

# HIGH FIDELITY

ICD 08398

## Microcomponents

**Expensive Toys or  
Pint-Sized Prodigies?  
First Lab Tests of  
Five New Units  
from Technics,  
Mitsubishi,  
& Infinity**

**Plus...  
a (full-size) \$400  
high-performance  
receiver from  
Yamaha**



Your  
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37 CLINTON ST  
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13820



# ONCE BUILT IT SOONER.

## ED, DUAL CAPSTAN CASSETTE DECK THAT OFFERS E-DOLBY, A DIGITAL BRAIN AND BIASING BY EAR.

control what you monitor.

The CT-F900 allows you to bias by ear. Which means you have almost as much control over your tape deck as you would over any other musical instrument.

By simply switching between the Source and Tape monitors and adjusting your bias monitors, you can make sure that what comes out of your cassette deck is as clean and crisp as what went into it.

### FEATURES OTHERS DON'T EVEN OFFER.

These are just a few of the features that will soon change the face of all

cassette decks. The CT-F900 also offers features like a double Dolby® noise reduction system that eliminates noise in both record monitoring and playback. And reduces tape hiss to -64 dB. Solenoid push button controls that give you direct function switching so you can go directly from one mode to another without damaging the tape. A two motor, dual capstan drive system that gives you stable head contact, constant tape movement, and an inaudible 0.04% wow and flutter. And circuitry that lets you hook the CT-F900 to an external timer so you can make recordings even when you're not there.

Obviously, all that went into the

CT-F900 sounds impressive. But it's not half as impressive as what comes out of it.

Given all this, it's not surprising that sooner or later all cassette decks will be built along the lines of the CT-F900.

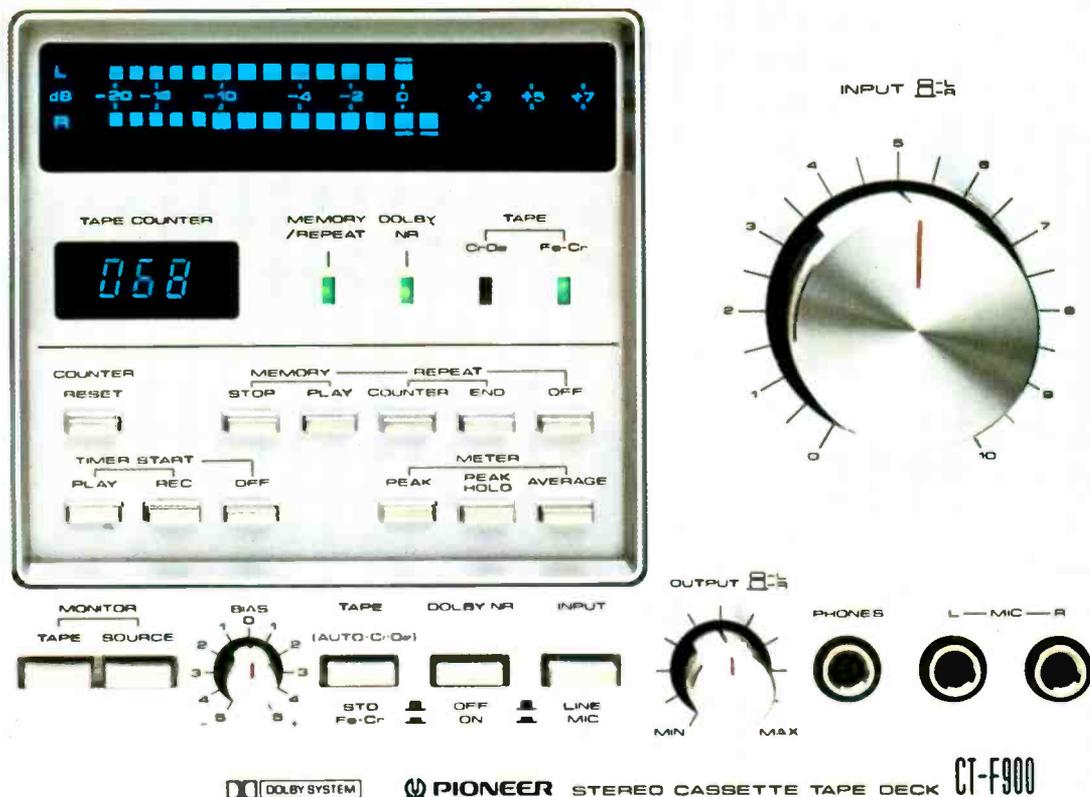
But even then there will be that fine line that has always separated Pioneer from the competition.

Value.

**PIONEER®**  
We bring it back alive.

©1978 U.S. Pioneer Electronics Corp.,  
High Fidelity Components,  
85 Oxford Drive, Moonachie, N.J. 07074

Wood cabinet  
optional



SOONER OR LATER,  
ALL CASSETTE DECKS  
WILL BE BUILT  
ALONG THESE LINES.

Innovation is nothing new to Pioneer. We were the first to introduce the high power receiver. Sooner or later everyone followed.

We were the first to create the front loading cassette deck. And the first with a quartz lock loop turntable that was as easy on the budget as it was on the ear. Again, our competition had no alternative but to follow.

So now that Pioneer introduces the CT-F900, we expect that soon there'll be a few rushed-through imitations that have our look. But not our value.

This is no small coincidence. And it's nothing we're unaccustomed to. It's a simple case of follow the leader.

### A METERING SYSTEM AS FAST AS THE SPEED OF SOUND.

Conventional cassette decks are all plagued with the same problem. Either they have slow to react VU meters that give you average readings or slightly more advanced LED's that give you limited resolution.

Pioneer offers a better resolution. A Fluroscan metering system that's so fast and so precise, it provides a more accurate picture of what you're listening to.

It covers the range of -20 dB to +7 dB in 20 easy-to-read calibrations. And while other meters may work within that same range, in terms of precision they're not even in the same neighborhood.

The CT-F900 has a Peak Button that lets you register all the peaks in the incoming signal. And lets you register an unheard of level of harmonic distortion. Less than 1.3%.

A Peak Hold Button that retains the highest peak level in each channel. So you can record at the highest level possible without fear of overload.

And an Average Button that makes the Fluroscan meter respond like an ordinary level meter.

### A DIGITAL BRAIN WITH AN INCREDIBLE MEMORY.

All cassette decks have tape counters. Even the most respectable ones have mechanical counters you can't really count on.

Pioneer's designed the most precise electronic way of keeping track of your tracks.

As the take up reel rotates, pulses are fed to a microprocessor which provides a three digit readout on an electronic tape counter.

The terminology may be difficult to understand, but the benefit of all this is simple. Precision. Dependability. And convenience.

Many of these "better" cassette decks also claim they have advanced memories. But there are functions that even the best of them haven't been programmed to remember.

The CT-F900 has the first electronic memory of its kind that performs four different functions.

Memory Stop automatically stops the tape wherever you select. Memory

# ONCE AGAIN, PIONEER

## THE CT-F900. THE FIRST 3-HEAD FLUROSCAN METERING, DOUBLE

Play rewinds the tape to this spot and then automatically goes into the play mode. Counter Repeat rewinds the cassette when the end of the tape is reached. Then begins replaying the tape wherever you want it to begin. End Repeat automatically rewinds the tape. And then replays it from the beginning for endless listening.

### WE'RE HARD HEADED, BUT SENSITIVE.

Every audiophile will agree that to achieve professional quality recording, three heads are better than two.

And while you can expect three heads from most reputable cassette

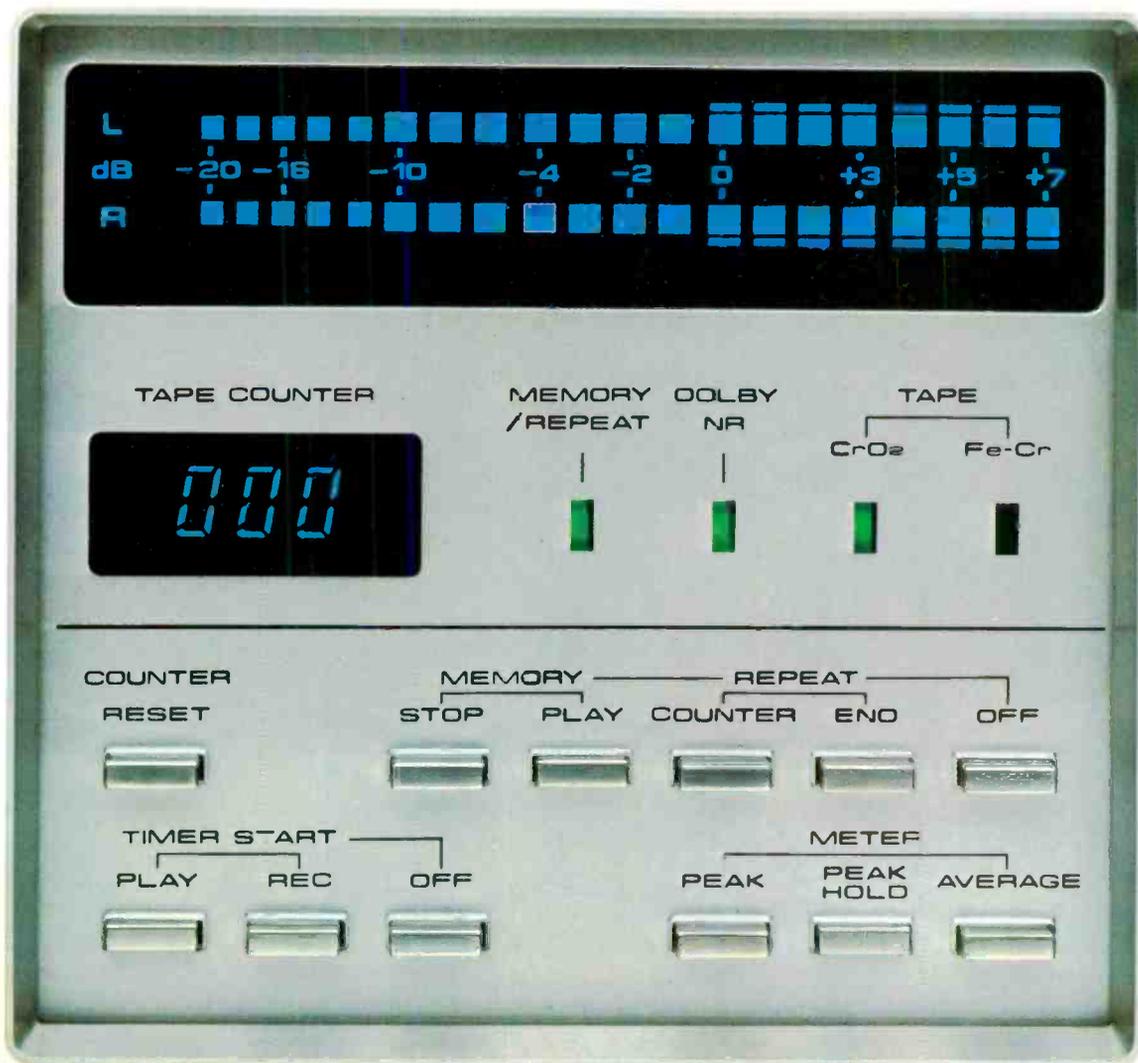
decks, you can also expect that they're either made of ferrite or permalloy.

The CT-F900 has recording and playback heads made of a newly developed Sendust Alloy. This remarkable bit of technology gives you higher frequency response (20-19,000 Hz.) and lower distortion than ferrite. And better wear-resistance than permalloy.

### BIASING BY THE MOST SOPHISTICATED AUDIO EQUIPMENT KNOWN TO MAN. HIS EAR.

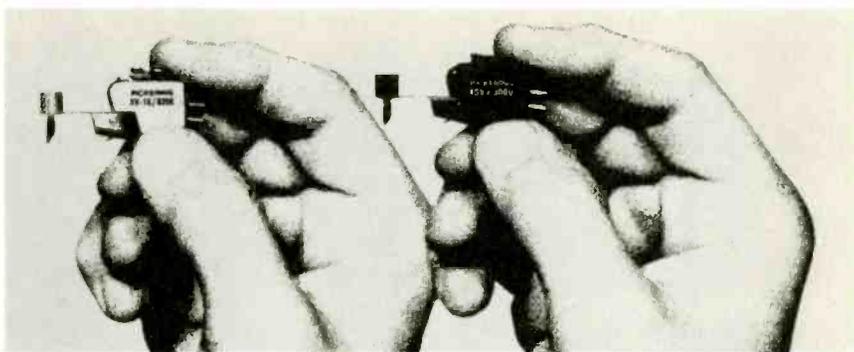
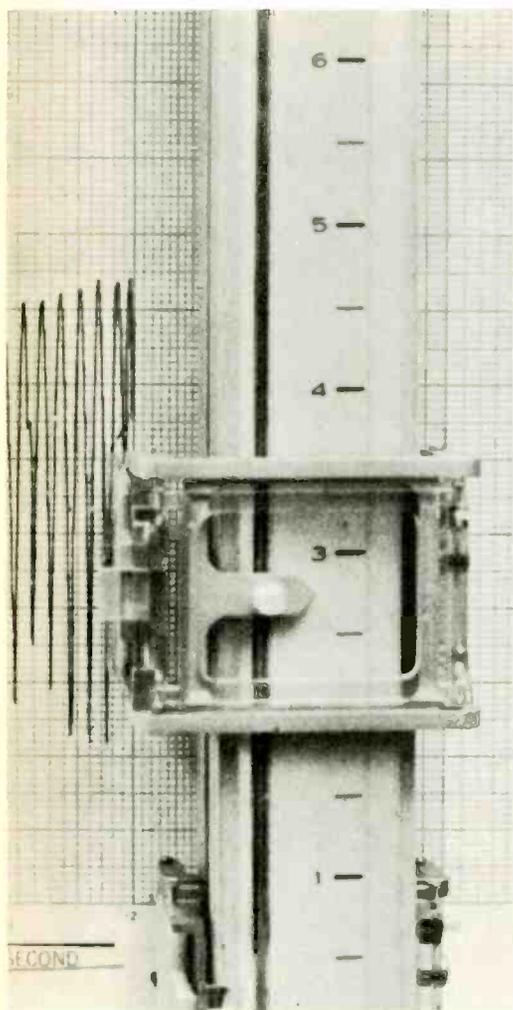
While many of today's "equipped" cassette decks let you monitor during recording, what they don't do is let you



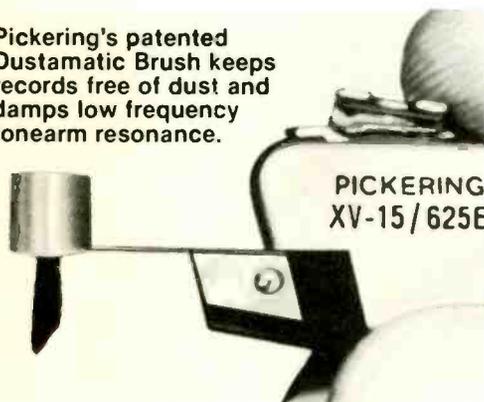


Only the most sophisticated research and development in this industry could create

# Two sources of perfection in stereo sound!



Pickering's patented Dustomatic Brush keeps records free of dust and damps low frequency tonearm resonance.



It takes real effort and skill to become the acknowledged leader in the industry, and even more to stay ahead.

Pictured above are just a few of the advanced electronic devices that Pickering employs in product research and custom-designed development. At left above, the XY plotter on Pickering's Real Time Analyzer and, at the right above, Pickering's remarkable Scanning Electronic Beam Microscope capable of 160,000 times magnification.

Pickering's engineering department is responsible for creating these two outstanding cartridges that, as one reviewer stated: "The XV-15/625E offers performance per dollar; the XSV/3000 higher absolute performance level."

Both the XSV/3000 with its trademarked Stereohedron Stylus tip for the least record wear and the longest stylus life achievable so far... and the XV-15/625E... represent best buys at their price levels. Audition them today at your Pickering Dealer.

 **PICKERING**

"for those who can hear the difference"

For further information write to Pickering & Co., Inc., Dept. HF, 101 Sunnyside Blvd., Plainview, N.Y. 11803

# HIGH FIDELITY

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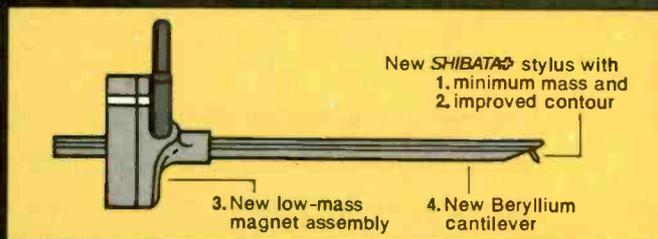
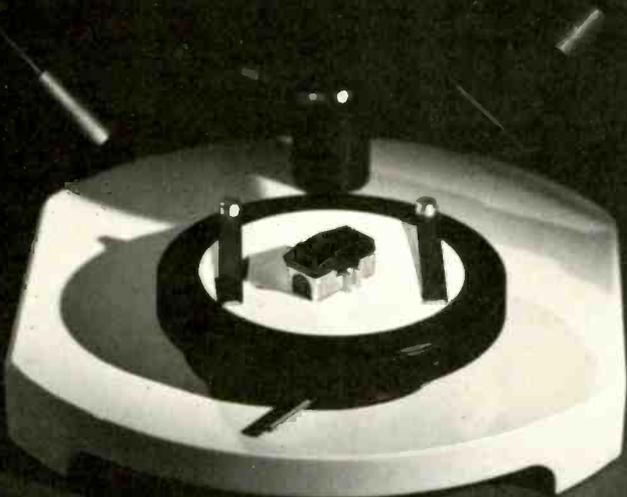
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# Announcing four tiny advances with room-filling benefits!



In the tiny world of the stereo cartridge, microscopic differences in dimensions are all-important. Which is why the extremely low moving mass of the new AT15SS is a major achievement in stereo technology.

For instance, to the best of our knowledge our new stylus is the smallest whole diamond used in series production. In cross-section, it's 36% smaller than our best previous model. It is also nude-mounted to further reduce mass at the record surface. And the square-shank design insures exact alignment with groove modulations.

All this is so small you'll need a microscope like the one above used by many A-T dealers to see the details. If you look very closely you'll also see we've slightly revised the contour of the Shibata tip. The combination of minimum mass and new contour which we call Shibata+ offers outstanding stereo reproduction, especially of the latest high level recordings.

But there's more. Extremely low distortion results from a new ultra-rigid

Beryllium cantilever which transmits stylus movement without flexing. And flatter response plus better tracking is achieved by a new method of mounting our tiny Dual Magnets to further minimize moving mass.

Four tiny differences, yes. But listen to the new AT15SS or the hand-selected AT20SS for ultra-critical listening. You'll find out that less IS more. At your Audio-Technica dealer now.

Note: If you own a current AT15Sa or AT20SLa, you can simply replace your present stylus assembly with a new "SS" stylus assembly to bring your phono system up to date.



Model AT15SS  
\$200.00

Model AT20SS  
\$250.00

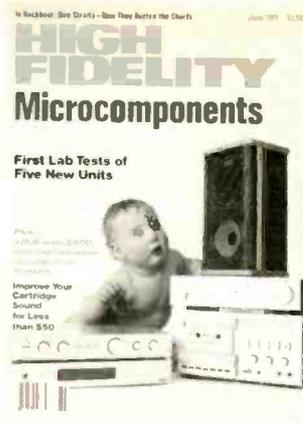


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INNOVATION □ PRECISION □ INTEGRITY

AUDIO-TECHNICA U.S., INC., Dept. 69H-1, 33 Shilawassee Avenue, Fairlawn, Ohio 44313

CIRCLE 5 ON PAGE 89



First Lab Tests of Five New Units

Improve Your Cartridge Sound for Less than \$50

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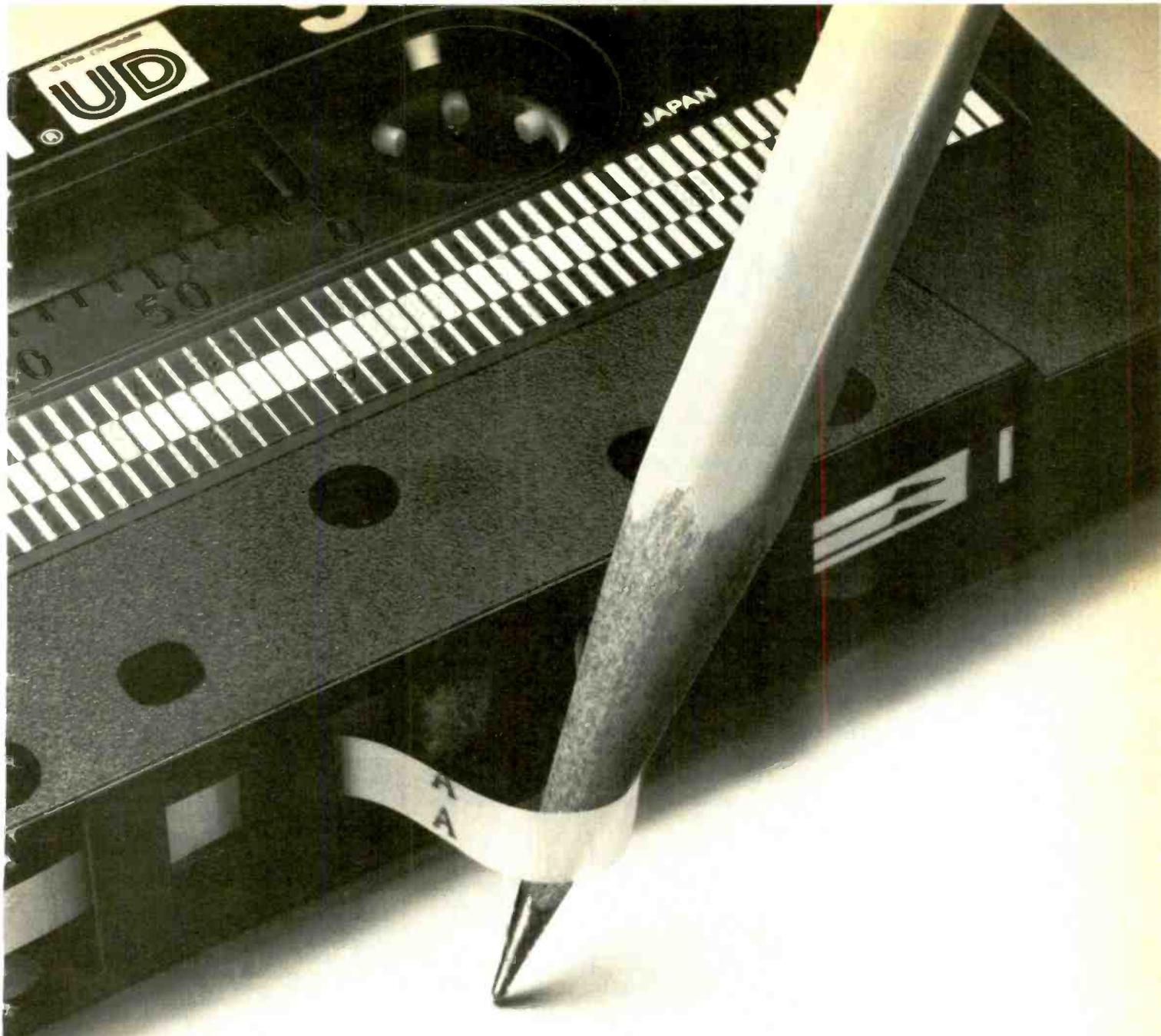
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# We put more thought into our leader than most manufacturers put into their tape.

One of the reasons Maxell has such a great following is because of our leader.

It has a built-in non-abrasive head cleaner designed to remove the oxide residue other tapes leave behind, without damaging your tape heads.

It also points out what side of the tape you're on (A or B) as well as which direction the tape is traveling. So it's almost impossible to make a mistake.

It even gives you a five second cueing mark, so you can set your recording

levels without wasting tape. Or time.

Obviously, all the thought that went into our leader was designed to help you get more out of our tape.

So if you think our leader sounds impressive, wait till you hear what follows it.

**maxell**



Maxell Corporation of America, 60 Oxford Drive, Manachie, N.J. 07074



# Enjoy Music More

If the recorded music you purchase and listen to is important in the way you enjoy life . . . you ought to know about a goldmine of helpful information for every record collector.

## Schwann Record & Tape Guide

is a compilation of information about records and tapes of many classifications. This wonderfully useful catalog uncovers titles you didn't know were available, helps you select versions by conductors and artists whose work you prefer . . . shows you money-saving reprints on budget labels . . . and much, much more.

More than 65,000 records and 8-track and cassette tapes are listed in the monthly *Schwann-1* and its semi-annual companion, *Schwann-2*. All are available through your record dealer if you ask for them by Schwann title and number. Schwann opens up rich rewards in your record collecting hobby. See your record dealer for latest copies.

**Schwann-1** Monthly. Lists the month's new releases in every category. Also nearly 45,000 available recordings on 702 record labels, 231 tape labels, 82 quadrasonic labels, in classical, recent popular, rock, jazz, musical shows, country, opera, ballet, electronic, etc. \$1.25 at your dealer's.

**Schwann-2** The semi-annual companion catalog for specialized categories: pop more than two years old, classic jazz, classical classics of the pre-stereo era, also the great re-issue catalogs; international pop & folk on domestic labels, spoken, educational, religious, etc. \$1.25 at your dealer's.

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If your favorite store doesn't carry Schwann, order samples by mail, but please try your dealer first. Prices include postage and handling.

- Latest Schwann-1 (monthly).....\$2.50
- Latest Schwann-2 (semi-annual).....\$2.50
- Combination Offer: latest Schwann-1 (monthly) and latest Schwann-2 (semi-annual).....\$4.50

- Basic Record Library booklet.  
Lists 1,000 suggestions in classical music by musical periods for your enjoyment. Send 50c for cost of handling and postage.

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**ABC Schwann Publications, Inc.**

2160 Patterson St., Cincinnati, OH 45214

HF

### COMING NEXT MONTH

July's HF will be a very special issue indeed—but we aren't going to tip our entire hand now. What we can tell you is that **SPEAKERS** are in the spotlight: Five of our equipment test reports center on this most idiosyncratic link in the audio chain, ranging from a midpriced bookshelf system from JBL to the Rogers LS3/5A, the current darling of the audio "underground" press, and for do-it-yourselfers a Speakerlab kit we built ourselves. There are **Ten Test Reports** in all in this special issue, including Harman Kardon's feature-laden HK-3500 cassette deck and receivers from Sherwood and Fisher. Our principal article asks the question **Is Your Listening Room in the Way of Your Speakers?** and tells you how to tell and what to do about it. Paul Henry Lang waxes revisionistic on **The "Authentic Performance" Shell Game**, too. In **BACKBEAT**, you learn **How Pros Fix the Disco Mix** and encounter **Steve Forbert on the Road to Rock-&-Roll Glory**. Reviews of Beniamino Gigli reissues, Bach-on-the-piano recordings, and a new version of Britten's **Peter Grimes** with Jon Vickers are lagniappe—but that's not all.

### SOLUTION TO HI-FI-CROSTIC NO. 43

JOHN BARBIROLI: [Introduction to Leslie Ayre.] *The Wit of Music*

Leeds had a charming old theatre, though primitive in its facilities: The ladies' toilet was just above the stage. When entombed, Radames sang the unaccompanied recitative, "Aida, where art thou now?," immediately the sonorous plug was vigorously pulled. I'm afraid the opera ended there.

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You're looking at three small sonic wonders that prove components no longer have to be big and bulky to sound big and beautiful. The Micro Series by Technics.

Take our power amp, the SE-C01. It has a high-speed switching power supply with filter capacitors that recharge 40,000 times a second instead of the usual 120. That's just one reason for the SE-C01's low distortion and clean, tight bass response. Direct coupling is another. With it, bass response goes all the way down to DC (0 Hz).

With an amplifier like this, you want power meters that measure up to it. 24 LED's provide true peak power indication with extremely fast attack time.

Another big surprise is the SU-C01 preamp. It's one preamp but it works like two. Because it has a built-in preamp for moving coil cartridges. It also has gold-plated connections to maximize signal transfer.

To add the finishing touch, there's the ST-C01 tuner. It gives you great FM specs and great FM sound. And that's a big achievement considering its small size.

It's also a breeze to tune. Instead of conventional separate tuning meters, the center-of-channel indicator is on the tuning dial, where it's easy to see. Two LED arrows point you in the right direction for fine tuning.

Experience the Micro Series. Once you do, you'll agree: The big thing about them is definitely not their small size.

# Technics micro series

SE-C01

Continuous power per channel into 8 ohms, 20 Hz - 20 kHz	Total Harmonic Distortion	Signal to Noise Ratio
40 watts	0.03%	110 dB

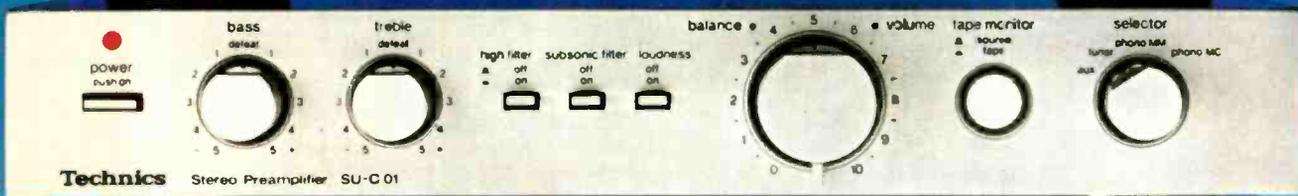
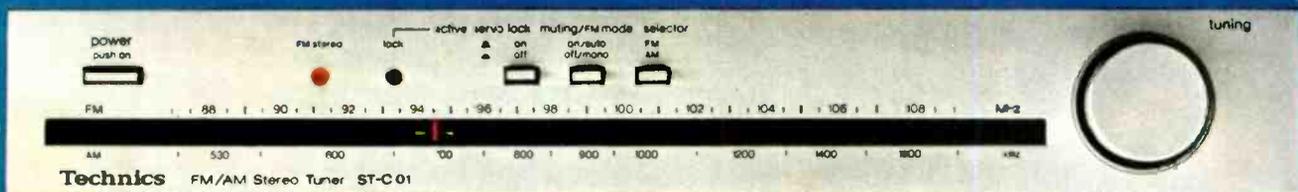
SU-C01

Total Harmonic Distortion	Phono Signal to Noise Ratio	Frequency Response
0.005% (phono) 0.003% (aux)	90 dB (MM, 2.5 mV) 78 dB (MC, 250 $\mu$ V)	3 Hz - 100 kHz -1 dB

ST-C01

FM Sensitivity 50 dB (stereo)	FM Selectivity	Stereo Separation (1 kHz, 10 kHz)	Total Harmonic Distortion (stereo)
38.3 dB $\mu$ i	75 dB	45/35 dB	0.15%

**With performance this big, the last thing you expect is components this small. The Micro Series by Technics.**



# Philips Direct Control

## Better than belt. Better than direct.

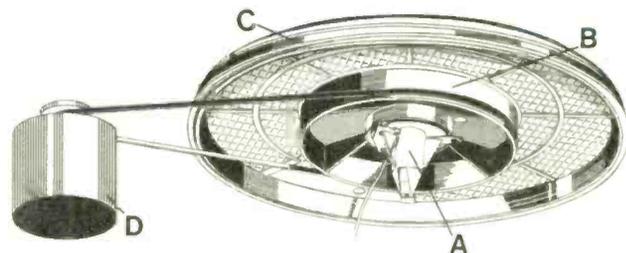
What's better than belt and direct drive? The best of both in one turntable. The specs of direct drive with the acoustic and mechanical isolation of a belt drive. Until now, unheard of. But now you can hear it all on Philips' exclusive, new Direct Control turntables.

How did Philips do it? The way you'd expect a worldwide leader in electronics to do it – with the world's best electronic technology.

### PHILIPS' EXCLUSIVE DIRECT CONTROL ELECTRONIC DRIVE SYSTEM.

In all Philips Direct Control turntables a mini-computer at the driving disc constantly checks and re-checks the platter speed. Instantly correcting for any variations in line voltage, frequency, pressure on the platter, temperature – even belt slippage.

That's how all Philips Direct Control turntables keep the speed constant and accurate.



A 160 pole tachometer (A) at the driving disc (B) electronically monitors the platter's (C) rate of rotation. The tachometer's d.c. signal is continuously compared to a stable d.c. reference signal. Any variations (+ or -) and the tachometer (A) instantly accelerates or slows the separate d.c. motor (D). Direct Control actually puts the driving disc into the electronic feedback loop for excellent speed stability.

**DIRECT CONTROL FREE-FLOATING SUBCHASSIS.** Specially designed to give Philips Direct Control turntables superb acoustic and mechanical isolation. To cushion the platter, the tonearm – and protect your valuable records – from unexpected jolts, shocks and knocks. And to keep the rumble remarkably low.

**DIRECT CONTROL = TOTAL TURN-TABLE DESIGN.** But Philips doesn't stop there. For us Direct Control is more than an exclusive new drive and suspension system – it's a completely new concept in total turntable design. Direct Control is specially designed straight, low mass, tubular aluminum tonearms, with very low friction bearings. To track even your most warped records accurately.

**DIRECT CONTROL ELECTRONIC FEATURES.** Direct Control means reliable electronic touch switches for silent, vibration-free operation. Accurate electronic pitch controls. Digital and LED indicators to monitor platter speed and identify functions. And photo-electronic sensors to initiate the automatic tonearm return.

# trol:

**DIRECT CONTROL RECORD PROTECTION.** Philips even built in an accurate stylus pressure gauge, to keep the pressure off your valuable record collection. Nobody ever thought of that before. But Philips thinks of everything.

**ALL AT A PRICE THAT'S WELL UNDER CONTROL.** Philips' exclusive Direct Control turntables – the new state-of-the-art – from \$160 to \$250. With Quartz Control, \$400.

By joining our European research facilities with our American know-how, Philips produces a full line of audio equipment high on performance and value. That's what sets us apart from the competition. Here and around the world.

**EVERYONE WHO KNOWS, KNOWS  
PHILIPS**

High Fidelity Laboratories, Ltd.

	WOW & FLUTTER	RUMBLE	PRICE
AF 977	0.025% (WRMS)	- 73dB (DIN B)	\$399.95*
AF 877	0.03% (WRMS)	- 70dB (DIN B)	\$249.95*
AF 867	0.05% (WRMS)	- 65dB (DIN B)	\$219.95*
AF 777	0.05% (WRMS)	- 65dB (DIN B)	\$189.95*
AF 677	0.05% (WRMS)	- 65dB (DIN B)	\$159.95*

\*Suggested retail prices optional with dealers.



QUARTZ PLU

# The revolutionary new AIWA AD-6700 puts metal-particle tape through its paces.

Now there's a cassette deck designed to realize all the potential sound improvement that metal-particle tape can offer: the revolutionary new AIWA AD-6700. With the impressively broader frequency response and increased dynamic range that rival even today's most advanced reel-to-reels.

AIWA designed it that way to make a breathtaking difference in the way you listen. There's a Sendust Guard Head with extended 1.3 micron gap for optimum recording, AIWA's double-gap Ferrite erase head and an improved erase circuit to meet the increased power demands of metal-particle tape.

But the extraordinary performance of the AIWA AD-6700 doesn't stop with just metal-particle tape. AIWA's own precision Bias Fine Adjustment System lets you select the proper bias for every tape formulation available today with just a twist of the dial. So every tape you play gives a flat response.

The AIWA AD-6700 makes distortion-free recording a cinch, with an amazingly accurate system of sensitive LEDs that instantly respond to peak signal

levels. AIWA's system boasts a highly visible three-color display to help you record a safe level every time. A Peak Hold facility is also included.

For carefree listening, there's a convenient Auto/Repeat with Memory Switch that lets you replay the complete side of a tape—or just the portion of it you most want to hear.

And with AIWA's exclusive "3 Minute Warning" Remaining Tape Time Meter you'll never worry again about running out of tape. All you do is check the left meter.

Wow and flutter have been reduced to an outstanding 0.04% (WRMS). And there's Dolby\* NR with MPX Filter.

As a special limited introductory offer, every AIWA AD-6700 comes with one free cassette of Scotch® Metafine™ Pure Metal Tape. Now whatever metal-particle tape can do, the new AIWA AD-6700 makes it do better.



## With full-function wireless remote control.

Advanced feather-touch logic controls make the AIWA AD-6700 a pleasure to operate. Plus it's the first cassette deck in the world with full-function wireless remote control that includes the extra freedom of Cue and Review—even from across the room! So anything the AIWA AD-6700 does, you can do in the palm of your hand.

Upgrade to **AIWA**

Distributed in the U.S. by: AIWA AMERICA INC., 35 Oxford Drive, Moonachie, New Jersey 07074.  
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# Letters

## Recording: Art and Technology

I recently acquired Guido Cantelli's recording of Franck's Symphony in D minor [RCA ARL 1-3005; feature review, March]. I expected somewhat poor sound, but I was curious to hear how the NBC Symphony sounded in original stereo just two days after Toscanini's retirement. At the same time, I purchased a highly rated direct-to-disc record.

Surprise! The 1954 recording sounded "direct," natural, and balanced, and the modern one sounded gimmicked and artificial. During the past few weeks, I have played the older recording many times in awe and delight, while the other one is starting to gather dust on the shelf.

Raymond Falcon-Lugo  
Santurce, Puerto Rico

How unexpected Ken Furie's reference to "the late Fifties, when the recording art reached its zenith" ["Superdisc—Will It Fly?," March]! Perhaps, after two rather lonesome decades, certain views are once again beginning to be in vogue.

To exceed a small number of microphones in recording is to add sonic vantage points that we lack in reality. These vantage points interfere with the illusion of reality, because human beings can be in only one place at one time. Spotting of individual instruments or groups of instruments is doomed to shatter the illusion. We will take a giant step toward realistic sound the day we stop regularly utilizing banks of microphones and multiple tracks.

David D. Milor  
Glendale, Calif.

It is my opinion that the digital process of recording has a definite edge over direct-to-disc, because the performances are superior. Most of my experience with direct-cut discs has been disappointing, to say the least. Yes, they have beautiful fidelity and wide dynamic range, but the performances usually range from mediocre to poor. My first digital purchases (from Telarc and Orinda) were superb discs with very wide dynamic range and low noise, unequaled by any other recording means. And the performances had none of the dry, analytical quality commonly heard on direct-to-disc.

The digital process would seem to provide a new definition of what "high fidelity" is (and, by extension, isn't). This is truly the software we have been waiting for.

William Sautre  
Carlstadt, N.J.

## Mackerras on Mozart

"On the shores of Coromandel/Dance they to the tunes of Handel," wrote Sir Osbert Sitwell. But Sir Charles Mackerras—he was knighted last New Year's Day—seems to have emitted some questionable notes of his own in the course of his reflections

["Charles Mackerras on Handel," March]. Bernard Shaw never said, as he implies, that "Beecham played Mozart as generalized eighteenth-century music"—that would have been a namby-pamby powder-puff slap from one who was adept at blowing his targets out of the water.

Shaw's essay "Mozart with Mozart Left Out" dates from 1917, when he was at the peak of his powers. In it he excoriates the then thirty-eight-year-old conductor for offenses against Shaw's ingrained ideas of proper Mozart style and suggests that he hand over his baton to Sir Edward Elgar: "If Sir Thomas does not, after one hearing, blush to the roots of his hair and exclaim, 'Great Heavens! And I took this great composer for a mere confectioner!', I will pay a penny to any war charity he likes to name."

To judge by Beecham's lovely performances of Mozart during the 1930s, he either matured thereafter or was spurred by Shaw's barbs. In any event, his recorded Mozart is neither generalized nor confectionary. Mackerras' ancillary contention that Bruno Walter was "not particularly a Haydn conductor" is refuted by Walter's noble and idiomatic performances of the 86th and 92nd Symphonies, recorded when conductors engraved their specialties on records rather than turning them out like batches of cookies (or, like Philips' current featherbrained scheme, recording Haydn's symphonies with "names"—quite enough to drive one *distratto*).

On another subject, Deena Rosenberg should blush to the roots of her hair for conveying the impression [in "Mining America's Gold; Vintage Musical Theater Albums," March] that Fats Waller wrote "Your Feet's Too Big." It was written by Ada Benson and Fred Fisher. But no one ever rendered it like Fats.

David Wilson  
Carmel, Calif.

*Credit where credit is due: Mr. Wilson is correct, and we bow to Benson and Fisher. But, as he acknowledges, Fats was the instrument of their salvation from oblivion.*

## Speakers Optional

We at RMI have just read the "Input Output" column in which Fred Miller expounds on our KC-2 Keyboard Computer [February]. We thought he covered the subject admirably but were perplexed to read that "this unit has built-in speakers." The KC-2 does not include speakers or amplifiers, though they are available as an option.

Clark A. Ferguson  
RMI  
Macungie, Pa.

## Pan American Albums

Schwann now lists a label called Inter-American Musical Editions, whose albums are issued by the organization of American States. I quote from the OAS's reply to my inquiry: "The recording project is noncommercial in nature. The records cost \$3.00 per unit; they are sold at cost, and monies received are used to further the work of the Pan American Development Foundation in



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Stereo components that are compact. But can hardly be called compacts.

They have the same high-performance characteristics as our regular size components. They have to. They're Mitsubishi.

The Micro FM tuner, for one. It's the teeniest tuner in the world. A mere 10<sup>5</sup>/<sub>8</sub>" x 2<sup>3</sup>/<sub>4</sub>" x 9<sup>3</sup>/<sub>4</sub>" big. However, few tuners can measure up to its standards. It has, among other

things, a quartz-PLL synthesizer tuning system so sophisticated that it has absolutely no drift. Zilch.

We were no less frugal with features on our Micro Cassette Deck. It has an Automatic Spacing Pause System, Dual Capstan Drive, Separate 3-way Bias and Equalization Feather Touch Controls and of course, Dolby. Yet measures only 10<sup>5</sup>/<sub>8</sub>" x 5<sup>1</sup>/<sub>2</sub>" x 9<sup>5</sup>/<sub>8</sub>".

For power, the Micro Amp is unbeatable at this size. The little "direct coupled" powerhouse puts out 70 watts per channel. Total harmonic distortion is only 0.01%. For 30 watts per channel, it's an infinitesimal 0.004%.

Our Micro Preamp is made to complement the

amp. And faithfully conduct any signal source that goes through it. It has a built-in moving-coil head amplifier. With a signal-to-noise ratio of 77dB even for 100 $\mu$ V input and 0.005% THD, it obviously does the job better than components twice its size.

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community-level, self-help projects in Latin America." There are no postal charges, just the \$3.00 per album, payable to the Pan American Development Foundation and sent to the Technical Unit on the Performing Arts, Organization of American States, 1735 I St., N.W., Room 922, Washington, D.C. 20006.

This strikes me as a worthwhile project, both socially and musically, and the price is certainly right. I thought your readers might like to know about it.

David Pierce  
Vero Beach, Fla.

### Haydn's Operas

Bravo for your recent series of reviews of the Haydn opera recordings on Philips. Certainly a major article on this little-known part of Haydn's output should be forthcoming—the author being Paul Henry Lang or H. C. Robbins Landon.

Stephen Colburn  
General Director  
Milwaukee Chamber Music  
Society  
Milwaukee, Wis.

### Bouquet for "Folios"

As a librarian faced with updating a terribly outmoded collection of sheet music and songbooks, I thank you heartily for BACKBEAT's excellent section on folios.

I always have used and will continue to use your reviews as a guide for purchasing recordings. The folio section just makes HIGH FIDELITY that much more helpful.

Julia S. White  
Lansing, Mich.

### Memorable Rota Score

If Royal Brown thinks that film composer Nino Rota has not produced any memorable scores outside his collaboration with Federico Fellini [review of "War and Peace" and "Casanova," January], he has apparently missed hearing what I consider Rota's greatest score to date: *Romeo and Juliet* [soundtrack available on Capitol ST 400]. The film, directed by Franco Zeffirelli, was released in 1968, and eleven years later the themes of the score linger.

Jack Gauvitte  
Minneapolis, Minn.

### Corrections

"Spring is the mischief in me," said Robert Frost, and that seems to go for someone who had a hand in April's HIGH FIDELITY as well. That issue showed evidence of gremlins at work.

In our report on the Grafyx SP-Ten speaker system, the ZIP Code for Grafyx Audio Products should have been 60174.

In our report on new products, "Audio Heads into the '80s," the Eumig Metropolitan CCD cassette deck was called a two-head deck, but it actually has three heads. And in the same article, an incorrect price is given for the Leak Model 3090 speaker. The correct price is \$960.

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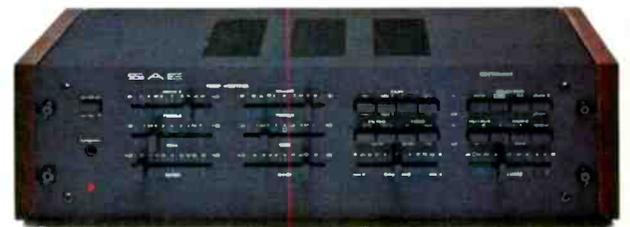
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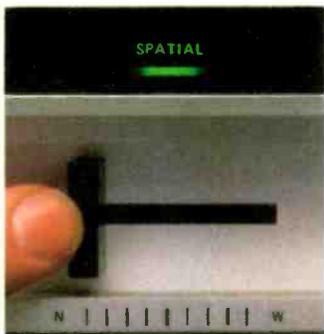
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### Controlling the Spatial Image

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.



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# Introducing the ADC 1700DD turntable. The quality begins with the tonearm...



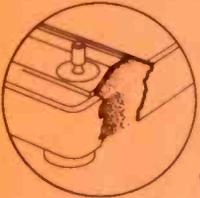
## ...and keeps on going.

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.

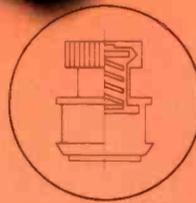
Our engineers have combined the latest advancements of audio technology to create the amazing 1700DD, the first low mass, low resonance turntable.



The famous UMF 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 is constructed with two dissimilar materials that are resonance-cancelling. First, the outer shell of the base is molded, then a composition of industrial foam and concrete is injected to absorb and neutralize resonance and feedback.



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.

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# Too Hot to Handle

I own a twelve-year-old McIntosh C-22 preamplifier that is still operating on the original Telefunken vacuum tubes. The preamp was pronounced healthy at a recent clinic conducted by McIntosh Laboratory. A supposedly knowledgeable professional told me that to retube my preamp would undoubtedly result in an audible improvement in its sound quality. Another professional states that this is not necessarily true. Who is correct? (The tubes test well in a drugstore tube tester.)—**Morris T. Reagan, Greenfield, Wis.**

You have had the word from the horse's mouth (McIntosh); what else do you need? Incidentally, some terrible tubes test "okay" on drugstore tube testers.

I have a Kenwood KA-6100 50-watt amp and a pair of its LS-405A loudspeakers, which have a recommended power requirement of from 10 to 100 watts. When I was listening to the latest record of Boston at full blast, my output meters registered 50 watts at their highest. But when I turned down the volume, a ringing sound appeared. Presto, a blown tweeter!

When I took my speaker to the local authorized dealer, he told me he could fix it under warranty. He also told me that it was my fault and that "no speaker the size of the LS-405A" could take 100 or even 50 watts. I was amazed and told him of the manufacturer's recommendation; he only said that printing was cheap and that anyone could say something will take a certain number of watts. In other words, when I feel like checking out my speakers at full blast, I'm not able to. That's disgusting!

What I need to ask you people is, where can I find a speaker the size and price of the LS-405A that will take 50 or even 100 watts of power? Is there one?—**Gary A. Lucero, Albuquerque, N.M.**

Sorry to hear you've blown your tweeter, but your experience merely points up the problem with loudspeaker power ratings, which are not really power ratings at all, but merely indications of appropriate amplifier-power range. In arriving at a rating, the speaker manufacturer makes certain assumptions about the peak-to-average power ratios of typical music and the frequency distribution of that power. Most instruction manuals clearly warn that the speaker is not meant to withstand the "recommended power" level on a continuous (for example, sine-wave) basis. The woofer may stand up for a brief period, but the power-handling ability of most tweeters is limited to a handful of watts. For this reason, the tweeter is frequently protected with a fuse even when the woofer is not. And even though the tweeter's capacity may be limited, that is sufficient for

the high-frequency power in music when one takes into account the music-energy distribution curve and the peak-to-average factor—at least with "typical" music. (In rock, of course, both factors are extreme, and your source material puts maximum stress on the tweeter for a given listening level.)

If you think this is an unfair way to characterize a loudspeaker, consider the following. Let's say the continuous power rating of a tweeter is 5 watts. Had the manufacturer rated the total system at 5 watts, purchasers would assume that it would work well with a 5-watt amplifier, which is certainly not true because such an amp would run out of steam long before it is delivering 5 watts in the tweeter's frequency range.

Frankly, had you been using an amplifier of greater than 50-watt capability at the time the mishap occurred, you might still have your tweeter intact. It seems to us that you drove the KA-6100 into hard clipping at the levels you were cranking out. When that occurs, a lot of high-frequency power (above and beyond that needed to replicate the input signal) is delivered to the tweeter. Using an amplifier without sufficient power capacity is one of the best ways to kill a tweeter.

I have a Heath AD-1304 audio processor connected between my receiver and cassette deck. When I play a Dolby-encoded cassette, the recording occasionally sounds better if I don't decode it but, instead, allow the audio processor to provide the noise reduction (plus some expansion). What is the net effect in terms of the source material?—**H. L. Beck, Anchorage, Alaska.**

If we define fidelity in the narrow sense of reproducing precisely what is on the tape, without alteration, use of the Heath AD-1304 to "decode" a Dolby-encoded tape is improper. Dolby-B encoding compresses high-frequency information in varying degrees depending both on signal level and on spectral distribution. The Dolby-B decoder is meant to expand the signal in a precisely compensatory fashion, restoring the dynamics and response of the signal that went into the encoder, while the Heath expander is not reciprocal to the encoding process.

That is not to say that under some conditions the AD-1304 won't sound better. Because of tape compression, Dolby mistracking, recorder nonlinearity, or a number of other foibles, what comes out of the Dolby decoder may not be an exact replica of the original. Conceivably, the AD-1304 might come closer. Finally, the original program might have been compressed or noisy even before encoding. In such a case, Dolby does nothing to improve matters, while the AD-1304's single-pass noise-reduction circuitry

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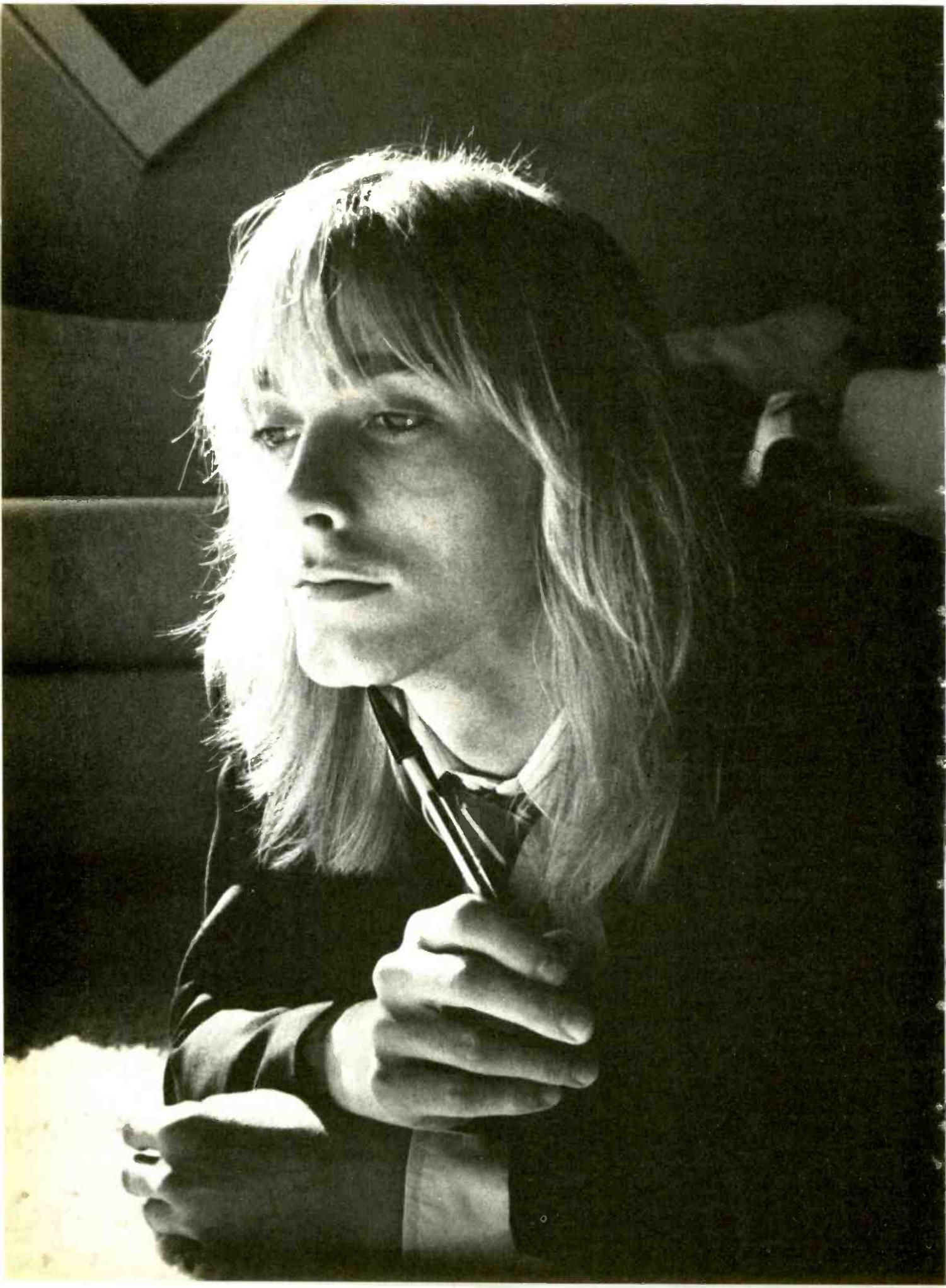
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CIRCLE 29 ON PAGE 89



# Robin Zander listened to us.

He's the lead singer with Cheap Trick.

Here's what he said about the Jensen System B.

"The sound covers the entire room perfectly. No matter where you are it just fills it all up."

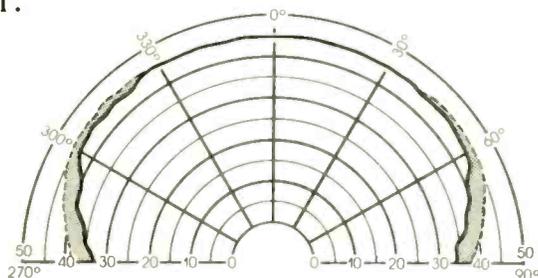
The System B is a vented 4-way, 5 driver loudspeaker system with high efficiency. And low distortion. And wide dispersion.

We've used advanced engineering technology to solve critical engineering problems that have plagued speaker designers for years.

To improve dispersion over the complete frequency range, we symmetrically positioned all four front-firing drivers along the vertical axis of the baffle surface.

What's more, the System B has two specially designed, but different high frequency drivers.

One on the front and one on the rear.



System B Half-space polar response at 5000 Hz. It shows improved dispersion (shaded area) as a result of rear firing driver.

With the System B positioned 12" from a wall, the reflected sound from the rear driver provides an increased sense of depth as well as uniform dispersion throughout the entire listening area.

The result is music that sounds virtually the same whether you're directly in front of the speaker or off to the side.

Robin, a professional musician, sums it up.

"The sound covers the whole area."

This is illustrated in the polar response diagram.

Of course, the system includes a new Impedance Compensated Crossover Network as well as a precision low frequency radiator and upper and lower midrange drivers.

We can't describe everything in this amazing speaker system in detail.

That's why you should go to your audio dealer for a demonstration.

After all, what's most important is how the speaker sounds to you.

You're the ultimate test.

But one more comment from Robin.

"I listen to music everyday. So when I hear a speaker that sounds good, I get excited about it. This is good and I'm excited."

Listen to our speaker in person.

Robin Zander did.

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Audiotex auto speakers will turn you on the first time you hear them. They'll still be turning you on months later, because they'll still be delivering rich, powerful, undistorted sound.

What's the secret to their continuing good performance? All Audiotex auto speakers feature Liqui-Glide, the rare and costly magnetic fluid that improves performance by dissipating heat from the voice coil, thus increasing power handling capability. Which means you can really crank

them up and they won't break down.

But Liqui-Glide also reduces distortion and aging, which means you may very well get more miles out of Audiotex speakers than you do out of your car.

6x9 3-way  
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30 watts

6x9 Coaxial  
Power Handling  
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CIRCLE 19 ON PAGE 89

helps to reduce such pre-Dolby noise and the expander helps to improve the dynamic range.

If you like what you hear, enjoy.

My system consists of a Dynaco 410 power amp, Pioneer RT-701 open-reel deck, ADC 500 frequency equalizer, Nikko Beta II preamp, DBX 3BX dynamic range expander, DBX II 122 noise-reduction system, Technics SL-1600 direct-drive turntable with Shure V-15 Type III cartridge, and a pair of Bang & Olufsen Beovox M-70 speakers. I'm planning to purchase some direct-to-disc records, and I want to preserve them on tape if possible. Will my system be able to handle such records? I understand that they have a wider dynamic range than commercial records.—Myles Uyesono, Lihue, Hawaii.

The dynamic range that you can record with the DBX II 122 noise-reduction system and an open-reel deck exceeds by far that which can be recorded on disc. Therefore, you should have no trouble in recording direct cuts with minimal degradation. (Presumably, there will be some—otherwise the recording could have been mastered on tape.) The rest of your equipment should also handle the dynamic range without problems.

After blowing the woofer of my AR-2ax speaker (my fault) and incurring a \$50 repair charge, I bought the fuses Acoustic Research recommends for them. Before installation, I had the fuse resistance measured on a lab instrument designed for low resistances. The value obtained was about 2 ohms. Since the nominal impedance of this speaker is 5 ohms, putting these fuses in the circuit would reduce the damping factor to a minuscule 2.5. Is AR more interested in avoiding warranty costs than in how their speakers sound?—Robert Malanchuk, Columbus, Ohio:

We doubt the fuse recommended has anything to do with warranty costs. If it did, the fuse would in all likelihood be mandatory, not optional. The fuse is chosen to protect the speaker; its resistance is a side effect that, unfortunately, does degrade performance a little. If you don't like the sound with the fuse in place, there is nothing to do but leave it out and take your chances, or find an amp with a circuit (like the Dynaguard used by Dynaco in some of its products) that will limit the power to the speakers electronically.

I am interested in buying a pair of headphones that I can use with my GAS Thalia preamplifier. It only accepts phones with impedances of 600 ohms or more, and thus far I have been unable to locate any headphones with such a high impedance. Can you suggest any?—Jay Aronowitz, New Hyde Park, N.Y.

The professional line-impedance level is 600 ohms, and there are a number of high-quality headphones that match. For example, AKG's K-140S, K-141, and K-240 are all 600-ohm models; so are the Beyer DT-440 and Sennheiser HD-400. You probably won't run into much trouble with a 400-ohm phone, and that opens up your options considerably.

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

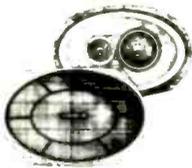
# COMPARE PRICES

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TS 695  
6"x9" 3-way speakers

**\$141**



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Car Stereo



SA 8800  
Amplifier



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800-356-9514**

# In a class by itself.



©1979 Koss Corp.

There are few stereophones of any kind that can match the full-bandwidth performance of the Koss Pro/4 AAA. That's because the Triple A's oversized voice coil and extra large diaphragm reproduce recorded material with a lifelike intensity and minimal distortion never before available in dynamic stereophones.

With a frequency response from 10 Hz to 22 kHz, a highly efficient element and a perfect seal for low bass response to below audibility, the Triple A lets every note blossom to its fullest harmonic growth. You'll hear so much more of your favorite music, you'll think you're listening to a whole new recording.

Unlike other stereophones, the earcushions developed for the Pro/4 Triple A represent a breakthrough in both comfort and acoustical engineering. Through extensive studies on how stereophones are actually worn, Koss engineers were able to reduce lateral pressure with a direct contour Pneumalite® earcushion that not only offers soft pliable comfort, but also creates an ideal environment for minimizing the linear excursion of the driver. Thus, the driver is able to produce any volume level without distortion. So you'll hear all the fundamental and harmonic frequencies exactly as they were recorded.

In addition, Koss has designed a

special Pneumalite® dual suspension headband that creates a feeling of almost weightlessness even over periods of extended listening. It makes wearing the Triple A's as pleasurable as listening to them.

Why not stop in at your audio specialist and see why the Koss Pro/4 Triple A belongs in a class by itself. Or write for our free, full-color catalog c/o Virginia Lamm. Better still, listen to a live demonstration of the incredible Sound of Koss with your favorite record or tape. We think you'll agree that when it comes to the Pro/4 AAA and other Koss Stereophones and CM loudspeakers: hearing is believing.

 **KOSS** stereophones/loudspeakers  
hearing is believing™

KOSS CORPORATION, 4129 N. Port Washington Ave., Milwaukee, Wisconsin 53212 International Headquarters: Milwaukee/facilities, Canada · France · Germany · Ireland · Japan

U	1	E	2	D	3	A	4	N	5		I	6	X	7	S	8		K	9	Y	10	Z	11	L	12	T	13	Q	14		
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Y	138	K	139		G	140	I	141	N	142		O	143	Z	144	X	145	T	146		V	147	Y	148	U	149	K	150			
		N	151	D	152	H	153		O	154	Z	155	ZZ	156	B	157	V	158		A	159	L	160	U	161		T	162			
E	163		S	164	P	165		O	166	I	167	N	168	G	169	X	170	R	171	K	172	F	173	Z	174	Y	175				
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Z	203	I	204	L	205	D	206	N	207	M	208	Y	209																		

**DIRECTIONS**

To solve these puzzles—and they aren't as tough as they first seem—supply as many of the Output words as you can in the numbered dashes following the Input. Unless otherwise specified in the Input, the Output consists of one English word. "Comp." means compound, or hyphenated, word.

Transfer each letter to the square in the diagram that bears the corresponding number. After only a few correct guesses you should begin to see words and phrases emerging in the diagram, which when filled in will contain a quotation related to music, recordings, or audio.

The words in the quotation are separated by darkened squares and do not necessarily end at the end of a row.

Try to guess at these words and transfer each newly decoded letter back to its appropriate dash in the Output. This will supply you with further clues.

A final clue: The source of the quotation—the author and his work—will be spelled out by the first letters in Output, reading down.

The answer to HiFi-Croctic No. 44 will appear in next month's issue of HIGH FIDELITY.

**INPUT**

**OUTPUT**

A. German conductor (1891-1966), many recordings on Westminster

85 4 159 33 113 102 66 188  
176

B. See Word I. (3 wds.)

15 49 137 198 157 92 60 38  
72

C. Exchange (colloq.)

19 68 95 119

D. See Word E.

47 206 181 82 23 152 3 135  
71 191

E. With Word D., Russian composer (1882-1971)

2 200 163 94

F. Verdi opera

129 173 42 105 96 189

G. \_\_\_\_\_ Dominique, jazz trumpeter

55 91 169 140 26

H. Italian pianist, edited complete works of Clementi

153 87 48 76 21

I. With Word B., work composed by Messiaen while a war prisoner (3 wds.)

80 167 204 31 179 126 6 59  
117 99 41 141 24

J. \_\_\_\_\_ Green, jazz trombonist

93 70 192 22 120

K. Blues guitarist and singer: "461 Ocean Blvd." on RSO (full name)

106 197 84 9 133 123 172 202  
150 45 139

L. Deliberately distorted and noisy performance (It.)

110 205 79 130 12 160 194 37

M. Brass fanfare (Ger.)

115 81 36 208 185

N. Eglk opera (2 Ger. wds.)

207 16 108 40 58 151 5 168  
64 184 142 90 32 77

**INPUT**

**OUTPUT**

O. Monteverdi opera

67 89 143 101 182

P. "She's Got Everything" Eddy Arnold

109 165 88 50

Q. Mendelssohn's Symphony No. 3

14 166 121 56 154 201

R. Declare openly

103 171 132 17

S. Wagner festival site

164 30 39 63 8 199 178 187

T. Completely (comp.)

52 134 162 35 75 128 13 193  
146

U. Pianist, 1976 winner of Avery Fisher Prize; Davies' Trumpet Sonata on Nonesuch (full name)

183 51 1 74 25 149 69 111  
122 136 118 161

V. In concertos, orchestra as opposed to soloist

147 46 186 158 57

W. American electrical engineer, inventor of a synthesizer

53 177 98 29

X. German printer (d. 1478), first to print music with movable type (full name)

62 127 78 170 145 196 180 114  
7 20

Y. Lehár operetta (4 wds.)

125 138 131 54 116 27 195 148  
209 85 10 43 104 175

Z. German soprano (b. 1919); St. Matthew Passion on Archiv (full name)

112 190 11 61 144 203 107 83  
124 28 97 155 44 174 73

ZZ. In mensural notation, vertical dash attached to a note

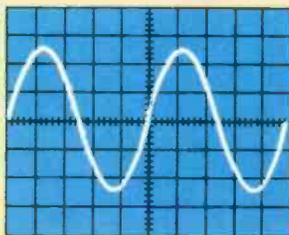
100 156 86 34 18

Solution to last month's HiFi-Croctic appears on page 6.

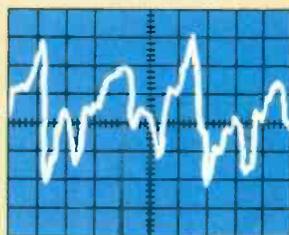
# Many amps can deliver pure sound. The Sansui AU-919 delivers pure music.



Today's audio engineering has reached the point where you can select among a number of affordable high-power amplifiers that have virtually no "total harmonic distortion." That's good. But THD measurements only indicate an amplifier's response to a pure, continuously repeating, steady-state test signal (below, left). They don't tell you how the amp responds to the never-repeating, rapidly-changing transient waveforms of real music (below, right). And only an amplifier designed to reproduce the demanding dynamics of music signals can satisfy the critical audiophile. An amp like the Sansui AU-919.



SINE WAVE



DYNAMIC MUSIC SIGNALS

Because low THD without low TIM is like sound without music, the Sansui AU-919 is designed to respond well to both simple sine-wave test signals and also to handle the jagged, pulsive edges required for realistic reproduction of music—without imparting that harsh, metallic quality known as "transient intermodulation distortion" (TIM).

The Sansui AU-919 sounds better than conventional amps because Sansui developed a unique (patent pending) circuit that is capable of achieving both low THD and low TIM simultaneously.

Our DD/DC (Diamond Differential/DC)\* circuitry provides the extremely high drive current necessary to use proper amounts of negative feedback to reduce conventionally-measured THD (no more than 0.008%, 5Hz-20,000Hz into 8 ohms at 110 watts, min. RMS) without compromising our extraordinary 200V/ $\mu$ Sec slew rate, ensuring vanishingly-low TIM, as well. The power amplifier frequency response extends from zero Hz to 500,000Hz.

Since ultimate tonal quality depends on more than the power amplifier alone, Sansui also uses its DD/DC\* circuitry in the phono equalizer section—where current demands are also particularly high—to prevent TIM. ICL (input capacitorless) FET circuits are used throughout the AU-919, and a "jump switch" is provided that will let you run pure DC from the Aux. input to the output.

Visit your authorized Sansui dealer today, and he'll show you a lot more that the AU-919 has to offer. Like twin-detector protection circuitry and our Penta-Power Supply system. Two-deck monitoring/recording/dubbing facilities. And a high-performance ICL/FET pre-preamp for moving-coil cartridges.

Then listen to the AU-919 with the most demanding music you can find. You'll hear the way the music should sound. Like music. Not just like sound.

\*The Diamond Differential/DC, Sansui's (patent pending) totally symmetrical double ended circuitry with eight transistors, is named for its Diamond-shaped schematic representation.

## SANSUI ELECTRONICS CORP.

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

**Sansui**



# The Panasonic 200-watt dash. Win it with a built-in graphic equalizer.

Vast expanses of curved glass and valleys of vinyl all encased in steel. A less than ideal place to listen to music. But, unfortunately, a lot of us do. Because this is the interior of a car. It's here that Panasonic teams up two 100-watt amps with a built-in graphic equalizer to create the stereo system that can outrun the problems your car's interior creates.

Our built-in graphic equalizer has 5 bands. It divides the music into five parts, to give each part its own separate bass and treble control. So whether you're listening to the stereo tuner or the cassette player, you'll have excellent control over all your music.

And when some other car stereo amps may be gasping for power and limping with distortion, these Panasonic in-dash hi-fi components have 200 watts of power

with only 0.05% total harmonic distortion. That's plenty of power to take the most difficult passages in stride.

The Panasonic 200-watt dash gets off to a running start with the CO-7600: An AM/FM stereo tuner, graphic equalizer, cassette player with Dolby and a bi-amp. The bi-amp further separates the music by routing most of the low notes through the rear speakers. And most of the high notes through the front speakers. The CO-7600 runs in concert with a matched pair of CJ-5000 power amps. Each with 100 watts of total power (30- and

40-watt amps are also available). And to handle all that power, Panasonic has the Sound Pumps™ 100 speaker system.

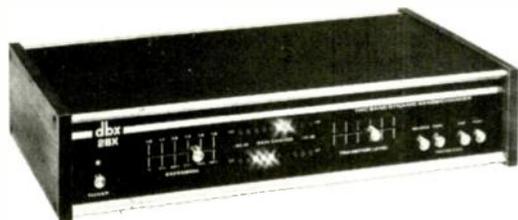
Panasonic 200-watt dash is the stereo system that adds up to the sweet sound of victory in your car.

Dolby is a trademark of Dolby Laboratories, Inc.



**Panasonic.**  
just slightly ahead of our time.

# Equipment in the News



## DBX introduces expanders

DBX's new 2BX is a two-band (low frequency/mid and high frequency) dynamic-range expander designed to yield an increase of up to 50% in the range of a signal. It comes equipped with two LED displays to indicate the degree of expansion in each band. The front panel also has adjustable slide controls for expansion and transition levels, a pushbutton SOURCE/TAPE switch, and a similar PRE/POST switch that can place the expansion before or after an auxiliary tape recorder. The 2BX sells for \$450. Another unit, the 1BX—as the name implies, a single-band expander—sells for \$245.

CIRCLE 137 ON PAGE 89



## Dalco launches speaker system

Dalco Speaker Works of Philadelphia has introduced a line of speakers that includes the MW-II, a two-way system housed in a metal enclosure. According to the company, its efficiency is 96 dB for 1 watt of input measured at 1 meter, and rated frequency response is 55 Hz to 30 kHz into 8 ohms. The speaker, it says, can handle input power of from 3 to 125 watts (4¼ to 21 dBW). Price of the MW-II is \$135. Other models range in cost from \$80 to \$495.

CIRCLE 138 ON PAGE 89



## Put an Ace in your bass

Ace Audio's Model 8000 mono power amplifier, called Chunky and designed to drive a subwoofer, has a rated output of 70 watts (18½ dBW) into 8 or 4 ohms. The company states that the frequency response of this direct-coupled amp is flat throughout the audio bandwidth—from 15 Hz to 20 kHz, ±0.1 dB—with distortion of less than 0.1% at rated power. Thus it can be used in pairs to drive stereo speakers. The Model 8000 costs \$189 if bought singly or \$185 each for two or more.

CIRCLE 139 ON PAGE 89



## Kenwood packs a tuner with features

A digital pulse-count detector used for the FM demodulator in Kenwood's new KT-917 tuner is said to lower distortion—rated at better than 0.05% (mono) from 50 Hz to 10 kHz wideband—and signal-to-noise ratio: 84 dB (stereo). The tuner also employs a new sample-and-hold multiplex process for stereo demodulation, achieving separation of 60 dB wideband at 1 kHz, according to Kenwood, and its proprietary Distortion Detection Loop, which locks in a station at the point of minimum distortion. Among other features are switchable FM de-emphasis (25/75 microseconds) and three selectable bandwidths. The price of the KT-917 is \$1,000.

(more)

# 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.

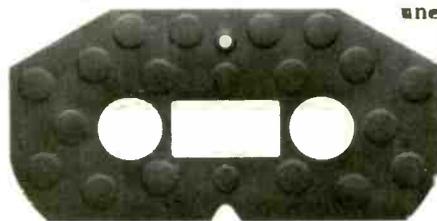
**The Screws** Our cassettes use five screws instead of four for warp-free mating of the cassette halves. We carefully



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.

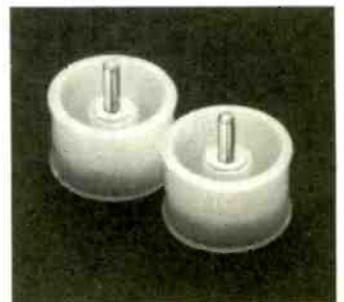
**The Liner Sheet** Our ingenious and unique bubble liner sheet makes the tape follow a consistent running angle with gentle fingertip-like embossed cushions. It prevents

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.

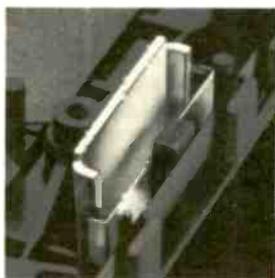
**The Pins** In every cassette we make, we use stainless steel roller pins to minimize friction and avert wow and flutter and channel loss. Some other manufacturers "cheat" by using plastic pins in some of their less expensive cassettes. We don't.



# 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.



### The GUSDORF Tower

The GUSDORF Tower equipment cabinet, Model 1490, stands more than three feet tall and has four 3/8-inch-thick shelves that adjust at 1-inch increments. Smoked-glass doors enclose the equipment section, and a storage area at the base holds up to 230 record albums. Finished in walnut and fitted with double-wheel casters, the 1490 retails for \$226.

CIRCLE 140 ON PAGE 89



### Antenna amp aids FM reception

The first product from Audio Marketing by Von, the Magnum FM Power Sleuth, is a tunable RF amplifier that may be used with any antenna and with any receiver or tuner. The amplifier is specifically designed to boost reception in fringe areas but may also be used in urban situations with indoor dipole antennas. With three RF stages, the Sleuth's gain is rated at 35 dB maximum. Spurious response and image rejection are rated at 90 and 85 dB, respectively. The price of the Power Sleuth is \$150.

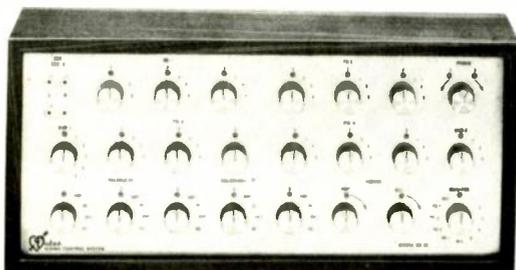
CIRCLE 141 ON PAGE 89



### Wharfedale adds to E series speakers

New in Wharfedale's speaker line is the computer-optimized E-30, said to be able to handle peak program material of 100 watts (20 dBW). Two bass/midrange drivers complement a horn tweeter with a level control. Nominal impedance of the system is 8 ohms, rated frequency response 63 Hz to 18 kHz,  $\pm 3$  dB, and sensitivity 94 dB for 1 watt of input measured at 1 meter. Finished in walnut veneer, the E-30 costs \$300.

CIRCLE 142 ON PAGE 89



### Dubie has your system under control

The Dubie CD-35 sound-control system provides rear-panel hookups for five tape recorders, four signal-processing devices, two turntables, and one amp or receiver. Front-panel connections allow use of a sixth recorder as well. Flexibility is enhanced by fade controls for the amp/receiver and two turntables, a twelve-position monitor switch, and two tape-dubbing switches. Mixing of the source output with one tape output onto another tape is possible. The CD-35 costs \$299.95.

CIRCLE 143 ON PAGE 89

(more)

# THERE ARE FASTER WAYS TO BUILD SEPARATES, BUT THEY WOULDN'T HAVE NIKKO'S ONE-OF-A-KIND EXCELLENCE.



Once is not enough for Nikko.

That's why we go one step beyond the inspection and quality control procedures of most manufacturers. Nikko's "200% Quality Control" program takes more time. But we know that once you buy a Nikko preamp, amp or tuner you're going to enjoy it for a long time. And you can be confident you will because we continuously monitor every unit as it moves along each station of our production line. Then we thoroughly inspect each and every unit a second time before it's shipped to your Nikko dealer. It's Nikko's way to make sure you always get the accuracy, dependability and outstanding performance that we build in. And that's what you get with these new separates.

## Alpha III MOS-FET DC Power Amplifier

The Alpha III uses two separate power supplies, each with its own transformer. Its direct-coupled DC amplifier lets nothing come between you and the music since there are no input or output capacitors in the circuit. By combining this design with two pairs of DC power



MOS-FETs, there's rock-solid stability. The Alpha III delivers 80 watts per channel, minimum RMS, at 8 ohms, from 20 to 20,000 Hz, with no more than 0.008% total harmonic distortion. And you can monitor power output with fast, accurate multi-LED indicators.

## Beta III Stereo Preamplifier

From its direct-coupled phono input to its high-speed circuitry and top performance specifications, the slim-line Beta III is the perfect control center. Complete versatility is provided to accommodate the impedance characteristics of different phono cartridges. There's also the convenience of two-way tape dubbing and switch-selectable low and subsonic filters. The combination of high sensitivity, flat frequency response and wide dynamic range coupled with low noise and distortion makes the Beta III a professional performer you can enjoy at home.



## Gamma V Synthesized FM Stereo Digital Tuner

FM stations a hairline away from each other pose no challenge for the Gamma V

Whether you tune manually or automatically, its digital synthesized tuning circuit pinpoints and locks in the signal. You can even program the unit to memorize and store up to six stations automatically by the push of a button. LED indicators show signal strength and stereo operation. With switching for high blend, IF band (wide or narrow), stereo/mono and adjustable muting, plus exceptional specifications, the Gamma V is everything you'd ever want in an FM tuner.

So if you want to get the best sound from records, tapes and FM broadcasts, you want Nikko separates. We build them as though they're one of a kind; because we refuse to compromise a standard of excellence abandoned by many for the sake of expediency.

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

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# GRAND MASTER™ BY AMPEX.

## UNTIL NOW, ONLY THE PROS WERE READY FOR IT.

High-tensile strength leader staking prevents leader/hub detachment.

Graphite-impregnated Teflon® friction plates for smooth tape wind.



Head-cleaning leader tape keeps recorder heads clean.

True-Track™ fore-and-aft guide system for precise azimuth control.

Felt pad and beryllium/copper spring assembly for precise tape to head contact.

Precision guide rollers with stainless steel pins provide smoother tape movement with minimal friction.

When we invented Grand Master studio recording tape in 1973, professional recording engineers grabbed it. And Grand Master soon became the unquestioned leader in its field.

But in 1973, not even the most sophisticated home users had the kind of equipment that could drive tape hard enough to explore Grand Master's amazing potential. For output sensitivity. Ultra-wide dynamic range. Improved signal-to-noise. And low distortion.

In the studio, yes. But not at home.

Now, the world has changed. Home equipment has improved dramatically. With bias flexibility. Higher output. And lower distortion.

So that now, the time is right for Grand Master.

In cassette, 8-track, and open reel. Including a specially formulated Grand Master II cassette, for high bias.

You're ready for it. And it's ready for you.

## GRAND MASTER BY AMPEX. WE THINK YOU'RE READY FOR IT.

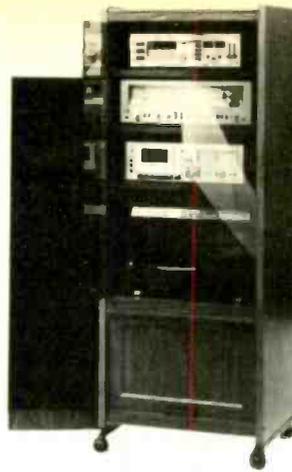
Ampex Corporation, Magnetic Tape Division, 401 Broadway, Redwood City, California 94063 |415|367-3887



### AudioFile audiophile racks

AudioFile Systems offers standard 19-inch-wide racks in a variety of heights and styles, with or without casters, to accommodate your amp, preamp, graphic equalizer, tuner, dynamic-range expander, cassette deck, tape recorder, digital delay lines—and still have room on top for a turntable or two. The LowBoy, pictured here, sells for \$434.95. Other models cost from \$139.95 to \$524.95.

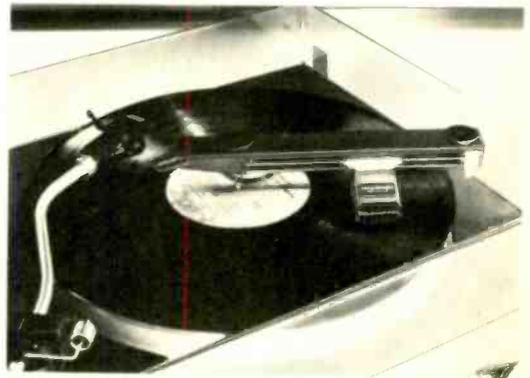
CIRCLE 144 ON PAGE 89



### Look, Ma, no hands!

The Lencomatic record-cleaning system, distributed by Neosonic, consists of a brush, a spring contact, and a conductive foil turntable pad. The brush, mounted on the inside of the dust cover, is positioned upon the record when the cover is lowered and moves inward as the record plays, removing dirt and conducting static to the spring contact as it goes. The mat, meanwhile, removes static charges on the underside of the record. Adjustment can be made for different disc sizes. The Lencomatic system costs \$19.95.

CIRCLE 145 ON PAGE 89



### Electro-Voice introduces bass guitar speaker

The B-115M is a two-way speaker system utilizing a vented cone mid-range driver and a single EVM-15B 15-inch woofer. Designed especially for electric bass, the B-115M has a rated power-handling capacity of 200 watts (23 dBW) and is said to have an improved high-frequency response when matched against comparable systems. The enclosure is made of ¾-inch plywood and covered in black vinyl, with aluminum trim and metal mesh grille. It also has built-in handles and optional casters. Suggested retail price is \$650.

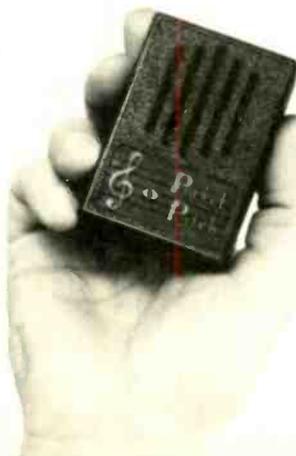
CIRCLE 146 ON PAGE 89



### Musician, tune thyself

An oboist named Alan Werner has developed the A-440 tuning device for Monroe Electronics. Called Pocket Pitch, this device is quartz-crystal-controlled to ensure accuracy of pitch, and a standard 9-volt battery drives its tiny speaker. It has two loudness levels, one for personal tuning and one for tuning a band or orchestra. The whole package is about as big as a pack of cigarettes and costs \$49.

CIRCLE 147 ON PAGE 89





## 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 advanced low mass tonearms.

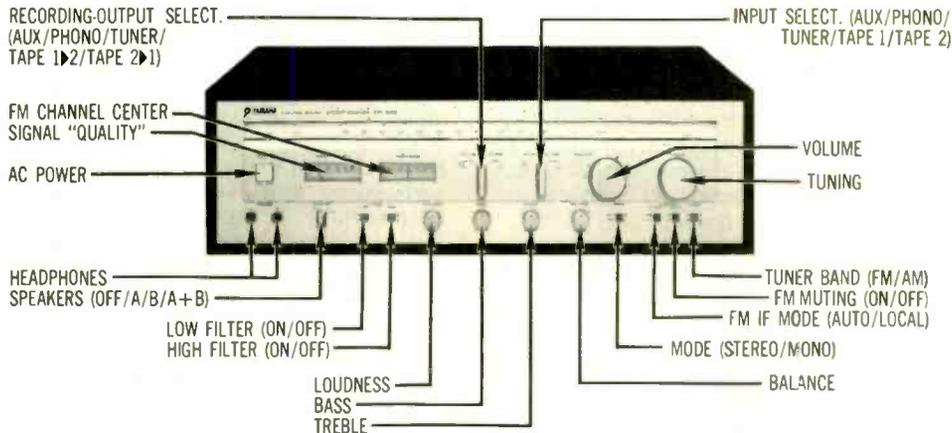
But more important, as the EDR.9 cartridge represents a new approach to cartridge design, we ask that you consider it in a slightly different way as well. Send for our free technical brochure on the EDR.9, and then visit your audio dealer and listen. Don't go by specs alone.

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. **EMPIRE**  
Garden City, N.Y. 11530

# New Equipment Reports

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



## A "Low-End" Receiver that's Far More

**Yamaha Model CR-640** stereo FM/AM receiver, in simulated wood-grain cabinet. Dimensions: 20 by 6½ inches (front), 15¼ inches deep plus clearance for controls and connections. AC convenience outlets: 1 switched (200 watts max.), 2 unswitched (200 watts max. total). Price \$410. Warranty: "limited," three years parts and labor. Manufacturer: Nippon Gakki Co., Ltd., Japan; U.S. distributor: Yamaha International Corp., P.O. Box 6600, Buena Park, Calif. 90620.

One of Yamaha's more radical ideas is that the basic specifications of the lowest-priced product in its line should match those of its more expensive ones. The premium components may offer more features or power, but the bandwidth and distortion specifications of the new CR-640 receiver are precisely the same as those of the top-of-the-line CR-2040. Each claims 0.02% THD from 20 Hz to 20 kHz; each has the same damping factor, the same sensitivity, and pretty much the same frequency response and signal-to-noise ratios. And although the higher-priced receivers' tuner sections afford somewhat better stereo sensitivity, slightly lower distortion, and improved ability to reject spurious noise, there are no gross differences in tuner performance.

The Yamaha CR-640 is what we have come to call a modestly priced receiver. It is rated at 40 watts (16 dBW) per channel—certainly no Charles Atlas but probably adequate for the vast majority of installations. It meets its power spec with a generous margin of safety both dynamically and on a continuous-power basis. Clipping does not occur until the output is 1¼ dB greater than spec into 8 ohms, and 1 dB more is available when driving 4-ohm loads.

Total harmonic distortion is virtually nonexistent at both the 0-dBW (1-watt) and 16-dBW (40-watt) output levels. (Note that this is "true" harmonic distortion, not the total-harmonic-distortion-plus-noise figures that we have used in the past. In this case it consists mostly of second and third harmonics, with just a hint of fourth at full power and 20 Hz.)

Low-frequency damping factor is more than sufficient for any system; the gauge of the speaker wire will probably be the limiting factor.

The phono preamp encompasses the entire band from 20 Hz to 20 kHz with virtually perfect flatness and virtually no distortion. Midfrequency overload is more than adequate; while the circuitry has somewhat less headroom at high frequencies, it is unlikely to be taxed by the signal on any commercial record. Phono noise level is low, sensitivity adequately high. The input impedance is not "classic"—it cannot be modeled by an ideal parallel combination of resistance and capacitance. Perhaps as a result, the phono cartridge we used did not produce the best response we have heard from it. But differences in this respect are subtle; use of another cartridge might have altered our opinion.

The frequency response from the high-level inputs remains utterly flat from below 10 Hz to the upper limits of audibility. It can be modified by switching in the sharp low filter (whose cutoff frequency is sensibly chosen at 24 Hz) or the high filter, which is less effective. For additional tonal modification, the shelving tone controls provide symmetric boost and cut of sufficient magnitude to please even tone-control-happy listeners—which we are not.

**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 construed as applying to the specific samples tested; HIGH FIDELITY, CBS Technology Center, and Diversified Science Laboratories assume no responsibility for product performance or quality.

The independent dual selector switches are a welcome surprise—at least to us. One selects the program for listening; the other picks that to be recorded. You not only may dub between two tape decks, in either direction, while listening to FM or whatever—a common provision on high-tap receivers though infrequent in this model's price class—but can record from any source at all while listening to the same or any other source. Greater flexibility than that defies imagination. Measurements

made on the tape-recording-output circuitry indicate that it is compatible with audiophile decks.

A second goody not usually found even on expensive receivers is the separate loudness control. Note that we say "control," not "switch." Theoretically, the degree of loudness compensation should vary with the listening level: The greater the reduction from "real" sonic levels, the greater the compensation. In the Yamaha CR-640, you first turn up the LOUD-

## Reading the Numbers: An Update

You will find a number of changes in this issue when you look at the test data. Some represent new measurements; some involve new ways of looking at old ones—either in terms of the way a measurement is made on the test bench or in how we report the lab findings in our pages. All, we believe, will be useful to our readers, whether they are technically inclined or music lovers in search of better sound systems.

Conflicting criteria are, in several respects, a way of life in the equipment testing program of a magazine such as ours. We would like to be as complete as possible in our documentation; yet too much information can easily be, for the non-technical reader, even more confusing (and therefore even less useful) than too little. We would like to keep our ways of measuring and reporting utterly consistent so that comparisons between products may be as direct and unequivocal as possible; new and potentially more revealing test techniques are always coming to hand, however, while some of the old ones tend to lose their meaning as the problems they once documented are solved. There are, in addition, conflicts within the technical community itself about the comparative value and meaning of many tests; between the extremes of the tests whose virtues are familiarity and ease of measurement rather than precise revelation of audible quality, and those almost faddist approaches that fascinate briefly with the promise of saying all that need be said but that prove on cooler consideration to speak less than plainly, lie a host of opportunities for disagreement.

The current changes reflect these conflicts. You will find that many of the measurements—particularly for separate channels in areas where performance is very consistent between channels in today's equipment—have been dropped in favor of data that we have not presented at all in the past. And there are changes in the way some of the remaining measurements are made, with varying effects on the comparability of numbers. You will find that we are increasingly adamant about avoiding data that represent electronic achievements rather than sonic quality.

In FM tuner sections, for example, our intermodulation measurements have been made in mono only and have followed the IHF spec in looking only for the first-order distortion products—the "difference tone." Other spurious products within the audio band can be even higher in level, however, and we herewith begin reporting the total of these products (as measured in the mono mode), which we believe to be a more accurate indication of signal quality. These total numbers can be several times as high as the conventional measurements and therefore do not bear comparison with the IM distortion in past reports or on spec sheets. We also are adding what the IHF calls a stereo IM measurement. In reality, it documents intermodulation between a signal tone and the stereo pilot tone at 19 kHz, so we will call it "stereo pilot intermodulation."

Formerly, this sort of intermodulation contributed significantly to what we called (with admitted inexactitude) "10-

kHz harmonic distortion," which lumped together a variety of high-frequency and ultrasonic "garbage" components as measured by a conventional THD + N distortion analyzer. In effect, we have singled out the most significant of these components so that the reported figure will better reflect audible performance. At the same time, we have altered the test frequencies for THD + N to conform to the IHF spec—100 Hz, 1 kHz, and 6 kHz—and simplified the test results by reporting on only one channel in stereo.

An important addition is the figure for THD + N at 50 dB of stereo quieting (the sensitivity rating point) as an index of how "clean" the audio will be when signal strength is barely enough to keep noise reasonably low. (The other THD + N measurements are made at considerably higher signal strengths.) A "perfect" score would be about 0.3% since that is the percentage equivalent of the noise component in the THD + N when the noise is at -50 dB. And we have added a figure for muting threshold so you can judge at what performance level you will have to forgo the muting feature.

In the amplifier data, we are continuing to drive both channels simultaneously in the high-power tests to put maximum stress on the circuitry, though we report on only one. The major change is in our approach to distortion, where we are altering both measurement techniques and reporting practice.

Within the last year or two, increasing quantities of experimental evidence have shown that, given flat frequency response and reasonably low steady-state distortion, the subtle differences that the "experts" (self-styled or otherwise) have found between amplifiers are not attributable to the amplifiers themselves and that the more carefully controlled the experiment, the more unequivocal its demonstration of this fact. There are differences, however. Some are attributable to the way in which a given design may mate with other equipment connected to its input or output stages; some (transient intermodulation is the most talked of) are attributable to other than steady-state effects; some seem to be limited to the ear of the individual beholder. In any event, we can find no unassailable reason to assume that the current insistence on ever-lower steady-state (conventional THD or IM) measurements has any real sonic meaning. Nor, since they ultimately document the same basic nonlinearities, do we see any reason to continue separate THD and IM measurements, which are largely redundant with current equipment.

In graphs and data, beginning in this issue, we are ignoring as negligible any distortion below 0.01%. Probably the threshold of perception is very much higher, but this admittedly arbitrary cutoff will allow us to include any data of importance without getting into the realm where distortion numbers become dubious in the measuring as well as useless in the listening. Many manufacturers, we are sure, will continue to insist on their accomplishments in that area; we can only reply, as we have in the past, that we are interested in sonic quality—not electronic virtuosity as such.

We will continue to use both THD and IM measurements as

NESS all the way and set the volume control to the highest listening level you'd be likely to want—which will, of course, depend on your taste, the efficiency of your speakers, and the acoustics and size of your room. For subsequent level adjustments, turn down the LOUDNESS, which boosts the lows and, to a smaller extent, the extreme highs relative to the midband to maintain a natural-sounding balance. To our ears, the balance is plausible indeed. We don't usually wax eloquent about

such circuitry, but this control strikes us as considerably more useful than the run-of-the-mill variety.

**Yamaha's tuner design** emphasizes simplicity of operation, and some audiophiles may find that it actually does too much for them. The tuner can operate in two IF modes (surprising at this price): "DX" and "LOCAL." The DX mode—short-wave jargon for distant transmission—is the more selective of the

investigative techniques, though the precise format in which we couch the numbers probably will be subject to experiment over the next few months until we are convinced we are expressing the results with maximum intelligibility and usefulness. Since the results will not give us the conventional intermodulation curves from which to judge maximum power capability into various resistive loads (the only unique capability of the IM curves in our past format), we will show clipping points with the three standard resistive loads—4, 8, and 16 ohms—instead.

At the input end, we are adding a measurement of phono-cartridge loading. Following the IHF amplifier standard, we will determine what values of resistance and capacitance are presented by the phono input and report them as an aid to those readers looking for an ideal pickup/preamp match. (See Edward J. Foster's article in this issue.) Where the input impedance is complex, implying different resistance and capacitance values at different frequencies and therefore problematic matching, we will show only the 1-kHz resistive value.

**Tape equipment reports** now provide a lot more beneficial information than heretofore. Diversified Science Laboratories, where the decks are measured for us, has developed methods for measuring meter ballistics so that our comments on this crucial area can be more precise. It also has begun measuring the midrange overload point (3% distortion) with each of the tapes used in testing the deck. This—in combination with the meter data—provides information about effective dynamic range (as opposed to S/N ratio with respect to a fixed standard recording level) and best use of the deck. To help get a fix on the overload properties of the design, we have added a figure for the mike-input clipping point.

The S/N ratio figures themselves—which now, also, are given for all the reference tapes—are A-weighted. The CBS curve, which we have been using, is a more elegant approximation of actual noise audibility; tests have shown, however, that the numbers delivered by the simpler and much more widely accepted A-weighting curve are very closely related to the CBS results. In addition, they are consistent with those measured in amps and preamps, employing the same technique. While the numbers will be reasonably consistent with those we have been publishing, you should be aware that differences of a few dB might result if a given product were to be measured both ways.

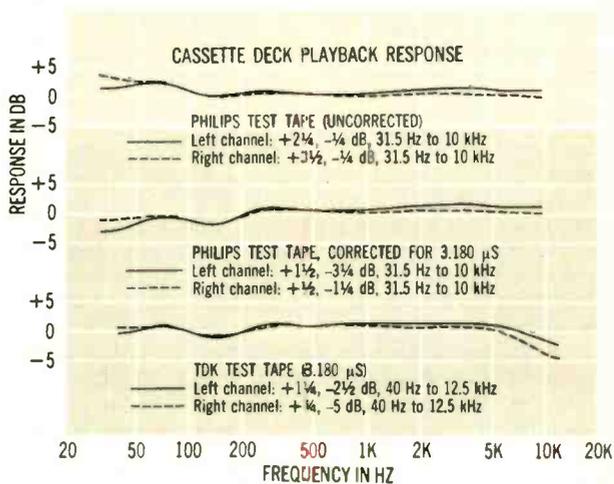
One of the reasons for our documentation of deck behavior with more than one tape is the change, in cassette equipment, from ferric to chrome or chrome-equivalent tapes as the basic standard for record/play measurements. When we began testing these decks, ferric tapes were, indeed, standard; now—at least for the quality performance that justifies their inclusion in our test reports—chrome is the standard. In a few instances, ferrichromes deliver even better performance, and decks capable of using the metal alloy tapes will be the subject of reports later this year. So, as an aid in comparing current results with past reports and in grasping the tape's role in deck performance, key data are given for all tapes. And, aware that interchannel consistency has improved markedly in recent years, we have dropped measure-

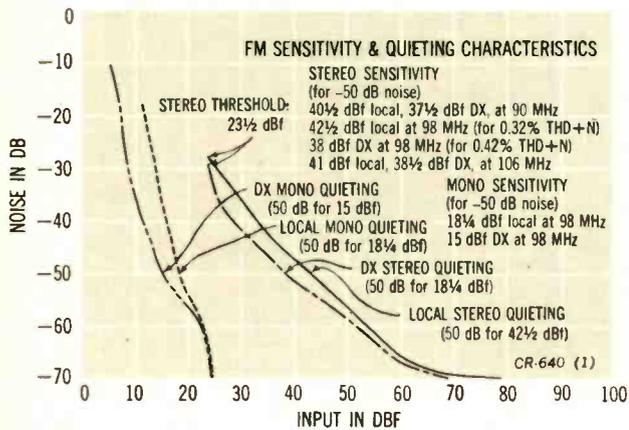
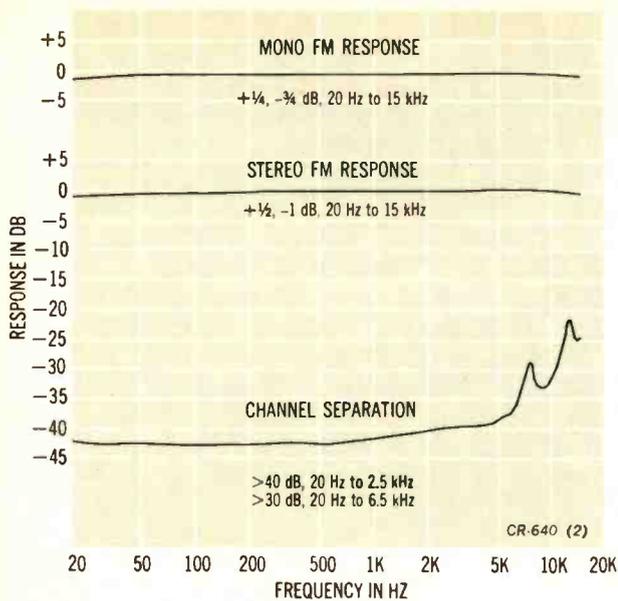
ments for the second channel of stereo decks in all areas except frequency response, where differences between channels can be quite revealing.

One final major change is illustrated in the accompanying graph. We always have tested cassette playback response with the Philips test tape, since Philips is the inventor (and therefore arbiter) of the format. But for several years, and by general agreement within the industry, the vast majority of decks have been "nonstandard" in one respect: They have used a 3,180-microsecond bass equalization curve to avoid the low-frequency distortion that could result from the more exaggerated pre-emphasis of the original Philips standard. A regular feature of our deck reports therefore has been a verbal "translation" of the data derived with the Philips tape into its equivalent response with the de facto 3,180-microsecond standard. We now are using TDK test tapes that are recorded to this standard and need no translation.

The three pairs of curves were made on a single deck. The top pair appears as it would have in past reports—the data read directly from the output meter. The second pair represents the translation—the effective response on which we would comment in the text of the report. The third is a direct reading from the TDK tape. Note that the test frequencies are different: The Philips tape goes about one-third octave lower, the TDK one-third octave higher. And while the shapes of the TDK and corrected Philips curves agree reasonably well, the match is not perfect. The problems of producing and working with test tapes being what they are, exact agreement is virtually impossible; the differences may be taken as an index of the degree of accuracy to be expected in such tests.

In particular, a gradual high-frequency rolloff is discernible in the TDK results (and repeated on other decks with this tape). This, like the bass "boost" in the Philips results, will require interpretation, but the new curves have the distinct advantage of allowing comparisons between decks at higher frequencies than before—a more critical range than the deep bass where we are dispensing with some data.





two. LOCAL, as the name implies, is for strong-signal reception. In normal operation, the tuner automatically chooses DX whenever the signal level is low.

Lab data show the DX mode to be 3 to 4 dB more sensitive than LOCAL. Response and S/N ratios are virtually identical. Capture ratio and distortion are, predictably, better in the wideband LOCAL mode. The DX mode both reduces IF bandwidth and blends the two stereo channels to decrease background noise. In the CR-640, this blending affects the entire band—rather than the high-frequency region alone, as in most BLEND switches—and chops the channel separation to a uniform 8 dB. (In LOCAL, it is better than 40 dB over the important part of the spectrum.)

We can follow Yamaha's logic part way: The DX mode is most useful when receiving weak stereo broadcasts, and—since they are likely to be noisy—some channel blending will make them more listenable. This does not allow, however, for occasions when one wants the added selectivity of the narrow bandwidth (to reject an interfering station on a nearby channel) even though the signal strength is relatively high and the blend therefore unnecessary. We could put up with the slightly higher DX distortion (it's still very low), but in such a circumstance we would prefer not to give up stereo (or even the near-stereo of a conventional BLEND) in favor of this

## Yamaha CR-640 Receiver

### Tuner Section

Capture ratio	1¼ dB	2½ dB*		
Alternate channel selectivity	46½ dB	60¼ dB*		
THD + N	stereo	stereo*	mono	mono*
at 100 Hz	0.29%	0.45%*	0.27%	0.27%*
at 1 kHz	0.088%	0.20%*	0.066%	0.098%*
at 6 kHz	0.15%	0.26%*	0.13%	0.16%*
IM distortion (mono)		0.068%	0.080%*	
Stereo pilot Intermodulation		0.098%	0.247%*	
AM suppression		76½ dB		
Pilot (19 kHz) suppression		60 dB		
Subcarrier (38 kHz) suppression		>85 dB		
S/N ratios (at 65 dBf)				
stereo	68¼ dB	69 dB*		
mono	80 dB	80 dB*		
Muting threshold		23½ dBf		

\*Asterisked data were measured in the DX (long-distance) mode; all others were measured in the local mode.

### Amplifier Section

Manufacturer's rated power	16 dBW (40 watts)/ch.
Power output at clipping (both channels driven)	
Into 8 ohms	17¼ dBW (52½ watts)/ch.
into 4 ohms	18¼ dBW (68 watts)/ch.
Into 16 ohms	15¼ dBW (34 watts)/ch.
Dynamic headroom (at 1 kHz)	¼ dB
Frequency response	+0, -¼ dB, <10 Hz to 21.3 kHz +0, -3 dB, <10 Hz to 93.5 kHz
Input characteristics (re 0 dBW; noise A-weighted)	
phono	Sensitivity 0.405 mV S/N ratio 77 dB
aux, tape	19.3 mV 85 dB
RIAA equalization	+¼, -¾ dB, 20 Hz to 20 kHz
Phono overload (clipping)	192 mV at 1 kHz
Phono impedance	50K ohms at 1 kHz (complex)
Harmonic distortion (THD; 20 Hz to 20 kHz)	
at 16 dBW (40 watts) output	<0.014%
at 0 dBW (1 watt) output	<0.012%
Damping factor at 50 Hz	99

blend's near-mono. Although the mode button can force the CR-640 into LOCAL, it cannot "select" DX; the only alternate setting (AUTO) automatically goes into DX operation when the signal strength is low and chooses LOCAL on strong stations. This degree of automation does reduce one's options.

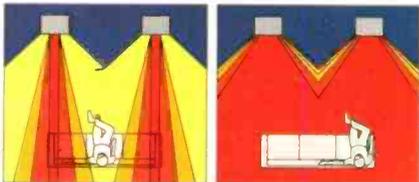
That aside, we find the tuner section very good indeed. Distortion is low, response excellent. AM suppression (a new measurement) is first-rate. That, together with the good cap-

# How Audio History is made.



A lot of speakers claim to be audio breakthroughs. Our new Model 14 really is. In fact, it's so unique, that before we could create it, we first had to invent a whole new family of components.

We began with a new type of horn. The Mantaray™\* It's the first "constant directivity" horn ever created. Conventional horns,



Conventional beaming narrows listening area. Mantaray expands listening sweet spot.

cones and domes (including so-called omnidirectional and reflective speakers) tend to "beam," that is, narrow their angle of sound radiation at higher frequencies. This effect causes the stereo image to lose strength off the center axis and to actually wander.

Mantaray, on the other hand, delivers a clearly-defined sound wedge that keeps its strength regardless of the music's changing frequencies. You get the full spectrum of sound and the most solid three-dimensional stereo image you've ever heard. And since the sound doesn't diminish off center axis, the

Model 14 enlarges your listening area, your "stereo sweet spot."

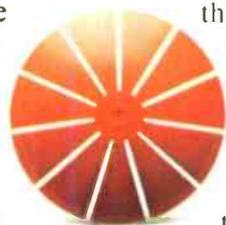
As an extra benefit, Mantaray's precise sound focusing means your music goes in your ears — not in your drapes, walls and ceilings. Consequently, it's more likely than other speakers to sound the same in your home as it does in your dealer's showroom.



Power Control

Then to give you even higher highs, we developed the first radial phase plug, the Tangerine®\*\*

In contrast to conventional phase plugs with two equidistant circular slots that block some frequencies, the Tangerine's tapered slots permit a free flow of high frequencies to beyond 20 KHz.



Tangerine

Equally important to all this is our new Automatic Power Control System.

Unlike fuse-type devices or circuit breakers, the system keeps track of the power pumped into the speaker, lets you know with a blinking light when power exceeds safe limits, and then reduces overloads automatically.

but without shutting the speaker off. It's quite a system.

In addition, the Model 14 offers you super-efficiency, high-power handling capacity and exceptional dynamic range, plus a new vented enclosure with a 12-inch bass driver for a tighter, crisper low end. So that's how audio history is made. And it's all yours at a price that means the best sound value available for your home today.

For a free brochure and the name of your local dealer, write: Altec Lansing International, 1515 South Manchester Avenue, Anaheim, CA 92803.

**ALTEC LANSING**



\* U.S. and foreign patents pending  
\*\*U.S. Patent No. 4050541

# Better Than Any Pusher

**No matter how fine the fibers or how soft the "plush"  
—everything other than the Discwasher system is a pusher.**

**Pushers only line up dirt and microdust into an even line of  
contamination. Run your pusher off the record at a tangent—  
and you spread these particles into a tangent line. And micro-  
dust becomes permanently welded into vinyl by a tracking  
stylus.**

**Only the Discwasher system has the patented micro-  
tipped fibers which are directional—slanted—to pick  
up, hold and thus remove particles from your discs.  
These same directional fibers also remove fluid  
and solubilized contaminants by capillary  
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**The superior record cleaner—  
better than any pusher.**

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**Now Available with DC-1  
Pad Cleaner at no extra charge.**

ture ratio, bodes well for good reception under multipath conditions—whose control is aided by an excellent SIGNAL QUALITY meter that indicates multipath by fluctuation of its pointer. The sensitivity of this meter in displaying both the tuning point of maximum signal strength and the antenna heading of minimum multipath is much better than average. The tuning meter is highly sensitive and calibrated (quite accurately) to indicate how far off channel you are tuned. Couple that with a highly accurate dial calibration over most of the band, and it's easy to tell just which station is being received.

On good stations, the CR-640 affords excellent reception; on weak stereo stations, the noise reduction afforded by the DX/blend combination is very effective in improving listenability. On very weak stations, we prefer to defeat the muting

to prevent the station from sputtering back and forth across its threshold; here, of course, mono reception also is in order.

All this adds up to a lot more than we could logically expect of the low man on Yamaha's receiver-line totem pole—even in view of the company's minimum-performance-standard policy. The tuner section is several cuts above the conventional. The phono preamp is eminently quiet, and we are highly impressed with the flexibility of the rest of the preamplifier section. We find the loudness control highly satisfactory, the tone controls and low filter up to their tasks. And the independent selector switches will bring joy to the hearts of tape recordists. From what we've seen, the Yamaha CR-640 is unique in its price range.

CIRCLE 134 ON PAGE 89

## Manufacturer's Comment

**We invite rebuttal from those who produce the equipment we review. The comments printed here are culled from those responses.**

**Source Specialist preamplifier (March 1979):** The Specialist now is available from stock and lists at \$495.

Our own A-weighted measurements of phono signal-to-noise ratio, made at the tape-monitor connections and referenced to a 10-millivolt input (0.9-volt output), which is a realistic measure with a typical cartridge, give better than 79 dB. A measurement made with the extra 10 dB of gain in the high-level section (in its 1-volt setting) would require an input of 1.65 millivolts to produce an output of 0.5 volt, and the S/N ratio would indeed be about 64 dB, as you say; but such a method has the odd effect of penalizing high gains and favoring low, without regard for the intended input. Also, the overload figure rises with frequency; it goes from the low-seeming 66 millivolts to 330 millivolts at 10 kHz, so there is no possibility of overload with any recording and the highest-output magnetic cartridge.

As you noted, we adjusted the tape output to allow for the IHF load spec (of which we had been unaware) in existing stock as well as in production. We also corrected an obscure bias problem that limited output clipping levels to the 7-volt figures you gave; they should have been, and are now, 9 volts rms. The overall noise figure of the Specialist is that of the volume expander (80 dB), rather than that of the high-level circuitry (90 dB).

The reduction in "obviousness" of the noise suppressor's action with very noisy signals was attained by modifying the control rates, not by increasing time constants, which would have caused noise trailing. The 3-dB error ("response roughness") you noted in mono modes is largely due to the noise-reduction system's filter ripple, which is similar to (though smaller than) the local irregularities in the response of the best loudspeakers. There is, as you imply in the text, no overall "trend" that would make the irregularities evident to the ear.

Our noise suppressor patent (No. 4,135,590), pending at the time of your review, has been granted.

C. F. KERRY GAULDER  
Source Engineering

## Why—and Whither—Micros?

A discernible trend at recent consumer-electronics trade shows has been the so-called micro format in audio components. (We say "so-called" because not all companies use the term "micro" for the format and because there has been some quibbling over whether it is appropriate. But it appears to be sticking, and we have adopted it.) Several companies offer such electronics in Japan; of these, some have displayed samples here, but as of this writing only two have offered them for sale on the U.S. market. Size-compatible speakers have been a big hit here in recent years, and some other compact gear designed (if not built) here bears at least some resemblance to the micros. But it remains an open question just where the format will go.

Our first reaction to the prototypes was delight. After the monstrous superreceivers, too heavy to be borne on a single chassis, that some companies had conceived, the spare economy of the new designs made them look like sports cars in a tractor-trailer world. Unfortunately, that word "economy" applies only to the designs—not to the prices. All the micros we have seen cost more than we would expect in conventional components of comparable specs and features.

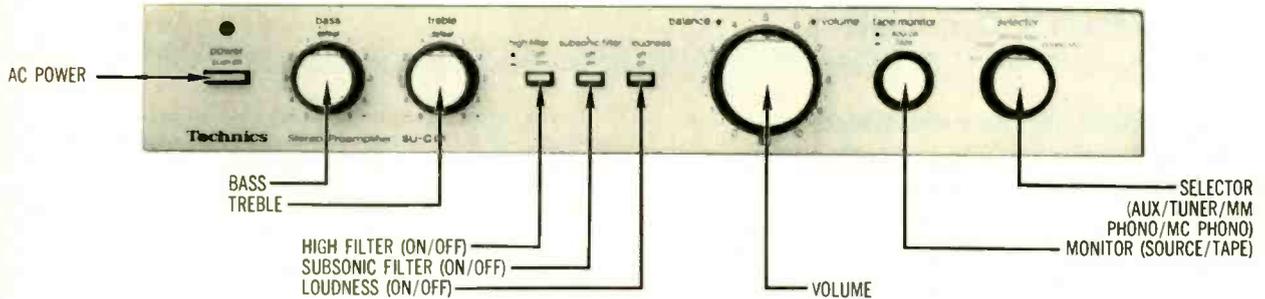
But how good are they, really? And do those relatively tiny faceplates prohibit manipulation by less than skinny fingers? The only way to find out was to run some full-scale tests. We

wanted one each of the separate components that make up a full stereo system, to give some workout to each element. This meant that we had to choose more than one model from each of the two companies (Mitsubishi and Technics by Panasonic) marketing such separates here. And for speakers we added Infinity's tiniest (and newest), though there obviously were many conceivable alternatives. Thus we ended up with a full set of electronics, a speaker pair, and a cassette deck. (Neither open-reel decks nor quality turntables are—or appear likely to be—available in what might reasonably be called a micro format.)

Essentially the tests confirm that most (though not all) of what can be accomplished in full-sized units can be matched in miniature today, reducing the sprawl of a complex stereo system without commensurate reductions in sound quality. The size of the faceplates puts surprisingly little restriction on the features—at least with the middle-of-the-road design approach taken in these examples. Since it seems unlikely that purchasers seeking an approximation (cosmetic or functional) of professional gear ever would be satisfied with micros even if micros were to be designed specifically for them, the present sophistication level seems appropriate. Certainly it is vastly higher than that of the previous generation of miniatures—the so-called compacts, which seem to have disappeared largely because their sophistication level was inadequate to sustain their pretensions to the values offered by "real" components. *(more)*

And these micros certainly are real components: capable, attractively made, and generally well thought out. They also are relatively expensive, given the lower shipping cost that reduced bulk implies. In the electronics, one contributing factor appears to be the wholesale retooling and redesign that was needed. (A new generation of full-sized models often can employ whole assemblies and even circuit cards from its predecessors). Add to this the fact that their "cuteness" may tempt purchasers to approach them as toys—making them seem all the more expensive—and we wonder what sort of a market they will find. (The success of midget speakers offers no guidelines since they reduce bulk to a much smaller fraction of their predecessors'.)

Some electronics manufacturers share our doubts; Pioneer and Toshiba, both of which market micros in Japan, were still waiting and watching U.S. attitudes before committing to our market as this issue went to press. While we would like to think that, in time, the micros could be made competitive with full-sized gear and that purchasers will not be blinded to their virtues by sheer megalomania, an honest prognosis has to stop short of unqualified optimism. But whatever their final fate, for now—particularly for the space-hungry who live in apartments, vacation in cottages, or travel in vans or trailers, or for those to whom self-effacement is a virtue in audio gear—micros are here, and this is how some of them performed for us.



## A Neat, Sweet, Simple Preamp

**Technics Model SU-C01** stereo preamplifier, in metal case. Dimensions: 11¾ by 2 inches (front panel), 8¼ inches deep plus clearance for controls and connections. AC convenience outlets: 1 unswitched (300 watts max.), 3 unswitched (total 250 watts max.). Price: \$260. Warranty: "limited," two years parts and labor. Manufacturer: Matsushita Electric Co., Japan; U.S. distributor: Panasonic Co., Div. of Matsushita Electric Corp. of America, 1 Panasonic Way, Secaucus, N.J. 07094.

If you have any doubts about whether the so-called micro format is intended to consist of "real" components, setting up the SU-C01 should dispel them. It is finely detailed in a way that instills confidence. The back-panel contacts are gold-plated, as are those on the short stereo interconnect cables that are supplied with the preamp. One is a special tuner-to-preamp-to-power-amp affair—it might almost be called a harness—that makes interconnection of an all-Technics-micro system ultraneat. Even the feet on the bottom have a special detail: a little fold-down element at the front of the case to tilt the unit for better faceplate visibility. (We had no complaints about the visibility, and when the micros are stacked as Technics suggests in its multiple systems-stacking diagrams, the feature is not needed.)

The size of the front panel in no way inhibits its human engineering; the controls are, if anything, easier to use than those in many full-size receivers. The detented tone controls and other knobs display their settings with exemplary clarity; the tape-monitor button (alas, for only one deck) is twice the size of many; the filter and loudness buttons are adequate for all but the ultramypic.

There even is provision on the selector for moving-coil cartridges via a head-amp stage that inserts into the phono-input circuitry. (There are no separate moving-coil input jacks.) The phono circuitry is quite flat in both modes, and the DSL data show it to be excellently engineered for minimum noise consistent with the generous overload points.

The loudness feature follows the most recent perception re-

### Technics Model SU-C01 Preamplifier

Frequency response	+0, -¼ dB, <10 Hz to 37.3 kHz +0, -3 dB, <10 Hz to 170 kHz	
Input characteristics (re 0.5 V; noise A-weighted)	Sensitivity	
moving-coil phono	54 µV	S/N ratio 82 dB
fixed-coil phono	1.2 mV	88½ dB
aux, tuner, tape	78 mV	90 dB
RIAA equalization (either phono mode)	± ¼ dB, 20 Hz to 20 kHz	
Phono overload (clipping)	moving coil 8.2 mV at 1 kHz fixed coil (moving magnet, etc.) 215 mV at 1 kHz	
Phono input impedance	moving coil 47 ohms fixed coil 47K ohms; 135 pF	
Output clipping level	8.8 V	
Harmonic distortion (THD)	<0.01%	
High filter	-3 dB at 8.6 kHz; 6 dB per octave	
Subsonic filter	-3 dB at 35 Hz; 12 dB per octave	

search in addressing the bass only. Some listeners (including some of ours) miss the extra "zing" that the more conventional approach introduces at low listening levels, but we generally agree that the sound is more natural without it. The tone controls shelve, rather than peak: good for altering inter-range balances, though less effective if you want to compensate, for example, for a speaker that sounds either boomy or bodiless in the deep bass. The range of both is limited to ±10 dB maximum—less than average but entirely adequate, in our

# Why is the Fisher ST430 one of the world's best-selling new speakers?

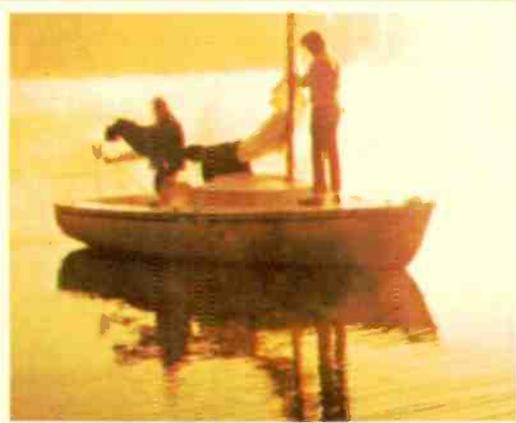
Probably not because of its looks (although it is unusually handsome). Probably not because of the Fisher name (although millions of people know and trust our reputation for quality). And probably not because of its reasonable \$219.95\* price (although you could spend a lot more and get a lot less).

No, what sells a speaker is sound, pure and simple. And the ST430 was created to sound better than any speaker in its class. How Fisher did it is the subject of this ad.

We began with our own Model 1050 10" woofer. By itself, it does a creditable job of reproducing bass. But we added our Model 800 passive bass radiator. It's computer-tuned to the woofer and enclosure parameters, and effectively doubles bass output while reducing distortion, giving the ST430 low-end "sock" rarely found in a speaker of its size.

A Fisher Model 500 high-flux cone midrange driver delivers smooth, uncolored response in the all-important mid frequencies, and the Model 301 3" low-mass tweeter provides excellent dispersion and precise transient response for brilliant, "live" sound.

But just as important as the quality of the individual drivers in the ST430 is the way they are matched and interfaced. There's no "textbook formula" for this phase of speaker design; it takes decades of experience, tireless experimentation, and hundreds of hours of evaluation



with trained ears and sophisticated equipment to produce an optimum design. Most speaker companies simply don't have these resources available (which accounts for the dozens of high-priced speakers on the market

that can't match the ST430's sound).

So if you're looking for outstanding value in a medium-sized, medium-priced speaker system, by all means listen to the Fisher Studio Standard® ST430. You'll find it at selected audio dealers or the audio department of your favorite department store. A few minutes of listening will show you why it's one of the most successful new speakers in Fisher's 42 year history.

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

New guide for buying high fidelity equipment. Send \$2.00 with name and address for Fisher handbook to Fisher Corporation, Dept. H, 21314 Lassen Street, Chatsworth, CA 91311.

 **FISHER**  
The first name in high fidelity.®



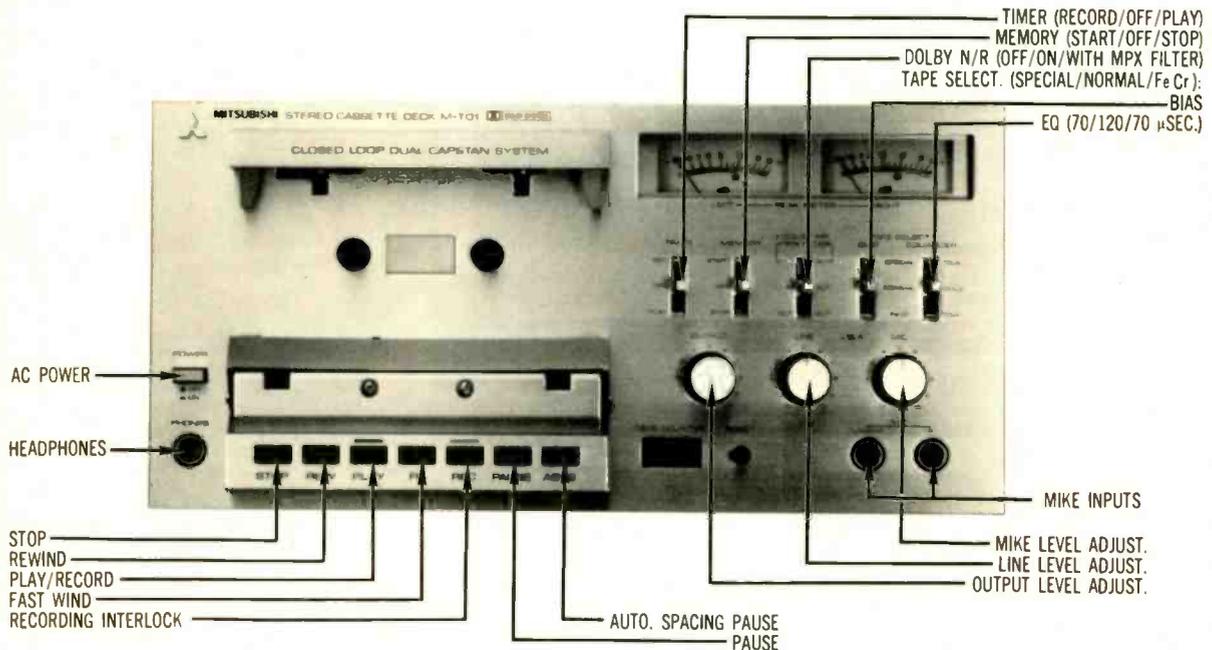
ST430

opinion. The high filter, which reduces 15-kHz output by only about 6 dB, doesn't strike us as particularly effective; while the subsonic filter is much better, its turnover frequency may seem a hair high for those who like organ pedal passages.

Overall performance and behavior are very good indeed. Distortion is essentially nonexistent, even through the phono stage, which exhibits a "classic" impedance of fairly low capacitance, allowing precise tailoring to the requirements of your fixed-coil pickup. (The so-called MM phono stage is, of course, equally appropriate for moving-iron and some high-output moving-coil designs as well.) The lab found all other input and output connections well suited for hookup to any typical modern equipment.

And the preamp listens well. It is quiet, clean, unobtrusive. While there really is no reason why a preamp should not be small—indeed many "full size" ones are no bigger than this micro—we found the elegant compactness of the Technics especially pleasurable to work with. Aside from the concerns of the ardent tapeophile or the inveterate user of outboard signal processors, who will find the connection options (and perhaps the features, since there is not even a stereo/mono switch) less than adequate, we see no reason why this design or its like should not find a respected place among conventional components, let alone among the micros that it so neatly exemplifies.

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## It's a Good Little Deck

**Mitsubishi Model M-T01** stereo cassette deck, in metal case. Dimensions: 10½ by 5¾ inches (front), 8¾ inches deep plus clearance for transport superstructure, controls, and connections. Price: \$560. Warranty: "limited," one year labor, two years parts. Manufacturer: Mitsubishi Electric Corp., Japan; U.S. distributor: Melco Sales, Inc., 3030 E. Victoria St., Compton, Calif. 90221.

It's a formidable problem, trimming down a cassette deck to "micro" size. The designer can do nothing about the size of the cassette itself—and that, to some extent, determines the size of the transport. Mitsubishi has fudged a bit by putting the cassette holder outside the main body of the deck, instead of building a conventional "well." (Some full-size decks use similar designs.) But it certainly has not tried to solve the space problem by nibbling away at the features; the M-T01 has some that are missing from most full-size decks in this price class. And the company can't be accused of compromising performance in the search for compactness.

Response with the three tapes suggested by Mitsubishi—Sony ferrichrome, HF ferric, and TDK SA for the "chrome" settings—is consistently excellent. Not only are all three sets of curves representative of the extended high-end response

available today, even without a separate playback head or gap, but they are quite flat. The SA curves are particularly flat and, partly for this reason, hold up very well indeed with the Dolby circuit turned on. The tape-motion measurements, too, are very good—thanks, in part, presumably, to the closed-loop dual-capstan drive. Noise figures are consistent with those in other decks of this class and can be improved upon slightly by riding gain a little higher than the manual's admonition to stay below the meters' 0 dB would allow. There is about 1½ dB of overshoot (which is relatively little) on sudden transients, and we found that we could run the meters to about +2 dB without getting into trouble.

Audible performance is excellent, in fact, with all three tapes. While we would give the edge to SA, HF produced sound that was more quiet and brilliant than average for a ferric and the ferrichrome seemed both quieter and cleaner than average for that tape type. But the tape table in the otherwise good manual is the usual—very unfunny—joke. More than half of the listed tapes have never been offered here, are called something else in the U.S., or have been discontinued both here and abroad. BASF and 3M are the only non-Japanese companies represented; though we got excellent results with Ampex Grand Master (in the ferric settings) and Memo-



## THE SPARKOMATIC SOUND. CAR STEREO FOR THE TRAVELIN' WOMAN WHO IS NO STEREOTYPE.

You're a travelin' woman because you know the action doesn't stay put. And one of the driving forces in your lifestyle is music—today's spectacular high fidelity sounds. Which means the stereo that shares your driving space had better share your high standards.

Meet Sparkomatic's High Power AM/FM Stereo with integrated Cassette SR 3100. A whole new generation of car high fidelity designed for your demanding expectations. Styled along the lines of the most beautiful and sophisticated home components. With reception and sound reproduction that compare as well.

This particular Sparkomatic Stereo is a High Power tour de force—45 scandalous watts of stereo-phonetic power. With sensitivity and separation a

purist like yourself will love. Advanced efficiencies like feather touch electronic switches activate major high fidelity functions. Separate bass/treble and balance/fader controls put you in total command of the performance. What you ultimately hear is the ultimate achievement in car sound.

There are 20 unique Sparkomatic car stereos to choose from, including many other High Power models. A set of Sparkomatic speakers completes a sound system in fabulous high fidelity fashion.

Because you're a travelin' woman who is no stereotype, Sparkomatic has your type stereo.

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# tech talk:

Five-band equalizer with 5 harmonically related control ranges  
 $\pm 10\text{dB}$  boost or cut at 60Hz, 240Hz, 1KHz, 4KHz, 16KHz.

## explained.

When you look at this MCS Series<sup>®</sup> 75 Watt Receiver, you'll notice a graph-like display with tiny red lights. That's what the graphic equalizer is. What it does is give you more control over the sound you hear than any other receiver available. Because each channel has five separate tone controls, designated by the five Hz and KHz numbers above. 60Hz is the frequency level for the bass. 240Hz for mid-bass. 1KHz for mid-range. 4KHz for mid-treble. 16KHz for treble. And the figure  $\pm 10\text{dB}$  means that each of those controls has a range of plus or minus ten decibels.

All of which gives you about 300,000 tonal combinations to choose from. So you can adjust the tonal response of your stereo system to your listening environment, and adjust it more precisely than you'd be able to with any other receiver. You can even see what you're doing. LED readout shows you which

frequency response you've established.

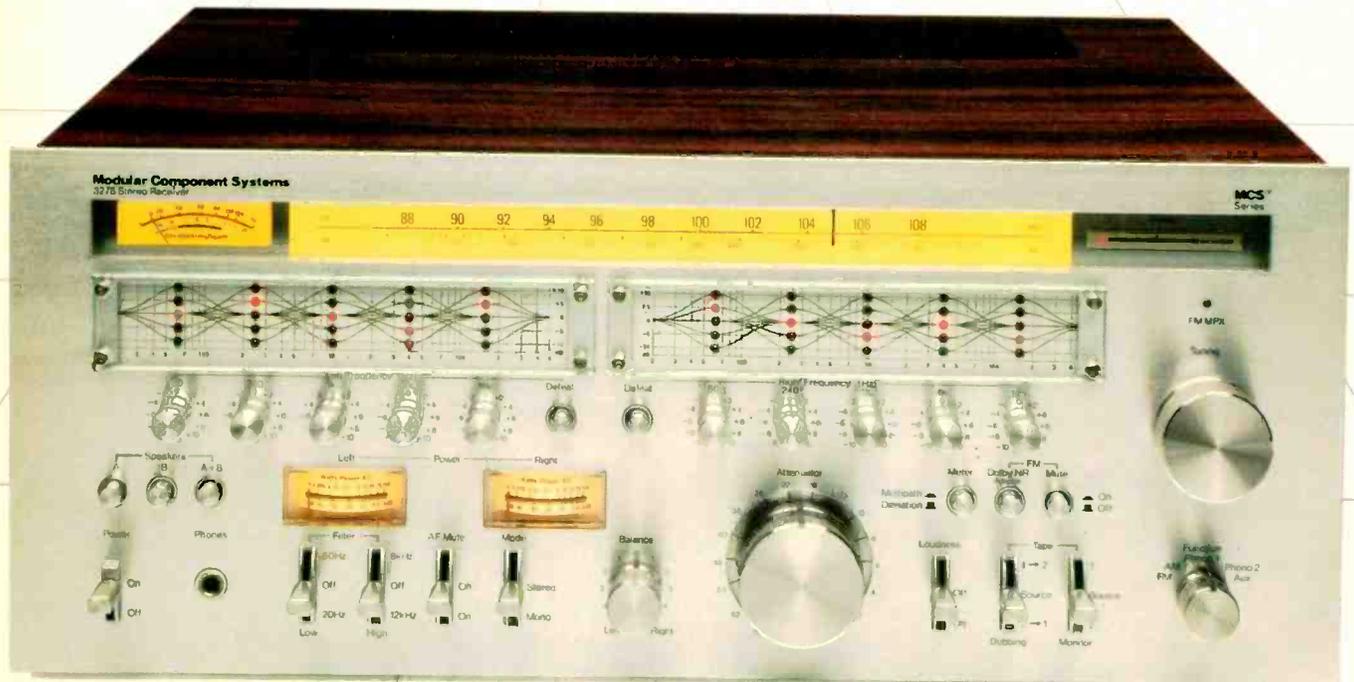
That's the kind of advanced technology that you get in the MCS Series 75 Watt Receiver. And there's more. Features like a multipath deviation meter that makes sure your FM antenna is positioned properly for the cleanest signal. And our LED signal strength meter, that helps you tune in the strongest AM and FM signals.

If you want to hear more, listen to the sound of MCS. It says it all.

The MCS Series 75 Watt Receiver, only \$599.95

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

Prices higher in Alaska, Hawaii and Puerto Rico.



75 watts RMS per channel, 2 channels driven at 8 Ohms, from 20 to 20,000Hz, with not more than 0.25% total harmonic distortion.

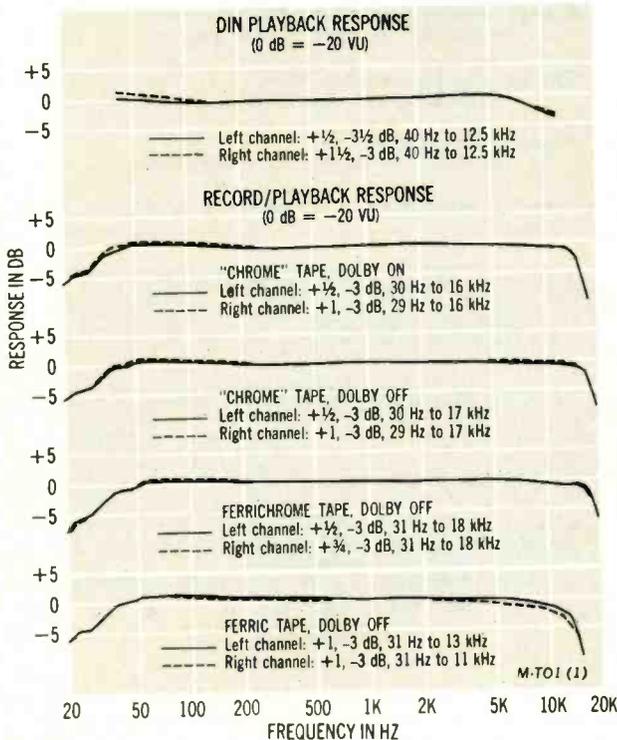
**MCS**<sup>®</sup>  
Series

IT MAKES EVERYTHING CLEAR.

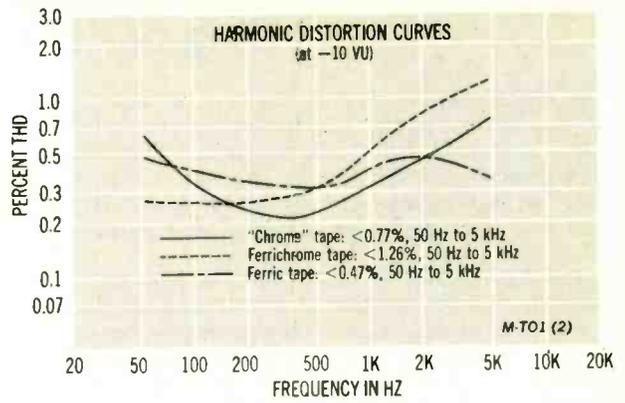
Sold and serviced at JCPenney

## Mitsubishi M-T01 Cassette Deck

Speed accuracy	0.43% fast at 105, 120, & 127 VAC		
Wow and flutter (ANSI/IEEE weighted peak)	playback	± 0.06% average	
	record/play	± 0.09% max. instantaneous	
S/N ratio (re DIN 0 dB; A-weighting)	playback	60½ dB	61½ dB
	Dolby playback	67½ dB	68½ dB
Erasure (333 Hz, re DIN 0 dB)	record/play	57 dB	58 dB
	Dolby record/play	64 dB	65 dB
Channel separation (r/p, 333 Hz)	playback	61½ dB	58 dB
	record/play	62½ dB	62½ dB
Meter indication for DIN 0 dB	+2 dB		
Meter indication for 3% THD (at 333 Hz)	"chrome" tape	+1½ dB	
	ferrichrome tape	+5½ dB	
	ferric tape	+2¼ dB	
Sensitivity (re DIN 0 dB)	line input	130 mV	
	mike input	0.12 mV	
Mike input overload (clipping)	17.5 mV		
Output (from DIN 0 dB)	0.51 V		



rex High Bias ("chrome"), neither brand is mentioned. Yet the list does include tapes so disparate that, although we did not try every one, we find it difficult to believe that any single deck can give good or even acceptable results with all.



Among the features that are out of the ordinary are the memory—which offers automatic playback (START) as well as stop mode following rewind—and the two pause modes, one of which (called ASPS, for automatic spacing pause system) automatically records a blank of about three seconds before the deck actually pauses. The mike and line level controls allow mixing; each has separate elements for left and right channels, though the friction clutching is so stiff and the knobs so small that fine interchannel adjustments are exceptionally difficult.

The controls are solenoid-operated and logic-controlled. This means, among other things, that you can go directly from one mode to another without pressing STOP. (The solenoids also save a lot of space—by comparison to mechanical "piano keys"—with their small trip buttons, which have illuminating symbols to confirm operation mode.) The PAUSE is very good for a solenoid deck: almost quick enough to prevent audible wow, and with only a moderate click on the tape when there is no input signal. In general, however, we find it easier to make edits with the mechanical pause levers that start the transport when you remove your finger; the M-T01's solenoid restarts the transport when you press the button, making split-second timing a mite more problematic.

Readers who suffer from the delusion that there is something inherently worthy about "big, professional VU meters" will look with disdain on those in the M-T01. The disdain is unwarranted. It's true that Mitsubishi's read only to -20 dB, but then, so do professional VU meters. These are peak-reading meters of excellent ballistics, big enough (if only just) to read useful data on the calibration dial. Admittedly, larger meters might have been even more useful; but we certainly prefer these to the sloppy, sluggish average-reading jobs that once were standard or the overly frenetic and essentially unreadable types that, in excessive obsequiousness to instantaneous peak values, don't dwell long enough on the maxima.

Of the front-mount (as opposed to well) transport designs, Mitsubishi's strikes us as quite good. Like some (though not all), it allows free access to the heads for maintenance. A flip-down door covers them when the deck is not in use, and although it has openings through which dust can get in, they are reasonably small.

We would rate the M-T01 as a very good deck of its class. Though it is only about half the bulk of the typical \$500 deck of comparable features, performance is solid and good human engineering of the faceplate has packed in a lot of elements without serious crowding or overminiaturization. It is a little more costly and a little less convenient than one would expect a comparable full-size deck to be; but the differences are not great, and its compactness may count for many as a more-than-compensatory virtue on crowded equipment shelves.

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## King of the Minispeakers?

**Infinity InfiniTesimal** full-range loudspeaker system in molded case with oak end panels plus removable swivel mounting brackets for automobile or wall use. Dimensions: 6½ by 11½ inches, 5½ inches deep. Price: \$175. Warranty: "limited," five years parts and labor. Manufacturer: Infinity Systems, Inc., 7930 Deering Ave., Canoga Park, Calif. 91304.

If the InfiniTesimal had appeared even five years ago, we would hardly have believed that so fine a sound could issue from so small an enclosure. As it is, we are mighty impressed despite the parade of good sounding minis that have preceded it. This is not (by a small margin) the tiniest nor (by a larger one) the least expensive, but we certainly don't know any we like better.

Infinity has used its Emit tweeter, rated (and checked out at CBS) to beyond 35 kHz, in combination with a hardworking little woofer. It is axiomatic that something must be given up when enclosure size is reduced: deep bass, efficiency, dynamic range, clean reproduction, or a combination thereof. The InfiniTesimal essentially takes the last approach via a balance of tradeoffs so canny that at first listening the laws of physics appear to have been broken.

They have not been, of course. The anechoic measurements show bass resonance to be relatively high—a little above 100 Hz—with the usual rolloff below. The sensitivity is low (at just under 80 dB of sound pressure level for a 1-dBW input), but not so low that extraordinary power is required. Nor should such power be applied; signs of distress appear before input power reaches 19 dBW (80 watts) at 300 Hz or, on pulsed signals, peak levels 10 dB higher. In other words, the little speaker will play loud with a medium-power amplifier (by today's standards), but it should be expected neither to fill big rooms at more-than-moderate levels nor to withstand the drive of really big amps.

But as long as it is not pushed too hard it will stand comparison, even in fairly large rooms, with other speakers in its price class, size no object. Short of the organ pedal-tone range (which no speaker in this class should be expected to do an exemplary job with), its sound is astonishingly clean and well defined in the bass and free of coloration above. Measured harmonic distortion is not particularly low at the 0-dBW (1-watt) level, averaging roughly 0.5% second and 0.25% third above the resonance frequency. But even at the higher-level distortion test (the lab limited the level to 87 dB SPL at 300 Hz to stay clear of outright overload), the figures do not increase markedly.

The omnidirectional anechoic curve shows a very gradual rolloff as frequency increases above resonance, while the on-axis curve is just about horizontal. In either case the various peaks and dips do not exceed about ± 2½ dB with respect to the general "lie" of each curve, but the divergence of the two does suggest a gradually progressing tendency to beam as frequency increases. Yet, perhaps because the onset is so gradual, the dispersion seems very even in practice.

**So why even consider larger speakers** if the InfiniTesimal is so good? There is the question of deep bass, which can easily be obtained in greater abundance—though by no means with necessarily greater clarity—from a larger enclosure. More important, to our way of thinking, is the dynamic range. When the speaker is pushed hard, both the clarity of the sound itself and the erstwhile excellence of the stereo image begin to evaporate. Both spatial and instrumental textures thicken and become fuzzy; hard-driven highs take on qualities that might variously be described as grainy or buzzy or blurred, while the midrange becomes very opaque. Even so, the won-



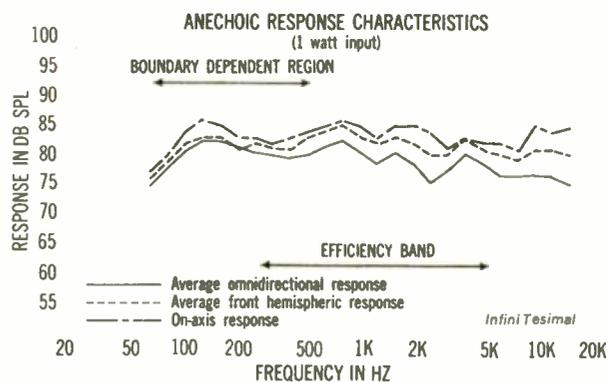
### Infinity InfiniTesimal Loudspeaker System

Average omnidirectional output, 250 Hz to 6 kHz  
79½ dB SPL for 0 dBW (1 watt) input

Continuous on-axis output at 300 Hz  
101 dB SPL for 19 dBW (79.5 watts) input

Pulsed output at 300 Hz  
111 dB SPL for 29 dBW (817.6 watts) input

"Nominal" impedance 3.7 ohms at 210 Hz



der is not that these effects occur, but that they are not more pronounced and at even lower output levels; so small an enclosure simply can't be expected to do everything superbly.

And it does a great deal very well indeed. Despite the extended highs and flatness of response—which, in this price range, often is accompanied by a brightness that lends some edginess or nasality to voices and strings—the InfiniTesimal reproduces violins and sopranos convincingly. Male voices

# 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.

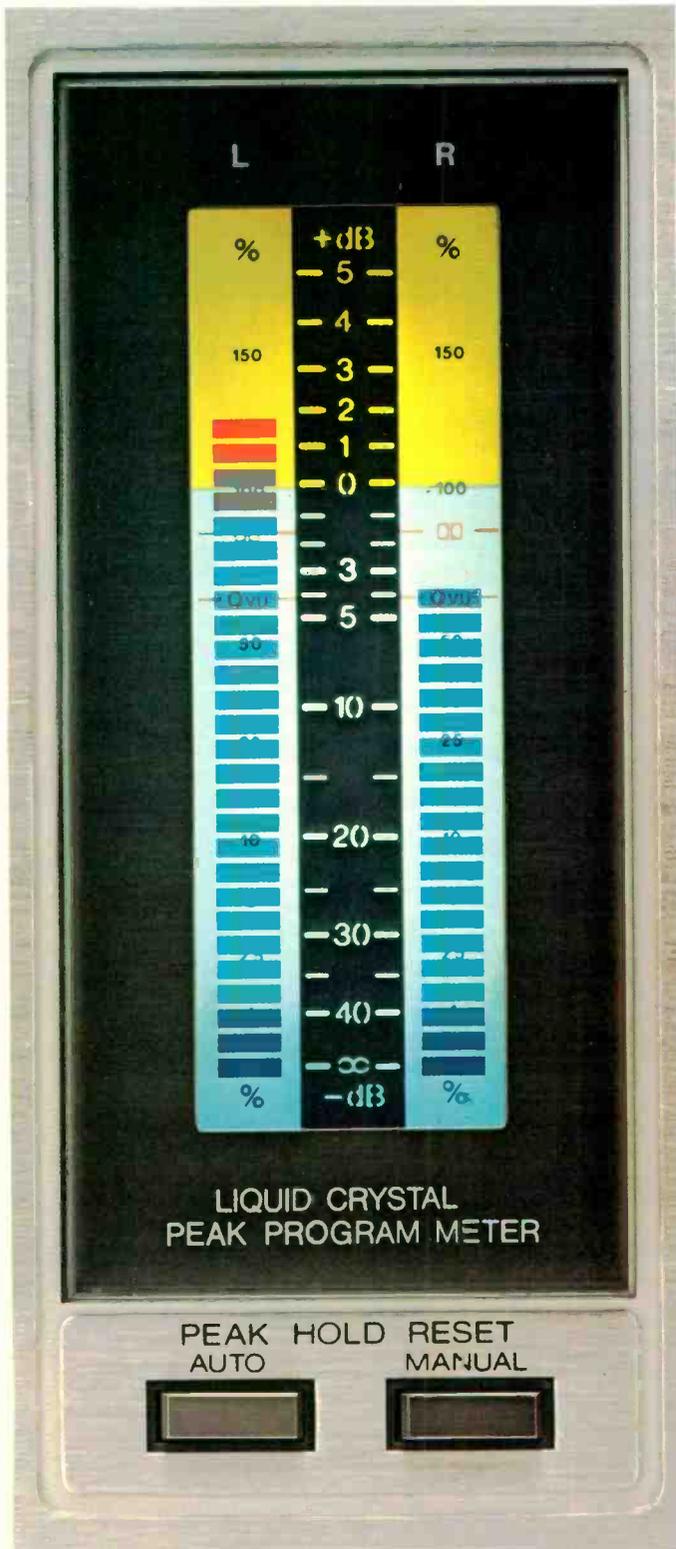


With our own hesitation-free brushless/slotless BSL motor, our own newly developed Dolby\* IC, our own Ferrite-and-Ferrite head, and our own microprocessor-controlled Automatic Music Sensor that lets you preselect any of up to nine recorded program segments.

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 AUDIO

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have excellent balance, with neither the throatiness of an overbright speaker nor the chestiness of one having an exaggerated midbass (a common way of "compensating" for lack of really deep bass). Infinity does offer, on the back panel, a two-position slider intended to trade away a little of the midbass (around resonance) for a little more response below around 60 Hz, but the effect is so subtle (about 1 dB either way), both in the lab and in the listening room, that its value is marginal. High transients—from xylophone to the tinklier instruments—are very well reproduced; the woofer seems less

quick than the tweeter, and bass drums and similar sounds are not quite as sharply defined.

You could find another speaker that will do better in one respect or another at the price, but not, in our experience, one at this size and in all respects at the same time. For its obvious intended purposes—relatively small spaces from car interiors to moderate-sized rooms, where a speaker's bulk is a major consideration—the InfiniTesimal makes a significant contribution to fine sound. We rate it a winner.

CIRCLE 136 ON PAGE 89

## A Compact and Very Unconventional Amplifier



**Technics Model SE-C01** stereo/mono power amplifier, in metal case. Dimensions: 11¾ by 2 inches (front panel), 8¼ inches deep plus clearance for heat sink (at least 1½ inches) and on/off switch. Price: \$360. Warranty: "limited," two years parts and labor. Manufacturer: Matsushita Electric Co., Japan; U.S. distributor: Panasonic Co., Div. of Matsushita Electric Corp. of America, 1 Panasonic Way, Secaucus, N.J. 07094.

An unusual beast, this amplifier. In the first place, Technics has designed a switching power supply for it to dispense with the traditional bulky transformer that otherwise would tend to swell it beyond its modular-micro format. In the second place, the company includes a strapping feature to convert the SE-C01's basically stereo circuitry for mono operation—a feature common in public-address and other commercial-application amps but not in home gear. And both aspects of the design have some rather surprising ramifications.

The switching power supply leaves some residual of its switching frequencies in the output, which therefore would make unweighted noise measurements (ours are A-weighted) appear poor. The switching frequency always is above 20 kHz, so it is (at least in theory) inaudible. The exact frequency changes somewhat, depending on how hard the amp is driven; it showed up anywhere between 21 and 27 kHz in the bench tests at DSL.

The amp gets noticeably warmer than most contemporary power amps, though you should be able to avoid outright misadventure by heeding Technics' warnings about allowing the SE-C01 proper ventilation and keeping it from sources of heat. There does seem to be current limiting in the design. Note that maximum output power into a 4-ohm load is a little less—not more—than that into an 8-ohm load, though the actual power level in both cases is above Technics' rating of 40 watts per channel.

When a strapping switch on the bottom of the amp is used to convert it to mono use, more surprises show up. As it turns

### Technics Model SE-C01 Power Amplifier

#### Stereo (unstrapped)

Manufacturer's rated power	16 dBW (40 watts)/ch.
Power output at clipping (both channels driven)	
into 8 ohms	17¼ dBW (52 watts)/ch.
into 4 ohms	16½ dBW (45½ watts)/ch.
into 16 ohms	15¼ dBW (33 watts)/ch.
Dynamic headroom (at 1 kHz)	0 dB
Frequency response	+ 0, -¼ dB, < 10 Hz to 38.8 kHz + 0, -3 dB, < 10 Hz to 260 kHz
Input characteristics (re 0 dBW; noise A-weighted)	
sensitivity	150 mV
S/N ratio	90½ dB
Harmonic distortion (THD; 20 Hz to 20 kHz)	
at 16 dBW (40 watts) output	< 0.01%
at 0 dBW (1 watt) output	< 0.01%
Damping factor at 50 Hz	83

#### Mono (strapped)

Manufacturer's rated power	17½ dBW (55 watts)
Power output at clipping	
into 8 ohms	19¼ dBW (85 watts)
into 16 ohms	20½ dBW (110 watts)
Dynamic headroom	2 dB
Input characteristics (re 0 dBW; noise A-weighted)	
sensitivity	75 mV
S/N ratio	83 dB
Damping factor at 50 Hz	47

# THE JVC CASSETTE DECK.

It gives you more of what the others wish they could.

Cassette recording takes a giant step forward with the new series of JVC cassette decks. Each is designed to give you everything you need to get the most out of any tape. And there are totally new features to help you make better-sounding cassettes.

## Exclusive Spectro Peak Indicator System.

With almost recording studio vigilance, 25 instant-responding LED indicators offer fail-safe protection against distortion produced by tape over-saturation.

For the first time, you can constantly visually monitor the levels of five low-to-high musical frequency ranges. Then, on playback, the Spectro Peak Indicator actually lets you see how accurately the deck has performed.

## Expanded Dynamic Range and Better Noise Reduction.

Our Super ANRS circuitry applies compression in recording and expansion in playback to improve dynamic range at higher frequencies. So distortion is eliminated in sudden high peaks of any musical

program. Super ANRS also reduces tape hiss by boosting the deck's signal-to-noise ratio by as much as 10dB over 5000Hz.

## New Head Design.

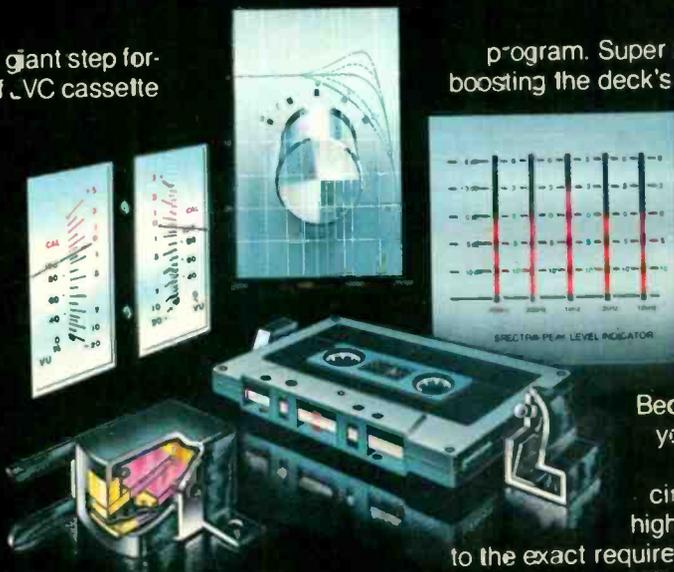
Our refined Sen-Alloy head gives you the sensitive performance of permalloy head construction, combined with the extreme longevity of ferrite, for bright, full-sounding recordings.

## Get the most out of any tape

Because whichever type you select, you'll extract the most from it with our special recording equalizer circuit that lets you "fine tune" the high frequency response of the deck

to the exact requirements of the tape. These innovations alone set JVC cassette decks apart from all the others. Then, when you consider our other refinements, like precision-ground capstans, gear/oil-damped cassette doors, multi-peak LED indicators, independent

drive mechanisms, plus top performance specifications, you can understand why we say that JVC gives you more of what other decks wish they could. Visit your JVC dealer and you'll hear why.



Top: KD-65, PD-55, KD-25. Bottom: KD-10, KD-1770 II, KD-1636 II. Not shown: KD-2, KD-3030, KD-S201

# JVC



# The Bose® 901® Series IV: A new approach to room acoustics creates a major advance in performance.

It's well known that living room acoustics are a major factor in how any speaker will sound in your home. Recently, an ambitious Bose research program analyzed speaker performance in dozens of actual home listening rooms. The study showed that, while rooms vary greatly, their prin-

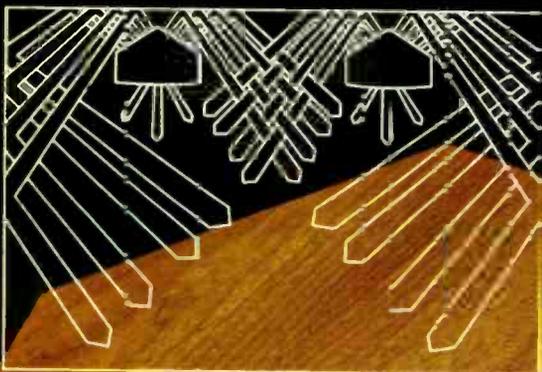
cipal effects can be isolated to specific types of frequency imbalances.

Based on this research, the electronic Active Equalizer of the new Bose 901® Series IV speaker system has been totally redesigned. New controls allow greater capability for adjustment of room factors

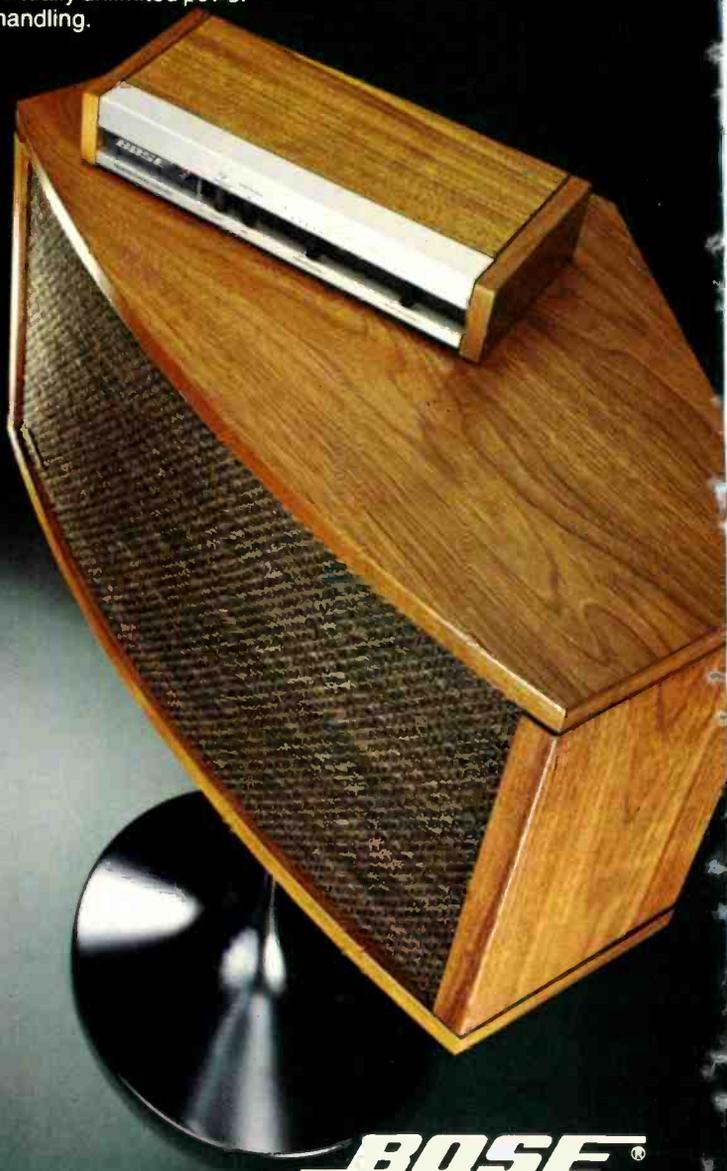
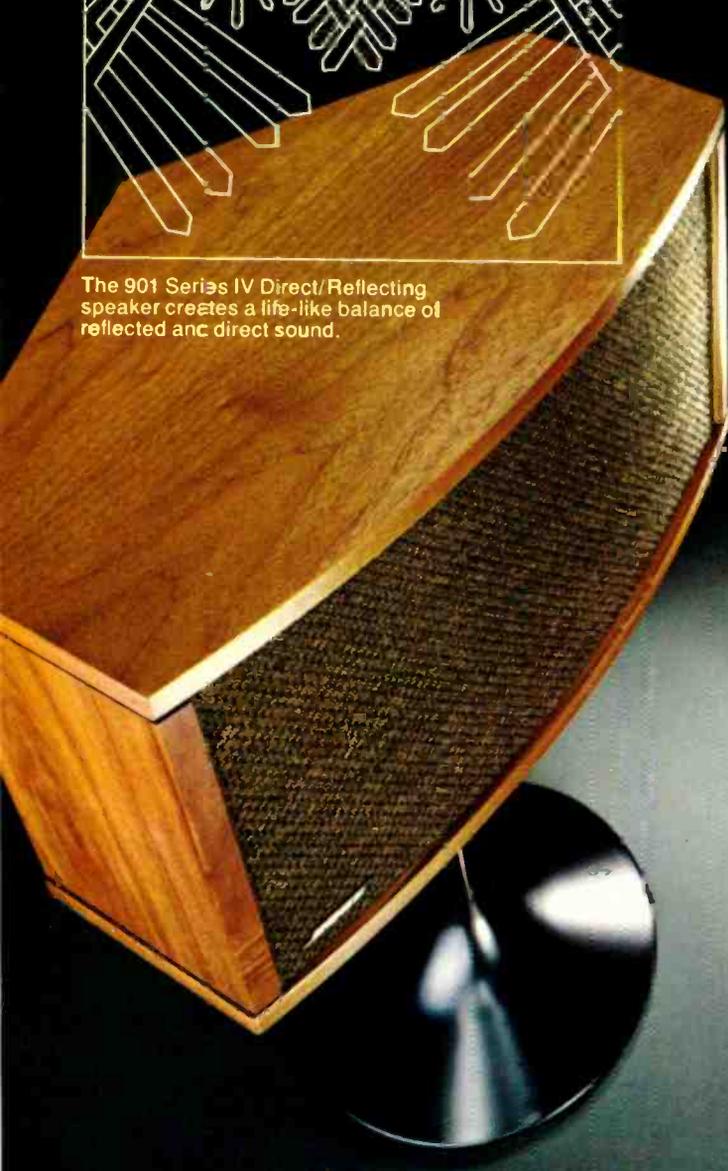
than conventional electronics, and make possible superb performance in almost any home listening room.

These new room controls also let us develop a basic equalization curve with no compromises for room effects, allowing still more accurate tonal balance. In addition, an important improvement in the design of the 901 driver makes possible even greater efficiency and virtually unlimited power handling.

These innovations combine with proven Bose concepts to create a dramatic advance in performance: in practically any listening room, with virtually any amplifier, large or small, the 901 Series IV sets a new standard for the open, spacious, life-like reproduction of sound that has distinguished Bose Direct/Reflecting® speakers since the first 901.



The 901 Series IV Direct/Reflecting speaker creates a life-like balance of reflected and direct sound.



**BOSE®**  
The Mountain, Framingham,  
Mass. 01701

Covered by patent rights issued and pending.

out, however, the surprises are occasioned less by actual performance than by Technics' specs—which, on paper, make it appear that the mono strapping is almost worthless. We might assume that the feature was provided so that owners wanting to increase the power of their systems could buy a second amp and use each—strapped—for one channel of the stereo pair. But Technics' own power claim in the mono mode is a mere 1½ dB above the per-channel stereo rating. Big deal! On the bench, however, it turns out that clipping power is 2 dB higher into 8 ohms and 5¼ higher into 16. (The mono mode is not intended for use with 4-ohm loads.)

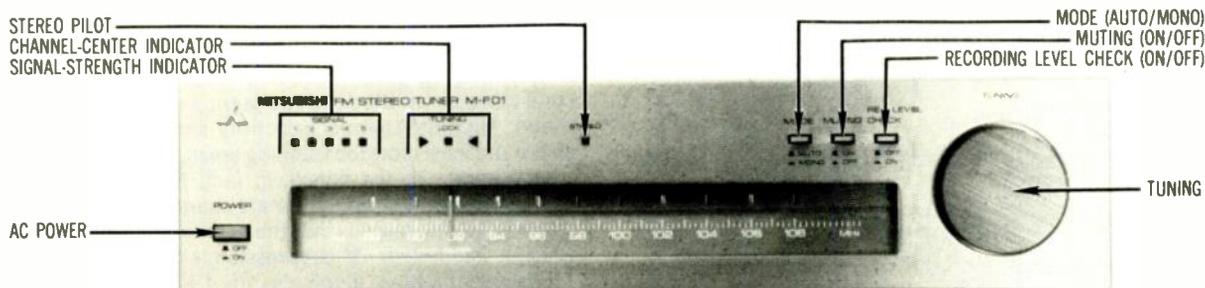
And with music the difference is even more dramatic. In stereo, the amp actually produces 1¼ dB less power before clipping the music-simulating tone bursts of the dynamic-headroom measurement than it does before clipping the steady tones of the regular clipping test; in mono, the dynamic headroom is ¼ dB above the steady-state clipping level. So the per-channel power the amp can deliver into 8-ohm loads is 45 watts stereo and 85 watts mono with sine waves and the equivalent of 40 watts stereo and 90 watts mono with the simulated music! In other words (and despite the implications of Technics' specs), you can effectively double the power by adding a second amp.

The oddities made us wonder what we would hear when we

used the SE-C01 in a listening system. Not to worry: It sounds just as it should. While we would not attribute any distinction to it, its sound is as clean and well defined as that of any regular moderate-power amp (separate or built into a receiver) with which it would occur to us to compare the Technics. Distortion is very low (and essentially the same in both operation modes) and generally remains low even if we consider the power-supply switching frequency as "distortion." Checks of intermodulation at high frequencies—which we thought might be aggravated by the switching frequency—were all below 0.075% and dropped to the level of the harmonic-distortion measurements by the time the test tones had descended into the 10-kHz region.

It should be fairly obvious that we don't know quite what to make of this design. Like all the Technics micros, it is elegantly sharp-edged in style and features gold-plated input contacts and nonscratch feet that can be folded down to tilt the amp upward for a better view of its power metering. And somehow the omission of an on/off switch (which Technics expects will be supplied by your—and preferably their—preamp) lends some special "feel." But the unconventional behavior of the circuitry is harder to assess. We liked what we heard, and perhaps that is all that need be said.

CIRCLE 132 ON PAGE 89



## A Tiny "Thinking" Tuner

**Mitsubishi Model M-F01** stereo FM tuner, in metal case. Dimensions: 10½ by 2¾ inches (front), 8¾ inches deep plus clearance for controls and connections. AC convenience outlets: 2 unswitched (max. 400 watts total). Price: \$340. Warranty: "limited," three years parts and labor. Manufacturer: Mitsubishi Electric Corp., Japan; U.S. distributor: Melco Sales, Inc., 3030 E. Victoria St., Compton, Calif. 90221.

Without the heat-dissipation problems of a power amp, the control complexity of a preamp, or the size restrictions imposed by the cassette, it would seem that the FM tuner is the easiest component to micro-miniaturize. And, indeed, the Mitsubishi M-F01 affords the same circuit sophistication that we have come to expect in full-sized quality tuners.

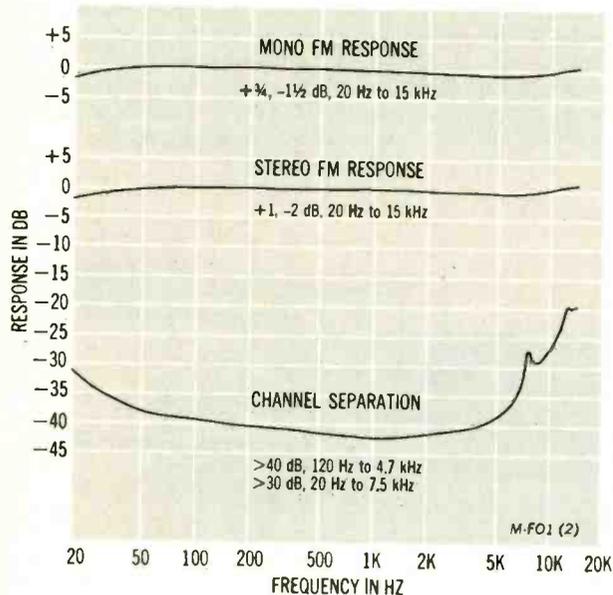
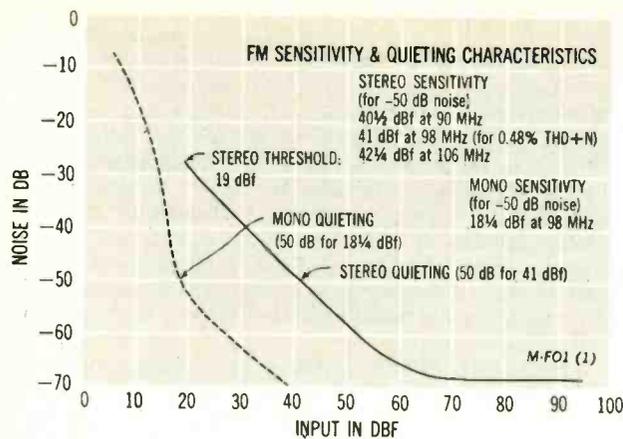
Its quartz-crystal-controlled phase-locked-loop synthesized tuning system grabs the station, wresting control from the fumble-fingered even on relatively weak stations. A green LED—flanked by two red ones that direct you toward the desired goal—indicates the point of optimum tuning. Once lock is achieved, the tuning dial changes color from light to dark green.

Five LEDs display signal strength, and they do so in a more

useful manner than many other such arrays, which are something of a fad. The first comes on at a 20½-dBf input level, corresponding to somewhat better than 50 dB of mono quieting. The second, at 32 dBf, assures 65 dB of mono quieting and a marginal 40 dB of stereo S/N. By the time the third illuminates (at 40½ dBf), mono reception is virtually ideal (70 dB of S/N) and stereo quieting approaches the magic 50-dB figure. The fourth and fifth LEDs (56½ and 64 dBf) denote progressively quieter stereo reception. Considering the non-defeatable quartz lock, the tuning aids thus are appropriate to the M-F01 in both threshold points and physical compactness.

As added encouragement to orient your antenna for best reception, a pair of multipath output jacks on the rear panel may be connected to an oscilloscope display or monitored aurally for minimum multipath distortion. (One of the jacks, wired directly to the FM-detector output, could serve to drive an external discrete-quad demodulator, should such a system appear.) Both fixed and variable stereo output jacks are provided, the latter controlled by a rear-panel adjustment.

The size of micro components does take its toll in the tuning dial, which is necessarily short (just under 5 inches) and



### Mitsubishi M-F01 FM Tuner

Capture ratio	1½ dB
Alternate channel selectivity	56¼ dB
THD + N	stereo    mono
at 100 Hz	0.44%    0.22%
at 1 kHz	0.53%    0.23%
at 6 kHz	0.50%    0.52%
IM distortion (mono)	0.092%
Stereo pilot intermodulation	0.13%
AM suppression	51 dB
Pilot (19 kHz) suppression	57½ dB
Subcarrier (38 kHz) suppression	>85 dB
S/N ratios (at 65 dBf)	
stereo	67¼ dB
mono	75¼ dB
Muting threshold	18¼ dB

sparsely calibrated (every ¼ MHz). The tuning mechanism lacks the smooth feel of the massive flywheels we're accustomed to on standard-size tuners, and it is not quite so free of backlash. But these foibles are largely counteracted by Mitsubishi's quartz-lock tuning and relatively accurate dial.

In both stereo and mono, the M-F01 requires a few dB more signal strength to achieve 50 dB of quieting than some other tuners; with stronger signals, however, the quieting is quite acceptable. Sensitivity is relatively uniform across the band, with a bit more "reach" for distant stations at the low end of the band than at the upper extremity.

At 65 dBf, THD + N is acceptably low. Though it exceeds what we have measured on some other quality tuners, we suspect this may be due to a slight misalignment of the detector circuit vis-à-vis the quartz-lock system in our sample and the undefeatable lock prevents tuning manually for the best figure. (The superb distortion figures that can be achieved on the bench with some tuners require extremely precise tuning and so are less likely to be obtained in practice than under controlled test conditions.) Spectral analysis of the distortion shows it to be mostly second harmonic (with the exception of some pilot intermodulation on the high-frequency stereo measurement), so it will be relatively unannoying.

The muting threshold seems well chosen: When the tuner comes to life, mono quieting is 50 dB. The stereo threshold is at almost the same input level, which assures that no stereo signals will be lost—though the mono mode delivers more acceptable listening on such weak stations.

For a single-bandwidth tuner, the four-pole, linear-phase IF filter strikes an adroit compromise between selectivity and conflicting parameters such as capture ratio and stereo separation. Alternate-channel selectivity should be adequate for all but the most crowded listening areas, and the capture ratio is very good. On the bench, in fact, we found that, when presented with a strong alternate-channel signal, the M-F01 chose to go into mute rather than contaminate the station to which it was tuned. AM suppression is fairly good.

Because the tuner eliminates the 19-kHz stereo pilot via a canceling circuit rather than a notch filter, it achieves superb bandwidth in both mono and stereo. (It actually—and very atypically—is flat within 1 dB to 20 kHz in mono.) The 19-kHz pilot is suppressed adequately in the left channel and almost totally in the right; the 38-kHz subcarrier lies below our ability to measure. Separation is more than adequate throughout the important midband region.

The level control lets you match the output of the M-F01 to that of other program sources. The maximum output voltage (greater than 1 volt) should assure an adequate adjustment range for almost any system. The output impedance of the variable circuit changes with the level-control setting; since it can be fairly high (greater than 5,000 ohms), interconnecting cables should be kept to reasonable length—say, 10 feet or less. The voltage at the fixed-output terminals is about 40% of the maximum, and the impedance is higher (13,000 ohms), so shorter cables—say, no greater than 3 to 4 feet—are in order. Depressing RECORDING LEVEL CHECK introduces an output tone whose level equals approximately 60% modulation.

The quartz-lock circuitry certainly simplifies tuning, especially for the neophyte. Once you're within lock-range of the station and the signal strength is sufficient to bring the M-F01 out of mute, it takes over and makes the final adjustment. The experienced audiophile may find its "mind" too opinionated; on relatively strong stations, however, we find no grounds on which to quibble materially with this tiny but sophisticated tuner's decisions.

CIRCLE 135 ON PAGE 89

# 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 gyrosopic 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**<sup>®</sup>

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

# How can equipment designed for an average listening room perform optimally in your environment?

There's nothing particularly wrong with your stereo system. It's just that different rooms have different acoustics.

Of course, you could build a room specifically designed around the needs of your speakers, and you could rebuild it every time you upgrade your system. But we have an easier way; an MXR Graphic Equalizer that enables you to achieve maximum performance from *your* system, in *your* room... without moving walls.

Our equalizers allow you to critically adjust the frequency balance throughout the entire musical spectrum. They can help to correct certain audible inconsistencies common in many of today's records and tape recordings. You can choose the MXR equalizer that best suits your needs. We make three models that differ in flexibility and precision/sophistication, but each is built to the same exacting specifications and all three share MXR's reputation, in the professional field, for reliability and integrity.

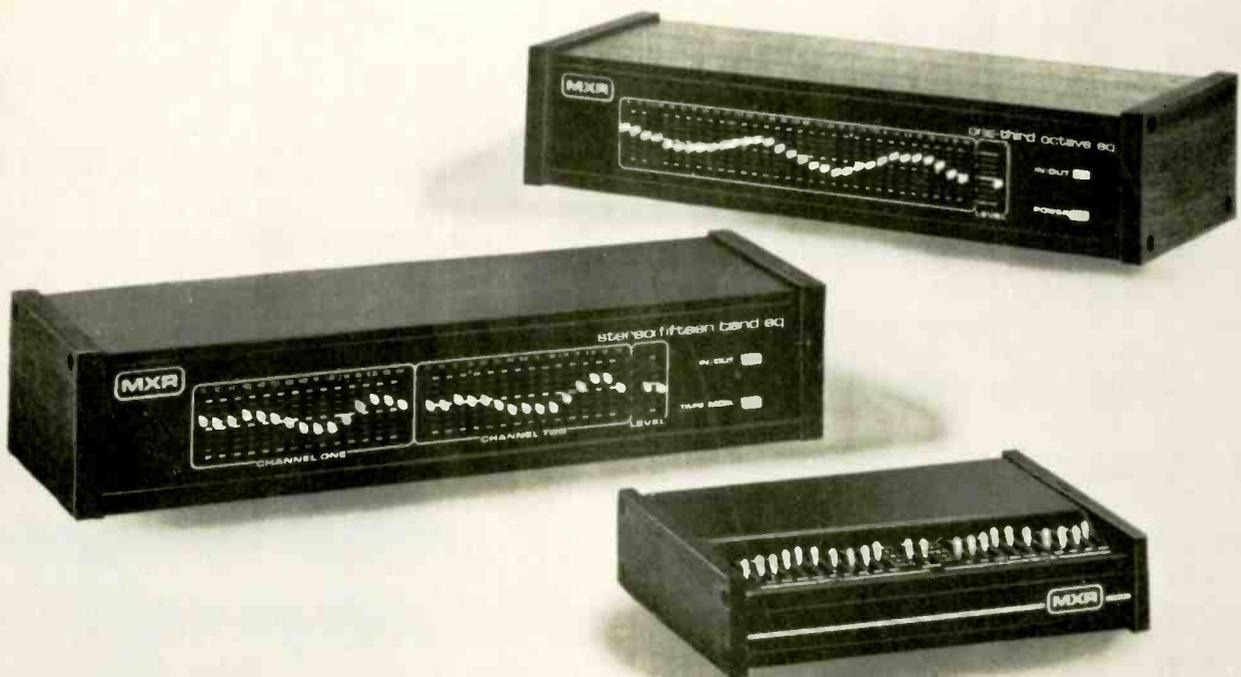
Our popular ten band stereo EQ has one band per octave. Our stereo fifteen band model allows even greater control with two-thirds octave per slider; and for the true audiophile, the MXR thirty-one band equalizer provides ultimate control with one-third octave per slider.

Each of the MXR Graphic Equalizers can help you get the most from your stereo system by working with your room, not against it.

Your MXR dealer can help you choose the MXR equalizer that best suits your needs.

**MXR Innovations, Inc.**, 247 N. Goodman Street,  
Rochester, New York 14607, (716) 442-5320

**MXR** Consumer Products Group



# The Pickup/Preamp Confrontation

A “marriage counselor” explores the trouble spots in this sometimes-uneasy union.

by Edward J. Foster

**F**UNNY THING, the way some fads come and go and some, by refusing to go away, prove that they weren't fads in the first place. One such is the emphasis that recently has been put on proper phono-cartridge loading.

The dramatic improvement in cartridges over the last few years has made the need to eke out their best performance more—not less—important. Indeed, the same cartridge can sound subtly, but noticeably, better with one preamp than with another. Switch to another cartridge, and the other preamp might sound better. The obvious explanation is incompatibility between the components rather than essential quality differences in the components themselves. The most common cause of this incompatibility is traceable to the phono-cartridge loading—the combination of input resistance and capacitance—provided by the preamplifier's input termination.

The process of engineering a new pickup is like designing a smooth road for a hilly landscape. The ridges must be whittled away and the gullies filled up, and no rock and earth should be left over when you're finished. Thus, in trying to produce a pickup with a flat frequency response, something must be done about the resonance that will occur at a relatively high frequency—generally in the region between 12 and 35 kHz—because of the interaction between the effective mass of the stylus and the compliance (springiness) of the vinyl from which the record is made. There is likely to be a peak in the frequency response at the resonant frequency and a fairly rapid rolloff in response at still higher frequencies. This resonance establishes the upper frequency limit of the cartridge.

The phono-cartridge designer has no more control over the vinyl characteristics than the high-

way engineer does over the geology of his site. The mass and damping of the stylus, however, are within his power to control. The lower he makes the mass, the higher the resonant frequency. So one way of taming his particular topography is to get the mass so low that the resonance lies far above the audio range. But then he must take care that the stylus assembly will be rigid enough to prevent it from flexing while tracing the groove. Here is another juggling act involving mass and rigidity—and price, since low mass and high rigidity translate into exotic materials and increased cost.

A second approach to this “topology” is to damp the resonance so that its effect is less apparent. This takes discretion. Too much damping results in a sluggish cartridge and one with poor high-frequency tracking ability. Yet a third technique compensates (at least partially) for the mechanical resonance with another resonance. Since most high-quality cartridges are of the “magnetic” type and have relatively high self-inductance, the mechanical resonance can be smoothed with an electrical one created by the inductance of the cartridge and the capacitance and resistance to which it's connected. Here's where proper cartridge termination comes in.

The designer controls the internal characteristics of his pickup, but he doesn't control the load. The best he can do is to postulate likely loads and say, in effect, “If you want this cartridge to work the way I intended, terminate it with X ohms of resistance and Y picofarads of capacitance.” It's up to the user to provide that load, which is to say that, for best response, the preamp and tonearm wiring must conform to the expectations of the cartridge designer.

## A Question of Standards

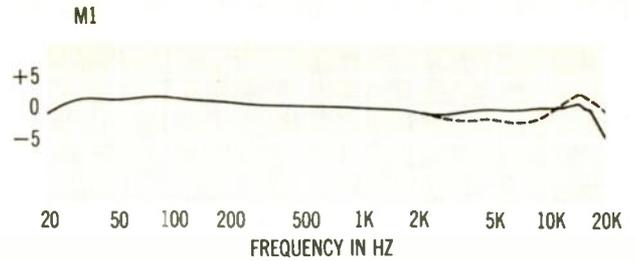
It has been standard in the industry for some time that the resistive load a preamp provides for a magnetic cartridge should be 47,000 ohms (though CD-4 cartridges were designed for 100,000-ohm termination). What isn't standardized is the capacitive load. Perusing cartridge spec sheets, you'll find recommended loads of from less than 100 picofarads (usually for CD-4 cartridges) to about 500 picofarads. To complicate matters further, relatively few preamps have heretofore carried input-capacitance specifications, although generally they have conformed to the 47,000-ohm resistive requirement. Nor have many tonearms carried a wiring-capacitance spec.

Some help is on the way: The recent IHF amplifier-measurement standard includes characterization of phono input impedance as a "primary" specification for preamplifiers and integrated amplifiers. Furthermore, it requires that both the input resistance and the input capacitance normally be specified. Presumably, the standard will make its presence felt, and disclosure of these parameters will be more widespread, in the future.

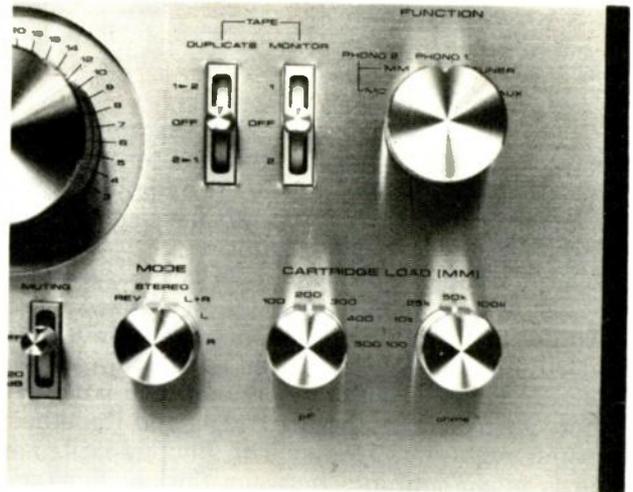
The sleeper here is that not all phono-preamp circuits can be "modeled" by a simple two-element circuit containing just a resistor and a capacitor. Some circuit configurations exhibit an equivalent input capacitance that varies with frequency, so the ideal load cannot be presented to the cartridge at all audio frequencies even if some portions of the range are well matched. Such a load certainly was not what the cartridge engineer envisioned, and it can induce frequency-response aberrations that are even more substantial than those caused by a slight capacitive mismatch.

According to the IHF standard, such circuits are to be characterized by a specification of input impedance at 1 kHz alone, without the separate specification of resistance and capacitance—a warning to the consumer that all may not be well. Since the IHF document is relatively new, however, and since providing only the 1-kHz spec was the old way of doing things, you can't really tell whether a manufacturer has merely ignored the new standard or indeed does have an atypical input load and is properly indicating that fact. (Starting with this issue, HF is reporting the phono input impedance in accordance with the new standard.)

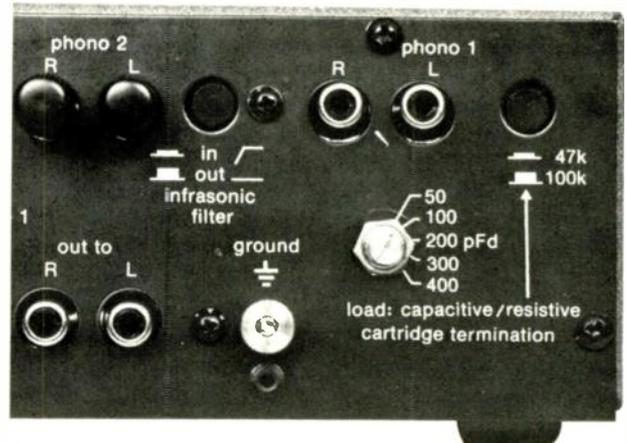
You're likely to see more and more phono circuits that present a classic load to the phono cartridge. Certainly the many preamps that now afford user control over the input capacitance suggest that greater attention is being paid to input characteristics and reflect the fact that their designers are more or less in the same boat with the cartridge engineers: Neither knows which product will be used with his, so neither knows what capacitance values to design for.



The effects of incorrect capacitive loading can be difficult to predict. With this particular pickup, the correct loading (450 picofarads) produces the fairly flat response curve represented by the solid line. When loading is reduced to 150 picofarads (dotted line), not only does a nasty peak appear at the top end, but the treble below the peak is noticeably weakened.



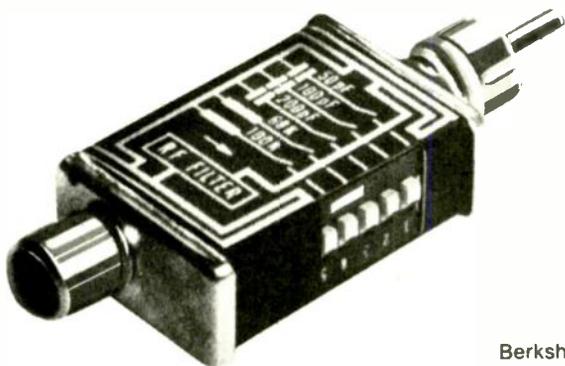
Some preamps (like this, in a Pioneer integrated amp) have phono-loading controls visible on the front panel.



Others (this is Holman design for Apt) hide controls at the back as a set-and-forget onetime adjustment.



DB Systems offers color-coded capacitor-loading plugs.



Berkshire does it with a single multiple-value capacitance loader for each channel (above). It also offers capacitance meter (below) so you can measure values already present in your system.



## What Can You Do?

The new genre of adjustable-load preamps affords valuable opportunities to act as marriage broker between pickup and preamp. To do so, there are two facts you must know: the optimum load for the cartridge you are using, and the cable capacitance of your tonearm or turntable. The first is almost always given in the cartridge's specification sheet; the latter is harder to come by.

Few current tonearms or turntables have specified values of capacitance, though a common value is "under 100 picofarads" (thanks to pressure from the CD-4 lobby, whose subcarrier tends to get lost at higher values). When in doubt about how much capacitance the cabling adds, contact the turntable or arm manufacturer for the specifics. The preamp's capacitance should then be set to equal the desired load for the cartridge minus the tonearm-cable capacitance.

There are several products on the market with which you can increase the capacitive load on the cartridge. One is the DBP-6 Phono Equalization kit (\$24.95) from DB Systems. It consists of a set of "Y" connectors and pairs of phono-plug-mounted capacitors that add 100, 150, 200, 300, or 400 picofarads to the system. Another product is the Match-Maker (\$49.95) from Berkshire Audio Products. This device is connected in the phono-cable line and can add capacitance from 50 to 350 picofarads, in 50-picofarad steps. (Berkshire also offers a capacitance meter—the \$89.95 Model CCN—so you can measure your leads.) The cheapest way (if you're handy) is to buy capacitors of the appropriate values in a radio-parts store and solder them directly across each phono-input jack.

In each case, you will need to know the capacitive load already present in your preamp. Lacking test data or specs, you will have to contact its manufacturer. The total capacitance is the sum of the parts; add the input capacitance of the preamp to that of the tonearm cabling and subtract this sum from the optimum load required by the cartridge. Make up that difference with the closest value at hand. You needn't be precise; if you're within 20% of the optimum value, that should be good enough.

Let's say, for example, that your pickup is rated for a 400-picofarad load, your tonearm leads at 100, and your preamp at 130. You would need about 170 [ $400 - (100 + 130) = 170$ ] picofarads more, and a 150-picofarad value should be dandy. If the capacitance of the system already exceeds that desired by the cartridge, no external "fix" will help.

When you've corrected your system's capacitance, what difference in sound can you expect to hear? That will depend upon the cartridge you're using. Some are quite tolerant of mismatch; others are not. Remember that there are several options

open to the cartridge designer to achieve a flat response. To the extent that a particular design relies upon a specific electrical termination, the sound of your cartridge can be improved substantially by providing that termination. (Improperly terminated cartridges have been known to exhibit 5-dB variations in frequency response.) To the extent that the cartridge does not rely greatly on external compensation, the load is less critical—although, in any case, an excessive capacitive load will depress the high end.

Oddly enough, adding capacitance may make a cartridge sound brighter. Some pickups (for example, those made by Shure prior to the V-15 Type IV) exhibit a depression in the region between 3 and 10 kHz when the load capacitance is insufficient. This depression is accompanied by a high-frequency resonant peak somewhere near 20 kHz. With proper loading, the upper-midrange output is increased and the peak brought under control. Since there is more musical energy between 3 and 10 kHz than at the resonance frequency, the cartridge sounds brighter (and smoother) when properly terminated.

Proper capacitive termination is most important when using fixed-coil magnetic cartridges of relatively high impedance—those with moving magnets or moving iron (variable reluctance). Moving-coil cartridges have relatively low impedance (inductance), and their frequency response cannot be smoothed by capacitive loading. (Their designers are left on their own to solve the problem.) In the opinion of some critical listeners, however, terminating a moving-coil cartridge with the proper resistive load is as important as the capacitive load is to a fixed-coil cartridge.

Why this recent concern with the phono-cartridge/preamp "marriage"? Surely, if its effect is so dramatic, the problem (and solution) would have surfaced earlier. Perhaps part of the answer lies with the quest for better high-frequency phono-cartridge tracking ability. In some cases, this may have been achieved by a reduction in internal damping and a greater reliance on external loading to assure flat response. But, undoubtedly, it has been the very progress made in phono-cartridge design that has exaggerated—or even created—the problem.

As long as phono styli were so massive as to resonate in the region between 12 and 15 kHz, one could only damp the resonance in the pickup and make the best of it. And, in any event, early styli geometries were incapable of accurately tracing signals of much higher frequency; even if such signals were on the record, you'd never know it. But today's styli—with their narrow tracing radii and exceedingly low effective mass—can reproduce the highest tones on a disc. And, in high fidelity lore, if it can be done, it will be done.

## LOAD REQUIREMENTS OF FAMILIAR PICKUPS AND TONEARM AND CABLE CAPACITANCES OF FAMILIAR TURNTABLES, ARMS, AND PHONO CABLES

The table immediately below shows preferred resistive and capacitive load values for familiar phono cartridges that are likely to be used with the "regular" (moving-magnet, etc.) phono inputs in good home installations. Where a range of values is indicated, relative insensitivity to loading values is implied—though, since specification practice varies, some forgiving pickups may show only single values. The table that follows shows capacitances for familiar tonearms, turntables, and connector cables; instructions for using these figures are given in the article's text. The information is drawn from a number of sources, including manufacturers' data and measurements at Diversified Science Laboratories. We are particularly indebted to Thomas Holman for permission to use data compiled for and supplied with the Apt Holman preamplifier.

### PHONO CARTRIDGES

Manufacturer	Model	Load Resistance in Ohms	Load Capacitance in pF
Acutex	All models	47k	100-400
ADC	All models	47k	275
AKG	All models	47k	470
Andante	E, S	47k	250
Audio-Technica	All AT	47k	200
B&O	MMC-3000, MMC-4000 MMC-6000	47k 100k	200 100
Decca	London Mk. VI Gold or Plum	50k	250-300
Dynavector	All models	10-47k	275
Empire	2000Z, 2000T All other 2000 series 4000 series Broadcast One	47k 47k 100k 47k	300 400-500 < 100 300
Goldring	All models	47-100k	200-400
Grace	SF-90, F-9L F-8L	47k 47k	250 100
Grado	All F and G series	47k	not critical
Hervic	G-900SE Mk. II G-900E, G-820D	47k 47k	150-250 200-400
JVC	4MD-20X	100k	100
Micro-Acoustics	All models	10-100k	100-1,500
Nagatron	All induced-magnet models	50k	350
Ortofon	M-20, VMS, and FF models	47k	400
Pickering	Models with "Q" suffix All XV-15, V-15 Series, XSV-3000	100k 47k	100 275

Realistic/Shure	R-1000E	47k	450
Satin	M-18 series	47k	150
	M-117G	47k	100
Shure	V-15 Type IV	47k	200-300
	V-15 Type III	47k	450
	M-24H	20-100k	100-250
	All other models	47k	400-500
Signet	Models with "TK" prefix	47k	100
Sonic Research	Sonus Blue		
	Standard Series	47k	≤ 400
	CD-4 Series	47k	≤ 250
	All other models	47k	≤ 400
Stanton	Models with "Q" suffix	100k	100
	500, 600, 680, 681, 881 series	47k	275
Stax	CP-Y/ECP-1	≥ 20k	≤ 300
Supex	SD-901/E + Super	47k	not critical
	SM-100/Mk. III, SM-100/Mk. II	47k	300

## TONEARMS, ETC.

Manufacturer	Model	Capacitance in pF
ADC	LMF-1, LMF-2 (Both models are available with optional 100 pF cables.)	240
Akai	AP-207, AP-307	115
	AP-206, AP-306	81
	AP-100	100
AR	XA, XB, 77XB	140
B&O	All models back to 3000 including 1900, 2400, and 4002	180
B.I.C.	All models	160-180
BSR	All models including ADC turntables	275
Decca	Decca	300
Denon	All models	100
Dual	All models	155
Dynavector	DV-505	50 (+ 37 pF/m cable, arm supplied with 1 m.)
Empire	598I, 598II	210
	698	100 with 4-ft. cable 210 with 5 ft. cable
Fidelity Research	FR-54	150
	FR-64s, FR-66s	100
Fisher	MT-6115, MT-6211	84
	MT-6224, MT-6225, MT-6250	75
	MT-6310, MT-6320,	
	MT-6330, MT-6335	84

GAS	5-ft. cable	165
Garrard	SL-55, 95	180
	All current models	110
Gold-ens	old, 1 m.	55
	new, 2 m.	125
Harman Kardon	ST-6, ST-7, ST-8	110
Hitachi	All models	150
Infinity	Black Widow	80
JVC	All models	85
Kenwood	All models	100
Lenco	L-133, L-236 L-830DD	82
	L-833DD	25
Lux	PD-272	90
Marantz	All models	90
Micro Seiki	All tables and arms	100
Mitsubishi	All models	100
Philips	GA-437, GA-222, GA-312, GA-406	170 (+ 30 pF for 1-ft. cable)
	AF-677, AF-777, AF-877, AF-977	180 (+ 30 pF for 1-ft. cable)
Pioneer	All models	100
Rabco	SL-8E	125
Radio Shack	Realistic LA3-400	190
ReVox	B-790	205
Rotel	All models	100
Sansui	All models	85
Sanyo	All models	100
Scott	All models	100
SME	3009 II, 4-ft. cable	125
	3009 II, CD-4 cable	75
	3009 III, 4-ft. cable	300
		(just under 100 with capacitor in male connector removed)
Sony	PS-T3	180
	All other models	70
Stanton	All models	95
Stax	UA-7	80
Technics	All models	80
Thorens	TD-126C/Mk. II, TD-110, TD-115	230
Visonik	VT-3300, VT-5300	190
	VT-7300, VT-8300, VT-9300	230
Yamaha	YP-800	80
	YP-D6, YP-211	125

# TRACKING-ANGLE ERROR: A NEW SLANT

by James V. White

The problem of vertical tracking error in phono pickups was brought to light seventeen years ago by Erik R. Madsen of Bang & Olufsen. A year later, more detailed evidence was published by the late Benjamin B. Bauer of CBS Technology Center, by J. D. Halter and J. G. Woodward, then of RCA Victor's Princeton Laboratories, and by Duane H. Cooper of the University of Illinois. Last year measurements by our author, James V. White, and Art Gust at CBS Technology Center, and parallel measurements by Mitchell Cotter at Verion Audio, Inc., confirmed that the problem is with us still.

THE ODDS ARE better than 100 to 1 that, astonishing though this may seem, your phonograph's sound suffers unnecessarily from as much as 5% distortion due to vertical tracking angle error. Recent data developed at CBS Technology Center show that VTA modulates the frequency of tones recorded in the groove and that 5% peak "flutter" is typical of the results with modern pickups—including models that enjoy formidable reputations. Moreover, listening tests verify that the effects are clearly audible in music reproduction.

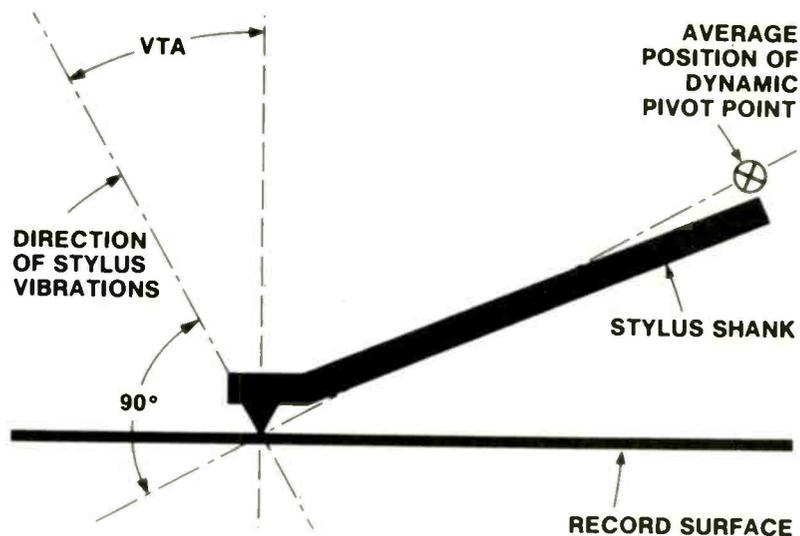
VTA has a simple geometrical meaning that is illustrated in Fig. 1. It should be obvious that the cartridge—and the pivot point within it—must be mounted above the record during playback so that it will not drag on the surface. The pivoted stylus shank therefore must vibrate at an angle to the ver-

tical—the vertical tracking angle of the pickup—when reproducing "vertical" modulation of the record groove. To prevent distortion in playback, the original master disc must be cut with a stylus that pivots (as shown in Fig. 2) so as to produce a vertical cutting angle that matches the tracking angle of the pickup. Any difference between the two is called VTA error.

Ideally the error should not exist, but with today's commercial products it is typically a whopping 10 degrees. Many readers will be aware that the vertical angle was standardized at 15 degrees by the RIAA in the U.S. back in the Sixties and that a German (DIN) standard, by contrast, specifies a range of angles with 20 as a central target value.

Ben Bauer, for many years the man in charge of CBS's Stamford laboratory where our recent investigation of VTA took place, was the first to conduct a comprehensive study of vertical angles, and his work in the Sixties contributed significantly to the development of cutters having angles that could be matched with pickups of practical design. A primary frustration in establishing a standard was the wide divergence among different brands of cutters and pickups at the time. In addition, the use of different measurement techniques on them were usually found to give somewhat different values for the vertical angle. This raised the question of which measurements were accurate. Amid this turmoil, it was Bill Bachman of CBS Records, according to Bauer, who made a moder-

**Fig. 1: The pickup's stylus tip, in tracing vertical modulation, does not move straight up and down, but at an angle tangent to a circle about the effective (dynamic) pivot point of the stylus assembly. The angle between this tangent and the true vertical is called the vertical tracking angle, or VTA.**



ate suggestion to the RIAA standards committee: Why not pick 15 degrees? This figure had the merit of being nearly midway between the extreme values of vertical angle, ranging from less than 0 degrees to more than 40, that were attributed to the various cutters and pickups then being used. And 15 degrees was not a difficult value to achieve in cartridge design—or so it was believed at that time.

So why does the VTA problem still exist? In my view, the present state of affairs is a natural outgrowth of one simple fact: The test records that have been available for measuring VTA all give different results. Put yourself in the position of a busy pickup designer or equipment reviewer, and imagine what you would do if two authoritative measurements of VTA for a pickup you were testing differed by 10 degrees. Add to this the existence of two different standards in international trade, and I think you can see how the subject of VTA would gradually crawl under the rug, where it has been lurking for several years.

During this time, of course, significant improvements in pickups have reduced tracking forces and stylus impedances and have improved stylus geometry for reduced tracing error and record wear. But these very improvements have made the frequency-modulation distortion caused by VTA errors one of the most obvious flaws remaining.

### How Big Is the Error?

The most accurate method for measuring VTA is the one that ignores all other characteristics of the pickup (and test equipment) and responds in a predictable manner only to the tracking angle. Unfortunately such a method may, technically, be prohibitively difficult to implement.

Based on the simple geometrical meaning of VTA, you might think that a direct optical measurement would be the best technique; you could observe stylus deflection with a microscope while slowly pushing against the stylus with a microm-

eter probe. Such techniques have been tried in several laboratories, including those at RCA and CBS. Careful observation reveals, however, that the stylus is dynamically excited by sliding in a real record groove and only statically deflected in the optical test, making its results of questionable value for assessing behavior during music reproduction. Optical measurements also are very time-consuming. The best methods rely on the use of special test records and associated playback equipment, which permit those features of waveform alteration that are caused by VTA errors to be distinguished and quantified, despite the simultaneous occurrence of other waveform changes caused by tracing error (due to the stylus geometry), groove deformation (due to vinyl or lacquer compliance), and test-record imperfections.

Advances in electronics make it possible to do routine experiments that would have been considered impractical in the Sixties, when the original VTA test records were developed. Art Gust and I, over the last two years at CBS, were able to devise two test methods that fall into this category. Both methods are based on measuring only that component of FM distortion caused by VTA error, while rejecting the simultaneous FM caused by tracing error and some other imperfections. One of the best ways to isolate this factor is to use phase-coherent FM demodulation, which can now be managed inexpensively with integrated circuits. No new test records are needed with this approach. Another way to zero in on tracking-error FM would be to use test records with special square-wave signals, though no such records are available at present.

The validity of these test methods has been verified in an extensive set of experiments with a variety of pickups. We were pleased that they produced results that agreed with those obtained with the RCA test record, which also employs an FM technique. We believe this is the first time that three different techniques using three different test

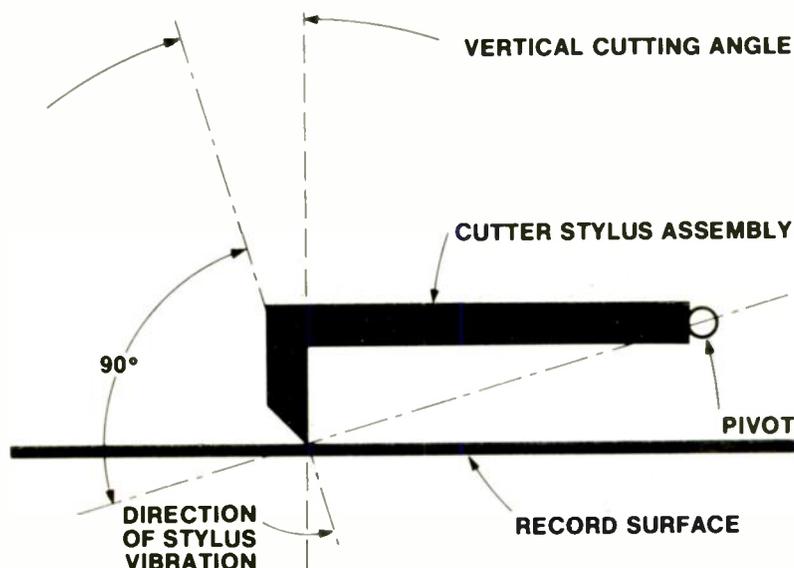


Fig. 2: Stylus assembly construction in cutting heads differs from that in playback cartridges, affecting to some extent the range of vertical cutting angles that can, in practice, be designed for. The cutting and playback angles should agree, however.



**UNDISTORTED WAVEFORM**



**WAVEFORM WITH VTA-ERROR DISTORTION**

**Fig. 3:** Displacement in time of waveform elements (here with the peaks "pushed" to the left and the valleys to the right) characterizes the distortion due to vertical tracking angle error. The input wave shape's symmetry is disturbed as its waveform is alternately "stretched" and "squeezed"; in other words, its frequency is modulated, introducing a form of flutter.

records made in two different laboratories all have achieved the same VTA results to within the calibration tolerance of the experiments (estimated to be 5%). The agreement among methods was observed in experiments with ten pickups typical of today's commercial products. In addition, the FM data were in agreement with those obtained by an elaborate optical method—whose precision, even so, was relatively poor: roughly 15% for the pickups used in the test.

A practical outcome of this work is a new VTA test instrument developed at CBS Technology Center. It was conceived and nurtured by Lou Abagnaro, designed by Gust and myself, and brought to fruition with the help of Dan Graveaux. This instrument—together with the CBS STR-112 test record—provides an accurate and very convenient means for measuring tracking angles via coherent FM demodulation. Only one band on the record is played, and the meter immediately indicates the tracking angle of the pickup with an estimated accuracy of 5%. The meter is sensitive enough to detect light once-around variations in VTA error occasioned by record warps.

### Where Do We Stand?

The test results with such equipment are startling. With a group of ten modern pickups tracking at one gram, the smallest angle we measured was 22 degrees, the largest 33 degrees, with an average VTA of 29 degrees. In conversations with Mitch Cotter of Verion Audio, I learned that these figures

are similar to measurements he made with a digital FM method that resembles the CBS square-wave method. His work, by the way, was carried out independently but in parallel with ours.

To determine what errors are involved, we must compare these VTAs with the vertical cutting angles of commercial records. The vast majority of records are made with Westrex and Neumann cutters. When we measured five such cutters, the recording angles ranged from 15 to 22 degrees. From this we estimate that, on the average and with a random selection of records and pickups, the most probable VTA error is about 10 degrees. This error, again, produces peak flutter of 5% on the inner bands of commercial recordings. And, unfortunately, the effect is clearly audible in reproduced music.

HIGH FIDELITY relies, in part, on tests conducted by the CBS lab for evaluating phono pickups in its product reviews. The results of VTA measurements with the CBS meter are now a part of these tests. The new data will permit you to make a more complete appraisal of competing phono pickups based on objective measurements that are more accurate than those available in the past—including those HF has published for several years based on an established measurement technique developed in the early 1960s and used since then both at CBS and elsewhere. Recent tests show that this older technique gives lower angle values whose departure from true VTA varies from one pickup to another. As a result, any pickup measured with the VTA meter will be found to have a higher tracking angle than was measured using the older method, but the true value cannot be estimated accurately from the older data. The discrepancy between results may be due to the fact that the older method relies on the measurement of second harmonic distortion and therefore is sensitive to many pickup imperfections other than VTA error. You must therefore expect the vertical angles shown in future cartridge reports to be larger than before—that is, until pickup designs are changed to bring the angles down to match commercial recordings more closely.

And this, it seems to me, should be the first step. It would allow the vast store of records to be reproduced more accurately—a real gain for the music-loving consumer. Remember that you can replace your phono pickup for around \$100, but you probably can't replace your record library—at least not all of it—at any price.

VTA error is one of the few causes of distortion that can be abolished very simply: by establishing a single standard vertical angle and adhering to it. Perhaps this change to a more accurate measuring method will put a healthy pressure on both cutter and pickup manufacturers to reach agreement on an international standard and reduce the errors to the point of being negligible. ●

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The 4000 Series Two also spots low level gain riding, where the recording engineer adds volume to a low signal to overcome noise on the master tape. The

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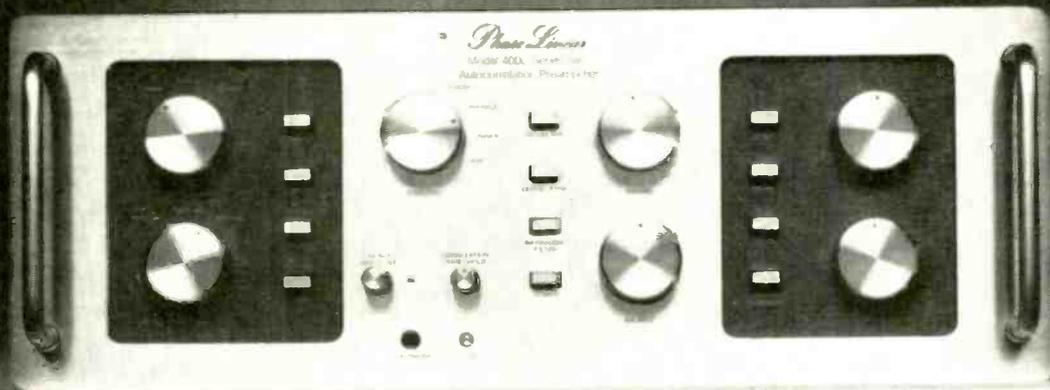
The 4000 Series Two second generation Autocorrelator reduces record hiss, tape hiss, and FM broadcast noise. Weighted overall noise reduction is -10dB from 20Hz to 20kHz. So your music comes clean, and the background is silent.

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## DIARY OF A CAVPAG MADMAN



## INTRODUCTION AND THUMBNAIL REVIEW

This article will be a departure from the accepted review format. It's a forced departure that may hit some readers as an act of critical desperation; if so, the basic message is coming through. A crazy response for some crazy realities — R. D. Laing would understand.

But some of you, I'm sure, will only be indignant at all this craziness and desperation. What call is there, who needs it, isn't there enough? (No! Here are things getting crazier and more desperate by the day, and here are lots of people *not noticing*. They include people who are paid to notice, and should be the craziest and most desperate of all, like me. Perhaps they must be paid more to keep on noticing: At the going rates, how important can it possibly be? A point, but no excuse; if the rich pusher and the poor cop are in cahoots, I say shoot the cop first.)

Still, you want a sensible review after all, some facts and come now reasonable evaluation. So we open with *morceaux* of each, the more so since it gets crazy farther on. This pairing of *cavpag* was recorded in London two years back, and is a vehicle for the charming and currently popular lyric tenor Luciano Pavarotti. It's a *cavpag* package, you have to buy them both, which is sort of too bad,

## BECAUSE

the *Cavalleria* is passably sung and quite interestingly conducted by Gianandrea Gavazzeni, therefore conceivably desirable to those who place high value on conductorial nuance, whereas the *Pagliacci* is a no-account bore. (End of facts. Further reasonable evaluation, and somewhat more detailed review, can be found rather far below, for those who wish to skip the craziness and desperation.)

## WHAT!?

Oh, you don't think it can possibly be a no-account bore? I exaggerate, I have given in to the rhetorical?

## THUMBNAIL REVIEW OF PAG AS IT WOULD READ IF HONESTY WERE THE ONLY CONSIDERATION

This really stinks. Ees so bad, ees terrible. I suspect Robert Wilson's influence, in that the case passes beyond questions of competence or incompetence to those of the very nature of performance, of whether or not the performance can be said to exist and if so why. I say it doesn't, and this is getting to be a hateful and sophisticated inquiry of a philosophical nature; there is obviously nothing evaluative to be said about something that is, literally, a nonentity. End of review.

## EXPLANATORY NOTE ON DESPERATION

There is a degree of desperation, or at the least anxiety, that is always present in the makeup of a critic worth anything at all. It relates to his evaluative function. Admit it: The strongest single motivating factor is the stubbornly held conviction that something's wrong, that the critic sees what it is when others don't, and feels he must say so. He believes it is constructive to say something's wrong; saying that something's wrong is the act he most fervently believes in and regards as his contribution. Naturally he also says that something's right when he believes it to be. But frankly, that is less important, because whatever's right is already okay, right?, and besides it doesn't happen as often. Because of his astonishment and delight at finding something right, he is apt to discourse disproportionately over it, especially when he considers it important that a particular right be recognized and accepted. But he really shouldn't. No one



Anita Siegel

ever became a critic in order to say that all's well, nor has anyone ever given a damn for such a critic except for selected beneficiaries (foolish ones) of such criticism.

If one accepts this, then whence anxiety? Why first, one belongs by definition to an embattled minority. If many others shared the perception that something's wrong, then either it wouldn't be wrong or there would be nothing noteworthy about the perception. Of course the critic finds allies, he is not universally disliked or resented. But since he frequently feels more in common with the dislikers and resenters than with the allies, there is a mild anxiety about the whole business, just on the human level.

That is nothing. The real problem defines itself when the critic arrives at the view that the somethings wrong are so basic, so pervasive, and so crippling that they render the usual evaluative norms quite useless. This type of perception is, of course, the source of all true innovation and reform in art. No creator would accomplish anything of importance without it, as one of the very few valuable critics (and creators), Shaw, observed in his wonderful commentary on the relationship between progress and "the unreasonable man."

But to offer criticism from this perspective is very difficult. How helpful (and how credible?) can it be to repeatedly point at a crumbling cornerstone when all concerned insist that the building is structurally sound and is to be judged on the taste of some new decorative elements, a dormer or some new lintels? And indeed there may be some splendid new dormers and lintels, and some not so hot, and a number of companies in the business of the manufacture thereof, and here is the *Monthly Dormer and Lintel Review*, and can you really keep on saying, "The dormers

and lintels do not matter, because when I passed the building yesterday morning it had fallen down," when here is the morning paper with a photo of the building as it once was and a perfectly intelligent-sounding article on the new dormers and lintels, and you look out the window and by God there is a truck delivering more dormers and lintels to the site, and your neighbors in earnest discussion of the new details of the building, as if it were still standing?

#### NOTE ON THE STANDING BUILDING MIRAGE

Here is the rubble of the building, already cold and settled in a deep hole, and here are many estimable people with a stake in the illusion of its existence. They range from the manufacturers and deliverers to media persons assigned to report on gingerbread to far-off subscribers of the Review who have in fact never seen the building but look forward to reading about the new dormers and lintels and like to buy similar ones for their own homes. My God, they will all be bloody angry if I say, "Either this building has not yet been reconstructed or it has fallen down again. In any case it still isn't standing up. I believe some residents are trapped in the rubble. As I said last month, there doesn't seem much point in commenting on the many new dormers and lintels under these circumstances."

The editor of the Review will say, "Cut that out! Our readers could care less about cornerstones, they're into D&L! And here are eight other articles, not one of which says anything about the building being down!" Guess I'll really have to look one more time—

#### EVIDENCE FOR ALLEGED EXISTENCE OF PAG

#### LEONCAVALLO I Pagliacci\*

Nedda  
Mirella Freni (s)  
Canio  
Luciano Pavarotti (t)  
Beppe  
Vincenzo Bello (t)  
Tonio  
Ingvar Wixell (b)  
Silvio  
Lorenzo Saccomani (b)  
Villagers  
Pacho Panocia (bs),  
Fernando Pavarotti (t)

#### MASCAGNI Cavalleria rusticana†

Santuzza  
Julia Varady (s)  
Lola  
Carmen Gonzales (ms)  
Mamma Lucia  
Ida Bormida (ms)  
Turiddu  
Luciano Pavarotti (t)  
Alfio  
Piero Cappuccilli (b)

Finchley Children's  
Music Group\*,  
London Voices,  
National Philharmonic  
Orchestra,  
Giuseppe Patané\* and  
Gianandrea Gavazzeni†,  
cond.  
[James Mallinson\* and  
Michael Woolcock†, prod.]  
LONDON OSAD 13125,  
\$26.94 (three discs,  
automatic sequence).

Comparisons  
(Pagliacci):  
Amara, Corelli,  
Gobbi, Von Matačić  
Angel SBL 3618  
Carlyle, Bergonzi,  
Taddei, Karajan  
Deutsche Grammophon  
2709 020  
Tucci, Del Monaco,  
MacNeil, Molinari-Pradelli  
London OSA 1212  
Caballé, Domingo,  
Milnes, Santi  
RCA LSC 7090

No doubt at all about the package. Here is a humiliating photo of Luciano (see below for surname usage), with enough whitewash out around the beard for that whole Calabrian village. Inside is a booklet containing cavpag articles by William Weaver, who is definitely alive. They are good articles, as his invariably are. Also the librettos, with translations colloquially British in tone ("Whip-crack-away!" says Alfio), and some illustrative matter, and the records themselves, cav on the first three sides, pag on the last three. The labels claim the collaboration of a number of prominent operatic artists; the laws on such matters are pretty stringent.

**BRIEF RECAP OF CONCEIVABLE ARTISTIC JUSTIFICATIONS FOR NEW RECORDING OF AN OPERA**

1) The absence of any acceptable recording of the same work. 2) The presence of a complement of artists whose work is of such unusual quality and appropriateness to the work that it merits the widest possible circulation, even if only in recorded form. 3) The presence of a striking perception of the work, or belief about it, that can be conveyed by the chosen artists and production team, if all goes well.

**POWERFUL SUSPICION AS TO REAL REASONS BEHIND NEW CAVPAG RECORDING**

1) Luciano. 2) Estimated market opening. **OBSERVATION IN INTEREST OF FAIR-MINDEDNESS**

So what? The motive hardly concerns us if the outcome is legitimate. Calculations similar to those powerfully suspected have produced some fine recordings.

**MUSINGS ON LUCIANO'S RECENT PROGRESS**

I think he'd want us to call him Luciano, don't you? "Charming and currently popular" he decidedly is. Not too long ago, in one of those worshipful Sunday *New York Times* Mag articles, Terry McEwen (not exactly a disinterested on-looker, but a knowledgeable one) was quoted as suggesting that L.P. had captured the public imagination like no other male singer since Caruso. I guess in a sense he's right, though other and greater singers have certainly claimed their share. "Captured" seems to me altogether correct (with Johnny Carson, Merv Griffin, Dinah Shore, and Live from Lincoln Center, a complete assault force is mobilized), but not "imagination": Showing everyone you are a regular guy who cooks pasta, harmlessly ogles women, and tells jokes is, in fact, the process of dismantling imagination.

I'm by no means against all this. Opera singers are actual people. Luciano is charming.

My critical concerns would be, first, the possibility that a subtle (or unsubtle) confusion arise between the identities of Luciano, media personality, and a good tenor with fine artistic potential; second, the possibility of his being led away from what he does well to satisfy the new demand; third, the possibility of his media rating being taken for his artistic standing.

**A BACKWARD GLANCE AT LUCIANO**

It wasn't a sight to make the heart leap, the first time I saw Luciano live; you knew there were muscles trying to move bones under there, but finding it all too much even for such undemanding exertions as a moderate bend from what should have been the waist for the purpose of depositing Edgardo's cloak and hat on the rim of *ah, quel fonte*, alongside the nearly-as-unmotile Renata.

**NOW YOU'RE GETTING PERSONAL**

But certainly. It is artistically relevant. I don't say Edgardo must look precisely this or that way, but I insist that a person of his temperament and life-style is not credibly represented by obesity. A performer in such a condition always arouses two feelings in me: concern for the human being so afflicted, and a certain immediate artistic disrespect. Not a good start. However, the uneasiness grew less over the evening, as it became clear that it was possible to enjoy the man's singing. Indeed it was the one time I have enjoyed it without reservation — the voice was beautiful, steady, well balanced, and the role exactly the right caliber and tessitura for it. Though not much of an actor, he was comparatively relaxed and seemed to take it all seriously. He and Renata really did a job.

**MOVING ALONG NOW**

You keep hoping all will go well, that such a gifted person will continue singing that way, perhaps lose some weight and learn a bit more about acting. On his records, the top sometimes sounded a bit pinched and thinned-out, but it hadn't been that way that night, and, you know, records —

But here's my friend, my companion of the *Lucia*, a day or two after seeing Luciano do *Daughter of the Regiment*. "Yeah, he sings all the Cs," he tells me, "but who cares? — they're the size of a pea." My friend also didn't care for the campy spectacle Luciano made of himself. But, you know, *friends* —

Now here's Luciano singing the Duke in a big splash of a *Rigoletto* with Joanie and Sherrill (Scene 1, sick) and Matteo (rest of show). Still pretty good, at points brilliant, but the tops of some phrases ("sarò per te" in the duet, the big toughie in "Parmi veder") do have a disappointingly constricted sound. He moves with an oddly



dainty gait. In the last act, he makes a point of feeling up Maddalena while leering cutely at the audience. Luciano has learned to keep on being Luciano while an opera is trying to take place. The audience would rather see Luciano than an opera, so it's total success. After you shoot the cop, fire a few rounds into the auditorium, just over their heads this time.

Later yet, at a *Bohème*, I really can't hear Luciano's top at all, except when the accompaniment is *vide* or he happens to catch hold of a phrase riding nicely from below, as at the opening of "O *Mimi, tu più*." To put it bluntly, it's a bust, but the audience reaction is wild—this is a personal appearance event. I begin to form a rather unappetizing image of a huge, mincing galoot with a pretty, medium-sized voice that can't make climaxes, kneading his handkerchief and appealing to the audience for sympathy for all his hard work and sweet personality. The image of what Jerzy Grotowski calls "the courtesan artist." (Now, *there's* a passing strange fellow. Being Polish, he makes a mean stuffed cabbage, I bet—but would he even *do* it for Dinah? Would he *tell* a Polish joke on a talk show, just one? Or would he possibly tell you to go stuff your own cabbage, and maybe not even want to be called Jerzy except by a personal acquaintance? How do you promote a guy like that?)

Since then, I have heard Luciano sing high and small, low and large, though once (in *Favorita* last year), the lie of a part pulled things together in a way that at least suggested the Edgardo voice. On all the TV shows, it's of course much harder to tell about the balance of the voice. But you can tell that singing, good or bad, is tough labor (indeed, Luciano shows off the labor just a bit) and that Luciano is a genuinely likable and amusing man with a sharp sense of his own appeal. Also that he has lost weight. Artistic failures and successes cease to have any relative values, since the audience and colleagues are parts of the act and behave as if each effort produced a triumph of absolutely equal and predictable proportions. The thought does occur that "live" audiences are learning the lesson.

#### FINAL QUERY BEFORE LISTENING TO ALLEGED PAG

How does it happen that a charming and popular lyric tenor, marvelously suited to parts like Edgardo, Alfredo, Faust, and Werther when in peak condition, decides that such roles as Calaf, Canio, Cavaradossi, Manrico, Radamès, and Enzo are his *Fach* at the very time, almost to the hour, that his upper range is losing its juice and open-throatedness? The timing is devilish. One recalls that certain lyric tenors, notably

Bjoerling, sang several of these roles effectively enough, though only some of them in the theater. But one also recalls that Bjoerling's voice was in almost ideal balance at the time, and that the undertaking did not represent any general change in repertory or in his way of singing. And one remembers a larger number of other lyric tenors, some with voices as lovely and full as Luciano's, who wound up hoist by their own petard in an all-too-literal sense.

#### PRELIMINARY INVESTIGATION OF PAG RUMORS (MORE LIKE A REVIEW)

I begin playing the three sides labeled *I Pagliacci*. I have already listened a couple of times to the sides called *Cavalleria rusticana* and have concluded (though not without some travail, see below) that it exists and even has a shaky but palpable *raison d'être*. Well here we go. Side 1, Side 2, Side 3, there it went. I have a poignant sense of elapsed time as the stylus wallows in the takeup groove. Damn it, I set the alarm and everything. Otherwise, nothing. *Io? Nulla. Allora.* . . . It's like driving through a contourless but familiar landscape in a quiet, air-conditioned car, but arriving back where you started instead of at your destination. It is later, but did I do it? Did anything transpire? It's a nonexperience.

#### SO WHAT'S THE EXPERIENCE?

Yes, it's true that one has certain expectations. Me, I love *Pagliacci*, and will try to tell you why. It is not because of the extremely high level of craft present in the libretto and score. As a critic, I can enjoy listening for that, analyzing and detailing it for readers, mostly for the sake of making a case for it in terms that a certain valued segment of readership will accept as verification. Some performances tend to underline those considerations, and I would want to write about them under those conditions. But it's of no importance right now, these whys and hows of the experience that lie in the text.

What's important here is that there is an experience. I am moved, excited, frightened by any performance of this opera, it can't miss. It gets straight at some very important emotional issues that I recognize as parts of myself (that's where the fright comes in) and as important to the life that exists inside me and everyone else I have ever been close enough to to have emotional knowledge of. By some funny process that no one has explained awfully well, though we do keep trying, it is a part of my relationship to those issues, my definition of them, my effort to cope with them. I believe in that as a function of art, I'm inclined to think it the most important



one. I have never not had some of this experience at any live performance of the piece, however dreadful, and do not remember ever missing it on records before.

#### UTTERLY SUBJECTIVE, THEREFORE ENTIRELY VALID REPORT OF FURTHER INVESTIGATIONS

Despite this accumulated experience of the interaction between *Pagliacci* and C.L.O., which we could well take as sufficient grounds for judging a new encounter, it has to be conceded, as always, that some factor bearing more on my own state than that of the recording may account for the nonexperience. Have I changed, is some connection out of its socket, did I perhaps prejudge out of anticipations formed about the performers, as for instance my pre-existing attitudes re Luciano? Given my trust in my way of dealing with this always present problem, and my primed condition for hearing a new *Pagliacci*, it doesn't seem likely, but you have to keep the door open: *could be*.

So I decide to re-familiarize myself with some of the other recordings, which is of course a good idea anyway, before going back into the void in hopes of bumping up against something. To minimize the subjective factors, I rule against listening to any of the oldest recordings. That will ensure that the Gigli recording, which was a major adolescent sublimation, won't just be running its old track, or that the Bjoerling/Warren/De los Angeles one, rendered by artists who meant much to me at a still impressionable stage, will not come up with a nostalgia number. I even stay away from the Callas/Gobbi/Serafin version, which was a lesser part of my life but might still call up some romantic distance, capture my imagination, you might say.

I instead go to the three earliest stereo versions, all of which I had reviewed upon original issue and none of which I had even sampled in quite some time. Well for Pete's sake, there it all is! *Pagliacci* and C.L.O. are still in business, it's a happy day! I wind up listening to practically all of all three versions, sort of pinching myself aurally and luxuriating in the differences of three performances I had not recalled as great, but which are *performances*, and which I can tell you sound mighty healthy from this perch. I now figure I must have underrated these recordings unforgivably when they were new, so I look up the old reviews. Now I'm relieved, and a little astounded, to find that the opinions there seem very much the same as the current ones, give or take an emphasis here and there and allowing a slight advantage on the perspective. Some comforting verification is building up; just possibly the enthusiasm will

carry over when I check again for vital signs on the new album.

#### BUT HOLD IT A SEC

Before I do that, I ought to give a listen to what we'd call the current competition, which it happens I've never heard. That would be the RCA Victor recording with Placido and Montserrat and Sherrill. Zounds if I'm not getting that creepy feeling again. These people are in a trance, bemused and preoccupied with matters left over from some other opera or, more probably, their private affairs. Sort of a stoned meditation, *verismo* viewed from the hazy yon. We could blame it all on Nello, but that wouldn't be fair: Singers can still sing, however slowly. The voices float in limbo, they are caught inside someone's toy.

#### FINAL BEDCHECK (YOU GUYS HAVE EXACTLY ONE MINUTE OR I GIG THE WHOLE BARRACKS)

No further room for doubt. Pag ain't here, he's prolly out to lunch wit Victah.

#### CAN'T YOU BE MORE SPECIFIC?

Oh sure. It's just that I don't want you thinking that the specifics, grisly as they are, can possibly account for so whelming a reality as nonbeing. If you go at this aspect by aspect, as you might in a depth review of something extant, you will total it up to a poor performance, like some others on records. Truly, that isn't what's at issue. Still, if you like, we can run it down a bit, beginning with the nonsuitability of the cast.

#### BUT WHAT ABOUT MIRELLA?

Touché, Mirella's the one principal here you might think of if you were casting a real pag. A good, warm, full-bodied lyric soprano, and a nice easy style in operas like *Bohème* and *L'Amico Fritz* that aren't far from the mark. But this wasn't the time for her Nedda. There's still a pleasing sail to sustained sounds in the upper-middle part of her voice, but the whole middle octave is unsteady and not always cleanly intoned. She never did have any anchoring at the bottom and so (as I had occasion to observe about the work of certain other female vocalists while inspecting some of the dormers and lintels along Broadway back in Jan/Feb, '79), now that she's trying to lean on it a bit, she gets a very thin variety of chest jabbing in at odd assorted spots, some of them too high. Because of the way weights are sliding and heaving about in her voice, she can't sing a really smooth line these days, and tends to pump into the downbeats just to keep it all cranking along. The *Balletta* is not good at all; she settles in a bit better in the Silvio scene, but then goes in and out in the last act. Why?, I hear you ask.



## SEX

Not a trick subhead at all, just the shortest tag for Theory No. 1 concerning Mirella's mucked-up middle. Back to the *Times* and Mr. McEwen, who is full of caution about singers having any fun. Claims he can always tell when a singer's had sex before singing (how long before? this could be important) — "the middle goes" (does it ever!). Tell the truth, this bothered me, because here I've been working with voices for years, and can't tell you when a singer's had sex unless I've been 1) the party of the second part, or 2) told. Also because singers have enough to be uptight about without reading baloney like that in the Sunday paper. Still, the symptom does fit in this case, doesn't it, and here's a photo of Luciano giving Mirella a cozy hug, *right around the middle*, which you may acquire by purchasing this album.

Theory No. 2 would have to do with Mirella having a bit of unbalance in her voice to begin with and then singing an overheavy repertoire. That one's already been run through in a *Bocca-negra* review (Feb '78), q.v. Theory No. 3: Mirella was ill or otherwise indisposed at time of recording. Theory No. 4: She just had an off week and sang lousy.

### THEORIES ABOUT MIRELLA'S MIDDLE RANKED ACCORDING TO OUR FONDEST WISHES

1, 4, 3, 2.

### M's M THEORIES RANKED ACCORDING TO REAL-WORLD PROBABILITIES

2, 3, 4, 1.

### WHO ELSE?

Let's leave Luciano for cav. Ingvar sings Tonio with tone that is sometimes pleasing, sometimes rattley, never Italianate, and with a top so open it's starting to sound like a Bway shout (funny how Bway keeps coming back here). He uses almost no portamento, even where the score indicates it, and is unconvincing dramatically. Lorenzo, a singer whose name I've seen but whom I'm hearing for the first time, has decent equipment but little technique and no real phrasing sense. He needs more training. The usually omitted duet section of his scene is restored, but the advantage squandered. Vincenzo sounds as if he has more voice than most Beppe's, particularly when he goes into the top in the Serenade, but he doesn't sing phrases either, and in the important interruption at the end of Act I seems to be giving a reading.

Not one of these persons gives the impression of having so much as shaken hands with pag prior to recording date. Neither do the orchestra and chorus, who play and sing nicely enough (a lot nicer than those found on several

actual performances), but without the faintest suggestion of why or in what direction. No, it is not all Giuseppe's fault; if you're playing an opera gig you're supposed to do the homework, otherwise you're robbing us blind. While we're at it, though, Giuseppe is in some kind of time warp here, the tempos droop like Spanish moss.

The engineering might as well have been put together in a rock studio. It has no acoustic whatever save for the reverb that puts the solo voices into an electronic box canyon.

### LISTEN

to any of the versions mentioned above. On Angel's, hear the Scala orchestra under Von Matačić seethe and crack with a magnificent unanimity of goal, with the sense of theatrical ensemble, operatic musicianship at the highest level. Hear the color and bite of Gobbi's Tonio, the lovely nap of Mario Zanasi's baritone before he blew it out on big Verdi parts. And remind yourself that the minute Franco Corelli opens his mouth in this type of role, it's forget it Luciano. But observe, in fact, that all elements (even the Nedda of Lucine Amara and the Beppe of Mario Spina, though not all that distinctive) are at another level of professional qualification entirely from those of the new version.

Same's true on DG's pag. But listen in particular for the loving shaping of every phrase (Scala again, very different under Karajan, but just as fine), the unfailing firmness of decision about the shapes of musical gestures as dramatic statements. All soloists and every ensemble element reflect this. Special prizes: the aching tenderness (not just sexuality) of the Nedda/Silvio scene (Joan Carlyle and Rolando Panerai, the latter in a class by himself in binding note and word into evocative phrase, at — dast I say it — capturing our imaginations), and the Beppe of Ugo Benelli, especially with the above-noted interruption, which becomes a true scene.

On the earlier London (and the new one is a replacement, so buy the old one quick; it's available separately), Molinari-Pradelli and the Santa Cecilia forces aren't in the same league, but they are still opera professionals giving a performance. Del Monaco's is another genuine Canio voice, not quite as free and supple as Corelli's, but lent to a performance of even greater intensity and dignity. Cornell MacNeil was young, quite American, and on the bland side, but vocally just stupendous — no other Tonio on the complete recordings, not even Warren or Granforte, soars through the music like this. And another splendid Beppe, Piero de Palma. Those are the special things, but once again, all along the line it's *nolo contendere*.

### REFLECTIONS ON CAGEY CARLO AND





## A COUPLE MORE

Carlo's the Turiddu and Canio of the Karajan cavpag. A *tenore di forza* he's not, barely a *tenore di ballo*. I vividly recall his cries for help in the Nile Scene of *Aida* and at sundry other athletic events. A Sicilian standee I knew in the '50s insisted Carlo had to be a really great tenor. "How do I know?" he would ask. "Because, anyone who can sing Canio *with that voice* —"

But he did, and actually did most of his work in the heavy roles you would have assumed he had no more business singing than does, for instance, Luciano. This isn't to say one didn't prefer him in more lyrical parts, but he survived, kept his dignity, and brought a suavity of phrase and control of dynamics that held rewards for even the heaviest roles.

As it happens, Carlo's a levitated baritone. Story goes that he threw up his hands with teachers (no doubt with excellent cause) and made the transition himself within a few months — you must know something of singing to appreciate how much that says about his vocal instincts. Nonetheless this does not mean that the operation was perfect. It's interesting to listen to his earlier recording of pag, which like his *Boccanegra* Adorno was made very close to the beginning of his tenor career. If you know his later vocalism, you'll be shocked. Carlo! This is downright vulgar! You still hear the baritone, the roughness of the transition into an uncertain top, which rather like Luciano's is narrower than the rest of the voice.

Carlo had a choice to make. Possibly it was not the ideal one — you can't help feeling that a true technical master might have helped him balance out the voice with a fuller-throated entry to the upper range. That did not happen. But Carlo was cagey and did the next-best thing: He worked to align the lower two-thirds of his range with the ever-more-carefully husbanded top, to smooth the transition within that alignment and to avoid violating its limits. His singing grew continually smoother and more graceful. It lacked the final excitement (his defiance of Philip in the *Don Carlos* auto-da-fé will not make your blood race) and lost some of the vitality that early pag shows in flashes. Finally the voice became too much of a wisp. But a safe wisp that is still wisping, artistically guided as it is.

If you follow through the records of Franco and Mario, you will hear them making increasing efforts to lighten the break and sing more suavely, too, but with guns of heavier caliber than Carlo's. Franco is given increasingly to *diminuendos* and to attempts at the lyric roles,

while Mario treads less heavily in the low range and opens the vowels more at the break. These are authentic dramatic voices striving to gain more complete control. The choices are not always aesthetically persuasive and may have been counterproductive when it comes to vocal wear. But among them all there are some lessons about why which voices succeed with what roles, and how they endure.

## CAV REVIEW

As already suggested, it is Gavazzeni's reading that is the noteworthy element, and though orchestra and chorus still don't have it in the blood, they do respond professionally to expert guidance. In discussing leadership of cav, one must first set aside the Karajan, which is in a class of its own. I don't say one has to agree with it, but it is a special view, spectacularly carried through (the only comparable performance of the music I've heard was Bernstein's at the Met, so gorgeously played you were happy to go along with a reading that verged on the preposterous). Hearing Karajan's cav is like viewing a primitive rural scene painted by a sensitive, sophisticated urban artist who sees it from his time and place, and therefore discovers in it much that the inhabitants would be slow to recognize.

Next to Karajan's, Gavazzeni's reading is the most distinctive on records. This is most noticeable in the prelude and opening choral sections, where he has a unique plasticity of rubato, an individual feel for the shapes and motivations of all the many tempo fluctuations, that keep us glimpsing the life of the musical scene. But throughout, the reading is intelligently judged and nicely detailed, and its playing is lacking only by the Scala standard.

Julia Varady, the Santuzza, has a round and solid mezzo voice and a firm way with the phrases. It is a very predictable performance, though, with not much individuality of expression to it. If you're picking and choosing, there's Giulietta and Fiorenza and Maria and Zinka and Renata, and for my money Caterina, so you'll want to think that one over.

## PERSPECTIVES ON PIERO

Since performance criticism is a much lesser part of my life than it used to be, I do not attend as many performances as I once did, nor listen to the vast majority of vocal records upon release, as was formerly my custom. That's how I'm thankfully certain I'm not wracked by Jaded Reviewer's Syndrome. While I've heard a number of Piero's recent recordings, I haven't precisely followed them.

I have friends who have, and from such sources I hear word that this is one of his best; since I regularly see in print considerations that do not blush to rank Piero with Tito, and Tito with the great baritones of yesteryear, I could figure it's dumb luck that such an one might condescend to the role of Alfio.

Now sure enough it's not bad, we've had many worse in and out of town in my time. He is bright and thrustful enough in the song, rather dry in the scene with Santuzza. But my perspective is not all that au courant, and my standard tends to be not Piero's last few recordings, but the many other baritones who have inscribed the part, and I find myself doing a bit of checking to determine not whether Piero might be the best of them, but whether he's not the worst. He's not, but I tell you it was a search. Aldo Protti, back on the first Del Monaco recording, is perfectly atrocious (but he later did it very competently with some Naples folk), and Carlo Tagliabue, though a major singer, was long in the tooth when he got his down.

There are some others you wouldn't call Great Shakes —Sereni and Guarrera and Guelfi—but it's moot whether Piero is above their class. Then you've got the real voices in prime shape—Bechi, Panerai, MacNeil, Merrill, Bastianini (Ettore hasn't heard about note values, though, and that may put you off a little)—and you have to realize that Piero's closer to the bottom of the list than the top. It's a shift in perspective, all right, and if Piero's lagniappe, something's sure happened.

#### PIERO, THE ACTOR

For some reason, Piero sneers the line "*Ite voi altri in chiesa.*" (No mere bel canto show-off he, but a singing actor.) Is Alfio an atheist? Or does he make fun of the womenfolk? Or is he just The Villain? You got me.

#### LUCIANO!?

All right, all right. Naturally the timbre of the instrument is still in evidence a good deal of the time. But this is crude, pushy singing, fake-dramatic. He falls into every trap of the role. His phrasing choices are the obvious clichés. He resorts to irrelevant bursts of energy to try to fill out the music. He gets off meaty top notes here and there, constricted ones at other points. The vibrato turns tremulous in the middle (this is even more the case in pag).

All in all, it would have to be said that Luciano offers neither the authentic vocal caliber of singers more naturally suited to such roles (like Mario and Franco), nor the combination of technical expertise and extraordinary musical

sensibility that others with no more sheer voice than he (like Carlo or, especially, Jussi) have brought by way of compensation.

If you care to sample the parts of the role you'd figure him to do well, try the end of the *Siciliana*—it's no pleasure to hear him ram his voice up onto the Fs at full forte, without a hint of curve on the *portando*. Leaving aside Bjoerling, who is the only tenor since Caruso to play with these phrases with a true mastery, you'll find him a good deal less suave than Bergonzi or Corelli, and no more so than De Monaco on his first two recordings of the role. As with Piero, Luciano of course compares well with some of the competition—could we assume otherwise, with the Turiddus of Achille Braschi, Gianni Poggi, and the Del Monaco of the Souliotis set as parts of the legacy?

#### WHY PICK ON THIS SET?

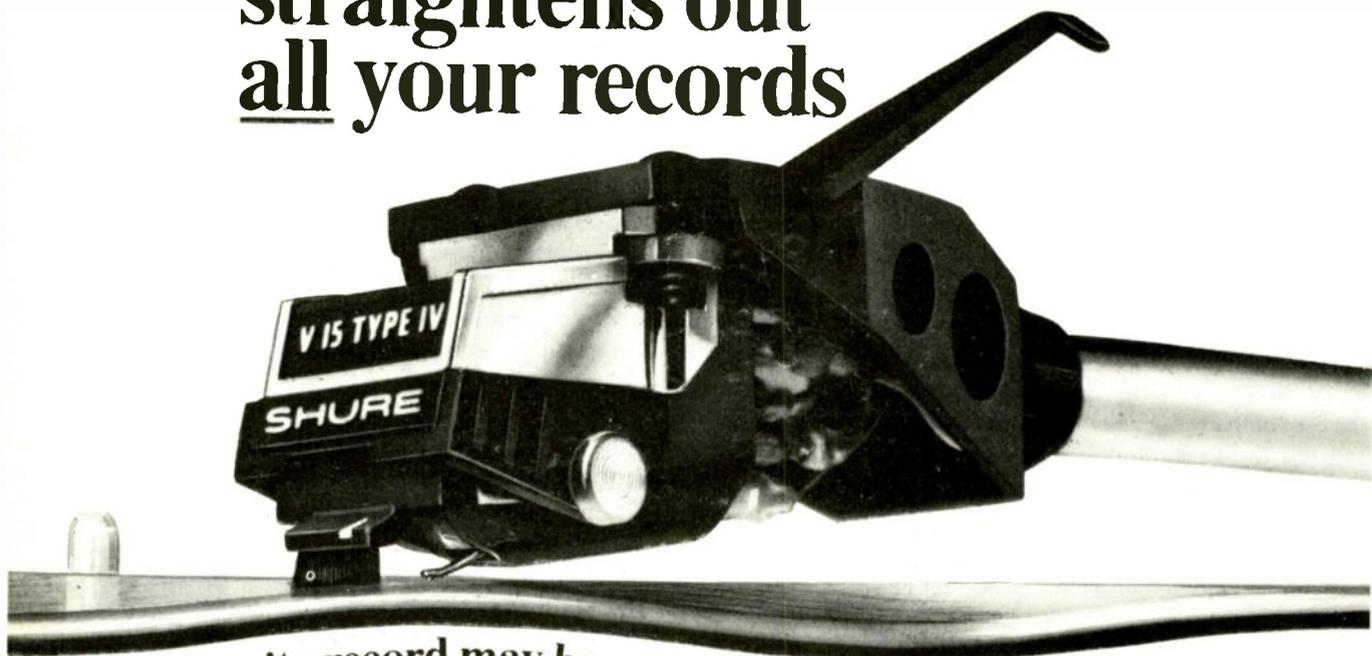
Simply because the whistle must be blown somewhere; the technical fouls have been piling up like mad. I've called the shots like this before—in a 1967 review of the Leinsdorf *Ballo*, for example, I noted that something eerie was creeping into a good proportion of major operatic recordings. The something need not have to do with the level of musical and technical talent involved, or with the "correctitude" of the interpretation. Some recordings (though this is not among them) have every appearance of excellence and of care in preparation, yet fail to engage any aspect of the experience inherent in the work except that of correctitude, of an intellectualized, operalogical point-scoring. Quite a trap for any critic who has lost faith in his own reactions and sensitivities, or who for any reason is not using them fully in his listening. In coming back to the problem repeatedly over the past dozen years, I have done enough relistening, comparing and second-opinioning to be fairly obstinate about it: We aren't talking about something that has happened to me or to other veteran listeners, but about something that has happened to recorded performance, and is alas invading the live operatic theater as well. We are getting not opera, but a pasteurized, processed opera food, or potted opera product.

#### WHAT LONDON SHOULD DO WITH THIS CAVPAG PACKAGE

First, try to figure if there is some way you can chop this up so the pag labels don't have to be on the backs of the cav labels, or else subtract the pag price from the cav price. If that doesn't work, consult Jerzy. He can be reached in Wroclaw. He may be reluctant at first, but maybe you can break the ice with a Polish joke.



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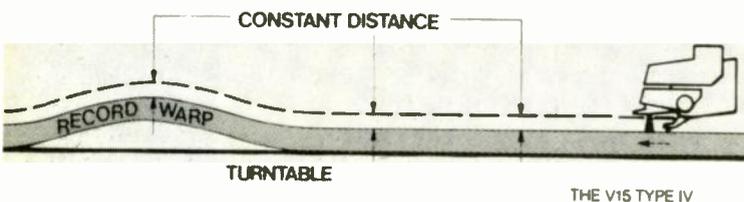
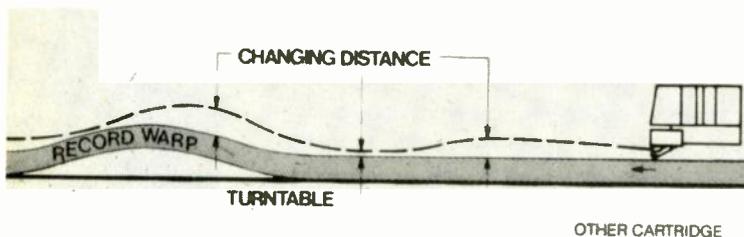
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by Robert Fiedel

John Williams

JOHN WILLIAMS' STAR continues to rise with his exuberant, witty, and often breathtaking score for Warner Bros.' super production, *Superman*. For this latest and most elaborate screen resurrection of the enduring, quintessential comic character, Williams has once again tapped his seemingly inexhaustible supply of epic-heroic thematic material to provide an effective and entertaining musical embellishment.

His approach to *Superman* is appropriately as straightforward as the film's narrative, using lavish orchestral themes and leitmotifs to identify key characters and concepts. Superman himself has, not one, but two distinct tonic-dominant heroic brass themes to accompany his exploits. Particularly noteworthy is the first theme's resemblance to the old Universal Pictures fanfare, which subliminally reminds us of the character's 1930s-'40s origin and provides a spiritual tie with previous screen realizations.

The planet Krypton and Superman's father, Jor-El, are represented by a single tonic-dominant brass motif—an apparent inversion of the aliens' peace motif in Williams' *Close Encounters of the Third Kind*, thus endowing Krypton and Jor-El with a mystical benevolence. The dim-witted villain, Otis, is aptly depicted by a comical, flatulent march theme for bassoon against sparse, eccentric string harmonies. And finally, Lois Lane and her encounters with the Man of Steel are characterized by a lovely (despite Margot Kidder's drunken "vocal") romantic pop ballad, displaying Williams' talent for composing a good pop tune and integrating it into a typically grand-scale symphonic idiom.

The composer has generously supplemented these themes by scoring several scenes as total entities with more extended thematic material. The swirling,

hauntingly mysterious strains of "The Trip to Earth" and the poignant, expansive sonorities of "Leaving Home" are stunning examples of this technique.

The one conceptual flaw I find in the score is that Williams has not lent musical support to the overt messianic analogy that enhances this retelling of the Superman myth. Jor-El's cosmic communion with his super-son, in which he tells him of his earthly mission with such pregnant lines as, "They need someone to show them the light, which is why I have sent them you, my only son," is the film's most obvious allegorical moment. This plus the infant Superman's arrival on Earth in a Star-of-Bethlehem-shaped spaceship, Jonathan and Martha (read Joseph and Mary) Kent's "immaculate conception" of son Clark, and at least a dozen other Biblical allusions indelibly weave the Superman-Christ analogy into the total cinematic tapestry.

Since it is inconceivable that Williams was oblivious to this concept, he must have consciously chosen to overlook its musical possibilities and instead focused on Superman's romantic adventure flavor. As successful as the result is, I can't help feeling that the music would have been that much more integral to the film, and that the overall film experience that much richer, had he recognized this crucial aspect.

Also, I still have ambivalent feelings about the unmistakable and repeatedly heard influences of certain other composers in Williams' scores. Korngold and Stravinsky are called to mind by, respectively, the vibrant, rousing "Main Title" and the strident, frenzied portions of "The Trip to Earth." "Leaving Home" contains passages of Coplandesque Americana, and Prokofiev might have devised Otis' theme for a rotund, malevolent Lieutenant Kije. Williams brings off this

eclecticism with such flair and imagination that I accept it here more readily than I have in the past, but I still hope to see him develop a more cogent and individual stylistic identity.

(Recordings of Williams' first symphony, given its world premiere by André Previn and the London Symphony, and his violin concerto, composed concurrently with *Star Wars*, would offer a fascinating glimpse into his personal workshop and be welcome additions to his growing discography.)

That Williams' *Superman* music perfectly complements and enhances the film with an ambience of excitement and awe is obvious. That it also conveys these qualities without the visuals is one of its remarkable achievements, making the soundtrack album an especially rewarding listening experience. A few cues are rather fragmentary (an occasional necessity to meet the film's requirements), but most hold up quite well as self-contained movements, a quality Williams has taken care to preserve by discreetly rearranging certain sequences for this recording.

The most outstanding selections are the "Main Title," a driving scherzo arrangement of the score's principal themes; the "Trip to Earth" and "Leaving Home"; "The Flying Sequence & 'Can You Read My Mind?,'" an enchanting, magical treatment of Lois Lane's theme; and "The March of the Villains," an elaborate version of

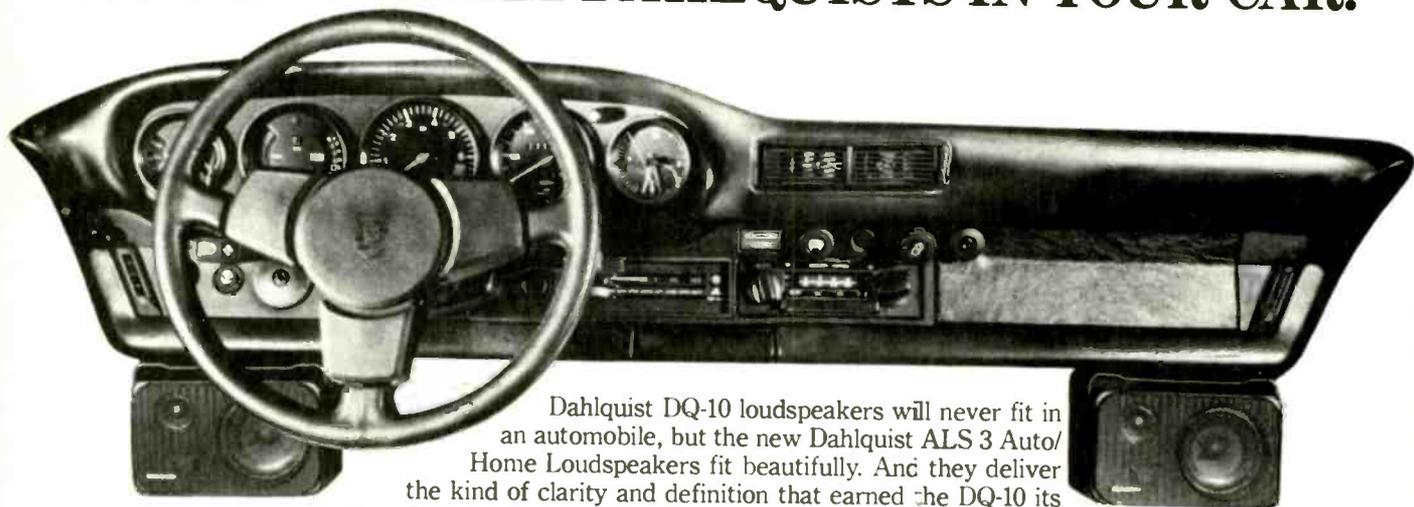
Otis' theme that I don't recall hearing in the film. Clearly there is as great a potential here for concert performances of a *Superman* suite as there has been for Williams' *Star Wars* and *Close Encounters*—and indeed I note that the composer is guest-conducting such a suite in this season's *Previn and the Pittsburgh PBS* series.

Warner Bros. has generously given us almost all of the music from *Superman* on two well-pressed discs. The individual selections are presented more or less in proper sequence, affording the listener the added enjoyment of following the film's continuity. However, the omission of liner notes and even technical credits for the album's production is inexcusable for such an important release.

Williams conducts the London Symphony with all of the strength and vitality the score requires; the heavy demands on the brass section are well met. The sound is a bit dry, and there is a noticeable lack of orchestral presence in the mastering—problems often encountered in soundtrack recordings. But, overall, these flaws should not interfere with anyone's enjoyment of this marvelous, high-flying score.

**SUPERMAN.** Original film soundtrack recording. Composed by John Williams; London Symphony Orchestra, John Williams, cond. WARNER BROS. 2BSK 3257, \$14.98 (two discs, manual sequence). Tape: ● 2K 53257, \$14.98; ● 2K 83257, \$14.98.

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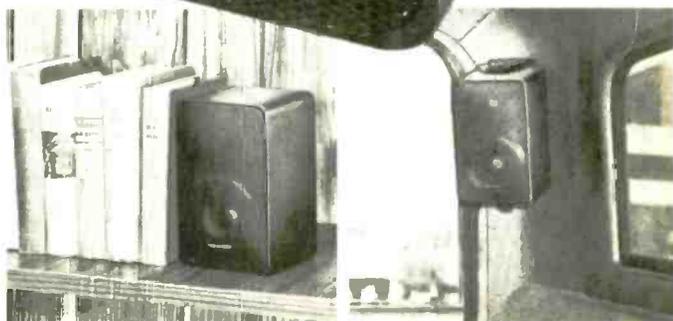
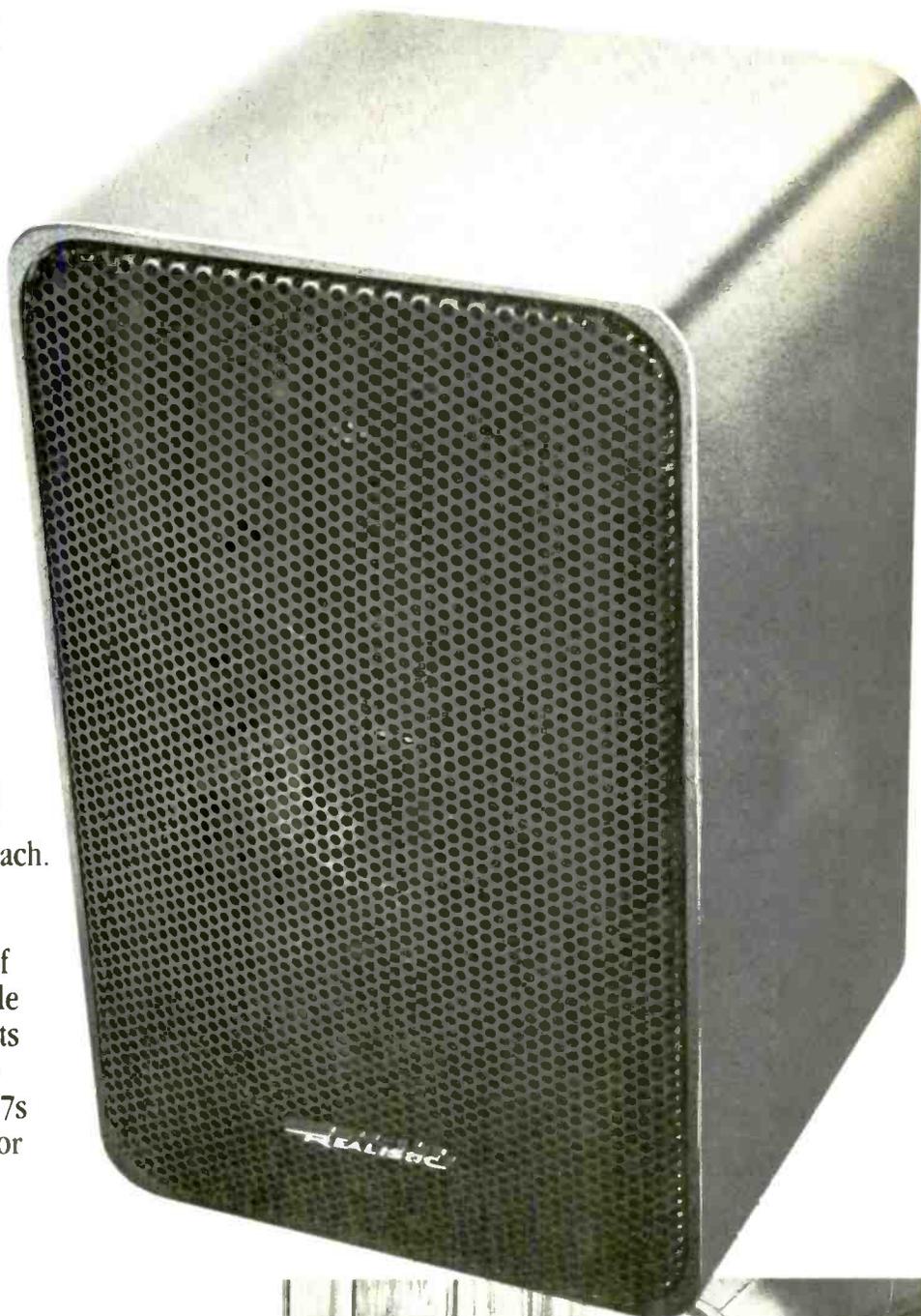
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# REVOX



Lorin Maazel—taking the Cleveland through its second cycle of Beethoven's nine

# Classical

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**BEETHOVEN:** Sonatas for Piano: No. 4, in E flat, Op. 7; No. 23, in F minor, Op. 57 (*Appassionata*). Russell Sherman, piano. [Tomlinson Holman and Tom Kusleika, prod.] SINE QUA NON SAS 2023, \$6.98 [previously released on ADVENT cassettes E 1057 (No. 4) and E 1060 (No. 23), 1977].

Sherman is a formidable pianist and an interesting musician. He stresses clarity of texture and communicates his ideas with freshness and enthusiasm, though he is not blessed with the gift of simplicity. I occasionally wish for a fuller-bodied sonority, less finicky phrase shapes, less picky articulation; Beethoven can absorb large quantities of personalized concentration, but there are more direct approaches, and certainly more tonally grateful ones.

A few examples from Op. 7 should demonstrate what bothers me. The excessively short chords at the end of the first movement and the beginning of the Adagio splinter and disjoint the musical argument; while Beethoven peppers his melodic fragments with telling pauses, one must nonetheless feel an ongoing line. Similarly, the figurations in bars 60 and 62 of the Adagio are given with a contorted rubato. I found the scherzo too slow (it is marked allegro), and though the rondo goes at a fine brisk, unsentimental clip, the tacky left-hand work in the *minore* section and the fussy *ffps* in bar 161 are impediments to wholehearted enjoyment.

The *Appassionata* displays similar tendencies, but since this sonata is habitually subjected to all sorts of heaving and hauling, Sherman's intellectualized mannerisms sound relatively patrician. He observes all repeats in both sonatas.

The sound is clear enough, but without

sufficient richness or color: the treble is particularly penetrating. *Sine Qua Non's* pressing is adequate, and Sherman's annotations make interesting reading. H.G.

**BEETHOVEN:** Symphonies (9). Overtures: Egmont, Op. 84; Fidelio, Op. 72c; Leonore No. 3, Op. 72b. Lucia Popp, soprano<sup>+</sup>; Elena Obraztsova, mezzo<sup>+</sup>; Jon Vickers, tenor<sup>+</sup>; Marjti Talvela, bass<sup>+</sup>; Cleveland Orchestra Chorus<sup>+</sup>; Cleveland Orchestra, Lorin Maazel, cond. [Paul Myers, prod.] COLUMBIA M8X 35191, \$47.98 (eight discs, manual sequence).

Symphonies: No. 1, in C, Op. 21; No. 2, in D, Op. 36; No. 3, in E flat, Op. 55 (*Eroica*); No. 4, in B flat, Op. 60; No. 5, in C minor, Op. 67; No. 6, in F, Op. 68 (*Pastoral*); No. 7, in A, Op. 92; No. 8, in F, Op. 93; No. 9, in D minor, Op. 125<sup>+</sup>.

The Cleveland Orchestra recorded its first Beethoven cycle in the late 1950s and early 1960s when George Szell's tenure as music director had brought it to a well-deserved and long overdue prominence. The orchestra's second cycle may reflect the changes wrought by Szell's successor, Lorin Maazel.

but for all the divergencies demonstrates that this is a group with decided collective profile. The years of constant performance under such technicians as Artur Rodzinski, Erich Leinsdorf, Szell, and Maazel can hardly be overlooked in the formation of the crisply disciplined execution associated with the Cleveland brand name.

Szell favored a pronounced *marcato* articulation that gave his performances a spiky, astringent character. The almost obsessive emphasis on well-drilled attacks and releases combined with the traditional Germanic tempos and with such rhetorical devices of the older Central European school as *Luftpausen* frequently imparted an aura of ruthless pedantry to his interpretations. Maazel tends to be brisk rather than brusque, cool rather than cold. He has encouraged the orchestra to play with a somewhat more sensuous tone, and there are signs that its good discipline is less absolute than it used to be. Instances of the fractionally faltering unanimity that signals a conductor's less than complete control are few (I heard far more of them in the Maazel/Cleveland Beethoven cycle at Carnegie Hall several years ago), but in the main the orchestral work is more relaxed, less prickly than in the Szell performances—which brings gains as well as losses.

Maazel has a way of periodically inserting his mark into these outwardly objectivist readings. Like Szell he uses the occasional ritard, the minute adjustment—sometimes barely more than a tiny break—before a new section, but where Szell sounded dry and dogmatic, Maazel seems merely theatrical. Taken individually, almost all of Maazel's touches can be justified intellectually, yet their aggregate effect can produce discomfort—such "insights" as

## Explanation of symbols

Classical:

**B** Budget  
**H** Historical  
**R** Reissue

Recorded tape:

●● Open Reel  
 ● 8-Track Cartridge  
 ●● Cassette

the brasses' dynamic expansions in the last movement of Symphony No. 1 and at the end of the scherzo of No. 4, or the deliberately measured tempo for the choral return of the ode theme following the double fugue in the finale of No. 9, strike me as a mite fancy and self-conscious.

My enjoyment is also inhibited by the sound, which varies from work to work but whose balances generally seem to me as much a product of electronic mixing as of a great orchestra's response to a highly proficient conductor. Although every strand is heard clearly, the perspective sounds uncomfortably constricted, as if the piccolo, contrabassoon, and fourth horn had been recorded on their own tracks and then inserted afterward. I missed a feeling of true solidity, particularly in No. 7.

One further peculiarity must be noted before proceeding to the individual performances. Maazel observes all repeats except in the scherzos of Nos. 7 and 9, which are both unaccountably shorn of even the minimal repeats heeded in most performances. Fortunately, he does not include the spurious *da capo* repeat in the third movement of No. 1.

Symphony No. 1, briskly paced and rhythmically well sprung in all four movements, is in the tradition of Toscanini's

NBC recording—a decided improvement over Szell's ably controlled but humorless account. No. 2 is one of the set's glories, a mercurial, perfectly controlled interpretation, close in manner to the recent Karajan and to the Szell, which was one of that set's triumphs.

The *Eroica* is well paced but lacks intensity. Part of the problem is the mushy sound; note the anemic-sounding timpani and the rather pale oboe and cellos in the Funeral March. (In fairness, the horns in the scherzo's trio are outstanding, and there is also good brass work in the fourth-movement coda.) No. 4 is wonderfully played, though the constantly maintained tempos in the first two movements undercut such introspective moments as the ethereal dialogue between soft strings and timpani toward the end of the first-movement development. Jochum makes far more of that passage in his new recording (reviewed separately), and so did Toscanini in his NBC version—an interpretation in essentially the same briskly symmetrical mold as Maazel's.

No. 5 gets one of the set's best-sounding recordings, but the performance is inconsistent, veering between taut clarity and amorphousness. Those problematical "special" phrasings are most abundant here—

for example, the holdback before the fortissimo at first-movement bar 94 (Szell did this too, but more conservatively) and the affected phrasing forced on the solo oboe in its famous recitative. Moreover, there are problems with tempo relationships: The *piu mosso* ending of the Andante seems lethargic, and the fourth movement wavers between being massively imperious and jaunty and rushed.

Apart from some fussing in the "Thanksgiving" movement (the coda is particularly slow and sentimentalized) and an obtrusively exaggerated trumpet leadback at the end of the "Peasants' Merrymaking" trio, the *Pastoral* gets a ravishing performance—crystalline and beautifully graded in sound, patrician and well sprung in rhythm. There are no ritards from the bassoons and violins in those notorious fourths at first-movement bars 190 and 236, and the "Scene by the Brookside" flows beautifully.

No. 7 is mostly well paced. Maazel does vary the articulation (as in the fourth movement, where the violins are perfectly audible despite the very energetic tempo; the dotted figures beginning at bar 52 are also admirably weighted), but somehow the lack of a really solid sound causes the reading to seem slightly antiseptic. The Allegretto, which Szell took too briskly and nervously, begins to lapse into a somnolent dirgelike tread. No. 8, by welcome contrast, is splendidly curt and imposing. The first movement is rather broad, but the tremolos—caught in a forward, close perspective—impart a thrilling urgency. In the Allegretto, Maazel's metronome bears happy resemblance to Maelzel's—both are suitably animated, a point of view aided by the orchestra's delicacy and cutting virtuosity. The beautifully pointed third-movement trio and the caustic, witty finale put this performance up with the very best.

The opening movement of No. 9 is incisively paced—a good middle-of-the-road tempo, nicely controlled and steadily cumulative. The scherzo is beautifully lithe, although it is hurt by the omission of repeats and the timpani solo could be more robustly registered. The Adagio is luminous, phrased with a sinewy reserve that builds resolutely to the climax. In the finale, Maazel's sense of continuity—aside from that bit of deliberation following the orchestral double fugue—is absolutely knowing but perhaps a bit cut-and-dried. Surely there could be more of a shattering sense of fulfillment when the ode theme blazes up in the full orchestra, and such moments as the timpani outburst preceding the entrance of the bass solo have been heard to more thrilling effect elsewhere. The Cleveland Orchestra Chorus does resounding work in this recording, but my impression of the vocal quartet is of four superstars in slightly frayed condition, their vocal roughness magnified by close microphoneing.

No. 9, by the way, was simultaneously recorded by Telarc in a digital version, and we can expect the fruits of that labor in time (at a premium price, of course). The Columbia presentation is rounded out by crisp accounts of the three overtures (the *Fidelio* is particularly impressive) and comes in an attractive box. The booklet

## Critics' Choice

The most noteworthy releases reviewed recently

- BACH:** French Suites. Leonhardt. ABC/SEON AX 67036/2 (2). Inventions; Sinfonias. Leonhardt. ABC/SEON AX 67037. March.
- BEETHOVEN:** Symphony No. 6. Jochum. ANGEL S 37530, Apr.
- BRAHMS:** Songs. Ameling, Baldwin. PHILIPS 9500 398, March.
- BRAHMS:** String Quartets (3). Alban Berg Qt. TELEFUNKEN 26.35447 (2), Apr.
- BRUCH:** Violin Concertos Nos. 1, 2. Accardo, Masur. PHILIPS 9500 422, March.
- CHOPIN:** Etudes, Opp. 10, 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.
- DEBUSSY:** Preludes, Book I. Michelangeli. DG 2531 200, March.
- DOHNÁNYI:** Chamber Works. HNH RECORDS 4072; HUNGAROTON SLPX 11624, 11853, March.
- FRANCK:** Symphony in D minor. Cantelli. RCA ARL 1-3005, March.
- HANDEL:** Alexander's Feast. Palmer, Johnson, Harnoncourt. TELEFUNKEN 26.35440 (2), May.
- MOZART:** Vocal Works. Blegen, Zukerman. COLUMBIA M 35142, May.
- 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.
- SWEELINCK:** Harpsichord Works. Koopman. TELEFUNKEN 36.35360 (3), May.
- TCHAIKOVSKY:** The Sleeping Beauty. Bonyng. 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 099D 3 (3), Apr.
- ZELENKA:** Orchestral Works. Camerata Bern. ARCHIV 2710 026 (3), March.



Christiane Eda-Pierre and Colin Davis—a variable performance of *Béatrice et Bénédict*

contains a Maazel essay on Beethoven that appeared originally in the *New York Times* and notes on the music by Phillip Ramey.

H.G.

**BEETHOVEN:** Symphony No. 4, in B flat, Op. 60; Leonore Overture No. 3, Op. 72b. London Symphony Orchestra, Eugen Jochum, cond. [John Willan, prod.] ANGEL S 37529, \$7.98 (SQ-encoded disc). Tape: 4XS 37529, \$7.98.

Jochum's new Fourth is similar in style to his last one, with the Concertgebouw for Philips. Again one finds a wealth of geniality, expressed in—for me—slightly laggard tempos and overripe sonorities, but as before the playing has obvious devotion and structured intelligence behind it. And in fairness, Jochum's finale, deliberately paced though it is, has much more of the requisite lightness than some others I can think of—Szell's or Klemperer's—that feature similar tempos.

Leonore No. 3 is forthright in interpretation, though here there are surprising instances of imprecise orchestral playing and rhythmically slipshod (or is it Furtwänglerian?) phrasing. Angel's sound is as impressive as in Jochum's Beethoven Fifth (S 37463, August 1978) and Sixth (S 37530, April 1979)—note the clarity of the timpani's quiet taps.

H.G.

**BERLIOZ:** *Béatrice et Bénédict*.

Héro	Christiane Eda-Pierre (s)
Beatrice	Janet Baker (ms)
Ursule	Helen Watts (a)
Bénédict	Robert Tear (t)
Claudio	Thomas Allen (b)
Somarone	Jules Bastin (bs)
Don Pedro	Robert Lloyd (bs)
Leonato	Richard Van Allan (spkr)

John Alldis Choir, London Symphony Orchestra, Colin Davis, cond. PHILIPS 6700 121, \$17.96 (two discs, manual sequence).

**Comparison:**  
Veasey, Mitchinson, Davis                      Ois. SOL 256/7

Set to his own libretto after Shakespeare's *Much Ado About Nothing*, Berlioz' last major work is an *opéra-comique*—that is, an opera with spoken dialogue. In Colin Davis' 1962 Oiseau-Lyre recording, the dialogue was omitted entirely: the two numbers involving the pedantic musician Somarone (an invention of Berlioz, not found in Shakespeare), which in their full form don't make sense without the dialogue, were abbreviated, and the elaborate cadenza for Héro's aria was cut in half. The new Philips recording incorporates a modicum of spoken dialogue and also restores these musical omissions—a gain not only for completeness, but also for sense: The two opening choral numbers, which use the same musical material, are in different keys (B flat and A, respectively) and were clearly not meant to be played in immediate succession; they benefit from the intervening air space generated by the dialogue.

Predictably, some of the singers don't speak the dialogue very well. Helen Watts is particularly, if only briefly, unconvincing, and I'm mystified why Richard Van Allan's something less than idiomatic delivery should have been tolerated in a role involving no singing, merely the ability to speak French well. It could be worse, though—there are two native speakers, Jules Bastin and Christiane Eda-Pierre, and two leads who speak the language idiomatically, Janet Baker and Robert Tear.

The trouble is, those two leads don't sing very well, and that is more important. Tear is in such trouble above the staff as to be downright unlistenable, and every phrase that involves higher notes has clearly been shaped more by desperation than by musical considerations. (He's not very happy at the lower end of the part, either, but that is at least less conspicuous.) Baker sings, as usual, with spirit, but her current vocal condition is severely limiting, the unsteady tone a serious liability in slower music. Eda-Pierre isn't a model of firmness either, though her flexibility is welcome in the

Philips faster part of Héro's aria. And with Watts, the only holdover from the Oiseau-Lyre cast, in appreciably older voice, the trio of the three ladies is a trial of warring wobbles. Indeed, the only unalloyed vocal pleasure afforded by this set is Bastin's solid, humorous, idiomatic Somarone.

When I first listened to the Philips set, the music seemed rather less buoyant and inventive than I remembered. Alarmed, I put on the Oiseau-Lyre set; lo and behold, wit and sentiment flowed as in years past. It took some time to pin down the reasons for this discrepancy (not unlike, I have since learned, the experience reported this month by Conrad L. Osborne vis-à-vis London's new recording of *Pagliacci*)—and it wasn't simply a result of the unsatisfactory singing in the new set, although the temptation to blame that was naturally very great.

Some close comparisons disclosed that, for all the greater overall smoothness and solidity of the Philips sound, there is less detail audible at times—and, since this is an opera by Berlioz, much wit and sentiment is made individual and vivid by orchestral detail. Not that the detail is actually inaudible (although I cannot in fact hear the dotted rhythm in the strings at “*Un pareil bonheur/Est-il pour mon coeur*” in Bénédict's aria), but it isn't placed as forwardly, doesn't come to the attention as readily as in the older set. In effect, after listening to a number in the old recording, the new one became more enjoyable because now I know “what to listen for.”

Other things, not major in themselves, also contribute to the eventually significant difference in overall effect. The earlier cast is generally sharper rhythmically, quicker off the mark—especially April Cantelo as against Eda-Pierre. And just as the Oiseau-Lyre trio of women blends better, so the men: John Cameron and John Shirley-Quirk are better matched than Thomas Allen and Robert Lloyd. The famous Nocturne, at the end of Act I, went with a gentle swing in 1962 that Davis has not quite recaptured now.

If you don't know the opera, by all means start with the Oiseau-Lyre set; though its omissions undoubtedly misrepresent the letter of the work, the musical performance is truer to the spirit. Those who already own the earlier set may wish to investigate the new one; they will find, in addition to the discs, an expectably fine essay and translation of the libretto by David Cairns.

D.H.

**BRAHMS:** Organ Works. Jan Hora, organ of St. Maurice's Cathedral, Olomouc (Czechoslovakia). [Pavel Kühn, prod.] SUPRAPHON 1 11 1948, \$8.98.

Fugue in A flat minor. Chorale Prelude and Fugue, “O Traurigkeit.” Chorale Preludes (11), Op. 122.

Brahms left rather little music for organ—he composed some early preludes and fugues and in his last year completed the eleven Chorale Preludes, Op. 122—but in the best of these pieces he confided some of his deepest and most intensely personal feelings. Jan Hora plays these richly emotive works in a deadpan, metronomic manner. Never does the slightest rhythmic inflection

disturb the note-spinning; never does one get a sense of phrase, of melodic shape, of harmonic tension. A pianist would be laughed off the stage for this sort of playing, and, without the piano's range of varied touch, its effect on the organ is unbearable.

To make matters worse, Hora's instrument (the builder of which is unidentified) has a mean and mincing tone, and the excessive proximity of the microphones negates whatever acoustical warmth may exist in its setting. S.C.

**CHERUBINI: Medea (ed. Lachner).**

Medea	Sylvia Sass (s)
Glauce	Magda Kalmár (s)
Maids	Veronika Kincses (s), Katalin Szokeláhy-Nagy (ms)
Neris	Kiara Takács (ms)
Giasone	Veriano Luchetti (t)
Creonte	Kolos Kováts (bs)

Hungarian Radio and Television Chorus, Budapest Symphony Orchestra, Lamberto Gardelli, cond. [Laszlo Beck, prod.] HUNGAROTON SLPX 11904/6, \$23 94 (three discs, manual sequence).

**Comparisons**  
Callas, Penno, Bernstein/La Scala Turn. THS 65157/9  
Jones, Prevedi, Gardelli/Sta. Cecilia Lon OSA 1389

The persistence of Cherubini's marmoreal, not to say glacial, tragedy is to me inexplicable, except in terms of the opportunities it offers the dramatic soprano to show her mettle by giving vent at length to a number of strong emotions: jealousy, rage, vindictiveness, motherly love that alternates with murderousness. Medea, in the immortal words of Bottom, is a part to tear a cat in. It is a part that has proved highly tempting to prima donnas who fancy themselves as singing actresses, ever since Maria Callas took it up at the 1953 Florence May Festival and at a blow restored the long-neglected opera to international currency—at least for a while.

Yet as this new recording once again demonstrates, Medea offers no surefire guarantee of success. The fact that Callas enjoyed a series of triumphs in it is somewhat deceptive. The overwhelming sense of inevitable tragedy she evoked whenever she sang the role owed, it now seems clear, rather more to her interpretive genius than to Cherubini's creative skills. (Furthermore, a far from negligible part of her vivid characterization was established in the orchestrally accompanied recitatives composed by Franz Lachner in the mid-nineteenth century in place of what was originally a mixture of spoken dialogue, *mélodrame*, and string-accompanied recitative.) In the hands of lesser interpretive talents, the opera—monumental in conception, classically decorous (all the bloody deeds on which the tragedy turns take place off-stage); its narrative stiffened by a plenitude of symphonic orchestral passages—remains well-meaning fustian, a would-be great occasion lacking the necessary animating spark.

Or so the lack of artistic success attendant upon those who have followed in the wake of Callas would suggest, whether Eileen Farrell on the concert platform, Leonie Rysanek on-stage, or Gwyneth Jones on records. Now Sylvia Sass can be added to their number. Sass is a striking-looking young woman who, though still under 30,



Burton/DG

Krystian Zimerman  
*Chopin worth investigating*

has already achieved in her native Hungary, in France, and in Britain a *réclame* with the public and the press that, having heard her weakly sung *Traviata* at Aix-en-Provence and her immature *Tusco* at the Met, I find astonishing.

Here she is no less out of her depth, both vocally and interpretively. For one thing, she is monotonous. From her entrance on the scene to the opera's final curtain, Sass maintains a single note of emotional outrage. The dissimulation Medea practices on Creonte to win her another day in Corinth, her deception of Giasone by means of which she gains his assent to her temporary repossession of their sons, the conflict she experiences between maternal tenderness and the impulse to revenge herself on Giasone through the children's murder—all these elude completely the soprano's very limited interpretive grasp. Nowhere does she respond to the varying needs of the drama, nowhere does she follow the psychological course of Medea's machinations.

Sass's chance of success is in any case bound to be hampered by her vocal inadequacies. Lacking both dramatic bite and an assured lower register, she simply cannot project Medea's commanding personality. In the Act II Giasone/Medea duet, for example, the latter's threatening and hate-filled asides make hardly any impression because Sass does not know how to give such utterances the right kind of weight, emphasis, and variety.

In terms of characterization, Veriano Luchetti's Giasone is no less monochromatic. In addition, his tendency to heave himself up into notes above the staff quickly becomes annoying. But Luchetti, unlike his colleagues, at least gives one a certain amount of pleasure through his Italian enunciation. Magda Kalmár, the Glauce, has her points, though she has an obtrusively weak lower register and is troubled by the high Cs in her aria.

The chorus and orchestra are satisfactory. Lamberto Gardelli is sound but unexciting. The opera includes the Lachner recitatives and is heard in the standard Zangarini translation of the original French. Like the current London recording,

also conducted by Gardelli, Hungaroton's *Medea* uses the Ricordi edition, but with minor cuts at the end of Act I, in the Giasone/Medea duet, in the Act II concertato, and in the Act III finale. The London set offers a better Neris (Fiorenza Cossotto) and minimally livelier conducting but is hardly much of an improvement. Bruno Prevedi (Giasone) has perpetual recourse to intrusive aspirates; Pilar Lorengar (Glauce) is in her most flattery voice and is routed by the technical demands of her aria; and Gwyneth Jones (Medea) is hopelessly beyond her depth.

For those who do not mind off-the-air mono sound, the clear choice is Turnabout's issue of Callas' 1953 La Scala performance. Leonard Bernstein's conducting is irresistibly impetuous, while Callas, in superb if reckless voice, is at her most thrilling and illuminating: To hear her agonized vacillation over her sons is to see immediately how a great artist can transfigure essentially frigid music. Her commercial recording (Ricordi/Mercury, currently unavailable), made four years later under Tullio Serafin, finds her sounding tired and Serafin underenergized.

Turnabout supplies an uncommunicative leaflet, London an Italian-English libretto plus notes, and Hungaroton a libretto in Italian, English, Hungarian, German, and Russian plus good, if occasionally quaintly phrased, notes. Hungaroton's recording is less impressive than London's, for all that the latter is more than ten years old. In the new set, the singers are too closely miked, and the big concerted scenes lack a sense of space adequate to the number of participants. D.S.H.

**CHOPIN: Waltzes (14).** Krystian Zimerman, piano. [Cord Garben and Hanno Rinke, prod.] DEUTSCHE GRAMMOPHON 2530 965, \$8.98. Tape: ●● 3300 965, \$8.98.

Waltzes, in E flat, Op. 18, in A flat, Op. 34, No. 1; in A minor, Op. 34, No. 2; in F, Op. 34, No. 3; in A flat, Op. 42; in D flat, Op. 64, No. 1 (*Minute*), in C sharp minor, Op. 64, No. 2; in A flat, Op. 64, No. 3; in A flat, Op. 69, No. 1; in B minor, Op. 69, No. 2; in G flat, Op. 70, No. 1; in F minor, Op. 70, No. 2; in D flat, Op. 70, No. 3; in E minor, Op. posth.

Zimerman plays only the standard fourteen waltzes, which puts his disc at a competitive disadvantage with those versions that contain as many as five extra pieces. Nor, to be frank, do I find his playing as satisfying here as in his earlier recordings of Chopin (DG 2530 826, October 1977) and Mozart (2531 052, January 1979). He begins unpromisingly: The E flat major *Valse brillante*, Op. 18, is tonally hard-edged, overzealously articulated, and ridden with finicky tempo adjustments. This technically superb but charmless pianism—in works that are nine-tenths courtly charm even when deeper emotions are present—continues throughout the first side and recurs occasionally on the second, as in the final E minor Waltz, Op. posth.

In fairness, some of Zimerman's playing is breathtakingly nuanced and beautifully sinuous, particularly as he relaxes into a more communicative state. The A flat Waltz of Op. 64 has an elastic, undulating line above the finest-spun bass line imagi-

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nable, and all the pieces of Opp. 69 and 70 bloom with prismatic transparency and seductive half-tints.

Textually, Zimerman goes his own way. He uses the Paderewski Polish text for most of the waltzes but plays the Fontana versions of the two Op. 69 pieces—and in the B minor, Op. 69, No. 2, switches to the Oxford University Press version's unexpectedly pungent variant of the last four measures.

The disc is only a partial success, but it merits investigation. H.G.

**HAYDN: Die Schöpfung.**

Gabriel, Eva Helen Donath (s)  
Uriel Robert Tear (t)  
Raphael, Adam Jose van Dam (bs-b)

Leslie Pearson, harpsichord; Philharmonia Chorus and Orchestra, Rafael Frühbeck de Burgos, cond. [Christopher Bishop, prod.] ANGEL SB 3859, \$15.98 (two SQ-encoded discs, automatic sequence).

**HAYDN: Die Schöpfung.**

Gabriel Lucia Popp (s)  
Eva Helena Dose (s)  
Uriel Werner Hollweg (t)  
Adam Benjamin Luxon (b)  
Raphael Kurt Moll (bs)

Brighton Festival Chorus, Royal Philharmonic Orchestra, Antal Dorati, harpsichord and cond. [James Mallinson, prod.] LONDON OSA 12108, \$17.96 (two discs, automatic sequence). Tape: ●● OSA5 12108, \$17.96.

**HAYDN: Die Jahreszeiten.**

Hanne Ileana Cotrubas (s)  
Lukas Werner Krenn (t)  
Simon Hans Sotin (bs)

Roger Vignoles, harpsichord; Brighton Festival Chorus, Royal Philharmonic Orchestra, Antal Dorati, cond. [James Mallinson, prod.] LONDON OSA 13128, \$26.94 (three discs, automatic sequence). Tape: ●● OSA5 13128, \$26.94.

Antal Dorati has done more to revitalize the music of Haydn, and to reacquaint audiences with that composer's works, than any other conductor of our era. His Haydn discs fill up the shelves and keep coming. They can be counted on to be well performed and well thought out—they are, pardon the pun, as reliable as the seasons.

That said, I prefer *The Creation* as overseen by Rafael Frühbeck de Burgos. Dorati's does have the imprimatur of H. C. Robbins Landon's scholarly notes and the luxury of separate soloists for Adam and Eva, but Frühbeck's performance has an aura of spontaneity and delight that Dorati seems to have lost. The EMI/Angel engineers haven't put the soloists as far up front as Decca/London's, and if this and some other decisions end up causing a few minor problems in the Frühbeck set, at least this *Creation* doesn't sound as premeditated and routine as Dorati's.

There are more similarities in these two versions of the composer's first great oratorio than there are differences. Both recordings were made in England, and despite the characteristic divergences in the recorded sound, there is not much to choose between the Philharmonia Orchestra and the Royal Philharmonic; both are adequate to the job at hand. The two conductors' tempos are essentially the same, though



Antal Dorati  
Continuing the Haydn revival

Frühbeck allows himself to go both slower and faster than Dorati, who opts for moderation at every corner. Similarly, he incorporates more sonic outbursts than Dorati, and, though these blazes may annoy the purists, Haydn would probably have greeted them with cheers.

Once Dorati has set up these conservative parameters, it is surprising and even off-putting to hear him create tension by letting the orchestra pull against the soloists in several of the more active and florid passages. Where instruments and voice or voices should mesh elegantly, Dorati sets them at odds, evidently purposely. The results make me uncomfortable.

I can't imagine that anyone would choose one or the other of these recordings because it does or doesn't double the soprano and bass roles. Haydn himself could settle for only three soloists, but among recent recordings the trend has been to five. (Karajan, in fact, used six; Werner Krenn was brought in to complete the role of Uriel after Fritz Wunderlich's death.) Although my favorite recording, the earlier London set conducted by Karl Münchinger (OSA 1271, just deleted), uses five soloists, what matters is not number but effectiveness, and Dorati seems to defeat his own case when he brings in Helena Döse as Eva instead of letting Lucia Popp double the soprano roles. As Gabriel, Popp is little short of wondrous—light, clear, pure, and limpid. Helen Donath (Angel) is only slightly less impressive; her technique is on a par with Popp's but the timbre is not as pleasing.

Obviously there are gains from having a bass sing Raphael and bringing in a baritone for Adam. London's Kurt Moll is a first-rate Raphael, but so, except in the lowest passages, is Angel's José van Dam, and I will put up with Van Dam's struggles on the bottom in order to hear his Adam, which is rich, smooth, and attractively passionate. Between the tenors, there is little choice: Werner Hollweg's tones are edgy, while Robert Tear's lines are cool and stylish,

more attuned to my idea of what archangels sound like.

Dorati plays his own harpsichord continuo in his *Creation* (in the name of authenticity one would have expected London to put the continuo closer to the aural front) but not in his recording of *The Seasons*, made in 1977, a year later. The congenial later oratorio is less demanding and therefore easier to put across than *The Creation*. Dorati's interpretation is full of lilt and dances; if there are long passages on these three discs that are less than fascinating, the fault may be more Haydn's than the performers'.

Ileana Cotrubas is a lovely Hanne in this recording, which is the equal of the best of those still available. Indeed, the juxtaposition of three sets is enough to make one rejoice in the current abundance of graceful, flexible soprano voices. The two men, Krenn (Lukas) and Hans Sotin (Simon), are no less congenial, and in *The Seasons* the Brighton Festival Chorus sings with more gumption and spark than in *The Creation*. K.M.

**LEONCAVALLO: I Pagliacci.** For a feature article, see page 66.

**MASCAGNI: Cavalleria rusticana.** For a feature article, see page 66.

**MASSENET: Le Jongleur de Notre-Dame.**

Angels Antoinette Rossi (s), Amanda Cassini (ms)  
Jean Alain Vanzo (t)  
A Poet Monk Tibère Raffalli (t)  
A Painter Monk Jean-Marie Frémeau (b)  
A Musician Monk Michel Carey (b)  
Brother Boniface Jules Bastin (bs)  
The Prior Marc Vento (bs)  
A Sculptor Monk Jean-Jacques Doumène (bs)

Monte Carlo Opera Chorus and Orchestra, Roger Boutry, cond. [Gréco Casadesus, prod.] ANGEL SBLX 3877, \$16.98 (two discs, automatic sequence).

Even in the years when Massenet was known principally by *Munon* and *Werther*, his short (approximately ninety minutes) three-act "miracle" opera *Le Jongleur de Notre-Dame* enjoyed a general critical reputation as one of the best of his other operas. But performances have always been rare, owing to a variety of factors: the all-male cast, the gentler music-making that Massenet employs, and perhaps also the sanctimonious nature of the score itself.

The opera was written because Massenet became interested in a libretto sent to him, based on a story by Anatole France. Even though he was at the time a famous composer, he could not find a home for the finished work until the impresario of the Monte Carlo Opera, Raoul Gunsbourg, accepted and produced it February 18, 1902, beginning Massenet's relationship with that opera house, which continued after his death. After its Monte Carlo premiere, the opera was given at the Opéra-Comique, but it is fair to say that its international renown was largely occasioned by the fact that Mary Garden saw it as a vehicle for her talents and transformed the title role to a travesti part for Oscar Hammerstein's Manhat-

tan Opera Company November 27, 1908.

The story is a simple one, familiar because its clearest imitator has now become the more performed work: Puccini's *Suor Angelica*. (The story also has points of reference with Menotti's *Amahl and the Night Visitors*.) In the fourteenth century a poor, half-starved itinerant *jongleur* (the word is untranslatable, including in it elements of an acrobat, musician, minstrel, juggler, and magician), simple and pure in heart, is accepted as a novice in the Abbey of Cluny. He is awed by the sophistication and expertise of the monks, who look upon him with overt condescension—all but the kindly monk/cook Boniface. The monks celebrate the Virgin by pridefully putting forth their specialties—painting, sculpture, music—so that Jean, the *jongleur*, is left utterly confused as to how to compete with them. He does so in the only way he knows, by going clandestinely to her statue and performing his pitiful but heartfelt act. The monks, eavesdropping, are scandalized by the sacrilege—all but Boniface—but are awestruck when the statue comes to life and wipes his sweated face with her robe.

Maurice Léna's libretto is excellent in its concise elaboration of France's story and in its delineation of character (particularly that of Boniface), but in the accepted nineteenth-century manner he changed the ending so that the Virgin merely blesses Jean, while surrounded by holy light. Celestial voices are heard, and Jean expires in bliss. It is not surprising that these pages, in Massenet's well-worked "creeping Jesus" style, are the weakest in the score, only partly redeemed by the nobly understated final page.

Yet the overall innocence permeating the story, expressed in the final page in the Prior's words, "Blessed are the simple, for they shall see God"—the music of which heads the score and acts as a loosely applied ground bass at various points—is beautifully set forward in Massenet's writing. His craftsmanship is everywhere in evidence: the expressivity of his instrumentation, the use of archaic modal echoes, the directness and uniformity of the music. Boniface's "Legend of the Sage Plant" ranks with Massenet's finest inspirations, as does the 9/8 theme that represents the contemplative repose of the monastery. Even given its "miracle" music, *Le Jongleur* stands as one of Massenet's most consistent and persuasive scores.

This premiere recording uses the original tenor setting; the soprano recension was never explicitly sanctioned by Massenet, although he well realized the value of Gardin's contributions—not least to his bank account. A soprano voice would provide an appropriate element of naive simplicity, but Alain Vanzo's fluid and forthright tenor voice makes a poignant Jean, particularly in his big scene before the Virgin. Vanzo must use all his art to suggest a youthful naïveté he no longer inherently commands, and now and then I would like more soft shading than he provides.

The rest of the cast is solid without being outstanding: Jules Bastin draws a good deal, but not all, from the role of Boniface—crucial parts of the "Legend of the Sage

Plant" song lie in a weak area of his voice. Roger Boutry leads a strong performance from his ensemble and is rewarded by expressive playing, especially from Michel Pons on the solo viola d'amore.

The recording benefits from a welcome naturalness in the blend of voices, chorus, and orchestra, with a few quite appropriate "stage effect" sounds: would that more of today's opera recordings were engineered in this low-key way. In sum, a fine job of an opera worthy of attention. P.J.S.

**MILHAUD:** Protée: Suite Symphonique No. 2.\* Les Songs. \* Utah Symphony Orchestra\* and Utah Chamber Orchestra\*, Maurice Abravanel, cond. [George Sponhaltz, prod.] ANGEL S 37317, \$7.98. Tape: ●● 4XS 37317, \$7.98.

Most music lovers had buried Darius Milhaud long before his death on June 22, 1974. Although he continued to compose prolifically throughout his later years, he had already passed into history, remembered almost entirely by his earlier works. My current copy of SCHWANN 1, for example, lists nothing later than a single work from the mid-Fifties, several from the Forties, but mostly those—the best known and most often recorded—from the Thirties and earlier. And so it's surprising to encounter two more all but forgotten works from that early period. They show us a Milhaud who is an even more impudently imaginative spokesman for his age than we have usually credited. These scores retain, more than a half-century later, unfaded piquancy and forcefulness.

The last of Milhaud's several reworkings of incidental music for Claudel's play *Protée* was responsible for one of the greatest twentieth-century Parisian concert scandals. Its premiere, conducted by Pierné at the Colonne Concerts on October 24, 1920, caused a near riot (the gendarmes had to be called in!) that outdid even the stormy reception of Stravinsky's *Sacre* some seven years earlier. And no wonder, for if ever a composer bawdily nose-thumbed the musical establishment, it was Milhaud in this suite. It seems not to have been recorded since Monteux's Victor 78s of 1946 (except for a noncommercial Steinberg/Pittsburgh Symphony LP of the early Fifties), and since the score is rarely if ever revived in American concert halls, today's listeners are likely to be unprepared for its bite, impact, and exuberance.

The overside ballet score *Les Songs*, for reduced (theater-pit) orchestra, has had scant success on the stage despite its Balanchine choreography originally starring Toumanova. It hasn't fared any better on records; I know of only the composer's mid-Thirties Columbia version with the Paris Symphony. But Abravanel, who conducted the 1933 Paris stage premiere, obviously has never lost faith in this episodic, diversified work, notable for its rowdily festive moments and for its inexhaustibly inventive orchestral scoring.

Without even a suggestion of camping-up, Abravanel and his players, who manage to sound more French than Utahans, suc-

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**MOZART: Concertos for Oboe and Orchestra:** in C, K. 314; in E flat, K. Anh. 294b (attrib.). Han de Vries, oboe; Prague Chamber Orchestra, Anton Kersjes, cond. [Eduard Herzog, prod.] ANGEL S 37534, \$7.98 (SQ-encoded disc). R.D.D.

The distinguished Dutch oboist Han de Vries, who for seven years was a Concertgebouw principal, deserves better support than he is given in this EMI/Supraphon coproduction. Nothing can conceal his impeccable musical artistry or his subtle tone coloring, more slender-toned but no-less elegant or individual than that of most noted oboe soloists. But the over-enthusiastic Anton Kersjes drives the Prague Chamber Orchestra far too hard, and the recording captures only too candidly its penetrating high frequencies and its generally overloud, overemphatic dynamics. Or is it possible that some of the fault should be ascribed to the American disc processing?

Unfortunately, then, I can commend this disc only to oboe connoisseurs who don't want to miss knowing De Vries better. For Mozartean, it is no real competition for either the Holliger or the Black version of K. 314 (Philips 6500 174 and 6500 379, respectively). The inclusion of the E flat Concerto, K. Anh. 294b, is a dubious advantage, since this largely reconstructed work is patently spurious—indeed, not even remotely "Mozartean." However, it is pleasant enough music by some competent late-eighteenth-century composer, with a disarming slow-movement melody. And there is no other available recording. R.D.D.

**MUSSORGSKY: Pictures at an Exhibition** (arr. Howarth). Philip Jones Brass Ensemble, Elgar Howarth, cond. [Chris Hazell, prod.] Argo ZRG 885, \$8.98. Tape: ●● KZRC 885, \$8.98.

For so staunch a wind-music advocate as I've long been, as well as for so consistent an admirer of the Philip Jones Brass Ensemble's superb earlier recordings, it's awkward to have to brand the daring present project as essentially a failure. The principal fault is Howarth the conductor, not Howarth the transcriber. Perhaps some of the executant demands are too much for even these British virtuosos to manage at top speed, or perhaps they haven't been given enough rehearsal time to avoid seeming to sight-read their parts, but most likely the conductor's reading is simply routinely—even sluggishly—dull.

Howarth's transcription itself is as idiomatically as possible, and certainly marvelously ingenious, but it is handicapped by the constant predicament of either imitating the Ravel orchestration's brass scoring or deliberately attempting something different and almost invariably less suitable. What remains, then, are some magnificent brass sonorities magnificently re-

corded—which well may be enough for brass aficionados but never add up to a satisfying Pictures. R.D.D.

**RAVEL: Vocal and Instrumental Works.** Various performers. [Marc J. Aubort and Joanna Nickrenz, prod.] NONE-such H 71355, \$4.96.

Chanson madécasses (Jan DeGaetani, mezzo-soprano; Paul Dunkel, flute; Donald Anderson, cello; Gilbert Kalish, piano). Les Sites auriculaires; Frontispice (Paul Jacobs, Kalish, and Teresa Sterne, pianos). Sonata for Violin and Cello (Isidore Cohen, Timothy Eddy).

Nonesuch offers an irresistible bargain sampling of what might be called the uncharacteristic Ravel. The 1895 two-piano *Sites auriculaires* includes the keyboard original of the "Habanera" from the *Rapsodie espagnole* and a rollicking piece called "Entre cloches." The 1919 *Frontispice* for piano five hands—whose fifteen bars are printed at the beginning of a collection of Ricciotto Canudo's poetry—is suffused with polyrhythm and polytonality. The 1922 sonata for violin and cello, the only such work to gain any kind of toehold in the repertory, is treasured for its blunt rhythmic patterns, stabbing dissonances, and sections of swaying indolence. The 1925-26 *Chansons madécasses* are set to eighteenth-century poems of Evariste-Désiré de Parry, which for a while masqueraded as ethnically authentic. Eroticism and assertive racial consciousness are compactly juxtaposed in the text, and Ravel's setting of it uses the solo voice (a baritone or mezzo) and an ensemble of flute, piano, and cello with uncanny acumen, evocativeness, and economy.

All the music is presented with impeccable taste and skill. Gilbert Kalish and Paul Jacobs, two of the better pianists around for such repertoire, collaborate effectively in the *Sites*, though their "Habanera" could be accused of excess deliberation. (Nonesuch's impresario Tracey Sterne provides the fifth hand in the *Frontispice*.) The piano pieces sound forth with impressive dynamic range and bass.

The suppleness and remoteness with which Jan DeGaetani sings the *Chansons* are hypnotic, and many a rival recording is lacking such neat coordination between singer and instrumental trio. In the violin-cello sonata, Isidore Cohen collaborates with Timothy Eddy as smoothly as if the latter were his regular Beaux Arts Trio cello partner, Bernard Greenhouse.

For those who want to explore this music more systematically, the catalogs offer the usual complicating choices. The piano-duet miniatures appear in the Kontarsky brothers' two-disc Debussy/Ravel set (DG 2707 072), which contains the two-piano original of the entire *Rapsodie espagnole*. The piano pieces also appear, played by Queens College faculty members without quite the muted translucency of the Nonesuch performance, on a Musical Heritage Society disc (MHS 3581) that is indispensable for a number of Ravel rarities, including the only recording thus far of the lovely posthumous violin-and-piano sonata movement.

The alternatives for the *Chansons* go in both directions emotionally from DeGaetani's performance: Fischer-Dieskau's virtuosically accompanied interpretation

(HNH Records 4045, with Fauré's *Bonne chanson* and Poulenc's *Bal mosqué*) is larger than life: Janet Baker's (*Oiseau-Lyre SOL 298*, with Ravel's *Trois poèmes de Mallarmé* and songs by Chausson and Delage) is more meltingly tender. The Columbia recording of the violin-cello sonata by Jaime Laredo and Leslie Parnas (M 33529) is more incisive than that of Cohen and Eddy, with more lucid stereo separation, and it is paired with the finest performance of Ravel's piano trio in my experience. A.C.

**STRAUSS, R.: Ariadne auf Naxos, Op. 60.**

The Prima Donna, Ariadne	Leontyne Price (s)
Zerbinetta	Edita Gruberová (s)
Najade	Deborah Cook (s)
Echo	Norma Burrowes (s)
The Composer	Tatiana Troyanos (ms)
Dryade	Enid Hartle (ms)
The Tenor, Bacchus	Rene Kollo (t)
The Dance Master	Heinz Zednik (t)
Scaramuccio	Kurt Equiluz (t)
Brighella	Gerhard Unger (t)
An Officer	Peter Weber (t)
The Music Master	Walter Berry (b)
Harlekin	Barry McDaniell (b)
Truffaldin	Manfred Jungwirth (bs)
A Wigmaker	Georg Tichy (bs)
A Lackey	Alfred Sramek (bs)
The Major-Domo	Erich Kunz (spkr)

London Philharmonic Orchestra, Georg Solti, cond. [Christopher Raeburn, prod.] LONDON OSAD 13131, \$26.94 (three discs, automatic sequence).

**Comparisons:**

Karajan/Philharmonia Ang. CL 3532  
Leinsdorf/Vienna Phil. Lon. OSA 13100

Historically, the second version of the Strauss-Hofmannsthal *Ariadne auf Naxos* has been remarkably well performed on records. Writing in these pages in February 1969, Conrad L. Osborne hypothesized, "Perhaps it is the special quality of this opera (and its special difficulty) that has saved it on records; the cast requirements are so severe and unusual and the orchestral demands so high (in terms of quality, of course, not quantity) that one would not dream of undertaking the piece without an extraordinary assemblage of talent." Not long thereafter, however, came Böhm's stereo version, seriously undercast as far as the opera seria principals were concerned. Now here is the next *Ariadne*, and the jinx is still on, if in different ways.

The major problem, I feel, is that Sir Georg Solti misses the point a good deal of the time. At the start of the opera proper, the G major trio of nymphs has no spine, no tonal continuity; I found myself turning up the volume trying to hear what was missing "between the notes," but without success. This isn't really a matter of vocal inadequacy; though the lowest voice of the trio is uncertain, the sopranos are firm enough. Essentially, by voices and instruments, the music is pecked at: impressionistic petit point instead of elegant tapestry.

*Ariadne's* big solo veers from slow motion to virtually no motion at all, the conductor making enormous ritards to underline even the most local cadential events as if they were major articulations. And the final duet undergoes the same sort of debilitating distensions—occasionally in aid of the singers, but as often clearly a matter of the conductor's choice. The buffo material, on the other hand, though taken at a respectably bouncy clip, is so uniformly and unvaryingly stressed as to lose both shape

and significant direction: Everything seems to be one-beat-to-the-bar. As a result, nothing much ever seems to be happening musically.

To these reservations must be added the qualification that the LPO's playing, though certainly competent and clearly recorded, is hardly up to the level of some other recorded ensembles in this opera: Karajan's Philharmonia (don't miss Dennis Brain's horn playing in "Ein schönes war"), the Vienna Philharmonic (whether for Böhm in 1944 or Leinsdorf in 1959), Kempe's Dresden State Orchestra. (On this honor roll certainly belongs the Metropolitan Opera Orchestra as it played this work during the recent season—will there ever be a commercial recording of its present superb estate?)

Once upon a time, Leontyne Price might have done justice to the requirements of *Ariadne's* music. Occasionally, a phrase still surges out with the familiar temperament and something like the old warmth and richness of tone. A certain rapt intensity is also germane—in the duet with Bacchus, at "Ich weiss, so ist es dort wohin du mich fuhrest," for example. Most of the time, the tone is dry, wooden, and the German diction insufficiently specific to give the character profile. Neither vocally nor interpretively can Price's work be compared to Schwarzkopf's magisterial performance (in the Karajan set), or to the now unavailable performances of Reining (Böhm, 1944) or Janowitz (Kempe).

René Kollo may be a rather plain Bac-

chus; he does manage to get through this murderous part without coming to conspicuous grief, though the notes around the break are not really comfortable, and his soft singing in the upper register is chancy. We have heard worse performances of this role: Jan Peerce (Leinsdorf) makes a more musical effect, and the now deleted BASF resurrection of a 1935 German broadcast (the opera only, without the Prologue) preserved the genuinely heroic singing of Helge Roswaenge.

In Zerbinetta's coloratura intricacies, Edita Gruberová's accurate singing is hard to fault, though the legato lines of the Prologue duet show up a beat in the lower range. This is a brittle comedienne, with a squeezed, Slavic tone and a small but distinct Slavic accent—far less winning than Erna Berger (in the BASF set) or Rita Streich (Karajan). Her companions are led by Barry McDaniell (also the Harlekin of Böhm's stereo version), a warm, slightly wobbly voice; they are more efficient than characterful.

In the Prologue, we encounter two old friends: Tatiana Troyanos as the Composer, familiar from the second Böhm recording, and Walter Berry as the Music Master (which he sang earlier for Leinsdorf, also doubling then as Harlekin). Troyanos is a fine singer and a committed interpreter, who deserves her success in the part on-stage. Still, for all her strength in the lower reaches of the part, crucial moments clearly demand a voice that opens up as it climbs toward B flat, and in this she is no match for



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Irmgard Seefried (Böhm, 1944, and Karajan a decade later) or Sena Jurinac (Leinsdorf). Berry's voice is simply no longer at ease in this music; he substitutes exaggerated inflections for his former easy, secure pitching. Erich Kunz—Böhm's Harlekin in 1944—is now a flavorful Major-Domo (much preferable, in particular, to the low-comedy undertones that intrude on Kurt Preger's work for Leinsdorf). Otherwise in the Prologue, Peter Weber's strenuous but unfunny Officer and Alfred Sramek's overstressed Lackey attract unfavorable notice.

Clearly, this doesn't add up to serious competition for the Karajan set—or even, for that matter, for Leinsdorf's less strongly cast recording, which benefits from its conductor's strong structural grasp: In no other recording is the second trio of nymphs (announcing the approach of Bacchus) so cleanly detailed and firmly limed. If you must have stereo, this is the current choice, and perhaps you will feel that Leonie Rysanek (Ariadne) makes up in enthusiasm for her frequent vocal unkemptness. In my own view, Ariadne is such an absurd, pretentious, and stylized conception that it only works if delivered with a maximum of elegance, which means Karajan, though the 1944 Böhm and the Kempe, among the deleted sets, do pretty well in this direction.

Less pretentious, because it gives the final word to the comedians rather than to the straining heroics of Bacchus, is the original 1912 Ariadne, written to be played with the Molière-Hofmannsthal Bürger als Edelmänn. The Beecham Society has circulated a 1950 Edinburgh performance; neither complete nor very well recorded, this is enjoyable for the astonishingly accurate Zerbinetta of Ilse Hollweg (though she skips some of the famous extra difficulties of this version) and the strong, unusually youthful Bacchus of Peter Anders. But this is no substitute for a complete and modern set; next time someone is thinking about recording Ariadne, why not try that version? D.H.

**STRAVINSKY:** *Petrushka* (1947 version). Concertgebouw Orchestra, Colin Davis, cond. PHILIPS 9500 447, \$8.98. Tape: ●● 7300 653, \$8.95.

**STRAVINSKY:** *Petrushka* (1947 version). Vienna Philharmonic Orchestra, Christoph von Dohnányi, cond. [James Mallinson, prod.] LONDON CS 7106, \$8.98. Tape: ●● CS5 7106, \$8.98.

**Comparisons:**

Boulez/N.Y. Phil. (1911)	Col. M 31076
Ansermet/Suisse Romande (1911)	Lon. CS 6009
Stravinsky/Columbia Sym. (1947)	Col. MS 6332
Levine/Chicago Sym. (1947)	RCA ARL 1-2615

Christoph von Dohnányi's recording seems uncomprehending about *Petrushka's* style and texture. The engineering renders every line consistently audible—without distracting zooming in to pick up now this instrument, now that strand—but little attempt has been made to balance orchestral dynamics so that important events in the harmonic and melodic scheme stand out properly. The characteristic trumpet-dominated color so essential to the *Petrushka* sound has been slighted in heavily scored passages, and yet when instrumental solos come along (e.g., the trumpet for the Balle-

rina's entrance in Tableau III or the high clarinet writing in the "Bear Dance" of the last tableau) the playing is so beefy and charmless it doesn't seem as if one was missing anything before. Dohnányi sets reasonable tempos but is rhythmically stodgy, and the side break unfortunately comes within Tableau III (before the waltz) rather than between Tableaux II and III.

Philips provides equally transparent and un gimmicked sonics in its new *Petrushka*, yet with a musically discriminating balance so that one hears a Stravinsky instead of a Brahms orchestra. The Concertgebouw's virtuosity yields nothing to the Vienna Philharmonic's, and so much more grace and wit comes with it. Colin Davis generally heeds the composer's markings closely and displays control and vital energy in his interpretation, but I want something more in this music: a certain jaggedness in the rhythm that can't be precisely written in; a regretful trailing off in the ambiguous closing pages as *Petrushka's* apparition fades away (this is written in, but Davis ends firmly and unwaveringly); a sense of pathos and clumsiness in the two central tableaux.

Several of the numerous important *Petrushka* recordings realize some of these qualities. I still return to the composer's barbed and febrile reading with pleasure, though the playing is frequently ragged. Levine duplicates Stravinsky's driving intensity with greater orchestral precision, but RCA's recording is hardly ingratiating. Ansermet's enduring rendition of the original, 1911 version (the textual differences are pretty minor) is deeply compassionate and whimsical, tonally fresh, and bittersweet as a hurdy-gurdy. Though mildly artificial in its sonic perspective, Boulez' recording (also 1911) combines in some degree everybody else's propulsion and wit and is organized in all dimensions with particular lucidity. That might well make it my basic recommendation, with Davis for those who must have the 1947 revision; both of these plus Ansermet will give you, in irreducibly minimal form, the essential faces of *Petrushka*. A.C.

**TANEYEV:** *Symphony in B flat*; John of Damascus, Op. 1\*. Alexander Yurlov Russian Chorus\*. U.S.S.R. Symphony Orchestra, Vladimir Fedoseyev, cond. ABC CLASSICS/MELODIYA AY 67043, \$7.98.

Sergei Taneyev (1856-1915) was a venerable musical figure in tsarist Russia and is still highly honored by the Soviets as a composer as well as pedagogue, yet he and his music are almost unknown in this country. There have been a few recordings of Russian origin available briefly; the last of these—a fine program of choral works conducted by Alexander Yurlov on Melodiya/Angel (SR 40151, May 1971)—followed the others into limbo several years ago. Hence the present works would be welcome almost regardless of their executant and technical merits. But it's a joy to be able to report that both performances by the relatively young and enthusiastic conductor not only are most impressively dramatic, but are powerfully enhanced by first-rate engineering.

(Continued on page 93)

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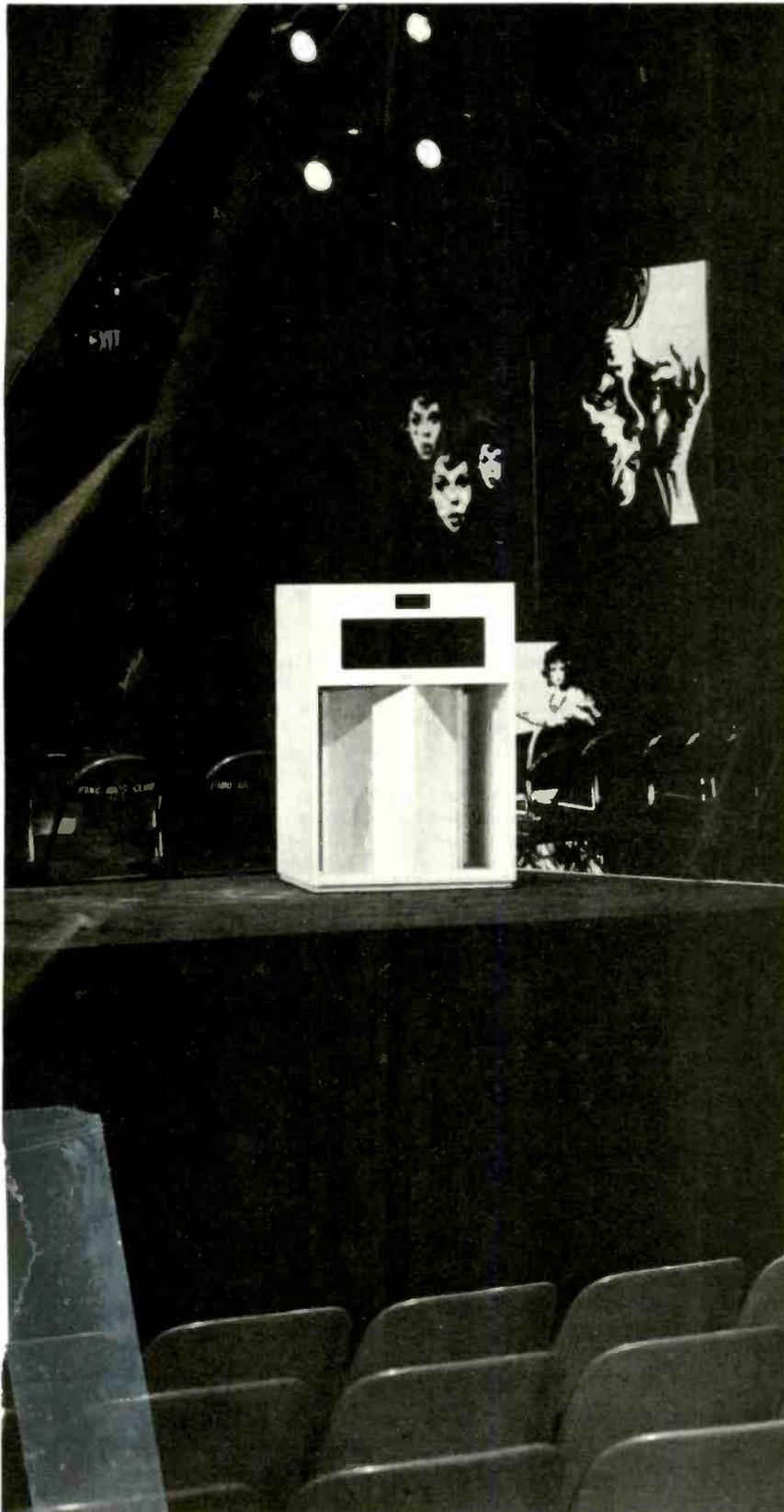
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## Gerhard Hüsch: A Voice to Reckon With

by David Hamilton

Best known to American listeners as the Papageno of the classic Beecham recording of Mozart's *Die Zauberflöte* (Turnabout THS 65078/80), the German baritone Gerhard Hüsch (b. 1901) was also among the most eminent of Lieder singers. He made the first complete recordings of some of the major German song cycles, contributed to the Hugo Wolf Society series, and recorded substantial groups of songs by then-contemporary composers such as Hans Pfitzner and the Finnish Yrjö Kilpinen.

In its prime, during the 1930s, the Hüsch voice was a rich, well-knit lyric baritone, reaching easily up to G, somewhat less consistently down to the bottom of the bass clef. The color was basically darker than most German specimens of this type (such as Hermann Prey, the closest present-day equivalent); though fundamentally a French horn, so to speak, Hüsch could also muster the more brazen colors of the trombone. His articulation was forward, lively, and precise—in speech, almost affectedly so, but this clarity nicely matched the sung tone, yielding a remarkably natural binding of word and tone. Like Elisabeth Schumann, Hüsch always seemed to be simply

singing words, not singing notes interrupted by consonants or speaking words with pitches in the middle. And the control of dynamics was equally masterful, the instrument capable of much timbral variety, the legato impeccable.

At his best, Hüsch was also an irresistible interpreter. For example, Schubert's "*Lied eines Schiffers an die Dioskuren*" in the present reissue: The richness of the tone and the fervor of the delivery define an expressive territory that isn't much heard from nowadays. (I suppose Gérard Souzay is the recent singer who comes closest to this combination of nobility and tenderness, but his vocal material was never in the same league.) Equally hors concours is Hüsch's performance of "*Dass sie hier gewesen*," an exceptionally difficult song. The voice intrudes upon silence so gently yet firmly that the reverence due a special place is perfectly expressed. However soft, the tone retains its beauty and solidity, nor does the pitching falter in the tricky central stanza. The precision with which word and note are matched also defines magically the crucial rests, and thus the silence is as concrete as the sounds.

Two lesser-known songs, "*Widerschein*" and "*Liebeslauschen*," are quite as exceptional, and most of the other Schubert performances are good. "*Ständchen*" begins uncertainly, then warms up; "*Horch! Horch! die Lerch'*" (with the inauthentic additional verses) is warm and spirited. The bite of the diction is compelling in "*Der Doppelgänger*" and in "*Erlkönig*," though Hanns Udo Müller—a pianist of considerable sensitivity—isn't able to punch out the triplets in the latter song as urgently as one would like. Loewe's "*Archibald Douglas*" is invigoratingly done; though allotted both sides of a twelve-inch 78, the ballad still had to be abridged slightly.

"*An die Musik*" misses on simple musical grounds; though Müller begins correctly, Hüsch seems determined to put the primary accents in the middle of the bars rather than at the beginning, and the result is just plain uncomfortable. A more complicated failure seems to me to mar the Brahms songs, and it's one that frequently complicates my response to Hüsch's singing. "*Wie bist du, meine Königin*" is a love song, but this singer is clearly more occupied with the lovely sounds he's making than with his "*Königin*." One is ever grateful for that gorgeous tone, that cultivated diction, that un-failing legato—but, especially in longer works, we eventually also sense a certain narcissism. There's nothing wrong with beautiful singing, God knows, but when we remain more conscious of the singer as vocalist than of the miller's boy, the winter journeyer, or the lovelorn poet, something is out of kilter. Even in such disparate personae as Papageno and Jesus (in the Ramin recording of Bach's *St. Matthew Passion*), the unvarying self-satisfaction is not far away.

Still, there are treasureable things in nearly all of Hüsch's recordings. Preiser's *Lebendige Vergangenheit* label has done

well by his song recordings for HMV: the Schubert cycles are on LV 203 (*Winterreise*) and LV 204 (*Die schöne Müllerin*), while LV 105 includes Beethoven's *An die ferne Geliebte*, Schumann's *Dichterliebe*, and Schubert's *Harfenspieler* songs. The Kilpinen songs (LV 80) were much admired in the Thirties, possibly because little other contemporary vocal music was then being sung this attractively; they now seem pretty hollow. On the other hand, the Pfitzner series (LV 208), accompanied by the composer, stands out as perhaps Hüsch's finest work: "*Zum Abschiede meiner Tochter*" is vocally impeccable, interpretively imaginative, and moving beyond words, and most of the others are similarly masterful. At the piano, the old gentleman fumbles now and then, rolling his chords in nineteenth-century style, but one imagines that his presence served as a lightning rod for some of that self-esteem. (Preiser includes several unpublished sides from these sessions that were not on an earlier Electrola LP.)

There's also an operatic collection (LV 76), which is but a sampling of a large catalog; particularly enjoyable is the "*Waschkorb*" duet from Nicolai's *Merry Wives* with Eugen Fuchs, conducted by Alexander von Zemlinsky (Alma Mahler's composition teacher and Schoenberg's brother-in-law). Hüsch's Italian arias (in translation) are both fascinating and infuriating, for he sings the "wrong" words with imagination and conviction.

Not yet on LP are the Wolf songs (and won't somebody do something about Herbert Janssen's recordings for that series as well?). I'm slightly annoyed that the present record omits just one of Hüsch's HMV Schubert recordings: "*Der Wanderer*," originally issued as the verso of "*Der Musensohn*"; not a compelling performance, but I imagine that most collectors would as soon have the whole series and make up their own minds.

In the early 1950s, Hüsch went to Japan to teach, and made more recordings, including two versions of Schubert's *Schwanengesang*. I've heard only the second; the fervor and authority are still present, sometimes movingly so, but the once-golden tone had turned to dry wood, with a wobble on sustained notes. These Japanese Victors are only for those who know the great Hüsch recordings.

All the Preiser reissues are furnished with the same biographical note, in German. Except for the Kilpinen songs, most of the texts and translations can be found in the Fischer-Dieskau collection of song texts.

**H GERHARD HÜSCH: Song Recital.** Gerhard Hüsch, baritone; Hanns Udo Müller, piano. PREISER LV 257, \$8.98 (mono [from HMV originals, 1934–39] distributed by German News Co.).

**SCHUBERT:** *Der Musensohn; Ständchen; An die Musik; Lied eines Schiffers an die Dioskuren; Widerschein; Liebeslauschen; Dass sie hier gewesen; Horch! Horch! die Lerch'; Erlkönig; Der Doppelgänger.* **LOEWE:** *Archibald Douglas.* **BRAMMS:** *Feldensamkeit; Wie bist du, meine Königin.*

*John of Damascus (1884)* is a magnificently expansive and diversified choral and orchestral setting of a Tolstoy poem, exceptional both for the beauty of some of its characteristically Russian unaccompanied choral passages and for the exultant drive of its intricately fugal finale. It reminds us that Taneyev, almost alone among Russian composers, was an avid student of the giant European contrapuntists of earlier eras.

The symphony is even more excitingly rich in thematic ideas and virile in sheer energy; it is so magisterial in formal construction and colorful scoring that its composer demands to be ranked high in the pantheon of the musical great. One realizes how much Rachmaninoff in particular must have been influenced by him—without, however, emulating comparably taut control of both materials and his own emotions. Neither Tchaikovsky nor Rachmaninoff surpasses Taneyev in the imaginative exploitation of instrumental possibilities. Yet perhaps the most remarkable characteristic of this music is that it is at once quintessentially Russian (at times as darkly somber as Mussorgsky) and distinctively individual, albeit with a combination of intellectual power and lusty humor unique among Slavic composers at least up to the time of Stravinsky and Prokofiev.

Only pedants will worry about the obscurities of this symphony's provenance. Some major reference works in English make no mention of it at all; others mention it only as one of Taneyev's unpublished symphonies. There are two more of these, dating from 1873-74 and 1884, respectively, in addition to the so-called Symphony No. 1, in C minor, Op. 12, of 1896-97, lately renumbered No. 4 in Russia (available in England in a Rozhdestvensky recording, HMV/Melodiya ASD 3106). The present work is labeled here as being in B flat major, although it actually begins in B flat minor, and is claimed to be No. 4 in Byron Cantrell's jacket notes, although he supplies no date. To confuse matters further, *Gramophone* reviewer John Warrack not only places it as No. 2 in the sequence of four, but describes it as an unfinished work for which Taneyev never got around to providing a fourth movement—a notion undercut by the patent conclusiveness of the third movement and by the perfectly integrated holism of the symphony as it stands.

Few listeners who "discover" the composer of this provocative work are likely to be content with this much. They'll want an American release of the C minor Symphony, plus some of the highly reputed chamber works. And we can at least dream of hearing Taneyev's magnum opus, the operatic trilogy *Oresteia* (1895) after Aeschylus. R.D.D.

**WAGNER:** *Das Liebesmahl der Apostel*®; *Siegfried Idyll*. Westminster Choir®, New York Philharmonic, Pierre Boulez, cond. COLUMBIA M 35131, \$7.98.

*Comparison—Das Liebesmahl:* Morris/Symphonica of London

Peters PLE 043

Had it been issued a year ago, this record would have elicited lively curiosity among Wagnerians intrigued by the prospect of

hearing *Das Liebesmahl der Apostel*, an 1843 work for large male chorus and orchestra. But in the meantime, Peters International brought out Wyn Morris' excellent recording (reviewed in these pages November 1978), and our curiosity has been well satisfied: *Das Liebesmahl* demonstrates Wagner's proficiency in handling large forces, but is generally of more historical than aesthetic interest.

Of Boulez' version, at least, it may be said that it offers a choice, not an echo. Whereas Morris takes thirty-three minutes to get through the piece, Boulez polishes it off in twenty-six. In general, Morris gets a fuller, warmer choral tone, and also a wider range of dynamics (and closer observation

of Wagner's markings). For this reason, his performance appears to be more interesting, and holds the attention over its longer span better than the Boulez.

A minor advantage of the faster speed is that the whole piece fits on a single side, avoiding Morris' turnover shortly before the orchestra's entrance for the coda. But then Peters gives you an otherwise unrecorded—and rather good—Bruckner piece, *Helgoland*, while Columbia offers only a fairly rebarbative performance of the *Siegfried Idyll*. This is played one instrument to the part, which is a good idea in principle—but chamber music playing is not the strong suit of these Philharmonic men. The rather clinical recording exposes an unfortunate

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CIRCLE 59 ON PAGE 89

quantity of steely string tone, erratic intonation, and unpleasant tutti sound. D.H.

## Recitals and Miscellany

**GERHARD HÜSCH:** Song Recital. For a review, see page 92.

**WEISS FAMILY WOODWINDS.** Dawn Weiss, flute; David Weiss, oboe; Abraham Weiss, bassoon; Zita Carno, piano. CRYSTAL S 354, \$7.98.

**VIVALDI:** Sonata for Flute, Oboe, Bassoon, and Harpsichord, in G minor, RV. 103. **MESSIAEN:** Le Merle noir, for flute and piano. **BORDEAU:** Solo for Bassoon and Piano, No. 1. **HINDEMITH:** Sonata for Oboe and Piano.

The Romero family foursome remains unchallenged, but even the great Gomberg brothers and other familial musical pairs must defer to the Weiss siblings: David, currently co-principal oboist of the Los Angeles Philharmonic; Abe, principal bassoonist of the Rochester Philharmonic; and Dawn, a flutist with the Oregon Symphony. It isn't merely their family relationship that makes this program one of the best of those I've heard lately in Crystal's recital series, although the kinship well may account for the combined precision and freedom of the

ensemble playing in the delectably cheerful yet songful Vivaldi sonata, which is new to me.

The individual Weisses' performances, each with pianist Zita Carno, are all first-rate, although perhaps only oboist David radiates magisterial authority. The selections vary widely in appeal, with Messiaen's rhapsodically improvisatory *Blackbird* and Bordeau's conservatory contest/display piece of decidedly more specialized interest than Hindemith's better-known, vivacious oboe sonata.

The apparently quite close-miked recording cannot be faulted, nor can the disc processing. R.D.D.

## AUDIOPHILE RECORDS

The unconventional techniques employed in the recording and manufacture of the discs reviewed below result in prices and distribution patterns that set them apart from mass-market recordings.

**RIMSKY-KORSAKOV:** Capriccio espagnol, Op. 34. **TCHAIKOVSKY:** Capriccio italien, Op. 45. Boston Pops Orchestra, Arthur Fiedler, cond. [Ed Wodenjak, prod.] CRYSTAL CLEAR CCS 7003, \$14.95 (direct-to-disc recording).

**PROKOFIEV:** Love for Three Oranges: Suite.

**RAVEL:** La Valse. **FALLA:** La Vida breve: Dance No. 1. London Philharmonic Orchestra, Walter Susskind, cond. [Ed Wodenjak, prod.] CRYSTAL CLEAR CCS 7006, \$14.95 (direct-to-disc recording).

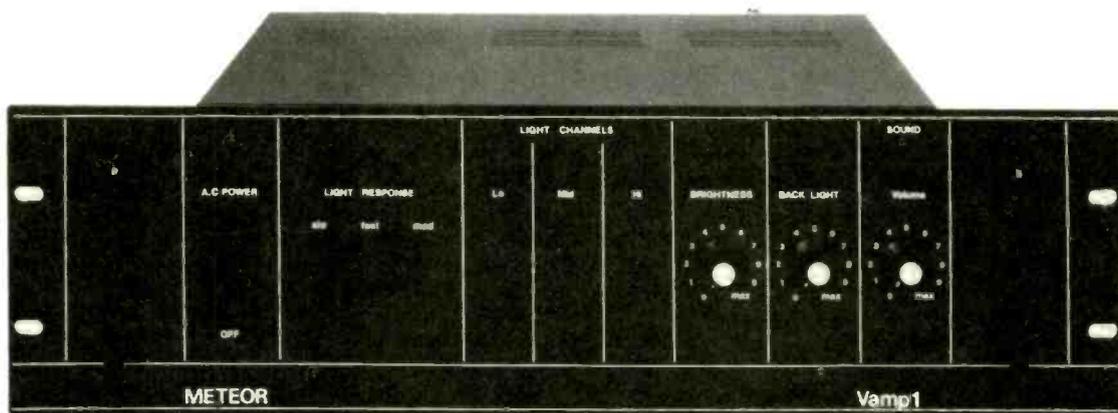
**GOULD:** Spirituals for Orchestra; Foster Gallery. London Philharmonic Orchestra, Morton Gould, cond. [Ed Wodenjak, prod.] CRYSTAL CLEAR 7005, \$14.95 (direct-to-disc recording).

(Crystal Clear Records, 225 Kearny St., San Francisco, Calif. 94108.)

What impresses me about these three discs is their lack of sensationalism, their freedom from sonic smudging—in short, the concert-hall authenticity of their timbres, dynamics, tonal balances, and perspectives. Everything here seems as natural and real as in live performances heard from midway back in Boston's Symphony Hall and in London's Watford Town Hall.

One very good explanation for this lies less in the technology involved than in the fact that the recording engineer for all three programs is Bert Whyte, whose early stereo recordings for the original Everest company remain milestones of audio progress. Here, of course, he can draw upon some twenty years' technical advances, to say nothing of the elimination of tape masters and a couple of generations of submasters, plus exceptionally careful disc processing. Yet I doubt that any of these factors contribute as much to the results as Whyte's ear and aural taste.

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Granted, the direct-to-disc technique's greatest handicap—the necessity of getting everything right the first time—does result in some execrable constraints. Even the ever exuberant Arthur Fiedler seems uncharacteristically overserious, while Walter Susskind never achieves the full elasticity and sinuosity demanded by *La Valse*. Only Morton Gould, conducting his own music, which is more slapdash in nature anyway, seems relatively free from inhibitory tensions.

But any real or imagined constraints are quite minor shadows on the luminosity of Fiedler's capriccios, each of which must rank among the best of the innumerable recordings. It's good too to get such splendid new versions of the relatively neglected suite from Prokofiev's *Love for Three Oranges* and that favorite symphonic encore of 78-rpm days, the *Dance No. 1* from Falla's *Vida breve*. Old and new Gould fans will be equally delighted by the first modern recordings of his long forgotten diversissements on Stephen Foster tunes and of his once popular *Spirituals for Orchestra*. For me, these works have aged less gracefully than his ever-delectable *Latin American Symphonette*, yet they are so rich in ingenious orchestral sound effects that they handsomely demonstrate the recording technique's sonic authenticity, lucidity, and rock-solid percussive lows.

The Susskind and Gould recordings (made late in 1978) boast, as the Fiedler (made late in 1977) does not, of being "super-percut . . . using the Ortofon extended range disc mastering system," though I don't hear any appreciable improvement. At high playback level none of these discs' surfaces, exceptionally smooth as they are, is absolutely noiseless, which gives me—as a tape connoisseur—some wry satisfaction; until home digital playback of digital recordings becomes practicable, the closest approach to the elimination of surface and background noise remains the best Barclay-Crocker Dolby open reels and the best Advent and In-Syn Dolby chromium-base musicassettes.

R. D. DARRELL

## JAZZ

**CHARLIE BYRD.** [Ed Wodenjak and Michael R. Phillips, prod.] CRYSTAL CLEAR RECORDS CCS 8002, \$14.95.

The two featured instruments in Byrd's group—his guitar and Paula Hatcher's flute—are caught with clear, delicate resilience by the direct-to-disc process. The balance between them is good, and the heavier sounds of Bill Reichenbach's trombone and Joe Byrd's bass are clean and distinct. Wayne Phillips' drumming is, for the most part, kept in the background where it belongs, but there are nice percussion touches, including gentle dustings and a gong that shimmers with an especially rich tone.

JOHN S. WILSON

**LOUIS BELLSON:** *Note Smoking.* [Jeffrey Weber, prod.] DISCWASHER DR 002 DD, \$14.50.

Putting a bunch of L.A.'s best sessionmen in a studio with Louis Bellson is a sure bet to produce, at the very least, listenable music. Aside from Bellson's fiery drumming, "Note Smoking" has some first-rate ensemble swinging and excellent soloing from the likes of Pete Christlieb, Ted Nash, Don Menza, and Chuck Findley.

And it's all superbly recorded. Big bands seem to work particularly well in direct-to-disc, but they must be miked and balanced properly. Discwasher has done a brilliant job of letting the music come through.

DON HECKMAN

**JON JARVIS:** *Evolutions I.* [Ed Wodenjak and

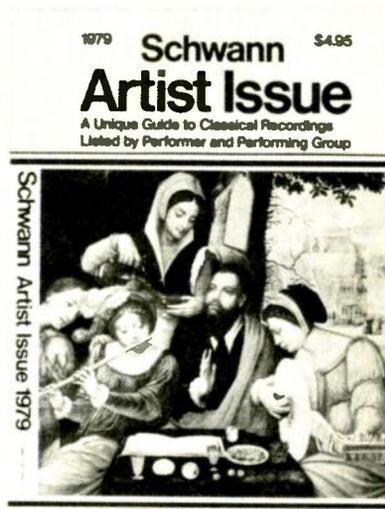
Tom Wiggins, prod.] CRYSTAL CLEAR RECORDS CCS 8004, \$14.95.

Jon Jarvis takes an unproblematic approach to direct-to-disc: He simply plays one improvisation on each side. He is a pianist with technique to burn; unfortunately, his musical taste is less combustible. He winds through every style imaginable, from James P. Johnson to Keith Jarrett, and manages to miss the real point of each.

I wonder how Crystal Clear is going to get away with overlooking Jarvis' obvious references to copyrighted songs? "I Can't Get Started," for instance, wanders in and out of Side 2, and he plays a good sixteen bars of the theme.

DON HECKMAN

## SCHWANN 1979 ARTIST ISSUE



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**Budget reissues: second wave.** It's encouraging to find that the recent debut series of lower-cost musicassettes (recordings mostly from the '60s or late '50s and the early '70s) aren't one-shot bonanzas. *Odyssey* is out with a second list of twenty-five releases and *Seraphim* with fifteen (and more coming), while Deutsche Grammophon's *Privilege* and Philips' *Festivo* series continue on a regular basis. It's even more encouraging that their Dolby-quieting and other processing standards still match those of the higher-priced competition, domestic and imported.

There is soon to be a welcome newcomer: the London Treasury cassette series. I haven't yet seen the full thirty-item list, much less heard any samples, but I'm anticipating in particular the well-deserved return of many Ernest Ansermet/Suisse Romande old friends. Meanwhile, here are some of the representative works in the other series that I have heard.

- **ODYSSEY** (\$4.98 each). Two Dinu Lipatti legacy programs finally reach tape: the celebrated coupling of his 1947 Grieg and 1948 Schumann piano concertos (YT 60141) and his fourteen Chopin waltzes (YT 60058), c. 1950. Both were mono, but the latter is now in "electronic stereo." No matter—the sound in each case is at least acceptable, and the readings themselves still incomparable.

Another invaluable revival, even in electronic stereo, is the c. 1951 Goddard Lieberman production of highlights from Gershwin's *Porgy and Bess*, conducted by Lehman Engel and starring Lawrence Winters and Camilla Williams (YT 35501, double-play). But the milestone, musically complete, 1958 German recording of Kurt Weill's *Die Dreigroschenoper*, starring the composer's widow Lotte Lenya, is in true stereo and still sui generis (YT 32977, double-play). The only catch with these last two works is the lack of any notes or texts.

- **SERAPHIM** (\$4.98 each). I jumped the gun last month on the Victoria de los Angeles/Giuseppe di Stefano *Madama Butterfly* (4X3G 6090, \$14.94), so all I have on hand is the mono "Art of Jussi Bjoerling" program (4XG 60168), which represents the fondly remembered Swedish tenor not only in opera arias by Flotow, Puccini, Rossini, and Verdi, but also in songs by Beach, Beethoven, Campbell-Tipton, Elgar, Godard, Sjoeborg, Speaks, R. Strauss, and Tosti.

- **FESTIVO** (\$6.98 each, including notes). Most novel of the additions to Philips' midpriced series is the first taping, I think, of Mozart's *Masonic*

by R. D. Darrell

## The Tape Deck

*Funeral Music*, K. 477, in the 1970 recording by the Ambrosian Singers and the New Philharmonia Orchestra under Edo de Waart (7310 063). But this is of rather specialized interest, as is perhaps one of the all-too-rare *Lieder* programs: one of fifteen best-known Schubert songs, newly combined from various earlier releases by Hermann Prey with pianists Karl Engel and Leonard Hokanson, all in cleanly bright 1974 recordings (7314 010).

Of more general appeal is the fine, quite Toscaninian 1967 Wolfgang Sawallisch/Dresden Schubert Ninth Symphony (7310 054), still remarkable for its sonic warmth. And there is both general and a very special delectable appeal to the elegant yet expansive 1968 recording of the Dvořák Cello Concerto by Maurice Gendron and the London Philharmonic under Bernard Haitink. That would be enough in itself, but for good measure it includes the concerto's too-seldom heard preparatory studies: *Silent Woods*, Op. 68, and the Op. 94 Rondo (7310 112).

- **PRIVILEGE** (\$6.98 each, including notes). The latest DG midpriced series releases I've heard are topped by Sviatoslav Richter's superbly romantic 1959 Schumann program of the piano concerto and Op. 92 Introduction and Allegro, plus the solo Toccata, Op. 7, and Novelette, Op. 21, No. 1 (3335 181). All Mozarteans as well as Karl Böhm aficionados will welcome the convenient collection (mostly drawn from complete opera sets with various orchestras) of seven overtures, including K. 318, better known as Symphony No. 32 (3335 229). Then there are two fine Ferenc Fricssay recordings: his empathic 1960 Dvořák *New World* Symphony (3335 141) and idiomatic 1961 Johann Strauss I and II *Emperor Waltz* and polka program (3335 134).

**Solving another Everest Strauss mystery.** Whatever their other faults or merits, Everest/Olympia cassettes (\$5.98 each) are unique for their frequent complete lack of content-identifications. For the Strauss polka program (Olympia 8138, "Tape Deck,"

April 1978), I was helped out by Charles K. Hewins Jr. of the K. C. Company, VLMS American agent, Augusta, Maine. Now I've had to go to my Strauss family guru, Elwood Freedle of Winston-Salem, North Carolina, to get the complete contents of the mysterious (date unknown) Josef Krips/Vienna Symphony "Strauss Waltzes" (Everest 3406). There are Johann II's complete *Man lebt nur einmal*, Op. 167 (Side A, No. 1), *O schöner Mai!*, Op. 375 (B-4), and *1001 Nights Intermezzo* (A-4); and the novel, but cut, *Josef Strauss Flinserln*, Op. 5 (B-2), and *Die Vorgeiger*, Op. 16 (B-5). But skip those that have been brutally mutilated, some rescored: Josef's *Mein Lebenslauf*, Op. 263 (B-3), and Johann II's *Wiener Bonbons* (A-2), *Freut euch des Lebens* (A-3), *Kuss* (A-5), *Wo die Zitronen blühen* (B-1), *Lagunen* (B-6), *Seid umschlungen Millionen* (B-7), and *Morgenblätter* (B-8). Caveat auditor!

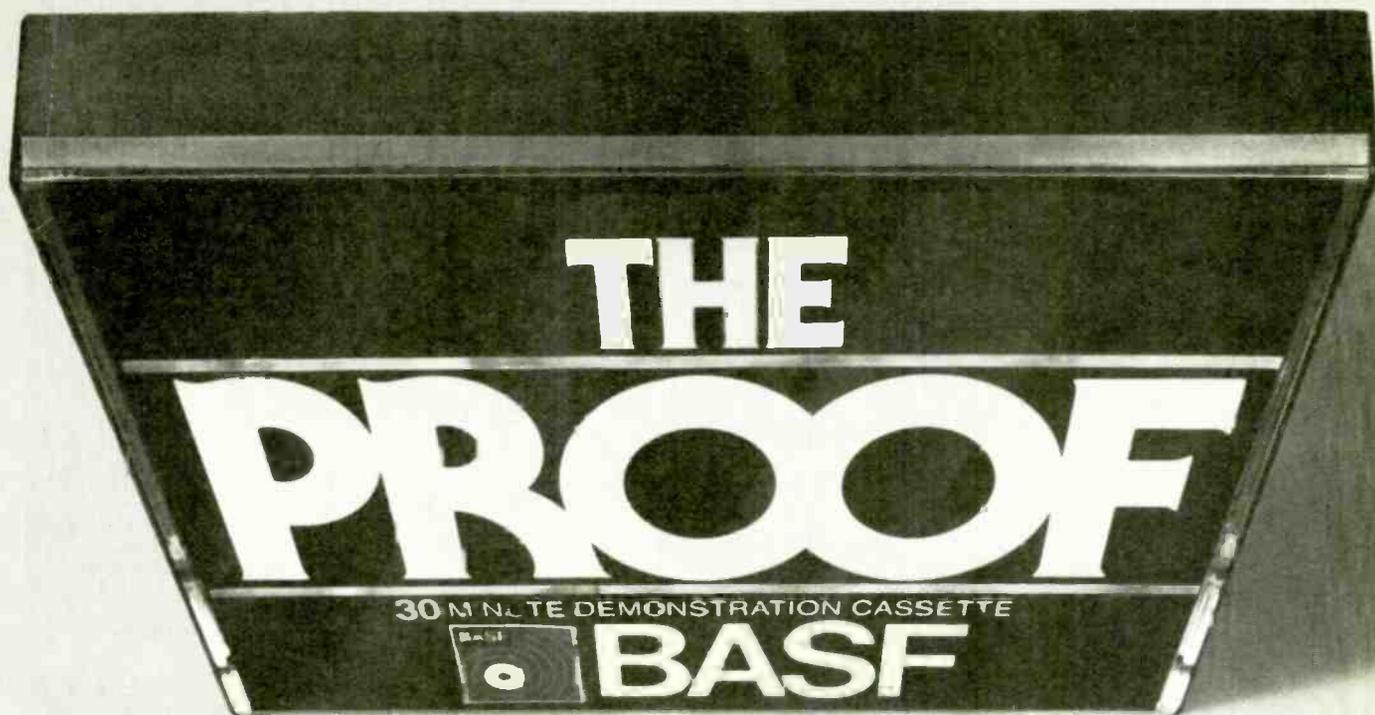
**Major Barclay-Crocker open reels.**

Telefunken's Dolby reel series is impressively launched with the pioneering period-instruments version of Bach's *Brandenburg Concertos* by Nikolaus Harnoncourt and his *Concertus Musicus*, Vienna (N 6.35043, double-play, \$17.95). There have been other fine authentic-style-and-sound editions since this one of 1964, but it has worn well as an interpretation, even better for its well-nigh ideal sonic balances, lucidity, and presence—technical qualities that never have been revealed as convincingly as they are here. It's mighty good just to have the *Brandenburgs* back in the reel repertory, where not so many years ago there was a choice of seven versions, all long since out of print.

Similarly, there once were seven reel editions of Handel's *Messiah*, so there would be a warm welcome for any new one. The 1976 version by Neville Marriner's Academy of St. Martin-in-the-Fields has distinctive attractions besides. It's the only recording to adhere scrupulously to the 1743 first London performance, which involves some fascinatingly unfamiliar variants. And while, among the soloists, only Elly Ameling is outstanding, the modest-sized chorus and orchestra sing, play, and are recorded admirably—with particular grace and zest in the many light, fleet, sotto voce passages (Argo/B-C V D18D3, two reels, \$25.95).

(Correcting the ZIP Code error I made in last February's column, the mail-order firm's address is properly: Barclay-Crocker, 11 Broadway, New York, N.Y. 10004.)

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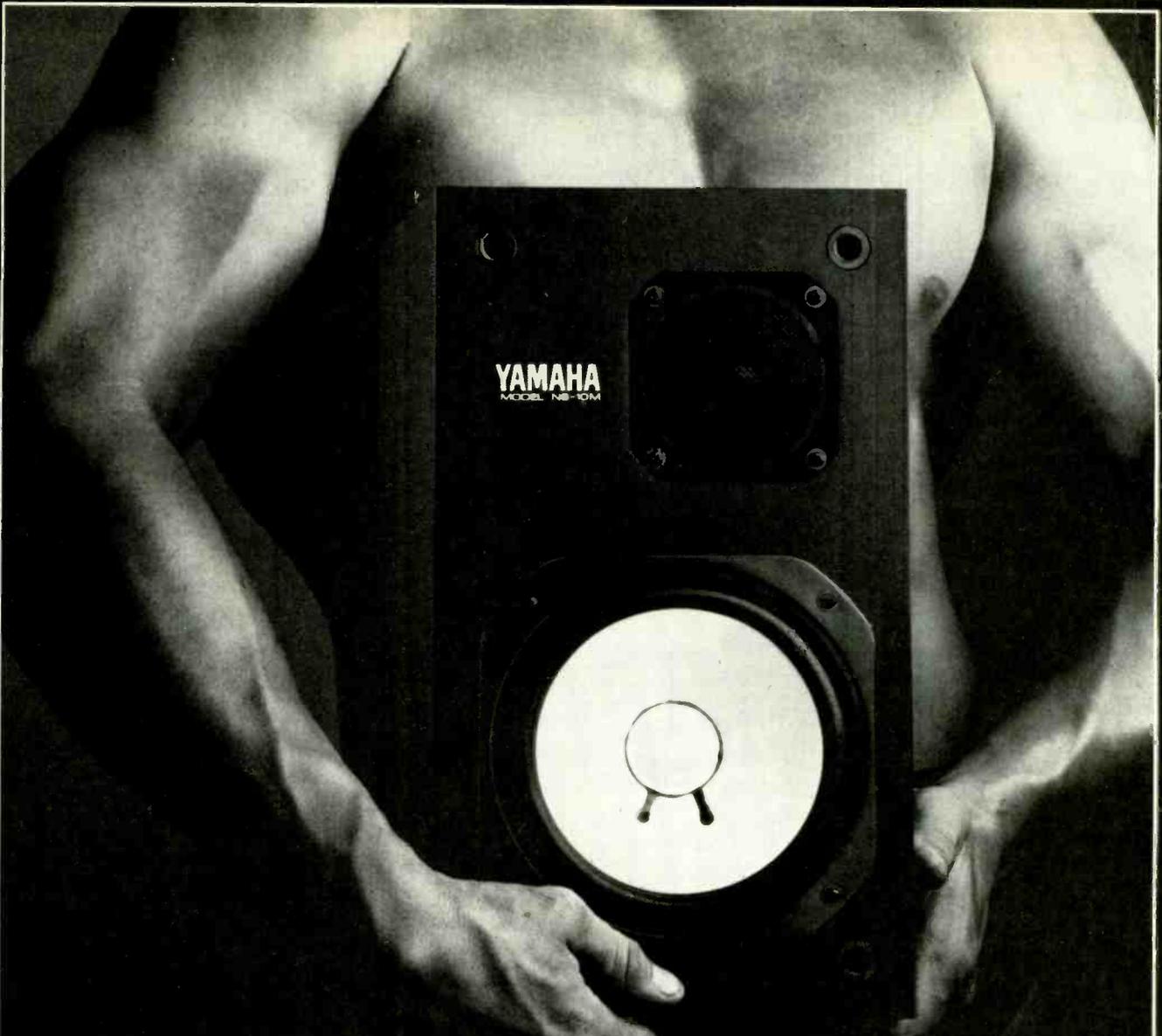
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# Backbeat®

## Smooth Sailing for Dire Straits

by Ken Emerson

Some people sing in the shower; others listen. "I'd been out on a run and was standing in the shower," John Stainze recalls, "when all of a sudden this song came on the radio. I thought it was the Amazing Rhythm Aces or some other southern band, so I perked up my ears." When British disc jockey cum rock historian Charlie Gillett announced that the unfamiliar number he had just played was entitled *Sultans of Swing* and had come from a demo by an unknown English group named Dire Straits, Stainze's ears perked up even more. The London-based a&r man for Phonogram raced to sign the band and eventually nailed down worldwide rights.

It was a shrewd move, so it turns out, for *Sultans of Swing*, so unassuming yet so insinuating a song, has become an international hit. It broke first in Holland, spread to Germany and France, leapfrogged to Australia and New Zealand, and, according to *Billboard*,

What gladdens the heart  
about *Sultan's* success  
is that it is a hit without hype.

now is No. 4 and still climbing on the American singles charts. On the strength of *Sultans*, the band's first album, "Dire Straits," is not only No. 3 in the States, but also the most frequently played LP on FM radio. What gladdens the heart about *Sultan's* spectacular success is that, like Gerry Rafferty's *Baker Street* last



Top: Hlsley and M. Knopfler; Withers and D. Knopfler

year, it is a hit without hype in an era when entertainment conglomerates churn out little else. It is music that has made it on its own merits rather than on the promotional muscle of a record company.

In fact, nearly every American record company turned Dire Straits down on the first go-round, according to one industry source, and even within Phonogram enthusiasm did not run particularly high. The band's big, brawny bass player, John Illsley, says that Phonogram practically had to be coerced into releasing *Sultans* in Germany and that Warner Bros. held off picking up the American rights "until they were pretty sure that the album was doing well elsewhere."

Many of Dire Straits' initial difficulties can be traced to the peculiarities of the pop-music scene in Great Britain. "Fifteen months ago," Stainze says, "they couldn't get any gigs in London because punk was all the rage. Everybody would have laughed them off the stage because they didn't have that high-energy thing." The situation was so dire, according to drummer Pick Withers, that "we started to do gigs off our own back, hiring our own halls and doing our own posters."

The problem was that Dire Straits, with its muted

instrumental approach and reflective lyrics, was unfashionable in a country whose record-buyers, to swipe a line from the Kinks' Ray Davies (what better source?), are "dedicated followers of fashion." Leader Mark Knopfler attributes much of this to "the rock media in England, which are weekly and therefore very competitive. You get headlines like 'This Week's Big Thing' and then a picture of Fred Scrounge. They're all trying to beat each other with the latest and the greatest."

What makes such faddism especially frustrating

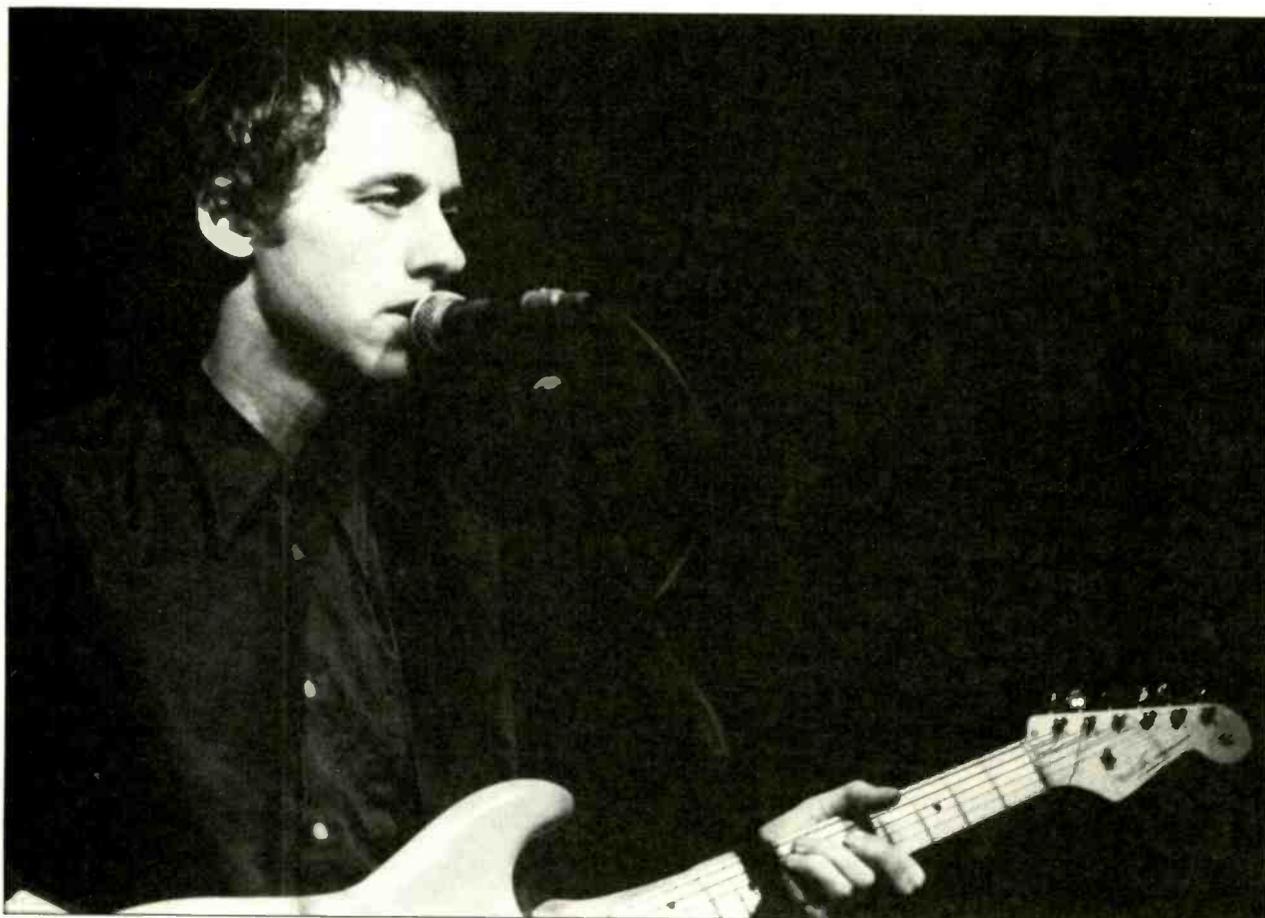
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**Nearly every American  
record company  
turned Dire Straits down  
on the first go-around.**

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is that it is unrooted in the reality of the marketplace. "People are still buying twenty thousand Genesis albums," Knopfler says, "while Fred Scrounge and the Gougers are selling only three thousand copies on the New Wave charts."

Because punk rock was the passion of the British press, Dire Straits found it hard to get a public hear-



*Mark Knopfler—"Everybody has American imagery in his head."*

Photos by Richard E. Aaron

ing, and only now are they becoming prophets with honor in their own land. *Sultans* is finally a bit there, though in a re-recorded version. "It was done at the express wish of a member of Phonogram who said that the original version wasn't 'balls' enough," Illsley says. "It's a lot rougher and possibly a bit faster." According to David Knopfler, Mark's younger brother and the band's rhythm guitarist, the drums on the English edition of *Sultans* "sound like cardboard boxes."

If it has taken Dire Straits a bit of doing to win acceptance in England, it doesn't appear to have bothered them very much. The Knopfler brothers are used to being outsiders. Jews born in Glasgow, Scotland, they were doubly alien growing up in Newcastle-on-Tyne, England, where their architect father eventually moved the family. Withers is also accustomed to being a stranger in a strange land. When he was seventeen, during the mid-'60s, the Leicester, England, native used a forged passport to drum in seedy German clubs. Subsequently he lived in Rome for three years, playing with an English band, the Primitives, which performed cover versions of the latest British and American hits. "It certainly wasn't very challenging musically," he says. "About all you had to do was ar-

rive on time and look like the posters."

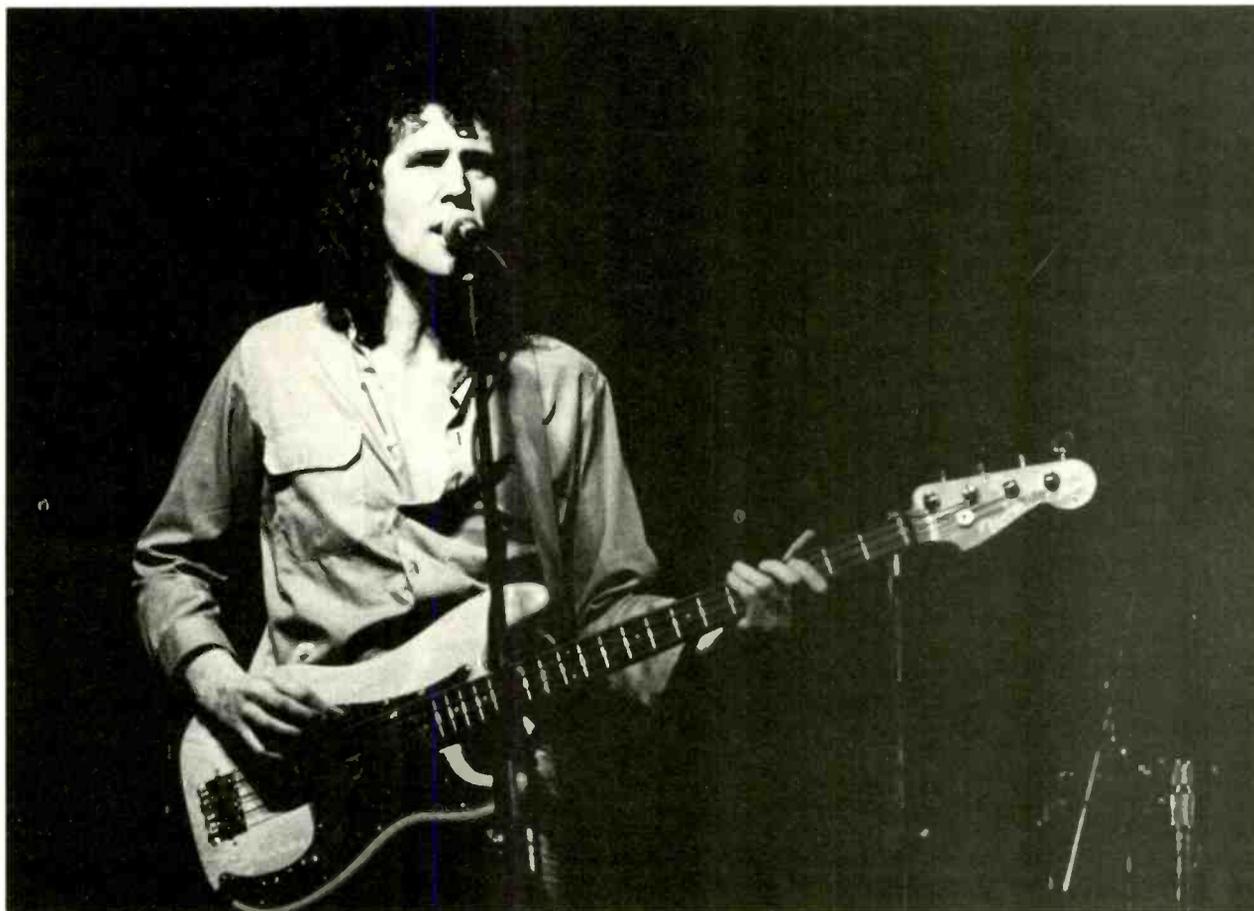
Withers is the only member who is a professional musician of long standing—he eventually settled into studio drumming in Monmouth, England, for the likes of Dave Edmunds and Andy Fairweather-Lowe. The others pursued more conventional, middle-class careers. Mark Knopfler was a cub reporter (his last story for the *Yorkshire Evening Post* was about the death of Jimi Hendrix), went to a university, and got his degree in English literature, which he taught to "kids, housewives, secretaries, foreign students,

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### They couldn't get any gigs in London because punk was all the rage.

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Arabs, and mechanics" at a school for continuing education in London. Brother David, meanwhile, became a social worker. John Illsley, after leaving the employ of a London lumber importer, got his college degree in sociology and later opened up a record shop. Not long after, he met David and the two ended up sharing a flat.



*Bassist John Illsley: from lumber to sociology to Dire Straits*

All three had been in rock bands as teenagers and had kept on playing in the privacy of their apartments. Mark had even made a stab at a full-time musical career after graduating from college. "The first thing I did when I left was join the first group I could and try to live by it. Rock & roll and living in London cost me a lot in a lot of ways. It made me realize just how many guys there are who carry their dreams around with them all the time. It's quite a frustrating scene. I had a

### "The fact that we became successful is just an incredible bonus."

home-life bustup with me girl, and I moved around with nothing definite, no bread."

A vacation in America played a major part in inspiring Mark to give up the relative comfort of his teaching job. He traveled across the country by bus and "felt very much alive. I liked the people and the food and the space and the energy, the optimism and the capacity for enjoyment and the desire to communicate and share in each other's happiness, the different ways of saying hello and good-by. I liked the literature and the trashiness and the humor."

Perhaps, too, Mark liked being an outsider, and when, a year later, he quit teaching to devote all his time to Dire Straits, the American qualities of his music made him an odd man out in England. Most British punk rock is fiercely chauvinistic—part of it is a reaction against the wholesale defection of a previous generation of rock stars to climes where taxation is not so severe. With their thickened English accents and the muddy mixes of their records, a lot of punk rockers seem to be daring Americans to make head or tail of their lyrics, many of which address very specific circumstances in the U.K. (in contrast to the deliberate universality of, say, the Beatles' songs).

Dire Straits' songs, some of which Mark wrote before he visited the States, are set in Great Britain, to be sure, but it is a Great Britain on which a mythical map of America has been superimposed. Romance and realism commingle. The Sultans of Swing play Dixieland jazz "way on down South," referring both to the origins of Dixieland in the American South and to the southern part of London where the Sultans perform. Similar geographical double entendres are at work (play, really) in songs such as *Southbound Again* and *Wild West End*. "America," Mark says "colonized the European subconscious, as someone once said. Everybody has American imagery in his head." But that imagery is unusually active in Mark's songs.

It was his songs that drew Dire Straits together. Brother Dave and his flatmate were the first to join him. Meanwhile, sitting in with the group Brinsley Schwarz had convinced Withers that he should move to London and give up session work in favor of working with a real live band, and he rounded out the quartet. Withers fondly remembers the moment he real-

ized that Dire Straits had something going for them. "We were playing *Wild West End* in this tiny little club. You had to open the door every 10 minutes to get rid of the cigarette smoke. But we were all looking at each other with these beatific smiles on our faces. They weren't self-congratulatory pats on the back, but the music just evoked this really nice feeling amongst ourselves. The fact that we became successful is just an incredible bonus."

It's an incredible bonus, indeed, for a band that has been together for less than two years. And most of the credit accrues to Mark Knopfler. It's the exquisite restraint of his lead guitar that instantly catches the ear. Mark makes light of his prowess and is quick to credit the influences he has absorbed, the most conspicuous of these being J. J. Cale and instrumental groups such as the Ventures and the Shadows. Of the Shadows, he says, "The twang and the minor keys were a big deal for me when I was a kid. There was a kind of mystery to it that stayed with me. It's simple, evocative stuff."

That's a pretty fair description of Dire Straits' first album, although the simplicity of the music is a far cry from the deliberate crudeness of much punk rock. The haunting spareness of the sound evokes the wide-open spaces of the Wild West, over which Mark's guitar ranges like a laconic, rail-thin cowpoke. There's more than a touch of poetry in his hard-bitten soul, however, and it peeps out in the almost flamenco filigree and bluesy bent notes that adorn his wiry and otherwise no-nonsense leads. Meanwhile, the "chucka-chucka" of the rhythm guitars (played by Mark and brother David) proceeds at a snappy trot.

On "Dire Straits" and in live performance, Mark's voice is less eloquent than his guitar. Barry Beckett and Jerry Wexler coproduced their forthcoming second LP, "Communique," and Wexler, Mark says, devoted most of his attention to the vocals: "He's easy to sing to and is a very sympathetic character." Whether Mark overcame his debt to Bob Dylan and enlivened his gruff murmur remains to be heard.

The other question is whether success will ruin the Straits' underdog status. After all, the best songs on their first album, *Sultans* and *In the Gallery*, identify passionately—and a little resentfully—with artists who are unappreciated because they don't conform to the styles that are au courant. Knopfler discourages reading too much into his songs ("They don't necessarily represent a standpoint that is there and always will be"), but he concedes that D. H. Lawrence, a favorite author of his in college, was right when he warned, "Never trust the artist. Trust the tale."

Even the group's name no longer applies. Withers' roommate suggested it, Mark says, and "it was literally applicable at the time, because we had all given up everything and were completely broke and in debt." Hard times are now a thing of the past, however: The present is flush, and few bands seem so well equipped to persevere in the future. ●

## It Happened in Havana

by Eliot Tiegel

**H**avana, March 2, 3, 4. The Havana Jam—a pop, jazz, and Latin spectacular sponsored and initiated by CBS Records—was the first cultural interchange between the U.S. and Communist Cuba in twenty years. Ironically, it took place at the Karl Marx Theater, where, just several months before, Premier Fidel Castro gave the American government a severe tongue-lashing for its continued economic embargo of his nation.

The event, nicknamed by one wisecracking American jazz musician as the “Bay of Gigs,” was over a year in the making. “Originally we were going to have a two-day festival with one evening devoted to only Latin music,” said CBS Records president Bruce Lundvall. “But the Cubans wanted a total musical exchange, with the same number of Cuban artists as American.” CBS officials made three preliminary trips to determine—from both the Cultural Ministry and people “on the street”—who on their roster the Cubans would most like to see perform. “They wanted Weather Report and Billy Joel,” Lundvall said. “because they hear them on Miami radio. They didn’t want Santana. I have no idea why—it might be political, or they might have thought his act was a corruption of Cuban music.” Needless to say, the Cubans had the final say on which acts would perform.

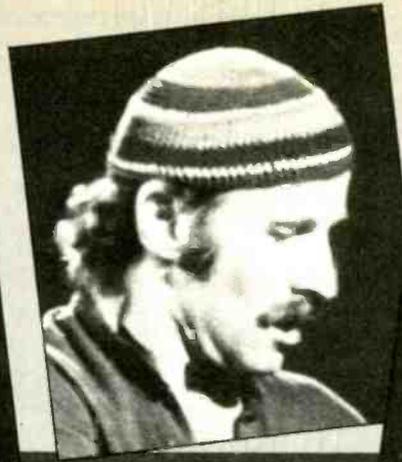
Oddly—and despite the audience’s ultimately lukewarm reception to them—the salsa-styled Fania All-Stars were approved. The Cubans specifically asked for Rita Coolidge and husband Kris Kristofferson, and other acts included Stan Getz and Willie Bobo, Dexter Gordon, Jimmy and Percy Heath, Hubert Laws, John McLaughlin, Cedar Walton, Woody Shaw, Bobby Hutcherson, Tony Williams, Arthur Blythe, Eric Gale, and Weather Report’s Joe Zawinul, Wayne Shorter, and Jaco Pastorius. From the Cuban camp came the Orquesta Aragon, formed thirty years ago and still going strong with its violin-flavored brand of cha-cha dance music; the Orquesta de San-

tiago, Cuba’s version of the Stan Kenton band; and, of course, Irakere, recently signed to CBS Records and currently on tour in the eastern U.S. with Stephen Stills. The only performances that seemed blatantly political were those of vocalists Sara Gonzalez and Pablo Milanes, whose revolutionary-theme folk tunes were backed by the group Manguare. The Cuban performers were paid by their government for rehearsals and performances. The Americans were not paid.

Enroute to Havana on the TWA charter jet, there was an air of excitement. “It’s an amazing opportunity to communicate personally with the Cuban people,” said California rocker Stills. He and the Fania All-Stars had written tunes specifically for the event, respectively titled *Cuba al Fin* and *Tres Lindas Cubana*. The plane was filled with journalists, musicians, and CBS personnel (thirty-five strong) whose mission was to keep tabs on all of us and ensure that the three-day junket came together without a hitch. Each act had its own label coordinator (all of whom wore special T-shirts) to shepherd the players from the hotel to the theater and back for afternoon soundchecks and evening performances. The Fania All-Stars had four watchdogs, Billy Joel and Weather Report three each; Kris, Rita, and Stills each had two. Preceding our arrival by several days were one planeload of CBS execs and two cargo jets carrying forty tons of sound equipment, instruments, lighting panels, platforms, and stage design elements. All two hundred of us stayed at the Marazul Hotel, and we were all given printed outlines with meal and bus-departure times. Nothing, but nothing, was left to chance.

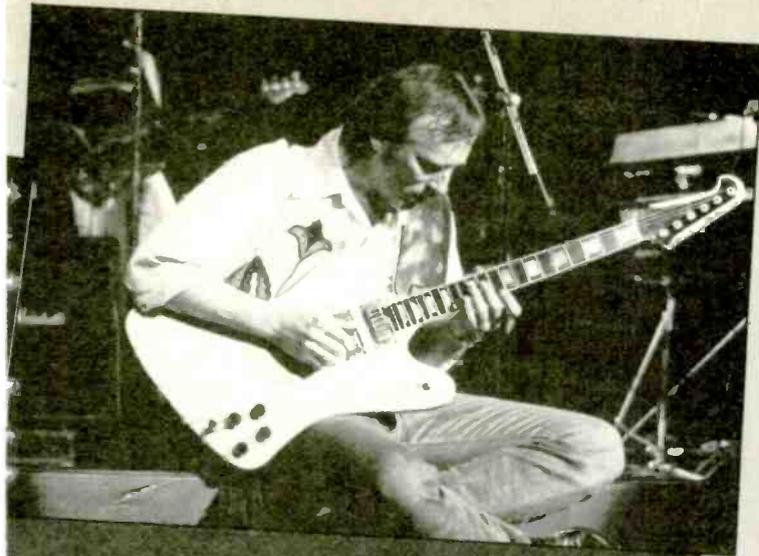
The first night of performances, there was a huge crowd of young people assembled in front of the five-thousand seat Karl Marx. “I am an American citizen,” one eager young man said as he strode along beside me. “here is my passport. Can you get me inside?” “No, I’m sorry, I really can’t,” I told him. “You need a ticket and I don’t have any.” They cost \$14, and the majority of the attendees were outstanding students, outstanding workers, or loyal Communists who had

*Eliot Tiegel is the managing editor of Billboard.*



Photos by Elliot Tiegel





Top row: Jaco Pastorius and John McLaughlin, Josef Zawinul, Rita Coolidge, Stephen Stills. Center: Irakere. Bottom row: Orquesta de Santiago de Cuba, Kris Kristofferson, Wayne Shorter.

won tickets for good behavior. There was even speculation that Premier Castro would show up for Irakere's performance. He ultimately did not, but the Cuban cultural minister, the head of the Communist party, and former president Osvaldo Dorticos Torrado did. Only the elite were granted entree to this event.

Yet initially Havana Jam was to be held in a 50,000-seat baseball stadium. "We were even close to a commitment for a network television special," said Lundvall, "with additional artists like Johnny Cash, Barry White, and Earth, Wind & Fire." So what happened? "This is the twentieth year of their revolution," he continued, "and the Cubans were concerned about an invasion of TV network people and others jamming their hotels and their ground transportation. So we redid the concept on a smaller scale."

Inside the theater Stills and Kristofferson introduced their songs in labored Spanish. When they mentioned Fidel or Che Guevara the audience came to its feet. Stills's program was extremely well executed, and his material had all the sweat, determination, and raw energy that is the hallmark of American rock & roll. Bonnie Bramlett sang backup in his band. Kristofferson's *Help Me Make It Through the Night*, *I Fought the Law*, and *Lovin' Her Was Easier* drew instant recognition from the young audience. Wife Rita's crystalline voice struck an even more responsive chord than her husband's laidback renderings.

Though Fania All-Stars leader Johnny Pacheco had no trouble with his introductions, reception was cool to his group. Special tune or no special tune, there was decided resistance to New York Puerto Ricans playing Latin music. When Billy Joel came onstage, however, the packed theater let out a yelp like you might hear in Boston or New York. His effusive stage act was certainly not what the Cuban government expected—the tunes they hear via radio stations ninety miles away sound far less bombastic and less angry than they did in his ravaging live performance. He hopped onto the piano, roared with disdain, and grimaced with true grit as he sang *Honesty*, *My Life*, *Big Shot*, *She's Always a Woman*, and *Just the Way You Are*. The crowd loved him.

All of the performances, with the exception of Joel's, were taped since CBS hopes to at least recoup its \$300,000 transport costs by releasing several live Havana Jam LPs. Joel's wife/manager said no to recording since they've already been burned once by pirates (the "Cold Spring Harbor" LP has been counterfeited) and they don't intend to let it happen again.

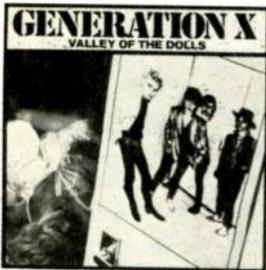
"Shocked" is the way Rita Coolidge described how she felt when the audience responded so warmly to her music. "Truly amazed" is the phrase Joel used. Havana Jam produced a mélange of moods and tempos, a brief linkup onstage of American and Latin roots—a pairing so natural that after a while there seemed nothing extraordinary about acts from such different worlds playing on the same bill. ●

# New Rock

BY TOBY GOLDSTEIN

**The Dickies: The Incredible Shrinking Dickies.** John Hewlett, producer. *A&M SP 4742, \$7.98.* Tape: CS 4742, 8T 4742, \$7.98.

From the West Coast comes this quintet of quasi-Ramones Concorde-decibel speedrockers. Although their raucous cover of Black Sabbath's *Paranoid* is effective, and the mutation of *Eve of Destruction* from a dirge into a punk theme humorous, the Dickies' original tunes lack distinction. Even with a total running time of only twenty-eight minutes, the album's unrelenting mindlessness gave me an Excedrin headache.



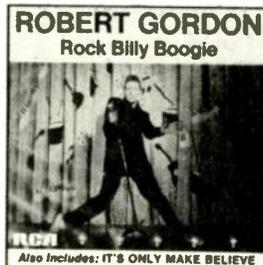
**Generation X: Valley of the Dolls.** Ian Hunter, producer. *Chrysalis CHR 1193, \$7.98.* Tape: CCH 1193, 8CH 1193, \$7.98.

Former Mott the Hoople spokesman Ian Hunter loves to make high drama out of good narrative themes, and as producer he interacts skillfully

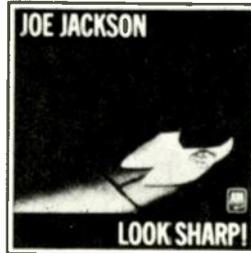
with Generation X's tales of life and love. While singer Billy Idol's talents are still more stylistic than substantive, the group's writing has moved away from their first album's hardcore drive to include a credible epic ballad in *The Prime of Kenny Silvers*.

**Robert Gordon: Rock Billy Boogie.** Richard Gottehrer, producer. *RCA AFL 1-3294, \$7.98.* Tape: AFK 1-3294, AFS 1-3294, \$7.98.

Singer Robert Gordon's sincere interpretations of his apparently limitless reserve of little-known '50s rock classics are here backed by authentic time-warp guitar work from Chris Spedding and Scotty Turner. Producer Richard Gottehrer has given "Rock Billy Boogie" an early rockabilly feel so flatly realistic that you'd swear it had been cut in a Memphis garage.



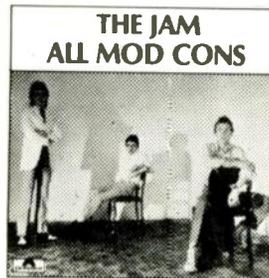
Also includes: IT'S ONLY MAKE BELIEVE



**Joe Jackson: Look Sharp!** David Kershenbaum, producer. *A&M SP 4743, \$7.98.* Tape: CS 4743, 8T 4743, \$7.98.

Joe Jackson is the latest graduate of England's "angry young man" school of biting, sarcastic rock. But his songs are so openly envious of happy endings, his piano solos so delicate

and emotive that he's also just a heartbeat away from being a romantic. The doo-wah-diddy-styled *Pretty Girls* and high-energy *Got the Time* predict a showman of astounding diversity.



**The Jam: All Mod Cons.** Vic Coppersmith-Heaven, producer. *Polydor PD 1-6188, \$7.98.* Tape: CT 1-6188, 8T 1-6188, \$7.98.

This young English power-chord trio follows the pattern of its first two albums in emulating the Who. It is now up to *Tommy*, which accounts for the

at first shocking appearance of acoustic guitars. Songwriter Paul Weller deals equal parts of inner-city alienation (*'A Bomb in Wardour Street*) and love pledges to the fatherland (*English Rose*). I suppose the progression was inevitable, but Rick Buckler's occasional bursts of drum static make me nostalgic for the no-time-wasted appeal of "In the City" and "The Modern World."

**Tin Huey: Contents Dislodged During Shipment.** Paul L. Wexler, producer. *Warner Bros. BSK 3297, \$7.98.* Tape: M5 3297, M8 3297, \$7.98.

They are from Akron, but they are not Devo. Tin Huey owe a lot more to the abrupt pacing of early Frank Zappa than to industrial posing. While several songs do deal with the degradation of assembly-line life (*Hump Day*), most are less descriptive than they are impressionistic (*Chinese Circus*.) Simple cleverness, such as the use of a slide guitar in a song called *Slide*, cannot hide the group's playing facility, and "Contents Dislodged" provides proof that jazz and the New Wave can coexist.

**Walter Steding: New.** Chris Stein, producer. *Red Star 3, \$7.98.*

Walter Steding is a popular figure in the hazy New York underground where rock & roll meets avant-garde electronics. Blondie guitarist Chris Stein uses violin and mini-synthesizer to frame his subject's dreamlike explorations in fairly accessible terms, and at times draws on help from Robert Fripp and Richard Lloyd. *Instrumental*, recalling ancient Irish folk music, is hauntingly lovely, and Steding's interpretation of the *Hound Dog* is uproarious.

**BEYOND THE FOREGROUND:  
A DIRECTORY OF  
SMALLER AUDIO COMPANIES**

(PART FIVE)

Close observers of the audio scene know that just beyond the foreground of mammoth mass-market multinationals and names that have been around so long as to be synonymous with quality audio lies a significant and promising multitude of companies that rarely receive the attention they merit: the smaller and specialized manufacturers (and importers) of audio equipment and accessories. Though they are often somewhat imprecisely referred to in the trade as the "esoteric" or "high-end" manufacturers, their products—and the potential purchasers of them—probably vary even more widely than those of the "majors." But such companies have a few things in common: limited production facilities and similarly limited or regional distribution, and budgets that seldom permit access through advertising to the broad national public reached by such journals as this one. With this in mind we extended a blanket invitation to these companies to tell their stories in their own words for readers of this special section. What follows is selected (and in some cases slightly adapted) from the responses. The first installment of this directory appeared in January 1979.

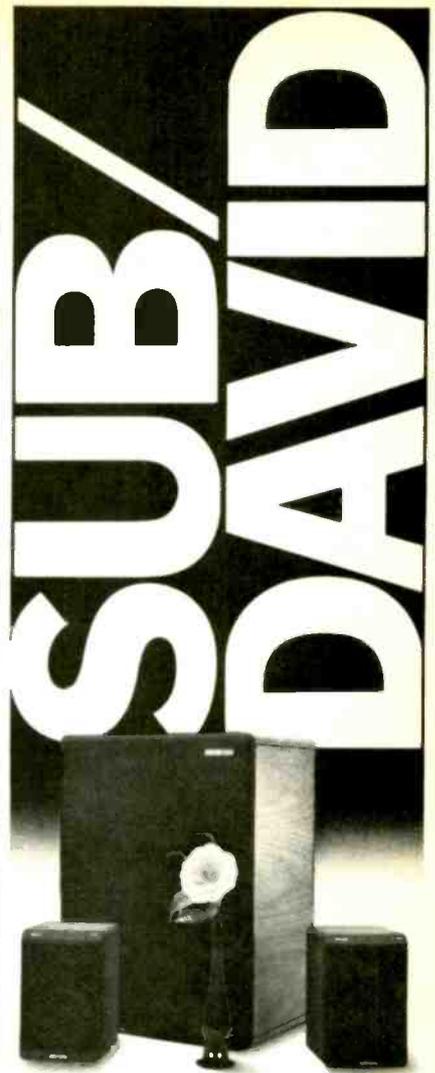
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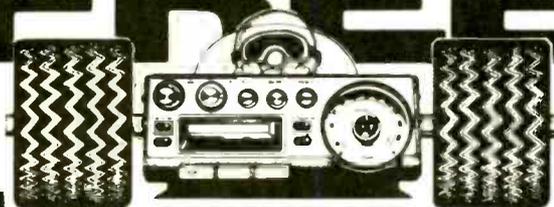
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CIRCLE 85 ON PAGE 89

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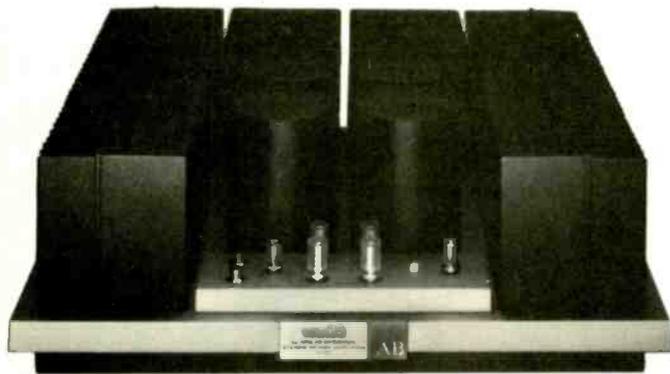
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## Supertramp: Easily Their Best Since "Crime"

by Sam Sutherland

**Supertramp: Breakfast in America.** Supertramp & Peter Henderson, producers. A&M SP 3708, \$7.98. Tape: ●● CS 3708, ●● 8T 3708, \$7.98.

Because their songs often run past the five-minute mark and draw from a fairly ecumenical range of pop sources, Supertramp is invariably typecast as a progressive rock outfit. Yet as each previous album has suggested, and "Breakfast in America" now confirms, this Anglo-American quintet really adheres to its own brand of conservatism: Each new record since 1974's "Crime of the Century" has followed that LP's stylistic blueprint, one that dictates not only the keyboard-based dynamics, but the alternately introspective and critical thematic perspective.

That constancy has also evinced a loyalty to the idealistic social and emotional values of the late '60s. Whereas "Crime" saw songwriters Rick Davies and Roger Hodgson skewering the hypocrisy of the British caste mentality, the new album takes the same tone in scanning American mores. In essence, the major change is one of locale, not sensibility, and, like their predecessors these songs sometimes tip precariously toward self-righteousness. But though that trait has occasionally flawed past albums, "Breakfast in America" generally succeeds in offsetting it with stunning musical and production effects. It's easily their best work since "Crime" and arguably their best ever.

Typifying Supertramp's strengths and weaknesses is *The Logical Song*, released as a single prior to the album. Paced by martial electric piano chords and punctuated with contrasting Latin percussion,

the song is intentionally garrulous, rhyming intellectual buzzwords in long verbal daisy chains that blur their meaning. The tension created by the verse's eccentric line lengths and instrumentation eases into a bridge that reveals the singer's underlying confusion: He is but a simple man unable to assume the correct air of hip detachment demanded by the verses.

Davies and Hodgson are celebrating a familiar theme, and, with the fatal sophistication of the era at hand, in doing so they leave themselves open to easy rebuke. The "sensitive" archetype at the heart of their songs is at odds with a mainstream culture that rewards sartorial elegance or sexual potency as much as integrity and perception. But that's precisely the point: Throughout "Breakfast in America" we're confronted with the conflict between a certain hedonistic nihilism and the authors' moral sense.

That applies even more directly to *Goodbye Stranger*, possibly the best song here, which recounts the easygoing credo of a modern age Lothario who prefers lust to the entanglement of romantic passion. The racing solo verses are cushioned by a languid falsetto backing chorus that suggests contemporary Lotus Eaters who've followed their own admonition to "feel no sorrow, feel no pain." Here, as elsewhere, the ensemble brightens its stately keyboard underpinning with jangling, Beated guitar figures—another Supertramp signature that points up their pop instincts, rather than their "progressive" aspirations.

Supertramp's seriousness and familiar instrumental signatures do approach a dangerous consistency that sometimes threatens to undercut their message.

More ironic is a possible consequence of their state-of-the-art production: As one of the most spacious, richly detailed rock recordings ever made, "Breakfast in America" can easily seduce the listener on the strength of sonics alone, offering the prospect that the band's apparent obsession with content might be overwhelmed by its dazzling surface. That won't stop any number of other producers from attempting the same finish, though, for the end result is truly impressive.

One minor gripe: Lyrically, Supertramp often attempts to inject some leavening humor into their material. Their concentration on linking punch lines to some higher theme tends to dampen their success. They're to be commended for their sense of purpose amid the increasingly commonplace and rather selfish concerns probed by too many chart-toppers these days. But a little fun honestly presented could go a long way, especially in light of the band's often portentous musical landscape.

**Average White Band: Feel No Fret.**

AWB & Gene Paul, producers. Atlantic SD 19207, \$7.98. Tape: ●● CS 19207, ●● TP 19207, \$7.98.

The Average White Band is one of those rare long-term groups whose personnel grew up together (in Glasgow) liking the same music. Just as the Rolling Stones chose to deliver their sermons based largely on the Chuck Berry liturgy, and just as the Band built its tiered castle of sound on bedrock New Orleans r&b, so has AWB continued to plow the fertile soil of early-to-mid-'70s funk and soul. And "Feel No Fret" definitely represents its harvest. The group has matured tremendously, operating more and more in a musical world of its own, blithely oblivious to au courant disco conventions (that, ironically, it helped to create in the early '70s). Furthermore, without Arif Mardin's firm hand at the production helm, AWB feels absolutely no compunction in coming up with an obvious blow-out single.

What we have here is a band determined to expand its own idiosyncratic use of texture, percussion, and lyricism in keeping with its traditional soul roots. The classic example is an Alan Gorrie and Hamish Stuart composition, *Stop the Rain*, a groove tune with a bass line that creeps along under chunky, wah-wah guitar ninth chords. This is, of course, James Brown country, circa 1973, but it is actually just the jumping-off point for a lush foray into delicately layered horns and group vocals. On *When Will You Be Mine*, quirkily meshed rhythm guitar parts constantly comment on the lyrical



**Supertramp: Helliwell, Benberg, Thomson, Hodgson, Davies**

action, so that as Gorrie and Stuart sing "I'm not sure I can take/Anymore of this waiting game," eighth-note guitar strums perfectly accentuate the frustration and tension in the lyric.

Drummer Steve Ferrone in particular has grown as a performer even since the last LP, "Warmer Communications." This is probably due in large part to his playing associations in New York with musicians like the Brecker Brothers. On *Atlantic Avenue*, a tribute to Rio de Janeiro, he pins the beat to the floor, even in the company of Airto Moreira and Brazilians Luis Carlos Dos Santos and Zeca da Cuica on various percussion.

The album features a reworking of the Bacharach/David classic, *Walk on By*, which, more than any other song here, showcases AWB's vocal development. As Hamish sings the lead in his lovely falsetto, the group establishes a bouncy melodic counterpoint that's quite affecting, even managing to give this old chestnut a distinctively fresh flavor.



**Average White Band**

"Feel No Fret" was recorded in Nassau, and even the most obvious hit-single choice, *Fire Burning*, has a completely good-time feeling to it (the song itself is somewhat reminiscent of LTD's *Back in Love Again*), lacking the hard-edged bite of AWB's earlier funk excursions cut in New York. No followups to *Le Freak* here. Rather, a full-blown sophistication and ripened sensibility within the r&b idiom that has a special satisfaction all its own. C.C.

**Rickie Lee Jones.** Lenny Waronker & Russ Titelman, producers. *Warner Bros.* BSK 3296, \$7.98. Tape: ● M5 3296, ● M8 3296, \$7.98.

This is one of this year's relatively few albums by an unknown artist that has gone on the radio immediately. Warner Bros. is promising a big push for Rickie Lee Jones, and the popular comparison to Laura Nyro (voice and melodies) and Tom Waits (subject matter and style) will no doubt continue since it's pretty accurate. Everybody's first album should be produced with as much attention to what the artist is saying, and I think it's just swell that someone finally took the walking bass and overall instrumental arrangement of Meri Wilson's *Telephone Man* and made a longer song (*Danny's All-Star Joint*) out of it. I recommend the album without reservation, and wonder what Jones is going to do the next time around. I.E.

**Jerry Lee Lewis.** Bones Howe, producer. *Elektra* 6E 184, \$7.98. Tape: ● TC 5 184, ● ET 8 184, \$7.98.

For a while there, it seemed as if Jerry Lee Lewis was never going to cut another decent album. His long years with Mercury and producer Jerry Kennedy,

one of the least distinguished craftsmen in Nashville, resulted in little more than a turgid flow of mostly indistinguishable country records, interrupted only in 1973 by two non-Kennedy albums, "The Session" and "Southern Roots."

The Killer's first album with Elektra is his finest offering since "Southern Roots," perhaps since "Live at the Star Club" (still, after all these years, unreleased in the States). His new producer, Bones Howe, is a man who knows how to make records—and who knows it is senseless to tamper with the natural ways of Jerry Lee.

Except for one straight-ahead country song, *I Wish I Was Eighteen Again*, "Jerry Lee Lewis" is a collection of hard, fast rock & roll. The material ranges from Jesse Stone's *Don't Let Go* to Chris Kenner's *I Like It Like That* to Lloyd Price's (*You've Got*) *Personality* to



**Rickie Lee Jones**

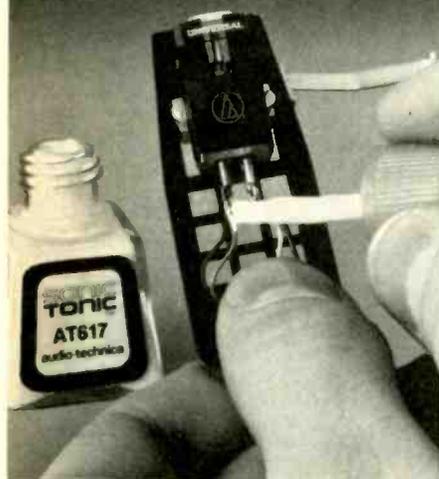
Charlie Rich's *Who Will the Next Fool Be*. One of the most startling performances is a new song, *Rockin' My Life Away* (written for Jerry Lee by Mack Vickery), which possesses the same anthemlike powers as *Whole Lotta Shakin' Goin' On*.

There are a dozen small surprises here: those inimitable Jerry Lee fillips that raise great rock to the level of mythology; drunken giggles, a conversation with his left hand ("Watch that, bass-hand, It's tough, Mean"), commands to his musicians, a rollecall of his various ex-wives (in *Everyday I Have to Cry*) and assorted growls and expletives. There is no longer any reason to make excuses for Jerry Lee's work. He's back, pure and simple, wilder and harder than ever—the world's only true forty-year-old rocker. N.T.

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CIRCLE 6 ON PAGE 89



Lewis—no more apologies

**Manhattans: Love Talk.** Bert DeCoteaux, Manhattans, Scorpicorn Music. & Jack Faith, producers. Columbia JC 35693, \$7.98. Tape:  JCT 35693,  JCA 35693, \$7.98.

What separates the corny from the classic is often a mile-wide hairbreadth. The Manhattans' new album kicks off with schmaltzy strings and a kind of de-e-e-p confiding "what-would-I-do-without-you" spoken rap that, in the hundreds of less capable hands out there, could sound like aural ipecac. Similarly, the quartet ballad that follows is light and slightly dry on the palate—quite the opposite of most like it. Just as the Manhattans keep *The Right Feeling at the Wrong Time* from cloying, so do they remind us with *Here Comes the Hurt Again* and all their other ballads that, despite all the dehydrated instant imitations (and despite one weak, unsavory track, *The Way We Were*), real soap can still be rich and creamy and comforting.

But their craft goes beyond balladry. The title track, a piece as light as the bubble in the album's cover art, amusingly bounces off affectionately recalled shoobie-oobies of r&b's callow innocence. Here again, what makes the piece a lead voice of aching brilliance, backup doowops of mellifluous tightness, and an ease that comes only from mastery.

There's a nostalgic edge to the Manhattans, but it's neither camp pseudo-nostalgia (like Manhattan Transfer's) nor carbon-copy escapism. They look back on Then from Now, and their richness stems from having one foot in each place—as in *New York City*, a deliciously bustling piece as light and lifting as spring on Park Avenue.

"Immaculate" isn't a word I like, because it suggests too much focus on sur-

face matters. But it suits both the Manhattans and their orchestral backings. Even the string section, the ruin of many an album, fits the mood and the music. Like the vocals, the orchestration is full of such little felicities as discreet r&b sax and the marvelous jazz violin obbligato tucked under the jaunty vocalizing on *New York City*. The only objective review of "Love Talk" is a rave. J.S.R.

**Michael Murphey: Peaks, Valleys, Honky-Tonks & Alleys.** John Boylan, producer. Epic JE 35742, \$7.98. Tape:  JET 35742  JEA 35742, \$7.98.

"Peaks, Valleys, Honky-Tonks & Alleys" was to have been a two-disc set: one disc studio-recorded, and one cut live at the Palomino Club in North Hollywood. But Murphey hasn't been doing too well, so the auditors condensed the project to one record with one side of each. The irony of it all is that this may well be his big breakthrough, and the original plan might have more than paid for itself.

The concert or honky-tonk segments give Murphey a chance to redo some material cut several years ago for A&M, where he made some noise with *Cosmic Cowboy/Cosmic Breakdown* and *Geronimo's Cadillac*. The studio sessions contain some new Murphey songs, as well as two venerable oldies—an attractive, slowed-down reading of Sam Cooke's *Chain Gang*, and *South Coast*, best-remembered from a 1959 Kingston Trio album.

The same band plays on both sides, giving a kind of continuity to the madness. It's a collection of session heavies who, for a change, really do kick out when playing for an audience. Distracting from what purports to be a sort of honest feeling is the fact that, according to Murphey, virtually all of the acoustic instruments were overdubbed later (to avoid sound leakage problems, he says) and that there are some players on the live side who weren't even present at the show.

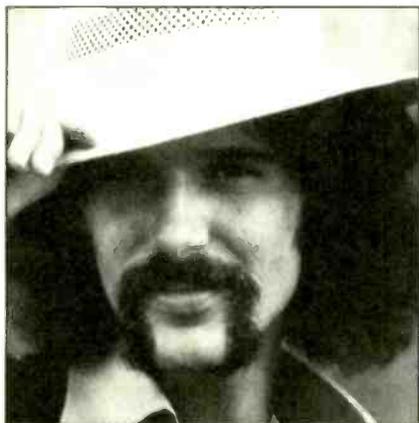
All of the fooling around by producer John Boylan (who also works with Boston) doesn't seem to have hurt much. The spirit of Murphey's rousing shows remains, the songs are among the best he's ever done (*Another Cheap Western/Western Movies* and the collaboration with Lost Gonzo Gary Nunn, *Years Behind Bars*, are worthy new ones), and there isn't a dour moment here. People who have enjoyed Murphey through his last several incarnations should enjoy "Peaks, Valleys, Honky-Tonks & Alleys" tremendously. More important, it should draw many converts into the fold. And now may we have Volume II? T.E.



**Gino Soccio: Outline.** Mix Machine, producer. Warner Bros. RFC 3309, \$7.98. Tape: ● M5 3309, ● M8 3309, \$7.98.

From "Outline," one senses that Gino Soccio defines successful disco music as that which illustrates—is almost filmic in its sensibility: Vocals are not so much sung as they are used to comment on or direct an ongoing action; the music talks to and rubs against the dancer. Soccio achieves this cinematic reality through the synthesizer's unlimited choice of sound strokes in conjunction with black music's percussive possibilities. The dancer does not see a band performing; he sees himself inside a staging in which he can only hear the music.

*Dancer* best illustrates this experience, and it is performed with the precision of ballet and structured with the suppleness of modern dance. A chorus of women's voices tells us what the dancer is thinking and doing, commenting as it would in a Greek tragedy. They encourage and instruct him—from first steps and hand-claps to free spirit, exhaustion, second wind, sexual arousal, and final collapse—while Soccio's synthesizer program illustrates the sound and feel of his body. The



Soccio—musical cinematography

rhythm section adds the sound of steps and of other dancers rushing by. The instruments fall down and then bob up again in the mix like bodies on the dance floor. The quality of the pressing is as sharp as Soccio's score: We can feel the point of dancers' heels on the floor and the inside of their bodies thumping and burning free.

Of the other sketches, *There's a Woman* and *The Visitors* lose immediacy because of their reliance on soft-rock and space-show themes. But *So Lonely* and *Dance to Dance* are as successful as *Dancer*. The first is a ballad without any changes and without a memory—a two-minute scene of the essentials of loneliness. *Dance to Dance* is a fond good-bye to the early years of disco, when the

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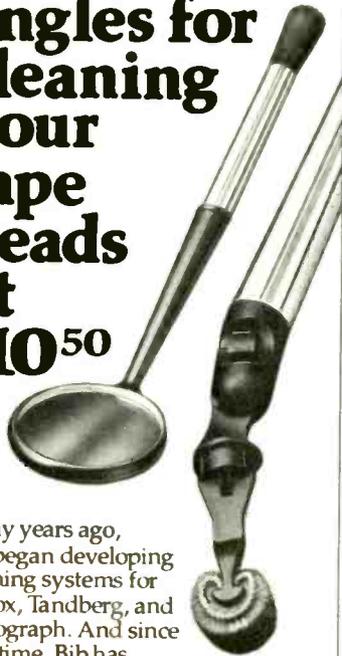
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Philadelphia beat was It and live show bands were fresh in everyone's minds. Here Soccio uses a kind of echo sculpturing to three-dimensionalize his flute, piano, and drum parts, while his chorus comments that the Life was and still is to go from dance to dance. M.F.

**Gary Stewart:** Gary Roy Dea, producer. RCA AHL 1-3288, \$7.98. Tape: ●● AHK 1-3288, ●● AHS 1-3288, \$7.98.

Perhaps someone is listening after all. For years I've been complaining about how Gary Stewart's records were being ruined by those coy and dreary background singers. Well, guess what? They're finally gone. The complementary voices on "Gary" are, with the exception of one cut (*I've Just Seen the Rock of Ages*), spare and as raunchy as Stewart's own. And hearing him sing straight solo on *Shady Streets*, *Everything a Good Little Girl Needs*, and the 1949 classic *Lost Highway*, is pure and very unaltdback pleasure.

While there is nothing here as strikingly tough lyrically as *She's Actin' Single (I'm Drinkin' Double)* or *Your Place or Mine*, Stewart has come up with some of the best songs to issue from Nashville's tired pen. *Mazelle*, a nasty rocker, and *Shady Streets*, a weeper, work well enough but would have been much better off without the harmonica clichés. *The Blues Don't Care Who's Got 'Em* is woozy and smiley, almost reminiscent of an Emmett Miller perform-

ance. *I've Just Seen the Rock of Ages* is sort of scary, the way all good sacred songs are. *The Same Man* is flush with strange little twists and permeated by a Proustian fear of infidelity.

By far the best cuts on "Gary" are *Lost Highway*, which was written by Leon Payne and first recorded by Hank Williams, and Stewart's own *Everything a Good Little Girl Needs*. Unharmful by sweetening, *Everything* carries that out-there edge of grinning evil, that existential swagger that Gary Stewart is all about. It seems like he has entered into a new day. He just might fulfill his promise and become the Jerry Lee Lewis of the post-Nashville era. N.T.

**The Tubes: Remote Control.** Todd Rundgren, producer. A&M SP 4751, \$7.98. Tape: ●● CS 4751, ●● 8T 4751, \$7.98.

The Tubes began their recording career as rock parodists and, in the process, created a frustrating stumbling block for themselves. Any parody must first comply with the rules of the form it seeks to ridicule, one requirement the multimedia octet has had few problems with. Yet the kind of kilowatt, heavy-metalized rock that has been their best prior work achieves its impact through immediacy. The Tubes undercut that impact with their own detachment from rock, despite an obvious love for its archetypes. Ever since their debut album, they've attempted to resolve that di-



*The Tubes: punk aggression, synthesizer rock, and unapologetic disco drive*



chotomy, but with only checkered success.

"Remote Control" is the resolution they've long sought. In producer Todd Rundgren, the band has found a complementary perspective, that of a fully credentialed rocker who also enjoys satirizing his craft. Rundgren himself has found a worthy subject for the more disciplined, astutely "commercial" side of his production style. And although only one song lists him as cowriter (*TV Is King*), there are recurrent echoes of his songwriting style in the melodic flow of the material and the soaring choral harmonies.

If Rundgren's presence accounts for the shape and punch of the material, the Tubes themselves must be credited with the album's key achievement: the development of a binding thematic concept that carries them beyond their earlier preoccupation with lampooning pop and rock styles. In a sense, they've reached into their own context to do so. Video pioneers in their stage shows (like Rundgren), they have built "Remote Control" around that unblinking eye and its devastating effect on culture, a theme wonderfully summarized in the album's front and back covers.

The titles tell all, ranging from *Turn Me On* to the innuendo-riddled, discofied crooning of *Prime Time*. The stylistic framework offers a canny balancing of punk aggression, sweeping synthesizer rock, and a pulsing rhythmic momentum that injects an unapologetic disco drive to several songs. As someone who still winces at the mere thought of such dance floor poets as Sister Sledge (who is surely destined for pop footnote greatness if only on the strength of the immortal rhyme, "Halston, Gucci/Fiorucci"), I have to admit that more records like this one could make me recant. S.S.

**Bob Welch: Three Hearts.** Carter, producer. *Capitol SD 11907, \$7.98. Tape: ●● 4XO 11907. ●● 8XO 11907, \$7.98.*

Bob Welch's second solo album leaves little doubt that he feels safer in the pleasant pop/rock style of last year's solo debut ("French Kiss") than in his more varied work five years ago with Fleetwood Mac. "Three Hearts" rocks a little harder than its now-platinum predecessor, but it still features the same lovey-dovey songwriting and discofied strings that made "French Kiss" so unvaried, so disappointing, and, in today's marketplace, so successful.

The core of the LP—*Precious Love* (the first single), *Here Comes the Night*, *China*, and the title track—are firmly in that m.o.r. pop/rock groove, with glistening strings driving home every musi-



Welch—ultimately disposable pop

cal point and five-second guitar breaks thrown in occasionally to remind listeners of Welch's standing as a rock guitarist. A greater use of keyboards and acoustic guitar enlivens some of the remaining cuts, especially *Devil Wind*, which rocks well and features some Stevie Nicks *Rhiannon*-ish moaning and singing in the background. A stark acoustic guitar also works well on *The Ghost of Flight 401*, a foray into the supernatural along the lines of Welch's earlier *Bermuda Triangle*.

Christine McVie and Mick Fleetwood also pop up on a few cuts, and the former's vocal performance appears to be the only justification for the inclusion of the Fleetwood's *Come Softly to Me*. On the other cover, the Beatles' *I Saw Her Standing There*, Welch's ploddingly slow beat robs the simple, fifteen-year-old song of its strongest asset—youthful enthusiasm. "Three Hearts" offers few surprises, except for Welch's continued de-emphasis of guitar. It's predictable, disposable pop music, late-'70s style. J.S.

**The Roches.** Robert Fripp, producer. *Warner Bros. BSK 3298, \$7.98. Tape: ●● M5 3298. ●● M8 3298, \$7.98.*

You can file the Maggie, Terre, and Suzzy (rhymes with fuzzy) Roche album right next to your Kate and Anna McGarrigle collection, and not just because a Roche and a McGarrigle have each enjoyed a romantic relationship with Loudon Wainwright III. This is women's music, enough so that it may alienate the kind of person who can't abide more than about thirty seconds of "girl talk." The singing is shrill, and for the most part the lyrics waver among



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coy, wistful, and precious. It's uncommercial in the sense of being under-produced—acoustic guitars, bass, brush drumming, and the three voices are the main ingredients. And the Roches themselves are unglamorous in that they are capable of looking like either distaff Dead End Kids or something out of *Children of the Damned*.

All of that notwithstanding, I—a red-blooded he-man type if ever there was one—love the album and expect to play it with some frequency (if not for my male friends). The sisters' singing is airy and refreshing; the lyrics explore regions left relatively unscathed by other writers. On "The Roches" there are neither straightforward love songs nor kvetchy sagas about the loneliness of Holiday Inn rooms and the rigors of the road. There is wit and anger, and both are frequently served up with a pixiness that many will find tremendously appealing. And while it may surprise many of his fans, the production of British progressive rocker Robert Fripp lets everything shine through quite splendidly.

This is Maggie and Terre's second album; Suzzy's first. All write, with Maggie scoring the most copyright points. You're not likely to have heard any of these songs, though Phoebe Snow has released her own version of one of the wistful ones, Maggie's *The Married Men*.

Apparently, the Roches perform some interesting outside selections in their live performances; they might consider including one or two of them on their next album. Either a Crystals' song or Handel's *Hallelujah Chorus* would sound pretty fine in three-part female harmony. In the meantime, if *An Unmarried Woman* was your kind of movie, "The Roches" may be your kind of album.

T.E.

## JAZZ

**Art Ensemble of Chicago: Nice Guys.**  
Manfred Eicher, producer. *ECM 1-1126*.  
\$7.98. *Tape: •• M5E 1-1126, •• M8E 1-1126*, \$7.98.

The Art Ensemble of Chicago—saxophonists Joseph Jarman and Roscoe Mitchell, trumpeter Lester Bowie, bassist Malachi Favors Maghostus, and percussionist Famoudou Don Moye—makes a major step toward reaching a larger audience in its new association with ECM. The group has been exploring pure music for nearly a decade (with the exception of Moye, who joined more recently), and it continues to do so in this provocative new recording.

The Ensemble's roots are deeply buried in the style of free improvisation first advanced by Ornette Coleman, Don Cherry, and others. But pieces like Moye's *Folkus* and Mitchell's *Cyp* owe as much to the pointillism of Webern and Schoenberg (and, perhaps, to Anthony Braxton's translations of those composers) as they do to jazz sources. The group can shift its gears just as easily into Ellingtonesque textures (Mitchell's *Nice Guys*) as it can into bouncing, joyous calypso rhythms (Bowie's *Ja*).

Bowie's trumpet ranges from rasping, abstract flatulence to a floating lyricism that suggests Miles Davis' middle period. Mitchell and Jarman are beautifully matched expressionists, their sounds—on an array of woodwind and percussion instruments—as connective and interchangeable as the wailing of Siamese twins.

Perhaps most important, the music has a sense of flow and pacing; it moves and breathes, it finds moments to pause and contemplate as well as moments to overwhelm and surprise. That's a lot to expect from any form of aesthetic expression—especially something that can be as flimsy as contemporary jazz. But the Art Ensemble delivers. D.H.

**Anthony Braxton.** Michael Cuscuna, producer. *Arista A 3L 8900, \$19.98 (three discs).*

This music has absolutely nothing whatsoever to do with pop, jazz, blues, rock, folk, or soul, neither as separate entities nor in combination. It *does* have something to do with exploring the outer limits of large ensemble performance—the same territory first opened up by Ives, Stockhausen, Austin, Xenakis, and others.

As with many other Braxton compositions, the title of this one is actually an abstract drawing that cannot be duplicated in text. For the sake of simplification, I suppose, Arista has chosen "Anthony Braxton" with the actual title serving as a decorative cover drawing.

The piece is a massive exploration of sonic textures that can be derived from four interreacting ensembles of forty musicians each. Braxton is concerned here with the spatial and directional qualities of sound, with the manner in which trajectories of sound, whipped from one performing group to another, can affect a listening environment. His original specifications for the work included, among other things, revolving chairs for both audience and musicians. The former were to be seated amid the four ensembles, the latter were presumably to have faced in various directions at various times, though they do not in

this rendering. The technical and economic problems of recording such an enterprise are obvious, and the spatial dimensions conceived by Braxton are only hinted at in a stereo recording. A limited budget has resulted in an ensemble (apparently made up of Oberlin College musicians) that plays notes instead of music. And the technical quality of the recording—so important in this kind of endeavor—ranges from adequate to lousy, with most of Braxton's complex textures buried in a sea of murky sound

reproduction.

What survives is an overly long (three discs worth) collection of slowly pulsing orchestral sound unenlivened by redeeming pulse or rewarding melody. The composer clearly is concerned with Larger Matters, and his most significant accomplishment is the massive contrasting of loud and soft, of tension and release, of long tones with short interjections. It's all done in the most basic textural fashion: a kind of avant-garde interpretation of baroque terrace dy-

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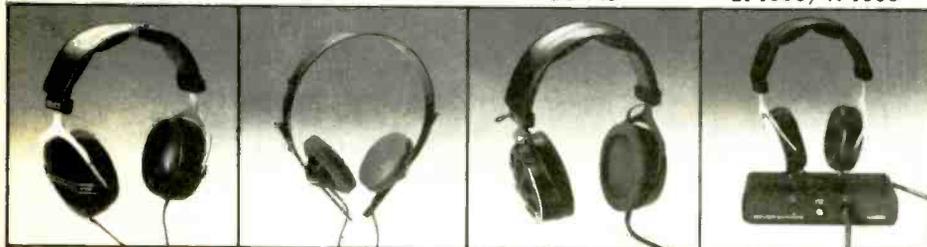
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namics.

Alas, it is, in the long run, a curious piece rather than a listenable one. Braxton—who loves to describe his procedures in the complex language of an engineer—could probably fascinate us far more by describing *how* he made the piece rather than by having it recorded for us. D.H.

**Dick Hyman Ensemble: Music of Jelly Roll Morton.** Brock Holmes & Bill Bennett, production coordinators. *Smithsonian P14710*, \$7.98 plus \$1.49 for postage and handling. (Available by mail only from Smithsonian Customer Service, P.O. Box 10230, Des Moines, Iowa 50336).

The best recordings of Jelly Roll Morton's music—like Duke Ellington's—are those performed by the composer himself, primarily in sessions with his Red Hot Peppers. Since a reasonable number are available on reissues, one may wonder about the value of contemporary recordings of his work. Bob Greene made a couple with the groups that performed Morton's music on tour earlier in the '70s, and Dick Hyman made some studio recordings of it five years ago.

Hyman's new disc, "Music of Jelly Roll Morton," was recorded in concert at the Smithsonian Institution in 1978. Audience response may have been the impetus for the project, but the polite applause that filters through the hall after the band has dazzlingly ripped through a fast piece tends to put a pall on the proceedings. Nevertheless, the group plays with the kind of fire that Jelly Roll managed to get from his groups.

That fire seems to get its spark from the fact that the musicians are playing "in the manner of" the original recordings, rather than copying them note for note. Hyman also has used different instrumentation on some of the pieces. *Wolverine Blues*, for example, was recorded by Morton with a trio—Hyman does it with a septet. So, in this sense, the repertory has been expanded.

Although the ensemble's work does not have the precision and force of Morton's groups, the soloists have found their grooves and successfully carry the styles over. Bob Wilber plays a mellow, low-register clarinet, Warren Vaché Jr. punches out the clipped trumpet phrases, and Jack Gale blows a rough-toned, growling trombone. Tommy Benford, who was the drummer on some of Morton's records, adds a note of authenticity, particularly in his cymbal flourishes. Hyman's pianistic versatility, which encompasses virtually anything from Bach to Bud Powell, can't quite

come to grips with Morton. His emphasis is lighter than the composer's, and he tends to be busy, on the move, and pushing forward while Morton was generally more relaxed and laidback. J.S.W.

**Abbey Lincoln: People in Me.** Toshinara Koinuma, producer. *Inner City IC 6040*, \$7.98.

It has been more than fifteen years since a new Abbey Lincoln disc has shown up in this country, and, though "People in

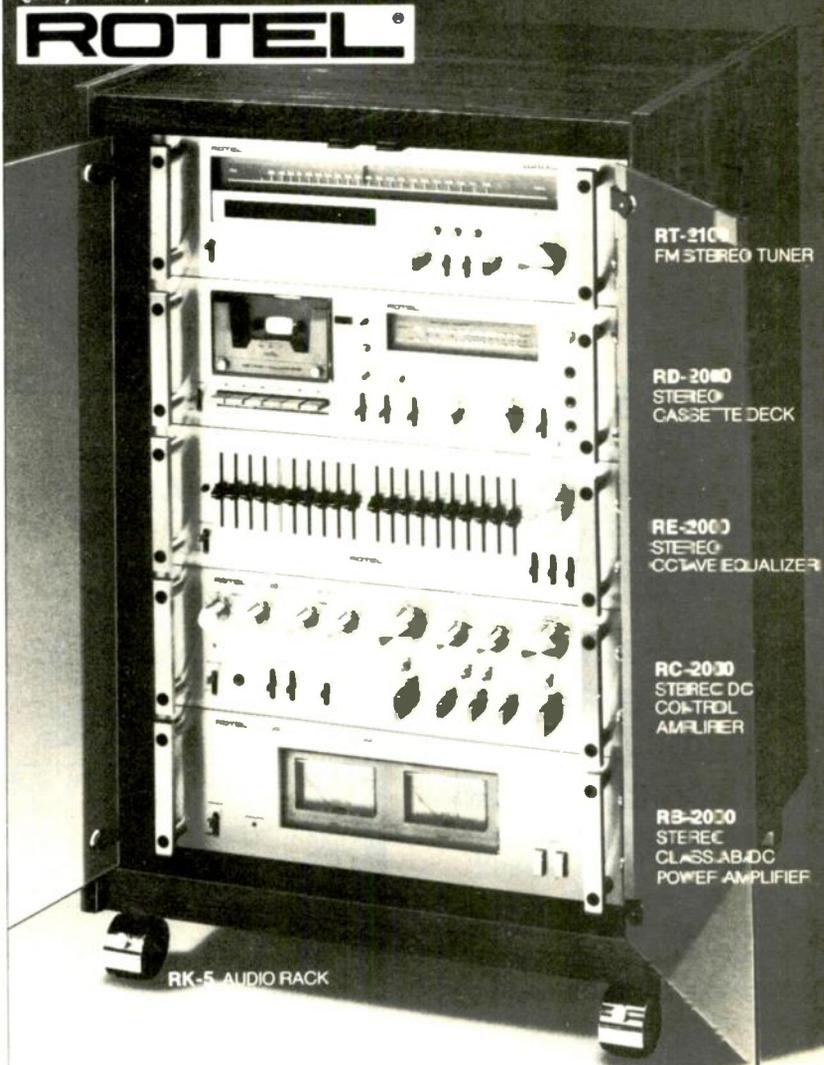
Me" was recorded in Japan in 1973, it is only now being released here. In the early '60s her work with Max Roach (to whom she was married at the time) showed her developing from a relatively bland pop singer into a forceful, dramatic performer. She has appeared occasionally in California clubs since then, but she has been primarily involved in acting in films and on television.

Lincoln wrote the lyrics for all eight songs here (including John Coltrane's *Africa*), and she shows an uncommon fa-

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Red Richards

dridge. And with Vic Dickenson he led a traditionalist group called the Saints and Sinners for several years.

Despite all this activity, Richards received surprisingly little attention. As this disc shows, he is a very attractive pianist. It might be that his lack of flamboyance simply resulted in his being taken for granted. Perhaps too, with his Harlem origins, he may have been thought of as simply a stride pianist. But he's a romantic who combines a light airy touch with a strong rhythmic accent.

"Soft Buns" includes several Fats Waller tunes (as well as the derivative *Walleresque* by Donald Heywood) and a Willie the Lion Smith number, but instead of going for the stride in those composers Richards chooses *Jitterbug Waltz* and *Echoes of Spring*. On *Satin Doll* he smooths out and aerates Ellington's emphasis and on *Ruby, My Dear* he transforms Monk's angularity to a melodic and accessible warmth. He shows his full colors as a melodist on his own compositions—*Sherrie*, a drifting, dreamy ballad, and *Soft Buns*, a rhythm tune built on a fascinating minor figure. He also sings in a husky, high, rhythmic murmur.

Richards works in an easygoing, low-keyed manner. But don't overlook him—under that reserve lies charm and amiability. J.S.W.

**Ira Sullivan: Peace.** Ed Michel, producer. *Galaxy GXY 5114*, \$7.98. *Tape: ●● 5 5114, ●● 8 5114*, \$7.98.

For three decades, Ira Sullivan has been one of the most progressive figures in jazz. He is a multi-instrumentalist who plays both brass and woodwinds, a combination that sets him apart from everyone in the field except Benny Carter. On "Peace" he plays trumpet, flugelhorn, flute, alto flute, and soprano and tenor

Continued on page 122

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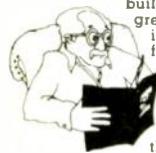
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saxophones. This is not mere showmanship: He is as strong on one horn as he is on another, and he is not particularly derivative on any of them.

Sullivan has always had a penchant for staying out of the limelight. Even in the '40s and '50s, when he lived and worked in Chicago and was easily accessible to recording companies and the media, he was virtually unknown beyond the city limits. And since the '60s he has been working in Miami and Fort Lauderdale, neither of which is a jazz center. Yet despite—or perhaps because



Ira Sullivan

of—his hermitlike musical life, he has grown steadily through the years. Certainly he has never been trapped in any passing fads (at least not after his initial devotion to Charlie Parker). His progress, as charted on his infrequent records, has been toward depth, range, assurance, and polish.

On "Peace" he is propelled by a strong rhythm section: John Heard on bass, Billy Higgins on drums, Joe Diorio on guitar, and the exceptionally imaginative Kenneth Nash on percussion. Sullivan and Diorio are constantly feeding each other, in the ensembles and in their solos, and Nash is virtually a third voice much of the time. On *I Get a Kick Out of You* Sullivan's tenor sax plays a sinuous game of tag with the guitar at a break-neck clip. By contrast, *Send in the Clowns* is given an absorbingly lovely, mood-filled treatment: His soprano and Diorio's guitar are set in a sylvan woodland by Nash's birdsongs. And *Vento Bravo* is an exciting sample of his flute's commanding drive. Between this mutual support and the multiplicity of Sullivan's instruments, the performances have the variety and color that would normally

come from a much larger performing group.

J.S.W.

**Mary Lou Williams: The Asch Recording, 1944-47.** Compiled and edited by Peter O'Brien S.J. *Folkways FA 2966* \$15.96 (two discs).

**The History of Jazz.** Compiled and edited by Peter F. O'Brien S.J. *Folkways FJ 2860*, \$7.98.

**My Mama Pinned a Rose on Me.** Mary Lou Williams & Peter F. O'Brien S.J., producers. *Pablo 2310819*, \$8.98.

First on one label and then another, Mary Lou Williams' work cannot be conveniently summarized in a series of "twofer" reissues. She was initially a sidewoman with Andy Kirk and an arranger for Benny Goodman, Duke Ellington, and Jimmy Lunceford. During those years, she made only a few discs as a soloist and, on the Varsity label, as part of a group called Six Men and a Girl.

It was not until she signed with Moe Asch in the mid-'40s that she began to put together a representative collection, recording earlier tunes like *Drag 'Em*, *Little Joe from Chicago*, *Froggy Bottom*, *Roll 'Em*, and *What's Your Story Morning Glory*. Asch also showcased the mainstream Mary Lou of that era, particularly in a trio with Bill Coleman on trumpet and Al Hall on bass, and the avant-garde Mary Lou with *Lonely Moments* and *Kool*. These performances are all in "The Asch Recordings, 1944-47," and the set goes a long way to explain why Williams has never—like most other musicians of her generation—seemed tied to any period, why she has always sounded immediate.

"The History of Jazz" is a deliberate attempt to trace the changes in the music Williams has known and played. A narration with illustrations, it is a little self-conscious in concept but consistently swinging in performance, from spirituals (*Anima Christi Suite*) to free jazz (*A Fungus Amungus*). "My Mama Pinned a Rose on Me" views her career from a slightly different angle. It focuses on the blues—its varieties, variations, and influences—with a repertoire that ranges from a tune she learned as a child (the title cut) to a pair of recent pieces by Butch Williams (her bassist) and herself. The well of inspiration that the blues can be has never been more vividly illustrated than in the cornucopia of colors, tempos, and melodies that she packs into these sixteen selections. On "Mama Pinned" she has put together a display of her performing and composing prowess much like she inadvertently did on her Asch recordings more than thirty years ago.

J.S.W.

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