3-2951, \$26.98) features warmer, less close recording, a more convincingly dramatic interpretation—by Renata Scottò and conductor James Levine in particular. The large-size box may be a disadvantage, but among the set's other attractions is a decided improvement in RCA's previously erratic Dolby quieting of surface

noise. (This advance is also evident in other recent Red Seal cassettes.)

Even more sharply differentiated are the period-instrument version of Handel's delectable dramatic serenata, *Acis and Galatea* (Archiv 3375 004, \$17.96), and one for modern instrumental forces (Argo K114K 22, \$17.96). The former uses the original (c. 1718) Chandos edition, the latter the first published score (1743). The Archiv singers and very small ensemble are lightly, closely recorded; the Argo set boasts more pellucid sonics, and the Neville Marriner/St. Martin's Academy performance is far more satisfactorily Handelian than the less idiomatic, less skillful one by John Eliot Gardiner and his English Baroque Soloists. Both tapings are admirably processed.

Three other complete operas compete only with long-established versions. They enjoy the advantages of newer recording and tape-processing techniques, but since they can't begin to supersede their most illustrious predecessors, they will appeal most strongly to devotees of the singers and conductors involved. In Columbia's first big (disc-size) opera box (M3T 35181, \$23.98), Puccini's *Madama Butterfly*, Scotto and Plácido Domingo are the stars—the former even more dramatically moving than in her 1966 Angel recording—and Lorin Maazel is the rather impersonally straightforward conductor.

In the other Puccini opera, *Turandot* (Angel big-box 4X3X 3857, \$24.98), Montserrat Caballé switches from Liù (which she recorded for London) to the title role, and Alain Lombard is another somewhat impersonal, though skillful, conductor. But here the star is vocally less outstanding than others in the cast, notably Mirella Freni (Liù) and José Carreras (Calaf), while the prime attraction well may be the admirably processed, vivid recorded sound.

In Angel's Richard Strauss *Salome*, conducted by Herbert von Karajan (4X2X 3848, \$16.98), similarly fine processing captures the warmer but curiously veiled sound of superb Vienna Philharmonic playing. Vocally, José van Dam's Jokanaan is magisterial; while Hildegard Behrens is a remarkably provocative *Salome*, she lacks the dramatic power of Birgit Nilsson in the still matchless 1961 London version, now available in a boxed cassette edition (OSA5 1218), as are a number of other London operatic triumphs, including the Mozart *Marriage of Figaro* conducted by Erich Kleiber (OSA5 1402) and the *Magic Flute* conducted by Solti (OSA5 1397). **HF**

## ADVERTISING INDEX

For free product literature, use the reader service card on page 93

Key No.		Page No.
59	ADC Professional Products, a div. of BSR Consumer Products	91
60	ADC Professional Products, a div. of BSR Professional Products	120
	Advent Corp.	105
	Akai America Ltd.	65
1	Alpine Electronics of America, Inc.	66
2	Angel Records	137
3	Audio Directions	16
4	Audio Technica U.S. Inc.	4
5	Audio Technica U.S. Inc. Avid Corp.	100
		77
6	B & F Enterprises	151
7	B & W Loudspeakers	79
	Bose Corp.	8, 9
8	Burns Audioelectronics, Inc.	101
	Classified Ads	154, 155
10	DBX, Inc.	113
11	Discount Music Club	146
	Discwasher, Inc.	17-23
12	District Sound	153
	Dual	10
13	Electro-Voice, Inc.	108
	Empire Scientific Corp.	38
14	Fisher Corp.	78
15	47th Street Photo	146
16	Fujitsu Ten Corp. of America	149
17	Hi Fi Buys	152
	High Fidelity	110
	High Fidelity's Test Reports	133
18	Hitachi Sales	29
19	Icelandic Airlines	153
20	Illinois Audio	152
21	Infinity Systems, Inc.	82
	Institute of High Fidelity, Inc.	109
22	International Hi Fi	150
	Jensen Sound Laboratories	26, 27
23	J & R Music World	96
24	JVC America, Inc.	36, 37
	Kenwood	Cover IV
	Lux Audio of America	75
25	Mattres Industries Inc.	11
26	Maxell Corp.	35
27	McIntosh Laboratory	98
28	Memorex Corp.	15
29	Mitsubishi Audio Systems	106, 107
30	Mitsubishi Car Audio	97
	Nikko Audio	88
31	Ohm Acoustics	87
32	Onkyo	92
33	Park Row Electronics	156
34	Penney, J.C.	61
35	Phase Linear	47
58	Phase Research	143
36	Pioneer Electronics of America	30, 31
37	Pioneer High Fidelity	Cover II, 1
	Radio Shack	99
38	Rank Hi Fi	32
	Sams, & Co., Inc., Howard W.	45
39	Sansui Electronics Corp.	40-43
40	Sanyo Electric	24
	Schwann Artst Issue	139
41	Scott, H. H., Inc.	111
42	Series 20	141
43	Shure Brothers, Inc.	84
44	Shure Brothers, Inc.	85
57	Sonikit	150
45	Sony Corp. of America	7
46	Sound Guard	147
12	Sound Reproduction	153
47	Sparkomatic	81
	Speakerlab	148
48	Stanton Magnetics	2
49	Stereo Corp.	148
	Stereo Discounters	33
50	TDK Electronics	12, 13
51	Teac Corp.	Cover III
52	Technics by Panasonic	5
	3M Company	33
53	Top Discount Audio	151
54	Toshiba America	71
55	Transcriber Co. Inc.	69
	United Audio Products	10
56	Wisconsin Discount Stereo	112
	Wyeth Press	112
	Yamaha Audio	114

## 158 CLASSICAL

three records) that fact is likely to escape the notice of many listeners and consequently diminish for them the impact of Berganza's skill. Her secure vocalism and elegant style will not, however, escape attention.

Carreras is a more generalized performer. What carries him through both his recitals is not the gift of musical illumination, but simply the full, rich sound of his middle range. (His upper and lower ranges are less effective, the former showing a tendency to spread, and the latter being distinctly sketchy.) His zarzuela disc, though lacking in variety, is more personal, and thus more interesting, than his Philips song recital, which is less a performance than a tribute to the vocal manner of Giuseppe di Stefano, whose records Carreras evidently admires inordinately.

Unfortunately, what served Di Stefano so well does not serve the younger tenor, who here sounds pushy and heavy-handed most of the time. The charm of Tosti's "Malia" cannot survive such unrelentingly high-powered treatment. Neither can "Dein ist mein ganzes Herz." Apart from "Malia," "Granada," and the odious "Be My Love," the other songs are all twentieth-century Neapolitan *canzoni* and highly enjoyable when sung with intimacy and a certain gracefulness.

The orchestral accompaniments on Carreras' song disc are all souped up in Hollywood soundtrack style; those on the zarzuela recitals are authentic. The Spanish discs are well recorded, but the Philips disc is rather overbearing. All the pressings are first-rate. D.S.H.

**BENIAMINO GIGLI:** Various recordings—For a feature review, see page 128.

### RALPH SAUER: Trombone Recital.

Ralph Sauer, trombone; Thomas Stevens, trumpet; Zita Carno, piano. [Jeffrey Reynolds, prod.] CRYSTAL 5384, \$7.98.

TELEMANN: Fantasies: No. 4, in A minor; No. 5, in A. HAYDN: Concerto for Horn and Orchestra, No. 1: first movement (arr. trombone and piano). SEROCCI: Sonatina for Trombone and Piano. BORDEN: Six Dialogues for Trombone and Trumpet. LARSSON: Concertino, Op. 45, No. 7.

As the son of a semipro trombonist, I'm congenitally biased in my admiration of the—for me—noblest of all orchestral instruments. And if common sense dictates the restriction of my commendation of the present program to specialists and similarly biased listeners, at least I can assure them that this disc is well worth their attention.

Sauer, a Philadelphian now in his mid-thirties, has been co-principal trombonist of the Los Angeles Philharmonic since 1974, commands a robust, well-controlled, and varied tone, plays forthrightly with obvious relish, and is admirably free from stylistic mannerisms. Moreover he is well recorded—not too closely miked, in good balance with his collaborators, pianist Zita Carno and, in the Borden *Dialogues*, his Philharmonic colleague, trumpeter Thomas Stevens.

## HIGH FIDELITY

The music is well chosen for both variety and idiomatic effectiveness. Even the unaccompanied Telemann fantasies survive their sex change from feminine flute to masculine trombone. The three modern works are all well crafted and more than that in the case of Kazimierz Serocki's witty sonatina and Lars-Erik Larsson's eloquent concertino. R.D.D.

### EDWARD TARR and GEORGE KENT: Baroque Masterpieces for Trumpet and Organ, Vol. 3.

Edward Tarr and Marc Ullrich, baroque trumpets; George Kent, organ; Anne Apostle, cello. [Hellmuth Kolbe, prod.] NONESUCH H 71356, \$4.96.

ANON. (Torelli school): Sinfonia for Two Trumpets and Continuo, in D. FANTINI: Sonatas for Trumpet and Organ: No. 1, in C (*della del Colloredo*); No. 2, in C (*della del Gonzaga*); No. 7, in C (*della del Vitelli*). TARR (ed.): Suite of Trumpet Voluntaries, in C (Stanley, Stubley, Handel, Boyce). CLARKE: English Suite for Trumpet and Organ, in C. KREBS: Chorale Preludes: No. 2, *Wachet auf*; No. 5, *Komm', heiliger Geist, Herre Gott*. PEZEL: Sonatinas for Two Trumpets and Continuo: No. 4, in C; No. 5, in C. BARRETT: Voluntary for Two Trumpets and Organ in C.

The mere announcement of this release is all that's needed for everyone who has treasured the two earlier volumes in this series (H 71279, August 1973, and H 71290, July 1974).

This program is especially distinctive as the first by Tarr and Kent to use natural trumpets exclusively: a period instrument by Johann Leonard Ehe II (1663-1724) in the Clarke suite, a Meinl & Lauber replica of a 1746 instrument by Johann Leonard Ehe III in all the other works—including the second Krebs chorale prelude, for which it is adapted as a slide trumpet. The French recording locale—the Temple St. Jean in Mulhouse—not only is superb acoustically, but boasts a fine organ, a 1972 Alfred Kern reconstruction of a 1764 Silbermann instrument. As in the earlier releases, Tarr's informative jacket notes are augmented by complete details of the musical sources and editions, the instruments, and the stop specifications of the organ as it now exists, tuned to A = 420.

The new program is as imaginatively representative as its predecessors, concentrating on but not confined to trumpet/organ and trumpet/continuo originals, and including "trumpet voluntaries" written for organ-only but featuring that instrument's "trumpet" stops. The Fantini sonatas and Pezel sonatinas here complete the series begun earlier; the Krebs *Wachet auf* is a companion setting of two earlier ones; and as usual there is one trumpet-less organ solo—here only the brief *Rather Slow than Fast* by Boyce. As usual too there is novelty, the noble Voluntary in C by the English composer John Barrett (c. 1674-1735), a pupil of the more famous John Blow, whose skills are suggested by the fact that this work was long attributed to Purcell.

Better performances and more authentic recordings than these may be barely imaginable, but I don't expect ever to hear them actually achieved. R.D.D.

# WE'VE GOT THE GUTS.

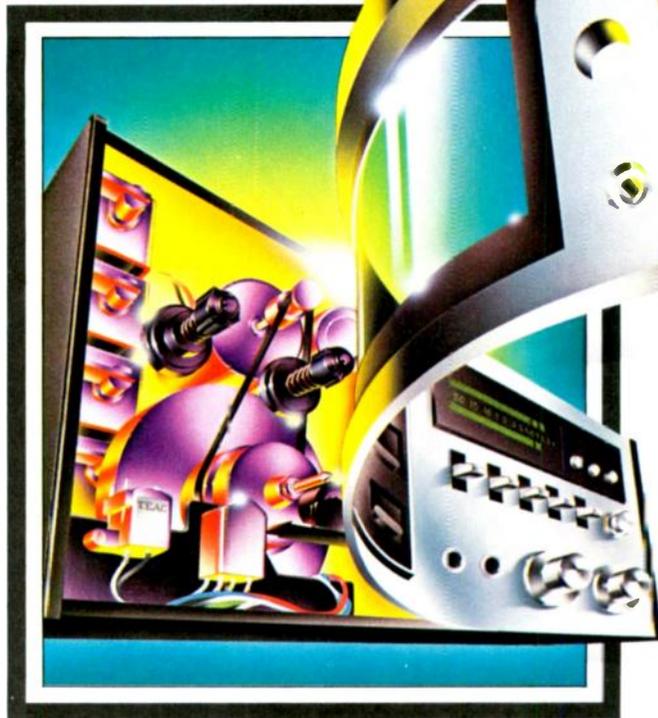
Look inside any tape recorder and you'll find the parts that really matter. The parts that define the ultimate quality of your sound. The transport mechanism.

Transports must work in a world of micro-tolerances. A millionth of an inch error can ruin your audio quality. Because when the transport errs, no amount of electronic wizardry can replace the lost fidelity.

Consider the TEAC transport. Capstans formed on computer-controlled lathes and perfected on industrial micro-grinders. Massive flywheels, inertially balanced. Solenoids typically twice the size and power of those used in other decks. Belts that are tested for dimensional stability under the most severe temperature, humidity and atmospheric conditions.

The results of this specialized design and manufacturing technology are unusually high levels of accuracy, stability and durability. Proven qualities that make a TEAC sound better initially and maintain its sonic integrity after years of use.

Often, to reach these performance criteria, we've found current state-of-the-art con-



cepts lacking. So through the years, we've introduced new technologies.

Like the first cassette deck with integral Dolby\* noise reduction in 1971. And the first cassette transport to break the 0.1% wow & flutter barrier in 1973. Designs that helped make the cassette deck a respectable high fidelity component.

Today, we're producing cassette components with instrumentation drive systems. Mechanisms taken right out of our own data recorders. These transports are

built to withstand continuous read/write use in computer installations. Where megadollars are at stake. And reliability is everything.

Soon you'll see the first popularly priced cassette decks with integral dbx\*\* noise elimination. Originally designed for open reel recorders in professional recording studios, the dbx system gives you sound so quiet, so noise-free, it's scary.

Twenty-five years of specialization has taught us that design balance is critical for quality

sound reproduction. So you'll find that balance in every TEAC.

The proof is in the results. That's why more professional recordists rely on TEAC machines than any other make in the world.

So next time you're distracted by an Astro-this, Fluoro-that or Spectro-something else, remember: a tape recorder is a machine.

How well it works depends on how well it's made.

Look into a TEAC, and you'll find that we've got the guts. To show you what's

inside. To let you evaluate our performance. To make you the final judge.

To us, it's a matter of craftsmanship. To you, a matter of decision. Because when you peel away the bells and whistles, you find the real measure of every tape recorder. Especially ours.

For more information, see your TEAC Audio dealer.

Or write us at Dept. HF-7.

\*Dolby is a registered trademark of Dolby Laboratories

\*\*dbx is a registered trademark of dbx inc

## TEAC

# THE LUMBER-CORE BAFFLE BOARD: REDUCES SPEAKER DISTORTION.

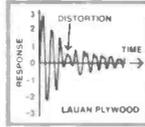
The baffle board in any speaker system is what transfers the acoustic energy (sound waves) to the air and to your ears.

In fact, it's the most critical part of cabinet construction. Like the sounding board in a grand piano, the wood used in a speaker can seriously affect the way music sounds.

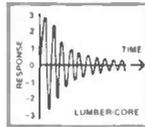
To get the music sounding best, Kenwood laminates five layers of wood around a Shina lumber-core. The result is a very rigid baffle board that produces no vibration of its own to interfere with the music. That means less speaker distortion.

You'll hear the difference as music that sounds more *accurate*. With a solid, tight bass. A midrange without coloration. And high frequencies that are crisp and clear right up to the highest violin overtones.

That's because every part of every Kenwood LS-Series B speaker is designed from scratch—from the composition of the rigid, lightweight



Typical response of damped acoustical radiation using plywood baffle board.



Typical response of damped acoustical radiation using Kenwood lumber-core baffle board.

speaker cones, to the unitized tweeter construction, to the exclusive lumber-core baffle board.

Since speaker systems are the most personal of any high fidelity component, you should really hear them for yourself. Your Kenwood dealer has a complete line of LS-Series B speakers to match your specific listening requirements.

After all, if you want your speaker's *performance* to be as good as your receiver's, choose the speaker with a *reputation* as good as your receiver's.

## LUMBER-CORE BAFFLE BOARD

Hear the future of high fidelity.



# KENWOOD

For the dealer nearest you, see your Yellow Pages, or write Kenwood, P.O. Box 6213, Carson, CA 90749. In Canada: Magnasonic Canada, Ltd.

