

FIRST TESTS:  
METAL-PARTICLE TAPE!

SEPTEMBER 1978 • \$1.25

# Stereo Review

**New Audio Products at CES-78: Annual Preview for Buyers**

**The N.Y. Philharmonic's ZUBIN MEHTA • The New South's CRYSTAL GAYLE**

EQUIPMENT TEST REPORTS: Accuphase C-220 Stereo Disc Equalizer • Advent/1 Speaker System  
Aiwa AD-6800 Stereo Cassette Deck • Luxman R-1120 AM/FM Stereo Receiver

**THE ANTENNA: BEST MEDICINE FOR YOUR AILING TUNER?**



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# LAST YEAR'S REVIEWS PRESENTED US WITH A TOUGH ACT TO FOLLOW.

**"IT CANNOT BE FAULTED."**

SA9500 — *Stereo Review*

**"AS NEAR TO PERFECT  
AS WE'VE ENCOUNTERED."**

TX9500 — *Popular Electronics*

**"CERTAINLY ONE OF THE BEST...  
AT ANY PRICE."**

TX9500 — *Modern Hi Fi*



# PIONEER PRESENTS ACT II.

## WE STARTED WITH THE BEST AND MADE THEM BETTER.

Last year, the experts paid Pioneer's Integrated amps and tuners some of the highest compliments ever.

The challenge was obvious: to build even better amps and tuners. Amps and tuners that would not only surpass anything we'd ever built before, but anything anyone ever built before.

Here's how we did it.

### THE NEW PIONEER TX9500II TUNER. EVEN CLOSER TO PERFECT.

When Popular Electronics said our TX9500 tuner was as "near to perfect" as they'd encountered, they obviously hadn't encountered our TX9500II. It features technology so advanced, some of it wasn't even perfected until this year.

Our front end, for example, features three newly developed MOS FETs that work with our 5-gang variable capacitor to give the TX9500II an incredible FM sensitivity of 8.8dBf. In mono. In English, this means you can pull in beautiful FM reception no matter how far you live from the transmitter.

Where most tuners give you one bandwidth for all FM stations, the TX9500II gives you two. A wide band with a surface acoustic wave filter to take advantage of strong stations, and a narrow band

with five ceramic filters to remove all the interference and noise from weaker ones. (Distortion measured in stereo at one kilohertz is an incredibly low 0.07% in the wide band; and 0.25% in the narrow band. Both well below the threshold of human hearing.)

Where conventional multiplex circuits cut out some of the frequencies that add depth and presence to music, the multiplex circuit in the TX9500II doesn't. It features an exclusive integrated circuit that's far more accurate than anything else around. Plus a multipath switch that lets you align your antenna perfectly without an oscilloscope.

And where you simply have to guess about the proper recording levels off most tuners, the TX9500II provides you with a tone generator that lets you preset the recording levels on your tape deck before the broadcast starts.

So your tapes can sound just as clear and beautiful as your tuner.

### THE NEW SA9500II AMPLIFIER. HOW TO GET THE MOST OUT OF THE BEST.

After building one of the world's best tuners, we had no choice but to create an amplifier that could match it.

The result is the new SA9500II. An 80\* watt integrated amp that was designed

to let you get everything out of your tuner. Perfectly.

Our output stage, for example, features a new parallel push-pull circuit that reduces total harmonic distortion to less than 0.1%. Again, well below anything you can possibly hear.

To all but eliminate cross-talk, the SA9500II comes with a separate power transformer for each channel, instead of the usual single transformer for both.

And where some amps give you two, or three tone controls, the SA9500II gives you four. Two for regular treble and bass, and two for extended treble and bass. They're calibrated in 2 decibel click stops, which means you have a virtually endless variety of ways to get the most out of your music.

But that's only the beginning. To get the most out of your cartridge, the 9500II has a switch that lets you "tune" the amplifier to the cartridge manufacturer's optimum capacitance. And to get the most out of your records, our three-stage phono equalizer features an incredibly high phono overload level of 300 millivolts. With no more than 0.2 dB variation from the RIAA curve. So even the most complicated passage on one of today's highly engineered records will sound exactly the way it was recorded in the studio.

Obviously, both the SA9500II and the TX9500II are very sophisticated pieces of equipment. But all of the engineering skill that went into making them has also gone into every other tuner and amplifier in our new series II. No matter what the price, no matter what the specifications.

And that's something you don't have to be an expert to appreciate.

	SA9500II TX9500II	SA8500II TX8500II	SA7500II	SA6500II TX6500II	SA5500II TX5500II
POWER MIN. RMS 20 TO 20,000 HZ	80	60	45	30	15
TOTAL HARMONIC DISTORTION	0.1%	0.1%	0.1%	0.1%	0.5%
PHONO OVERLOAD LEVEL	300mV	250mV	200mV	200mV	130mV
INPUT: PHONO/AUX/ TAPE	2/1/2	2/1/2	1/1/2	1/1/2	1/1/1
SIGNAL TO NOISE RATIO	95dB	95dB	95dB	93dB	87dB
FM SENSITIVITY (HF 58)	1.5uV*	1.8uV	not applicable	1.9uV	1.9uV
SELECTIVITY	(wide) 35dB (narrow) 85dB	(wide) 35dB (narrow) 80dB	not applicable	60dB	60dB
CAPTURE RATIO	(wide) 0.8dB (narrow) 2.0dB	(wide) 0.8dB (narrow) 2.0dB	not applicable	1.0dB	1.0dB

U.S. Pioneer Electronics Corp., 85 Oxford Drive, Moonachie, New Jersey 07074.

\*Minimum RMS continuous power output at 8 ohms, from 20 to 20,000Hz, with no more than 0.1% total harmonic distortion.



TX8500II  
SA8500II

TX9500II  
SA9500II

TX6500II  
SA7500II

## THE NEW PIONEER TYPE II AMPS AND TUNERS.

High Fidelity Components  
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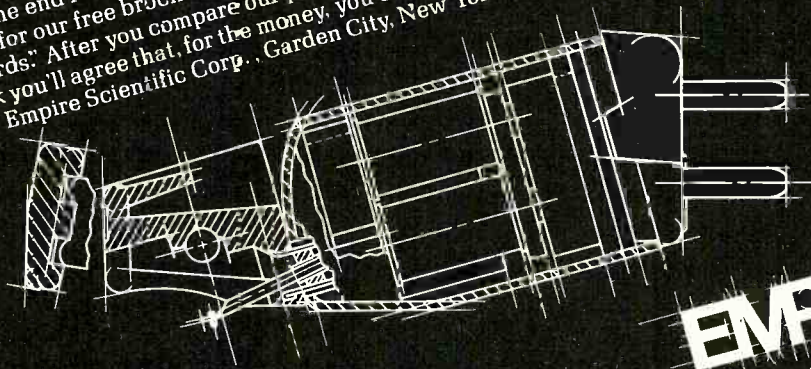


# Empire's Blueprint for Better Listening

No matter what system you own, a new Empire phono cartridge is certain to improve its performance. The advantages of Empire are threefold. One, your records will last longer. Unlike other magnetic cartridges, Empire's moving iron design allows our diamond stylus to float free of its magnets and coils. This imposes much less weight on the record surface and insures longer record life.

Two, you get better separation. The small, hollow iron armature we use allows for a tighter fit in its positioning among the poles. So, even the most minute movement is accurately reproduced to give you the space and depth of the original recording.

Three, Empire uses 4 poles, 4 coils, and 3 magnets (more than any other cartridge) for better balance and hum rejection. The end result is great listening. Audition one for yourself or write for our free brochure, "How To Get The Most Out Of Your Records." After you compare our performance specifications we think you'll agree that, for the money, you can't do better than Empire. Empire Scientific Corp., Garden City, New York 11530



**EMPIRE**  
Already your system sounds better.

MODEL	4000 D/III	4000 D/I	2000Z	2000Z	2000 E/III	2000 E/II	2000 E/I	2000 E	2000
FRQUENCY RESPONSE	10Hz-50kHz ±3dB	15Hz-45kHz ±3dB	20Hz-20kHz ±2dB	20Hz-20kHz ±1½dB	20Hz-20kHz ±2dB	20Hz-20kHz ±2dB	20Hz-20kHz ±3dB	20Hz-20kHz ±3dB	20Hz-20kHz ±3dB
TRACKING FORCE RANGE	¾-1¼ gm	1-1¼ gm	¾-1¼ gm	¾-1¼ gm	¾-1¼ gm	¾-1¼ gm	1-2 gm	1¼-2¼ gm	1½-3 gm
SEPARATION	28 dB 15Hz to 1kHz 23 dB 1kHz to 20kHz 15 dB 20kHz to 50kHz	24 dB 20 dB 15 dB	20 dB 30 dB 25 dB	18 dB 27 dB 22 dB	20 dB 28 dB 20 dB	20 dB 25 dB 18 dB	18 dB 23 dB 15 dB	18 dB 23 dB 15 dB	16 dB 21 dB 13 dB
THD DISTORTION @ 3.54 cm/sec	2% 2kHz-20kHz	2% 2kHz-20kHz	0.8% 2kHz-20kHz	0.8% 2kHz-20kHz	1% 2kHz-20kHz	1.5% 2kHz-20kHz	2% 2kHz-20kHz	2% 2kHz-20kHz	2% 2kHz-20kHz
STYLUS	2 mil bi-radial	2 mil bi-radial	2 x 7 mil elliptical	2 x 7 mil elliptical	2 x 7 mil elliptical	2 x 7 mil elliptical	2 x 7 mil elliptical	3 x 7 mil elliptical	7 mil spherical
EFFECTIVE TIP MASS	4 milligram	4 milligram	2 milligram	2 milligram	6 milligram	6 milligram	6 milligram	9 milligram	1 milligram
COMPLIANCE	30x10 <sup>-6</sup> cm/dyne	30x10 <sup>-6</sup> cm/dyne	30x10 <sup>-6</sup> cm/dyne	30x10 <sup>-6</sup> cm/dyne	20x10 <sup>-6</sup> cm/dyne	18x10 <sup>-6</sup> cm/dyne	17x10 <sup>-6</sup> cm/dyne	16x10 <sup>-6</sup> cm/dyne	14x10 <sup>-6</sup> cm/dyne
TRACKING ABILITY	32 cm/sec @ 1kHz @ 1 gm	30 cm/sec @ 1kHz @ 1½ gm	38 cm/sec @ 1kHz @ 9 gm	38 cm/sec @ 1kHz @ 1 gm	32 cm/sec @ 1kHz @ 1 gm	28 cm/sec @ 1kHz @ 1½ gm	28 cm/sec @ 1kHz @ 1½ gm	28 cm/sec @ 1kHz @ 1¼ gm	32 cm/sec @ 1kHz @ 2 gm
CHANNEL BALANCE	within 1 dB @ 1kHz	within 1½ dB @ 1kHz	within ¾ dB @ 1kHz	within 1 dB @ 1kHz	within 1 dB @ 1kHz	within 1½ dB @ 1kHz	within 1½ dB @ 1kHz	within 1½ dB @ 1kHz	within 1½ dB @ 1kHz
INPUT LOAD	100k Ohms/ channel	100k Ohms/ channel	47k Ohms/ channel	47k Ohms/ channel	47k Ohms/ channel	47k Ohms/ channel	47k Ohms/ channel	47k Ohms/ channel	47k Ohms/ channel
TOTAL CAPACITANCE	under 100 pF/channel	under 100 pF/channel	300 pF/channel	300 pF/channel	400-500 pF/channel	400-500 pF/channel	400-500 pF/channel	400-500 pF/channel	400-500 pF/channel
OUTPUT @ 3.54 cm/sec	3 mV/channel	3 mV/channel	3 mV/channel	3 mV/channel	4.5 mV/channel	4.5 mV/channel	4.5 mV/channel	4.5 mV/channel	7 mV/channel

FORMERLY HI FI/STEREO REVIEW

# Stereo Review®

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COVER: A front-panel oscilloscope (such as on the Sequerra Model 1 tuner) and an antenna rotator (Cornell-Dubilier's BT-1 control box shown) are great helps in orienting your antenna for best signal reception. Design by Borys Patchowsky; photo by Bruce Pendleton.

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## Record Ecology in DiscKit Form —you'll save more than money

DiscKit is a milled walnut tray and dust cover that saves you 15% with the Discwasher products in the kit. (\$46 versus \$54 separately)

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

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

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

Record Ecology from Discwasher—a substantial bargain.

(Walnut tray and dust cover are available separately as

the Discorganizer, \$12.50.)

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





# Stereo Review

# BULLETIN

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• **FOUR-CHANNEL FM BROADCASTS:** An analysis of the responses to the FCC's inquiry on FM quadrasonic broadcasting has been completed, and it reveals that both FM broadcasters and the public endorse standardization of quadrasonic broadcasting and favor CBS's SQ matrix system over all others, including discrete. The responses, which were analyzed by CBS Technology Center, included 374 from broadcasters and 2,195 from listeners. Of those responding, 96.8 per cent favored FCC adoption of standards for the transmission of FM quadrasonic broadcasts. Three out of five of those who indicated a preference for a particular system chose SQ. According to CBS, more than 1,000 SQ classical, pop, and rock records have been issued by major labels; some 500 FM stations already have SQ record libraries; and any FM station could broadcast quadrasonically at once simply by playing an SQ disc on the station turntable.

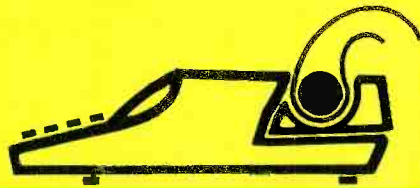
• **THE BEE GEES,** whose Saturday Night Fever album on RSO is still high on the charts, have donated one of their latest compositions to UNICEF. So that all the income from this music will benefit the United Nations Children's Fund, the composition will be administered free by Chappell Music Co. The Bee Gees, originally from Manchester, England, moved to Florida in 1977, and they record at Criteria Studios in Miami. For drawing attention to the technical facilities and musical talent available in the state, they were awarded honorary Florida citizenship this year. Criteria Studios, which boasts of recording 76 gold and platinum albums and singles, has just established its own label, Good Sounds Records.

• **YAMAHA'S NS-1000 MONITOR SPEAKER** has been adopted by two Scandinavian broadcasting systems. Last year Radio Sweden ordered one thousand (!) of the speakers for their network studios, and this year the state-run Finnish Broadcasting Company endorsed the same model by ordering two hundred of them.

• **LEONARD BERNSTEIN'S SIXTIETH BIRTHDAY** (August 25) has brought him many honors. They include a birthday celebration by the National Symphony Orchestra conducted by Mstislav Rostropovich at Wolf Trap (telecast live on PBS) and a biography and catalog of his works published by Boosey and Hawkes. May was "Bernstein Month" for Columbia Masterworks, which issued seven new recordings he conducted. CBS also sent a special recording of Bernstein's voice and music to radio stations around the country to be played on his birthday. Deutsche Grammophon is honoring Bernstein as both conductor and composer, issuing a special, boxed three-record set of new performances of his symphonies played by the Israel Philharmonic (2709 077). The discs will also be available separately.

• **FIFTY MILLION MIKES:** Matsushita Communications recently manufactured their fifty-millionth electret condenser microphone at the end of their eighth year of production. Despite their high sensitivity, microphones of this type are resistant to vibration noise, which makes it possible to build them into tape recorders, intercoms, hearing aids, and portable TV cameras. In other words, one of those fifty million may very well be yours.

• **JAZZ PIANIST KEITH JARRETT'S** next release on ECM will be a ten-disc set--that's right, ten discs--recorded during his recent series of concerts in Japan. The album is scheduled for release on October 1. ECM records are now distributed by Warner Brothers.



## Stereo Review

# BULLETIN

● THE METROPOLITAN OPERA will telecast four productions this season on the Public Broadcasting Service. Funding has been provided by Texaco, which has sponsored the Met's Saturday radio broadcasts for 38 consecutive years. The series begins on September 25 with Verdi's Otello with Renata Scotto, Jon Vickers, and Cornell MacNeil. On November 21, Smetana's The Bartered Bride will be sung in English by Teresa Stratas, Nicolai Gedda, Jon Vickers, and Martti Talvela. Puccini's Tosca follows on December 19 with Shirley Verrett, Luciano Pavarotti, and Cornell MacNeil. Verdi's Luisa Miller will be telecast in January (date to be announced) with Renata Scotto, Placido Domingo, and Sherrill Milnes. The Met's music director, James Levine, will conduct all but Tosca, which will be conducted by James Conlon. According to Texaco, stereo simulcasts will be arranged in the largest listening areas. Video tape hobbyists to the alert!

● THE 1978 AUDIO EXCELLENCE RECORD AWARDS, based on the votes of a nation-wide panel of audio critics, have been announced by Audio-Technica, organizer of the awards program. Instructed to choose the best-sounding disc records released during the past year, the critics selected an imported set of the six Tchaikovsky symphonies plus the Manfred overture (London Philharmonic, Mstislav Rostropovich conducting; EMI SLS 5099) for first place in the classical division, and Steely Dan's "Aja" (ABC AA 1006) for top honors in the rock division.

● BRUCE SPRINGSTEEN has been keeping his E Street Band on their collective toes of late. Apparently bored with his standard set as he has been performing it for the last two months of his national tour, he took to the stage in California recently and, without warning his co-workers, substituted Them's venerable 1965 hit Gloria for his own Badlands, the usual opener. At a later show, the Boss pulled a similar switch with a vintage Buddy Holly tune, and then startled the audience with his first-ever public rendition of Because the Night, the Top Ten smash he "gave away" to fellow Jerseyite Patti Smith.

● YOUR HOME MOVIES AND SLIDES can now be transferred to videotape cassettes. The nation-wide Fotomat chain will transfer 8-mm or Super 8-mm (sound or silent) film and 35-mm or 126-mm color slides to either half-inch Beta or VHS-format videotape. The cost of transferring a 400-foot roll of Super 8-mm movie film is \$8.75 plus the cost of a one-hour cassette (\$14.95). Slides are transferred with a cross-fade technique which makes one slide fade softly as the next one appears. Besides giving you the pleasure of seeing your own photography on your TV set, the system eliminates the inconvenience of setting up projection equipment and screen. A pamphlet, All About Transferring Your Film and Slides to Videotape Cassette, is available free at Fotomat's 3,400 stores.

● ROSALYN TURECK, pianist and harpsichordist, has completed her first recording for Columbia Masterworks, a two-record set that includes Bach's "Goldberg" Variations played on the harpsichord. Having previously recorded the work on piano, Miss Tureck is the first musician to record it on both instruments. The Columbia album is scheduled for late fall release.

● THE NEW YORK HI-FI/STEREO MUSIC SHOW will be held at the Statler Hilton Hotel October 5-8. Sixty major manufacturers of audio equipment will exhibit their products. October 5 is dealer day, and the show is open to the public thereafter. Admission \$3.



# FISHER INTRODUCES THE RECEIVERS THAT LISTEN TO YOU.

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

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

The RS2010, below, has great performance specs like superb 1.7  $\mu$ V (9.8 dBf) FM sensitivity, and plenty of power (100 watts min. RMS per channel, into 8 ohms, 20-20,000 Hz, with no more than 0.09% total harmonic distortion). Other models are available from 45 to 150 watts per channel.

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

Available at selected audio dealers or the audio department of your favorite department store. For the name of your nearest dealer, call toll-free in the continental U.S.: 1-800-528-6050, ext. 871 (in Arizona, 1-955-9710, ext. 871). For a copy of the new Fisher guide to high fidelity, send your name and address and \$2 to: Fisher Corporation, 21314 Lassen St., Chatsworth, CA 91311.

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RS2010



# Editorially Speaking

By William Anderson



## THE FUTURE: IS IT HERE?

ANY Sunday newspaper worth a brag these days has to have a little something included with it called the Magazine Section, a chaste cloister for the political, psychosocial, and philosophical think pieces that advance its claim to "intellectual" standing and therefore won't fit in particularly well anywhere else in its pages. Before the days when professional punditry became a recognized journalistic specialty, these sections were called Sunday Supplements and were filled with much more interesting stuff—tales of various Bluebeards and ax murderesses, the Curse of the Pyramids (or the Incas, or whatever), and the crystal-balling of the Futurists (the visionary rather than the painting kind). It must have been one of these latter augurs who composed the All-Time-Great Sunday-supplement headline "The Future: Is It Here?"

If someone were to ask me that provocative question right now, I would have to answer

"Just about"—as far as the home-entertainment future goes, at least. I am speaking, of course, of the (truly!) imminent arrival in our TV-viewing rooms of the Amazing Video Disc discussed here in July. Since that writing I have been privileged to see demonstrations of RCA's Selectavision video disc. Matsushita showed its system to attendees at the Chicago Consumer Electronics Show, and MCA/Philips may be readying an announcement about its candidate for a scheduled press conference in New York this month. Roughly, the story is this: all the units work, and work well; target retail prices are under \$500 (RCA says \$400); they are designed so that the video will play (in color!) through your TV set, the audio either through the TV (wretched mono) or the hi-fi (stereo as good as your components can deliver); they are incompatible (sort of—Matsushita's machine is said to be able to play RCA discs, and RCA's

machine could play Matsushita discs if they were pressed on RCA's conductive plastic; the MCA/Philips unit can play none but its own recordings); and they are all, technologically speaking, market-ready.

What, then, is the holdup? Software. Whatever else happens (there may be other contenders besides these three), the game will very likely be decided on the basis of who is first able to offer the biggest, best audio/video catalog. There is a pile of old material around—TV tapes and Hollywood movies, mostly—but it won't come cheap to the company that doesn't already own it. Surprisingly, though the machines themselves have been in development for five years and more, little original recording for the medium has been done, probably because it turns out to be expensive too (filming has just now begun in London on Menotti's *Amahl and the Night Visitors*, scheduled for TV broadcast here at Christmas, and the price of video-recording rights is bound to be high for the U.S.'s most-performed opera).

What really makes the manufacturers hesitate, however, is the fact that nobody has any idea just what the public will buy in this format, and a row of bad programming guesses at this point could knock a careless team right out of the game. But it strikes me that it should be possible to test the waters and get a preliminary reading by marketing this new format principally as an audio concept at first, letting the video part expand as it will. The recording technique used in these machines is PCM (pulse-code modulation) rather than the about-to-be-old-fashioned analog system of LP records, and it is easily capable of furnishing dynamic and frequency ranges, signal-to-noise ratios, and stereo separation that most current reproduction chains would be hard put to live up to. Better still, it is the final, conclusive answer to the pesky problems of record warps, scratches, snaps, crackles, and pops, all of which are spoken in the analog language PCM is all but deaf to. Let's hear it for the A/V disc!

## Stereo Review

### PUBLISHER

EDGAR W. HOPPER

### EDITOR

WILLIAM ANDERSON

### MANAGING EDITOR

WILLIAM LIVINGSTONE

### EDITORIAL COORDINATOR

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Editorial and Executive Offices  
Ziff-Davis Publishing Company  
One Park Avenue, New York, New York 10016  
212 725-3500

Advertising Manager: Richard J. Halpern  
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Midwestern Office: The Pattis Group  
4761 West Touhy Ave., Lincolnwood, Illinois 60646  
312 679-1100  
Arnold S. Hoffman

Western Office  
9025 Wilshire Boulevard  
Beverly Hills, California 90211  
213 273-8050; 272-1161  
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Telephone: 407-1930/6821, 582-2851

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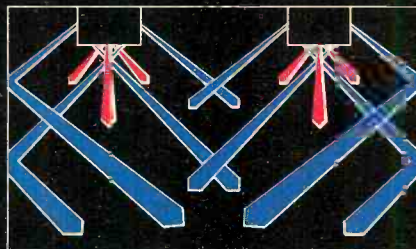
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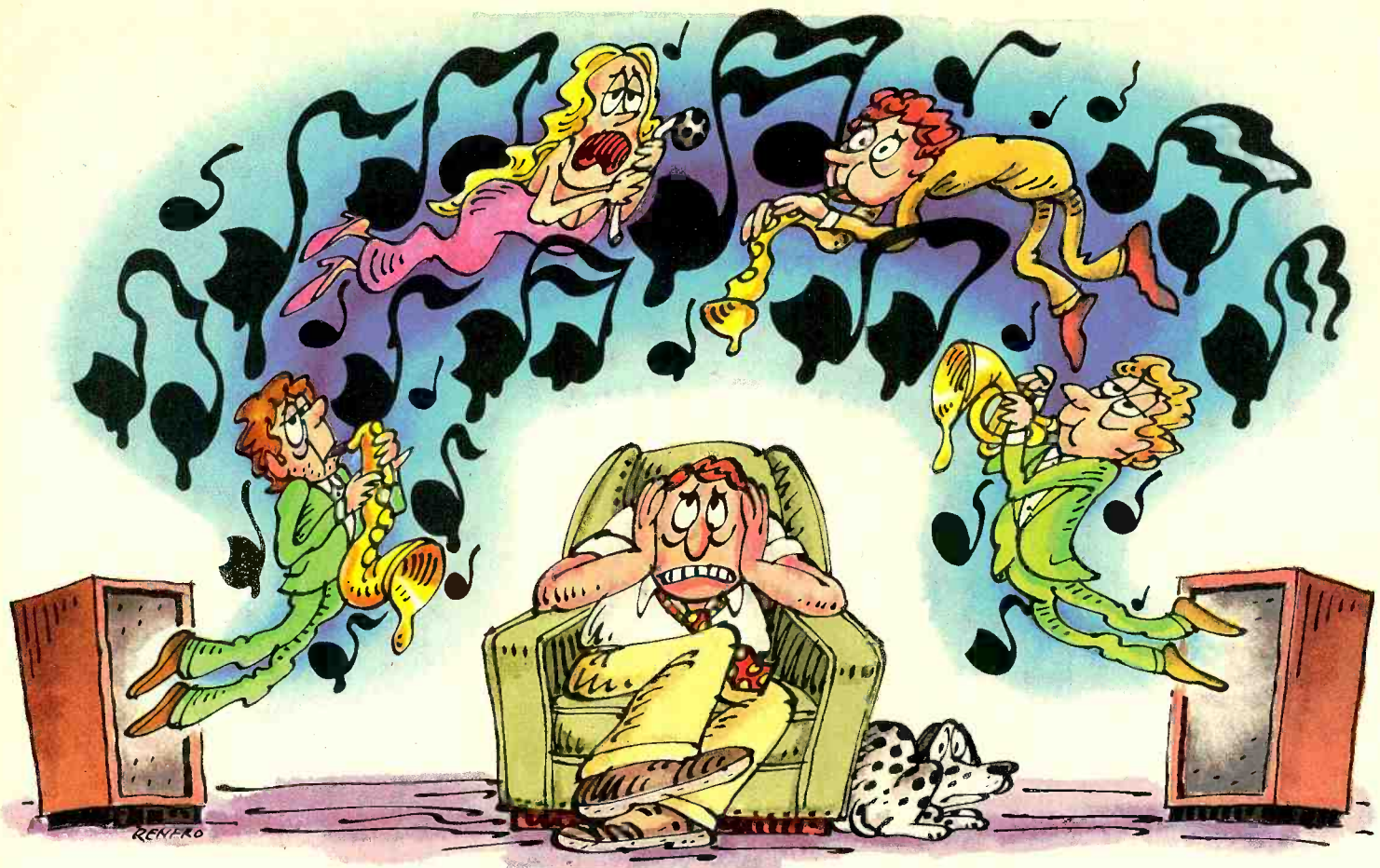
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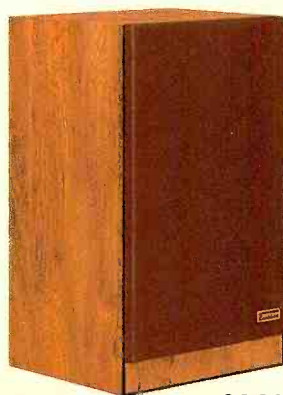


# The Pile Driver: It's just no

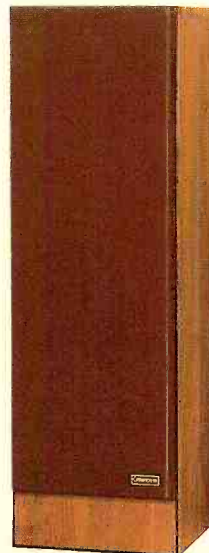
Since the turn of the century, "Pile Driver" speakers have laboriously "pushed" the sound out. This can result in a blurring and clipping of notes.

The revolutionary new Heil Driver in Lafayette's Criterion Series 3000 loudspeakers "shoots" the sound out.

There's no blurring or clipping. Every note is crisp and clearly defined.



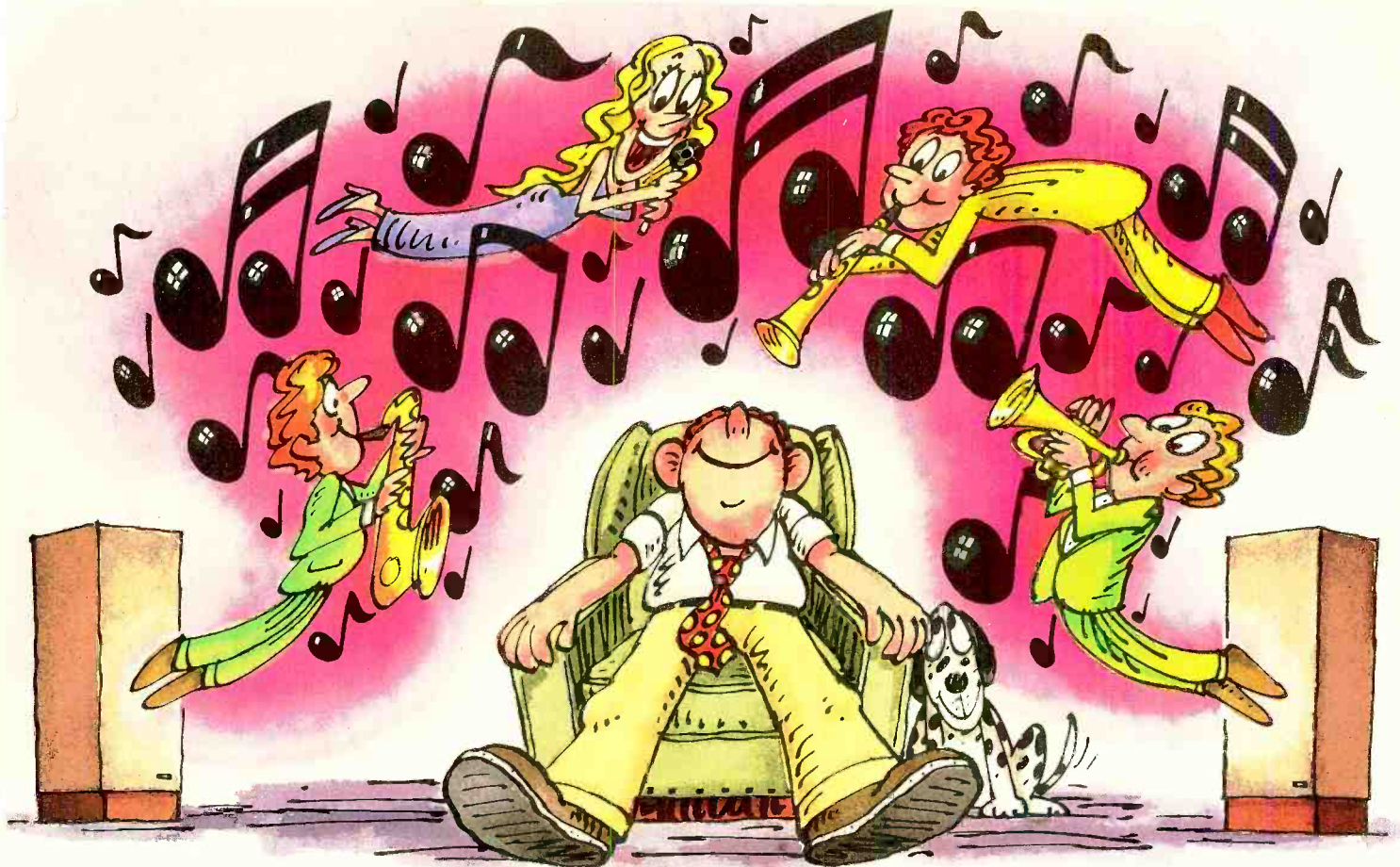
3001



3002



3003



# match for the Heil Driver.

Ever since "talking machines" first started talking, speakers have produced sound by pushing the sound waves out of the speaker with a diaphragm. Sometimes referred to as a "driver." Or "pile driver."

This system has definite disadvantages.

To reproduce sound faithfully, the driver has to have very rapid rise time (acceleration) and decay time (deceleration). But the mass of the driver is so great, it fights against its own immense inertia. The pile driver is still going one way when the transients (musical signals) are telling it to stop. So sound gets blurred. Parts of some notes literally get clipped short. Your high fidelity system is guilty of infidelity.

The only solution is to reduce the mass of the driver so it can react more quickly. And that's exactly what Dr. Oskar Heil has done.

The Heil Driver is the heart of Lafayette's new Criterion Series 3000. The Heil Driver is simplicity itself. It has just one moving part: A lightweight pleated driver made of soft Teflon. Rather than "push" the air out, it "shoots" it out.

The faster a driver can react, the higher the fidelity. The Heil Driver, because it has almost no inertia, reacts incredibly swiftly. It actually transfers sound energy to the air more than 5 times the speed of its own motion! (That's what we mean by "shooting" the sound out.) There is no blurring or clipping of notes. No ragged top ends. No rounding off of the initial "attack" that distinguishes each instrument. Every note is clear.

We could go on and on about the merits of the Heil Driver and the Criterion Series 3000 loudspeakers. But there's only one way to truly appreciate them: Visit a Lafayette showroom and let the speakers speak for themselves.

**The Criterion 3001** incorporates a 10 in. heavy duty woofer in a ported book shelf cabinet. It delivers a deep, solid bass and high efficiency.

**The Criterion 3002** is a tower design which couples the 10 in. woofer acoustically to a 10 in. passive radiator. It delivers a deeper, tighter bass.

**The Criterion 3003** is a taller tower design featuring a 12 in. heavy duty woofer coupled acoustically to a 12 in. passive radiator. It has an even fuller, deeper bass and greater power capacity.

All 3 are equipped with a variable high frequency Brilliance Control to tailor treble response to the acoustics of any room.

If you're looking for higher fidelity in your high fidelity, your reaction to the Criterion Series 3000 speakers featuring the remarkable Heil Driver will be the same as ours.

In a word: "Heil-lelujah!"

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Lafayette's catalog is all new for 1979! 172 illustrated pages — half in full color. Features our complete line ... everything Lafayette makes or sells. Write Lafayette Dept. No. 11099, 111 Jericho Turnpike, Syosset, N.Y. 11791. Allow several weeks for delivery.

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We let you hear what you've been missing.

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The AIWA AD-6800 uses its own circuitry to measure the precise bias figure of not just one or two, but every brand of cassette tape, whether it's LH, FeCr or CrO<sub>2</sub>. The result; a flatter-than-ever frequency response with any tape on the market.

And the new AIWA 3-head Flat Response Tuning System is a snap to use.

First, slip in a cassette and the AD-6800 will load it automatically.

Next, set the Input Selector to "test" and push the "record" key to automatically activate the 400Hz and 8kHz built-in oscillators. You're all set for test recording.

Slide the Azimuth Adjust control for optimum head alignment

and adjust the Bias Fine Adjust knob that corresponds to the type of tape you're using. The AD-6800 will let you know the exact bias necessary for the flattest possible response when the right (8kHz) and left (400Hz) VU meters are in corresponding positions. Now you're ready to record. It's that simple.

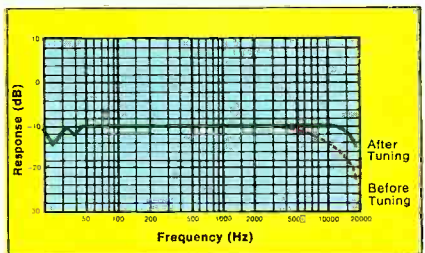
Bias Fine Adjustment allows precise fine tuning for optimum response.

AIWA's new 3-head Flat Response Tuning System (FRTS)

lets you monitor a tape simply by observing characteristics of the frequency response. You can actually "see" the sound so you can record at optimum levels.



AIWA's exclusive Double Needle Meters let you check both VU and Peak levels at a glance because they're combined on the same meter.



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The AD-6800 provides another exclusive feature—Double Needle Meters. AIWA has combined VU and Peak readout on each meter so you can monitor both functions at a glance. A convenience feature you won't find on any other cassette deck. The AD-6800 includes a Peak Hold function, too.

And with the AD-6800 you get an incredibly low wow and flutter of 0.05% (WRMS), and with Dolby\* on and FeCr tape, an S/N ratio of 65dB, and a frequency response of 20 to 19,000 Hz.

With all this in one great cassette deck and AIWA's exclusive new Synchronized Recording Operation (when used with the AIWA AP-2200 Turntable) you'll begin to understand what precision recording is all about.



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## LETTERS TO THE EDITOR

### Nyiregyházi

● I wish to commend STEREO REVIEW and Michael Walsh on the fine article about Ervin Nyiregyházi in the July 1978 issue. It was most interesting and fascinating; keep more of the same coming.

WILLIAM B. WEISS  
Ocean, N.J.

● The superb article on Ervin Nyiregyházi in the July issue is one of the finest I've read in STEREO REVIEW. I have a number of Nyiregyházi's Ampico piano rolls and the Desmar disc, and I have heard most of his local recitals (San Francisco and Novato, California); now I am longing to have the new Columbia recordings. To see this great artist appreciated after many years of indifference is one of the most wonderful revelations a music lover can experience.

By the way, I played some of the Ampico rolls for Mr. Nyiregyházi on a properly restored grand, and he enjoyed the roll he made of *The Muiden and the Nightingale* from Granados' *Goyescas*—which happens to be a rare and sought-after roll. Also, I recently heard him play his transcription of Liszt's *Faust* Symphony: it was magnificent and unforgettable. Congratulations on publishing such a well-written and informative article on one of the greatest geniuses in music history.

WILLIAM KNORP  
Sausalito, Calif.

● The July cover story on Ervin Nyiregyházi gave me quite a start, since Ervin was married to my late second cousin, Ethel Gray. I have not seen him for more than twenty years, and I wondered what had become of him. I enjoyed the excellent article, but I disagree with the statement that "Nyiregyházi's movie career included one on-camera appearance." Ervin doubled for actors at the piano in several films, probably most of all in *A Song to Remember*, a 1945 fictional (very fictional) biography of Chopin. I remember that Ervin was rather bitter that José Iturbi was chosen over him to record the piano score for that film. In other pictures, Ervin doubled for the actor Henry Daniell in non-musical scenes. Daniell had health problems, and when he couldn't

show up at the studio, Ervin would receive a call to replace him in long shots. They looked very much alike, and make-up increased the resemblance. If Ervin had to speak any lines, they were dubbed in later by Daniell.

CHARLES L. ANDERSON  
Sacramento, Calif.

### Home Video

● I found Robert N. Greene's article on home-video tape recorders in the July issue very enlightening; finally, an informative review written in layman's language, something we can all understand. Although I am interested in purchasing a home unit, I hesitate to do so at this time since there is no assurance that any particular format will become standard in the near future. The various manufacturers should get together on this point (as with audio cassette recorders), for it would certainly benefit the many prospective buyers in selecting a particular brand.

LEO J. DESROSIERS  
Acushnet, Mass.

### Barbra Who?

● If, as a reader suggested ("The Pop Beat," July 1978), Barbra Streisand married David Seville, her *real* name would not be Barbra Seville but Barbra Bagdasarian.

RUSSELL SANJEK  
New York, N.Y.

### Direct-to-disc

● After reading the articles on direct-to-disc recordings in the July issue, I decided that it was time to try a couple. I bought the Charlie Byrd album on Crystal Clear and the Wagner/Leinsdorf on Sheffield Labs, and they both lived up to my expectations. On a scale of 0 to 100, with my cleanest Archiv and Deutsche Grammophon discs pegged at 75, the D-D's were a solid 95.

Owners of these and other fine records should be reminded that, although it is exciting to listen to them over and over or to go

back immediately to a particularly fine passage, a record should be given a substantial rest between playings, preferably overnight. A hasty replaying will not only sound disappointing, it will also cause unnecessary wear, a fact that is nowhere more evident than with an ultraquiet record.

DONALD M. CHAFFEE  
Wellesley, Mass.

*Technical Director Larry Klein replies: Recent tests indicate that excessive wear from replays in rapid succession is not much of a problem with today's best cartridges.*

● A footnote to the July feature on direct-to-disc recordings: years before the current fad, HiFi/STEREO REVIEW put out a direct-cut record ("Stereo Test Record," Model 211), and I still have a beat-up copy of it.

ADRIAN HOPE  
New Scientist  
London, England

*Hold on to that copy, "beat-up" or not. It is now a collector's item.*

### RF "Littering"

● As an Arizonan and admirer of AuH<sub>2</sub>O, I pay special attention to comments by and about the senator, such as those in the July "Audio News" concerning his proposed law authorizing the FCC to prescribe filters for radio-frequency interference to be built into consumer hi-fi equipment. My realization of the place Senator Goldwater is coming from never crystallized so clearly as in seeing that his goal is not to achieve what is most just for *all* people but to placate the most "vocal" group—the CB'ers and hams. His SB 864 is like passing a law to tax garbage collectors for the littering done by motorists. The government should stop the CB'ers and hams from "littering" the airwaves, not charge the "opposition." It's discouraging how many politicians base their decisions on the "support our team" concept instead of considering the needs and values of *all* the people.

NED WHEELER  
Casa Grande, Ariz.

*See this month's "Audio News" on page 36 for late developments on the RFI front.*

### Autosound Specs

● In a note accompanying the June article on autosound equipment, Larry Klein comments on the lack of performance specifications made available to buyers of such equipment. Perhaps I can explain one reason why manufacturers may wish to underemphasize specs. Much of the autosound equipment produced is aimed at the mass market, the "average consumer," just as television sets are, and the fact is that most such buyers cannot interpret specifications meaningfully. If a manufacturer published specs on his products, customers might be lost to his competitors simply because to the layman the specs might seem inadequate in some way. I'm sure that this has been realized by many marketers in the area of speaker-magnet weights. Many a customer has been lost to the guy down the road because his speaker magnet weighs five ounces more (whether or not it sounds better). There

is a lack of precise specifications in many other consumer markets besides autousound equipment. For instance, do you know the percentage of carbon black in the last set of tires you bought?

JAMES W. STILLEY  
Tucson, Ariz.

Or in the last LP?

## Time and Music

● I have just listened to and timed an album highly acclaimed by one of STEREO REVIEW's critics (it was featured in the "Best of the Month" section), and both sides together to-

tal 31 minutes and 12 seconds of music. I therefore suggest that you either start including the total program time on a record (excluding lead-in and -out and all the wasted time between cuts) or else don't send me any renewal notices.

JON BLATT  
Hendersonville, N.C.

*Anybody else out there buy music by the yard? Seriously, our reviewers do point out those discs that, in their opinion, shortchange the buyer, but of course that is a relative thing; there are some 30-minute discs that are worth thrice their cost, and more than a few 50-minute items that are not worth the vinyl they are pressed on.*



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## Snuff Rock

● Hey—Snuff Rock is already dead! The April 27, 1974, concert by Genesis at the Century Theatre in Buffalo, New York, advertised a finale in which "The lead singer blows himself up!" I was there, and Peter Gabriel did blow up—sound and all! If Snuff Rock is, as Peter Reilly said in his July "Best of the Month" review of Helen Schneider, "the last shock tactic," then I guess the final, convulsive retchings of rock have been and are gone. Just listen to your local FM album-rock station and catch that slick new breed of hip, groovin', in-tune people, "... the cool sounds of those Mindless Seventies . . ." I think the air is ripe for another "biggest"—a real one. I'll bet it's not far away. Hey! Maybe it'll be Snuff Disco!

JEFF WURSTNER  
Seneca Falls, N.Y.

Popular Music Editor Paulette Weiss replies: According to our sources, the only thing that blew up at that concert was a magnesium flash bomb set off in front of Peter Gabriel as he sang Supper's Ready. The band didn't even smash its equipment, so it looks like "snuff rock," let alone "snuff disco," is still an unrealized nightmare.

## Sakura

● Methinks Paul Kresh could profit from a refresher course in Japanese. In his July feature "The Year of the Flute," he says that sakura—which appears in the title of the Jean-Pierre Rampal record he reviews—means spring. It means, in fact, cherry—the blossom or the tree. Spring is haru, as in Miyagi's Huru No Umi (The Sea in Spring) on the Rampal record.

ALVIN R. WOLFSON  
New York, N.Y.

## Tape Dubbing Service

● John McCallum's suggestion, in the July letters, of an open-reel tape dubbing service has been adopted by one record manufacturer that I know of. Doric Records of Monterey, California, offers all of its own recordings dubbed in both open-reel and cassette formats. The tapes are made from what Doric's literature describes as "dubbing masters." Open-reel copies are made in real time and are priced at \$15 each. While the Doric catalog is of limited interest, consisting mainly of theater-organ music and similar material, the company's dubbing policy at least shows that someone is still interested in the open-reel market. There may be other small record companies willing to offer this service. Perhaps Mr. McCallum should try writing to some of them directly and inquiring about tape dubs.

BRIAN JONATHAN GERL  
Milwaukee, Wis.

## Genesis Revisited

● In his June letter attacking Joel Vance's review of "Seconds Out" by Genesis, R. Miller says that a good critic should be objective and argues that Mr. Vance "can't even (Continued on page 16)



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attempt to admit that the album is superbly produced or that the playing on it is fantastic." My question is: how does one *objectively* critique a group by resorting to such *subjective* abstractions as "fantastic" and "superb"? Critical reviews are bound to be subjective in nature. Think how sterile musical criticism would be if it had to be an exact science.

Blame it on my sadistic inclinations, but I found Joel Vance's sardonic puncturing of this crudely pretentious (among other things) Genesis album to be reflective of a very refined musical perception.

PAUL WALTERS  
Kansas City, Mo.

## Simels Pro and Con

● After reading Steve Simels' critiques in the June issue of *STEREO REVIEW*, I have come to the conclusion that he is a fossil of the Sixties and thoroughly abhors anything that reminds him of anything else. He seems to be saying that few people listen to "rock and roll" because it doesn't any more. He comes close to saying that we listeners do not know what we are buying or listening to these days.

Let him reminisce on his own time. I want to know what he likes, whom he listens to, and when he lays his money down. If he would only state his preferences in music more positively readers could judge his critiques more objectively. It is difficult enough to get your money's worth today; Simels

should help to clear up instead of confuse the music-consumer's mind. Come on, Steve, take a stand.

DEE HENDERSON  
Iowa City, Iowa

● After many years of reading *STEREO REVIEW* and other magazines with record reviews, I think that Steve Simels is tops. He captures the essence of popular music (past and present) as one who knows, and his style is unique and invigorating. I am tired of reviews that reveal factual and technical data and not much more.

H. PALMETER  
Lewisburg, Pa.

## Dan Hill

● Seeing Noel Coppage's review of Dan Hill's album "Longer Fuse" in the June issue was almost as big a thrill for me as hearing the single from it. *Sometimes When We Touch*, hit the U.S. airwaves. I have followed and enjoyed Dan Hill's music and lyrics since hearing him perform at Toronto's Riverboat Coffee House several years ago, and my fingers are crossed that this first U.S. single will edge him as far into our musical consciousness as *If You Could Read My Mind* did for fellow Torontonian Gordon Lightfoot.

But it is unfortunate that Mr. Coppage chooses to view Dan Hill's music as a nostalgic throwback to an earlier time. It would be more appropriate to say that he has managed to *retain* certain values, not that he has dug

them up after a premature burial. *Hold On*, for example, is a more thought-provoking look at the way our values have changed in the past decade than, say, Jackson Browne's *The Pretender*. Dan Hill is relevant, contemporary, and valuable.

BOB MCCANN  
Long Beach, Calif.

## Syndrum

● After hearing them on countless new albums and reading about them in liner notes, I have yet to see one word about "syndrums" in *STEREO REVIEW*. Just what are they?

MIKE BLAKESLEY  
Forsyth, Mont.

*As the name implies, a "syndrum" is a synthesized drum. Four 8-inch drum heads are hooked up to oscillators with individually variable controls for volume, sustain, tone, vibrato, etc. Except for the controls, they're played like any other drum. Many readers will already know what the syndrum sounds like, since it is the featured percussion gimmick on Linda Ronstadt's Poor Poor Pitiful Me—and because the drummer for the Gong Show orchestra overuses it to the point of obsession.*

## Flutist/Flautist

● Paul Kresh, in his June review of "Jean-Pierre Rampal's Greatest Hits," wonders (Continued on page 18)

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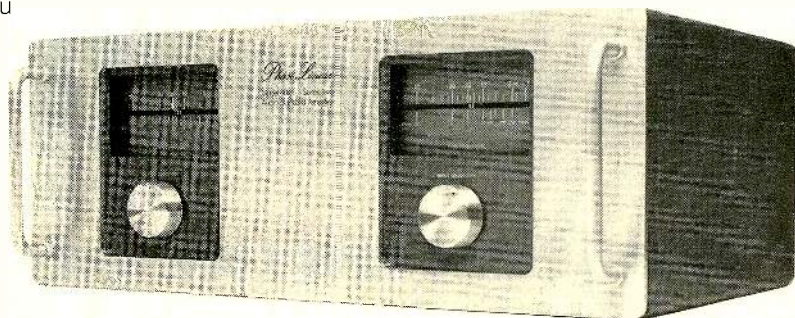
It incorporates a special 4-segment LED clipping indicator that warns of hazardous overloads.

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The Mini-Monitor was made in the image of the NS-1000. It has an identical finish, and like its bigger brother, is so close in mirror-image matched pairs. At low volume levels the sound is virtually the same. It's a primary monitor with the NS-1000 look and sound, for places the NS-1000 won't fit.

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# WE'LL GIVE YOU 1 HOUR TO PROVE AKAI'S GX HEADS SOUND BETTER.



## Free Maxell 60-Minute Cassette.

Buy any of these four Akai Decks — GXC-706D, GXC-709D, GXC-725D, or GXC-750D — and the Maxell C-60 is free.

Think of it as an introduction to two of the best recording names in the world.

And think of it as an introduction to the best heads, as well. The exclusive AKAI glass and crystal ferrite (GX), which remains unsurpassed for optimum sound and wearability. It's guaranteed, in fact, for 150,000 hours,



the equivalent of playing 24 hours a day for 17½ years.

You'll find the GX heads on the four models shown as well as a number of other Akai cassette and reel-to-reel decks.

So drop by your nearest Akai dealer and see what happens when two of the best names in the industry put their heads together for one great offer.

Akai and Maxell.

They were really made for each other.



Akai America, Ltd., 2139 E. Del Amo Blvd., P.O. Box 6010, Compton, CA 90224.

when flutists stopped calling themselves "flautists." The shoe is on the other foot, I believe. The *Shorter Oxford English Dictionary* dates "flutist" from 1603 and "flautist" from 1860. With 250 years on our side, we can face it out against "pride of knowledge" (as Fowler calls it in *Modern English Usage*).

STAN BROWN  
Calgary, Alberta

## Convenient Layout

● As an audio engineer and part-time instructor, I appreciate STEREO REVIEW's laying out feature articles on consecutive, ad-free pages. This makes it very easy to cut out and save them for future reference. It's a lot more sensible—at least for the reader—than dragging the articles out all over the magazine just to carry the reader past a lot of ads. Advertisers need not worry: we serious readers peruse the ads closely for their up-to-date information on the latest product refinements. Thanks for the little things!

ROBERT J. TAYLOR  
Englewood, Colo.

## Music Societies

● Some STEREO REVIEW readers may be interested to know that the second edition of my "Musician and Composer Societies: A World Directory" appeared in the September 1977 issue of *Notes*, the quarterly journal of the Music Library Association. Copies can be perused in many libraries, and one can be obtained for \$5 from the Association at 343 South Main Street, Room 205, Ann Arbor, Michigan 48108.

JOHN R. DOUGLAS  
New College, San José State University  
San Jose, Calif.

## Videocassette Software

● Because of internal problems, the distribution contract between Entertainment Video Releasing, Inc. and Video Warehouse, Inc. has been canceled by EVR. EVR is now distributing its own library of motion pictures on video cassettes for consumer markets nationally and internationally. Anyone interested in these products should write directly to EVR at the address given in the listing on page 70 of July STEREO REVIEW.

MARK SLADE  
President, EVR  
New York, N.Y.

## Corrections

● In the July review of the New World Records release (NW 228) containing John Alden Carpenter's *Krazy Kat*, the performance of that ballet score is called "slightly abridged." It is, rather, the performance of Henry F. Gilbert's *The Dance in Place Congo*, on the same record, that is abridged; the New World version of *Krazy Kat* is complete.

● The Lafayette AM/FM stereo receiver tested for the Hirsch-Houck Labs report in the August issue was the current, updated model, the LR-5555A. It appeared in the report as the Model LR-5555.

7,2,4, [NEXT RECORD], 1,1,3, [NEXT RECORD], 1,  
 5,6,2,4, [NEXT RECORD], 2,4,4, [RAISE RECORDS].

That's Microprocessor language. The language of the new Accutrac®+6.

The message?

Play tracks 7, 2 and 4 in that order on the first record. Then, track 1, 1 again and 3 on the next record. And so on.

The Accutrac+6 is the only turntable in the world that offers you computerized, customized listening. So you can hear the tracks on each of the six records in any order you like, as often as you like, even skip the tracks you don't like.

And you never have to touch the tonearm to do it, because the Accutrac+6 is engineered with a computerized "hands-off" tonearm.

In fact, once you close the dust cover you never have to touch the records or tonearm again to hear your programmed selections.

But the brain in the Accutrac+6 is smart enough to do even more: it doesn't drop your records!

No more "plop!" The Accutrac+6 is engineered to protect your records. It lowers each record v-e-r-y g-e-n-t-l-y onto the platter. Like an elevator.

And since elevators go up and down, so does the Accuglide™ Spindle. Just touch the "raise record" key, and it lifts all six records back up to the starting position.

If you think you've had enough miracles for one day, here's another one:

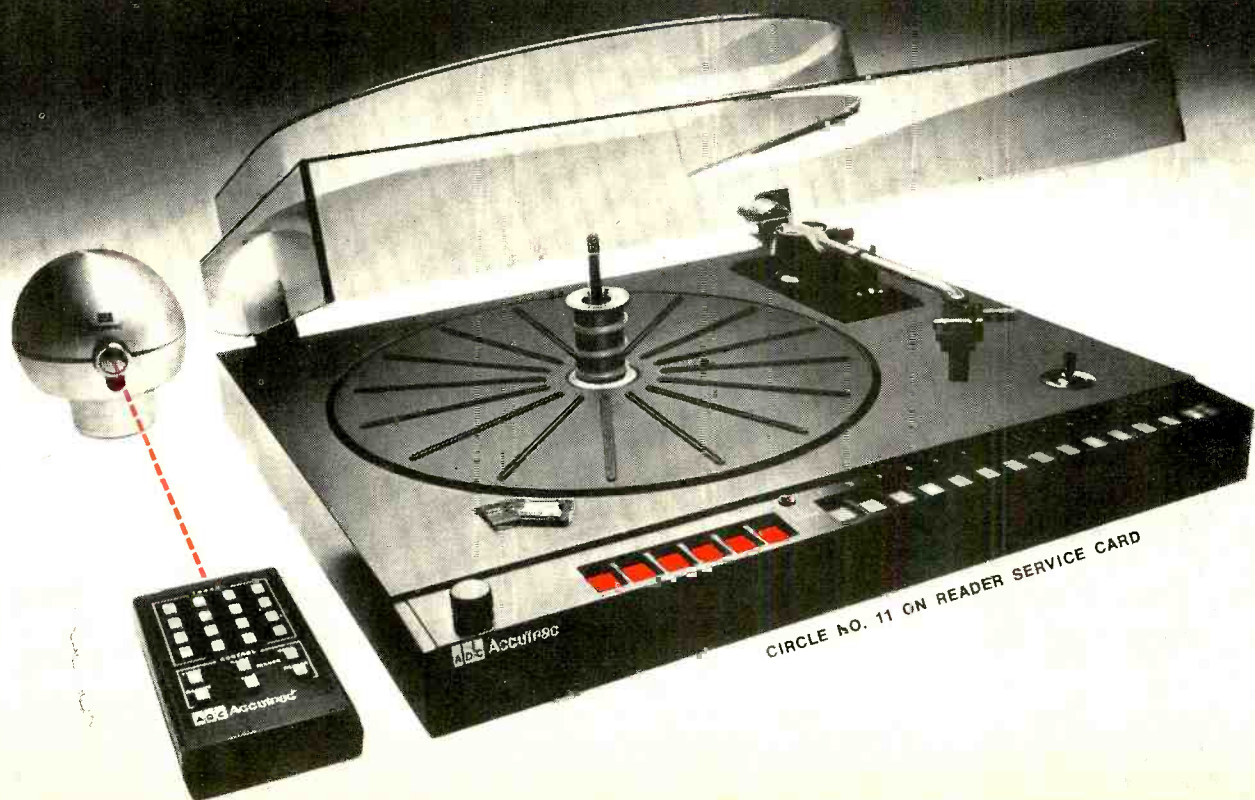
With Accutrac+6 model 3500R you can control everything from across the room with a full-system remote control transmitter and receiver. There's even remote volume control on model 3500RVC.

No other 6 record system gives you the record safety, convenience and control of the new Accutrac+6. But the truly incredible feature of the new Accutrac+6 is its low price. From under \$300\* for model 3500.

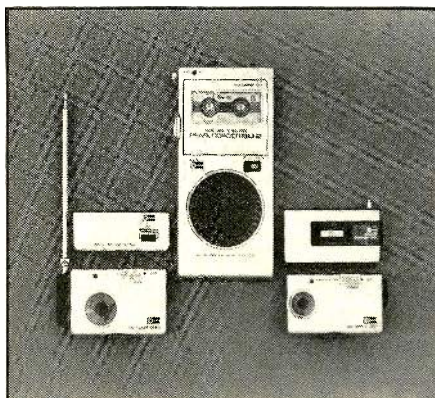
So forget everything you know about 6 record systems. And remember to see the new Accutrac+6. It's as easy to operate as 1, 2, 3.

**ADC Accutrac+6**  
 A BSR Company

\*Price shown in this ad is approximate. Selling price is determined by the individual dealer. ©Accutrac is a registered trademark of Accutrac Ltd. ADC Professional Products. A Division of BSR Consumer Products Group, Rte. 303, Blauvelt, N.Y. 10913.



# New Products latest audio equipment and accessories



## Microcassette with Tuner Modules From Olympus

□ The Olympus Pearlcoorder SD2 is a pocket-size, capstan-drive unit that will record or play back for up to two hours from one Olympus microcassette. Small, detachable AM and FM tuner modules are available to turn the SD2 into a radio, and a voice-actuating module permits recording without manual switching. The recorder incorporates an auto shut-off mechanism, cassette eject, and LED battery-check indicator. It will drive an external speaker on its own power, or it can be connected to an audio system. An electret condenser microphone and monitor speaker are built in. Accessories such as a tie-clip microphone, external speaker with amplifier, and various adapters are available. The SD2 measures approximately 1 x 2½ x 5½ inches, and it weighs 12 ounces. It sells for \$279.95 including the voice-actuator module.

Circle 115 on reader service card



## New Materials in Audio-Technica Phono Cartridges

□ New materials and stylus refinements mark the recently released AT15SS and AT20SS stereo phono cartridges from Audio-Technica U.S. Made of rigid beryllium, the stylus cantilever is said to be less likely to flex under playing conditions, thereby insuring smooth high-frequency response. The diamond stylus is a refined Shibata, called the

"Shibata Plus," that is 36 per cent smaller than its predecessor. Both units are moving-magnet cartridges employing dual magnets and are identical except that the higher-price AT20SS must pass additional high-performance tests.

The AT15SS has a frequency response of 5 to 45,000 Hz  $\pm 2$  dB from 20 to 20,000 Hz. Channel separation is 33 dB at 1,000 Hz and 23 dB at 10,000 Hz. Frequency response for the AT20SS is 5 to 50,000 Hz  $\pm 1$  dB from 20 to 20,000 Hz. Channel separation is 35 dB at 1,000 and 25 dB at 10,000 Hz. Tracking force for both units is ¾ to 1¼ grams, and channel balance is 0.75 dB. The AT15SS is priced at \$150 and the AT20SS at \$195.

Circle 116 on reader service card

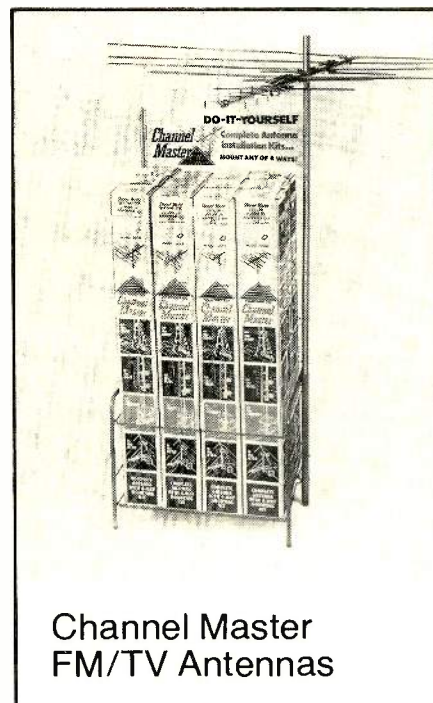


## New Realistic Sound-level Meter

□ Realistic's hand-size sound-level meter can be used for sound-intensity measurement in a variety of applications including testing the acoustics of studios, auditoriums, and home hi-fi installations. It permits selection of either wide-band sound level (C weighting) or the 500- to 10,000-Hz range (A weighting which compensates for the response of the ear).

Six 16-dB sound-level ranges are available, for an overall range of 60 to 126 dB, and there is a switch position for battery check. There is also a slow/fast response switch for checking average or peak noise levels. The unit can be used as a wide-response microphone or can be connected to a variety of test equipment. Distortion is said to be less than 2 per cent at 1 kHz, 0.5 volt. An accuracy of  $\pm 2$  dB at a 114-dB sound level is claimed, and measurements are referenced to a 0.0002- $\mu$ bar standard. The meter measures 6¼ x 2½ x 1¾ inches and weighs 7¾ ounces. It operates on a self-contained, standard 9-volt battery. Price, at Radio Shack outlets exclusively, is \$39.95.

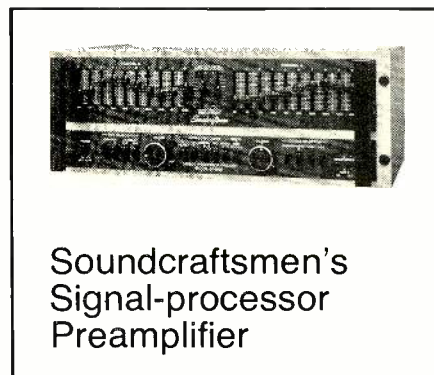
Circle 117 on reader service card



## Channel Master FM/TV Antennas

□ Channel Master is now marketing FM/TV antennas in compact packages, dubbed "QuicKits," containing a preassembled antenna (folded up) and complete hardware for mounting in any of four ways: in the attic or on the chimney, roof, or side of the house. There is a choice of nine different antennas with prices starting at \$23.95.

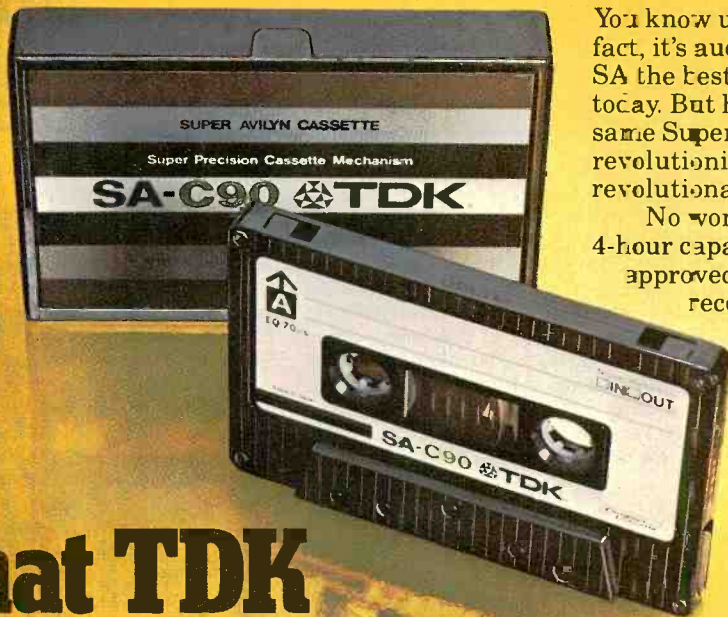
Circle 118 on reader service card



## Soundcraftsmen's Signal-processor Preamplifier

□ The SP4002 rack-mounting preamplifier from Soundcraftsmen features front-panel pushbutton switching facilities for outboard processing loops and for internal circuits providing octave-band equalization, infrasonic filtering, and full tape-recorder dubbing and monitoring for two machines. The unit's two stereo phono preamplifiers are equipped with variable cartridge loading of 0 to 750 picofarads and variable impedance of 100 to 47,000 ohms, and they will accept any type of cartridge (including moving-coil) with an output

(Continued on page 22)



You know us best for our reputation in audio. In fact, it's audiophiles like you who have made TDK SA the best-selling High bias cassette in America today. But here's something you may not know: the same Super Avilyn engineering principle that revolutionized audio cassettes is in TDK's equally revolutionary new Super Avilyn video cassettes.

No wonder that TDK Super Avilyn is the first 4-hour capability video cassette to be quality approved by the people who know: video cassette recorder engineers. And even less wonder that Super Avilyn makes possible an image so stunning, you will feel as though you are sitting in the broadcast studio.

What's more, TDK's strict quality control works to give you low wear on delicate video heads, virtually non-existent oxide shedding, and no problems with tape stretching, even with repeated playback.

That's because TDK Super Avilyn video cassettes are an actual component of the system, not just an accessory. Our tape is housed in a precision, jam-resistant mechanism, for years of consistent high quality video reproduction. And TDK Super Avilyn VHS video cassettes are compatible with all VHS machines, both those with short-play (2-hour) capability and those with short and long-play (4-hour) options.

TDK Super Avilyn VHS video cassettes: model VA-T60, for one and two-hour recording; model VA-T120, for two and four hour recording.

If you like things to look as good as you like them to sound, take a look.

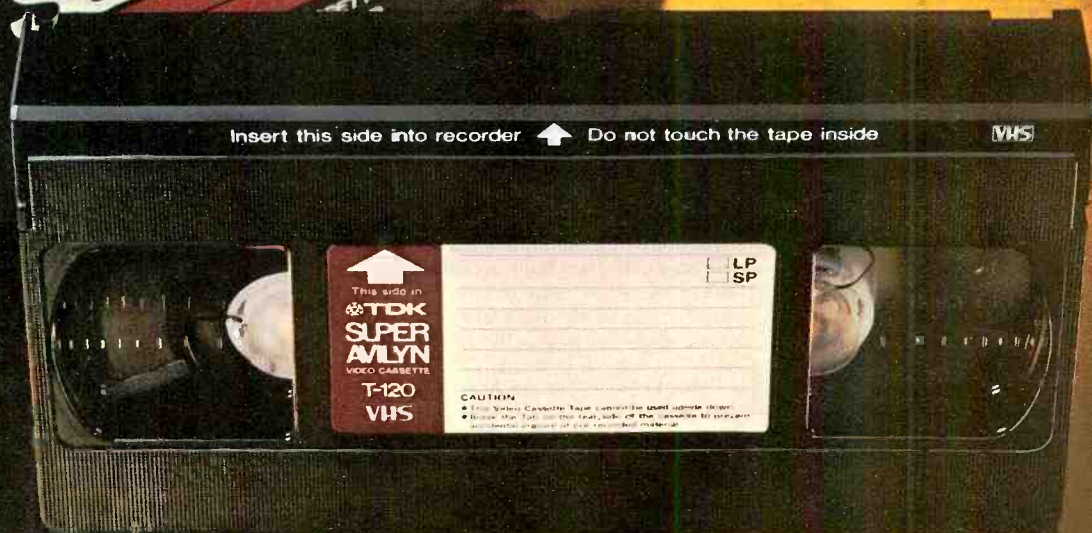
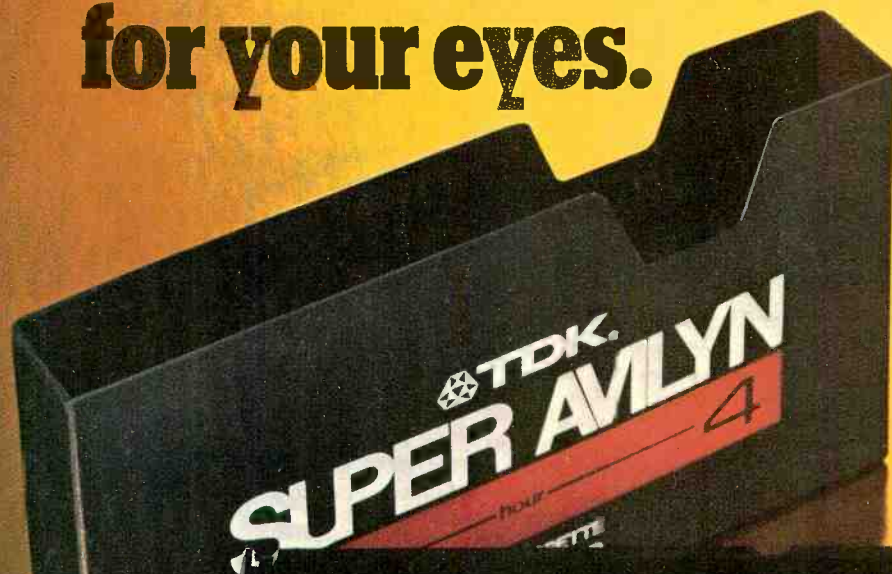
TDK Electronics Corp., Garden City, NY 11530. In Canada: Superior Electronics Ind., Ltd.

**TDK**

The Machine for your Machine.®

CIRCLE NO. 60 ON READER SERVICE CARD

**What TDK  
did for your ears,  
it now does  
for your eyes.**



# New Products latest audio equipment and accessories

of 0.28 to 300 millivolts. The two internal phono preamps are completely independent, with signal-to-noise ratios of 97 dB and 300 millivolts overload capability.

Pushbutton controls permit feeding any one of six input sources through an infrasonic filter, two external processing loops, an equalizer, and a mono mixer to either of the two tape or two line outputs. Complete tape-dubbing and monitoring facilities are included; one program can be listened to while another is being dubbed, with all the processing facilities being available for the dubbing. As has come to be expected of Soundcraftsmen, graphic equalization is the first thing that meets the eye; ten octave-band slide controls span a range of  $\pm 15$  dB with detented center positions. Signal-to-noise ratio is better than 114 dB at full output. Amplifiers are included to drive headphones from 8 to 2,000 ohms. The unit measures 7 x 12 x 19 inches and weighs 28 pounds. Price: \$699.

Circle 119 on reader service card



Otari's Two-section, Four-channel Recorder

□ Taking its place in an extensive line of new professional and semiprofessional tape decks from Otari is the MX-5050-QX, a compact, four-channel unit intended for use in small studios or broadcast stations, educational or audio/video facilities, or by the serious home recordist. Using  $\frac{1}{4}$ -inch tape at either 7½ or 15 ips ( $\pm 0.15$  per cent), the unit has front-panel adjustable biasing and record-equalization controls. Also on the front panel are four true VU meters that meet ANSI specifications for response and ballistics characteristics. Among the rear-panel controls are adjustments for playback equalization, recording level and calibration, test-oscillator calibration, and a noise-reduction-system (dbx or Dolby) interface jack. Input and output connectors are heavy-duty professional-type XLR's. The MX-5050-QX takes reels up to 10½ inches and employs three motors, the one on the capstan being variable-speed ( $\pm 7$  per cent) and d.c. servo-controlled. Wow and flutter (NAB weighted) is less than 0.05 per cent at 15 ips and less than 0.06 per cent at 7½ ips. Signal-to-noise ratio (overall record-playback), NAB weighted, is  $-63$  dB at 15 ips and  $-62$  dB at 7½ ips. Frequency response at

15 ips (at 0 VU) is 50 to 20,000 Hz  $\pm 2$  dB; distortion is less than 1 per cent at 1,000 Hz.

The MX-5050-QX is in two sections and comes in vinyl-covered portable wood cases. A rack-mounting kit and a floor console are optional accessories. The transport section measures 16¾ x 18¼ x 9½ inches and weighs 97 pounds. The electronics section measures 11¼ x 18¼ x 9½ inches and weighs 64 pounds. Total price: \$2,795.

Circle 120 on reader service card



Superscope Digital Device Plays the Piano

□ A combination of evolving digital technology and the vast player-piano-roll collection of Superscope chairman Joseph Tushinsky has resulted in a unique product: a player piano that employs digitally encoded cassette tapes together with an electromechanical mechanism that can be installed internally or externally on virtually any piano, enabling the purchaser to hear historically important performances of the past and present or to record his own piano performances for subsequent automatic replay. The Superscope Pianocorder comes in three versions: a kit that can be installed directly within an upright or grand piano with virtually no visible external alteration; a Vorsetzer unit (shown) that is rolled up to the keyboard of any piano for use; and a complete upright piano, available under the Marantz brand name, with the entire mechanism built in. All three versions play (and two of them record) from the entire keyboard plus the loud and soft pedals, and none of them disables the piano for ordinary use.

The Pianocorder mechanism consists of a complex of solenoids, electronic switching devices, logic circuits, and a specially designed cassette deck with controls for tempo and dynamic range, plus another control to adjust the azimuth of the record/play head.

The cassettes used in the mechanism are pulse-width-modulated to express dynamics and pulse-code-modulated to indicate assignments to individual keys and pedals. After processing by the logic circuits, these signals are routed to the proper solenoids, which then depress the appropriate keys or pedals. Except for the Vorsetzer version, the electronic switches in the complex will register the performance of a live player, route it to the logic circuits for encoding, and store the result on a cassette for later playback.

As a preliminary offer, all versions of the Pianocorder are accompanied by one hundred prerecorded cassettes transcribed from the Mr. Tushinsky's piano-roll collection, including performances by Paderewski, Rachmaninoff, Lhevinne, Kreisler, Fauré, Grieg, Gershwin, Stravinsky, and numerous other classical, jazz, and popular artists. Playing times average 45 minutes each. Suggested retail prices for the various Pianocorder systems, including the tapes: installation kit, \$1,895; Vorsetzer, \$1,995; Marantz upright piano with mechanism installed, \$2,995. Initial plans are to market the systems through piano dealers.

Circle 121 on reader service card



Jensen Automobile Receivers Include Tape Decks

□ Jensen has released three different automotive "receivers," each available in either eight-track or cassette format. The largest of these is a 30-watt-per-channel unit called the R430 in cassette form and the R330 in eight-track. It features biamplified outputs as well as Dolby-B noise reduction, an FM local/distant switch, and balance and fader controls. Frequency response is 30 to 18,000 Hz  $\pm 3$  dB, and usable FM sensitivity is 1 microvolt with a 50-dB quieting sensitivity of 2.5 microvolts. Harmonic distortion is 0.4 per cent at 1,000 Hz near the rated output. Tuner capture ratio is 1.5 dB, FM separation 32 dB. Tape-speed variation is  $\pm 1$  per cent, wow and flutter 0.2 per cent. The unit measures approximately 7 x 2¾ x 6 inches. The separate power amplifier (included), which can be mounted anywhere in the car, is 6¼ x 2½ x 8¾ inches. Price: \$469.95. A line of matching speakers is also being made available.

Circle 122 on reader service card

(Continued on page 26)



# TASTE WINSTON LIGHTS

The low tar  
cigarette that's  
all Winston.  
All taste.



Warning: The Surgeon General Has Determined  
That Cigarette Smoking Is Dangerous to Your Health.

LIGHTS: 12 mg. "tar", 0.9 mg. nicotine av. per cigarette, FTC Report AUG. '77;  
LIGHT 100's: 13 mg. "tar", 1.0 mg. nicotine av. per cigarette by FTC method.



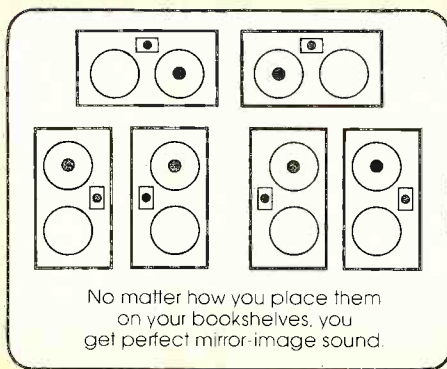
# The perfect pair.

## The new Koss CM/530 bookshelf speakers with the perfect mirror-image sound.

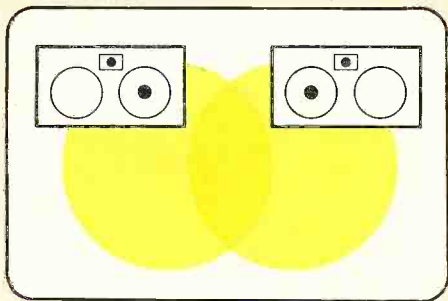
Here is truly a remarkable achievement in loudspeaker design and performance. The Koss CM/530 bookshelf loudspeaker sets an entirely new standard in extended bandwidth response, high efficiency, low distortion and perfect mirror-image for speakers in its size and price range and within today's technological capabilities.

By designing a left and a right channel configuration for the passive radiator, the woofer and the tweeter, Koss engineers created a perfectly matched set of bookshelf speakers that can be placed horizontally or vertically without losing perfect right

to left or left to right imaging, an incredible degree of dispersion and the beautiful Sound of Koss.



Once you've heard the CM/530 you'll be amazed at its breathtaking depth and clarity and incredible low distortion properties. By utilizing an 8-inch passive radiator to radiate the sound energy over the lower two octaves, Koss engineers were able to use an 8-inch woofer to reproduce the critical sounds in the midrange up to 3,000 Hz. Thus the CM/530 is able to reproduce a maximal flat frequency response from an  $f_3$  (3 dB down point) of 36 Hz on upward. In addition, the CM/530's 1-inch dome tweeter produces an exceptionally flat energy output and unusually low distortion



that gives your music a liveliness and transparency not found in competitive speakers.

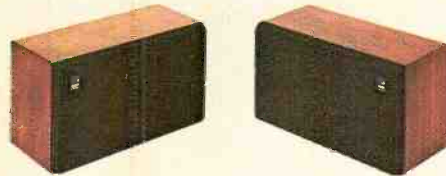
But what really puts the CM/530 speakers in a class by themselves is their perfect mirror-image sound. By creating a right and left channel configuration, the sound from the left and right speakers comes to the listener with the same musical balance.

So, no matter whether you're sitting in your favorite easy chair or walking around your room, you'll always hear a perfectly balanced, full-bandwidth sound.

The Koss CM/530's also offer an unmatched increase in dynamic range over competitive bookshelf speakers. Due to the CM/530's higher efficiency and lower distortion, you can hear the higher sound pressure levels without clipping and also hear the lowest bass with a dramatic clarity as well. And to help you shape the extra sound you'll hear, there's a 3-position Tweeter Level Control switch on each speaker that allows you to alter the tweeter

frequency spectrum from a flat response to  $\pm 3$  dB.

Ask your Audio Dealer to give you a live demonstration of a matched pair of CM/530 bookshelf speakers. You'll be amazed at their perfect mirror-image sound. And while you're at it, try the perfect answer to private listening: Koss Stereophones. But by all means write, c/o Virginia Lamm for our full-color speaker and stereo-



phone catalogs. The Sound of Koss will do great things for your records and tapes... and your image.

# **KOSS**® CM/530 BOOKSHELF SPEAKERS hearing is believing™

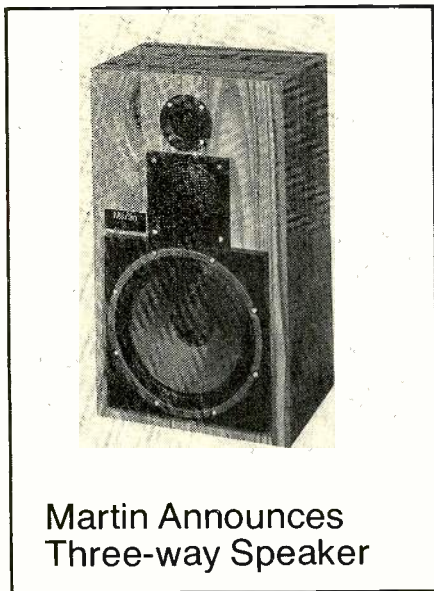
# New Products latest audio equipment and accessories



## Video-cassette Storage Unit Has Eject Mechanism

□ Le-Bo has created a storage unit for video cassettes. The plastic rack will hold up to twelve cassettes in VHS, Beta, or V-Cord format. It incorporates an ejection system that will slide the cassette out far enough for it to be grasped easily. The rack can be purchased alone as the VCM 1000, in a walnut-finish wooden cabinet as the VCM 1002 (shown), or knocked down separately as the VCM 1001. The VCM 1000 measures 14½ x 6 x 8 inches and weighs 3 pounds. The VCM 1001 cabinet measures 14¾ x 6¾ x 10½ inches and weighs 5¾ pounds. Prices: VCM-1000, \$29.95; VCM-1001, \$15.95; VCM-1002, \$46.95.

Circle 123 on reader service card

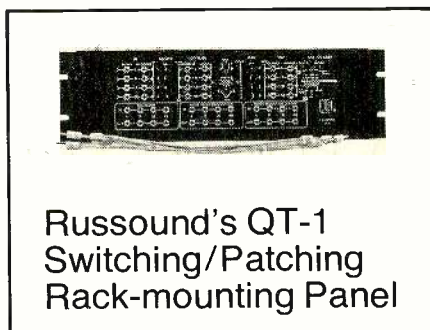


## Martin Announces Three-way Speaker

□ The Gamma 310 from the Martin Division of Eastman Sound is an air-suspension, three-way design with crossover points of 1,000 and 4,500 Hz. The uppermost range is handled by a 3-inch tweeter, while the mid-range frequencies are reproduced by a 5-inch dome unit.

Both drivers are covered by protective grilles. The woofer is a 10-inch unit mounted on a slightly protruding panel. Usable frequency range is given as 35 to 18,000 Hz. Recommended amplifier powers, based on a nominal impedance of 8 ohms, span a range of 15 to 60 watts per channel. For an input of 1 watt, the Gamma 310 will produce a sound-pressure level of 93 dB at a distance of 1 meter. The system has individual balance controls for the mid- and high-frequency drivers. Dimensions are 21¼ x 12¼ x 10 inches. Price: approximately \$190.

Circle 124 on reader service card



## Russound's QT-1 Switching/Patching Rack-mounting Panel

□ The QT-1 by Russound is an entirely passive switching/mixing complex and patch panel for up to four two- and/or four-channel tape machines, plus external Dolby and/or dbx noise-reduction processors, equalizers, etc. The basic tape-recorder connections are arranged in three groups serving, respectively, the tape-out jacks, dubbing jacks, and tape-playback jacks. The main inputs precede the tape-output jacks and the main outputs follow the playback connectors and tape-monitor switching. These are intended for connection to the tape-monitor loop of a stereo or four-channel system, enabling any of the program sources or processors plugged into the QT-1 to be inserted into the system signal path in any combination or order.

At each internal stage of the QT-1 there are front-panel jacks for miniature phone plugs. With the jumper cables provided, these permit the insertion of noise-reduction devices or equalizers at any point in the signal path, and they also permit main stages of the QT-1 to be conveniently bypassed. Mixing facilities are also provided for combining front and rear or left and right channels. To handle two- and four-channel sources, the QT-1 employs thirteen slide switches, forty-eight patching jacks, and seventy-two rear-panel phono jacks. No electronics are used except in the mixing stage, where resistors are switched in to maintain proper load impedances. Insertion loss is a negligible 0.5 dB except for mixing, which typically introduces a loss of approximately 6 dB. Built for rack-mounting, the QT-1 measures 19 x 5¼ x 5 inches. Price: \$249.50. A vinyl-clad wood-cabinet model measuring 14 x 4¾ x 5 inches is available at the same price.

Circle 125 on reader service card



## Marantz's Three-head Cassette Deck

□ Taking its place at the head of the Marantz line of three cassette decks is the 5030B, a three-head unit incorporating two sets of Dolby noise-reduction circuits. Designed to match other Marantz components, the 5030B features a d.c. servomotor system and a three-button arrangement for bias and equalization selection covering standard, CrO<sub>2</sub>, and FeCr tapes. Three-inch-wide VU meters indicate average loudness, while faster-responding LED's indicate peak or transient overloads. A defeatable peak limiter is incorporated. Frequency response is 35 to 14,000 Hz ±3 dB for standard tape, extending to 17,000 Hz with FeCr and CrO<sub>2</sub> tapes. Playback signal-to-noise ratio (overall) is -58 dB with Dolby off and -64 dB with it on. The unit weighs in at just under 15 pounds and measures 16¾ x 5¾ x 11¾ inches. Price: \$419.95.

Circle 126 on reader service card



## AcoustaTrac Equalizer/Booster For Auto Audio

□ For the audiophile on wheels, Sparkomatic Corporation has the AcoustaTrac, a graphic equalizer/power booster for use with car radios or tape players. It features slide controls for five different audio bands (centered at 60, 250, 1,000, 3,500, and 10,000 Hz) with read-out on an illuminated screen, a front-to-rear fader control, and a bypass switch. The unit can be used with all 4- and 8-ohm mobile systems with speakers having power-handling capacities of 15 watts or more. The AcoustaTrac measures 2 x 6¼ x 6½ inches and comes with mounting hardware. Price: \$90.

Circle 127 on reader service card

(Continued on page 28)

# New Scott amps are loaded with extras.

## DC Amplification.

Improves reliability, expands frequency response, and reduces TH and IM distortion.

## Twin logarithmic Op Amp meters.

Visually monitor the peak average power amplifier output of each channel in both watts and dBW.

## Attenuated volume control calibrated in dB.

Makes precise volume level selection and exact duplication of previous volume settings.

## Bi-modal electro-sensor relay protection.

Protects amplifier as well as speakers from all conceivable malfunctions.

## Complete tape monitoring and two-way copy capability.

Listen, record, monitor or copy from Tape 1, Tape 2, Tuner, Aux, or two phono inputs in any combination.

## Capacitance and Impedance Adjustments.

Maintain accurate frequency response by adjusting for various phono cartridge requirements.

## Two independent phono equalizer pre-amps.

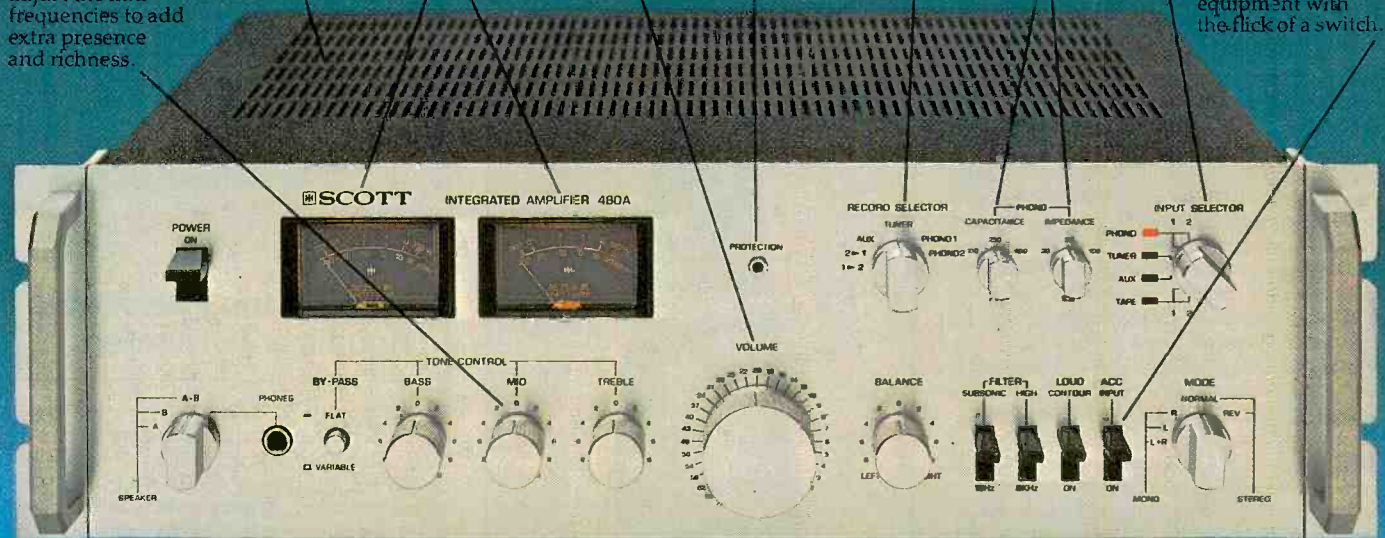
Use both phono inputs at the same time; listen to one while recording the other, or vice versa. Impossible with other comparably priced amps.

## Mid-range control.

In addition to the treble and bass controls, you can adjust the mid frequencies to add extra presence and richness.

## Front Panel Accessory Switch.

Control accessory equipment with the flick of a switch.



# At no extra cost.

When you consider separates, you want all the extras you can get for your money. And no one gives you more than Scott.

Just take our new 480A integrated amplifier. 85 watts per channel min. RMS, at 8 ohms from 20-20,000 Hz with no more than 0.03% THD.

It's the only amplifier in its price class that gives you two independent phono preamps. Now you can record one phono while listening to the other. Or vice versa.

All our amps boast dozens of other advantages you simply can't find in comparably priced units. Our state-of-the-art circuitry gives you plenty of power with very low distortion. And our features and functions give you full flexibility in producing the sound you like best.

When you move up to separates, move up to Scott. Where all the extras don't cost extra.



**New Scott 460A Integrated Amplifier**  
70 watts per channel min. RMS, at 8 ohms from 20-20,000 Hz with no more than 0.04% THD



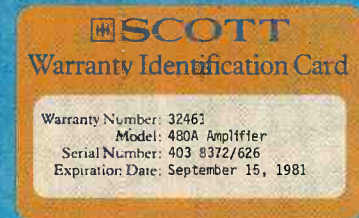
**New Scott 440A Integrated Amplifier**  
55 watts per channel min. RMS, at 8 ohms from 20-20,000 Hz with no more than 0.05% THD



**New Scott 420A Integrated Amplifier**  
40 watts per channel min. RMS, at 8 ohms from 20-20,000 Hz with no more than 0.08% THD

\*Shown with optional rack mount handles.

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# New Products latest audio equipment and accessories

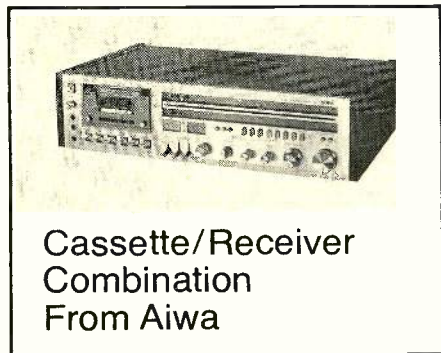


## Three Turntables From Technics

□ The Technics SL-3300 (shown) is an automatic direct-drive turntable employing a low-speed, d.c. brushless motor. It features automatic cueing of its S-shaped tone arm, including automatic return and stop, "memo-repeat" control for up to six repeat plays of a record or continuous play, viscous-damped manual tone-arm cueing in both directions, antiskating control, and individual pitch controls for 33 $\frac{1}{3}$ - and 45-rpm speeds. There is a built-in stroboscope for checking speed. Its front-panel controls are for start, stop, cueing, memo-repeat, and speed adjustment. It has a detachable tone-arm headshell and a hinged, removable dust cover. Wow and flutter are 0.03 per cent rms, and rumble is -75 dB DIN B. The unit measures 5 x 17 x 14 $\frac{1}{2}$  inches and weighs 20 pounds. Price: \$180.

The SL-3200 is essentially the same unit as the SL-3300 but without the automatic features. Its price is \$150. The SL-3350 is also similar in appearance and features to the single-play units, with the addition of a record-changing mechanism able to handle up to six discs. Wow and flutter of the SL-3350 are 0.03 per cent, and rumble is -70 dB. Weight is 21 pounds and dimensions are approximately 6 $\frac{1}{2}$  x 17 x 14 $\frac{1}{2}$  inches. Price: \$200.

Circle 128 on reader service card



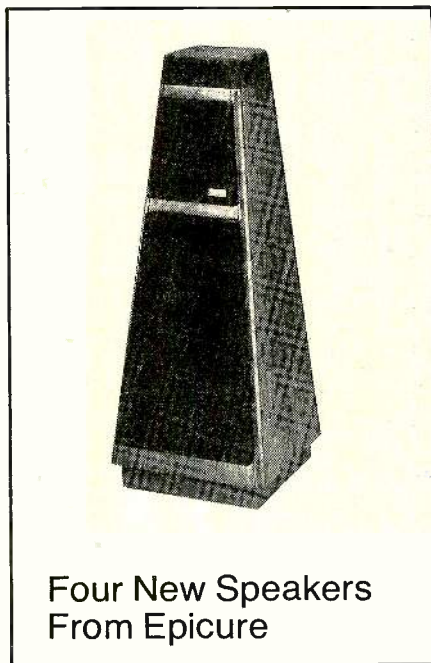
## Cassette/Receiver Combination From Aiwa

□ Aiwa has announced three new cassette decks, one of which, the AF-3090U (shown), is incorporated into a receiver. The deck section has a frequency response of 20 to 15,000 Hz with normal tape, and it extends to 17,000

Hz with CrO<sub>2</sub> and FeCr tapes. The signal-to-noise ratio is -65 dB (Dolby system on, FeCr tape), and wow and flutter is 0.05 per cent (wrms). The tuner section has a sensitivity of 1.8 microvolts, a S/N of -78 dB, and stereo separation of 45 dB at 1,000 Hz. Distortion is 0.15 per cent in mono and 0.25 per cent in stereo. The amplifier output is 50 watts per channel with no more than 0.1 per cent total harmonic distortion. The unit weighs about 41 pounds, and it measures 22 $\frac{1}{4}$  x 6 $\frac{1}{4}$  x 17 $\frac{1}{4}$  inches. Price: \$750.

The AD-6350U cassette deck has specifications similar to the deck section of the AF-3090U except that wow and flutter is rated at 0.08 per cent. It weighs 17 pounds and measures 17 $\frac{3}{4}$  x 6 x 13 inches. Price: \$320.

Circle 129 on reader service card



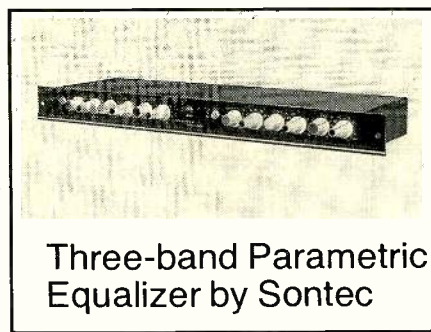
## Four New Speakers From Epicure

□ The Model 3.0 Trilogy (shown) at \$575 and the Model 120B at \$149 are the upper and lower ends of a new series of four EPI loudspeaker systems introduced by Epicure Products. The Trilogy is rather unusual in appearance—a tall, truncated pyramid covered with two grille sections on one side and another on top. The design is said to reduce time-delay distortion effects and increase power-handling ability while reducing distortion, especially at low frequencies. The three-way system incorporates a 1-inch tweeter, a 6-inch mid-range, and a 10-inch woofer with crossover points at 400 and 2,600 Hz. On-axis frequency response 3 meters from the measuring microphone is 32 to 20,000 Hz  $\pm$  3 dB. Minimum power requirement is 15 dBw (30 watts rms). Maximum power-handling ability is 20 dBw (100 watts) average with peaks to 27 dBw (500 watts). Nominal impedance is 4 ohms. The Trilogy occupies a 16 $\frac{1}{4}$ -inch square of floor space, measures 8 $\frac{1}{2}$  inches square at the top, and

stands 41 $\frac{3}{8}$  inches high. Its weight is 75 lbs.

The 120B is a two-way acoustic-suspension system of conventional appearance incorporating a 10-inch woofer and a 1-inch "air-spring" tweeter. The woofer is newly designed for lightness, rigidity, and increased efficiency. The 120B's frequency response is 38 to 20,000 Hz with a crossover frequency of 1,800 Hz, and tweeter volume is adjustable. Nominal impedance is 8 ohms, and the recommended power range is 25 to 80 watts rms. The unit is finished in wood-grain vinyl with bronze trim around the matte-black grille. It weighs 42 pounds and measures 25 x 15 x 11 inches.

Circle 130 on reader service card



## Three-band Parametric Equalizer by Sontec

□ The Sontec HF-230 is a three-band parametric equalizer with no more than 0.002 per cent total harmonic distortion from 20 to 20,000 Hz at any level from -30' to +24 dB. Intermodulation distortion does not exceed 0.002 per cent. Noise is 84 dB below a 1-volt output level, and 26 dB of headroom below clipping provides 110 dB of usable dynamic range. Frequency response is from d.c. (0 Hz) to beyond 1 MHz but is intentionally rolled off beyond 200 kHz at 6 dB per octave. The unit contains no transformers, capacitors, or integrated circuits in the signal path. Also, the upper- and lower-frequency sections can be converted into shelving equalizers.

The HF-230 contains three separate sections tunable to frequencies over the ranges 10 to 800 Hz, 100 to 8,000 Hz, and 400 to 25,600 Hz. Slope equalization is continuously variable from 4 to 14 dB per octave, and amplitude of the equalization peak is variable from -12 to +12 dB. It is possible to use the HF-230 for room tuning and compensation of loudspeaker faults as well as equalizing disc and tape playback and live performances. The unit weighs 6 pounds and measures 1 $\frac{3}{4}$  x 19 x 6 inches. Price: \$990.

Circle 131 on reader service card

NOTICE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturer.

Recent fluctuations in the value of the dollar will have an effect on the price of merchandise imported into this country. Please be aware that the prices quoted in this issue may be subject to change.

# Time and a bit of genius make the difference.

It wasn't easy to create the world's finest DC receiver. It took time. A great deal of it. For research. For development. For testing. And it also took a bit of genius -- the kind of genius that Sansui engineers are world famous for. But we at Sansui were determined. And we succeeded. So now there is a patent pending on Sansui's unique new DC amplifier circuitry.

The Sansui G-6000 DC receiver, like Sansui's entire G-line of DC receivers, incorporates this unique technology. It delivers music reproduction so superb you will actually hear the difference.

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With Sansui's DC amplifier circuitry you get better high frequency response. It goes all the way up to 200,000Hz, from main-in. Just try to find another receiver with frequency response this wide.

With Sansui's DC amplifier circuitry you also get fuller and faster response to musical transients. This is measured in slew rate and rise time. And the slew rate and rise time figures of the Sansui G-6000 are far better than those of any competitive models.

And with Sansui's DC amplifier circuitry there is virtually no distortion. While eliminating the capci-

tors, we've solved the time delay problem that causes transient intermodulation distortion (TIM). And total harmonic distortion is a mere 0.03% at full rated power: 65 watts/channel, min RMS, both channels driven into 8 ohms from 20-20,000Hz.

The Sansui G-6000 DC receiver is much more than its extraordinary amplifier circuitry. It is also a superb FM section, with excellent sensitivity, selectivity and signal-to-noise ratio, virtually without distortion.

The G-6000 also gives you high-technology protection circuitry that keeps both your speakers and receiver safe, always. It offers perfectly positioned and highly accurate power, tuning and signal meters. And human engineering, for greatest ease-of-operation. The G-6000 is also elegantly styled with a beautiful simulated walnut grain finish.

Listen to the G-6000 or any of Sansui's full line of DC receivers at your franchised Sansui dealer today. You'll easily hear the difference that Sansui DC makes.

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In Canada: Electronic Distributors

CIRCLE NO. 44 ON READER SERVICE CARD

## The Sansui G-6000 DC Receiver



## Specifications:

SPECIFICATIONS	NOMINAL	LIMIT
<b>AMPLIFIER SECTION:</b>		
Power output	—	75 Watt
THD at rated power %	—	0.25%
Power bandwidth at 8 OHMS	—	20–20,000 Hz
Frequency response RIAA deviation phono	30 to 20,000 ±0.5 dB	30 to 20,000 ±1 dB
Signal to noise ratio at 2.5 MV (dB)	75	70
Phono overload	200 MV	180 MV
<b>FM TUNER SECTION:</b>		
Usable sensitivity Mono UV at 300 OHMS	1.8	2.5
Usable sensitivity Stereo UV at 300 OHMS	3	5
50 db quieting sensitivity Mono UV at 300 OHMS	3	5
THD Mono & THD Stereo	0.2% & 0.35%	0.3% & 0.5%
Frequency response Hz	25 to 15,000	35 to 12,000
Capture ratio (dB)	1.5	2
Alternate channel selectivity (dB)	60	50
Image rejection (dB)	50	45
Stereo separation at one kHz (dB)	45	35

## Features:

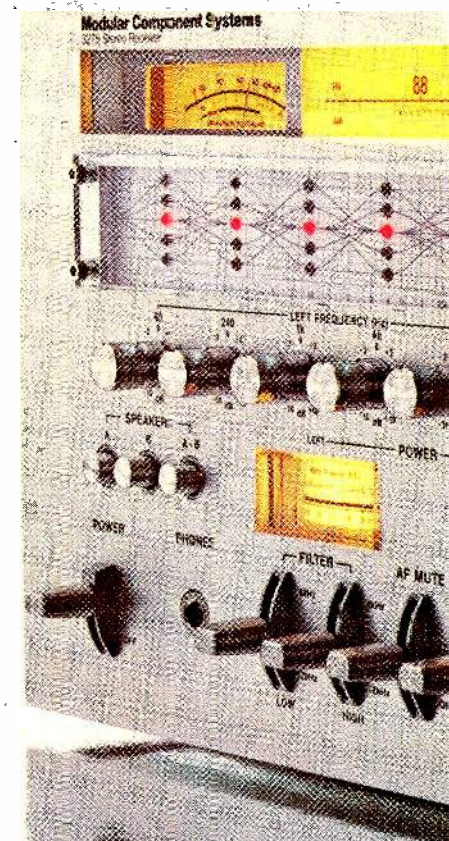
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Our "Tri-DC" design in the JVC JA-S55 and JA-S77 further eliminates distortion-causing capacitors within the DC phono equalizer, DC tone control and DC power amplifier sections, providing frequency response from 5Hz to 100kHz (+0, -1.0dB). And they have dual power supplies—not one for each channel, as in conventional designs—but one for the Class A-operated preamp/tone control section, and a second which performs even heavier duty for the Class B-operated DC power amplifier section. This unique design practically eliminates both inter- and intra-channel crosstalk and distortion, or what we call "sonic backlash." The results: increased tonal definition and brilliance, especially with high-level transient signals.

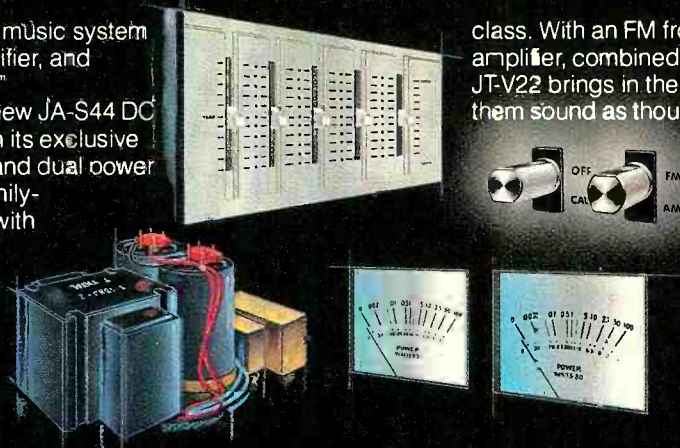
The new JVC JT-V22 AM/FM stereo tuner is a standout in its

class. With an FM front end that uses an FET RF amplifier, combined with a 3-gang tuning capacitor, the JT-V22 brings in the most timid FM stations and makes them sound as though they're just around the corner.

Or, if you're in an area where FM stations are a hairline away from each other on the dial, it delivers clear, interference-free reception. Then, to help you make sure you're on target, it has both signal strength and center-channel tuning meters.

Probably the most significant advance in recent FM tuner technology is JVC's Phase Tracking Loop circuitry in our new top model—JT-V77. This advanced circuit provides high signal-to-noise ratio as well as excellent interference rejection and freedom from multipath effects and adjacent channel interference. It's still another example of JVC's innovative engineering. But sounds speak louder than words. See and hear these magnificently-designed separates at your JVC dealer soon.

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Top: JA-S22 Bottom: JA-S55 Top: JT-V77 Bottom: JA-S77

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CIRCLE NO. 28 ON READER SERVICE CARD

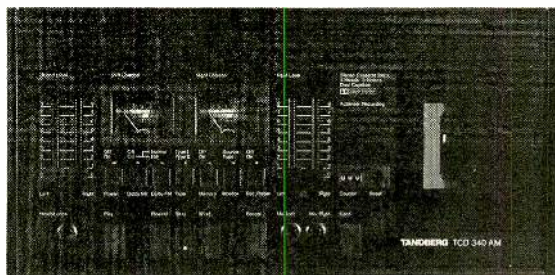


JT-V22, JA-S44

\*45 watts/channel, min. RMS 8 ohms, from 20Hz-20kHz, with no more than 0.02% THD. Rack-mount handles and wood-grain cabinets optional.

# Tape Talk

By Craig Stark



The new Tandberg cassette deck, one of the few capable of recording on metal tape, is forerunner of a new breed.

## FIRST TESTS: METAL-PARTICLE TAPE AND THE MACHINE TO HANDLE IT

AFTER more than a dozen years of intensive research and a highly confidential development program involving approximately one hundred recorder manufacturers, the first fine-metal-particle tape and the first consumer cassette deck capable of recording and erasing it have emerged from their respective laboratories.

The test results reported here are based on early pre-production samples of 3M's revolutionary new Metafine tape and the Tandberg Model TCD 340 AM cassette deck designed to handle it. The test figures should not be construed as defining the ultimate performance of either product, but they provide a fascinating preliminary look at tomorrow's state-of-the-art tape performance. Note that these are the first tests of this extraordinary new tape development ever conducted outside a manufacturer's own facilities. The Tandberg TCD 340 AM recorder is expected to be available about the time 3M's metal-alloy tape appears—perhaps before the end of this year.

Before getting involved with measurements, let's look at the special properties and requirements of the new tape. To the naked eye, the jet-black Metafine cassette tape looks very much like a chromium-dioxide formulation, and under an electron microscope its particles are said to appear roughly the same

size and shape as those of a high-grade ferric oxide. Chemically, however, the new Metafine magnetic material (and the presumably similar substances used in the "metal alloy" tapes of Fuji, Philips, TDK, Maxell, BASF, and others) is *not an oxide*, as all other tapes have been until now. Rather, the magnetic heart of the tape consists of fine, acicular (needle-shaped) iron particles that have been treated by a highly secret proprietary process to prevent their turning into an oxide when made into tape.

Whatever the mystery of their chemistry, the resulting particles have extraordinarily high *coercivity* and *retentivity*, the key characteristics engineers look at when assessing the magnetic potential of a material. Coercivity (abbreviated  $H_c$ ), measured in oersteds, constitutes an index of high-frequency performance at slow tape speeds and is an indicator of the bias and erase fields the tape will require. Technically, coercivity is a measure of the field necessary to *demagnetize* a tape fully, so its connection with high-frequency response may not at first be evident. The key to understanding the importance of coercivity is the realization that at slow speeds the treble frequencies tend to get erased as fast as they are recorded, because of the effects of the ultrasonic bias current and because their extremely close proximity to each other tends to cause mutual cancellation. This is why a large amount of treble boost is needed in the re-

coding process, and the equivalent of a treble boost is used in the playback process as well. (The low frequencies are relatively immune to self-erasure.) Since a high-coercivity tape is more resistant to erasure—and therefore treble *self-erasure*—high-coercivity tapes have a better treble performance.

The other key parameter, retentivity, is more obvious. Abbreviated  $B_r$  and measured in gauss, retentivity is simply a measure of how much magnetism a tape retains after being exposed to a very strong magnetic signal—such as it receives from a record head. (In my experience, high retentivity has also been associated with low distortion.) In any event, the more signal you can get to play back from the tape, the better your signal-to-noise ratio will be. While retentivity affects high frequencies, it is primarily associated with the low-frequency potential of a tape.

To put some numbers to it, the new 3M tape has a coercivity of 1,000 oersteds (compared with about 550 for a  $\text{CrO}_2$  type) with a retentivity of 3,400 gauss (compared with about 1,500 for top  $\text{CrO}_2$ -type tapes).

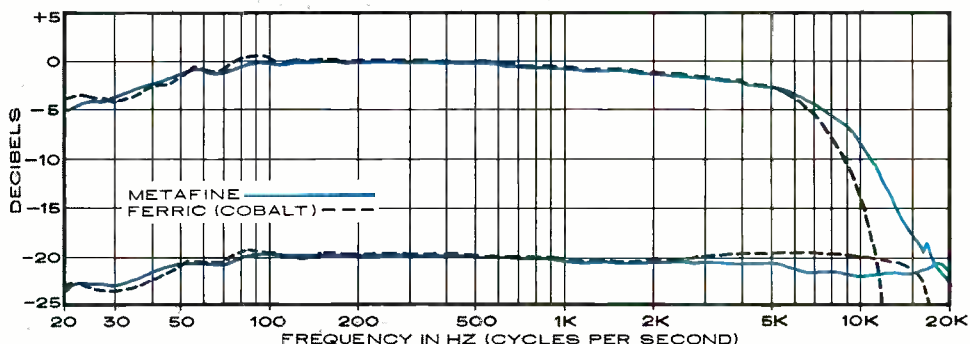
When chromium dioxide was first introduced, it did wonders for high-frequency performance over the then-current ferrics, but at low frequencies its output was, if anything, slightly lower—and its distortion was somewhat higher. The new metal-particle tape, by contrast, vastly exceeds both the high-end potential of chrome *and* the low-frequency retentivity of the top cobalt-treated ferrics of today.

THE fact that the new metal-particle tape requires approximately double the bias and erase currents of chrome (which itself requires about 1.5 times the bias of conventional ferric oxides) means that a whole new generation of recorders is needed to record and erase it. (You'll get some idea of the erasing difficulties when I say that I could not erase a sample of Metafine with a regular bulk eraser! It took a much heftier unit to do the job. The powerful erase circuitry of the new Tandberg deck was equal to the task, however.) New circuits are needed to supply the greater bias and erase current, and new tape heads must be used that can tolerate such large bias currents without going into magnetic saturation. Once a Metafine tape has been recorded, however, it can be played back on all conventional decks that have a chromium-dioxide (meaning 70-microsecond) playback-equalization switch position.

I did some preliminary tests of the new tape using the first consumer cassette deck capable of handling it: the Tandberg TCD 340 AM, a

(Continued overleaf)

With mid-range outputs made equal, the impressive potential of Metafine tape at high frequencies is clearly evident. In production samples the low-frequency augmentation should be just as dramatic.



## Tape Talk . . .

close cousin of the Model 330, which was reported on by Hirsch-Honuk Labs in the June 1977 issue of STEREO REVIEW. A three-motor, dual-capstan, three-head deck with full-logic controls and a host of other features [including an "Actilinear" recording amplifier (patent pending) designed to extend the signal-handling capacity of the recording system by about 20 dB and to reduce intermodulation distortion], the TCD 340 AM deserves far fuller description and comment than I can give it here. While the production models will be able to handle regular ferrics, extended-response types, and the new metal tapes, the pre-production sample I had was set up only for Metafine. Time permitted only a few quick cross-checks with some top-rated ferrics on a Tandberg TCD 340 A, the near twin of the TCD 340 AM save for metal-tape capacity.

In brief, it works—and then some! The accompanying graph shows both the new Metafine and a premium cobalt-treated 70-microsecond ferric tape recorded to produce a 315-Hz output at the international reference level of 250 nanowebers per meter (2 dB



above Dolby level) and at a level 20 dB below the reference. The difference between the two upper traces shows the enormously improved high-frequency headroom provided by the new 3M tape. Around 12,000 Hz, the output from Metafine is about 12.5 dB higher, and even at the -20-dB-level frequency response extends farther out. Despite its using a much thinner oxide coating than current premium tapes, low-frequency maximum-output level for 3 per cent third-harmonic distortion was 2 to 3 dB higher with the metal-particle tape. And as for signal-to-noise ratio (S/N), the figures for the Metafine/Tandberg combination speak for themselves. With the Dolby system operating, I measured an unweighted S/N of 59 dB, increasing to 68.8 and 69.5 dB with A and CCIR weighting, respectively. Tandberg's method of measurement, which compares the 315-Hz, 3 per cent distortion point against virgin (bulk-erased) tape noise, improved these ratios to 60.5, 72, and 73.4 dB, respectively.

Even in prototype measurements such as these, where the final optimizing and "tweaking" has not been done, the figures give some idea of what lies ahead in the very near future. 3M and Tandberg are the first with the new metal breed, but you can be sure they will not be the last.



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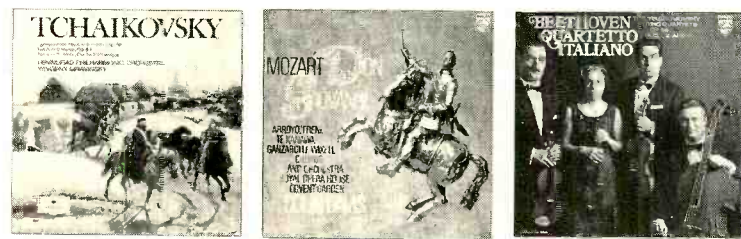


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# Audio News Views and Comment

## RFI UPDATE: LEGISLATIVE HEARINGS

SENATE Bill 864, which deals with the problem of radio-frequency interference (RFI) in consumer electronic equipment, was the subject of a hearing before the Senate Subcommittee on Communications on June 14. The principal witnesses were Representative Charles A. Vanik (D-Ohio), who is sponsoring a somewhat different RFI bill in the House; Charles D. Ferris, chairman of the FCC; Dr. John W. Lyons, director of the National Engineering Laboratory at the National Bureau of Standards; and Harry J. Dannels, president of the American Radio Relay League, the nation's largest amateur-radio organization.

Six additional witnesses took part in a panel presentation. The audiophile point of view was put forth by Len Feldman, who appeared in his capacity as technical director of the Institute of High Fidelity, by Ed Foster, chairman of the IHF Amplifier Standards Committee, and by this writer on behalf of *Stereophile* magazine. Rounding out the panel were an amateur-radio enthusiast from Virginia; counsel for a television broadcasters' trade group; and J. Edward Day, special counsel for the Consumer Electronics Group, Electronic Industries Association (CEG/EIA), representing TV-set manufacturers and others in the home-entertainment field. If Mr. Day's name sounds familiar, it should. He was Postmaster General in the Kennedy Administration. Senator Barry Goldwater (R-Ariz.), the sponsor of S. 864, served as chairman.

Senator Goldwater opened the hearing by announcing that he was still a firm believer in the free-enterprise system. Although he was sponsoring a bill that would give the FCC broad regulatory authority over the entire consumer-electronics industry, he said he hoped there would be no need to pass such a sweeping measure, that the mere prospect of government regulation would inspire the industry to work harder to find its own solutions to the RFI problem. He said that government regulation should be employed only as a last resort. This was at least mildly reassuring to opponents of the bill.

The first witness to testify was Charles Ferris of the Federal Communications Commission, who reported that the FCC staff was divided on the question of RFI legislation. Although the commissioners themselves unanimously supported the bill's objective of minimizing RFI in consumer-electronics equipment, they elected not to endorse passage of S. 864 at present for a number of reasons. In order to establish reasonable standards for RFI rejection, the FCC feels it needs more reliable data on the electromagnetic environment in which consumer devices typically operate. New measuring methods and new kinds of test equipment will be necessary for testing immunity to interference. FCC staff estimates of the cost of a suitable testing installation range from \$10,000 to \$500,000!

Another area of concern involves the expense to manufacturers of duplicating such a facility for the purpose of testing products un-

der development. Mr. Ferris pointed out that the costs would be so high that small manufacturers just entering the market would be at a substantial competitive disadvantage.

Mr. Ferris suggested that a voluntary product-labeling program such as one proposed in Canada might be feasible here. He also suggested that the FCC might start a consumer-education program stressing the importance of good installation practices. He concluded by recommending that the costs and benefits of alternative approaches be fully examined before any action is taken by Congress.

The second witness was Dr. John Lyons of the National Bureau of Standards. His testimony was interesting to engineers, but mystifying to everyone else. Dr. Lyons explained the difference between the near field and far field of a radiating device, and noted that it is extremely difficult to make accurate measurements of field strengths in the near field of an antenna. He reported that the NBS is planning to develop new instrumentation for this purpose. It is precisely this kind of equipment which would be needed if the FCC were to implement a thorough testing program to determine the RFI susceptibility of consumer-electronics devices.

Dr. Lyons was followed by Harry Dannels of the ARRL. The drive for RFI legislation has always been spearheaded by ARRL members, so there were no surprises in Mr. Dannels' statement in terms of content. There were, however, a few interesting touches in



the ARRL's presentation. Mr. Dannels produced a handful of small chokes, capacitors, and other electronic paraphernalia, including a piece of shielded cable. He asserted that these "protective components" could solve most RFI problems if properly installed in home-entertainment equipment. This use of "props" lent a novel air of theatricality to some otherwise unsurprising arguments.

The ARRL was also distributing reprints of a 1951 booklet on TV interference, a publication which purportedly showed how to solve almost any RFI problem. Unfortunately, the

ARRL people seem to be of the opinion that the kind of response-affecting filtering that may have been acceptable in audio devices of 1951 would be equally acceptable today. It is particularly ironic that they chose a TVI manual published in 1951, because it was in that very year that the then-small high-fidelity industry began to blossom.

**R**EGULAR readers of these pages are, no doubt, already familiar with the case against mandatory filtering in audio equipment. Mr. Foster, Mr. Feldman, and I all argued against S. 864. Our arguments were concerned as much with the quality compromises entailed in conventional RFI "cures" as with the cost increases that would result from extensive filtering. And Mr. Day, representing the EIA, stated that studies by the television manufacturing industry indicate that less than 20 per cent of TVI cases could be cured by an additional filter on the TV receiver.

In the middle of the panel discussion, Congressman Vanik arrived to give his testimony on the RFI situation. He stressed the growing magnitude of the RFI problem, noting that his office has received more mail on the RFI bill he is sponsoring in the House than it received on his work on the Ways and Means Committee. He also mentioned the possibility that regulatory authority of the kind envisioned in his bill might be incorporated in the new Communications Act now under consideration by the House Subcommittee on Communications. (The new act, when passed, would supersede the much-amended Communications Act of 1934, which forms the basis of our present system of radio regulation.)

When Mr. Vanik finished his testimony, I took advantage of the opportunity to point out a fundamental difference between his House bill (H.R. 8496) and Senator Goldwater's Senate bill. While S. 864 would allow the FCC to prescribe the use of specified "protective components" in various kinds of consumer-electronics products, H.R. 8496 would merely allow that agency to "establish minimum standards" for the reduction of RFI sensitivity. I stressed that this was no mere semantic difference, but rather a fundamental difference in approach. The language of the Vanik bill implicitly recognizes the fact that there are no panaceas for RFI, no simple cure-all measure that could prevent most or all kinds of interference.

**F**ELDMAN, Foster, and I all commented on the importance of proper installation of component systems in avoiding RFI. We also noted the unpredictable nature of problems resulting from the interconnecting of certain combinations of components and the difficulties simplistic filtering measures could create in terms of both sonic quality and stability of operation. As we expected, our position was challenged by the ARRL's Dannals.

The last speaker was the ham-radio operator. He related his personal experiences with RFI from his ham station afflicting the audio equipment of his neighbors. He attributed the problem to the allegedly shoddy engineering practices of some of the most respected companies in the high-fidelity field!

The hearing adjourned at 12:50 p.m. No important decisions were made during the proceeding, but at least a wide variety of views on the RFI question were aired. It is obvious that there are no easy answers to the interference problem.  
—Jack Hannold

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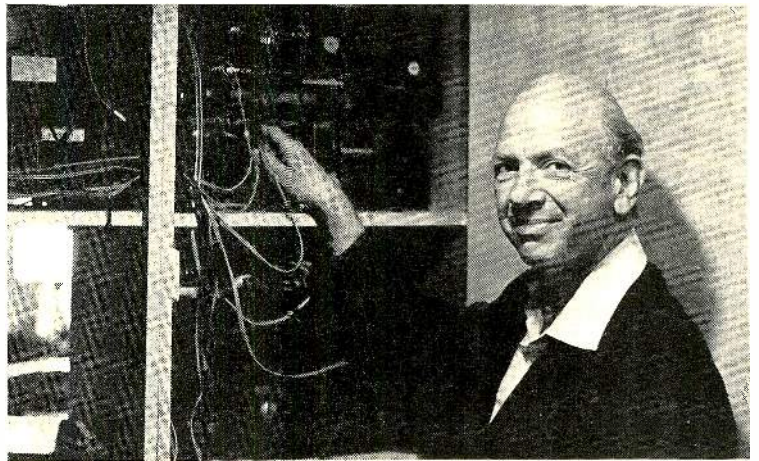


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# Technical Talk

By Julian D. Hirsch



## • Speaker Testing—Part 2 •

**L**AST month I discussed some of my basic philosophy of speaker testing and described in some detail how we measure the low-frequency response of a speaker system.

At higher frequencies, we try to obtain an overall contour of the speaker's power-output response rather than measure any of the "fine-grain" structure of its output, which in any case would not be possible in a live room. We use a "warble-tone" measurement to "break up" the standing-wave patterns as the General Radio response plotter slowly scans from 100 to 20,000 Hz. The frequency is smoothly shifted up and down over a  $\pm 50$ -Hz range as it is swept, and heavy damping is used on the writing pen of the chart recorder in order to smooth out the inevitable narrow-band output fluctuations of the speaker system operating in the room.

Actually, this is in lieu of a swept-filter analysis using 1/10-octave filters and a pink-noise test signal. Our sine-wave frequency-response plotter has been adapted to make a close approximation of the same test. The close correlation of our test data with other tests run by manufacturers *on the same speakers*, using reverberant chambers with random-noise signals or outdoor measurements with computer processing of hundreds of response readings taken at different microphone positions, has convinced us of the validity of our approach.

In our test, we locate the two speaker systems in a normal stereo configuration at the front of the room, with the microphone on axis about 12 feet from one speaker and about 30 degrees off axis about 15 feet from the other. The response measurement is made separately for the two speakers, but on the same chart. At most frequencies at which the response from one speaker rises (because of room resonances), it falls when measured from the other speaker. This is a strong indication that the response change is a function of room dimensions and is not inherent in the speaker. A smooth line averaging the two curves forms our mid- and high-frequency plot, which is then corrected for the microphone and room characteristics (previously obtained from our measurements of calibrated speaker systems).

Figure 1 shows the mid- and high-frequency

response curves obtained from the speaker whose bass response curve was shown last month. The speaker's level-balance controls were set to their "flattest" position (at maximum in this case, as in most others we have seen). Note that the two curves, measured from the left and right speakers, are markedly different at high frequencies, indicating a certain amount of directional "beaming" above 7,000 Hz. The averaged curve shows the 12,000-Hz peak in frequency response of our previous calibrated test microphone.

Potentially the most ambiguous part of the process is splicing the bass curve to the upper-frequency curve. Each has been plotted for more than an octave beyond its theoretical limits in an attempt to reduce this ambiguity. Sometimes the slope of the bass curve makes it very difficult to be certain where they should be joined. In this case, we rely on listening impressions of the "bassiness" of the sound to guide us. On the other hand, with some speakers the two curves overlap for about a decade of frequency (three octaves), which leaves no doubt about where to make the splice. We consider the resulting curve to be as nearly a "true frequency response" of the speaker as it is possible to obtain in terms of describing the frequency balance of its sound in a real listening room. In Figure 2, we have spliced the bass curve and the curve of Figure 1. The overall response of  $\pm 2.5$  dB from 37 to 15,000 Hz indicates that this is a very good speaker, and the overlap of the two curves from 100 to 700 Hz was virtually perfect. Not surprisingly, it sounds as good as its

curve suggests, in spite of its undistinguished high-frequency dispersion.

As a rule, we do not publish these curves in our speaker test reports. After considerable discussion, we decided that the interpretation of a basically non-standard measurement could be more confusing to the average reader than beneficial. One reason this is so is evident in Figure 3, a composite curve from a speaker whose sound is much better than the curve shape suggests. Its frequency-balance adjustments could be used to flatten out the curve significantly. However, we usually make our response measurements with the controls set as suggested by the manufacturer, which in this case did not yield the best sound. Since we had a complete family of curves on this speaker (whose high-frequency dispersion was outstanding) and had measured the range of the tweeter-balance control, we could judge the potential sound quality—and set the controls for it—more accurately than someone seeing only the composite frequency-response curve.

**S**o far, we have dealt with only one speaker measurement: frequency response. However, there is much, much more to the speaker-evaluation process, the question of distortion being particularly important. Distortion specifications are rarely applied to loudspeakers except at the low-bass frequencies. One reason for this is that conventional harmonic and intermodulation-distortion measurements are difficult to make—and even more difficult to evaluate—over most of the frequency range of a speaker system. IM tests are particularly problematical because the two test tones used are likely to be fed to at least two drivers simultaneously.

Most speaker systems use two or more drivers to cover the audio range. The output of each driver is more or less attenuated at frequencies outside its intended operating range. For example, a mid-range driver might cover from 800 to 3,000 Hz. Distortion components from an input signal near the low end of that range could be radiated by that driver, at least up to the third harmonic. However, a fundamental near the high-frequency end of the speaker's range could give a misleading impression of its distortion, since the harmon-

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### Tested This Month

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•  
Luxman R-1120 AM/FM Receiver  
Rotel RB-5000 Power Amplifier  
Advent/1 Speaker System  
Accuphase C-220 Disc Equalizer  
Aiwa AD-6800 Cassette Deck

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ics would be attenuated by the speaker's natural rolloff (not by the crossover network, which comes ahead of the driver).

A further complication is the fact that the irregular frequency response of any speaker above the bass range requires that any such measurement be made on a sweep basis in an anechoic environment. The instrumentation required for a swept distortion measurement, either harmonic or IM, is costly. For purposes of comparative evaluation of speakers (as distinct from the problem facing the speaker designer, for whom such tools are invaluable), its cost is hardly warranted. This is especially true because of the considerable controversy over the relative audibility of the different kinds of loudspeaker distortion.

We do measure distortion in the bass range, however. It can be measured with fair accuracy in a normal listening environment and with conventional laboratory equipment. And it does tell us something useful about the performance of a speaker system. Paradoxically, the actual distortion one measures in the bass region is of secondary importance. The real value of the measurement, as we make and use it, is to show how well the speaker maintains its acoustic coupling to its surroundings at low frequencies.

Most speakers fed a constant drive level will show a nearly constant harmonic-distortion reading as the frequency is reduced from 100 Hz (our upper limit for this test). At some frequency, such as 50 or 40 Hz, the distortion will begin to rise sharply, analogous to the clipping of an amplifier at its overload point. This frequency is not necessarily the useful lower limit of the speaker. Our measurement is made with a close microphone spacing like that used for the bass frequency-response measurement and for the same reason—to avoid interaction with room resonances. The result is approximately the anechoic response of the woofer, and in a real room one can expect to get better low-frequency response due to reinforcement from the room boundaries. The frequency at which the curve "breaks," however, does give us a good indication of the loudspeaker system's inherent low-frequency performance limitations.

We make this measurement by driving the speaker at a number of discrete frequencies, from 100 down to 20 Hz, with a constant 2.8-volt signal—which corresponds to a 1-watt input for a nominal 8-ohm system. The microphone output is connected directly to our spectrum analyzer, which displays the levels of the second and third harmonics. These are combined to obtain a THD figure (higher-order harmonics are almost never significant). The test is repeated at a drive level 10 dB higher, corresponding to a 10-watt input. The difference between the two curves is indicative of the power-handling ability of the woofer: if the distortion is much greater with the higher drive level, one can assume that the speaker will sound best with fairly low input levels. The bass distortion at 1- and 10-watt levels is measured in most systems. Of particular interest is the "break point" in the curve—the frequency *below* which the distortion suddenly rises. It is not feasible to extend a speaker's bass range below this point through the use of equalization since the distortion would then become excessive. We have also made this measurement with the drive level adjusted at each frequency to produce a constant output level equivalent to 90 dB measured at a distance of 1 meter. Such a

"Paradoxically, the actual distortion one measures in the bass region is of secondary importance."

curve does not convey any more information than the constant-input curves, except that the low-frequency "break" is usually much more abrupt. This measurement is not as convenient to make as the constant-drive measurement, and since it conveys no additional information that would be of help to the consumer, we do not use it in most cases.

When measuring the bass distortion of a ported system, we make separate measurements close to the woofer and close to the port opening, as we do with the frequency-response measurement. Using the combined bass frequency-response curve as a guide, we plot the distortion from the woofer cone at frequencies where it is the dominant factor in the total output, and from the port at the lower frequencies where its output is greater than that of the cone. If the two curves do not match up well, we make a smooth transition in the interest of clarity.

*Next month, I will deal with some of the less basic tests and measurements, such as those involving tone-burst, sensitivity, and impedance characteristics.*

This month's Test Reports begin overleaf.

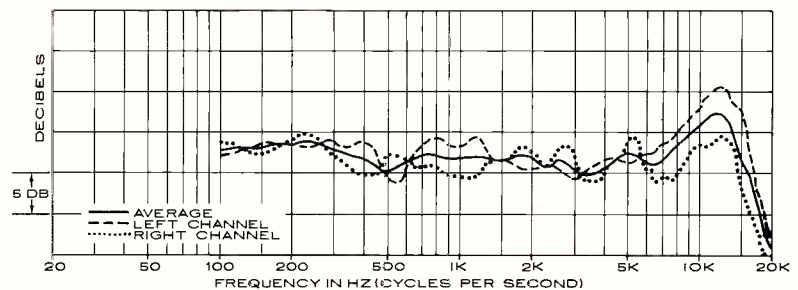


Figure 1. Mid- and high-frequency response curves of a speaker. The differences—particularly at 6,000 Hz and above—usually indicate some directional beaming.

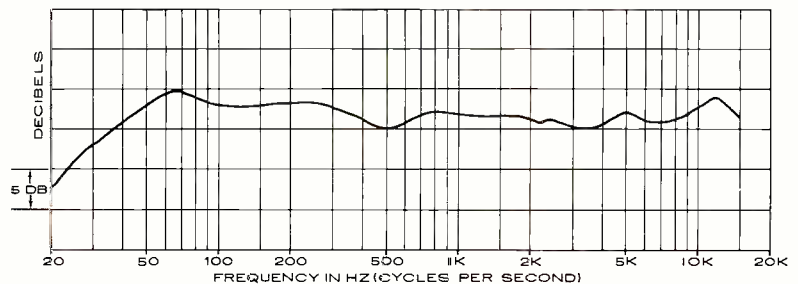


Figure 2. The averaged response curve from Figure 1 spliced to the bass-response curve. The measured overall response variation is  $\pm 2.5$  dB from 37 to 15,000 Hz.

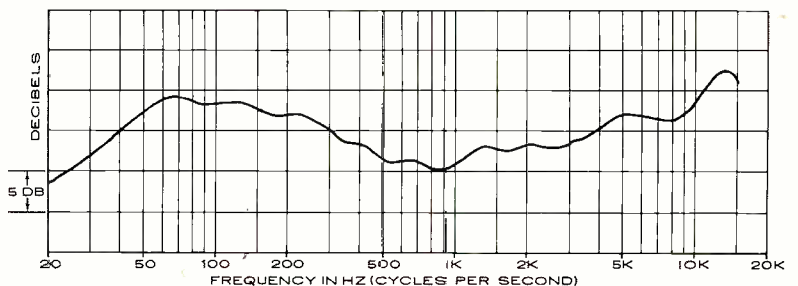


Figure 3. The composite response of a speaker whose sound is much better than the curve suggests. Controls were adjusted to manufacturer's suggested settings.

# Equipment Test Reports

By Hirsch-Houck Laboratories



**Luxman R-1120  
AM/FM Stereo Receiver**

**T**HE Luxman R-1120 is that company's finest and most powerful receiver, rated to deliver up to 120 watts per channel to 8-ohm loads between 20 and 20,000 Hz with no more than 0.03 per cent total harmonic distortion. The front panel of the R-1120, satin finished in pale bronze, is mostly devoted to a large glass-covered dial area in which are the FM and AM scales, two illuminated tuning meters, and a number of LED's. Two rows of LED's, one for each channel, are peak-power indicators, lighting up at power levels of -18, -15, -12, -9, -6, and 0 dB (where 0 dB is the rated 120 watts into 8 ohms). A pushbutton switch increases their sensitivity by 12 dB, so that the 0-dB light comes on at 7.5 watts and the -18-dB light glows at a mere 120 milliwatts output. Two additional LED's indicate stereo-FM reception and operation of an optional Dolby-FM decoder, which can be internally installed. When the decoder is installed, turning it on also changes the receiver's FM de-emphasis time constant to the required 25 microseconds. A large tuning knob dominates the center of the panel.

Across the top of the front panel, above the dial area, are a number of very small, unobtrusive controls. Three tiny pushbuttons turn on the Dolby system (when installed), turn off the FM muting, and set up the receiver to monitor the playback from a three-head tape deck (or simply to play back from any tape deck connected to its rear terminals). A fourth button selects the deck to be monitored from either of the two decks that the receiver can accommodate.

A small, knob-operated switch controls the recording inputs of the two recorders. It can select the receiver's normal program source or interconnect the two decks for dubbing from either one to the other. A similar switch selects normal or reversed stereo or the mono

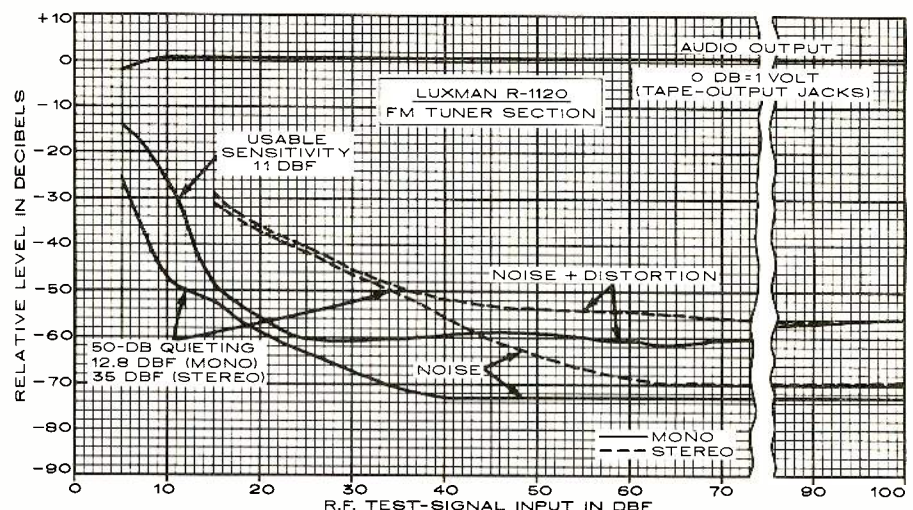
mode. To the right of these controls are five small pushbuttons for loudness compensation, the infrasonic, low-cut, and high-cut filters, and the LED power-display sensitivity increase. A larger button is the main a.c. power switch. Next to it is a tiny red LED signal light that blinks on and off at a 1-Hz rate for several seconds when the receiver is first turned on; when the operating voltages have stabilized, the outputs are connected to the speakers by a relay and the light goes out. If a d.c. voltage appears across the speaker outputs, whether due to a malfunction or to the amplifier's being overdriven, the speakers are instantly disconnected and the warning light comes on.

On the lower left of the panel is an input-selector switch with positions for AM, FM,

two magnetic-phono cartridges, and a high-level AUX input, plus two small tone-control knobs. These last are unusually convenient to use, since pulling out either knob changes the turnover frequency (at which its action becomes effective) by an octave. The bass turnover frequencies are 200 and 400 Hz, and the treble frequencies are 2,000 and 4,000 Hz. Each of the controls is detented at its center (flat) setting.

On the lower right of the panel are the volume control, with a concentric balance ring (both are continuous adjustments, but the balance control has a center detent), and the speaker-selector switch, with positions for controlling up to three pairs of speakers. Two pairs can be driven either singly or together, or they can be shut off for headphone listening via the front-panel jack. The third speaker position is for use with electrostatic speakers; with this setting, the R-1120 drives the speakers through a resistance-capacitance network that is apparently intended to stabilize the amplifier when driving highly capacitive loads (there is no clarification of this feature in the instruction manual).

The speaker outputs, in the rear of the receiver, are through insulated spring-loaded terminals that grip the end of the connecting wire securely. Near them is a small slide switch that turns off the front-panel LED power display. There are two a.c. outlets, one of them switched. The power transistors and their heat-sink fins extend from the rear of the receiver, but they are protected by a perforated metal cage. Near the FM antenna terminals (for 75- and 300-ohm antennas) are a hinged, ferrite-rod AM antenna and a switch that attenuates the antenna input to the FM tuner; the latter is for use when one is close to a powerful FM station that could overload the front end. A DIN socket duplicates the functions of one of the two sets of tape-recorder connections. *(Continued on page 47)*



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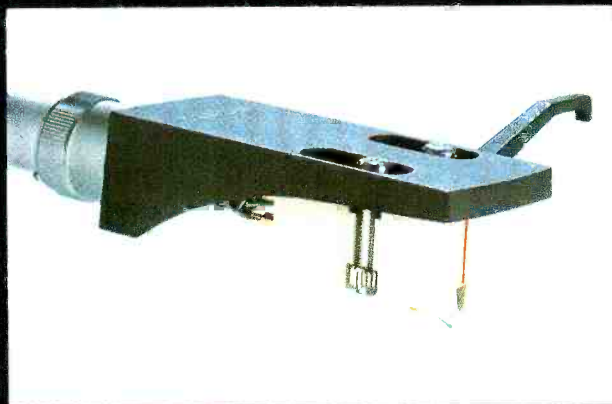
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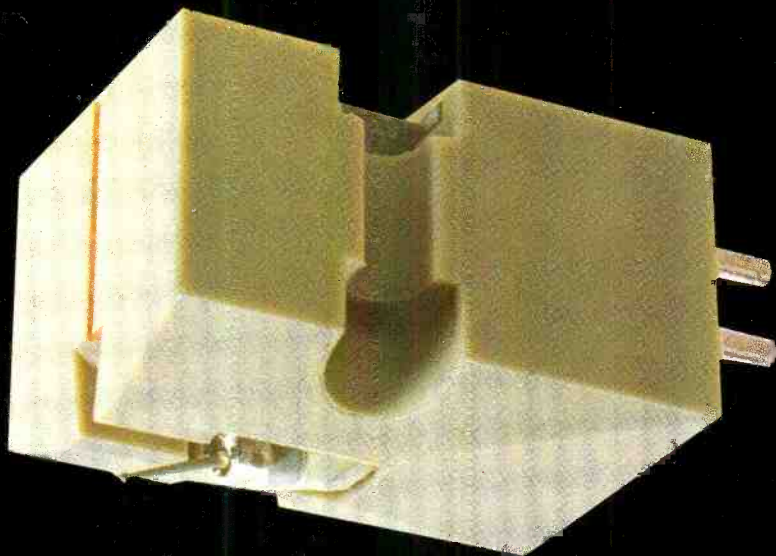
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# DENON

MODEL	DESCRIPTION	*PRICE
DP-755	Armless base; dir dr AC servo motor; detent on speed control	\$ 300
DP-1100	Economical direct drive AC turntable w/tonearm	280
DP-1200	Auto-lift/shutoff in simulated ash or mahogany base	375
DP-1250	Armless table with natural wood veneer	340
DP-1800	Natural marble base; dynamically damped tonearm	480
DP-2500	Quartz-locked; dynamically damped tonearm	525
DP-2550	Armless Quartz-locked in simulated ash & walnut	475
DP-2800	Quartz-locked TT in natural marble base with damped arm	675
DP-3500	Popular DP-3000 motor in natural walnut or ash veneer base	600
DP-6700	High performance quartz-locked DP-6000 motor w/DA-307 tonearm	1,060
DA-307	Dynamically damped static balance tonearm; magnetic anti-skate	255
DA-309	Economical version of DA-307 with improved damping	220
DL-103/T	DL-103 ccnical stylus MC cartridge w/AU-300 transformer	200
DL-103S	Moving coil type; modified shibata stylus	186
DL-103D	Moving coil type; elliptical stylus	267
AU-310	Moving coil transformer; 40 ohm impedance	95
AU-320	Moving coil transformer; 3 ohm & 40 ohm impedance	153
HA-1000	Head-amp for MC type cartridge	440
PCC-1000	Phono crosstalk cancellor	290
TU-501	AM/FM tuner to match PMA-501	340
PMA-501	50 + 50W integrated amp w/PCC	410
TU-850	Low distortion, high selectivity, 5 gang var. cap. tuner	480
PMA-850	85 + 85W integrated amp w/PCC; matches TU-850	800
PMA-830	65 + 65W; 15 + 15W class A integrated amp; matches TU-850	635
DR-350	Stereo cassette tape deck	450
DR-750	Professional quality tape deck	1,400
IR-8W	Vertical Sound Center	295

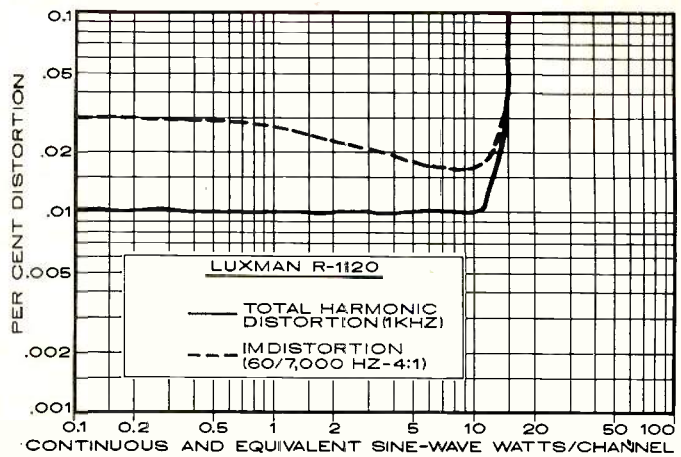
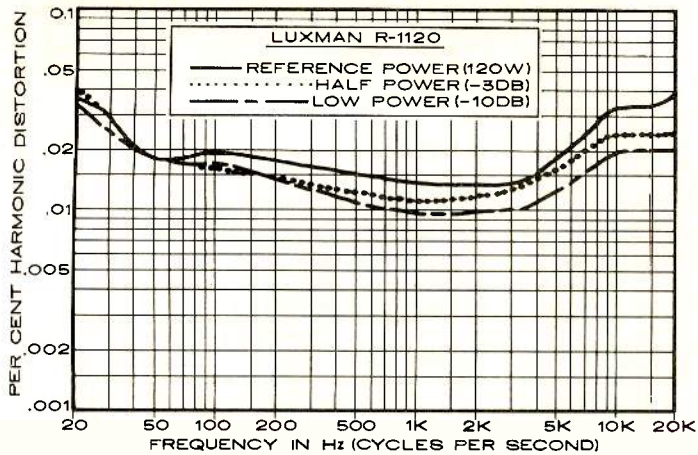
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## Vertical Sound Center

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The Luxman R-1120 is housed in a handsome rosewood-veneer wooden cabinet. Its overall dimensions are approximately 19¼ inches wide, 16¼ inches deep, and 7½ inches high, and the weight is about 37½ pounds. The suggested retail price is \$995. The Dolby decoder module is \$55.

● **Laboratory Measurements.** The preconditioning period of operation at one-third rated power caused heating of the metal grille on top of the receiver's cabinet, but elsewhere the unit remained cool. The output into 8 ohms, with both channels driven at 1,000 Hz, clipped at 144 watts per channel (IHF clipping headroom was 0.8 dB), and the power at clipping into 4- and 16-ohm loads was 159 and 97.5 watts per channel, respectively.

At 1,000 Hz, the total harmonic distortion (THD) was 0.01 per cent or less up to more than 100 watts output. It was only 0.011 per cent at 120 watts and 0.02 per cent at 140 watts. The IM distortion dropped from about 0.03 per cent at 0.1 watt output to 0.017 per cent in the 120-watt range before rising to 0.04 per cent at 150 watts.

At rated output, the THD was less than 0.02 per cent from 40 to 6,000 Hz, reaching its maximum points of 0.036 and 0.04 per cent at 20 and 20,000 Hz. At half and one-tenth power the distortion characteristics were similar, with slightly lower numerical readings. Although the full-power distortion measurements at the frequency extremes were marginally higher than the rated 0.03 per cent, the difference at the low end can be accounted for by the 0.02 per cent residual distortion of our signal generator at that frequency. It should be noted that our amplifier gain settings (which can affect some test results) were in accordance with the new IHF standard A-202, and the ratings of the R-1120 were established long before the issuance of that standard.

The sensitivity of the R-1120 amplifier for a reference 1-watt output was 15.5 millivolts (mV) through the AUX input and 0.22 mV through a phono input. The signal-to-noise ratio (S/N) was identical for both inputs, measuring 61 dB (with A weighting) referred to 1 watt. The phono-input stage overloaded at 162 mV, approximately as rated (this was a "worst-case" measurement, made at 20,000 Hz and converted to the equivalent level at 1,000 Hz). The IHF slew factor was 2.21 (when the amplifier was driven to its rated power at 1,000 Hz, the frequency had to be increased to 44,200 Hz before amplifier distortion

increased to 1 per cent). The IHF dynamic headroom was 2.13 dB, indicating that unclipped peak outputs of as much as 196 watts could be obtained during a tone burst of 20 milliseconds duration. The amplifier was stable with any capacitive load up to 2 microfarads in parallel with an 8-ohm resistive load (we did not, however, make any measurements through the electrostatic-speaker output terminals).

The power-output LED calibrations were sufficiently accurate for their purpose. The indications, for both channels were identical, and the instantaneous response of the LED's (as compared with meters) made them an effective indication of the actual peak-power output used in music listening.

The tone-control response curves provided the maximum degree of frequency compensation desirable from a conventional bass-treble tone-control configuration. When the 200- and 4,000-Hz turnover frequencies were used, the frequency response at the ends of the audio band could be modified considerably without affecting the mid-range or the overall sound balance. With the 400- and 2,000-Hz turnovers, the tone controls had a more conventional effect.

The low- and high-cut filters were excellent, with 12-dB-per-octave slopes and -3-dB response frequencies of 45 and 6,000 Hz. The main effect of the infrasonic filter was in a range too low for it to be measured; in the audio range it was about 1 dB down at 20 Hz. The loudness compensation boosted both low and high frequencies, and we found the effect

excessive. The RIAA phono equalization was accurate within +0, -1 dB from 50 to 20,000 Hz and was down 3 dB at 20 Hz. There was a very slight interaction of the phono equalization with phono-cartridge inductance, which boosted the output by about 0.6 dB between 5,000 and 20,000 Hz.

The FM tuner section of the R-1120 had a usable sensitivity of 11 dBf in mono and 15.7 dBf in stereo. The steep limiting curve gave a 50-dB quieting sensitivity of 12.8 dBf in mono and 35 dBf in stereo, with respective distortion readings of 1 and 0.35 per cent. At a 65-dBf input, the mono THD + Noise was about 0.09 per cent, with a S/N of 73 dB. In stereo, the distortion was 0.19 per cent and the S/N was 69.5 dB.

The stereo frequency response of the tuner section was within +0.6, -0.9 dB from 30 to 15,000 Hz. Channel separation was very uniform with frequency, about 42 dB from 30 to 500 Hz, slowly decreasing to 35 dB at 10,000 Hz and 32 dB at 15,000 Hz. At a 45-dBf input, the capture ratio was about 1.6 dB and the AM rejection was a good 66 dB. The image rejection was 86 dB, alternate-channel selectivity was 69 dB, and adjacent-channel selectivity was 6 dB. The muting and stereo thresholds were both at 14.8 dBf. In spite of the very flat audio-frequency response of the tuner section, the 19-kHz pilot carrier in its outputs was suppressed to a very low -78 dB. The hum level of the FM tuner section was also low at -72 dB.

The only measurement made of the AM tuner section was of its frequency response, which was very restricted. Although it had a better than average high-frequency response (down 6 dB at 5,500 Hz), the lows were inexcusably rolled off to -6 dB at 250 Hz.

#### NEW TEST METHODS

● **Hirsch-Houck Laboratories** is now using the Institute of High Fidelity's new *Standard Methods of Measurement for Audio Amplifiers* (IHF-A-202 1978). For convenience in making comparisons with previously tested products, we will correlate the new measurement results, when appropriate, with measurements made using our previous techniques. Copies of the new standard are available for \$7 from the Institute of High Fidelity, Dept. AS, 489 Fifth Avenue, New York, N. Y. 10017.

● **Comment.** The instruction manual does not specifically say so anywhere, but the R-1120 has a non-defeatable AFC system as an aid to its FM tuning. Only in the functional block diagram is this alluded to (as "FM tuning lock"), with no hint of its function. At any rate, although we usually take a dim view of non-defeatable AFC, this one is so subtle in its action that one must actively look for it to detect its presence. Only when a station has been tuned so closely that the channel-center meter pointer begins to enter the "tuned" center segment of the scale does the AFC come into action, pulling the tuning accurately in to the center.

Also, when we first placed the receiver into

service, the power-level LED's did not operate. We assumed that they were defective until an examination of the receiver turned up a barely visible switch in the rear, marked "PEAK IND," which had been accidentally moved to its off position during unpacking of the unit. Although this switch is shown on the control identification picture in the manual, its purpose is barely mentioned in the text, with no hint provided as to why one might wish to blank the display.

The only significant functional omission that we could find in the design of the R-1120 was the absence of separate preamplifier outputs and power-amplifier inputs, which we would have expected in a receiver of this quality and price.

We were impressed by the simplicity and functional beauty of the front-panel control layout, whose styling makes the little-used

controls almost invisible except under close examination. Except for the power switch, the operation of the receiver will normally be restricted to the few knob controls along the lower edge of the panel. However, we would have appreciated greater visibility for the markings that show the settings of the input and speaker-selector switches.

Overall, we had a strongly favorable reaction to the appearance, "feel," and sound of the Luxman R-1120. It shares with all the other Luxman products we have used the smoothness, elegance, and basic good taste that distinguish this brand from most of its competition. From the silky feel of the tuning control to the rich rosewood grain of the cabinet finish, this is a receiver meant to be seen, heard, and enjoyed. It is expensive, to be sure, but one is buying really first-rate performance plus some less tangible properties.

We have limited tolerance for products that behave in unexpected or undesirable ways (such as noises when switching, noise bursts when tuning across the FM band, vague or downright inaccurate FM-dial calibrations, and so forth). We are happy to report that the Luxman R-1120 was completely free of such anomalies. In spite of its occasional concessions to styling (the dial is calibrated only at 1-MHz intervals, for example), function has not really been sacrificed. The FM tuning was so accurate that we had no difficulty reading the station frequencies to the nearest 200 kHz directly from the dial. The sound of the R-1120, from both FM and phono sources, was impeccable—essentially determined by the quality of the program source rather than by any property of the receiver itself.

Circle 105 on reader service card



creates the sensitivity of the meter (and LED) displays by ten or one hundred times (10 and 20 dB); in the latter position, the lowest reading on the meters is only 5 milliwatts and a full-scale reading corresponds to 10 watts. The last switch is the LIMITER, which reduces the maximum output capability of the amplifier to either 25 or 50 per cent of the normal 500 watts.

The active circuits of the RB-500 are completely symmetrical (push-pull) from input to output and are direct-coupled, with the exception of a single blocking capacitor. The internal negative-feedback loops are completely direct-coupled as well. The only exception to the DC design is in the special balanced-input stage used with the Cannon connectors in the rear of the amplifier for interface with professional equipment having balanced signal lines. The balanced input of the RB-500 is electronic, employing FET's, instead of being transformer coupled. When the standard phono-jack inputs are used (as in any home system), a switch in the rear of the amplifier removes the balanced-input stages from the circuit. (It is interesting to note that the phono jacks on the RB-5000 are gold plated for reliable, corrosion-free contacts.)

The output stages operate in class AB. At power outputs up to 3 watts, they are biased for class-A operation, giving the lowest distortion. As the power increases beyond 3 watts, the operating conditions make a smooth transition to class AB.

The Rotel RB-5000 is really a "dual-mono-phononic" amplifier in that each channel has its own power supply, including a large toroidal transformer (about 6½ inches in diameter) and extensive regulator circuits. In addition, there is a third completely separate power supply for the amplifier's elaborate protective and display circuits. The RB-5000 is cooled by a slow-running, silent fan that operates at all times, automatically speeding up to provide the necessary extra cooling if the output-transistor temperature should rise excessively.

As might be expected, the Rotel RB-5000 is a very large, heavy amplifier (most of its weight, as well as its bulk, is associated with

(Continued on page 49)

NOT long ago, power amplifiers capable of delivering more than 200 watts per channel were a rarity; today, they are almost commonplace. However, the ranks of the super-power amplifiers thin out rapidly above 300 watts or so, and there are only a few in the 500-watt class. One of the most impressive of these giants is the new Rotel RB-5000, rated to deliver 500 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.009 per cent total harmonic distortion.

The RB-5000 is as imposing physically as it is electrically. The 8¾ x 19-inch satin-gold-finish front panel, styled to match other Rotel audio components, is slotted for rack mounting and fitted with a pair of appropriately robust handles. On the panel are two large meters calibrated in watts from 0.5 to 1,000. Behind a "blackout" window between the meters are two vertical rows of LED peak-power indicators (the meters respond to average power levels). The lights are calibrated at 3-dB intervals from -18 to +3 dB (0 dB is the amplifier's rated output). Between these rows are other LED's indicating STANDBY (the interval after power is first applied, during

which the outputs are muted to protect the speakers), PROTECTION (which lights when the amplifier's protective circuits are activated), and OVERLOAD (which indicates that the amplifier is being overdriven).

Across the bottom of the panel are a number of operating controls. Pushbuttons switch the power and connect the three pairs of speaker outputs (individually) through heavy-duty relays. Any two of the speaker buttons can be engaged simultaneously, but they are electrically interlocked so that pressing a third button will have no effect (a red LED above each button indicates that its speaker output is being driven). Under the center indicator panel are two level-control knobs and a lever switch that completely removes the input signal when it is operated. The level knobs, which are lightly detented, provide up to 21 dB of attenuation in 1-dB steps.

At the lower right of the panel are three knob controls. The FILTER switch has positions marked LAB TEST, NORMAL, and LOW FILTER. These provide three degrees of low-frequency rolloff for different applications. The METER SENSITIVITY switch in-



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While there's a lot of controversy over who makes the world's best tape deck, there's very little over who makes the world's best tape.

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widest frequency response, the highest signal-to-noise ratio and the lowest distortion of any tape you can buy. In fact, people who own the finest high-performance tape equipment use our

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So why buy one of the world's finest tape decks and get less than the world's best sound.

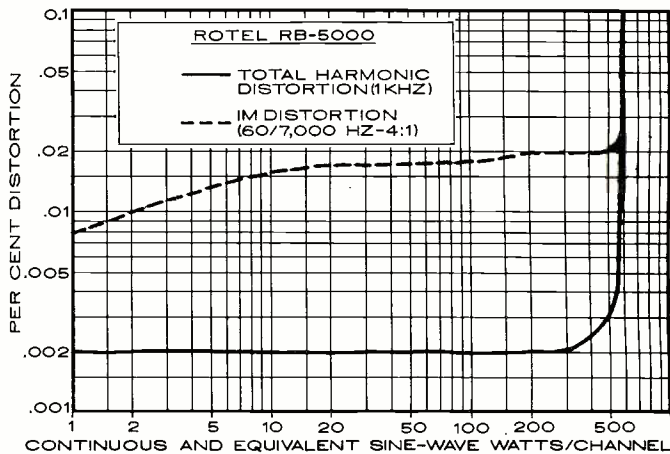
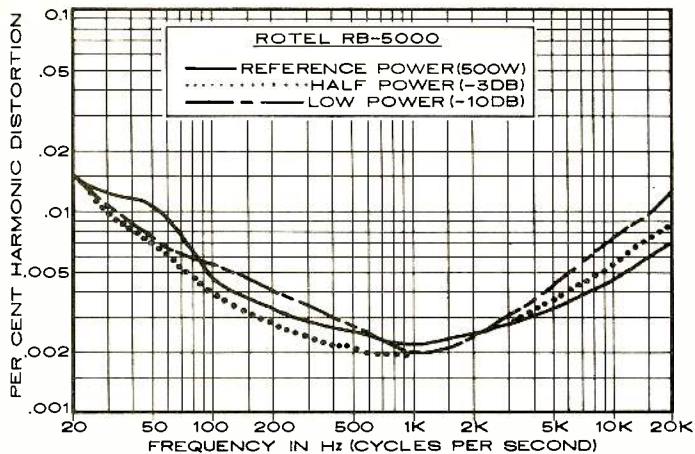
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the huge power supply). It extends some 17½ inches behind the front panel (including four large rubber feet on the rear apron that make it possible to stand the amplifier on its back without damaging the speaker terminals). The speaker connectors are large, heavy-duty binding posts able to grip any gauge of speaker wire securely. The heavy-duty power cable has a molded three-wire plug. It should be noted that this amplifier cannot be switched from any preamplifier since it draws a maximum of 3,200 watts (!) from a 120-volt power line. In addition, it cannot even be powered from a standard home-lighting circuit (rated at 15 or 20 amperes) if one expects to use its full power capability.

Rotel has cleverly included a pair of small caster wheels under the rear of the amplifier, next to the bottom rubber feet. By lifting up slightly on the front-panel handles, one can roll the amplifier easily on the casters—a feature we greeted with hearty approval in view of the unit's 117-pound weight. Suggested retail price of the Rotel RB-5000 is \$2,650.

● **Laboratory Measurements.** Since the Rotel RB-5000 draws too much power from the a.c. line to be operated with both channels running simultaneously at full power, we made all of our measurements with only one channel driven. Because of the use of separate power supplies for the two channels, this is a perfectly valid test procedure. However, the unit was given the required FTC preconditioning period, with both channels driven at one-third power (167 watts) into 8-ohm loads for one hour. The amplifier became only moderately warm, and the fan remained in its low-speed mode.

The 1,000-Hz output at the clipping point, into an 8-ohm load, was 595 watts. The 4- and 16-ohm outputs were 900 and 302 watts, respectively. The IHF clipping headroom (8 ohms) was 0.76 dB. With the prescribed 20-millisecond tone-burst signal, the IHF dynamic headroom was 1.1 dB. This confirms the excellent regulation of the power supplies of the RB-5000, since the clipping output for a tone burst was only 625 watts, as compared with the 595-watt continuous output.

The 1,000-Hz total harmonic distortion (THD) was unmeasurable over most of the amplifier's operating power range. It read the residual 0.002 per cent distortion of our test instruments from 0.1 watt to more than 300 watts output before climbing slowly to 0.004 per cent at 500 watts and 0.089 per cent at 600

watts, the clipping point. The IM distortion was less than 0.01 per cent in the vicinity of 1 watt and about 0.02 per cent up to 500 watts output.

At rated or lower power levels, the THD reading was at its minimum of 0.002 per cent at 1,000 Hz, rising at lower frequencies to 0.015 per cent at 20 Hz (this is the residual of the test equipment at that frequency, so it may be assumed that the distortion of the amplifier was much lower). At higher frequencies, the distortion also rose, to 0.007 per cent at 20,000 Hz and full power. It was slightly more (0.0085 per cent) at half power, and the measurement of 0.013 per cent at one-tenth power and 20,000 Hz was the highest bona fide distortion reading we obtained during our test of the amplifier!

The input sensitivity of the RB-5000 was 66 millivolts (mV) for a reference 1-watt output at maximum gain and 750 mV at minimum gain. The unweighted noise level was 73 dB below 1 watt at maximum gain and -64 dB at minimum gain (we did not subject our active A-weighting network to the possibility of accidental damage by connecting it to the output of the amplifier).

The IHF intermodulation distortion was measured with two tones of equal amplitude, 1,000 Hz apart, over a frequency range of 2,500 to 20,000 Hz. The difference-tone distortion was -76 dB relative to a 500-watt equivalent single-tone output at the highest frequency and -81 dB at 7,500 Hz and lower frequencies. The third-order distortion components were -67 dB at 20,000 Hz and -86 dB at 2,500 Hz, also referred to 500 watts of equivalent sine-wave power.

The frequency response of the RB-5000 was flat over the audio range and considerably beyond it. With the FILTER switch at its LAB TEST setting, the response was down 0.4 dB at 10 Hz and 1 dB at 5 Hz. With the NORMAL setting, the lows were down 0.6 dB at 20 Hz, 2.5 dB at 10 Hz, and 6.5 dB at 5 Hz. The LOW FILTER setting gave only slightly less output: -1.2 dB at 20 Hz and -9.7 dB at 5 Hz. In all the filter conditions, the high-frequency response was the same, down 0.2 dB at 50,000 Hz and 1 dB at 135,000 Hz. The amplifier rise time was 1.5 microseconds, and its slew rate was 30 volts per microsecond. It was completely stable with capacitive loads as large as

(Continued on page 52)



... But then when I offered to put on a video cassette, she turned down Blondes in Black Lace, Hard Bargain, and Every Inch a Lady and chose . . . Patton!"

# THE DREAM COMPONENTS



## A tape deck that thinks, a turntable steady as a rock, a receiver that protects itself, and more.

In your dream you hear beautiful music coming from a high fidelity system. All the components have the same name on them.

Impossible? Only if you believe there's one "best" maker for each type of component. Once, perhaps. But today no one has a monopoly on technological excellence. You'll find the Optonica® name on entire systems of the world's most advanced components, with innovations—our own

new circuits and features— you might expect to find only in a dream.

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just like granite. It is, in fact, mikage granite, which will transmit exactly the correct amount of vibration to the tone arm: none.

You might furnish your dream with a new Optonica receiver or separates, the only ones in the world built with aircheck calibration, Opto-lock tuning, triple power supply designs, and three protection circuits.

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history. Optonica CP-5151's incorporate a unique new tweeter. It weighs just about 1/50th as much as a comparable "dome"-type tweeter, and its sound is incomparable.

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2 microfarads in parallel with the 8-ohm resistor load. When we drove the amplifier into overload with square waves, its protective circuits shut it down. It was necessary to turn the power off and on again to restore the amplifier to operation when this occurred.

When we investigated the operation of the POWER LIMITER, we found that it caused the amplifier to clip at the indicated levels (125 or 250 watts). In effect, it reduced the amplifier power rating to those values, since it did not allow short signal bursts to pass through at higher levels.

The power-meter calibration was quite accurate—within a few per cent except at the lowest readings. The LED peak indicators were almost as accurate. Their relationship was fixed in relation to the meter readings, so that they were also controlled by the meter-range switch.

● **Comment.** Our first reaction to the Rotel RB-5000 was, "Who would use an amplifier like this in a home music system?" Clearly, its major application must be in very high-quality sound reinforcement and discotheque service. Nevertheless, there will surely be some people who will use it in a home music system, and we can assure this limited group that they will be using one of the most refined and overwhelmingly impressive power amplifiers we have seen.

Little need be said about its electrical performance, which is well beyond the ability of available test equipment to measure with any accuracy. We were always aware that we were dealing with a device that could easily destroy any home speaker system if not treated with respect. In our use tests, in fact, it demolished some supposedly "burnout proof" speakers, solely through our own foolhardiness in trying to see how loud 500 watts "sounded."

Considering the power of this amplifier, which can deliver close to 1,000 watts per channel to 4-ohm speakers for an indefinite period (certain to be set by the speakers rather than the amplifier), it runs amazingly cool. It has one of the most effective cooling systems we have seen, and it never became more than mildly warm in our tests—and not even that in normal operation. Best of all (for those who will insist on using it at home), the fan cannot be heard under any conditions. We could not believe that it *had* a fan until we placed a hand over the output-transistor heat sinks and felt a gentle, warm breeze. Since the fan never went into its high-speed mode, we cannot comment on its ultimate loudness, but it is a safe assumption that the sound of the program would mask it effectively in that unlikely event.

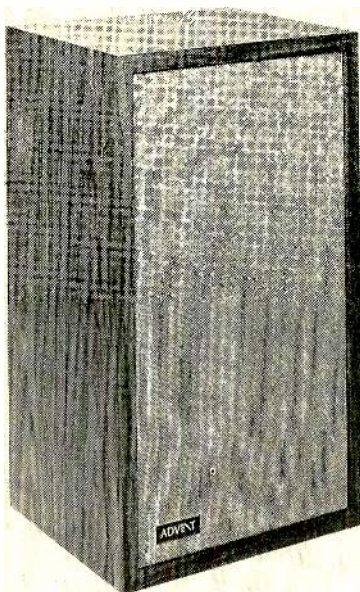
Although it is obvious that the Rotel RB-5000 is meant for heavy-duty commercial

service, it is just as obviously *styled* for home use, despite the fact that its size, weight, cost, and power consumption rule it out for almost all home installations. If its power limiter had been designed to pass full power for some short period, such as a few milliseconds, before clamping the power output to a safe value, we would have a different view of this feature. As it is, the limiter is merely a means of converting the RB-5000 into the world's largest, heaviest, and most expensive 125- or 250-watt amplifier!

Nevertheless, Rotel has demonstrated very dramatically how a state-of-the-art super-power amplifier can be designed to be attractive, reasonably compact, and apparently utterly immune to damage or destruction. (A number of amplifiers in the past have not fared so well under the conditions to which we exposed the RB-5000.) It is too bad that it still takes two men to lift it, but that, too, should be no problem in a fixed, commercial installation. At one time the word "heavy" was used among rock fans to indicate that someone or something had special desirable, significant, or awesome properties. If the expression has faded from use, we think it is worth reviving if only for the RB-5000, a product that is "heavy" in every sense of the word!

Circle 106 on reader service card

## Advent/1 Speaker System



**T**HE Advent/1 is roughly the size of the Smaller Advent Loudspeaker that preceded it, with overall dimensions of 22 x 13¼ x 9¼ inches and a weight of 29 pounds, and it is also a two-way acoustic-suspension system. Beyond that, it is completely different from the Smaller Advent. Its bass driver

(which is identical to that used in the larger Advent speakers) has a 10-inch cone treated and stiffened to minimize "breakup" effects in the upper part of its operating frequency range. The in-box resonance is 52 Hz in the Advent/1, as compared with 43 Hz in the New Advent and Powered Advent speakers, and

hence its frequency response is down slightly at the lowest bass frequencies (about 2.5 dB at 32 Hz) compared with these larger Advent speakers.

At 1,500 Hz there is a crossover to a newly designed tweeter. Its center dome, about ¾ inch in diameter, radiates at the highest frequencies, but the doughnut-shaped surround increases the effective diameter to 1¾ inches at the lower end of its frequency range. The new tweeter (which is also identical to that used in the larger Advent speakers) has been designed for high efficiency, low distortion, and increased power-handling ability. To this end, its magnetic gap is filled with magnetic fluid (ferrofluid) that helps to conduct heat away from the voice coil, which is wound on an anodized-aluminum bobbin for better heat conduction. The ferrofluid also helps damp the tweeter resonance. The new tweeter has more than twice the power-handling ability of its predecessor, as well as being twice as efficient. As a result, it can deliver about 6 dB more output (a four-fold increase) than the tweeter that was used in the original Advent speakers.

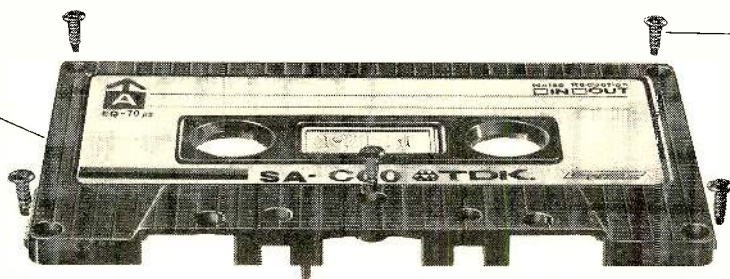
The Advent/1's woofer response is allowed to roll off naturally at the higher frequencies, although there is a small inductor (0.3 millihenry) in series with it to shape its response in the crossover region. The low-frequency tweeter output is rolled off at 6 dB per octave by a single series capacitor to minimize phase shift and make a smoother blend of sound through the crossover region. The levels of the tweeter and woofer are internally matched, and there are no external user-adjustable controls. (Continued on page 54)

# To get a superb performance, you need a precision machine.

To command a great performance, a cassette shell and cassette tape must be engineered to the most rigorous standards.

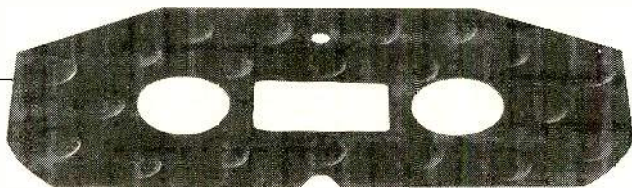
Which explains why we get so finicky about details. Consider:

**Precision Molded Cassette Shells**—are made by continuously monitored injection molding that virtually assures a mirror-image parallel match. That's insurance against signal overlap or channel loss in record or playback from A to B sides. Further insurance: high impact styrene that resists temperature extremes and sudden stress.

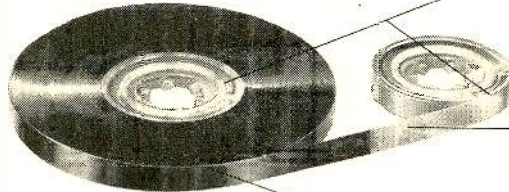


**Five-Screw Assembly**—for practically guaranteed warp-free mating of the cassette halves. Then nothing—no dust or tape snags—can come between the tape and a perfect performance.

**An Ingenious Bubble Surface Liner Sheet**—commands the tape to follow a consistent running angle with gentle, fingertip-embossed cushions. Costly lubricants forestall drag, shedding, friction, edgewear, and annoying squeal. Checks channel loss and dropouts.



**Perfectly Circular Hubs and Double Clamp System**—insures there is no deviation from circularity that could result in tape tension variation producing wow and flutter and dropouts. The clamp wedges the tape to the hub with a curvature impeccably matched to the hub's perimeter.



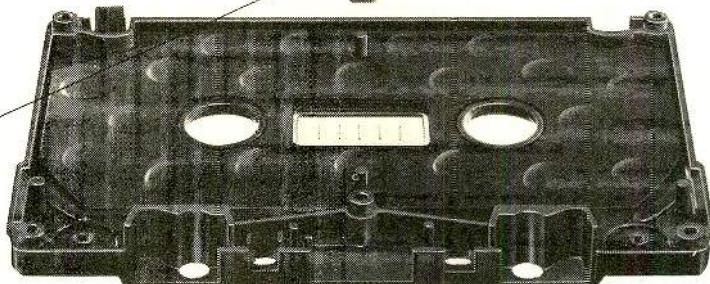
**Head Cleaning Leader Tape**—knocks off foreign matter that might interfere with superior tape performance, and prepares the heads for...

**Tapered, Flanged Rollers**—direct the tape from the hubs and program it against any up and down movement on its path towards the heads. Stainless steel pins minimize friction and avert wow and flutter, channel loss.



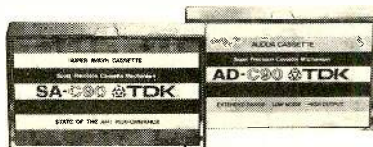
**Our famous SA and AD Tape Performance**—two of the finest tapes money can procure are securely housed inside our cassette shells. SA (Super Avilyn) is the tape most deck manufacturers use as their reference for the High (CrO<sub>2</sub>) bias position. And the new Normal bias AD, the tape with a hot high end, is perfect for any type of music, in any deck. And that extra lift is perfect for noise reduction tracking.

**Resilient Pressure Pad and Holding System**—spring-mounted felt helps maintain tape contact at dead center on the head gap. Elegant interlocking pins moor the spring to the shell, and resist lateral slipping.



TDK Cassettes—despite all we put into them, we don't ask you to put out a lot for them. Visit your TDK dealer and discover how inexpensive it is to fight dropouts, level variation, channel loss, jamming, and other problems that interfere with musical enjoyment. Our full lifetime warranty\* is your assurance that our machine is the

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\*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.

The published specifications of the Advent/1 are limited to the most basic ratings. Its crossover frequency is 1,500 Hz, the nominal impedance rating is 8 ohms, and the suggested minimum amplifier-power rating is 15 watts. It is available in either a walnut-grain vinyl finish or genuine walnut veneer. Price: vinyl finish, \$99.95; wood finish, \$120.

● **Laboratory Measurements.** The composite frequency response of the Advent/1 was smooth and wide. In our measurements, it varied only  $\pm 3.5$  dB from its mid-range level between the limits of 40 and 20,000 Hz. The bass output, in a close-miked measurement, fell at the expected rate of 12 dB per octave below about 60 Hz (the maximum woofer output occurred at 65 Hz).

There was no sign of any crossover irregularities in our semi-reverberant room measurement, but the average tweeter output was about 2.5 dB higher than the 1,000-Hz response we used as a reference level. The tweeter output began to roll off above 13,000 Hz but remained fully effective up to our 20,000-Hz measurement limit. The dispersion of the new tweeter was excellent, with nearly the same response being measured on and about 30 degrees off the speaker axis.

The bass distortion at a 1-watt nominal input was very low—only about 0.3 per cent from 100 down to 60 Hz and 0.9 per cent at 50 Hz. It rose at lower frequencies—to 3 per cent at 40 Hz and 10 per cent at 30 Hz. When we increased the drive level to 10 watts the distortion increased substantially, measuring 3 per cent at 90 Hz and from 6 to 14 per cent at most lower frequencies.

Our measurement of the speaker impedance indicates that it should be rated at either 4 or 5 rather than 8 ohms. The impedance was 5 ohms at 20 Hz, rising to about 18 ohms at 55 Hz and falling to 5 ohms in the 100- to 200-Hz range. After rising to about 12 ohms in the 1,000-Hz region, it fell to a minimum of 4 ohms at all frequencies above 5,000 Hz. The sensitivity of the Advent/1 was fairly high for an acoustic-suspension system, so that it delivered an 89-dB sound-pressure level at a distance of 1 meter when driven by 2.8 volts of random noise in the octave centered at 1,000 Hz. This is 1 watt based on the 8-ohm rated impedance, but it would correspond to about

2 watts if the speaker carried the more accurate 4-ohm rating.

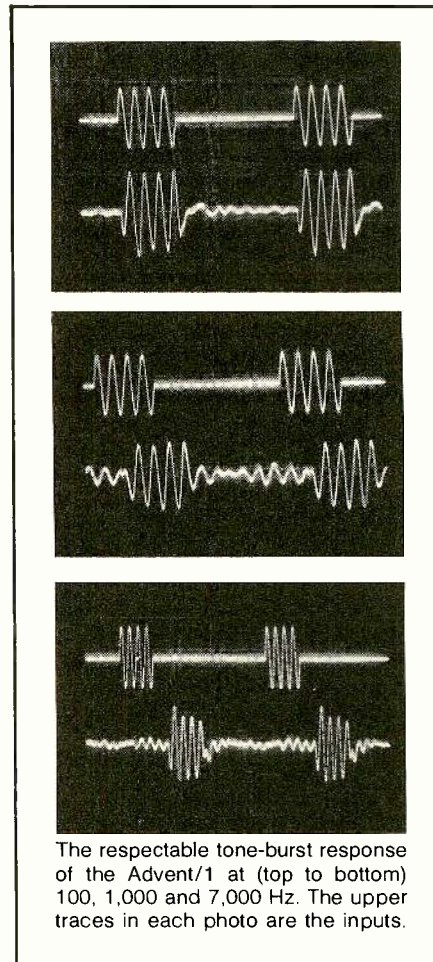
The tone-burst response appeared to be good at all frequencies. Although the intervals between bursts were partly filled in by room reflections at many frequencies, the actual starts and stops of the bursts were distinct and without signs of sustained ringing or other unwanted effects.

● **Comment.** The design goal of the Advent loudspeakers has always been to provide a smooth octave-to-octave sound balance by careful matching of driver and crossover characteristics so as to produce an accurate response with the widest range of music and recordings. In other words, Advent speakers are not designed to sound flashy or impressive nor to cater to any of the current fads in sound reproduction.

Although we had a fairly good idea of the quality of sound to expect from an Advent speaker, we were nevertheless pleasantly surprised by what we heard from the Advent/1. Compared with some other excellent acoustic-suspension speakers, it had a slightly crisper top end, and there was a striking absence of the kind of heaviness in the lower mid-range or upper bass that causes many older-design acoustic-suspension systems to sound muddy or muffled compared with more recent ones. There was certainly no obvious loss of deep-bass output; a slight attenuation could be heard only with program material having a considerable output below 40 Hz, and then only in direct A-B comparison with speakers having a strong output in that range. Overall, the sound of the Advent/1 could be described as clean, tight, and smooth, definitely in accord with the company's expressed aims.

The bass distortion of the Advent/1 at 10 watts suggests that this is not a speaker one would use with the expectation of lease-breaking or to obtain facsimile reproduction of bass-drum or pipe-organ sounds (although it is only fair to point out that the bass distortion, even at that rather high level, was not particularly audible on sine-wave signals, and therefore would be even less so with music).

Advent suggests fusing the Advent/1 when it is driven from large amplifiers. With that precaution, it should be compatible with al-



The respectable tone-burst response of the Advent/1 at (top to bottom) 100, 1,000 and 7,000 Hz. The upper traces in each photo are the inputs.

most every good-quality amplifier or receiver on the market. When one considers the total impact of inflation in the years since the introduction of the original Smaller Advent Loudspeaker, it is clear that, in terms of what today's dollar will buy, the Advent/1 is a lot more speaker for less money. Without question, it is a fine speaker at an excellent price.

Circle 107 on reader service card



Accuphase C-220  
Stereo Disc Equalizer

**T**HE search for perfection in sound reproduction can take many forms, most of them involving some compromise with convenience as well as a high cost. Nevertheless, there are a number of dedicated enthusiasts who will spare no effort or expense in their search for the ultimate in high fidelity.

In that regard, there is a recent trend toward using "outboard" phono preamplifiers. These devices are based on the assumption that the phono stages built into one's present amplifier or receiver are inferior in some important respects, so that an audible improvement can be obtained by employing an external phono preamplifier section. These preamplifiers usually deliver an output level

(Continued on page 58)

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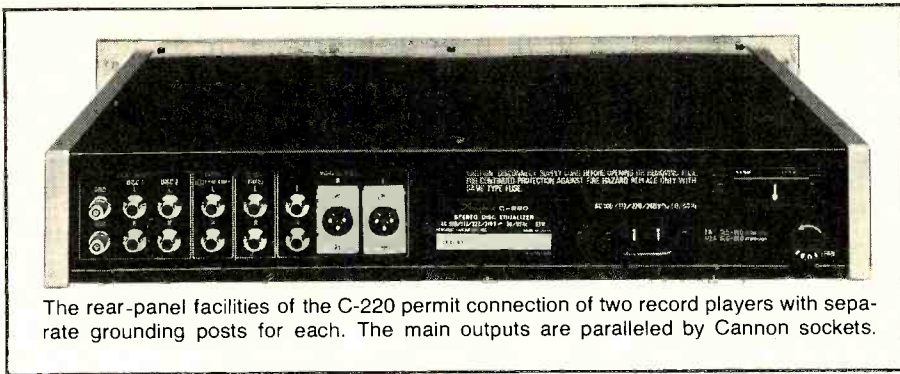
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The rear-panel facilities of the C-220 permit connection of two record players with separate grounding posts for each. The main outputs are paralleled by Cannon sockets.

on the order of 1 volt, which is suitable for driving the high-level input of any amplifier. They should not be confused with the preamplifiers or "head amplifiers" meant for use with low-output, moving-coil cartridges—these are unequalized gain stages that drive the normal phono inputs of an amplifier. However, some outboard phono preamplifiers also include a pre-amplifier circuit.

Most phono preamplifiers are priced between \$100 and \$200, but we recently had the opportunity to test what is probably the most costly and extravagantly designed special-purpose preamplifier on the market. The Accuphase C-220, a product of Kenonic Laboratories (distributed in this country by Teac), is a rather remarkable product, not only for what it does and how well it does it, but also for its extreme circuit complexity.

The Accuphase C-220 Stereo Disc Equalizer (to give it its full name) is meant for use with an existing preamplifier (or integrated amplifier or receiver) whose phono performance is felt to be in some way in need of improvement. The regular preamplifier's normal output connects to the C-220, which contains its own phono preamplifiers and switching circuits and whose output goes to the power amplifier. When the C-220 is switched off, the regular preamplifier is connected to the power amplifier in the normal manner. For listening to records, a push on the front-panel POWER switch on the C-220 turns it on and also disconnects the regular preamplifier, replacing it with the phono circuits of the C-220. Alternatively, the C-220 output can be connected to the AUX inputs of the regular preamplifier, so that the existing tone controls and filters can be used. In both modes of operation, the record player is of course connected directly to the C-220.

The Accuphase C-220 has inputs for two phono cartridges. Behind a hinged door on its front panel are pushbutton switches (in duplicate for the two inputs) that select terminating resistances of 100, 30,000, 47,000, or 100,000 ohms. Another button selects either of the disc inputs, and a button connects the head amp in the selected phono circuit for use with a low-output, moving-coil cartridge. When the head amp is selected, the input resistance is automatically set at 100 ohms. There is a stepped balance control with a range of 7 dB in either direction and a completely "off" setting at each limit. When the hinged door is closed, the only visible front-panel controls are the power switch and a large volume-control knob.

In the rear, in addition to the two sets of cartridge inputs and the external-preamplifier inputs, there are professional-type Cannon

jacks paralleling the main outputs, which are conventional phono jacks. A separate pair of phono jacks carries the audio outputs at a fixed (and lower) level.

All switching in the C-220 is done by reed relays, with electronic time-delay circuits. A logic system mutes the amplifier outputs the moment any button is touched. After the switching operations have been completed, there is a delay of about 3 seconds before the outputs are restored, to prevent any switching transients from reaching the power amplifier.

The design goals for the Accuphase C-220 included a reduction of noise to near-theoretical limits and the reduction of all forms of distortion (including transient types) to an absolute minimum. These aims have been shared by many other amplifier designers, but it is interesting to examine the "no-holds-barred" approach taken by the Kenonic engineers. For example, all the amplification is by symmetrical push-pull, direct-coupled, class-A circuits. Coupling capacitors are used between functionally separate parts of the circuit, but not between individual stages or in any of the negative-feedback loops. Only discrete circuits (no IC's) are used, and some idea of the circuit complexity is conveyed by the fact that the C-220 has 109 transistors, 16 FET's, and 34 diodes! Precision, high-quality, low-noise components are used extensively, and a newly developed ring-emitter transistor is used in the input stage of the head amp. The RET is claimed to have unusually low noise compared with any conventional or field-effect transistor (FET).

The key specifications of the C-220 include: frequency response, 20 to 20,000 Hz  $\pm 0.2$  dB; total harmonic distortion (THD), 0.01 per cent at the rated output of 2 volts from 20 to 20,000 Hz (the rated fixed output is 150 millivolts); and a maximum output level of 10 volts from 20 to 20,000 Hz with no more than 0.01 per cent THD. The rated noise and hum (A-weighted) is  $-85$  dB without the head amp and  $-72$  dB with the head amp (both referred to 2 volts). The maximum input level at 1,000 Hz for 0.01 per cent THD is 400 millivolts (mV) without the head amp and 20 mV with it.

Considering its function, the Accuphase C-220 is large and heavy. It is 19 inches wide,  $13\frac{1}{2}$  inches deep, and  $3\frac{3}{4}$  inches high in the rack-mounting version (a cabinet-mounting model is available that is  $17\frac{1}{2}$  inches wide). The weight of the C-220 is 23.5 pounds, and its suggested retail price is \$900.

● **Laboratory Measurements.** The phono equalization of the Accuphase C-220 was within  $\pm 0.5$  dB of the RIAA characteristic from 50 to 20,000 Hz and was down 1 dB at 20 Hz. It was not affected measurably by the inductance of a phono cartridge.

With the preamplifier driving a standard IHF load of 10,000 ohms in parallel with 1,000 picofarads, the 1,000-Hz output clipped at about 15 volts. The distortion was a constant 0.006 per cent from 0.1 to 14 volts output. When the variable output was 10 volts, the fixed output was 0.64 volt. The gain of the C-220 was almost exactly as rated: 59.6 dB through the regular input and 85.2 dB through the head amp. For the manufacturer's rated output of 2 volts, respective inputs of 0.11 and 2.1 mV were required with and without the head amp in use. For the new IHF standard output level of 0.5 volt, the required inputs were 0.026 and 0.52 mV. The overload level for the regular input was 460 mV at 1,000 Hz. The "worst-case" overload condition was at 20,000 Hz; corrected to the 1,000-Hz equivalent level it was 419 mV! Through the head amp, the 1,000-Hz overload input was 24 mV. It was difficult to determine the 20,000-Hz overload point, since the waveform distorted gradually rather than clipping suddenly. If overload is assumed to correspond with a distortion of 0.1 per cent, it occurred at an equivalent 1,000-Hz input level of only 4 mV. (Continued on page 62)





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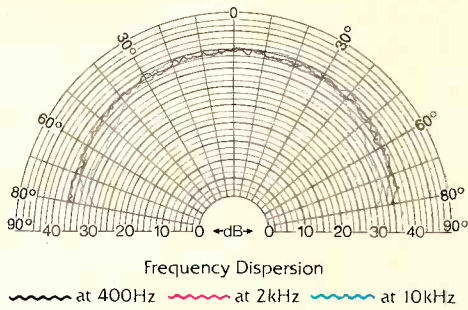
The L110 has almost perfect stereo imaging—a result of precise, uniform dispersion at every frequency.

Inside the L110, there's a brand new, super-sophisticated crossover network designed specifically to match the brand new components.

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If you'd like a lot more technical information on the L110, write us and we'll send you an engineering staff report. Nothing fancy. Except the specifications.

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The A-weighted noise in the output, under IHF standard test conditions, was  $-71$  dB relative to 0.5 volt output ( $-83$  dB referred to rated output) through the head amp. It was somewhat lower than that (and below the measurement range of our instruments) through the regular moving-magnet cartridge input. The measured input resistance of the C-220 was exactly as rated, and its input capacitance was 155 picofarads.

● **Comment.** Although the measured performance of the Accuphase C-220 was impressive and easily met the manufacturer's claims (within the limits set by our test conditions), we had expected no less from a company whose dedication to excellence is well known in the industry. We looked forward to use tests of the C-220, not in the expectation that it would sound *markedly* different from any other fine preamplifier, but because we were interested in hearing for ourselves how the low noise and refined switching of the C-220 translated into benefits to the user.

The subjective noise level of the C-220 was every bit as low as one would expect from its measurements. When the head amp was not used, even at very high gain settings there was *no* audible hiss or hum from the speakers when the pickup was lifted from the record. This is not unique to the C-220, of course, but it is nevertheless the exception rather than the rule in phono systems. There was audible hiss at high gain settings through the head amp, but this has been true of every such device we have used. In general, we concluded that, at any usable gain setting, any hum or hiss heard through the C-220 originated in the record player or external wiring rather than within the C-220 itself.

The delay logic in the switching circuit was very effective, though a trifle disconcerting, as one had to wait a few seconds after pressing any of the control buttons for the end result to be heard. In view of the rather exceptional flexibility of the C-220, we were surprised that it lacked provision for adjusting the input capacitance to meet the needs of a

particular cartridge/record-player combination. We also would have expected to find a sophisticated infrasonic filter in the C-220, since few amplifier "rumble filters" are really suitable, in respect to cutoff slope and frequency, for this purpose.

The final question, and the most difficult to answer, is whether the device is a reasonable value, even for the dedicated audiophile. It is built with impressive attention to detail, and it fairly radiates a sense of quality. It also appears to be greatly overdesigned, and the use of more than one hundred active semiconductors to perform only phono equalization and amplification functions seems difficult to justify. On the other hand, there are probably a number of audiophiles who already have what they consider to be the ultimate in all these component categories and for whom the price of the C-220 is not a deterrent. For them, it can be considered a very attractive bit of icing on an already rich hi-fi cake.

Circle 108 on reader service card



which is a conventional two-head recorder except in the TEST mode.

The metering system of the Aiwa AD-6800 is also unique. Each meter has two separate movements and pointers reading against a single mirrored scale. The black pointer gives conventional VU meter readings on a  $-20$ - to  $+5$ -dB scale. When a PEAK button on the panel is engaged, the red pointer also comes into action, reading the instantaneous peak signal level on a scale from  $-40$  to  $+10$  dB simultaneously with the action of the VU meter. The peak meters can respond in as little as 10 milliseconds, and their long decay time of 1.5 seconds in effect causes them to "hang" on the peak program level as a recording is being made. The relative positions of the two pointers give a constant display of the peak-to-average ratio of the program level. Finally, when the PEAK HOLD button is pressed, the red pointers remain at their highest attained levels, moving upward only if a still higher level signal comes along. The "hold" circuit maintains these maximum readings, within 1 dB, for as long as 30 minutes.

The tape transport of the AD-6800 features the "auto-loading" system that Aiwa introduced a year or two ago. The cassette is placed on a tray in the cassette compartment, and a slight push, closing the compartment door, will cause the cassette to be drawn automatically into the machine and placed on the tape-hub drive shafts. The compartment is well lit, and the 30-degree upward tilt of the cassette makes it easy to see the amount of tape left on each hub. When the STOP/EJECT key is pressed, the front-panel cover rises slowly and the cassette is moved forward to where it can be easily removed. The tape is driven by a d.c. servomotor whose speed is controlled by frequency-generator feedback.

The piano-key controls are interlocked so that (except for wind and rewind cueing) STOP must be pressed before making any change of tape speed or direction. The PAUSE key disen-

(Continued on page 64)

As we have often pointed out, the rated performance of a cassette recorder can be realized only with tapes of the same type for which it was designed or adjusted at the factory (or another with very similar magnetic properties). Sometimes the manufacturer specifies these tapes, sometimes not. The tape hobbyist who, for one reason or another, prefers a certain tape formulation may have to choose between less than optimum performance and having his recorder readjusted specifically for that tape type. This is generally a job for a technician, since cassette-recorder manufacturers do not encourage users to tamper with internal adjustments.

Aiwa's new Model AD-6800 front-loading cassette deck takes a giant step toward eliminating the problem of tape/machine incompatibility. It has built-in oscillators that record equal-amplitude signals at 400 and 8,000 Hz, respectively, on the left and right channels of the tape. A special third head plays back these test signals as they are being recorded, and their relative levels are shown on the left- and right-channel VU meters. In addition to the

three levels of bias set by a lever switch on the panel (for ferric,  $\text{CrO}_2$ , and FeCr tapes), there are three small, separate vernier bias-adjustment knobs, one for each switch position. In the special TEST mode of operation, the appropriate fine adjustment for bias is varied until the two meter readings are identical. This optimizes the deck's frequency response and distortion for that particular tape. The entire process takes only a few seconds, and this feature should make the AD-6800 compatible with almost any "oxide" tape made in the past, present, or (possibly) immediate future.

In its TEST mode, the AD-6800 employs a third "play" head, and it is necessary to adjust the azimuth of that head to match that of the record head. This is done by means of a sliding lever inside the cassette compartment, which is moved so as to give a maximum reading on the right-channel (8,000-Hz) meter. Then the bias adjustment can be set for the particular tape to provide equal-level meter readings for both channels. This azimuth setting had nothing to do with the normal recording or playback functions of the machine,

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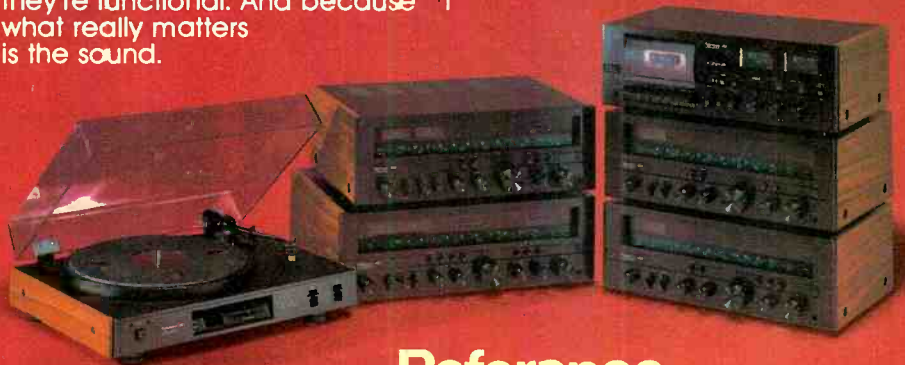
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gages the drive capstan, and it can be used to set the machine up for unattended recording or playback with the aid of an external clock timer. Like other Aiwa recorders, the AD-6800 has a tape-motion indicator whose sections glow in sequence when the tape is in motion. The index counter has a memory-rewind system that stops the tape in rewind when the counter reaches 000.

The three-position BIAS lever switch is used in conjunction with a similar EQ switch, which is marked to show either a 70- or 120-

microsecond equalization time constant. Normally, the two switches are set to the appropriate corresponding positions for one of the three basic tapes. A third lever switch turns on the Dolby system, and in its third position it adds a low-pass MPX filter to prevent any FM-tuner pilot-carrier leakage from interfering with the system's operation. The fourth lever switch selects either LINE or MIC/DIN inputs (they cannot be mixed) or the TEST mode. A DIN connector (covered) is on the front panel next to this switch.

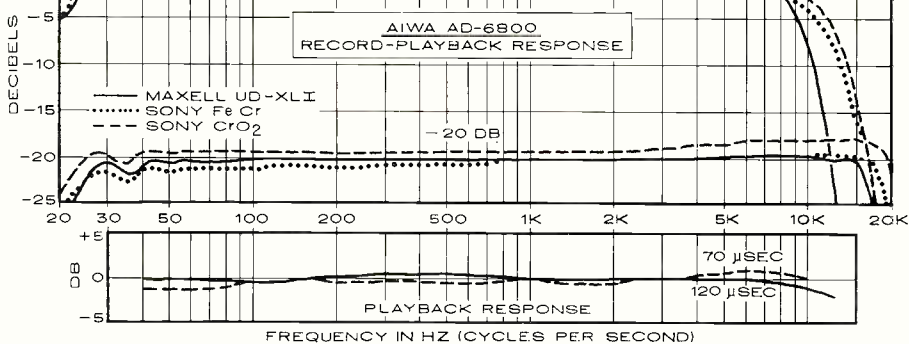
The left- and right-channel recording-level controls are concentrically mounted, as are the playback-level controls. A pushbutton turns on the LIMITER, which, to prevent distortion, goes into operation at levels exceeding 0 dB. At the left of the panel are the pushbutton power switch, two microphone jacks, and a stereo-headphone jack. The phono-jack line inputs and outputs are in the rear, together with a connector that can tie the recorder to an Aiwa record player so as to synchronize the recording operation with the tone-arm indexing of the record player.

The Aiwa AD-6800 has a satin-finish aluminum front panel, walnut-finish wooden side plates, and a black metal top that has on it a complete, functional block diagram showing the deck's signal-flow paths and control operations. The machine measures approximately 19 inches wide, 13 $\frac{3}{4}$  inches deep, and 6 $\frac{1}{2}$  inches high and weighs about 22 pounds. Price: \$650.

**● Laboratory Measurements.** Test data supplied with the machine indicated that it had been set up for and checked out with Aiwa tapes not generally available in this country. Therefore, we put its special tape-compatibility features to good use and checked the frequency response with a large number of different tapes. All gave very good results, which was in itself a novel experience for us. We selected three of those that gave the flattest over-

all record-playback frequency response for full testing. Maxell UD-XL I was used as the "normal" tape and Sony CrO<sub>2</sub> and FeCr for the other two. Our choice of the Sony tapes was based on Aiwa's indication that their own brand of cassette tapes is manufactured for them by Sony.

The 120-microsecond playback equalization was measured with a TDK AC-337 test tape, and it was within  $\pm 1$  dB over the tape's range of 40 to 12,500 Hz. The 70-microsecond response was measured with a Teac 116SP



tape, and it was within  $\pm 1$  dB over the tape's range of 40 to 10,000 Hz. The record-playback curves were remarkably flat. For example, the Maxell UD-XL I response was within  $\pm 0.5$  dB from 40 to 15,500 Hz and down 2 dB at 26 and 16,000 Hz. Sony CrO<sub>2</sub> was within  $\pm 1.5$  dB from 23 to 19,500 Hz, and Sony FeCr was within  $\pm 1.5$  dB from 24 to 18,500 Hz. The widest overall response (although not necessarily the flattest) was measured with BASF Chromdioxid Super (now Professional II) and TDK SA, both of which were within  $\pm 1.5$  dB from 23 to 20,000 Hz.

These frequency-response measurements were made at a -20-dB recording level. The response curve at 0 dB intersected the -20-dB curve between 12,500 and 16,000 Hz, depending on the tape. This indicates substantially lower tape saturation at high frequencies than occurs with most two-head cassette decks (and thus more efficient head design). At a 0-dB recording level, using UD-XL I

tape, the third-harmonic distortion in the playback was a very low -50 dB (0.3 per cent) for frequencies up to 400 Hz, increasing to a maximum of -33 dB (2.2 per cent) at 3,000 Hz. With FeCr tape, the curve shape was similar, but the distortion levels were higher: -40 dB (1 per cent) at 400 Hz and -27 dB (4.5 per cent) at 3,000 Hz. The highest dis-

tortion was measured with CrO<sub>2</sub> tape, but it was nearly constant with frequency from -28 to -25 dB (4 to 5.6 per cent). Of course, these distortion readings would be lower at lower recording levels. The Dolby-reference mark on the meters was at +3 dB.

The reference-distortion level of 3 per cent at 1,000 Hz was reached at a recording input of +7 dB with UD-XL I, -3 dB with CrO<sub>2</sub>, and +2 dB with FeCr. The unweighted signal-to-noise ratios (S/N) referred to those levels were, respectively, 47, 35.5, and 39.5 dB. With IEC A weighting, these became 58.5, 49.5, and 54.5 dB. Finally, with CCIR/ARM weighting and using the Dolby system, they were 64, 55.5, and 60.8 dB. The noise increased by 9 dB through the microphone inputs at maximum gain. The Dolby circuits tracked very closely, so that the overall frequency response changed by no more than 1 dB at frequencies up to 14,000 Hz when Dolby was used (at levels of -20 and -40 dB). A standard Dolby-level tape (200 nW/m) gave meter readings within 1 dB of the AD-6800's Dolby-calibration marks.

For a 0-dB recording level at maximum gain, the LINE input was 44 millivolts and the MIC input was 0.23 millivolt. The MIC circuit overloaded at 40 millivolts input. The unweighted rms flutter was 0.12 per cent, and wow was less than the 0.01 per cent residual of the test equipment. The VU meters overshoot by 1 dB on 0.3-second tone bursts, but the PEAK meters read the steady-state value of the signal exactly. A C-60 cassette was moved from end to end in about 90 seconds in the fast speeds. The limiter worked very well, holding a +10-dB overload down to only +2 dB and a +20-dB input to +3 dB. It had absolutely no effect at input levels of 0 dB or less.

**● Comment.** The Aiwa AD-6800 ranks as one of the very best two-head cassette machines we have seen. Whether it is actually the "best" depends on one's personal assessment of the relative importance of various characteristics of a recorder. There can be no doubt, however, that the AD-6800's frequency response cannot be surpassed by anything less than one of the far more expensive three-head machines.

The bias "fine-tune" feature is one of the most useful additions to a cassette recorder that we can imagine. It works with impressive simplicity and effectiveness. With a few tapes we were unable to set a bias that gave exactly equal outputs at both frequencies, but the audible effect was negligible.

The dual meter system worked beautifully. It is superior to the LED peak lights used on many recorders, since the PEAK HOLD can be used to determine the maximum input levels of a tape or disc and the final recording levels can be set accordingly. Like most cassette-recorder manufacturers, Aiwa does not recommend using C-120 tapes (drive slippage produces a severe "wow").

Although the AD-6800 is an expensive machine, its performance is consistent with its price, and its special features are not only genuinely useful, they are generally unobtainable in other machines at any price. It is refreshing, in the midst of so much "sameness" in competitive hi-fi products (albeit at a usually high level of performance), to find a cassette recorder that is distinctively different, and superior as well.

See this month's "Tape Talk," page 33, for Craig Stark's report on 3M's revolutionary new Metafine metal-particle tape and the cassette deck that is specifically designed to handle it.

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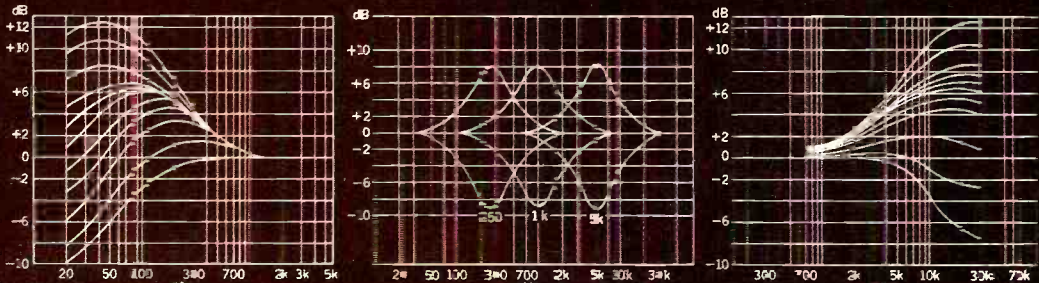


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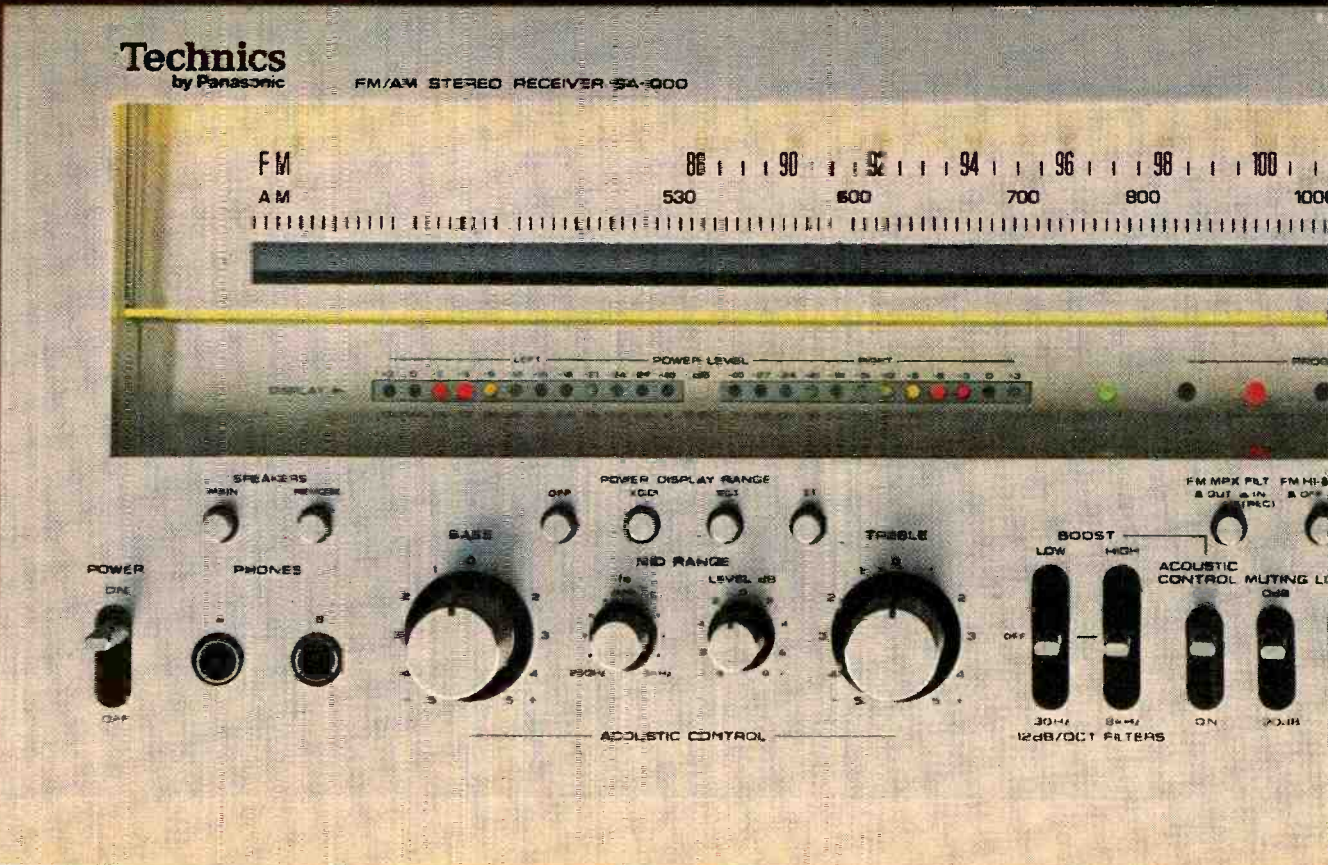
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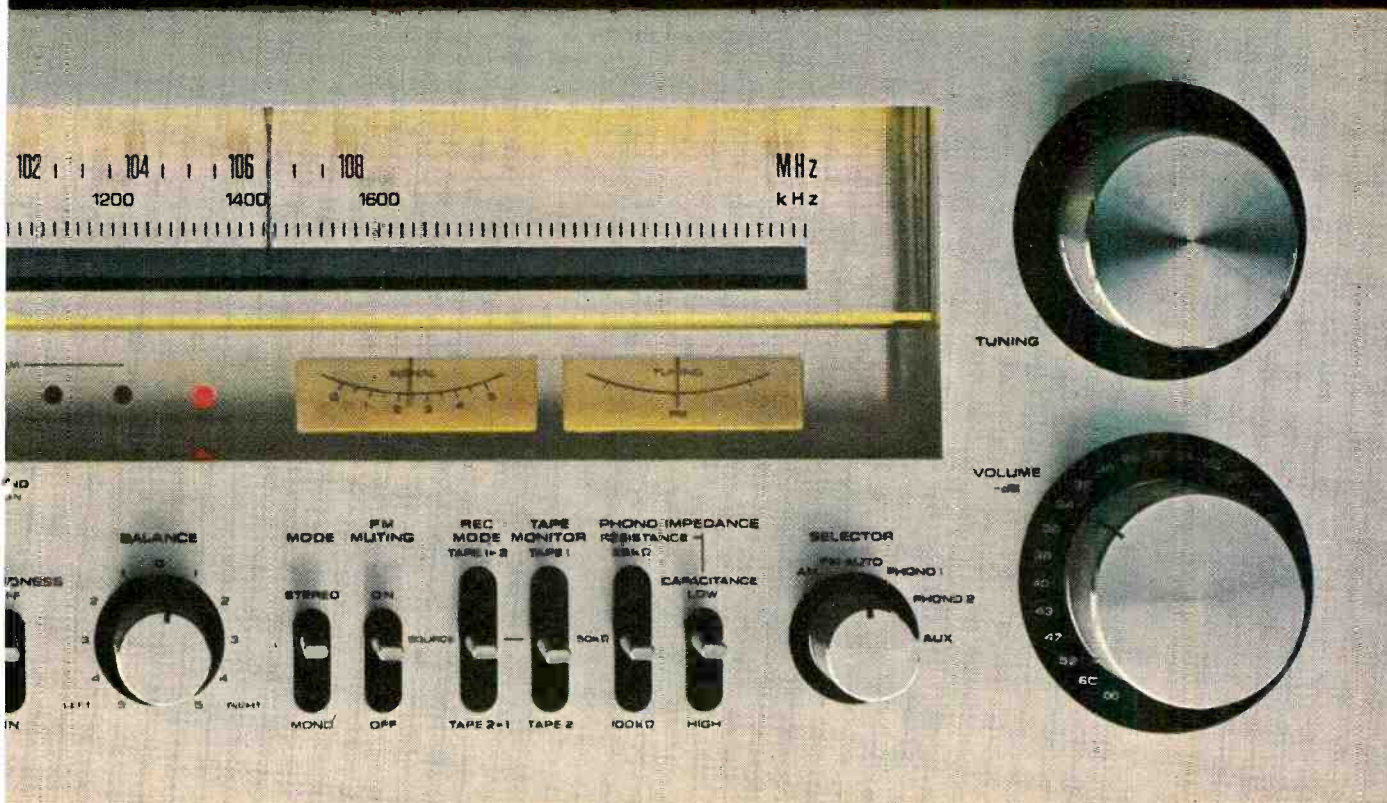
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# Technics



# Going on Record

By James Goodfriend



## THE WHERE OF MUSIC

**E**VEN forgetting about what sort of music it is, I dare say I am not alone in disliking music in elevators. Unlike many, though, I don't consider such usage of music to be a criminal abuse of an art form. I have a pretty open mind about where music can be played. Anyway, music is—like children—a lot tougher than most of us give it credit for, and it stands up successfully to many a hostile environment. It is the manhandling of music that I object to much more than where it is played.

I mention the matter largely because a letter I read recently reminded me of the screams of outrage I have heard over the years about people's ears being assaulted by music—99 per cent of it recorded music—everywhere. Well, hearing something when you really don't want to hear it is irritating, no doubt. But I am much more alarmed by the prospect of that irritation's practical opposite: hearing music *only* when one specially wills to hear it and, by extension, hearing it only in a specific place—a concert hall or an opera house. Music to me is a part of life, and that sort of compartmentalization of life bothers me.

Let me expand upon this a bit. There are a lot of people who listen to music only passively. It washes over them like some sort of warm bath, and either they feel a little better for the experience or they don't notice it at all. This gripes a lot of musicians, composers (especially), and music lovers, who want people to listen actively, focusing their intelligence on the musical discourse. There is something to that, of course. Anyway, the passive listeners get it in the neck in print from just about everybody interested enough in the subject to want to write about it.

Now, there are a lot of other people, many of them musicians, who only listen to music actively. They bring their full intelligence to bear on whatever music they hear, and they are the ones who feel most cut up by unexpected encounters with music they did not choose at that moment to hear. I feel a certain sympathy for them, but, frankly, I am not among them.

The fact is, I like to listen to music actively—as when I'm in a concert hall—and I also like to hear it passively. I like, at times, to overhear it. I like, sometimes, to hear it fragmentarily or in juxtaposition. I like to hear palm-court music in palm courts. (I went to

one the other week and became very irritated when the violinist, by playing classical sonatas, tried to con me into active listening when what I wanted was to overhear passively.) I like to hear dinner music at dinner. I like to hear movie music at the movies. And I like to hear all sorts of music at home on my stereo set, some when I am actively listening (and doing nothing else), some when I am following the score, some when I am reading the newspaper, some when I am writing a letter or even a review, and some when I am in the next room doing eleven other things. I can take music very seriously indeed, but I don't feel that it is injurious to me or to anybody else that I don't do so all the time.

In this, I am obviously a product of my age, the Age of Information Overload, the same age that has produced music in elevators. Perhaps I should feel ashamed of this, but somehow I don't. As a matter of fact, I think there has always been an information overload of music, just as I think that there have always been people who hear music only passively and others who only listen to it actively.

Lord, the complaints one can read about the hubbub in the streets of London in the eighteenth century! Or the sixteenth century, for that matter. You would think that all the fruit peddlers were in league to rob those of cultivated musical tastes of their sanity. And

yet today the transcribed, half-forgotten memories of those street cries are as treasured as the madrigals that were sometimes made of them. Both the art and the writing of other ages testify to the fact that there was much music going on, in town and country, of the sort that didn't get written down for posterity and that could be met with at the most unexpected times and places. The sensitive and serious few, I suppose, covered their ears and complained to the local authorities and to whomever else would listen. The peasants, I expect, drank their beer and wallowed in the bath of what the late Michael Flanders once referred to as "jolly pleasing noise."

Many musicians, I think, are afraid that the current situation will lead to *only* passive hearing on the part of everybody, that all distinctions between "background music" (such as Muzak) and "listening music" will break down. I don't see much real probability there. People ultimately do what they want to do, and those who are interested in music will listen to it actively (at times) while those who are not really interested in it won't. The sheer quantity of it and the ubiquitousness of it, I think, will have little effect other than making us all long for a little silence at times.

Most of us don't get much silence these days, music or no. The city street and the subway are certainly not places for quiet contemplation or reading, and the sounds they offer are hardly attractive to the ear. Those music lovers who wander through one and the other lugging their blaring, thirty-pound radio/cassette status symbols therefore cannot be said to be damaging an otherwise pleasurable ambience. No, it is not the fact that they play music in the subways that is damnable, but *what* music they play (I would hate it anywhere) and at what loudness levels (it only adds to the noise). Even there, it is not music itself that is being abused, but only my nerves. A Mozart divertimento at a moderate volume would probably find me smiling in appreciation.

**S**o, even as I find myself growing more conservative in other areas, I retain a policy of liberalism in regard to the where of music. The variety of pleasures is, to me, worth the occasional annoyance. Mind you, I still do not condone music in elevators, but most elevator rides are mercifully brief. And, anyway, I can always put my umbrella point through the speaker cone when there's nobody around to see me.



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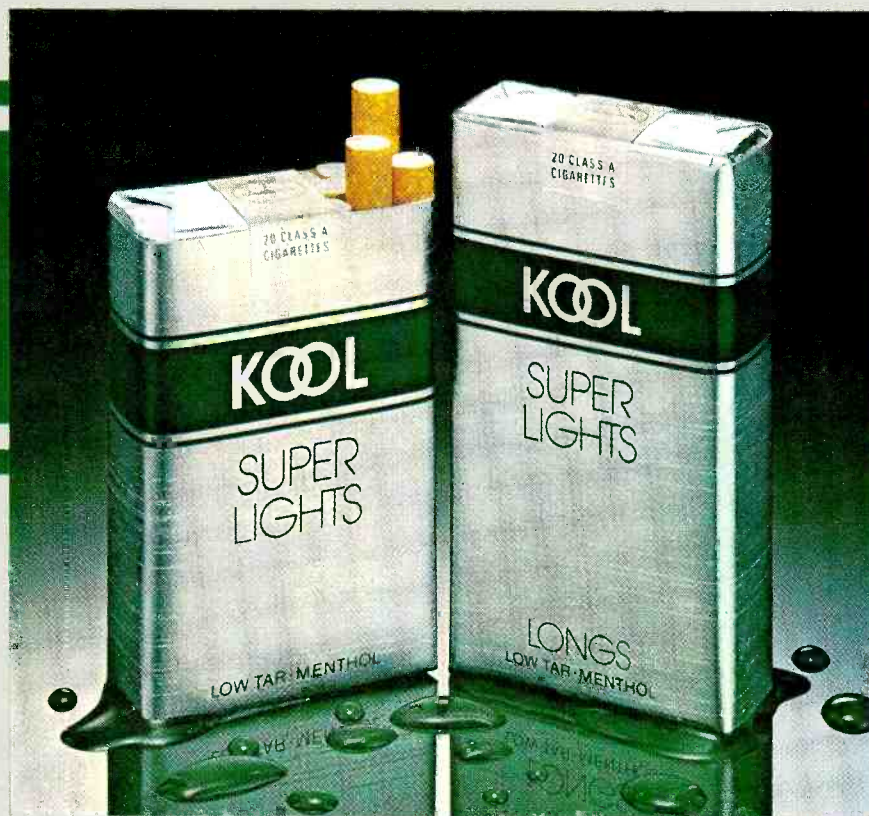
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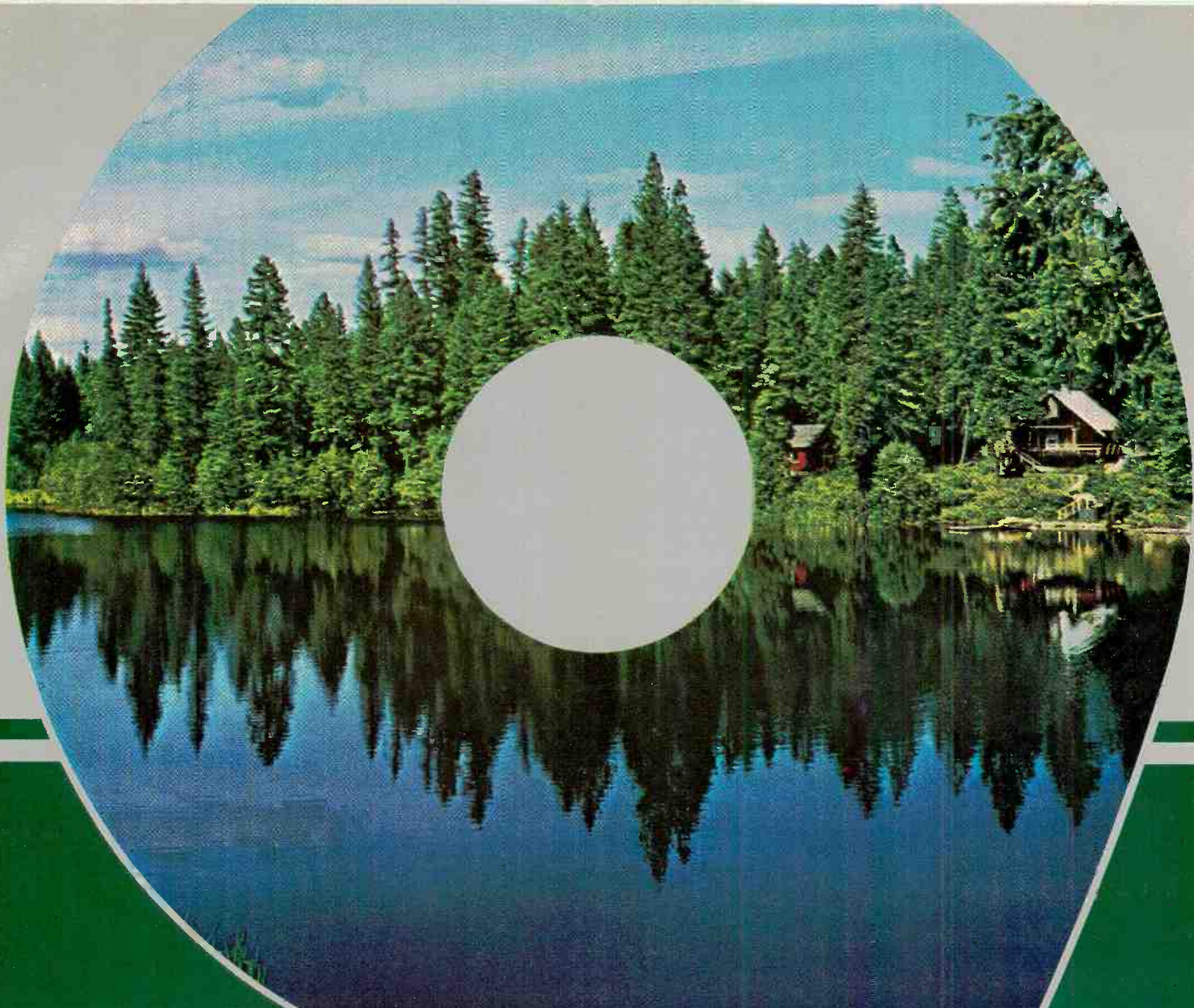
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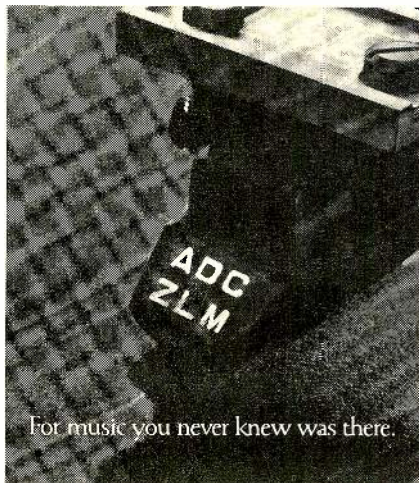
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## The Pop Beat

By Paulette  
Weiss

Pop Music Editor Weiss  
with Richard Maltby Jr.  
at a recording session for  
*Ain't Misbehavin'*. Producer  
Thomas Shepard (standing)  
supervises playback.



### WALLERMANIA

ONE of the liveliest of the many ghosts Broadway has conjured up for us recently (Elvis and the Beatles among them) is the roguish spirit of Fats Waller. Conceived with affection by Richard Maltby Jr., the award-winning musical *Ain't Misbehavin'* is a series of lightly dramatized songs associated with Waller, the great stride pianist of the Twenties and Thirties.

The show features five performers supported by an on-stage orchestra. RCA's two-disc, original-cast album has just now been released, and, judging from what I heard of it during a recording session back in June, it's a winner. The album contains all of *Ain't Misbehavin'*'s thirty songs, and except for some minor resequencing, it mirrors the show faithfully. The tremendous energy and sass of the cast—Neil Carter, Ken Page (whose dancing eyebrows and "yas, yas, yaaas" make Fats live again), Armelia McQueen, André de Shields, and Charlene Woodard—have been well captured by producer Tom Shepard.

It was not an easy show to record, but Shepard succeeded by coaxing and suggesting where others might have ranted and demanded. At one point in the session I watched as he and Maltby firmly mother-henned the three women into producing just the right inflection on the phrase "at the Waldorf!" for *Lounging at the Waldorf*, one of the album's happier irreverencies.

"This cast is unlike others in my experience," Shepard said. "Usually, when I ask a performer to repeat something there's an eventual improvement. This group seems to get restless with each repetition." That's not really surprising, considering the circumstances. The cast was doing eight shows a week, each a two-hour marathon of nonstop singing and dancing. The material to be taped was the equivalent of two full-length musicals, so to avoid winding up with five limp, exhausted bodies on the studio floor, the usual schedule of three sessions in one day for an original-cast recording was expanded into eight tapings spread over three days.

*Ain't Misbehavin'* was director Maltby's baby, although Murray Horwitz shared in the initial idea. Originally produced as a cabaret-size entertainment at the Manhattan Theater Club in New York, the show moved to Broadway last May, picking up the orchestra led by

Luther Henderson, whose stride piano does Waller proud (in the studio, when Shepard asked, "Could you make those eight bars a little dirtier, Luther?"), the results were positively filthy!). *Ain't Misbehavin'* won three Tony Awards (Year's Best Musical, Best Director for Maltby, Best Featured Actress for Nell Carter) and Best Musical of the Year from the Drama Critics Circle.

"The show is accurate," Maltby said at the second set of recording sessions. "There is no detail that is not accurate to the period, yet it is also contemporary, so it conjures up the period better than mere authenticity would. The musical arrangements are totally reworked. Nothing is done as Fats Waller actually did it. For instance, I added lyrics to his piano music. To me, his music is the source of the show. The spoken comedy is in there too, but what really struck me was the wit of the music, its incredible energy and vitality."

In addition to his genius at the keyboard, Waller's mugging and his unpredictable, hilarious asides helped to make him popular during a very brief career. He was famous for ad lib comments, such as his "Your pedal extremities really are obnoxious. One never knows, do one?" on a 1939 recording of *Your Feet's Too Big*, and for alterations of lyrics, such as "If you break my heart/I'll break your

FATS WALLER: very, very classy



jaw and then I'll die" on Billy Mayhew's *It's a Sin to Tell a Lie*.

During Waller's lifetime his engaging clowning around detracted somewhat from his reputation as an artist, and for years after his death in 1943 some jazz critics still would not take him seriously. Maltby says that some blacks rejected him because their struggle for respect made them nervous about their clowns.

"But not any more. What they see now," he explains, "is the tremendous life-force behind his work. Humor was his way, curiously, of preserving dignity. He was very, very classy at all times."

The classy gentleman's renaissance has begun, and his legend now looms properly large. Last year not one, but two biographies appeared almost simultaneously: *Fats Waller* (Schirmer Books) by his son Maurice and *Fats Waller, His Life and Times* (Contemporary Books) by STEREO REVIEW critic Joel Vance. The success of *Ain't Misbehavin'* and RCA's recording of the show are certain to step up demand for the label's previously released Bluebird reissues, and the tribute albums, vault scrapings, and bootlegs will probably follow.

Unlike many jazz musicians of his time, Thomas "Fats" Waller was a formally trained pianist. He started with hymns on the harmonium at age five and was later exposed to jazz through youthful explorations into Harlem night life. In 1920, when he was sixteen, he first met James P. Johnson, who taught him the stride style that was to make him famous. Johnson, Willie "The Lion" Smith, and Waller were the acknowledged kings of the style through the Twenties and Thirties. Stride is a piano style in which the left hand is rhythmically supportive, but not confined to chords, while the right, taking its cue from blues or ragtime, can be as free as the practicing jazzman's imagination and ability permit.

**W**ALLER's imagination and ability were prodigious, as were his appetites for food and drink (they didn't call him Fats for nothing—he weighed just under three hundred pounds for most of his adult life). Fats was nonetheless the darling of his day. He was a beloved radio personality, a comic film actor, a night-club favorite, a successful composer, and, backed by his band the Rhythm, a jazz innovator of impressive stature. His accomplishments with the organ as a jazz instrument have never been approached. Toward the end of his life his compositions took a classical turn. In 1942 he became the first jazz musician to give a solo recital at Carnegie Hall.

His recorded legacy is extensive—about five hundred records in twenty years. Although estimated to be about three hundred and sixty, the number of his compositions can't be confirmed. He was a prolific songwriter, but thoughtlessly sold the rights to his early songs for piddling sums. *Ain't Misbehavin'* and *Honeysuckle Rose* are perhaps his two best-known compositions, but his treatment of some songs by other composers, such as Ada Benson and Fred Fisher's *Your Feet's Too Big*, made them his forever.

If the combination of the recent biographies, the hit show *Ain't Misbehavin'*, its vital original-cast album, and the reissue of Waller's own recordings doesn't produce a mighty swelling of Wallermania, I will be very much surprised. But then again, one never knows, do one?

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# ZUBIN MEHTA

Irving Kolodin ventures a few questions about what is in store for us all when a new conductor steps up to the podium of the New York Philharmonic Orchestra

**I**f a musician is talented and lucky, he may eventually get the job he deserves in the commercial firmament of his profession and be happy there ever after. If he is talented and unlucky, he may eventually get the same job, though not deserving it, and be so unhappy ever after that he must wonder why he took it in the first place. Zubin Mehta, born in Bombay, India, in 1936, is so sensitively situated that, on the eve of becoming the music director of the New York Philharmonic Orchestra, he must sometimes awaken of a night and ask himself if he is in the first or the second of those categories.

The nature of the job is such that, in a period of seventy-odd years, it has been held by only a handful of men, beginning with Gustav Mahler (the most recent three have been Dimitri Mitropoulos, Leonard Bernstein, and Pierre Boulez). Now, after a twenty-year period in which the Philharmonic has been supervised by a conductor who aspired to be a composer (Bernstein) and a composer who aspired to be a conductor (Boulez), it becomes the artistic concern of a conductor who aspires to be nothing more than the best conductor he can be. That is certainly the kind of singlemindedness for which the Philharmonic personnel, in particular, should be grateful.

The legal language of the contract specifies that the title of Music Director becomes Mehta's at the beginning of the 1978-1979 season, which in-house specialists interpret as starting with his undertaking a share of the Central Park concert series in August of this year. I visited with him at an important point along the way to that official taking of office—after the concert that marked his first exposure to the revised and amended Avery Fisher Hall which will shortly become his musical home. To a question about how he found things, Mehta responded: "For us on the stage it is comfortable, much better than before. But it favors the brass. At yesterday's rehearsal I kept asking them to play less loud. They said they were playing only half the usual, but it was still too loud. The woodwinds have the best place of all: they're right in the middle."

At the previous evening's concert I had noticed—something one could hardly fail to notice—that Orin O'Brien, the Philharmonic's excellent female double-bass player, was at the principal's desk. "Is this something new?" I asked. "No," said Mehta, "they rotate—and anyway, the leader was out sick." As an afterthought, he added, "Interesting you should notice. In Los Angeles nobody would." ▶ p. 76





Expanding on the point, he explained the present system and how it works. "The first five desks in the strings are set. Other players change around. I don't like it as a practice, but some places it's worse. In Berlin, aside from the concertmaster, whoever comes in first sits where he wants to. Not in my orchestra. There are such things as *divisi*" (passages in which the composer writes different lines for each of the two players at a desk). "And," he went on, "it's bad for touring, where you may pick up a piece you played earlier in the season and find that the players for each line are not the ones you rehearsed with." In general, the present practice of switching about in the ranks doesn't have an enthusiast in Mehta; in this respect (as in many others pertaining to his craft), he is a traditionalist. He takes repeats almost every place they are indicated by the composer. He abides by the scoring as it is written. He tends toward chronology as a determining factor in program making.

This, of course, is part of the paradox about Mehta, who is widely associated with flamboyance, with the kind of behavior that made him a "swinger" when that word was in fashion, who is identified with such wild-eyed projects as combining two orchestras (both, in the term Mehta would use, "his"—the Los Angeles and Israel Philharmonics) in a performance of Berlioz's *Symphonie Fantastique*, with ventures into rock, if not roll, and with that flossy TV horror last New Year's Eve from London's Covent Garden, in which Johann Strauss' *Die Fledermaus* was batted about in German and English by a male Orlovsky singing falsetto. Under it all, though, is a broad base of traditionalism derived from his Parsee (meaning a native of India of Persian extraction and Zoroastrian beliefs) father, Mehli Mehta, a fine violinist and conductor of the Bombay Symphony until he left to follow his son to Southern California. Zubin Mehta owes his training as a violinist to his father, who also gave his son opportunities to conduct the Bombay orchestra as a teenager. When Zubin's career aspirations began to take shape, Mehli encouraged him to seek out the soundest kind of indoctrination under Hans Swarowsky in Vienna.

These schizoid tendencies in Mehta may not be of clinical proportions, but are they amenable to alteration and consolidation in the changed circum-

stances of New York and maturity (Mehta is now in his forties)? Or are they so deeply rooted that they will continue to divide him and preclude the complete fulfillment of his talent? More than a little of his past publicity has been adverse, and, what is worse, much of it has been out of his own



Christian Steiner/London Records

## THE WIT AND WISDOM OF ZUBIN "THE LIP" MEHTA

- *On women in orchestras: "They become men. Men treat them as equals; they even change their pants in front of them. I think it's terrible."*
- *"An American should lead the Philharmonic. And he should be able to deal with both the orchestra—they step over conductors—and New York. A lot of us think, why not send our worst enemy to the New York Philharmonic and finish him off once and for all?"*
- *"My orchestra (the Los Angeles Philharmonic) is better than the New York Philharmonic. We play better than they do."*
- *"I feel claustrophobic in New York. Aargh. I can't wait to get out of this town. I absolutely loathe it."*
- *"I don't threaten to leave Los Angeles. I consider it all the time. It's human—one feels unappreciated. I would never leave for a better offer. I would only leave if I thought my time was over."*

mouth. Mehta's lip has certainly gotten him into more trouble than his baton, and one might say that, up until now, he has been his own worst enemy (though there are those in Los Angeles, especially in the press, who might consider such a statement inaccurate).

Zubin Mehta began winning prizes as early as 1958 (Liverpool International Conductor's Competition) and almost immediately found a career as a replacement for ailing colleagues. Things began to look particularly good when he took over for Igor Markevitch in Montreal (in 1960) and for Fritz Reiner in Los Angeles (in 1962). In each instance he became music director only months afterwards. He inherited the Los Angeles Philharmonic through the "kindness" of Georg Solti, who resigned a position he really didn't want any longer—even before he conducted a single concert as music director—in "protest" against Mehta's engagement as his assistant.

Among the dozen or so programs I have heard Mehta conduct here and there in the last decade and a half, one stands out as combining the best of his background with what might be described as most of his foreground. It was a three-part concert with the Philadelphia Orchestra in Lincoln Center. The evening began with Beethoven's *Leonore Overture No. 3*, followed by the Mendelssohn Octet in E-flat with a reduced body of strings (but more than an octet), and ended with Strauss' *Also Sprach Zarathustra*. Recalling the effect of this repertoire grouping, I said to him (in the conversation previously mentioned): "What I remember most is how well the strings played in *Zarathustra*, after the Octet—like every man was a soloist."

Mehta responded slyly: "You must remember that I have been almost all my public life a music director. Very little guest conducting. As a result I always *think* like a music director. Some time ago I did an *Otello* at Covent Garden. After one rehearsal I could tell you what every man was doing, who was good, who was not so good, who had to be reminded to do better. Later I checked out my impressions with the concertmaster. He agreed with me, almost to a man. The same way with the Philadelphia Orchestra. Letting them play something they really wanted to play, like the Octet, made them go all out to show what they could do in Strauss."

A good ploy. It recalled Joseph Szigeti's observation in his autobiographical reminiscences (*With Strings Attached*) that during his long career as a soloist, whenever he played a concerto in the *first* half of the program, the orchestral strings almost always played with greater verve in the second half of the concert. They outdid themselves to match the standard of the soloist.

How much of a conductor's mind should be devoted to showing, through such ploys, who is master in the lion's

den, and how much to producing the best music of which he is capable strikes me as a not yet resolved dilemma for Mehta. I have to think that he fancies himself as a whip snapper and chair wielder in the orchestral ring, determined to be in control of the situation whatever the circumstances. And one might conclude from that that his principal study is the orchestra rather than the music.

**A** RUN-THROUGH of a respectable cross section of his growing library of recordings turns up a number of interesting, and sometimes conflicting, inclinations and impulses. Depending on where you start and how you proceed, Mehta is either a model of musical rectitude or a corsair on the high seas, heading into the waves and bucking current notions of how well-known works should be performed.

At the outset, it is clear that Mehta is in the forefront of today's small coterie of dedicated Straussians, taking in not only the early tone poems—which everybody conducts—and such middle-period works as *Don Quixote* (recorded on London CS 6849), *Ein Heldenleben* (London CS 6608), and the *Symphonia Domestica* (London CS 6663), but also the later *Alpine Symphony* (London CS 6981). By far the best of them, and the best of all the recorded performances by Mehta I have ever heard, is *Also Sprach Zarathustra* (London CS 6609). I wouldn't venture such terms as "noble" or "transcendental," but the performance is forthright and on target all the way. In comparison with his immediate predecessors at the Philharmonic, whose temporal center of musical sympathy could, in the case of Leonard Bernstein, be assessed as about 1937, or, in the case of Pierre Boulez, as about 1948, Mehta's strikes me as about 1896. That was not only the year of *Zarathustra* but also the year of Mahler's *Symphony No. 3*—a combination that might form a tidy program, given an inexhaustible orchestra and an insatiable audience.

My memory of a Mahler *Symphony No. 3* by Mehta runs back to March 1977 in Carnegie Hall. It was a performance of much beautiful playing by the Los Angeles Philharmonic if not so much beauty of feeling from the conductor. In other words, it was—as many of Mehta's performances tend to be—a physical thing rather than a spiritual one. His recording of the Mahler *Symphony No. 5* (London CSA 2248) strikes me as decidedly more successful in its projection of a musical essence. However, the adagio from the *Symphony No. 10* is already a little far into the future (1910) for Mehta's sym-

pathies. I hear the performance as superficial, lacking the sense of involvement that captures listeners.

Setting out such details about Mehta and his "center of musical sympathy" is in no way to suggest that he is any different from any other conductor who ever lived. Whether his name be

about which rings of sympathy developed, like those that mark the annual growth of trees.

This might in itself be the subject for an essay, of which more than a few paragraphs could be devoted to the symptoms that betray a lack of sympathy on the part of the interpreter. Tos-

Wide World Photos

Liverpool, England, May 22, 1958: Zubin Mehta with fellow prize winners Julius Hegyi and Haig Yaghjian after final performances at the International Conductors Competition.



Los Angeles, October 23, 1974: Mrs. Jack Ben ty presenting her late husband's two violins (a Stradivarius and a Pressenda) to Los Angeles Philharmonic music director Mehta and beaming principal concertmaster and associate director Sidney Harth.

Anaheim, California, April 1, 1978: William Shatner, captain of Star Trek's famed starship Enterprise, appeared in a dramatic sequence in a "Music from Outer Space" concert with Mehta and the Los Angeles Philharmonic.



Los Angeles, August 26, 1976: Beverly Sills was soloist when Mehta led "his" two orchestras (the Los Angeles and Israel Philharmonics) in a joint concert at Hollywood Bowl.

Wilhelm Furtwängler or Arturo Toscanini, Serge Koussevitzky or Sir Thomas Beecham, no man was ever born with an inbred, total command of the musical repertoire. Each of the ones I have mentioned had a similar, if different, center of musical reference

canini's efforts to search out the momentum of Schubert's C Major Symphony (something that came naturally to Furtwängler) led him only to faster and faster performances of the finale. A year ago in Salzburg, Herbert von Karajan told me he had given up this

# MEHTA...

“... either a model of musical rectitude or a corsair on the high seas.”

work because. . . . The sentence was unfinished, but eloquent. Boulez, for another example, could never comprehend the function of the ritard in German music (it becomes tempo fluctuations in Mahler), and Bernstein, though much more adroit, much more extensive in his sympathies, inclines to over-emphasize, in composers such as Tchaikovsky and Mahler, what cries out for restraint, not self-indulgence.

Mehta's worst failings are readily identifiable. In such a work as Elgar's *Enigma Variations* (London CS 6816) he tends to seek out and emphasize secondary voices, perhaps because the meaning of the primary voices leaves him unsatisfied. In the Seventh Symphony of Beethoven (London CS 6870), everything is up-beat and pressing forward because he cannot content himself with the spaciousness and grandeur of the music as the composer conceived it. And he sometimes makes a swagger and a show of knowing the score “cold”—as in Ravel's *La Valse* on London CS 6698 (to know the score perfectly is, as a matter of course, a worthy objective for any conductor, but this is no guarantee that he will then know the music equally well).

The productive approach to adding new musical terrain to one's area of specialization is not through domination but through comprehension, not by imposing, on the strange and provocative, the musical culture to which one was born, but through understanding each composer's individuality and learning how to live with it. All the great conductors of the past named above came to terms with the music of which they were masters, and that is why they also became leaders of the musical communities in which they functioned.

To be the leader of such a community means, in the first place, that a conductor has to be a leader of the smaller community in which he lives and works: the orchestra itself. This can be done by pressure, by intimidation, or by camaraderie, being “one of the boys.” The best and the most lasting way is for a conductor to command respect through knowledge of his craft. This may lead to admiration, but real affection is far, far down the road.

When the question was put to Mehta

about the Philharmonic's famed ability to play as well as any orchestra in the world *when it wants to* (once capsulized by a member who said of a discontented conductor, “We gave him a Bruno Walter performance; what more does he want?”), he observed: “They're lambs compared to the Israelis. In Tel Aviv they're always fighting among themselves, giving me problems with rivalries and personal preferences. But they play concerts like angels.” When I pushed the question of orchestral response, he commented: “It's like that in a lot of places. You should hear the Vienna Philharmonic with someone it doesn't like!” Well, I have heard the late George Szell with the Cleveland Orchestra (which didn't like *him*), and the results were often fabulous.

No doubt there is some connection between an orchestra's liking a conductor and their really producing for him, but it is, to say the least, inconsistent. Members of the Philharmonic of the



Rodney Friend, concertmaster of the N.Y. Philharmonic, with the orchestra's new music director.

Fifties liked Dimitri Mitropoulos almost inordinately because he was a “father” to them, a man who was always sympathetic to their problems even if he could not invariably resolve them. Despite this, they often gave him sloppy performances, which led to his replacement by Bernstein. Bernstein was “Lenny” to many members of the Philharmonic of the Sixties, of whom one once said to me: “We love that guy. Look at all the extra work (recordings, TV, etc.) he gets us.” And they rarely let him down. When Boulez first came to the Philharmonic, the comment was, “What a fantastic ear!” But after a while, and after some ventures into repertoire of which he was less than master, positive feelings waned, and when Erich Leinsdorf came in as a guest conductor, he brought forth the reaction, “Now, there's a real pro.”

Actually, Mehta could be described as the first “real pro” music director the Philharmonic has had in a decade. But the question is, of course, is that

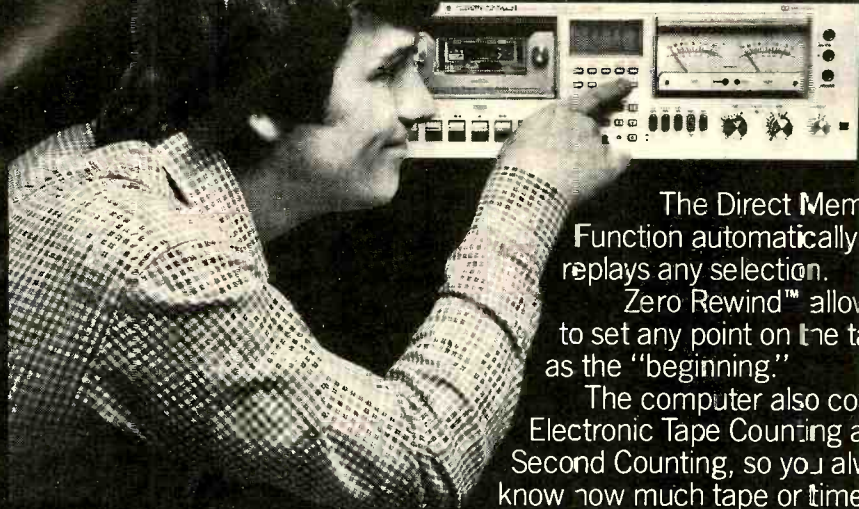
enough? Is an orchestra capable of changing its spots, or will it, leopard-like, inherit the character and disposition of its forebears, with whom, in many key instances, the present first-desk players were reared? Or, since we are talking in animal analogies, is the situation more akin to the lion's den, a place not exactly hospitable to outsiders? Mehta's disposition to be the master has already been noted. Will he pursue it on a “first among equals” basis (the prescription of many famous and successful conductors) or more in the spirit of “my orchestra”?

Which aspect of Mehta will prevail? The one capable of a splendid performance of *Zarathustra* (among other things) or the head engineer of the Cornball Express, highballing the Los Angeles Philharmonic down the line to deliver, on time, a couple of John Williams soundtracks for *Star Wars* and *Close Encounters of the Third Kind*? (This, believe it or not, is identified in the London catalog as “ZM 1001,” suggesting the possibility that there may be more “ZM” records of the kind to follow.)

Is the conductor both the Philharmonic and its audiences will have to live with into the 1980's (at least) the one of whom Isaac Stern said, when I asked him several years ago if a conductor really makes a difference in the performance of a concerto, “Yes, he can—with Danny [Barenboim], now and then, or with Zubin when he is really on.” Or is he the one who informally signaled his advent to Philharmonic leadership by programming one of his predecessor's specialties? (Unfortunately, Stravinsky's *Sacre* was the wrong work to choose for this piece of bravado, and it is now perpetuated for posterity [Columbia XM 34557] in one of the weaker performances of the twenty-five or so presently available.)

**T**HE Philharmonic administration has had its share of experience with difficult conductors (some might say, “Which one isn't?”) and is doubtless prepared to humor Mehta—up to a point. In the cases of Bernstein and Boulez at least, each, when the time came, had other occupations to turn to: the conductor-composer to guest conducting and composing; the composer-conductor to, among other things, his musical research center in Paris. Mehta might perhaps bear in mind an observation made to me by Mitropoulos when rumors of his replacement began to circulate: “I feel like I'm on the edge of a cliff. It's a long way from the top to the bottom.” Yes—the same distance as it is from bottom to top, and quite enough to keep a man awake at night. □

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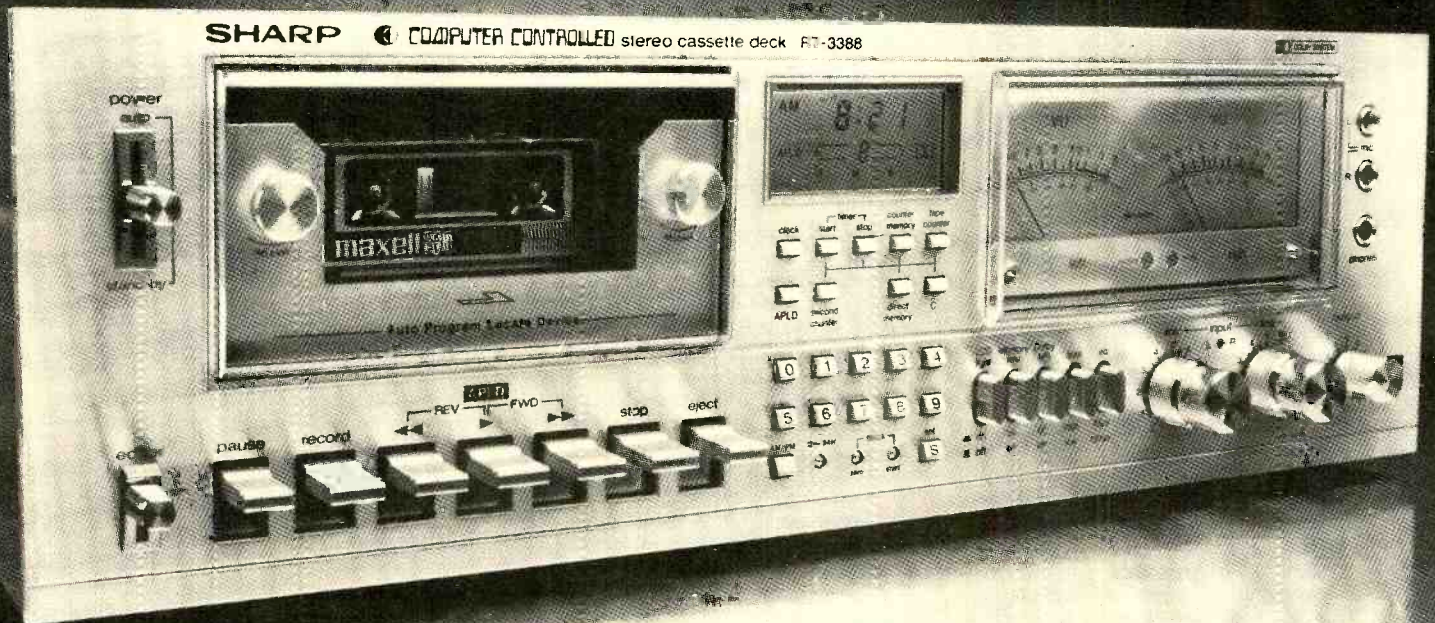
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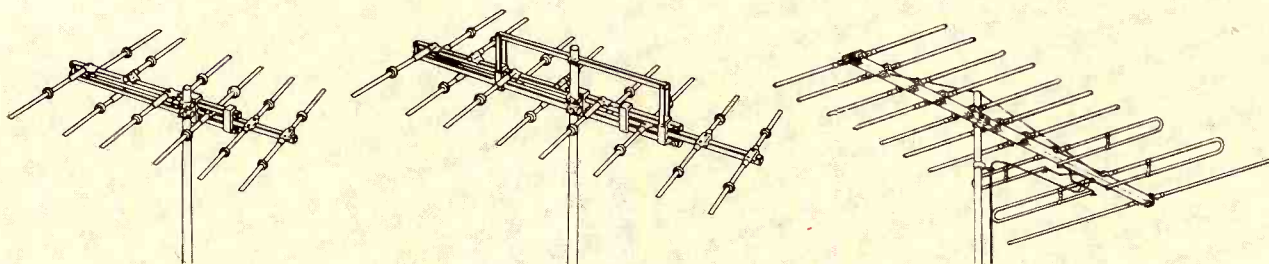
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JOHN Mc VEIGH TELLS YOU JUST ABOUT  
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**ANTENNAS**

**A**RE you thinking of trading up to a better FM receiver or tuner? Would you like to get a higher level of FM performance from your present one? If your answer to either question is yes, you should put some thought into the matter of FM antennas. No matter how sophisticated your tuner or tuner section, it will not live up to its full potential unless it is fed by a properly chosen and installed antenna. The cost of a suitable antenna system is usually a fraction of the average audiophile's investment in his tuner, yet this small expenditure can provide improved signal-to-

noise and capture ratios, greater dynamic range, and immunity to multipath interference, as well as lower distortion and a larger selection of listenable stations.

If you own a top-of-the-line tuner, a good antenna will allow you to obtain all the performance such a component offers. On the other hand, if you own a middle- or low-cost tuner, you might find that the right antenna will so dramatically improve the quality of its reception that you'll hesitate to trade up. How can you secure all these wonderful benefits for your sound system? Read on and see.

## Why an Antenna?

Simply described, an antenna is an electrical conductor or group of conductors which extracts energy from passing radio waves and passes it on—via a *transmission line*—to a tuner's input terminals. The tuner amplifies these flea-power radio-frequency signals and *demodulates* them (extracts the audio for subsequent amplification).

Today's FM tuners (or tuner sections) are quite sensitive, providing a listenable audio output from *very* low input levels. But just how "listenable" a tuner's output is with respect to noise and distortion depends, to a great extent, on how much input signal it has to work with. (A glance at the quieting and distortion curves in any Hirsch-Houck lab test of an FM tuner illustrates the point.) If you live in a high-signal-strength area, a relatively simple antenna will provide adequate signal levels. You might, however, need a more elaborate directional antenna to reduce the effects of multipath. And if you live in a weak-signal area, you might need help in the signal-strength department.

In situations between these two extremes there are many factors to be considered. *Each receiving location is unique*, with its

own special characteristics (including those of the tuner employed) that determine which combination of antenna type, physical mounting, and auxiliary components (transmission line, possibly an antenna preamp, etc.) will be most effective.

## The Basic Antenna

The half-wave dipole can rightly be considered the fundamental antenna because most other types are derived from it. As its name implies, the conventional dipole comprises two conductors, each a quarter-wavelength at the frequency of interest. In free space, the dipole has a feedpoint impedance of 72 ohms at its *resonance* frequency (that is, at the frequency at which the dipole is a half-wavelength long). For example, a dipole 5.3 feet long resonates at 88 MHz (megahertz), the lower end of the FM broadcast band. A dipole 4.8 feet long resonates at 98 MHz, the center of the band, and one that is 4.3 feet long is tuned to 108 MHz, the top of the FM band.

Any dipole has a certain bandwidth—centered at its resonance frequency—over which it functions most efficiently. As it is

operated at frequencies farther and farther away from resonance, it not only becomes less and less efficient, but a problem similar to multipath (see below) may occur.

However, there are ways to broaden the dipole's response. One is to use a *folded dipole* such as is shown in Figure 1. Here, a total of one wavelength of wire is used to construct the antenna. This dipole has increased surface area and therefore greater bandwidth. It also has a *feedpoint impedance* of about 300 ohms, offering a direct match to 300-ohm twinlead transmission line, and is widely used for FM reception.

Another means of broadening the dipole's frequency response is to increase the *surface area* of the conductors. It is for that reason, aside from structural strength, that metallic tubing is usually used in the construction of outdoor FM and TV antennas.

The dipole, be it conventional or folded, displays two fundamental antenna characteristics—*directivity* and *gain*—that are intimately related. Directivity refers to the fact that an antenna is more sensitive to signals from certain directions than from others. The characteristic response of a half-wave dipole is shown in Figure 2. Viewed in three dimensions, the pattern would be doughnut-

shaped for both the single-wire and folded dipoles. It is obvious that the dipole is most sensitive to signals striking it broadside, and least sensitive to signals striking it on edge. It must therefore be oriented to favor those directions the signals you want to listen to are coming from. If mounted at least 5 feet (a half-wavelength at FM frequencies) above ground or any structure containing appreciable amounts of metal, a dipole's response becomes similar to the pattern of Figure 2.

This directivity can be a nuisance if you want to receive signals from several different directions, but more often it is an effective weapon in the fight against *multipath distortion*. This phenomenon, called "multipath" for short, results when two or more signals arrive at the antenna from the same transmitter (see Figure 3). One portion of the signal radiated by the transmitting antenna travels directly to the receiving antenna; another portion strikes a large building which *reflects* it toward the receiving antenna. And a third portion may be reflected toward the receiving antenna from another direction. Each signal follows a different path and takes a different amount of time to make the trip. Although this difference is only a matter of microseconds, it causes the signals to be out of phase with each other at the receiving antenna. When the signals combine randomly, they produce fading, "flutter," or distortion in the signal. If a tuner has good AM suppression and a good (low) capture ratio, it will resist the effects of multipath. However, the fading produced by multipath is often too much for the tuner to handle. That's when antenna directivity becomes important.

A dipole can be physically oriented to favor the direct signal and reject the reflections. But more directivity is needed in severe multipath situations, and a more-complex antenna is required to achieve it.

Gain, the other basic characteristic of the dipole, is a measure of how much signal a particular antenna will deliver compared to the output of a reference antenna. Unfortunately, some manufacturers publish gain figures based on a theoretical "isotropic" (dBi) reference level, and others rate their products' gains using a half-wave dipole (dBd) reference. The dBi gain figure, if not the performance, will always be 2.1 dB "better" when *equivalent* antennas are being compared.

## Omnidirectional Antennas

If you want to listen to stations at various points on the compass, are not bothered with serious multipath problems, and don't need a lot of gain, an omnidirectional antenna is suitable. Two types are commonly used in FM applications—the "S" dipole and the "turnstile" antenna. The "S" dipole is a folded dipole composed of metallic tubing bent in the shape of the letter S (see Figure 4). This antenna has a polar response in the horizontal plane that is fairly circular or omnidirectional. However, the "S" dipole, like a straight one, is directional in the vertical plane. Its gain is about -1 dB refer-

enced to a "straight" dipole, or 1.1 dB over isotropic.

The turnstile antenna consists of two folded dipoles at right angles to each other. The turnstile and its horizontal polar response, shown in Figure 5, is roughly omnidirectional. At right angles to each dipole the turnstile has a 0-dB gain referenced to a single dipole. At intermediate angles, the polar responses of both dipoles comprising the turnstile combine to provide more received signal than either one alone would provide, but not as much as would be obtained from a single dipole oriented for optimum reception.

Several manufacturers offer antennas formed by stacking one turnstile on top of another. The two, spaced a few feet from each other, are connected together by a phasing harness to provide about 3 dB of gain over a dipole. Although these stacked turnstiles remain omnidirectional in the horizontal plane, they do discriminate in the vertical plane and may afford some relief from multipath.

## Directional Antennas

For really substantial amounts of gain and/or multipath suppression, a highly directional antenna must be used. Two types are commonly employed for FM reception—the *yagi* beam and the *log periodic*. Let's examine each in turn.

The *yagi* beam is composed of a dipole "driven" element and one or more "parasitic" elements coupled by electromagnetic

fields. If a parasitic element slightly *longer* than the driven dipole is placed behind it, the element acts as a *reflector*, reinforcing the dipole's response to signals striking the dipole first. If a *shorter* parasitic element is placed in front of the dipole, it acts as a *director*, further focusing the dipole on signal sources to its front.

A three-element *yagi* and its horizontal polar pattern are shown in Figure 6. This antenna has about 7 dB of gain over a half-wave dipole and is much more directional. Adding more elements will enhance the antenna's directivity and increase its gain. Note that the polar pattern of the *yagi* beam contains one major lobe and several minor ones. As more elements are added, the major lobe gets larger at the expense of the minor lobes.

Besides a *yagi's* gain, there are several other important specifications. Two are apparent from an examination of the antenna's polar pattern. The first is the *front-to-back ratio*, which describes in decibels how well the beam can discriminate between equal-strength signals coming from its front and back. Typical figures range from 10 to 30 dB. The higher the number, the more directional the antenna.

The second specification, the *half-power beamwidth*, is measured in degrees. It describes the width of the major lobe and is determined by locating the points where the antenna's response has fallen 3 dB (the "X" points in Figure 6). Lines are drawn from these points to the origin of the graph, and the angle thus formed is measured. The half-power beamwidths of typical *yagis* designed

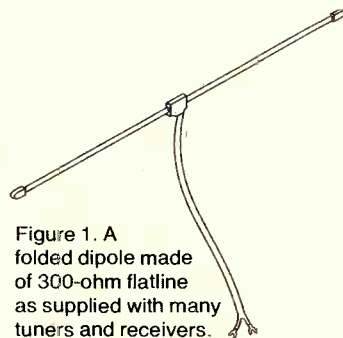


Figure 1. A folded dipole made of 300-ohm flatline as supplied with many tuners and receivers.

Figure 2. The figure-eight pickup pattern of a dipole antenna

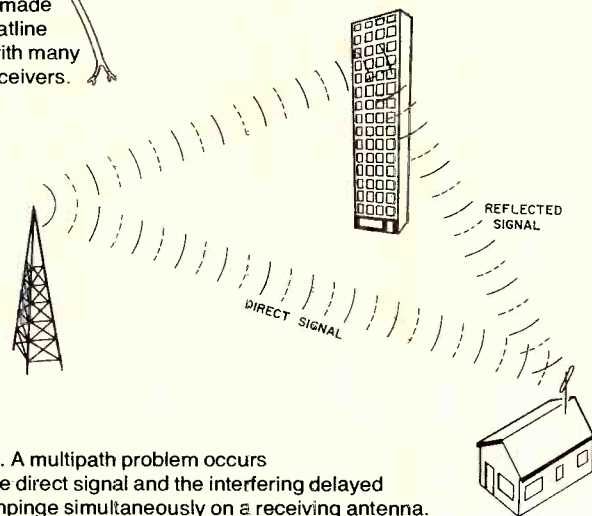
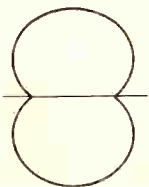
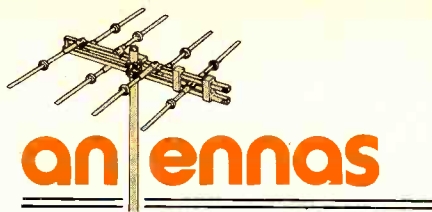


Figure 3. A multipath problem occurs when the direct signal and the interfering delayed signal impinge simultaneously on a receiving antenna.



for FM service range from 50 to 70 degrees. This half-power or  $-3$ -dB beamwidth is analogous to the field of view of a telescope or binoculars. To obtain a higher degree of magnification, the field of view must usually be reduced. Accordingly, to obtain more gain, an antenna's "area of focus" or half-power beamwidth must be reduced.

The practical consequences of these three specifications are apparent. If the antenna has high front-to-back and front-to-side ratios, it will greatly favor signals from stations situated in the direction of its major lobe. This makes the yagi very effective against multipath.

An antenna with a narrow  $-3$ -dB beamwidth will have to be accurately aimed for best results. If all the stations you want to listen to have transmitting antennas at one common site, the antenna can be oriented so that the major lobe points towards that site. However, if the stations you want to receive have scattered broadcast-antenna locations, you'll need to aim the yagi in different directions at different times. This is best accomplished by using an *antenna rotator* on the yagi's supporting mast (more on this later).

The yagi might appear to be exceptionally well suited for FM broadcast reception, but it does have some drawbacks. The most serious is that it is inherently a relatively narrow-band device. Of course, some of its elements can be folded to broaden its frequency coverage. There is much more than this involved, however, and special design techniques must be employed to produce a yagi that offers a good performance across the entire FM band.

A directional beam antenna that enjoys many of the advantages of the yagi but does not have bandwidth limitations is the *log-periodic dipole array*, or simply the *log-periodic*. As shown in Figure 7, the log-periodic is made up, in effect, of a series of dipoles. At the upper end of the FM band those dipoles that serve as "driven" (active) elements for the lower frequencies become reflectors and some of the directors behave

like driven elements. At the lower end of the FM band the roles change, and what were driven elements become directors, what were reflectors become driven elements. This smooth transition is a basic characteristic of the log-periodic and accounts for its extremely wide bandwidth. In fact, log-periodic arrays can function over as much as a 4:1 frequency range (say, from 50 to 200 MHz) with relatively constant gain, feed-point impedance, front-to-back ratio,  $-3$ -dB beamwidth, etc. A well-designed log-periodic can exhibit 8 dB or more of gain over a dipole and a front-to-back ratio comparable to that of a yagi. The log-periodic is usually connected directly to 300-ohm twinlead.

The directionality that is a boon in some situations can be a liability in others, requiring the use of a rotator. Also, yagis and log-periodics designed for high gain and directivity tend to be physically large. The boom (the horizontal beam that supports the active elements) can approach 12 feet in length and the elements 6 feet. Besides being unwieldy, large directional arrays require secure mounts and heavy-duty rotators, and they are vulnerable to damage by gusty winds because of their large surface areas.

How large an antenna you need depends on many factors. And, as is the case with other audio components, the specifications provide the basic—if not complete—information you need for making an informed choice. The key antenna specs required, if not supplied by advertisements or electronics catalogs, can usually be obtained by writing to the manufacturer or consulting his local distributors. (A list of companies manufacturing and/or retailing FM antennas and accessories appears in the box at the end of this article.)

## Television Antennas

Because the FM band lies between TV channels 6 and 7, it might be supposed that a wideband TV antenna, such as a log-periodic, could be used for FM as well. In some cases this is true, in others it is not.

To provide consistent performance on television channels 2 through 13, many manufacturers produce antennas that have *two* separate active sections. One covers channels 2 through 6; the other channels 7 through 13. These vhf antennas are frequently not good performers on the FM

band—the "low-vhf" section's performance falls off abruptly above 88 MHz, the lower end of the FM-broadcast band. As a matter of fact, some TV antennas are deliberately made to perform poorly on FM because strong FM signals can interfere with TV reception. In some instances, however, manufacturers give the purchaser a choice by installing FM trap or control elements that are left on if FM rejection is desired or snapped off if the antenna is to be used to receive FM signals.

Finally, there are some "all-band" TV antennas that give a good account of themselves on the FM band as is. If you have a TV antenna that does not have the FM-reject feature permanently built in, try connecting its lead-in to the antenna terminals of your FM tuner. You might find it performs suitably, in which case all you'll need is a simple two-set coupler or "signal splitter" to feed the television set and FM receiver simultaneously.

## Indoor Antennas

For best performance, an antenna should be mounted as high as possible and have a clear line of sight to the transmitting antenna. These conditions are hardly ever met indoors. However, there are many reasons for *not* mounting an antenna outdoors, ranging from inconvenience to absolute impossibility (for example, when a landlord prohibits them). What can an apartment-dwelling FM listener do when his lease prohibits outdoor antennas—or he simply doesn't want the bother or expense?

There are a few options open to him. If the apartment building has a master TV antenna system, it can frequently be used to drive the FM tuner. An inexpensive accessory (the signal splitter mentioned above) can be installed to provide signals to both the TV and FM tuner. If you subscribe to cable TV, try connecting your tuner to the cable system. Consult the cable company for how-to-do-it details, costs, and exactly what channels in the FM band are available. (The full 88- to 108-MHz band may not be.) More and more cable systems are offering high-quality FM service, either as part of the package or as an option. Sometimes the only possibility open to the apartment dweller is an indoor antenna—which is certainly worth a try if there is no alternative.

Figure 4. The "S" dipole has virtually omnidirectional response in the horizontal plane (see inset).

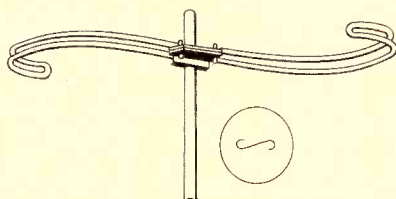


Figure 5. A "turnstile" pair of crossed dipoles is also almost equally receptive to signals from all directions.

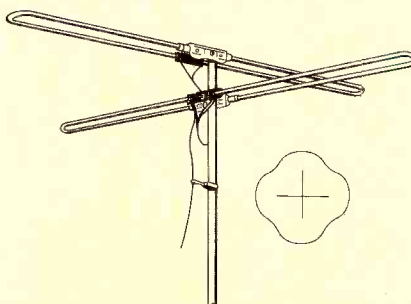
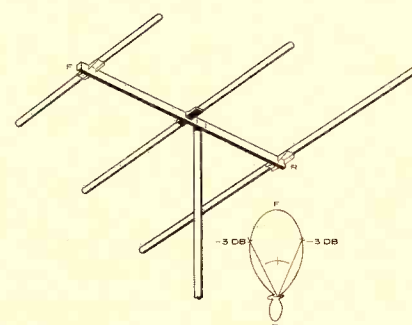


Figure 6. The yagi is intentionally directional, rejecting signals from the rear (R) and sides.





Most manufacturers pack a simple 300-ohm flatline folded dipole with their tuners. The dipole can be taped or tacked to a wall—or, better yet, to a simple wooden “T”-frame that can be rotated to position the antenna for best reception. You may find that the folded dipole provides adequate results. On the other hand, the dipole may not be able to provide enough signal to quiet the tuner (eliminate hiss) adequately or to prevent multipath-interference distortion. Or you might find that the signal fluctuates as you move around the room.

If the folded dipole proves unsatisfactory, try an indoor TV/FM or FM-only antenna. Many such antennas are being marketed, ranging from relatively simple “rabbit ears” to rather elaborate models with built-in phasing switches to attenuate multipath or TV ghosting (they are related phenomena). Some even have internal preamps to boost received signal levels.

Some years ago (June 1973), STEREO REVIEW featured a comprehensive article on FM indoor antennas. Tests were conducted on a number of models. Interestingly, few of them, except those with built-in preamplifiers, performed appreciably better than the reference folded dipole (some performed much worse), though adjusting the physical orientation of these antennas could, to varying degrees, result in the rejection of unwanted signal reflections. The key findings of the tests were:

- If you have a choice between a good, directional outdoor antenna and an indoor antenna, use the outdoor one.
- If you are limited to an indoor antenna and don't mind orienting it carefully and adjusting element lengths, choose the least expensive, least elaborate, rabbit-ears type.
- Indoor antennas are quite sensitive to positioning. Keep them away from metal surfaces. The presence of a human body can affect an indoor antenna and make adjustments tricky.

Since that article appeared, two relatively sophisticated “Beam Box” indoor antennas have been introduced by B.I.C. A Beam Box has inside it a crossed pair of quarter-wavelength dipoles, with switching to choose among the elements. In addition, there are 75- and 300-ohm outputs and a tunable signal filter that operates in switchable wide- and narrow-band modes. In the narrow-band mode it can attenuate by 12 dB unwanted signals 4 MHz above or below the

frequency to which it is tuned. This antenna is theoretically as directional as a dipole (and much more convenient) and hence can attenuate multipath. However, the gain of the Beam Box is rated at  $-12$  dB (in the wide-band mode) or  $-5$  dB (narrow-band) referenced to a dipole. Hence it may not be suitable if you do not live in a relatively high-signal-strength area. But if an outdoor antenna is an impossibility, it's worthwhile to consider a Beam Box or some other, less elaborate indoor antenna.

## Transmission Line

The technical name for the cable that carries the received signals from the antenna to the input of the tuner is the *transmission line*. A good one will have low loss and a constant impedance. It will also be easy to handle and resist the destructive effects of weather and pollution. Three basic types of transmission line are commonly used in FM reception: *coaxial cable* (also called “coax”), *twinlead*, and *shielded twinlead*, which is a hybrid of the first two.

Twinlead, which has a characteristic impedance of 300 ohms, is available in several varieties. What might be called *standard twinlead* is composed of two parallel, stranded copper wires spaced about  $\frac{1}{2}$ -inch apart and embedded in an insulating plastic. This is the least-expensive transmission line available for FM reception. Although standard twinlead has very low losses (only about 1.25 dB per 100 feet at 100 MHz), it is not really intended for outdoor use. Signal loss increases dramatically when the cable is wet, dirty, or aged by sunlight.

Twinlead is a *balanced* transmission line, providing a good match for a balanced (physically symmetrical) antenna such as the folded dipole. Like the balanced microphone lines used in recording studios, twinlead resists noise pickup, but only if its electrical balance is maintained. If one conductor is closer to, say, a metal antenna mast or window frame than the other, the twinlead will become unbalanced and susceptible to electrical noise and interfering signals. This tendency of twinlead to become unbalanced can be countered by twisting the transmission line during installation so that it has about one turn per foot. This will also help prevent the flat twinlead from whipping about in the wind.

The next step up in quality is flat, foam-filled twinlead—a polyethylene outer layer and an inner layer of plastic foam surrounding the two conductors. Compared to standard flat twinlead, foam twinlead is less affected by moisture and aging and has lower losses—but costs about one-and-one-half times to twice as much. In any case, even foam-filled twinlead should be replaced after a few years of outdoor service, especially in urban and coastal areas.

In *tubular twinlead*, the two conductors are bonded to a round or oval plastic tube whose center is filled with either air or polyethylene foam. Besides having low losses (about 0.75 dB per 100 feet dry) and being less prone to wind flutter, tubular twinlead is also more resistant to the effects of moisture, dirt, and pollutants. *Foam-filled tubular twinlead* is best in this respect, but even

this type of line should be replaced after a few years' exposure to the elements. Twisting the line, securing it with standoffs, and keeping it away from metal objects is also recommended.

Unlike twinlead, coaxial cable, because of its physical construction, is not affected by proximity to metal surfaces. An inner solid copper-wire conductor is surrounded by either a solid or foam polyethylene insulating layer. A copper braid is woven over the insulation (or aluminum foil is wrapped around it), and the entire assembly is protected from the environment by an outer insulating jacket of vinyl. Besides serving as one of the signal conductors, the braid or foil behaves like a shield. Properly designed coax can provide almost complete isolation from noise and other extraneous signals. It can be run close to or inside metal masts, pipes, drain spouts, etc., without disturbing its electrical characteristics. Coax is also highly weather-resistant (assuming the cable is of good quality) and can even be buried in the ground. It has a normal outdoor lifetime of about ten years.

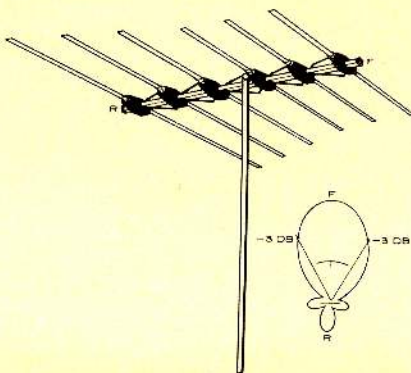
Coaxial cable is an unbalanced type of transmission line, and the type used in FM installations, RG-59/U, has a characteristic impedance of 75 ohms. These two properties necessitate the use of a *balun* (an abbreviation for “balanced-to-unbalanced” transformer) between the 300-ohm antenna and the 75-ohm coaxial transmission line. At 100 MHz, the RG-59/U has a signal loss of about 3.5 dB per 100 feet. Although coax has greater loss than *dry* twinlead, it is certainly more efficient than *wet* twinlead. Coax is also physically easier to handle and is not prone to whipping about in the wind. Good-quality coax, however, is more expensive than twinlead—it runs about 13 cents per foot.

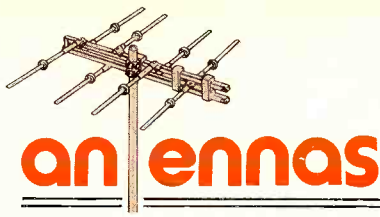
The shielding properties of coaxial cable have been highly touted and are beneficial in many installations. However, the outer coaxial conductor, be it braid or foil or both, can act as an efficient shield only if it covers all or most of the surface area of the insulating dielectric. For that reason, do *not* use coax that has a loosely woven braid. (If you can see an appreciable amount of the foam insulation through “holes” in the weave after carefully removing a portion of the outer vinyl jacket, the braid will be an ineffective shield.) It would be wiser to buy a high-quality, tightly woven braid-shielded cable intended for transmitting use by hams, or a high-quality foil-shielded cable produced by a reputable manufacturer such as Belden or Alpha Wire.

Shielded twinlead enjoys many of the advantages of both coax and twinlead. Its feedpoint impedance and balance allow it to be connected to 300-ohm antennas and FM receivers without a balun. If it is grounded, the shield acts as a barrier to noise and other undesired signals and also prevents the inner conductors from being disturbed by nearby metal masses. Like coax, shielded twinlead can be run close to or even inside metal masts and pipes. Its electrical characteristics, including signal loss (which is comparable to that of RG-59/U), do not vary with weather conditions, and its price and lifetime are about the same as for coax.

(Continued overleaf)

Figure 7. The log periodic is also directional. The  $-3$ -dB points are explained in the text.





## Rotators

If you want to listen to stations coming from more than one direction and you have a good directional antenna, you will need an antenna rotator so that you can aim the antenna by remote control. A rotator installation typically consists of a weatherproof, high-torque, slow-speed electric motor that is mast-mounted, a suitable length of multi-conductor cable to carry the required control voltages, and a control box through which you can activate the rotator from the comfort of your living room.

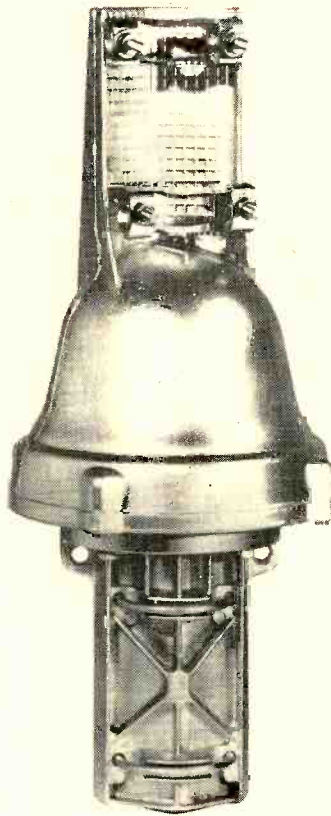
A number of rotator systems for use with an FM or TV antenna are available to the consumer. Prices range from about \$35 to \$100. Some control boxes have dials laid out like a compass. Twist the main dial to the desired heading and the rotator will swing the antenna to that direction and then shut itself off. On other control boxes there is simply a bar that is depressed at one end for clockwise rotation or at the other for counterclockwise rotation. This type of control box may or may not have some means of indicating the antenna heading, either a meter calibrated in degrees or a series of LED's spread out like points on a compass.

If you are going to the trouble of installing a rotator system, it makes sense to invest in a good one. The additional cost above that of a bare-bones system will yield a longer operating life, greater resistance to wind and the elements, smooth, quiet operation, and greater accuracy in aiming the antenna. Shown in Figure 8 is Cornell-Dubilier's Model BT-1 "Big Talk" rotator system. Its control box has a compass-type control knob that allows quick and accurate setting of the antenna heading and four memory positions that can be recalled at the push of a button. The rotor itself has high torque, a disc brake to prevent "weather-vaning" in high winds, and enough muscle to handle the largest stacked TV and/or FM arrays.

## Other Accessories

There are several other items that you might want to include in your antenna system. Foremost in importance is a lightning arrestor. Direct or even nearby surge-producing strikes are relatively infrequent, but a good lightning arrestor is inexpensive insurance against damage to your equipment. Lightning arrestors are produced by most antenna manufacturers and are available for all types of transmission and rotator-control lines. In order to function, these devices *must* be connected to a good earth ground (a deep ground rod or cold-water pipe), and are required by most city building codes and the National Electrical Code.

If more than one tuner or tuner and TV receiver are to be fed by the same antenna, either a directional coupler or a signal split-



ter (also known as a two-set coupler) is required. Directional couplers are used mostly in larger installations and offer greater inter-stage isolation. But they introduce more signal loss and are also more expensive than signal splitters. Splitters are frequently supplied with "all-band" vhf/uhf TV/FM antennas, but they are inexpensive and easy to install when bought separately.

If a balanced, 300-ohm antenna is to be used with 75-ohm coax, or if a 75-ohm transmission line is to be connected to a tuner with a 300-ohm antenna input, an imped-

ance-matching balun transformer must be used. Baluns are available in outdoor or indoor models, and some are indoor/outdoor types that can be used outside if a protective rubber boot is slipped over the coax attached to the balun. Typical signal loss due to the insertion of a balun is only 0.5 to 1 dB, far less than the loss that would result from mismatched impedance.

TV viewers and FM listeners who live in fringe areas where FM and TV reception is marginal often install signal preamplifiers either at the antenna or near the tuner. In some situations preamplifiers are highly desirable, even necessary; but in others a preamp is simply not called for. If you live in an area where the signal strength is very low, a preamp might mean the difference between receiving your favorite station or not. However, there are several potential problems to be aware of. All antenna preamplifiers, even high-quality units, introduce *some* noise. Mast-mounted preamplifiers generally provide better noise performance than indoor models. Preamps are subject to overload by strong, local FM signals and/or by signals outside the FM band—police, fire, amateur, or CB transmissions. Finally, an antenna-mounted preamp *must* be completely weatherproof. Overall, it's safe to say that some preamplifiers are good performers; others are notoriously deficient in one or more of the above-mentioned areas. In any case, if you need a preamp, choose one produced by a manufacturer with an established reputation. (Note that if you have a good antenna and a tuner that is close to state-of-the-art, it is unlikely that a preamp will provide much improvement.)

A non-electronic alternative to using a preamp is stacking two or more antennas. Most manufacturers offer kits that permit the user to stack and phase two or more antennas on the same mast. Stacking one antenna on top of another results in greater directivity and 3 dB more gain without the problems sometimes experienced with preamps. Of course, stacking two or more large yagis or log periodics calls for a very rugged and secure antenna installation.

If interference (RFI) is a problem even when you're not using a preamp, a good high-pass filter (such as those made by R.L. Drake or J.W. Miller) installed at the tuner's antenna input can help if the offending transmission is from a CB'er or a radio amateur operating below 30 MHz. Sometimes a strong local FM signal can overload the tuner's front end. In that case, a notch filter or adjustable trap can attenuate the overly strong signal. If your tuner is picking up TV, business band, police, fire, or vhf amateur signals, an FM bandpass filter might help. Suitable FM traps and bandpass filters are available from JFD and Jerrold.

If you've maximized the gain of your antenna setup, there are times when strong FM signals can themselves cause problems. The tuner can be overloaded, with the result that the same station will appear at several different points on the FM band. The solution is to use a signal attenuator. Some, such as Jerrold Electronics' PDA series, have fixed attenuation (1, 3, 6, 10, or 20 dB, depending on the model). Others, such as the JFD Model AS 5, can be switched to provide 0, 15, or 25 dB of attenuation. Another

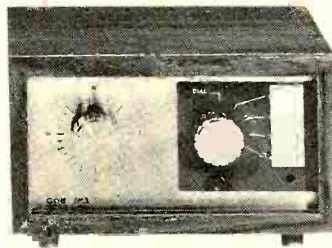


Figure 8. Cornell Dubilier's Model BT-1 consists of a rotator (top of page) that turns the antenna mast plus a solid-state remote control box.

way to reduce input-signal strength is to aim the directional antenna somewhat away from the transmitting antenna. Most of today's tuners have overload-resistant front ends, however, so the need for signal attenuation is not all that common.

## Choosing and Installing an FM Antenna

Among the factors you must consider when choosing an antenna are: the distance to the transmitting antenna, the power it radiates, and the terrain between it and your antenna. On the tuner side, you need to know its sensitivity, capture ratio, and overload characteristics. The further you are from a transmitter, the more antenna gain you will need. In multipath-affected areas, high directivity will be required. First evaluate your listening location and habits, and then compare your needs with the features of each antenna type we have discussed.

If you are physically able, you can install the chosen antenna yourself. All that's required is some mechanical ability and a standard assortment of tools. Otherwise, plan on paying your local TV service technician or antenna retailer \$35 to \$100 for an installation, depending on the complexity of the job.

It should be clear that it's best to use either coax or shielded twinlead transmission line. They are not only electrically superior but also more economical in the long run. The choice between shielded twinlead and coax is largely a matter of personal preference and the type of antenna connector on the rear apron of your tuner. Whatever type of line is chosen should be supported at frequent intervals with *standoff insulators* to minimize strain on the connections.

The antenna should be mounted as high and as much in the clear as possible. At a minimum, the antenna should be mounted at least 5 feet above ground or any large structure. Television and FM receiving antennas are usually installed on 5- or 10-foot masts, but in some installations telescoping masts or towers are used. If the terrain is relatively flat and there are no large intervening objects, a roof-mounted 10-foot mast is a good antenna support in an urban or near-suburban installation. For greater height, a 5-foot mast can be placed over a 10-foot mast if proper hardware is used. Two antennas (one, say, for FM and one for television reception, or two for FM) can be mounted on the same mast provided they are spaced at least 5 feet from each other.

In some locations greater antenna height is required, and this can be provided by a telescoping mast. Radio Shack, Lafayette, and Jerrold all offer galvanized-steel masts which telescope to 20, 30, 40, or 50 feet, depending on the model. These masts should be guyed with either nylon rope or aluminum- or plastic-clad, galvanized-steel wire. Collars with holes drilled for the guys are mounted on the masts at the factory.

There are several types of mounts for antenna masts available, including chimney, vent pipe, wall, eave, and roof mounts. Chimney mounts employ two straps that are wrapped around the chimney and tightened

to provide the required support. Wall, eave, and roof mounts are the most secure of all because they are bolted to the supporting structure. They can be attached to masonry after holes have been drilled and lead expansion fasteners installed, or they can be attached to wood beams with large wood screws. Tripod roof mounts and "snap-in" wall mounts are very convenient to use because they will temporarily support the antenna assembly before the mast-retaining hardware has been tightened—you won't need another person to hold the mast while you tighten the hardware.

It's best to stay away from chimney strap-on and vent-pipe clamp-on mounts because they're not as secure as those that are bolted to the supporting structure. The chimney is a convenient place to mount an antenna, and wall mounts can be attached to chimney brick, but the antenna will corrode rapidly if mounted so that exhaust gases pass over it and ash builds up on it. If you are using a telescoping mast, a bolt-on wall mount, tripod, or pivoted-flange roof mount is a *must*.

When a *great* deal of antenna height is needed, such as in fringe or deep-fringe reception areas or in a valley, an antenna tower should be used. A tower can also be installed if your roof cannot support (or you have aesthetic objections to) a telescoping mast. Towers are available in sectional, crank-up, or tilt-over configurations. Besides these categories, a tower can be classified as either guyed or free-standing.

A crank-up or tilt-over tower (the former telescopes) allows you to install, remove, inspect, or repair the antenna without disassembling all or part of the tower. Also, a crank-up or tilt-over tower can be lowered

temporarily to reduce the risk of damage to both tower and antenna if high winds or an ice storm are expected. A sectional tower, on the other hand, is simply a collection of (usually) 8- or 10-foot sections bolted together to form one rigid unit. Sectional towers are less expensive than the other types, and guyed towers less expensive than free-standing ones. Of course, before purchasing any tower you should investigate local zoning ordinances to make sure they are permitted where you live!

Lightning protection for your home will be afforded by connecting the tower to a good earth ground. Grounding the tower or large antenna mast should be done *in addition to* and not instead of installing lightning arrestors on the transmission and rotator control lines. *And, for safety's sake, NEVER attempt to install an antenna and mast in a location where it can in any conceivable way come in contact with overhead power lines.* Hundreds of people are killed or severely injured every year because they fail to observe this simple precaution.

As you can see, the "antenna question" is one that is not simply answered. But once you understand the ground (or grounding) rules, the task of selecting a "sky hook" suitable for your particular circumstances is not really all that difficult—and the payoff is cleaner, clearer, and altogether more satisfying FM reception. □

John McVeigh is an electrical engineer, an audiophile, and assistant technical editor of our sister publication *Popular Electronics*.

## LIST OF MANUFACTURERS

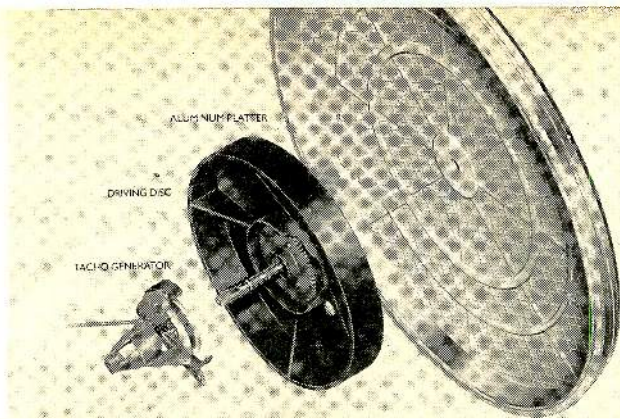
- Alliance Manufacturing Company (rotators), Alliance, Ohio 44601
- Alpha Wire Corporation (cable), 711 Lidgerwood Avenue, Elizabeth, N.J. 07207
- Belden Corporation (cable), Box 1327, Richmond, Ind. 47374
- J. W. Miller Company (filters), 19070 Reyes Avenue, Compton, Calif. 90224
- Blonder-Tongue Laboratories (antennas and accessories), 1 Jake Brown, Old Bridge, N.J. 08857
- British Industries Company (Beam Box indoor antenna), Westbury, N.Y. 11590
- Channel Master Corporation (antennas and accessories), Ellenville, N.Y. 12428
- Cornell-Dubilier Electric Corporation (rotators), 150 Avenue L., Newark, N.J. 07101
- R.L. Drake Company (filters), 540 Richard Street, Miamisburg, Ohio 45342
- The Finney Company (antennas and accessories), 34 West Interstate Street, Bedford, Ohio 44146
- GC Electronics Company (antennas and accessories), 400 South Wyman Street, Rockford, Ill. 61101
- Jerrold Electronics Corporation (antennas and accessories), Box 487, Byberry Road and Pennsylvania Turnpike, Hatboro, Pa. 19040
- JFD Electronics Corporation (antennas and accessories), Industry Drive, Oxford, N.C. 27565
- Lafayette Radio Electronics Corporation (antennas and accessories), 111 Jericho Turnpike, Syosset, N.Y. 11791
- Radio Shack (antennas and accessories), 2617 West 7th Street, Fort Worth, Tex. 76107
- Unarco-Rohn, Incorporated (towers), Box 2000, Peoria, Ill. 61656.
- Winegard Company (antennas and accessories), 3000 Kirkwood, Burlington, Iowa 52601

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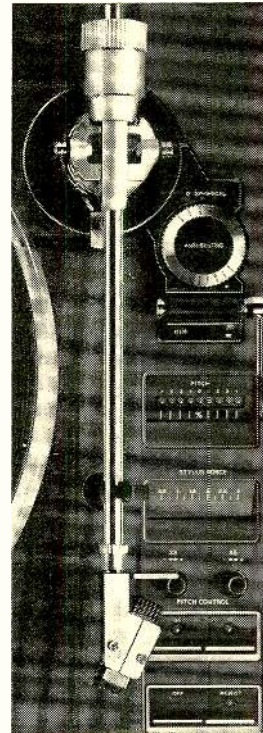
The wow and flutter on the Philips AF 877, for example, is a remarkable 0.05% (DIN) and 0.03% (WRMS). With a rumble figure of better than -70dB. No compromise there.

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# CRYSTAL GAYLE

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"I want to have songs out there on the market that are really me, that are what I'm really like, because it's *my* name on the record."

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CRYSTAL GAYLE always knew she would be a professional singer. She knew it when she began entering grade-school talent shows, and she knew it when she accompanied her older sister Loretta Lynn on the road for a couple of weeks each summer. She knew it when she got her first recording contract with Decca (now MCA), Loretta's own label. Even though that relationship didn't work out, Crystal had only a brief period of self-doubt before hooking up with United Artists Records and ace producer Allen Reynolds. The fact is, Crystal Gayle never gave serious thought to pursuing anything *but* a singing career.

What she didn't know was that in a year when female country-pop singers began to dominate the charts, she would become one of the biggest and most consistent successes of them all. Yet that is precisely the position in which she found herself early last spring when she came to New York to play the Bottom Line, one of the city's major rock showcases. She was still riding the success of the seductive *Don't It Make My Brown Eyes Blue*, a bluesy country-pop single that was nearing sales of two million after a long reign at the top of both the country and pop charts, and her latest album, "We Must Believe In Magic," had gone platinum. Thanks in part to that song and that album, she had recently been voted best female singer by both the Academy of Country Music and the Country Music Association, won the Grammy in the same category, and picked up a Record of the Year award from STEREO REVIEW. What's more, she was being talked about with the kind of reverence heretofore reserved for the likes of Linda Ronstadt, Emmylou Harris, and Dolly Parton, the three female singers who were doing

the most to erase the boundaries between pop and country musics, between regional and national success.

"You know," she speculates, "I think *Brown Eyes* would not have crossed over if it had been released a couple of years ago. The times weren't ready. A couple of years ago it would probably have been produced differently and would never have moved over from country to pop. It happened to be one of those lucky songs that don't come around that often. It was a case of being in the right place at the right time."

If that was the case, it couldn't have happened more appropriately than to Crystal Gayle, who has been moving steadily toward that "right place" for about five years now. She enjoys success on both the country and pop charts for the simple reason that her style *does* fall naturally somewhere between the two categories. Unlike her older sister, Crystal was not raised in the mountains of Kentucky but in the small city of Wabash, Indiana. While Loretta knew nothing except country music when she began singing, Crystal had other influences right from the beginning: by the time she was born, her family had partially escaped the grinding poverty that had been Loretta's early way of life, and the differences show in the respective attitudes of the two sisters.

But if Crystal Gayle seems most at home with cabaret-type material along the lines of *Brown Eyes*, she still has enough unabashed hillbilly in her to encore with *Rocky Top*, that Appalachian ode to the moonshiner, simply because she likes the song. Conversely, though she is not reluctant to acknowledge her country roots, her eight-piece band,

Peace and Quiet, rocks politely along behind her without benefit of either fiddles or pedal steel. Perhaps the breadth of her appeal is best illustrated by the fact that immediately before wowing the Bottom Line crowd she had been playing in Mississippi to an equally responsive audience. Crystal Gayle doesn't just aim to please; she aims to please *everyone*, and her approach to music is indicative of many of the newly developed styles in country (and pop) music today.

"It's *because* of my background that I sing the way I do," she says. "Wabash was a small city, so there wasn't just country music there. Even though country music was a big part of my life, there was so much else going on." It was late afternoon when we talked at her hotel before her Bottom Line gig, and though she had been up and doing interviews with press and radio since 5:30 a.m., she remained calm, patient, and attentive. She is not very talkative, answering questions directly and briefly without offering additional thoughts, and she giggles so often that, after a while, it begins to seem more a personality trait than mere nervousness. Her straight brown hair hangs down almost to the back of her knees; her green chiffon dress is striking without being flashy, and so is her make-up.

BORN Brenda Gail Webb in Kentucky in 1951, Crystal was the last of eight children. Loretta (who years later thought up the Crystal Gayle stage name) was already married and out of the house before Crystal was born. When she was four, her mother left Kentucky to find work in Wabash; her coal-miner father, a victim of black-lung disease who died in 1959, soon followed, bringing along the rest of the family.

Crystal has almost no memories of

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By John Morthland



# CRYSTAL GAYLE...

"I thought that you just went in and recorded and did what they said. I never thought you could have *input!*"

Kentucky, but she remembers singing on stage when she was in the first or second grade in Wabash. Later, there was a school variety show and competition in which she sang the Marion Worth hit *Shake Me, I Rattle* but didn't win. By the time she reached her teens, Crystal was singing country music on weekends and church music on Sundays. She also liked to sing along with the current pop hits on the radio, and she lists Leslie Gore, Brenda Lee, Patsy Cline, and Peter, Paul and Mary as some of her early favorites.

"I grew up singing, I think, because of Loretta," she says. "I grew up with her recordings. That's how I knew I was going to be a singer. During high school vacations—and junior high too—I'd go out on the road with her for about a week, and sometimes she'd get me up there to sing a song or two. It was like a little kid act, but people really liked it.

"Seeing my sister, like on the awards shows . . . I'd sit there and think, wow! And she really believed in me. She really thought I had a good voice and she'd say, 'You will record.' I did demos for her, songs that she wrote. I'm not sure how to give you the feeling, but . . . it's a different situation when it's like that. I was just growing up in it, in show business. People ask me, 'Did it hurt you or help you being Loretta's sister?' It did both.

"I learned a lot just watching her. Entertainment is much more difficult than it looks. A lot of what I learned with Loretta was business; I learned from her mistakes. She would tell me, 'Don't do this, because this will only bring you trouble.' Because it did her. Because of Loretta, with all her problems, I'm very leery of contracts, for example."

It was through Loretta that Crystal Gayle did finally get a recording contract. She was signed to Decca (along with her brother Jay Lee and sister Peggy Sue) shortly after graduating from high school. Though she had several minor hits (recently reissued on an LP called "I've Cried the Blue Right Out of My Eyes" that capitalizes on her *Brown Eyes* hit), it was not an alto-

gether happy deal. The records from that era are rather perfunctory, the sound of a voice in search of a style. And she also had problems with the company.

"I think all the people that worked for the company—and I mean like field people—I think they're good people, but I think they looked at me as being on the label only because of Loretta. I mean, that's just the way the business is. I was fortunate just to have the shorter contract, because I could see what it was doing to my sister Peggy Sue and my brother Jay Lee, and I was able to get out early.

"I'm different from Loretta; I had different ideas musically all along. But I had her producer, and I felt afraid of voicing my opinion then. I thought that you just went in and recorded and did what they said. I never thought you could have *input!* I was just singing what they told me, so I'm not really ashamed of those MCA records. But it's not me, and it wasn't me when I recorded them."

She was in limbo for a while after leaving the label, living in Indiana while her husband, Bill Gatzimos, went to school. (The couple has since moved to Nashville, where Gatzimos studies law at Vanderbilt University and comes

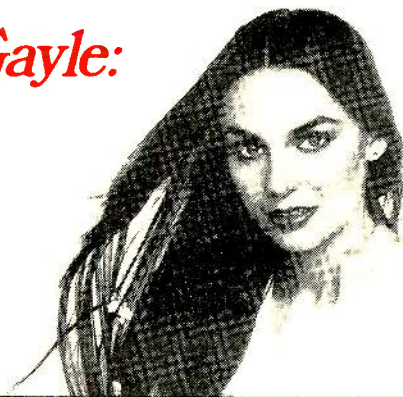
home in the afternoon to sing Randy Newman's *Short People* to his five-foot-one wife.) Then, in 1973, on the advice of country singer Del Reeves, Crystal swung a deal with United Artists. As soon as producer Allen Reynolds entered the picture, her fortunes began to change.

Reynolds is one of the new breed of Nashville writers and producers—he is as likely to use a legitimate harp on a record as he is a pedal steel—and he favors records with soft, intimate arrangements that have very little to do with the so-called Nashville Sound. He is expert at "setting off" a voice like Crystal's. It was also Reynolds who helped to evolve the relaxed sound that has since brought country crooner Don Williams to the edge of pop stardom.

"I wasn't familiar with him at all," Crystal now recalls. "I didn't even know he'd done *Amanda*, that Don Williams song, which I think is really beautiful. Allen is one of the best things that has happened to me. He made me realize that I had a voice I could use as a tool; until then, I was just getting out there and belting. I thought that was how you were *supposed* to sing."

Reynolds works with his artists, rather than making them work for him,

## Crystal Gayle: The New Album



TALK about an album that's pretty as a speckled pup. In "When I Dream," Crystal Gayle takes some likely and some unlikely elements—the latter includes out-Gogi-ing Gogi Grant on *Wayward Wind* (!)—and turns them into a piece of work that could give the most adorable little six-week-old Dalmation a (pardon) *bone-a-fido* ego problem. I write this fresh from one of those ultra-fixed-up suburban mall places called the Puppy Palace, so I *know* how pretty a speckled pup can be. There are a lot of Crystal Gayle albums out there in those spiffy suburban malls too, nowadays, and in my book when a "country" singer whose roots go back to Butcher Holler, Kentucky, can make it in the suburbs, that's something.

Butcher Holler is so far back in the sticks they don't even *spell* it the city way—hollow, that is. There are all kinds of hollers in the speech of the South and near South, but danged near all of them are always written down hollow. Except old Butcher. Now Crystal's big sister, Loretta Lynn, still sounds like she came from Butcher Holler, and the farther you get from there and/or Nashville, the less fuss you'll hear them making over Loretta Lynn in the suburbs. Loretta's reach (and it is considerable) is into the blue-collar districts. Crystal is accepted there (for a while yet, anyway), but she and Loretta have a sophistication gap between them; unlike her sister's, Crystal's voice is right at home in pricey places.

Crystal's style is also blithely ignorant



which immediately distinguishes him from the more traditional Nashville producers. Crystal felt the difference the first time she went into the studio with him, but she feels the real turning point came when they cut *Wrong Road Again* (one of the three hit singles from her first UA album, "Crystal Gayle").

"That one just felt good," she says, "and it was the first time everything about a session felt right. Since then I've been growing steadily, and I've had more and more personal input on my own records. I want to have songs out there on the market that are really me, that are what I'm really like, because it's my name on the record.

"It's always hard to find fresh melodies, which is what I look for first. Sometimes a melody will grab me, but then if the lyric isn't there I won't sing it. I love to sing *Ready for the Times to Get Better*. It's a song you can take so many different ways. You can take the love part of it, or you can take it as being about how things aren't going right. But you can also take it as just about life in general. *Brown Eyes* I love for the way it sings, the lilting melody. I like that style a lot."

**I**F there is one recurring criticism of Crystal Gayle, it has been about her

choice of songs and arrangements. There's no doubt that her sultry voice is a remarkable instrument, or that she is more than capable of putting across the right song in a highly personal way. But her albums do still tend to be erratic, burdened by songs that have either pedestrian lyrics or stiff and formal arrangements, music that lacks both the soul of the best country and the energy of the best pop. Since so much of what she and Reynolds do falls into that undefinable area between genres, the issue is connected in her mind with the question of what is really country and what is really pop. Probably as a result of her older sister's role as the leading lady of "hard" country, the question is one that's been forced on Crystal even though she considers it to be an irrelevant one.

"I just love *singing*," she explains. "So why does a song have to be labeled country or pop? Why can't it just be a good song? You can take a song and produce it any way you want. There've been pop songs that were just one word repeated over and over and over, and they were smashes. Do the same song a country way and it may even be a country smash. I'd be lying if I said I didn't want that crossover record, because I think every singer wants it. You're in

front of more people, you have better sales, just better everything.

"At the same time, there are 'hard' country songs going to number one on the charts, so it's not like country's getting away from itself. There are always fans there for that. Loretta's last song was number one. Conway Twitty's 'hard' country, and everywhere he plays it's to big audiences. So crossing over isn't helping to destroy country music, like some people say."

As for future recording projects, Crystal would like to do an album of folk songs. "That era has come and gone, but I really like a lot of those songs." Meanwhile, she enjoys her new-found fame and fortune enough not to question it.

"I don't know. It's just that times change, and this is the Year of the Woman," she says, switching to a facetious tone as she puts the capital letters on that last phrase. "I'm glad I'm in on it. It's like they had a time for the Beatles . . . but peoples' tastes change. Now everything's centered on the female singer. Maybe next year it'll be something else."

And what would become of Crystal Gayle if that should happen?

"Nothing. Because I'll still be in there singing!" □

of categories. It rings clear, like her name. It reminds you that good diction in a singer can be a treat, it doesn't phrase a line radically, and yet the phrasing is singular. This particular album (and some of her others) reminds me of easy listening, and if you know me at all you know that easy and listening are two of my dirtiest words. But in this case the term means something that makes sense: easy to listen to. Easy to take. Crystal's style is, of course, *sort of* country. It is a good product (in the midst of umpteen bad ones) of post-television country; it is country after the roads got paved, after indoor plumbing became widespread; after the Rural Electrification Association lit up the old home place.

Crystal Gayle is, you might say, country now that the country is overpopulated. Still, a voice that is *pure* country in the mountain-springwater sense, in the sense that country is serene and pastoral, can be, when backlit, so beautiful it hurts. She has the kind of voice some people like to call an instrument, not outlandishly rangey, but natural-sounding over what range it does have, unforced, unhurried, unharried, unhassled, and unpretentious. Her first big, monster crossover hit, *Don't It Make My Brown Eyes Blue*, had the kind of stylized "song-type" words one doesn't exactly sink one's teeth into, but—think back now—she had you paying attention to them anyway. Her much smaller hit with *Waiting for the Times to Get Better* (to my mind, a much better song) required some depth of emotional iden-

tification . . . and I'm sure she would have sold more copies if she hadn't sounded as sad as the song deserved.

And so it goes in this album; she's still getting into the songs, and, as in the past two or three of her outings, they're uniformly a cut or two above the norm for female country singers—or for pop singers, for that matter. Allen Reynolds' production is clean and, well, maybe a *tad* slick, but it knows about backlighting the vocalist. The album goes out in a curious way, with four old, familiar songs, all

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**"A voice that is pure country in the mountain springwater sense . . . can be, when backlit, so beautiful it hurts."**

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four identified rather strongly with some pretty strong personalities: *Cry Me a River*, *Wayward Wind*, *Someday Soon*, and *I Still Miss Someone*. I'd have kicked *Wayward Wind* out on merit, but she does sing it her own way, and she makes the other three hum with the kind of contentment that suggests they won't miss Julie London, Judy Collins, and Johnny Cash at all.

And it is hard to miss other voices when you have this one engulfing you,

especially in the even better moments stretched back to back across *Paintin' This Old Town Blue* and *When I Dream*. It's a voice raised on country sunshine but not at the expense of being isolated from the outside world. The culture one hears in this voice is not exclusively the kind that forms around yeast and corn. This is a voice that is going places with damned near all the labels torn out of its clothes, but everyone will say it knows how to dress. Of course, in places like Butcher Holler, they'll say *dress up*. For a while yet. One half expects Crystal Gayle to interrupt an album like this to say, "Look, Ma, no corn," but the message gets across in a subtler way, neighbors, and as long as Gayle continues to show the feel for a song's vitals she is showing nowadays, they're going to be looking for her stuff in the general stores as well as the chic shopping malls.

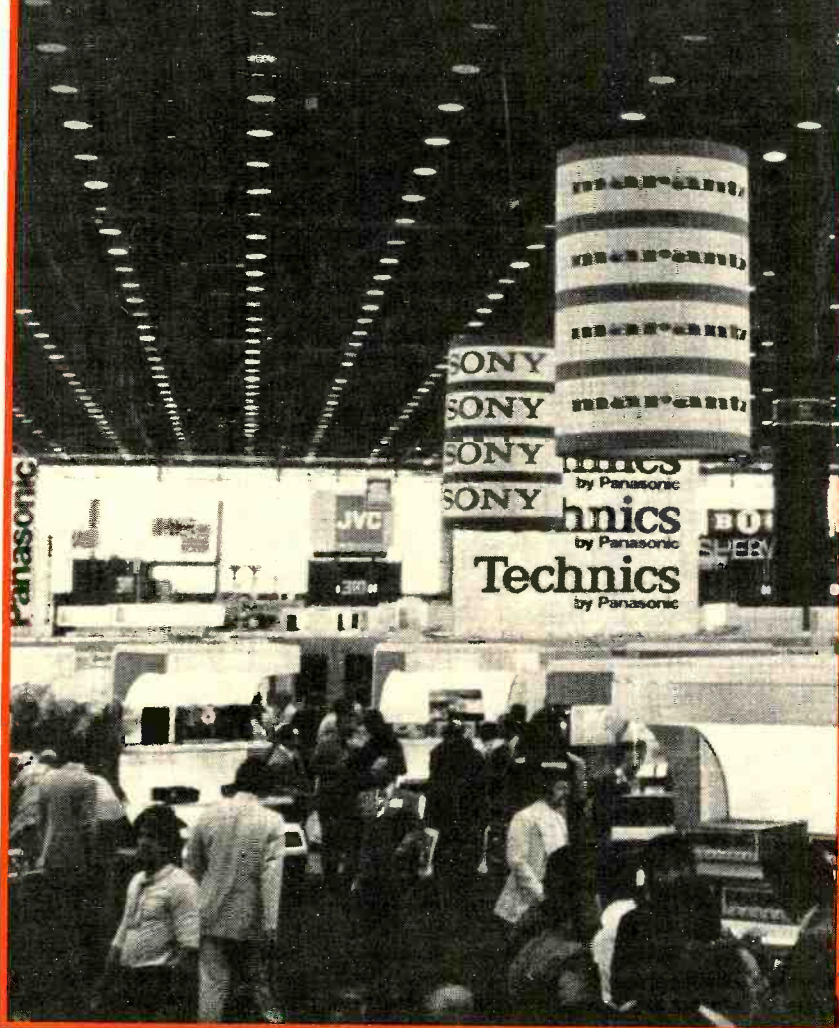
—Noel Coppage

**CRYSTAL GAYLE: *When I Dream*.** Crystal Gayle (vocals); Pig Robbins (piano); Dave Kirby, Reggie Young (guitars); Gene Chrisman (drums); Lloyd Green (steel and dobro); other musicians. *Why Have You Left the One You Left Me For*; *Heart Mender*; *Hello I Love You*; *Talking in Your Sleep*; *Paintin' This Old Town Blue*; *Don't Treat Me Like a Stranger*; *Too Good to Throw Away*; *Cry Me a River*; *Wayward Wind*; *Someday Soon*; *I Still Miss Someone*. UNITED ARTISTS UA-LA858-H \$7.98, © UA-EA858-H \$7.98, © UA-CA858-H \$7.98.

# CES 1978

There was so much going on at this year's Chicago Consumer Electronics Show that it's going to take us two installments to knock out the complete report.

By Ralph Hodges



CONSIDERING that several important high-fidelity manufacturers (Dynaco, Marantz, Sherwood) are celebrating their twenty-fifth anniversaries this year, it is a little startling to realize that a scant few decades ago hi-fi was generally considered to be the socially dubious preoccupation of a few wild-eyed eccentrics. Today, however, a meeting/exhibition of the nation's hi-fi manufacturers, representatives, dealers, and press affiliates can all but tie up a major metropolis for a solid week, overwhelming its service and recreational facilities. Attendance at the early-June Summer Consumer Electronics Show in Chicago, for example, was over 55,000 (up some 5,000 from last year), and there were an imposing 10,867 registrants at the Institute of High Fidelity's own show in Atlanta in May (the latter is, of course, limited to audio only, while the Chicago show covers the whole spectrum of electronic entertainment products, but with major emphasis on audio).

Audio electronics has, in sum, become an enormous industry in a comparatively short time, and a growing number of manufacturers marketing a growing number of products each year puts heavier and heavier pressure on industry journalists who must cover the field comprehensively. STEREO REVIEW's technical editors had their hands full (literally—all that product literature!), with the result that our report on the flood of new products that will shortly begin cresting on dealers' shelves across the country will, for the first time, have to be spread over two issues rather than wrapped up in the usual one. This month's installment will deal with those components that can be considered as being purely electronic: receivers, amplifiers, tuners, and whatever accessories fall into the same category. The transducers—loudspeakers, phono cartridges, and tape decks, along with other devices that are at least partially mechanical in nature, will follow next month. And so, without further ado, let us head down the aisles.

## Receivers

The latest of the truly big receivers, at 300 watts per channel into 8 ohms, is the Marantz 2600 (\$1,495), and its appeal is considerably enhanced by the presence of a front-panel oscilloscope equipped to function as a tuning display. The similarly rated Sansui G-33000 has a detachable power-amplifier section, plus internal circuitry designated as the Takahashi DC "Diamond Differential" configuration (after the talented Japanese electrical engineer who was in large part responsible for the QS Vario-Matrix four-channel system). Both of these receivers carry supplementary power ratings at lower

Larry Klein

impedances, reflecting the interest manufacturers are now showing in the problem of low, complex, and varying loudspeaker loads.

Marantz has augmented its inexpensive receiver line with the Model 2218 (18 watts per channel) as well as three other models (the 1550, 1530, and 1515) put together with a minimum of control features to realize maximum value for price. Sansui, on the other hand, has deliberately invested extra design effort and expense in the AM section of the G-33000 (and previously introduced G-22000) receiver to make it capable of high-fidelity AM performance.

Other receiver offerings from Marantz include the \$500 Model 2130, again with a front-panel oscilloscope—and a built-in 400-Hz oscillator to calibrate the recording levels of a tape recorder for off-the-air dubbing. The new Marantz 4025 "recording receiver" has an appropriate tape recorder (cassette) built in.

If high-quality AM reception can be said to have already arrived, high-quality TV sound is definitely on the way. A pair of receivers from Wintec, the \$600 R1060 and the \$900 R1120 (see STEREO REVIEW's August "Bulletin"), have tuners for VHF and UHF television audio plus dual power supplies, phase-locked-loop multiplex sections, bass, mid-range, and treble tone controls, and a host of front-panel features. Power outputs are 60 and 120 watts per channel, respectively.

The purely electronic receiver, with no mechanical operations whatsoever, is also becoming a reality. A Swedish organization called Intersearch has just introduced the 70-watt-per-channel Audio Pro TA-150, in which a single control knob (and a micro-processor) performs all front-panel functions such as volume, balance, tone-control adjustment, and tuning. Among the few mechanical parts remaining in the receiver are the switches that assign the master knob to its various duties and the pushbuttons for numerous FM and AM presets and other functions such as loudness compensation and tape monitoring. The knob operation itself is nonmechanical, involving optical scanning through a slotted rotor attached to the control shaft.

Fisher has presented a host of new receivers, most prominent among them being the RS2000 series, all with five-band (two-octave-band) graphic equalizers. Model numbers are RS2004, RS2007, RS2010, and RS2015. Prices start at \$450 and go up to \$850, with commensurate power increases from 45 to 150 watts per channel. The Fisher ICS series, a range of compact systems, is led by the ICS409 (\$550), the receiver for which (the MC4035) contains a cassette deck with wireless remote control.

Pioneer's four latest receivers range in power from 20 to 60 watts per channel and in price from \$225 to \$425. Model numbers are 580, 680, 780, and 880. All of Sherwood's receivers are now rated at a uniform 0.2 per cent harmonic distortion. Latest additions to the line are the S-7250 (20 watts per channel, \$250), the S-7450 (30 watts, \$300), and the S-7650 (45 watts, \$380). All are part of the Sherwood CP (Certified Performance) series.

The most recent additions to the Hitachi

receiver line are headed by the Model SR-1204 (\$800); it has a class-G output stage that boosts its continuous power rating of 120 watts per channel to higher levels on signal peaks. Four other new Hitachi receivers include one more class-G design (SR-904, \$600), and three conventional models starting at \$230. Onkyo is now represented by five recently introduced units, with particular emphasis being placed on the digital-readout Model 4500 Mark II whose seven station presets are programmed by a unique miniswitch panel. JVC's newest receiver introductions number six, four of which have the manufacturer's five-band graphic equalizer built in along with some attractive styling refinements. Top of the line is the JR-S501 at 120 watts per channel and \$700.

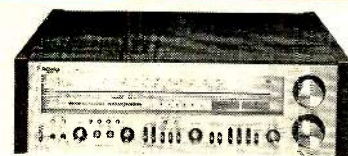
A company new to the U.S. market, NAD (New Acoustic Dimension), introduced its Series 7000 receivers, which pay special attention to bandwidth considerations and the phono-input interface. Four models are offered ranging in price from \$280 (30 watts) to \$535 (90 watts). And an older company, SAE, has just introduced its first receiver, the R3C (30 watts per channel, \$325), which is the spearhead of the new SAE TWO line manufactured overseas. Also, in a move that took us somewhat by surprise, Thorens introduced a pair of receivers at the IHF show. The AT-403 is rated at 30 watts per channel and the AT-410 at 50 watts.

Major introductions from Harman Kardon were the hk670, hk560, hk450, and hk340 receivers. Power ratings are from 60 to 20 watts per channel. Kenwood's newest high-end receiver, the KR-8010, offers 125 watts per channel at a price of \$675. Tandberg has made significant additions to its receiver line with a new "flagship" model, the TR 2080 (\$1,200), and three smaller units, the TR 2060 (\$685), TR 2045 (\$585), and TR 2030 (\$485). Per-channel power ratings are given by the last two digits.

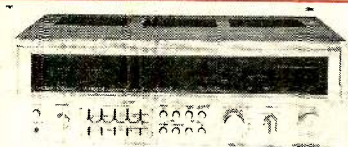
Toshiba's receiver line is led by the attractively styled SA-7150 (digital-readout tuning with six station presets and a flip-down cover concealing equalization controls and speaker switching) and supported by the SA-7100 and SA-750, bringing the total line up to six models. The SA-7150, it should be noted, contains a quartz-crystal-referenced synthesizing tuner and is rated at 150 watts per channel. Optonica's SA-5405 is a black-panel 65-watt unit (\$450) with a novel two-color LED indicator to show the activity of its output-protection circuit. Sanyo has expanded its line to five receivers, the top model being the 120-watt JCX2900K.

You can now buy a 120-watt-per-channel receiver, the 320R, from H.H. Scott for \$700, or any of five other models ranging down in power to 15 watts and in price to \$220. You can also buy (for the first time, to my knowledge) a receiver from England providing as much as 140 watts per channel: the Amstrad EX.333, which is backed up by a smaller relative, the EX.222 at 25 watts per channel. Both are capable of picking up medium- and long-wave broadcasts as well as FM.

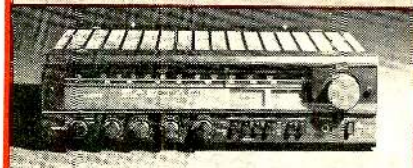
The Technics receiver line, which includes—for the moment—the industry's most powerful model (the SA-1000) at 330 watts per channel, now includes eight units,



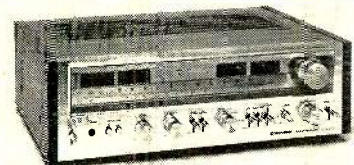
The super-power Technics Model SA-1000 offers 330 watts per channel into 8 ohms.



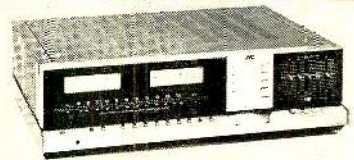
The Fisher RS2007 is representative of the company's latest receivers with built-in equalizers.



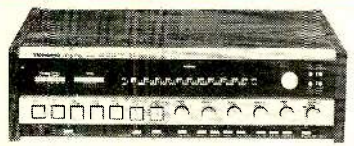
The Model R3C at \$325 and 30 watts per channel leads the new imported SAE TWO line.



The SX-880 receiver is one of several new models at the center of the Pioneer line.



JVC's receiver styling continues to be dramatic and imaginative. This is the new JR-S501.



The Model TR 2080 (\$1,200) has recently taken its place at the top of the Tandberg receiver line.

# CES-78

priced from \$230 to \$1,500. The larger models have up to a dozen fast-responding LED indicators for power output. Aiwa has a new 50-watt receiver, the AF-3090U, with a cassette deck built in. And Philips, presently with eight receiver models (four with aluminum front panels and four equivalents with black front panels), has found cause to upgrade their specifications. For the aluminum-front-panel versions, prices range from \$200 to \$430. Black panels cost \$10 more. Finally, a company called Yorx offers a "receiver," the CES M2600, that incorporates eight-track and Dolbyized cassette facilities, as well as digital readout for tuning (it also serves as a digital clock). It is called a "Studio Center," and you can't really argue with that.

## Amplifiers

The year's most interesting amplifier may well turn out to be the Threshold Stasis 1. The somewhat complex operating theory behind this 175-watt *mono* leviathan includes a technique known as "feed-forward." Two channels of Stasis 1 will cost at least \$5,000; projected availability of the units, which are rated at less than 0.002 per cent total harmonic distortion, is early 1979. Pair this with the intriguing Theta stereo preamplifier (available from Polk Audio) employing vacuum tubes from the USSR and you will have a system that should prove positively "revolutionary."

Otherwise, most of the limelight in this category belongs to the season's new integrated amplifiers, which include the 190-watt Model 1300DC from Marantz, priced at \$950 and bearing prominent adjustments for phono-input resistance and capacitance on the front panel, and five new integrated units from JVC, ranging from the budget-price (\$160) JA-S11G to the 65-watt \$400 JA-S77 (called a "Tri-DC" design because of its use of DC phono circuits, DC high-level section, and DC power-output stage). One of the new JVC units, the JA-S44 (\$290), includes the company's S.E.A. five-band equalizer.

Harman Kardon has presented two new integrated amplifiers, the 40-watt-per-channel

hk503 and the 60-watt hk505. The hk505 has a front-panel switch that adds 200 picofarads of capacitance to the phono inputs to suit those cartridges that benefit from extra capacitive loading. Philips offers three new integrated units, all with front-panel output meters. The AH384 (under \$250) starts things off at 40 watts, and the AH388 (under \$430) marks the top of the line with 80 watts per channel. Prominent in the SAE series labeled SAE TWO is a 50-watt integrated amplifier, the C3A, distinguished by sleek black-panel styling and a price of \$325. SAE's Esoteric line has also been enhanced with the 2300 power amplifier (\$700). It is rated at 150 watts per channel and has power-output-indicating LED's.

A standout among this year's CES exhibitions was the new Mitsubishi line of "microcomponents" (tentative name), especially the M-P01 preamplifier and M-A01 70-watt-per-channel power amplifier. Jewel-box construction is the term that comes first to mind when viewing these components, which are exquisite both in their (small) proportions and in their styling. The preamplifier has only one knob, the rest of its functions—including tone-control adjustment—being accomplished through pushbutton miniswitches. Both it and the power amplifier have colorful LED displays to indicate various operational modes. Prices were not absolutely firm at press time.

As part of its "non-kit" series, Dynaco has introduced a 100-watt-per-channel integrated amplifier, the Model 2530, with impressive specifications, and also a power amplifier (Model 2521) with similar ratings and a preamplifier (Model 2510) with FET inputs. Hitachi is bringing out the first class-G integrated amplifier, the HA-5300 (\$600), and a low-silhouette preamplifier intended to sell for about \$200 (Model HCA-6500).

Rotel's newest introductions, innovative as always, include three integrated amplifiers led by the 120-watt \$830 RA-2040, the RC-2000 preamplifier (\$500), and the RB-2000 power amplifier (120 watts, \$500). Some feature inputs for moving-coil phono cartridges as well as power-output stages that automatically switch from class-B to class-A operation.

Yamaha has created a very simply styled integrated amplifier, the 70-watt A-1 (\$595), with a special bypass mode that, at the push of a button, connects the phono section to the output stage with an absolute minimum of intervening circuitry. And Marantz, in addition to its integrated amplifiers, has in-

troduced a pair of preamplifiers, the top model being the \$500 3650 with inputs for conventional and moving-coil phono cartridges and controls for adjustment of cartridge loading.

Pioneer's most esoteric components have now been organized under an entirely new company called Series 20. In addition to the M-22 class-A power amplifier and the C-21 preamplifier, they now include a new class-AB integrated amplifier, the A-27 (\$1,250), at 120 watts per channel and with moving-coil phono inputs, and the similarly rated M-25 power amplifier (\$1,200). Both units switch automatically to class-A operation for power outputs of 3 watts or less.

The Lux "Laboratory Reference Series" has now been filled out to encompass seven models, and recent additions to the "Studio Standard Series" include integrated amplifiers—the L-3, L-5, and L-11—35, 60, and 100 watts per channel. Toshiba's latest separates are the SY-335 preamplifier and the 40-watt-per-channel SC-335 power amplifier. Soundcraftsmen's newest preamplifier, the \$700 SP4002, has the company's excellent octave-band equalizer built in; it offers 15 dB of boost or cut per band. The unit will also accept a moving-coil cartridge and has extremely flexible switching to accommodate outboard accessories. And Crown has a new low-profile power amplifier, the D75, featuring the unique IOC (Input-Output Comparator) distortion-detecting system, which is rated at 35 watts per channel for stereo applications.

Great American Sound (GAS) continues with its novel product names and its built-in capability for driving low-impedance speaker loads (down to 2 ohms). The Godzilla power amplifier is among the more recent introductions (300 watts per channel), and even newer are the Grandson power amplifier (40 watts into 8 ohms, 120 watts into 2 ohms) and the Thalia preamplifier. The Grandson is another amplifier with bias control to provide class-A operation at low output levels. BGW's latest is the Model 103 preamplifier with totally discrete circuitry and a price of \$400. Also new is a moving-coil-cartridge preamplifier designed to operate off the power supplies of associated BGW components.

Nikko's amplifier line, growing vigorously every year, now includes the Alpha III power amplifier (80 watts, \$480) with MOSFET output transistors, the Alpha VI 300-watt power amplifier (price as yet undetermined), and the Beta III low-profile preamplifier (again, price unavailable). NAD's product

Threshold's monumental Stasis 1 power amplifier, a special-order mono unit.

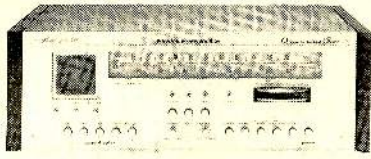


Dynaco's series of factory-assembled components features an integrated amp.



The SP-6 is latest in the evolutionary line of Audio Research tube preamps.

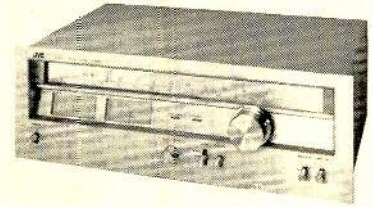




Marantz's top-of-the-line 2130 tuner has a front-panel oscilloscope.



The FM-only Rotel RT-2100 mates digital readout with a conventional tuning dial.



JVC's Model JT-V77 is the first with a "Phase Tracking Loop" circuit.

line includes five integrated amplifiers with power outputs ranging from 20 to 90 watts per channel and prices from \$140 to \$415. H.H. Scott's integrated amplifiers are almost as numerous: four models from \$220 to \$400, power outputs from 40 to 85 watts. All model numbers carry an "A" suffix to indicate improved specifications. And there is one new integrated amplifier from Optonica, the SM-3201 (\$250), with 40 watts per channel of power.

Audio Research is introducing five new products: two power amplifiers, an electronic crossover, a moving-coil-cartridge preamplifier, and an all new vacuum-tube preamplifier, the SP-6 (\$1,075). The power amplifiers adopt the businesslike styling scheme of the D-350 design, with large front-panel meters to monitor internal circuit conditions. They are rated at 50 and 100 watts per channel and cost \$995 and \$1,995. Cerwin-Vega's Metron division retains the M-200 power amplifier (125 watts, \$550) and is in the process of adding the A-4000, expected to cost over \$2,000 and to be capable of breaking almost any lease, anywhere. The Electro Research class-A A75 (75 watts per channel, \$2,185) is a sight to behold because of its massive size and many front-panel functions. Among the latter are a meter enabling the user to trim the input-capacitance characteristics to the output of the associated preamplifier and an odometer-type display to show hours of operation. On the Electro Research horizon there is also something like a strain-gauge phono cartridge—details are not quite clear yet—and a preamplifier to serve and power it. Details are clear on the Lenco A-50 integrated amplifier, however: it employs the circuitry and features of the R-50 receiver, although a price was not available at press time.

"Mentat" is described as a high-resolution voltage amplifier, which is to say that it is a preamplifier. It is a product of Triode Laboratory (division of Eidolon Research, Inc.), and it claims to eliminate the faults of other previous vacuum-tube preamplifier designs for a price of \$800. Radford is a company that has long been associated with vacuum-tube electronics but which now has an extensive line of transistorized components as well, including the ZD22 preamplifier, two power amplifiers rated at 70 and 90 watts per channel, and an integrated amplifier at more than 50 watts. The Radford vacuum-tube philosophy remains intact in the form of two stereo power amplifiers (50 and 100 watts per channel) and a mono device rated at 200 watts.

Monogram, like Radford an English firm, has several intriguing new products, including the Model 3300 power amplifier (\$595) rated at 200 watts per channel with a claimed peak power of 1,200 watts (!). The amplifier operates in the class-A mode up to 10 watts output. And yet another English company, Amstrad, would like to interest you in its integrated amplifiers, the EX.220 and EX.330, rated at 100 and 140 watts per channel, respectively.

Sanyo has expanded its line of integrated amplifiers to three models, the DCA611, DCA411, and DCA311, all of them DC designs ranging in power output from 60 to 30 watts per channel. And a new company, Spatial, offers a preamplifier with an entirely new solid-state device, the Knapp TFET-Valve, which is claimed to be something close to the ultimate in linearity.

## Tuners

The Yamaha CT-7000, one of the most glamorous and potent performers amongst the new breed of "super tuners," is to be replaced by the T-2, which is said to offer appreciably better performance for considerably less money (\$700). Yamaha also has another new tuner, the T-1 (\$355).

Marantz, one of only two manufacturers to offer oscilloscope displays in its tuners (Sequerra is the other), has been pursuing this policy vigorously. The new top-of-the-line unit for this year is the Model 2130 (\$500), which has a host of other features in addition, including a 400-Hz oscillator to set recording levels for taping off the air. The Model 2110, with fewer features, retains the oscilloscope at a price of \$340.

From Technics comes a lovely low-silhouette tuner with quartz-crystal oscillator, eight station presets, and various modes of automatic scanning, plus a separate microprocessor control unit that can be programmed to operate an entire audio system—including activation of tape-recording functions—on virtually any schedule one chooses, and over a week's time. The control unit has access to any of the eight preset stations the tuner provides. Model numbers are ST-9038 for the tuner and SH-9038 for the controller.

Nikko's Gamma V synthesizing FM tuner with digital frequency indication is now ready. It features a six-station memory and costs \$650 (somewhat more for a black front panel). Rotel's latest FM-only tuner, the RT-2100, has digital readout plus a conventional tuning dial, an internal audio oscilla-

tor for setting tape-recording levels, and superb specifications. Like the Nikko, it employs a row of LED's in place of conventional tuning meters. The LED circuits can be switched to indicate multipath interference in the received signal.

Mitsubishi has a new tuner, the M-F01, as part of its "microcomponent" series; it is an FM-only quartz-oscillator synthesizer with exquisite styling and extensive use of LED's. Harman Kardon's new tuner, the AM/FM hk500, is a conventional-appearing design, but with internal concentration on what the manufacturer considers the key performance specifications. The three new tuners from JVC are led by the JT-V77 (\$290) and followed by the JT-V22 (\$170) and the JT-V11G (\$150). The JT-V77 has a phase-tracking detector stage that provides a high degree of selectivity and interference rejection.

The Hitachi FT-8000 is another FM frequency-synthesizing tuner with a quartz-controlled local oscillator, digital frequency readout, and six station presets. Price is under \$500. The Series 20 line has acquired two new tuners, the \$690 F-28 and the top-model, \$1,000 F-26. Both are quartz-crystal synthesizing designs, with the latter having exceptionally clean low-profile styling. (Incidentally, like many of the tuners discussed here, the Series 20 units lock onto the center frequency of any station they're approximately tuned to, and the locking circuits are very often brought into play by the simple act of releasing the tuning knob—when there is a tuning knob. These automatic tuning functions are rapidly spelling the demise of the channel-center tuning meter, which is just no longer needed.)

The SAE TWO line offers the T3U AM/FM tuner (\$275) with an exceptionally wide tuning dial at the bottom of the front panel. In its standard SAE line the company has added a digital-readout FM tuner, the Model 3200 (\$400), with LED displays in place of tuning meters. Dynaco's new digital-readout 2501 FM tuner becomes a digital clock when the tuning knob is released. It also has an LED display to indicate signal strength; with the exclusive "Dynatune" signal-tracking circuitry built in, it does not require a channel-center meter.

From GAS comes "Charlie," a digital-readout FM tuner whose name derives from the TV advertisements for a well-known brand of "tuner" fish (ouch!). This one also has clock functions built in. Scott's present tuners number three, at prices from \$200 to \$300. The top-of-the-line 590T has a meter

# CES-78

that can be switched into a multipath-indicating mode. There are also three tuners in the NAD line, with prices from \$140 to \$270 and models numbered 4020, 4030, and 4080 in order of ascending price. A new \$200 tuner, the ST-4201, has been introduced by Optonica; it has a built-in oscillator to calibrate tape machines. Lenco also has a tuner, the Model T-30, that is essentially a separate packaging of the tuner section from its receiver line. And there is another single tuner from Sanyo, the FMT611K.

Amstrad's two tuners, the EX.202 and EX.303, offer the same multiband reception as this manufacturer's receivers. And another English manufacturer, Monogram, offers the 3600 digital-readout FM tuner with a rated usable sensitivity of 0.8 microvolt in *stereo*! (It seems safe to assume they are not using the new IHF standard.)

## Accessories

We come at last to a category of product that is arbitrarily defined as anything fundamentally electronic in nature that can be used in an audio system, mobile or home, without necessarily being part of the basic system—in short, electronic accessories. And for lack of a better place to put them, I'll also include here the so-called "PCM processors" that are intended to be used with the various video-cassette recorders for recording and reproduction of digitally encoded audio.

The PCM processors are analog-to-digital/digital-to-analog converters that, when used with a record-reproduce device of a bandwidth approaching that of a video tape recorder, can bring the performance of a true digital reproduction system to the home user. We have recently seen such products from Sony and Mitsubishi, and now we have them from Technics (the SH-P1) and Hitachi. Both are basically in prototype form with prices pending. However, both work; both are thirteen-bit systems with sampling rates of just over 44,000 Hz; and both provide a usable dynamic range of 85 to 90 dB with negligible levels of distortion.

Four-channel equipment is still available this year, but it isn't new—except for the excellent Scheiber 360-degree spatial decoder/synthesizer (\$3,000). What is happening at the moment is that time-delay reverberation devices are becoming a lively product category. ADS' Model 10 Acoustic Dimension Synthesizer includes built-in power amplifiers and a pair of "rear" speakers. Bozak has introduced the 902 time-delay system, also with an integrated amplifier (35 watts per channel) and rear speakers included. Advent's new digital "SoundSpace Control" has a digital display to indicate the initial delay (adjustable) in milliseconds. Price is \$595. Audio Pulse has launched itself into a second generation of digital delay systems with the Model Two. And Sound Concepts has developed the "Concert Machine" for

mobile use at \$300, plus \$40 for a remote control.

Speaking of automobiles, there is probably no faster-growing category of high-fidelity equipment than that intended for mobile applications. Among other products, Marantz has brought out a 60-watt underdash amplifier with a seven-band equalizer, together with a similar 40-watt unit with conventional tone controls. Sparkomatic's latest 40-watt unit has an illuminated flexible rod on its front panel that serves to display the settings of its five-band equalizer graphically. Clarion also has a five-band equalizer in its new 300-EQB, rated at 30 watts per channel, as well as LED power-output indicators. Pioneer of America's 15- and 25-watt-per-channel units, the AD-30 (\$120) and AD-50 (\$180), premiering with a number of other new Pioneer products, have five-band equalizers as well. Visonik's A-300 mobile power amplifier comes with a pair of D-302 MO speakers (\$320), or by itself for \$136. Fosgate has a new 20-watt amplifier, the PR-220, as does Rotel. (There are also an astonishing number of new amplifier/tuner/tape-player combinations which will be surveyed next month.)



New professional-application products from dbx include this "disco" version of the "Boom Box" synthesizer.

If equalizers are suddenly becoming popular in mobile situations, they also continue to be well received at home. Nikko's EQ 1 is an octave-band device with ten slider controls per channel; price, \$280. JVC's SEA-20G (\$170) has seven controls affecting both channels simultaneously, while the SEA-50 (\$260) from the same manufacturer has ten controls, the uppermost of which is switchable between center frequencies of 12,000, 16,000, and 20,000 Hz. Soundcraftsmen have introduced several new equalizers, including the one-third-octave-band (twenty-two sliders per channel) TG3044-R (\$550), the octave-band SE450 (\$250), and the company's first unit with op-amp substitutes for inductors, the RP2201-R (\$300) with octave-band controls. The ADC Sound Shaper Two Mk 1 (\$280) has twelve controls per channel and is recommended for use with the SLM-2 Sound Level Meter and a test record, both of which can be purchased for about \$70. And MXR's latest equalizers cover alternate third-octave bands (fifteen controls per channel, \$325) or, in a mono format, thirty-one controls covering third-octave points throughout the audio spectrum (\$350).

The Allison "Electronic Subwoofer" is an equalizer designed specifically to extend low-frequency response down to 20 Hz with suitable loudspeaker systems and to curtail

response below 20 and above 20,000 Hz abruptly, thus relieving the amplifier and speaker system of the task—and torment—of handling signals beyond the range of human hearing. The bass boost provided by the Allison device is adjustable to suit the loudspeaker involved, and the projected price is \$250. A similar product is Cerwin-Vega's DB-10 "Bass Excavator," which also boosts bass above 20 Hz and rolls it off rapidly below that frequency. Lower bass than is in the program material is available from dbx's "Boom Box," a unit that synthesizes subharmonics from existing recorded information; it is now available in a professional version as the Model 500. Other professional versions of dbx consumer products have been introduced as well. There are also recently introduced professional versions of the RG dynamic-range expanders, available as the PRO-20 series, which have LED indicators to display the operational modes.

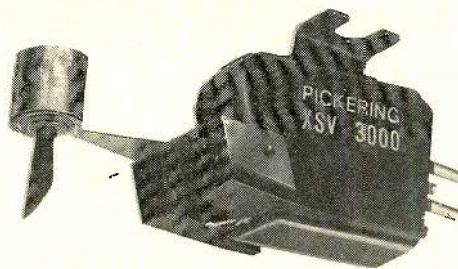
Test equipment is becoming popular with advanced audiophiles, and (fortunately) such equipment is becoming more accessible every year. Crown now offers the RTA-2 spectrum/real-time analyzer, with a 5-inch picture-tube (CRT) display and a built-in pink-noise generator (\$2,595 if you act quickly). The Scott 830Z Audio Analyzer has ten oscillators constantly sweeping the center frequencies of the ten octaves from 20 to 20,000 Hz. A direct feed (or the unit's built-in microphone) will then pick up these signals after they have passed through the device under test and display them on an LED real-time-analyzer panel.

Superex has a headphone control center that will process the signals going to your stereo headphones in just about any way you could wish or imagine, and it is entirely passive.

The Janis Companion-1, containing a 120-watt power amplifier, includes a circuit that applies an adjustable amount of offsetting direct current to the woofer. The idea is to center the woofer cone mechanically, and the results are directly measurable with a harmonic-distortion analyzer. The company's Interphase-1 "crossover amplifier" has the same feature.

Cables and other connectors have been much in the news of late. Audio-Technica's new line of cables goes under the name "Vital Link," and includes litz-wire connections from the phono cartridge to the tone arm, as does the line of Fulton Audio Leads, which also offers loudspeaker cables. Speaker cables designated "high efficiency" are available from Sansui. Discwasher has just introduced the "Goldapters," which are gold-plated inserts that will add selected amounts of capacitance to the loading of a phono cartridge to smooth its frequency response when necessary. And Pioneer of America has brought out a special cable to connect automobile audio-control complexes with an amplifier that may be located elsewhere in the car.

*This survey of new audio equipment will be concluded next month with an examination of the loudspeakers, phono cartridges, turntables, tape machines, video-disc systems, and accessories that will be on the market late this year or early next.* □



# The XSV/3000 is the source of perfection in stereo sound!

Four big features ... all Pickering innovations over the past 20 years ... have made it happen.

**1976: Stereohedron®** This patented Stylus tip assures super traceAbility™, and its larger bearing radius offers the least record wear and longest stylus life so far achievable.

**1975: High Energy Rare Earth Magnet**

Another Pickering innovation, enabling complete miniaturization of the stylus assembly and tip mass through utilization of this type of magnet.

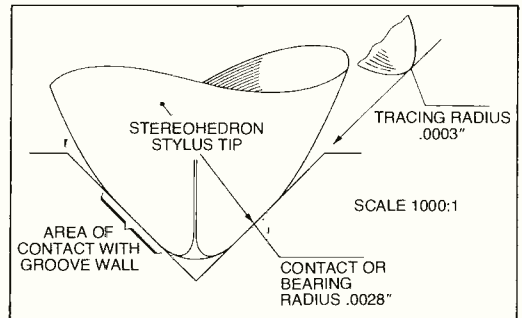
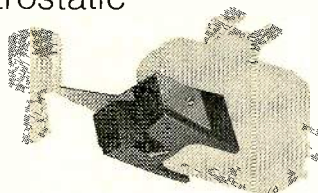
**1968: Dustamatic® Brush**

This Pickering patented invention dynamically stabilizes the cartridge-arm system by damping low frequency resonance. It improves low frequency tracking while playing irregular or warped records. Best of all, it provides record protection by cleaning in front of the stylus.

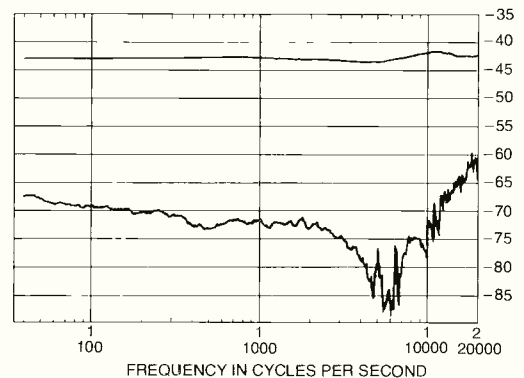


**1959: Record Static Neutralizer**

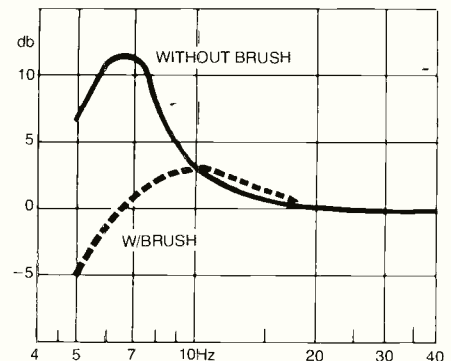
The patented V-Guard Record Static Neutralizer has been a feature of all Pickering cartridges since 1959. It eliminates electrostatic dust attraction at the stylus and discharges record static harmlessly into the grounded playback system.



1. Technical drawing of the Stereohedron shape.



2. Typical frequency response and channel separation curves of the XSV/3000.



3. Damping effect on tonearm resonance.

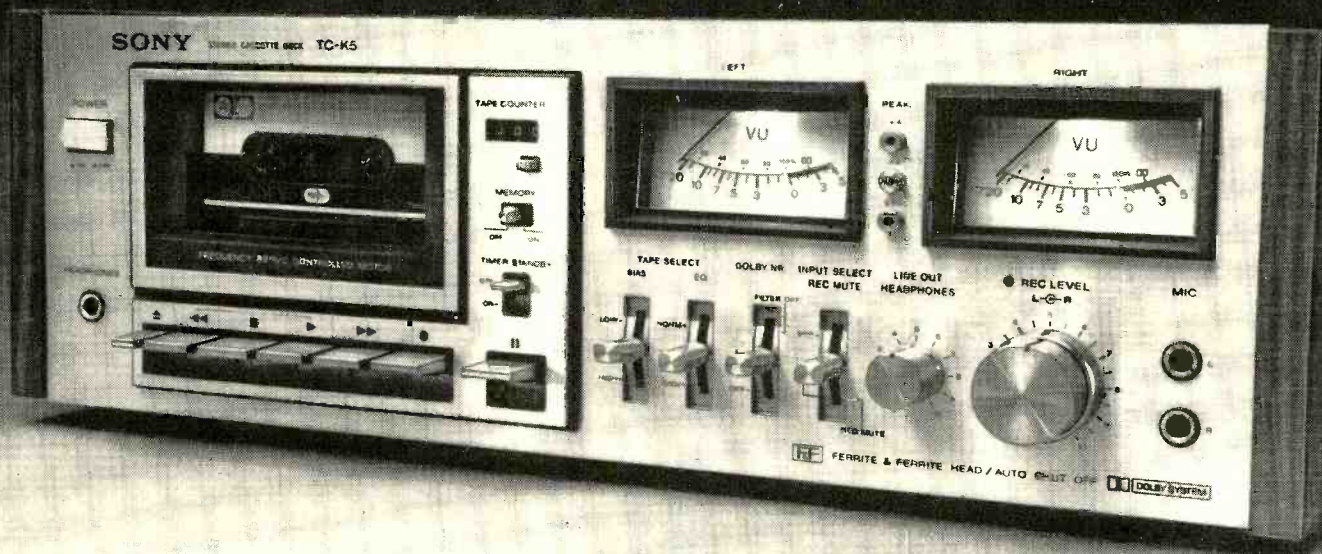
4. V-Guard Static Neutralizer, "Where the Stylus meets the groove."



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

© Pickering & Co. Inc., 1978

# Not all decks give you the same deal.



The deck: The Sony TC-K5 cassette deck.

The deal: A high-performance deck that also lets your money perform.

And the reason Sony gives you more for your money is that Sony is more of a company. After all, we've been making tape recorders for over 30 years. Other manufacturers have to charge you for their learning experiences; Sony's experience saves you money.

### **A new motor solves an old problem.**

The K5's DC motor is known as FG servo-controlled. What separates it is that the commutator is separately housed, to reduce vibration.

You'll also find a built-in frequency generator servo system. Infrequently found at this price, it monitors and cor-

rects speed variations, which reduce wow and flutter.

### **Go to the head of the class.**

That's where you'll find our ferrite-and-ferrite record/playback head. Ferrite improves high frequency performance, and allows for a wider frequency response.

Ferrite is more expensive, but it lasts 200 times longer than conventional heads. And the body of the TC-K5 is built to last as long as its head.

### **Measure a cassette deck by its meters.**

The TC-K5 has two professionally calibrated VU meters. And there's also three LED peak-level indicators.

Controls include an automatic shut-off in all modes, tape counter and memory, a rec-mute switch, and an

automatic tape-repeat mechanism.

And since we're not biased about standard, chromium dioxide, and ferrichrome tapes, our bias and equalization switches let you play all three. In fact, with nine possible combinations, any tape of the future can be handled.

The TC-K5, with built-in Dolby noise reduction system, is priced like a basic cassette. But you'd never know it from the elegant electronics and controls. It has features above and beyond the call of duty—but not the call of Sony.

It's for those on a budget. But who, when it comes to quality, refuse to budge.

# SONY AUDIO



# STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT BEST OF THE MONTH



CTI Records



## Well Worth a Four-year Wait: A Fresh Release From Nina Simone

It comes as a surprise to realize that four years have passed since Nina Simone, one of the most versatile and forceful artists of our time, has been represented on disc with fresh material. A new listing did appear in the catalog in 1976, an album devoted to songs of such popular poet-composers as Bob Dylan and George Harrison ("Poets," RCA APL1-1788), but it was, disap-

pointingly, a mere compilation of previously released items. What had happened to this woman who, during the turbulent Sixties, gave musical utterance to the pressing social issues confronting an America in a state of near revolt?

After first capturing public attention in 1958 with the release of *I Loves You Porgy*, which cast her in the role of a supper-club chanteuse, she underwent a series of aesthetic transformations to emerge, within a decade, as the "High Priestess of Soul," a clarion voice of the black revolution. I, for one, can never forget the abrasive insistence of her compositions *Mississippi Goddam* and *Four Women*, or the poignant entreaties couched in her renditions of Billy Taylor's *I Wish I Knew How It Would Feel to Be Free* and of *Young, Gifted and Black*, which she co-wrote with Weldon Irvine, at one time her musical director. While many others may have voiced the same thoughts, none but Nina seemed capable of endowing them with the requisite searing intensity and highly skilled musicianship. Perhaps it was because she was a true eclectic, drawing with equal facility from the deep, communicative wells of jazz, blues, gospel, folk, popular song, and even European classical music (in which she was trained as a pianist). An examination of her thirty or so albums—most of them now out of print—reveals an artistic range that is exceptional in the way it dips freely into all these forms and styles while maintaining a sturdy individuality. But the bottom line of her appeal was, and is, a rare combination of passionate indignation tempered by an almost painful sensitivity.

Where has Nina Simone been during those four years of silence? Why, performing for enthusiastic audiences in Europe and Israel! Her new CTI album, "Baltimore," was recorded during a concert in December 1977 at the Drury Lane Theatre in London, and oh

my, how satisfying it is! For though an array of strings and other instruments are employed to complement her, Nina dominates the whole. Here is the characteristic reedy timbre of the earthy voice we have hungered for so long, as well as a bonus of first-rate pianism—especially on *Music for Lovers*, with which she reaches Debussyan heights. *That's All I Want from You*, the tenderest of love songs, sounds like something Edith Piaf might have recorded, and it lingers at the edge of memory long after it is sung. As usual, there is a heavy gospel undertone in many of the selections, particularly *If You Pray Right* and the traditional *Balm in Gilead*, which gets an interesting reggae-flavored rhythmic treatment. And though Nina has lived for some time as an expatriate, she has apparently kept her inner ear tuned to the nuances of musical developments in her homeland. What else can account for her touching treatment of Judy Collins' *My Father*, or her spirited handling of Daryl Hall's *Rich Girl*?

Yet this is a Nina Simone who differs somewhat from the one we used to know, she who faced all dragons without trepidation, for the edge of fury has been honed down, the anger is held in abeyance. Perhaps, in her long sojourn abroad, she found a peace and assurance that eluded her here. Whatever the case, I hope she'll hurry right on back to us. We still need her.

—Phyl Garland

**NINA SIMONE:** *Baltimore*. Nina Simone (vocals and keyboards); instrumental accompaniment. *Baltimore*; *Everything Must Change*; *The Family*; *My Father*; *Rich Girl*; *That's All I Want from You*; *Balm in Gilead*; *Music for Lovers*; *Forget*; *If You Pray Right*. CTI 7084 \$7.98. © CTI 7084 \$7.98, © CTI 7084 \$7.98.

## Schubert's C Major String Quintet: The Composer Is the Only Superstar

ONE tends to distrust superstars in chamber music. It's not that they have no feeling for it, God knows, or that they haven't given us some memorable performances and recordings of chamber works over the years, but simply because, as a rule, they haven't enough opportunity to perform with the same associates month after month, year after year. Surely it is the experience of developing a unified style and outlook—of *breathing* with each other—that, as much as any other single factor, makes for the most probing and communicative performances in this area. Moreover, this seems more essential in respect to string players than to the pianists or wind players who may join the basic string quartet for such works as call for their services. That much acknowledged, it must be said that Deutsche Grammophon's new recording of the Schubert Cello Quintet in which the Melos Quartet of Stuttgart is augmented by no less a cellist than Mstislav Rostropovich is not only a success in terms of unified concept but one of the most beautiful and convincing performances of this grand work any of us is ever likely to hear.

The Melos Quartet's Schubertian credentials have been presented brilliantly in a seven-disc set of all the string quartets (DG 2740 123), and we must assume that this group has played

the quintet frequently. Rostropovich recorded the quintet with the Taneyev Quartet fifteen years ago (Westminster WGS-8299), and he, too, must have played it often—but could he and the Melos possibly have been able to work together frequently enough to produce so thoroughly integrated a realization of so vast a work? Perhaps sheer intensity was the compensating factor in this case. In any event, another factor that helped make this venture so successful was surely the willingness of the colorful and often provocative Rostropovich to allow himself to be inconspicuous. Not that one fails to notice the unusually beautiful cello playing, but there is no question here of solo prominence or "*primus inter pares*." In his chamber-music performances, as he does when he accompanies his wife, soprano Galina Vishnevskaya, at the piano, Rostropovich seems to take on a different musical character from the one he shows as soloist or conductor: the emphasis is on integration and intimacy, and the only superstar is the composer.

This performance of the Schubert quintet is a thoroughly idiomatic one, in keeping with what the Melos Quartet has given us on its own. The playing is highly polished, yet it gives off a sense of real Schubertian spontaneity. It is by turns taut and expansive, dramatic and lyrical, with phrasing as eloquently unforced as the great themes themselves; pacing is close to ideal, and the balance between the instruments is sheer perfection. The full exposition repeat is taken in the first movement, and with playing as beautiful as this I don't think I'd become impatient if it were taken yet again. The adagio is played very broadly, but always kept moving, even at the very end where time really seems to stand still. The rhythmic alertness in the fiercely energetic statement of the scherzo is quite remarkable, but no more so than the unanimously dead-on intonation in the scurrying final bars of the last movement, or, for that matter, the excellent recording which so vividly projects the whole, unflawed by a single out-of-place gesture, and draws us deeper into Schubert's world for a really enchanted hour.

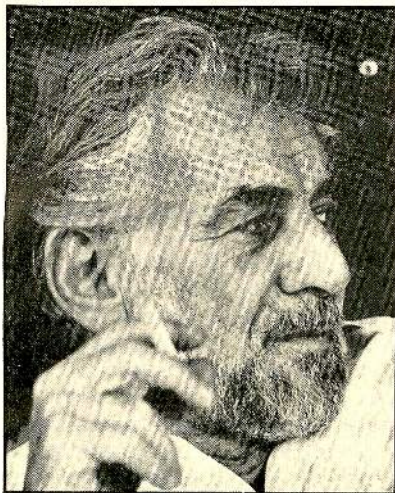
There have been other great recordings of this great work. The somewhat leaner approach of the Albeni Quartet with the late Thomas Igloi on CRD 1018 is still strongly appealing among those available now, and I hope that Capitol will someday get around to reissuing the unforgettable version by the Hollywood String Quartet with Kurt Reher (along with several other HSQ recordings!), but the overall richness and conviction of this newest one

THE MELOS QUARTET PLUS ONE:

Peter Buck, Rostropovich, Wilhelm Melcher, Hermann Voss, Gerhard Voss



Alteffer/Deutsche Grammophon



Gerard Neuwuelle/Columbia Records

BERNSTEIN: intensity, involvement, uplift

must place it firmly at the head of the current list. —Richard Freed

**SCHUBERT:** *String Quintet in C Major, Op. 163 (D. 956)*. Melos Quartet, Stuttgart; Mstislav Rostropovich (cello). DEUTSCHE GRAMMOPHON 2530 980 \$8.98, © 3300 980 \$8.98.

## Haydn's D Minor Mass: One of a Handful of Works That Must Be Rated as Sublime

**J**OSEPH HAYDN'S Mass in D Minor is a late, great work and one of the handful of chorus-and-orchestra settings that must be rated as sublime—right up there with the Bach B Minor Mass and the Beethoven *Missa Solemnis*. Its most recent recording—by Leonard Bernstein and the New York Philharmonic for Columbia—brings us a very special and thrilling performance, one that actually breaks new musical ground even as it delivers spinal chills!

The circumstances of the so-called "Lord Nelson" Mass are fascinating. Nothing could have been further from old man Haydn's mind when he wrote it than the English admiralty. The date was 1798, and the Napoleonic wars were threatening all of Europe—the Austro-Hungarian Empire in particular. Haydn called his new composition a "Mass in a Time of Anguish," and it is one of his stormiest and most dra-

matic compositions. And on the very day of its first performance news arrived in Vienna that Admiral Horatio Nelson and the English fleet had annihilated Napoleon's fleet in the Mediterranean near Egypt. A year later, Nelson himself, with Lord and Lady Hamilton in tow, was accorded a hero's welcome in Vienna and the Mass was performed in his presence. Haydn gave Nelson his pen, while Nelson gave the composer the gold watch he had carried during the battle. (Haydn also wrote music for Emma Hamilton, who sang several of his works—but that is another story.)

Leonard Bernstein's view of this magnificent late work has nothing in common with the conventional musical-folklore image of Papa Haydn. This is a tremendously dynamic performance with a level of excitement and drama one rarely finds these days even in Romantic music, let alone Classical. The feeling of emotional intensity, of irresistible involvement and spiritual uplift, surges irrepressibly out of these grooves, and it never lets up.

Not that this is an old-fashioned Romantic performance; far from it. It lies, I think, well within the meaning and sensibility of late Classicism and late Haydn: the utmost intensity, drama, and lyricism contained within the strongest architectural form. The work may have its incipient Romantic elements, but it also grandly incorporates many traditional elements from the Baroque. This largeness of vision is, of course, right up Bernstein's alley.

A special feature of this recording is the reconstructed organ part—originally performed by Haydn himself and very effectively realized here by Leonard Raver. The recording also features some of Columbia's finest sound, and the silvery glint of the organ riding over the golden orchestral sonorities or threading through the voices is certainly one of its delights.

I should not neglect to add a word of praise for the excellent singing and playing of the Westminster Choir, the New York Philharmonic, and the solo quartet. But this is eminently Bernstein's—and Haydn's—show. With this recording Bernstein not only helps restore Haydn to a properly lofty plane among the old masters but also adds a long-missing dimension to the contemporary interpretation of the Classical repertoire. —Eric Salzman

**HAYDN:** *Mass No. 9, in D Minor ("Lord Nelson Mass")*. Judith Blegen (soprano); Gwendolyn Killebrew (alto); Kenneth Riegel (tenor); Simon Estes (baritone); Westminster Choir; New York Philharmonic Orchestra, Leonard Bernstein cond. COLUMBIA M 35200 \$7.98.



Leutenwasser/Deutsche Grammophon

SCHREIER: malleable tone, liquid legato

## Songwriter Beethoven: Three Albums Aply Document an Impressive Stylistic Range

**B**EETHOVEN'S song output may be dwarfed by his gigantic achievements in orchestral, chamber, and piano music, but it is far from insignificant. We recognize Schubert as the first master of the Romantic song, but how can we forget that Beethoven wrote his first songs before Schubert was even born? True, the emotional range of his songs is not as broad as that of Schubert, but if a subject engaged him, it usually inspired him to a worthy effort.

Beethoven's songs include Italian ariettas (written under Salieri's influence, perhaps, or Mozart's) and German songs clearly modeled on Italian examples. There are also folksy strophic songs, comic ditties, slight occasional inspirations, and others that seem too ambitious for the modest confines of a mere song. He experimented with the form and, as a result, created the first song cycle (*An die Ferne Geliebte*). *Adelaide* (1797), the greatest of his early songs, anticipates the music of *Fidelio*'s Florestan in its ecstatic conclusion, but it calls for bel canto lyricism. And those who cite the uncompromisingly taxing lines of the Ninth Symphony or the *Missa Solemnis* as proof of Beethoven's "lack of understanding" of the voice need only study his songs to see their theory go up in smoke.

Telefunken has recorded three volumes of Beethoven songs with tenor Peter Schreier and pianist Walter Olbertz. Volumes II and III have now

been released in this country, following Volume I, which appeared here last year (Telefunken 6.41997, reviewed in December 1977). Taken together, they are the most extensive representation of Beethoven the songwriter ever to reach these shores. In addition to presenting certain rarities for the first time, they give us two songs in alternate settings. One of these pairings, *An die Hoffnung*, revealingly juxtaposes the earlier (1804) effort with the later (1815) version, harmonic richness and forceful declamation supplanting the lyric flow. Not all the discoveries are distinguished songs or even memorable ones, but it was a revelation to find a typically "Schubertian" song such as *Der Liebende* and to learn that it dates from 1810, just before the thirteen-year-old Schubert began his songwriting career.

Peter Schreier has the right lyrical approach to this repertoire. He sings gracefully, with a steady yet malleable tone and a liquid legato that removes all traces of strain from technically demanding phrases. There are a few songs (*In Questa Tomba Oscura* and the somewhat overblown *Abendlied Unterm Gestirnten Himmel*) that call for more vocal weight in the climaxes than he can supply, but his resolutions of these challenges are resourceful and never inadequate. He does the Italian songs with effortless ease (and enunciation vastly improved over his earlier efforts). His German is of course a model of clarity.

Dietrich Fischer-Dieskau has also recorded three volumes of Beethoven songs, but only one of them (Deutsche Grammophon 139 197) has found its way into the domestic catalog. In one respect—dynamic gradations—the baritone stands unchallenged: the subtle transitions he manages in *An die Ferne Geliebte* are not yet within Schreier's reach. But Fischer-Dieskau can at times be too *arty*, even trying, with some of his extreme mannerisms, and Schreier never is.

I recommend the Schreier records very highly. Walter Olbertz is a fluent and sensitive partner, and the record surfaces are superb. Song texts, however, are unfortunately in German only.  
—George Jellinek

**BEETHOVEN: Lieder—Volume II.** *An die Ferne Geliebte* (Op. 98); *Das Glück der Freundschaft* (Op. 88); *Der Liebende* (WoO 139); *Ruf vom Berge* (WoO 147); *Der Jüngling in der Fremde* (WoO 138); *Klage* (WoO 113); *An die Hoffnung* (two versions, Op. 32 and Op. 94); *An die Geliebte* (two versions, WoO 140); *Selbstgespräch* (WoO 114); *Gedenke Mein* (WoO 130). Peter Schreier (tenor); Walter Olbertz (piano). TELEFUNKEN 6.42082 \$8.98.

**BEETHOVEN: Lieder—Volume III.** *Ade-laide* (Op. 46); *Zärtliche Liebe* (WoO 123); *Der Kuss* (Op. 128); *Lied aus der Ferne* (WoO 137); *Resignation* (WoO 149); *Andenken* (WoO 136); *Der Zufriedene* (Op. 75, No. 6); *Trinklied* (WoO 109); *Punschlied* (WoO 111); *Three Italian Songs* (Op. 82, Nos. 1, 2, 3); *La Partenza* (WoO 124); *In Questa Tomba Oscura* (WoO 133); *Abendlied Unterm Gestirnten Himmel* (WoO 150); *An Laura* (WoO 112); *Der Wachtelschlag* (WoO 129); *Sehnsucht* (WoO 146). Peter Schreier (tenor); Walter Olbertz (piano). TELEFUNKEN 6.42130 \$8.98.

## Townes Van Zandt's Country/Folk Mixture Honorably Treated On Tomato Records

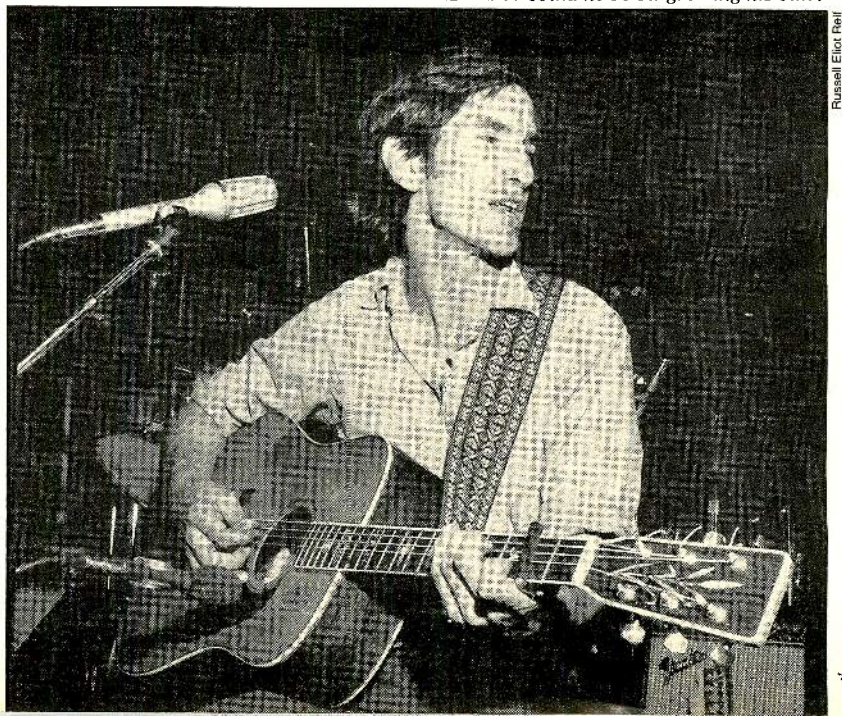
TOWNES VAN ZANDT has been around for a while, making some strange music, continually seeming to know more than he was letting on, and becoming something of an obscurantist, a cult hero—maybe by accident, maybe by design. Recently, his name has gotten around a bit as the writer of that strange (and good) song *Pancho and Lefty*, which was treated well by Emmylou Harris. And now he's done an album on the Tomato label, "Flyin' Shoes," which should get his name kicked around even more, for it's down to earth and yet it's good and solid and punchy and tuneful.

What happened is that Van Zandt teamed up with Chips Moman, who just may be the one producer in Nashville right now who has The Touch. Granted, it's an amorphous, would-be-commercial sound he gets, but it may be the most honorable way to, ah, update the sound of someone who's truly both country and folk, which is what Van Zandt is. Doc Watson, who also is, has recorded Van Zandt's songs off and on for years, and this album is mostly loaded with the kind of song Doc would do; the saner side of Townes Van Zandt, some call it—he has at least one album out that's truly bent and weird.

Moman plays up the acoustic guitar and plays down the electric guitar, getting the seamless wails from harmonica and pedal steel instead, and again that suits this side of Van Zandt to a tee. When the electric guitar finally does tear off on a solo in *Dollar Bill Blues*, it seems fresh and the heart is therefore fonder of it. The last time I heard Van Zandt sing he sounded like someone was holding him by the ankles and dangling him out the window, but he's smoothed it out quite a bit, and he has something valuable: an otherwise ordinary voice that's easy to recognize. The songs aren't spectacular or wildly original, but they're *subtly* original and they grow on you. Spooner Oldham plays some very tasty piano, and there's not really a clinker anywhere. Look out, cult—outsiders may be on the way!  
—Noel Coppage

**TOWNES VAN ZANDT: Flyin' Shoes.** Townes Van Zandt (vocals, guitar); Randy Scruggs, Chips Moman (guitars); Tommy Cogbill (bass); Eddy Anderson (drums); Jimmy Day (steel guitar); other musicians. *Loretta; No Place to Fall; Flyin' Shoes;*

TOWNES VAN ZANDT: could he be outgrowing his cult?



*Who Do You Love; When She Don't Need Me; Dollar Bill Blues; Rex's Blues; Pueblo Waltz; Brother Flower; Snake Song.* TOMATO TOM-7017 \$7.98, © 8353-7017(H) \$7.95, © 5353-7017 (H) \$7.95.

## Ry Cooder, Earl Hines, And Others Have Some Shameless Fun with Feel-good Jazz

I've always admired Ry Cooder's catholic taste and the sense of humor expressed in his choice of material: double-entendre blues, spirituals, Fifties and Sixties American and British rock songs, country-pop, and joshing songs like *A Married Man's a Fool*. His rule has always seemed to be "Never mind the era or the style; does the song feel good?"

Cooder has long been a first-rate, versatile guitarist, and since 1970 he has grown as a singer, becoming more comfortable both to himself and to his listeners. His new Warner Bros. album "Jazz" is by all odds his best so far in conception and artistry. The material spans fifty years—about 1880 to 1930—and contains works by as diversified a group of composers as you could imagine: Jack the Bear and Jess Pickett, Bert Williams, Bix Beiderbecke, Jelly Roll Morton, Milton Ager and Jack Yellen, Ford Dabney and Cecil Mack,

and Joseph Spence. This cast of composers is matched by admirable performers, including the magnificent Earl Hines on piano, and by the arrangements and conducting of Joseph Byrd.

All the songs are beautifully realized, but the two most effective and affecting are Cooder's solos on Morton's *The Pearls* and Beiderbecke's *Flashes*, both originally piano pieces here transcribed for guitar. Both compositions are complex, especially Beiderbecke's with its then-radical (1929-1930) experiments in harmony. Cooder's playing is delicate, elegant, and quietly moving.

A sprightly and transparent-sounding quintet is used for the two other Beiderbecke compositions, *In a Mist* and *Davenport Blues*. The former is Bix's famous piano work, which he recorded in 1927. The latter he never wrote down, but after his death in 1931 his friend Bill Challis transcribed Bix's cornet playing from the disc of *Davenport Blues* and adapted it for piano. *Face to Face That I Shall Meet Him*, *Happy Meeting in Glory*, and *We Shall Be Happy* are spirituals arranged in the syncopated style of Joseph Spence, a guitarist and singer from the Bahamas. Although the performances are commendable, Spence's adaptations are interesting rather than arresting, and one example would have sufficed.

*The Dream*, written around 1880 by Jess Pickett and Jack the Bear, was popular with the clientele and staffs of sporting houses. It is difficult to believe, on hearing the construction of the melody, that it was written nearly one hundred years ago, so contemporary does it sound. But then, good tunes are timeless. Earl Hines is timeless too, and the glissando with which

he opens the performance is a clear announcement that a master is present. His technique, attack, and imagination would alone be enough to certify him as a great classic-jazz pianist; what makes him quite possibly the all-time greatest is his independence. Hines has never played in any "school" style, as most jazz pianists have. He has, rather, his own style, one that begins and ends with him.

Cooder also offers two examples of the "coon song," a type of vaudeville ditty which flourished until the late teens and burlesqued black stereotypes (the genre was, in fact, invented by a black entertainer, Ernest Hogan). The first is *Shine*, which has often served as an inspiring vehicle for jazzmen and pop singers (Django Reinhardt and Anne Murray, to name one of each), and Cooder's version swings lightly and politely. The second is *Nobody*, originally written and performed by Bert Williams, one of the all-time great black entertainers. Williams, who was once described by W. C. Fields as "the funniest man I ever saw and the saddest man I ever knew," managed to insert humanity and dignity into his songs while operating within the highly restrictive limits of blackface comedy. *Nobody* is both hilarious and bitter, and it is to Cooder's credit that he selected it for inclusion. Williams' own 1920 recording is unmatched, but it has long been unavailable.

*Big Bad Bill Is Sweet William Now* is a happy-go-lucky tune in which Cooder is backed by a spunky group; it has a delightful "chase" chorus with trombonist Randy Aldcroft. The most wonderful thing about this album, however, is the way it returns jazz music to the public. Jazz has for too long been sequestered by cultists and ideologues who demand that America's Only Native Art Form be listened to as a Sociological Imperative. This attitude has driven away the greater part of three generations of potential audiences, and the unhappy results are by now probably irreversible. But for those who haven't yet been turned away by the Calvinist spoilsports, Cooder and his merry crew ably demonstrate that jazz is a pleasure and that listening to it can be—are you ready for shameless reactionism?—fun.

—Joel Vance

**RY COODER: Jazz.** Ry Cooder (guitars, mandolin, tiple, harp, vocals); Earl Hines (piano); instrumental and vocal accompaniment. *Big Bad Bill Is Sweet William Now; Face to Face That I Shall Meet Him; The Pearls/Tia Juana; The Dream; Happy Meeting in Glory; In a Mist; Flashes; Davenport Blues; Shine; Nobody; We Shall Be Happy.* WARNER BROS. BSK 3197 \$7.98, © M8 3197 \$7.97, © M5 3197 \$7.97.

EARL HINES AND RY COODER: *no Sociological Imperatives*



Warner Bros./Susan Titelman



# CLASSICAL DISCS AND TAPES

Reviewed by RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH  
STODDARD LINCOLN • ERIC SALZMAN

**BARBER: Songs** (see BERG)

## RECORDING OF SPECIAL MERIT

**BARTÓK: String Quartet No. 2, Op. 17; String Quartet No. 6.** Tokyo String Quartet. DEUTSCHE GRAMMOPHON 2530 658 \$8.98, © 3300 658 \$8.98.

Performance: **Intense**  
Recording: **Excellent**

The Second String Quartet is the most Central European of Bartók's works; that is, it shows the influence of Viennese expressionism (after all, the Austrian capital was only a few miles up the river from Hungary). It is a singularly intense composition, long and not easy to take. But it is also a strong and beautiful work, and it is realized by these Japanese musicians with magnificent clarity of style and full intensity of feeling. Bartók's Sixth Quartet, his last, written just before his emigration to the U.S., is a much tighter, more modernistic sounding work, but like his other late works it is highly eclectic, employing traditional elements—tonality, consonance, folk modality—in a new context. This somewhat enigmatic piece springs to life in the gifted hands of these young players. Theirs is some of the best Bartók around today. E.S.

**BAX: The Garden of Fand; Tintagel; Mediterranean; Northern Ballad No. 1.** London Phil-

harmonic Orchestra, Sir Adrian Boult cond. HNH 4034 \$7.98.

Performance: **Top-drawer**  
Recording: **First-rate**

I find Arnold Bax's *Northern Ballad*, with its forthright evocation of the Scottish folk idiom, more appealing than the somewhat diffuse though gorgeously orchestrated sea pieces *The Garden of Fand* (Ireland) and *Tintagel* (Cornwall). The brief *Mediterranean* is a kind of Baxian bow in the general direction of "pop" stylization (Spanish in this instance) of the type cultivated by the younger Paris-based composers of the day. The recorded performances here date from 1972 and were available initially on the Musical Heritage Society label. If the repertoire interests you, this disc is a winner, for the HNH remastering and pressing are superb, the recorded sound as such is of the very best, and the Boult readings and the orchestral performance could hardly be bettered. D.H.

**BEETHOVEN: Lieder** (see Best of the Month, page 101)

## RECORDING OF SPECIAL MERIT

**BEETHOVEN: Trio in B-flat Major for Piano, Clarinet, and Cello, Op. 11; Quintet in E-flat Major for Piano and Winds, Op. 16.** Peter Serkin (piano); Richard Stoltzman (clarinet); Fred Sherry (cello); Alan Vogel (oboe); Robert Rouch (horn); Bill Douglas (bassoon). RCA ARL1-2217 \$7.98, © ARK1-2217 \$7.98.

Performance: **Beautiful**  
Recording: **Sumptuous**

This program is headed "Tashi Plays Beethoven": three of the four members of that ensemble perform the trio and two of them return, with "guest artists," for the quintet. The B-flat Trio receives what is surely its most persuasive presentation since the old Decca mono disc, of blessed memory, on which it was played by Mieczyslaw Horowitzki, Reginald Kell, and Frank Miller. The Tashi approach is rather leisurely—each musician molding his sound lovingly and respond-

ing to his respective associates with an unhurried sort of spontaneity—and some listeners may find it a bit underanimated or, as one mentioned to me, short on humor. I can only say that I did not feel this myself; the word "beautiful" kept forming itself in my mind again and again as one lovely passage led to the next. The quintet, distinguished by similarly beautiful playing, is also a bit more relaxed than in most other versions, but again—especially in the slow movement—one is simply enthralled by the sound, the aura of intimacy, and the transparent charm. I would not think of doing without the London disc of the Beethoven and Mozart piano-and-wind quintets played by Vladimir Ashkenazy and the London Wind Soloists (CS-6494) or the aforementioned old Decca version of the trio (DL-9543), which I shall continue to cherish as I have the last twenty-five years or more; but among currently available recordings of the latter there is none so beautiful as this sumptuously recorded new one, which seems to me to justify whatever duplications acquiring it may involve. R.F.

## RECORDINGS OF SPECIAL MERIT

**BEETHOVEN: Variations on a Waltz by Diabelli, Op. 120.** Charles Rosen (piano). PETERS INTERNATIONAL PLE 042 \$7.98, © PCE 042 \$7.98.

Performance: **Extraordinary**  
Recording: **Very good**

**BEETHOVEN: Variations on a Waltz by Diabelli, Op. 120.** Alfred Brendel (piano). PHILIPS 9500 381 \$8.98.

Performance: **Brilliant**  
Recording: **Excellent concert take**

For me, Beethoven's *Diabelli Variations* are a kind of *comédie humaine*, a glorious excursion from the ridiculous to the sublime. Listening through these two new recordings, together with the legendary 1937 Artur Schnabel realization (now on Seraphim), proved to be both instructive and highly entertaining.

Schnabel is warm and earthy, Brendel is brilliant and witty, and Charles Rosen, to my

### Explanation of symbols:

- Ⓜ = reel-to-reel stereo tape
- Ⓢ = eight-track stereo cartridge
- Ⓒ = stereo cassette
- Ⓛ = quadraphonic disc
- Ⓡ = reel-to-reel quadraphonic tape
- Ⓟ = eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol Ⓜ

The first listing is the one reviewed; other formats, if available, follow it.

mind, seems to have the best of both worlds. There is marvelous suavité and bravura in Brendel's performance; he really does take one's breath away in the brilliant variations Nos. 10, 23, and 27. But Rosen's performance is in its totality a truly extraordinary achievement. There is all the virtuosity needed for the "brilliant" variations, and there are the grittiness, fierceness, and humor that these pieces need as well. While both Rosen and Brendel make the most of the dissonant elements in No. 9, Rosen makes a much fiercer affair of No. 13, and his control is just astonishing in the nastily difficult No. 17. Both artists excel in the harmonically suspenseful No. 20, but Rosen probes more deeply into the three great C Minor variations (Nos. 29-31), which constitute one of Beethoven's most sublime and fascinating "slow movement" complexes. Rosen similarly gets considerably more in the way of nuance and phrasing from the final variation and coda.

Brendel's performance, recorded at a London Royal Festival Hall concert on February 8, 1976, emerges from the disc with crystal clarity of sound and a lack of audience noise rather amazing for London in February. Rosen's recording is a beautiful studio job, also originating in England and with a piano appropriately voiced for the task at hand. D.H.

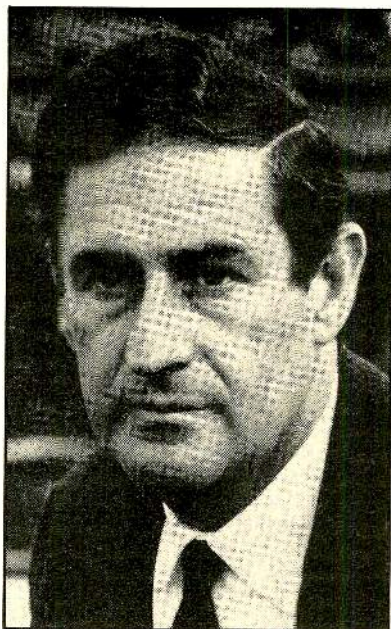
#### RECORDING OF SPECIAL MERIT

**BERG:** *Seven Early Songs*. **BARBER:** *Nocturne; With Rue My Heart Is Laden; Sure on This Shining Night; A Nun Takes the Veil; The Secrets of the Old; Solitary Hotel; Rain Has Fallen; Sleep Now; I Hear an Army*. Joan Patenaude (soprano); Mikael Eliassen (piano). MUSICAL HERITAGE SOCIETY MHS 3770 \$4.95 (plus 95¢ postage and handling from Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

Performance: **Very good**  
Recording: **Very good**

This second volume of "Songs of the Great Opera Composers" from the Musical Heritage Society (Volume One was devoted to Bizet, Massenet, and Saint-Saëns) includes some exquisite examples of the art song in the twentieth century. Both the Berg and the Barber songs are highly romantic. Berg's *Seven Early Songs* are settings of German verses about misty twilights, forest walks, autumn sunshine, and the bliss of lovers in a song cycle that is like a haunting nocturne for the human voice. His setting of Rilke's *Traumgekrönt* (*Crown of Dreams*) is particularly tender and evocative. Barber, at his best matched by few of his contemporaries in writing for the voice, is represented in top form with a wistful treatment of A. E. Housman's *With Rue My Heart Is Laden* and an ode to the beauties of a summer night by James Agee (who supplied the text for the same composer's remarkable *Knoxville: Summer of 1915*). Most absorbing of all are Barber's moving miniatures inspired by lines from the works of James Joyce, of which he has set quite a few. Included in this program are a brief passage from *Ulysses*, the tender *Rain Has Fallen* and *Sleep Now*, and *I Hear an Army*, a poem of such surging power that it is remarkable how well the composer has matched its flashing imagery with his music.

Joan Patenaude's voice is not a particularly supple or sensuous instrument, but she makes up for what it lacks in sweetness with an abili-



Thea Dispeler

## "The Saint of Bleeker Street"

**G**IAN CARLO MENOTTI has been writing operas since he was ten years old and has won two Pulitzer Prizes—one in 1951 for *Amahl and the Night Visitors*, the other for *The Saint of Bleeker Street* in 1954—yet the musical establishment has long considered him a lightweight. Menotti, after all, brought grand opera out of the opera house and into the commercial theater on Broadway with *The Medium* and *The Telephone*, wrote two of his operas for radio, and prefers old-fashioned melody and sumptuous orchestration to avant-garde adventure. Yet, in his own idiom, composing music unmistakably his own to his own librettos and even supervising the staging of his works, he is a composer who deserves to be taken seriously, and his accomplishments—the highly successful production of *The Consul* at his own Spoleto Festival USA, which was seen over educational television last winter, is an excellent case in point—are proving to be of a more enduring nature than was forecast by his detractors. *The Saint of Bleeker Street* was successfully revived by the New York City Opera Company last season and was well received when broadcast in the "Live from Lincoln Center" series on PBS TV—which probably explains why the album is being reissued at this time.

*The Saint of Bleeker Street*, which opened at the Broadway Theatre in New York in December 1954 and was seen by millions as a television program on the NBC Opera Guild series soon afterwards, is Menotti's most ambitious operatic effort, dealing, as so many of his operas have, with faith and the lack of it. Large-scale, rich in melody, and as theatrical

as any work in the repertoire, this story of Annina—the seer of Mulberry Street in New York's Little Italy who hears voices, sees visions, exhibits stigmata, and can cause the dumb to speak—spills over into melodrama and shameless sentimentality at moments but is saved from bathos time and again by the power and invention of its pungent score, into which the composer poured a remarkable amount of beautiful and persuasive music. Some of the early exchanges among Annina's high-strung relatives and neighbors threaten to mire the first act in the kind of banalities that make this composer's work so easy to parody, but when Annina sings her spine-chilling stigmata aria, the act builds thrillingly to a gripping climax.

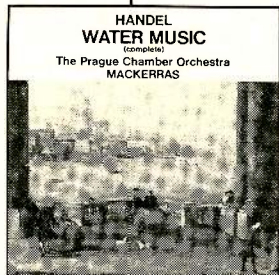
As the action later on speeds headlong to a crisis between the faith of Annina and the skepticism of Michele, the brother who loves her, there is color and spectacle at every turn—the procession of San Gennaro down Mulberry Street, an Italian wedding almost as lavish as the one in *The Godfather*, a murder, an eerie encounter in a subway station between Michele (who has stabbed his mistress to death and is hiding from the police) and Annina herself, mortally ill but determined to take the veil before she dies. Menotti wisely begs the big psychological and religious questions in his opera: Is Annina a saint or is she simply hallucinating? Is the love between her and her brother really incestuous? Is Don Marco the priest a cold-hearted coward or the incorruptible instrument of Christ? But the music itself is far from neutral; it sweeps the listener along and seldom fails to live up to its promise, right through to the last poignant pages.

**T**HE album just released by RCA is a reissue of the original 1954 recording prepared by the late Thomas Schippers with a perfectly splendid cast under the composer's supervision—a set that I am told was fetching something like \$600 on the rare-record market until this reissue appeared. The tapes seem to have been remastered, and the mono sound is marvelous. The production, an exceptionally impassioned one, brings out every bit of choral and orchestral color in the score. The entire cast is in excellent form. Gabrielle Ruggiero's Annina is an unforgettably incandescent portrait, and tenor David Poleri as her brother Michele, mezzo Gloria Lane as his mistress Desideria, and especially Leon Lishner as the priest Don Marco simply cannot be faulted. John Reardon makes a momentary welcome appearance as a wedding guest, and *The Saint of Bleeker Street* itself is more than welcome in this long-overdue return to the catalog. The album comes with a handsomely printed libretto and informative notes by Christopher Keene.

—Paul Kresh

**MENOTTI:** *The Saint of Bleeker Street*. Gabrielle Ruggiero (soprano), Annina; David Poleri (tenor), Michele; Gloria Lane (mezzo-soprano), Desideria; Maria Di Gerlando (soprano), Carmela; Leon Lishner (bass), Don Marco; Catherine Akos (soprano), Assunta; Maria Marlo (soprano), Maria Corona; David Aiken (baritone), Salvatore; others. Orchestra and chorus, Thomas Schippers cond. RCA Ⓜ CBM2-2741 two discs \$9.98.

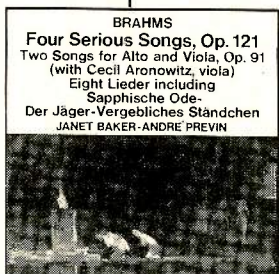
# Angel Challenges Your Playback System...



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of the full  
dynamic  
range.  
S-37532



Ravishing and  
explosively  
sonics.  
SBLX-3848



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nuances of  
burnished  
silver.  
S-37519



Strings of  
multi-color  
timbre.  
S-37553



Vivid,  
spacious and  
plamistically  
impeccable.  
S-37512



ty to interpret her material in a most penetrating way. Mikael Eliassen is an excellent accompanist for her, and he has plenty of challenging work here. There are no notes, alas, but texts are supplied. P.K.

**BLOCH: Quintet No. 1 for Piano and Strings.**  
New London Piano Quintet. HNH 4063  
\$7.98.

Performance: **Very good**  
Recording: **Very good**

Bloch's marvelously fierce 1923 First Quintet (he produced a second one in his final year), so filled with both primordial energy and tenderness, has been almost as neglected as his string quartets. It's hard to imagine why, for I've never seen an audience fail to respond to the work. In any event, it is heartening to have two fine recordings of it available now, and this is a very good one indeed, with plenty of passion and commitment and no lack of technical assurance on anyone's part. It is, in fact, quite similar in approach and in many details to the performance by Frank Glazer and the Fine Arts Quartet on Concert-Disc CS-252, and it is more cleanly recorded. The handsome sound, however, does not offset the richer string tone of the Fine Arts Quartet (the New London strings tend to sound thin) or the overall intensity that so consistently and effectively vivifies the American team's performance. R.F.

**BRAHMS: Symphony No. 3, in F Major, Op. 90; Alto Rhapsody in C Minor, Op. 53.** Christa Ludwig (contralto); Wiener Singverein; Vienna Philharmonic Orchestra, Karl Böhm cond. DEUTSCHE GRAMMOPHON 2530 992 \$8.98, © 3300 992 \$8.98.

Performance: **Spacious**  
Recording: **Better in Rhapsody**

This Third Symphony performance comes from Karl Böhm's 1976 Deutsche Grammophon package of all four Brahms symphonies. The first movement is spacious to the point of being almost loose. Brasses and woodwinds are a bit overprominent, but a slight cut in mid-range eases this situation. The reading seems to cohere better as it goes along, and there is beautiful nuancing of the woodwind interplay in the middle section of the third movement. The finale is splendidly taut and rugged. In all, a *good* performance, but nothing really exceptional.

The Alto Rhapsody is the real prize here, with an extraordinarily intense and very broadly paced interpretation by Christa Ludwig, who sounds in superb voice. The male contingent of the Wiener Singverein is heard to splendid advantage as well, and Böhm's knowing collaboration makes this an unusually distinguished performance. D.H.

**BRITTEN: Prelude and Fugue for String Orchestra, Op. 29.** English Chamber Orchestra, Benjamin Britten cond. *Phaedra, Op. 93.* Janet Baker (mezzo-soprano); English Chamber Orchestra, Stuart Bedford cond. *Sacred and Profane, Op. 91; A Wealden Trio; Sweet Was the Song; The Sycamore Tree; A Shepherd's Carol.* Wilbye Consort, Peter Pears cond. LONDON OS 26527 \$7.98.

Performance: **Very good**  
Recording: **Very good**

This record combines some very early Britten with two major works composed toward the

end of his life (1975-1976). The earliest pieces are three lovely and fresh-sounding carols (*A Wealden Trio, Sweet Was the Song, and Sycamore Tree*) dating from the composer's student years of 1929-1931. A 1944 setting of the W. H. Auden poem *A Shepherd's Carol* rounds out the carols on the disc; the text is rather weird and problematic because of its brusque juxtapositions, and I find the musical treatment unconvincing. I am entirely taken, on the other hand, by the *Prelude and Fugue* (1943), an inventive and richly scored piece that comes off with a virtuoso effect here.

*Sacred and Profane* was written for Sir Peter Pears' five-voice Wilbye Consort in 1975. It is a group of eight unaccompanied choral settings of medieval texts. Unpredictability is a key element here, for the songs range from sincere devotion to tongue-in-cheek parody, and the musical treatments from mellow liturgical modes to bold harmonic adventures. Though not without traces of self-conscious artiness, the sequence is refreshing and effective. *Phaedra*, a monodrama written for Janet Baker, is modeled on the Handelian cantatas of which Dame Janet is such a remarkable interpreter. She projects the text (Racine via Robert Lowell's poetic translation) with telling dramatic effect, but I don't find it memorable musically. All the performances are on a high level, and so is the recorded sound. G.J.

**CHOPIN: Sonata in G Minor for Cello and Piano, Op. 65; Grand Duo Concertant on Themes from "Robert le Diable"; Introduction and Polonaise Brillante, Op. 3.** Nathaniel Rosen (cello); Doris Stevenson (piano). DESMAR DSM 1009G \$8.98.

Performance: **Bland**  
Recording: **Excellent**

It is a convenience to have all of Chopin's cello music collected on a single disc, and it is especially good to see the two adorable shorter pieces, neither of which has been available at all for some time, but this release raises more hopes than it fulfills. Nathaniel Rosen has a nice, warm tone and plays with great assurance and smoothness; what is missing is the personality, the flair, that makes one really want to hear these pieces. As for the polonaise, I suppose I am irretrievably spoiled by familiarity with the old Feuermann recording, which had freedom and lightness, yet an aristocratic mien. I don't intend to condemn Rosen for not being Feuermann, but his approach here strikes me as too bland to bring the music to life. The most pleasurable contributions to the record are those of Doris Stevenson, who enlivens the piano part of each work with a true Chopinesque vitality, and of the recording engineers, whose well-balanced, realistic achievement is presented handsomely on the clean German pressings.

I am sorry I cannot be more enthusiastic about Rosen's performance, for he won the gold medal in this year's Tchaikovsky Competition in Moscow a few months after this disc was released. But now he will surely be making more recordings, and we'll have the opportunity to enjoy his artistry in other, possibly more sympathetic repertoire. R.F.

**DVOŘÁK: String Quartet No. 12, in F Major, Op. 96** (see SMETANA)

**HANDEL: Theatre and Outdoor Music. Transcriptions for Harpsichord of Pieces from**  
(Continued on page 112)



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Joseph Haydn: gouache by  
Johann Zitterer,  
c. 1790



## Haydn's Piano Sonatas

Now that all of Haydn's symphonies and string quartets are safely on disc, it's more than time we had an opportunity to become better acquainted with his almost as copious production of piano sonatas. A full three-quarters of the series is included in the five releases under consideration here, and it is marvelously varied and rewarding listening I have had from them over the past weeks. (For convenience, by the way, I have converted the Hoboken numbering of the works on the Vanguard, Nonesuch, and HNH albums to their equivalents in the comprehensive Christa Landon edition, and it is the latter's numbering system that I have used exclusively in both this review and the listings at the end.)

Spanning a period of three decades, from the early 1760's to 1794, when the sixty-second (and last) sonata was written, Haydn's piano music embraces an expectably wide range of the composer's styles. The first sonatas inhabit that curious middle ground between the Baroque and Classical styles, a manner at once piquant and poignant, which Haydn shared with Carl Philipp Emanuel Bach but cultivated with much greater musical mastery. The combination of the old language, with its non-dynamic closed forms and regular figurations, and a new impulse toward the cut and thrust—often dramatic or witty—of symphonic argument makes for arresting listening and illuminates the origins of the later symphonic style.

On the way to that new orientation, the series passes in the 1770's (as did the parallel series of symphonies) through a stage in which simplicity sometimes exaggerates itself into a sort of blandness. But even in the weakest works of this period there are always attractive individual movements to beguile the faithful explorer, and in perhaps the last dozen or so sonatas the true Haydnesque mastery

is fully asserted. There are depths in these late works that vividly foreshadow some of the greatest of the later Viennese classics—Schubert, for instance, in the plangent octaves of the first movement of No. 49, and even the Beethoven of the *Appassionata* in the suspenseful rhetoric of No. 59, which yields nothing in subtlety and scope to the more celebrated No. 62. Such pre-echoes are to be enjoyed not merely as history lessons before the event, but as magical expressions of a genius whose full range we are even now only just beginning to comprehend.

The A-flat Major Sonata, No. 31, offers the best starting point for a comparison of the five pianists before us, since it is essayed by three of them. On the second release in his London series, John McCabe, who is a composer as well as a performer, sets forth an easygoing reading that lets the music speak for itself. This it does very well in all but the middle movement, which is a superb blend of *passacaglia* and sonata styles marked *adagio* but here played at a slightly facile *andante*. (In general stylistic terms, McCabe is right not to pace his slow movements too slowly; but in this particular case it is impossible to imagine anywhere for the tempo to have gone had the marking actually been *andante*.) Charles Rosen (on Vanguard) and Rudolf Buchbinder (Telefunken), in contrast, give powerfully characterful performances. The difference between them is that with Rosen the character is rivetingly musical, whereas with Buchbinder it is, I regret to say, simply bad. All three of Rosen's performances (Nos. 32 and 33 as well as 31) are, indeed, full of the stylistic insight and expressive richness that we have come to expect from this scholar-pianist, and the disc—recorded by Columbia nine years ago and now at long last released in the U.S. under license—is the finest single achievement of all those under review.

I find Buchbinder's performances really quite strongly dislikable, which is sad both because of the scope of his project—it is the first in a presumably to-be-completed series, and the first set includes besides sonatas Nos. 1-20 and 29-34 an extended-play 7-inch disc with all the available material from the fragmentary sonatas Nos. 21-28—and because he is clearly a pianist of some stature with the ability, when he is not banging, to produce admirably singing treble tones. The trouble is with the woodenness of his left hand, which so drearily churns out accompanying chords that 4/4 movements almost always emerge at a pedestrian eight to the measure, and, more seriously still, with what I can only describe as a total lack of sympathy for Haydn's style(s). Hardly a phrase is allowed to pass without either an aggressive crescendo or a hushed, expectant diminuendo. Beethoven might respond splendidly to such playing, but for Haydn the whole approach, complete with jabbing accents and often absurdly hasty tempos, is wrong.

McCabe, fortunately, is a far more perceptive and sympathetic interpreter. More generous with repeats than any of the others in these releases and often beautifully inventive in his discreet ornamentation the second time around, he offers an attractive and usually convincing view of the music. Occasionally a fast movement loses impetus through too modest a tempo, but otherwise his set—and series as a whole—can be warmly recommended. Gilbert Kalish, too, on Nonesuch, is a distinguished Haydn player; if his series (this is his third disc of Haydn piano music) continues it may well provide some formidable competition for McCabe. And on HNH, the youngish British pianist Hamish Milne offers a strong performance of the great last sonata, together with a fascinating fantasia and, on the reverse, some impressive Mozart.

**H**ATE to end on a carping note—but what is happening to pianos these days? All these recordings are good in audio terms, but it is a depressing sign of the times that two of them are blemished by imperfectly regulated instruments: McCabe's piano, in some works, has a defective second G above middle C, and Kalish's, in addition to a very heavy action, has a no less disturbing second E-flat. Producers, not to say pianists themselves, really ought to catch such things. —Bernard Jacobson

**HAYDN: Piano Sonatas Nos. 9, 17, 31, 36, 43, 45, 46, 48, 54-56; Variations in A Major.** John McCabe (piano). LONDON STS 15349/51 three discs \$11.94.

**HAYDN: Piano Sonatas Nos. 1-34.** Rudolf Buchbinder (piano). TELEFUNKEN 6.35088FK six LP discs, one EP \$47.88.

**HAYDN: Piano Sonatas Nos. 31-33.** Charles Rosen (piano). VANGUARD/CARDINAL VCS 10131 \$3.98.

**HAYDN: Piano Sonatas Nos. 43, 49, 55, 59.** Gilbert Kalish (piano). NONESUCH H-71344 \$3.96.

**HAYDN: Piano Sonata No. 62; Fantasia in C Major (H. XVII:4). MOZART: Rondo in A Minor (K. 511); Fantasy in C Minor (K. 475).** Hamish Milne (piano). HNH 4056 \$7.98.



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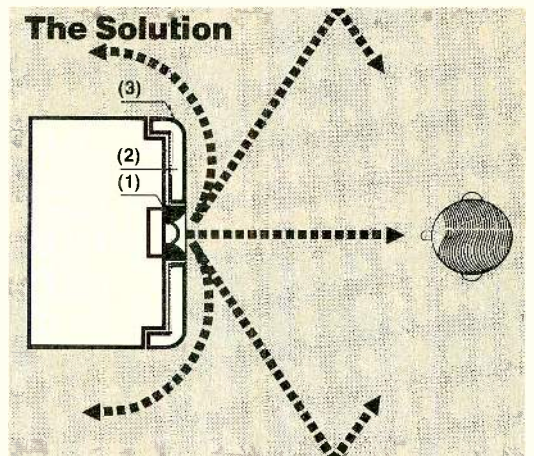
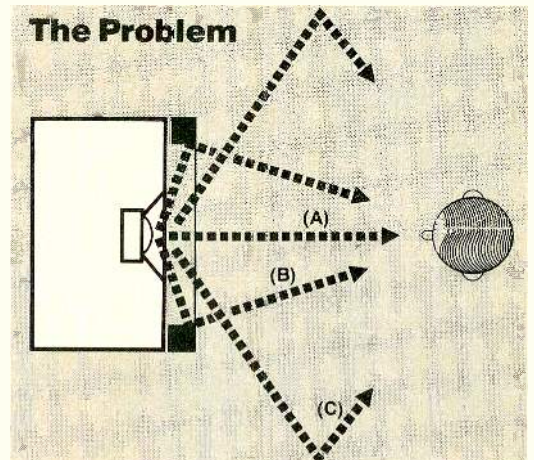
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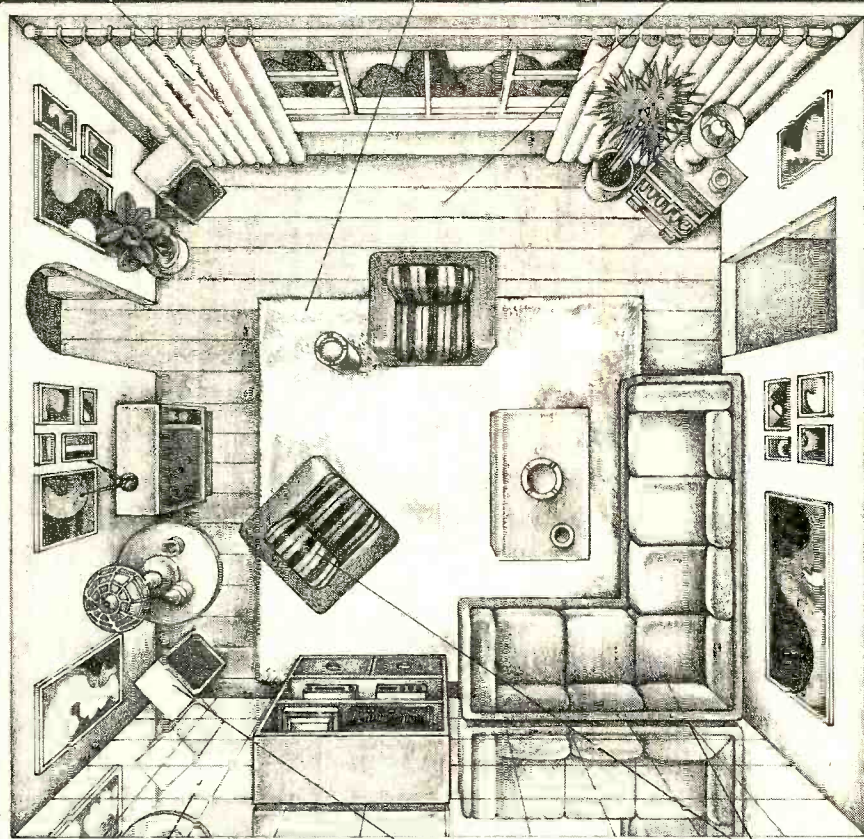
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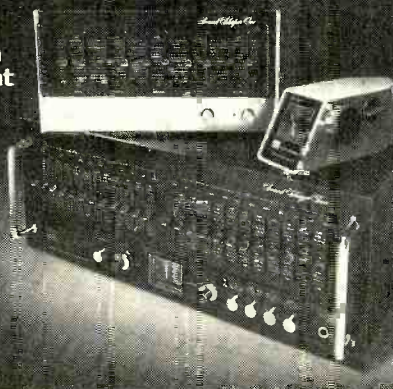
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*the Overtures, the Water Music, and the Flute Sonata in F Major, Op. 1. No. 11.* Kenneth Cooper (harpsichord). VANGUARD VSD 71224 \$7.98.

Performance: **Vigorous**  
Recording: **Excellent**

Recognizing the validity and long history of transcriptions, Kenneth Cooper has come up with a wonderful "new" Handel repertoire for the harpsichord. Handel's music is effective in its keyboard guise, and the disc is a joyous affair. Cooper plays vigorously and shows himself to be a master of *détaché*. The results are often stunning: "The Entrance of the Queen of Sheba" from *Solomon* is breathtaking. In more lyrical pieces, however, such as the adagio from *Il Pastor Fido*, too much detached playing shatters Handel's long sinuous lines. All of Cooper's ornaments emphasize brilliance; perhaps an expressive approach, and playing them as part of a melody, would be more appropriate for the slow sections. On the other hand, the artist's improvised ornamentation of such movements as the *Siciliana* from the F Major Flute Sonata is imaginative and tasteful. Let us hope for more of these transcriptions—and also that Cooper will give us some proper French overtures rather than more of the bonbons Handel put into the music to come after the overtures themselves. S.L.

**HANSON: Symphony No. 2, Op. 30 ("Romantic").** National Philharmonic Orchestra, Charles Gerhardt cond. **MACDOWELL: Piano Concerto No. 2, in D Minor, Op. 23.** Earl Wild (piano); National Philharmonic Orchestra, Massimo Freccia cond. **QUINTESSENCE PMC-7062 \$3.98.**

Performance: **Both fine**  
Recording: **Good**

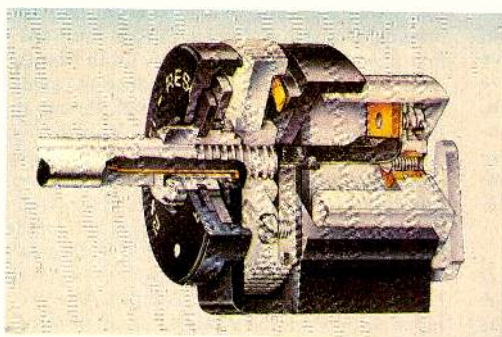
This appears to be the first recording of Howard Hanson's most popular symphony under a conductor other than Hanson himself, and Charles Gerhardt's way with the work is admirable. He maintains a good balance between expressiveness and color, avoids rhetorical excess, and is abetted by a fine and apparently enthusiastic orchestra. Hanson's own third and current recording of the symphony, though, has just that much more in the way of natural thrust and dignity (especially in the slow movement at the very end of the work), and his Eastman-Rochester strings sound richer than the probably more numerous ones of the National Philharmonic. The twenty-year-old Mercury recording (SRI-75007), in fact, has a more opulent character than this newer one, which is a bit less rippling than most of the Quintessence sides from this general source (recordings produced for the *Reader's Digest* by RCA in the mid-1960's). The MacDowell side is a bit stronger in respect to both performance and sonics; unsurprisingly, Earl Wild is stunning in the solo part, and Massimo Freccia is with him almost every step of the way. All in all, the Quintessence release is an attractive and economical way to add two big American works to one's collection. R.F.

**HAYDN: Mass No. 9, in D Minor** (see Best of the Month, page 101)

**KABALEVSKY: Piano Concerto No. 2, in G Minor, Op. 36; Preludes, Op. 38, Nos. 1, 3, 6,** (Continued on page 114)

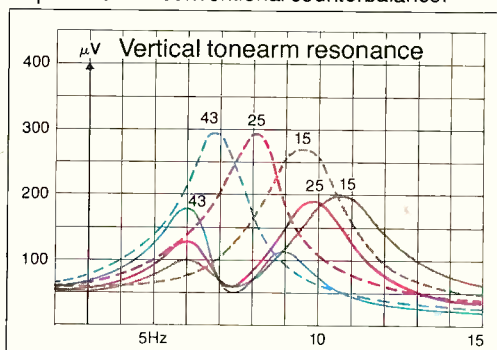
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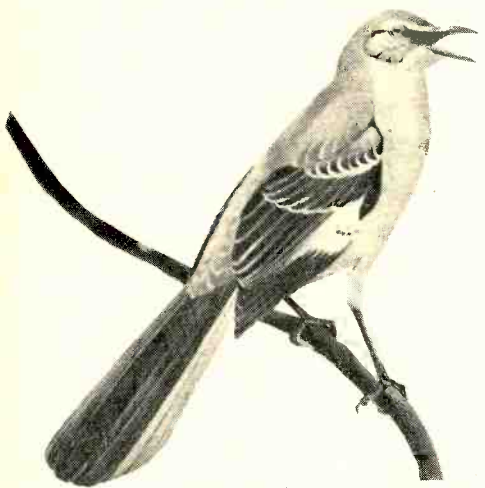


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Birds sing—the males, mostly—to establish a territory, attract a mate, keep peace with the neighbors, warn off intruders, identify themselves as individuals, and even, some scientists to the contrary, for the pure joy of it. Some people—even some scientists—think that animal music has something in common with human music. Aesthetics may actually be a factor in evolution, since the females tend to choose the best singers and thereby help perpetuate the genes for musical talent.

The most famous songsters—in Western culture at least—are mostly European: such birds as the nightingale, the skylark, the song thrush, the European blackbird, and the European warblers are celebrated in folklore and by the great Old World poets. Except for the mockingbird, our North American songsters—the hermit and wood thrushes, the thrashers—are a little less known, but also talented.

Possibly the most remarkable musicians of all come from warmer climates: the robin-chats of Africa, the lyrebird, bellbird, and tui of Australia and New Zealand, and the wrens and solitaires of tropical America. For an astonishing musical experience, listen to the musician wren or the cocoa thrush or the brown-backed solitaire—or the pied butcherbird of Australia, which sounds like a tape played backward! Or the African birds whose rhythmic qualities suggest nothing less than

African (human) music! (Interestingly enough, almost half of the best song birds are thrushes of one sort or another, and another dozen belong to more-or-less related species.)

These birds really express a kind of earth music. Short of experiencing them in their natural habitats, the best way of appreciating their great singing is through a new album, "Beautiful Bird Songs of the World," from the National Audubon Society. Birds live fast and high, and the high frequencies and tempos of their songs often contain more music than we lower, slower-paced humans can immediately grasp. And, of course, the difficulty of field conditions has long been a bar to good recordings. But modern lightweight field equipment, parabolic reflectors, ultrasensitive microphones, and low-noise tape have brought natural-sound recording into its own. The collection of tapes that went into "Beautiful Bird Songs"—from highly qualified amateurs as well as top professionals—is first-class, evoking the ambiance as well as the musical qualities of these singers.

I WAS already quite familiar with Olivier Messiaen's *Oiseaux Exotiques* when I saw the score for the first time and discovered that he had carefully indicated the names of all his bird sources. Most of them turned out to be our common North American songsters (exotic to him, perhaps), and I didn't recognize a one! Of course, a composer may take his inspiration wherever he finds it, but to find and appreciate the great bird singers, I suggest—short of some extensive globe-trotting—this beautifully produced set. The album includes illustrations of all the birds by Arthur Singer, one of the very best of living bird painters, as well as helpful notes and explanations by James L. Gullledge of the Cornell University Laboratory of Ornithology. And when you take this audio trip to far-out places, set your mode switch to mono; it's more natural that way.

—Eric Salzman

**BEAUTIFUL BIRD SONGS OF THE WORLD. Europe:** Woodlark; Skylark; Nightingale; Thrush Nightingale; Bluethroat; Rock Thrush; Blue Rock Thrush; Song Thrush; Blackbird; Icterine Warbler; Orphean Warbler; Garden Warbler; Blackcap. **Africa:** Bifasciated Lark; Rüppell's Robin-Chat; Snowy-headed Robin-Chat; Orange Ground-Thrush; Oberlaender's Ground-Thrush; Mountain Yellow Warbler; Bearded Scrub-Robin; Brown Robin; White-browed Robin-Chat; Chorister Robin-Chat; White-throated Robin-Chat. **The Americas:** Curve-billed Thrasher; Mockingbird; Hermit Thrush; Wood Thrush; Western Meadowlark; Cardinal; Bachman's Sparrow; Rufous-and-white Wren; Brown-backed Solitaire; Slate-colored Solitaire; Spotted Nightingale-Thrush; Musciana Wren; Cocoa Thrush. **Asia, Australia, and New Zealand:** Brown Laughing Thrush; Japanese Robin; White-eyebrowed Shama; Japanese Bush Warbler; Narcissus Flycatcher; Superb Lyrebird; Pied Butcherbird; Brown-breasted Shrike-Thrush; Crested Bellbird; Gray Warbler; New Zealand Robin; Bellbird; Tui. AUDUBON/CORNELL NAS 1000 two discs \$19.95 (plus \$1.75 postage and handling from the National Audubon Society, 950 Third Avenue, New York, N.Y. 10022).

7, 8, 10, 12, 16; *Rondo in A Minor, Op. 59.* Ozan Marsh (piano); Royal Philharmonic Orchestra, Paul Freeman cond. COLUMBIA SPECIAL PRODUCTS P 14254 \$7.98.

Performance: **Expert**  
Recording: **Good**

I well remember the first American performance (in 1942, with Leo Smit as soloist and Frank Black conducting the NBC Symphony) of Kabalevsky's Second Piano Concerto. I found the solo piano writing highly effective, the orchestral part somewhat opaque in places, and the music as a whole lacking the verve and character of the veteran Soviet composer's works in a lighter vein, such as the Violin Concerto. This excellent first recording (it is also Columbia Special Products' first newly recorded release) by Ozan Marsh, with Paul Freeman's fine conducting, gives me no reason to change my mind, though in the course of revising the music Kabalevsky has brightened up and more firmly pointed the orchestral texture. Much the best music on this disc is to be found in the eight pieces from the Op. 38 preludes and the brilliant rondo that Kabalevsky wrote for the 1958 International Tchaikovsky Competition (which, of course, was won by Van Cliburn). The preludes range from the virtuosic-dramatic (Nos. 10 and 16) to the simplistic "song without words" type (Nos. 1 and 8). They are all beautifully written for the instrument, as might be expected of one who was trained by teachers of Alexander Scriabin's generation. Ozan Marsh's performances are expert and committed, and the recording is wholly satisfactory throughout.

D.H.

**LEHÁR: The Merry Widow.** Beverly Sills (soprano), Anna Glawari; Alan Titus (baritone), Count Danilo Danilovitch; David Rae Smith (baritone), Baron Mirko Zeta; Glenys Fowles (soprano), Valencienne; Henry Price (tenor), Camille de Rosillion; James Billings (baritone), Njegus, Pritchitch; Thomas Jamerson (baritone), Vicomte Casada; Alan Kays (tenor), Raoul St. Brioche; Vincent Angeli (tenor), Bogdanovitch; Harlan Foss (baritone), Kromov. New York City Opera Orchestra and Chorus, Julius Rudel cond. ANGEL □ S-37500 \$7.98.

Performance: **Agreeable**  
Recording: **Superb**

When Franz Lehár's *Die Lustige Witwe* opened at the Theater an der Wien in 1905, the management was so nervous about its chances that the curtain went up on one of the oldest sets and the most worn-out costumes they had been able to fob off. Well, we all know what happened: Hanna (here, for some reason, Anna) Glawari, the Merry Widow from Petrovenia who has to marry a countryman to keep her money in her homeland, has been trilling her way into the world's heart ever since. *The Merry Widow* was considered daring in its day, what with its flirtatious heroine, its sensuous waltzes, and its flamboyant fashions (when it was finally fitted out with new costumes). It has been translated into twenty-five languages and made into a ballet, several movies, and an ice show; millions of records of it have been sold. (The only piece my own father could play all the way through on the piano was *The Merry Widow Waltz*.) Yet those of us who grew up in a period of waning sentimentality tended to patronize the

(Continued on page 116)





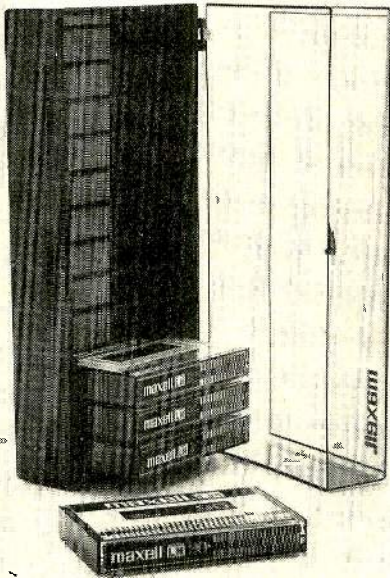
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whole thing as the sheerest shlock. Heard again now performed with much brio and a minimum of schmaltz by the New York City Opera Orchestra and Chorus led by Julius Rudel, the work makes a better impression.

This Angel abridgment is a version prepared by Tito Capobianco for a San Diego Opera production, with new lyrics by Sheldon Harnick (*Fiddler on the Roof*, *The Rothschilds*, *Fiorello*). Those lyrics, while deferential to the period, are crisp and singable and manage to dodge the absurdities indulged in by earlier translators. Harnick is occasionally a bit racy for his subject matter ("They give you a run for your money/And then take your money and run") but by and large gives a good account of himself. In Rudel's hands, the score is far easier to take than it once seemed in certain heart-on-the-sleeve treatments under Continental auspices. There is no paucity of dashing numbers—I *Find It at Maxim's*, *See the Horsemen Come*, the gypsy dances in Act One. The song about Villia, the "spirit maid" who leads the huntsman on into the woods, lets him make love to her, and then vanishes to leave him lovelorn, is still haunting, and the famous waltz itself proves to have plenty of life left in its lilt. The cast is a star-studded one, with a first-rate cadre of supporting singers, most of whom are associated with the New York City Opera (where *The Merry Widow* has recently been on the boards). As for Beverly Sills, she has been performing the title role since she was seventeen, for a total of more than two hundred times, and she still makes a glamorous Anna/Hanna even though her voice is deteriorating and betrays an occasional harshness along with its worsening quaver. The abridgment works just fine; *The Merry Widow* is not one of those operettas where it is really necessary to sit through all the dialogue in order to enjoy the music, and most of that fits into the one-disc format. A text is provided. P.K.

**MACDOWELL: Piano Concerto No. 2, in D Minor, Op. 23** (see HANSON)

#### RECORDING OF SPECIAL MERIT

**MAHLER: Symphony No. 1, in D Major.** Boston Symphony Orchestra, Seiji Ozawa cond. DEUTSCHE GRAMMOPHON 2530 993 \$8.98, © 3300 993 \$8.98.

Performance: **Provocative**  
Recording: **Outstanding**

Another Mahler First may not have seemed our most urgent need at the moment, but this new one by Ozawa is of the sort that would command the warmest welcome no matter how crowded the field. It is probably the finest performance in this conductor's discography to date, and it is surely the richest, most realistic recording Deutsche Grammophon has made in Boston, with the kind of sound that will make you feel very satisfied with yourself if you have recently invested in upgrading your audio system. I would have characterized Ozawa's exceptionally expressive and expansive approach as "Bruno Walterish," except that Walter was both brisker and steadier in the opening movement, and even he did not reveal so many intriguing details of the score as Ozawa does. In the latter respect, of course, the recording itself is quite a help. Ozawa's more leisurely pacing of the first movement points up the music's wistful nature without lessening its punch or vitality,

but there is a bit of gear-shifting in preparation for the big climax at the end that was not necessary (or simply not noticeable) in Walter's reading. In the famous Funeral March, one might feel that Ozawa's caressing way divests the music of some of its sardonic bite, but this is a matter of personal response, really, the sort of thing that makes it interesting to hear more than a single version of such a work.

In the two even-numbered movements, again quite unhurried but less conspicuously so than the odd-numbered ones, Ozawa seems at times to be taking advantage of the hindsight afforded by knowledge of the Second Symphony. The tender middle section of the robust second movement is especially evocative, and in the vast finale there is a real sense of *Innigkeit*, which makes the huge climaxes as well as the introspective sections unusually convincing. In his intensity and expressiveness Ozawa at times approaches excess, but he is never in any real danger of crossing the line. His feeling for the music is profound, his handling of the score masterly, and if the Boston Symphony Orchestra plays this well week after week it must be the equal of any on earth. Ozawa's provocative version is not superior to either Kubelik's (DG 139 331) or Horenstein's (Nonesuch H-71240), but it belongs in the same exalted class, and sonically it really is all-surpassing. It also carries a literary bonus in the form of Michael Steinberg's superb annotation. R.F.

#### RECORDING OF SPECIAL MERIT

**MOZART: String Quartet No. 14, in G Major (K. 387); String Quartet No. 15, in D Minor (K. 421).** Melos Quartet of Stuttgart. DEUTSCHE GRAMMOPHON 2530 898 \$8.98, © 3300 898 \$8.98.

Performance: **Elegant**  
Recording: **Fine**

The Melos Quartet plays Mozart about as elegantly as one will ever hear it. Their respect for the score manifests itself in a clarity of dynamics and articulation that translates Mozart's lucid writing into lucid sound. As Mozart shifts from the serious to the light and toys with graceful turns of phrase and playful evasions, so the Melos Quartet changes its style and mood. This is particularly striking in the finale of the G Major Quartet, a tour de force that pits Classical joyousness against serious Baroque counterpoint. Not only is the obvious contrast brought out here, but there is even a subtle difference in the two fugue subjects: the first is played in a singing *capella* style and the second enters with aggressive gruffness. When the two meet, like characters in an operatic finale, each maintains its own personality and both win. S.L.

**ROSSINI: Overtures: Guillaume Tell; Le Siège de Corinthe; La Cenerentola; La Gazza Ladra; Semiramide; Il Viaggio a Reims.** Academy of St. Martin-in-the-Fields, Neville Marriner cond. PHILIPS 9500 349 \$8.98, © 7300 595 \$8.98.

Performance: **Crisp**  
Recording: **Emphatic**

**ROSSINI: Overtures: La Gazza Ladra; Il Signor Bruschino; L'Italiana in Algeri; Il Barbiere di Siviglia; La Scala di Seta; La Cenerentola.** English Chamber Orchestra, Enrique García (Continued on page 118)

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—Richard Freed, *Stereo Review*

Asensio cond. **LEGEND LGD 023** \$7.98 (from Qualiton Records, 65-37 Austin Street, Rego Park, N.Y. 11374).

Performance: **Amiable**  
Recording: **Bright**

**ROSSINI** (tr. Sedlak): *Il Barbiere di Siviglia* (excerpts). *Overtures: Corradino; Semiramide; L'Italiana in Algeri*. Netherlands Wind Ensemble. **PHILIPS 9500 395** \$8.98.

Performance: **Brilliant**  
Recording: **Excellent**

Both collections of overtures, it will be noted, are performed by chamber orchestras, and the Academy had to be beefed up quite a bit to handle *William Tell* and *Semiramide*. Evidently it was felt that, since drums had to be hired for the project, there should be no reluctance to make the most of them: the final timpani thwack in *La Gazza Ladra* is particularly realistic on the Marriner disc, as are the drums in *Semiramide*. Aside from these impressive little displays (the recording throughout is what might best be termed "emphatic," and occasionally in *Semiramide* there is a bit of blur), the performances are less striking than those in Marriner's earlier Rossini overture collection (Philips 6500 878), whose contents on the whole are more suited to the Academy's style.

García Asensio's Rossini collection was issued two or three years ago by the Musical Heritage Society and is still available from that source (MHS 3176K). I find it a bit more comfortable than the new Marriner; the readings, not at all short on brilliance and bite, are amiable, unselfconscious, and altogether ingratiating, and the sound (recorded by Ensayo) is bright and uncluttered.

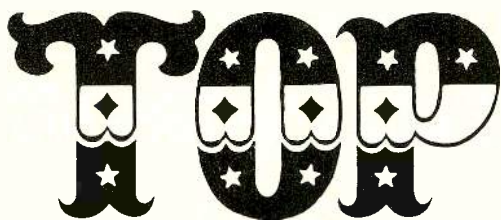
The Netherlands Wind Ensemble disc does not, of course, call for direct comparison with any other Rossini collection. A year or two ago Philips released a charming record, by the same group, of wind transcriptions of portions of Mozart's *Don Giovanni* and *Entführung aus dem Serail*, the former a concoction of Johann Georg Triebensee. Triebensee's pupil Wenzel Sedlak was one of the most prolific producers of these operatic transcriptions, so popular in the early part of the nineteenth century, and he was responsible for all the arrangements on this Rossini disc. *Corradino* is a real novelty in any form; "Corradino" is an alternative title for the opera otherwise known as *Mathilde de Shabran*, and probably the reason we never hear the overture in its original form is that it is just too silly and undistinguished to bother with. It is at least amusing in the transcription, and it is very brilliantly played, as is everything in the collection. The rumbling bassoons in the *Barber* overture are fine straight-faced humor; the six pieces after the overture are not presented in the order in which they appear in the opera, but that certainly doesn't matter. *Semiramide* is given a ripping performance, and the pizzicati and other string effects are most ingeniously replaced rather than imitated. The most fun for me, though, proved to be the deliriously burbling clarinets in *L'Italiana in Algeri*. I suspect this is really a record for true-blue wind aficionados that will not wear too well with most other listeners, but, for one or two times around, it's pretty close to enchanting. The sound is just about ideal in its wide-open naturalness.

R.F.

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(Continued on page 124)



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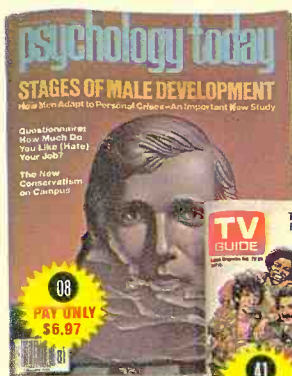
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**E**VEN after a generation in which to get used to it, I find that Olivier Messiaen's *Turangalila* Symphony can raise my hackles just as it did when I heard Leonard Bernstein conduct the world première with the Boston Symphony Orchestra in 1949 (the work was commissioned by the Serge Koussevitsky Foundation). I still have problems deciding what is genius and what is merely overblown Cecil B. DeMille kitsch in this ten-movement, eighty-

the movements bear programmatic titles relating to the theme of sacred and profane love that underlies the composer's conception of the work as a whole (the title is Hindi and means "Love Song," and the symphony is the central piece in a triptych evoking the Tristan legend). I will venture no further description or comment on the music, except to note that an enormous amount of what became fashionable among avant-garde com-



Producer Christopher Bishop with conductor André Previn

## Messiaen's "Turangalîla"

minute extravaganza—which, besides a full-strength symphony orchestra, calls for an array of gamelan-style percussion and incorporates both a virtuoso solo-piano part and a key role for the Ondes Martinot (a radiophonic instrument comparable to the Theremin). But, given today's technology, *Turangalila* is a record-producer/engineer's dream, and the two Christophers—Bishop and Parker—who, respectively, filled those roles for Angel/EMI's new recording of it have made the most of their opportunity. The sonic grandeur and variety that emerge, even with Angel's less-than-flawless pressings, are simply overwhelming, especially in terms of the "surround" and separation afforded by four-channel playback. Audiophiles should be delighted with the beginning of side four—or, for that matter, the second halves of both side two and side three—for it offers pretty much the ultimate in frequency range, complex tones, and transients.

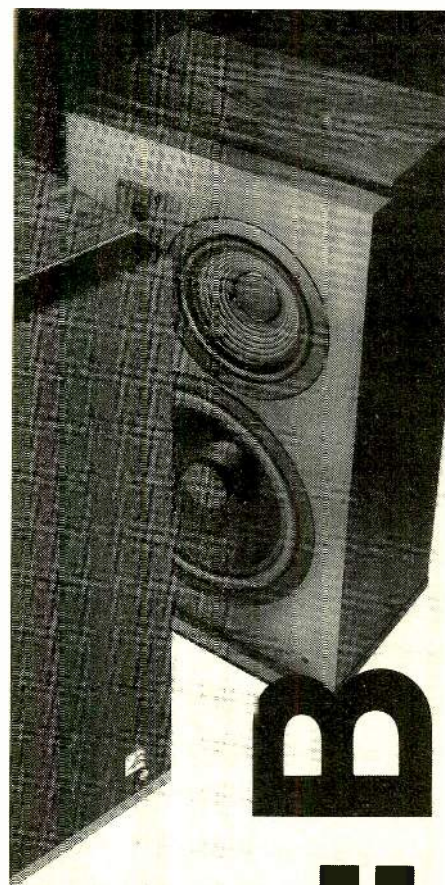
Musically, *Turangalila* is a monumental mixture of Hindu, bird song, and post- (very post-) Wagnerian French elements. The gestural rhythmic aspects seem to me to stem less from Stravinsky than from Messiaen's study of the classical music of India. Structurally, the work hinges on three contrasting cyclic themes, two of which are clearly manifest in the introduction, with the third reaching full development in the sixth movement. All

posers of all persuasions during the Fifties and Sixties—as well as what had been experimented with in the Twenties—is to be found in *Turangalila*. On that basis alone it ranks as a twentieth-century score of major significance. Whether its sheer prodigality can stand up to repeated hearings is, perhaps, a matter of personal reaction thresholds.

**I**n terms of sonic realization, this third recording of *Turangalila* is light years ahead of the first one (done in a dead-sounding studio and issued on the French Vega label), and it is a definite advance even over the generally excellent recording Seiji Ozawa made in Tokyo a decade ago (still available on RCA). In all three recordings the composer's sister-in-law, Jeanne Loriod, presides over the Ondes Martinot, giving assurance of fidelity to the immensely complicated score. But the greatest part of the credit for the spectacular results this time belongs to conductor André Previn and the magnificent London Symphony Orchestra players. I have no hesitation in saying that this release is one of their finest collaborations to date.

—David Hall

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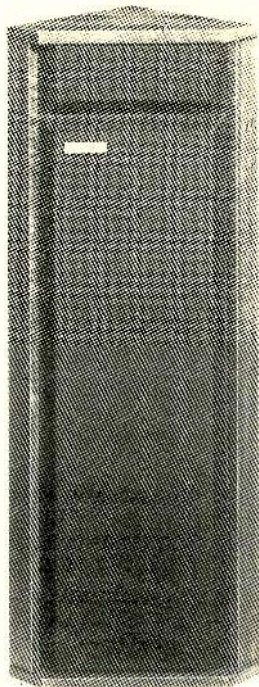
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**SCHUBERT:** *Der Pilgrim* (D. 794); *Frühlingsglaube* (D. 686b); *Der Liebliche Stern* (D. 861); *An Mein Herz* (D. 860); *Der Blumenbrief* (D. 622); *An den Mond in einer Herbstnacht* (D. 614); *Auflösung* (D. 807); *Abendstern* (D. 806); *Die Einsamkeit* (D. 620). Robert Holl (bass); Konrad Richter (piano). PREISER SPR 3288 \$7.98 (from the German News Co., 218 East 86th Street, New York, N.Y. 10028).

Performance: **Good**  
Recording: **Very good**

At first glance, this is hardly a release to invite much attention. The singer is unknown, and the liner, in German only, says nothing about him. Some of the songs are unknown, too, even if they *are* by Schubert, and there are no texts, not even in German. And yet, the album is worth investigating. At least three of the songs (*Frühlingsglaube*, *Der Blumenbrief*, and *Auflösung*) are top-drawer Schubert. The others are a mixed lot ranging from the beautiful *Abendstern* to the cantata-like *Die Einsamkeit*, which is virtually endless and for all practical purposes unperformable.

Robert Holl is obviously a cultivated and experienced singer. His voice is a warm and resonant bass-baritone, expressive and sensitively used. It is somewhat limited at both extremes, but most of the songs lie within the range his agreeable tones easily encompass, and his intonation falters only in sustained *forte* passages. Both the accompaniments and the engineering are excellent. This is a disc for specialists only, but it is a thoroughly professional effort. G.J.

**SCHUBERT:** *String Quintet in C Major, Op. 163* (see Best of the Month, page 100)

**SCHUMANN:** *Symphonies: No. 1, in B-flat Major, Op. 38 ("Spring"); No. 2, in C Major, Op. 61; No. 3, in E-flat Major, Op. 97 ("Rhenish"); No. 4, in D Minor, Op. 120. Manfred Overture, Op. 116; Konzertstück in F Major for Four Horns and Orchestra, Op. 86.* Chicago Symphony Orchestra, Daniel Barenboim cond. DEUTSCHE GRAMMOPHON 2709 075 three discs \$23.94, © 3371 035 \$23.94.

Performance: **Variable**  
Recording: **Excellent**

We have learned to expect both wonderful and exasperating things of Daniel Barenboim as a conductor. Let's take the wonderful ones here first. The *Manfred Overture* performance is one of the most fiercely passionate and convincing I have ever heard. The same expressive intensity permeates the reading of the C Major Symphony. The tempos are sensible throughout—though I would have liked slightly more momentum in the introduction—and the slow movement is simply marvelous. The *Rhenish* Symphony is only slightly less convincing. There is a fine impetuosity to the opening movement, and the free treatment of the scherzo, while remaining within appropriate musical bounds, really works to keep up one's interest. The slow movement is a mite too slow for my taste, and the so-called "Cathedral Scene" that immediately precedes the finale is very solemn and intense. The finale begins rather tamely, but it works its way up to a splendid conclusion.

It is in the *Spring* and D Minor Symphonies that exasperating things come into the picture, chiefly overly extreme tempo shifts and contrasts. The opening of Barenboim's *Spring* seems to my ear more appropriate to Mahler

than to Schumann. Leonard Bernstein, who can be equally exasperating in Schumann, offers a superbly exuberant reading of it that I recommend as an alternative, and there are also good alternative versions of No. 4, most notably George Szell's.

The Chicago Symphony plays with great sweep and brilliance throughout the set, and it is only logical that Barenboim should have picked the *Konzertstück* for Four Horns as a filler for side two. The piece is not major Schumann, but the great Chicago horn section gets a superb workout, and the whole thing comes off brilliantly as a display of pure virtuosity. The recorded sound is first-rate all the way. D.H.

## RECORDING OF SPECIAL MERIT

**SHAPEY:** *String Quartet VII.* Quartet of the Contemporary Chamber Players of the University of Chicago. COMPOSERS RECORDINGS, INC. SD 391 \$7.95.

Performance: **Most impressive**  
Recording: **Good sound**

Ralph Shapey, born in Philadelphia in 1921, belongs to what I have called the abstract-expressionist generation of American music. Shapey's work is the musical equivalent of the New York school of painting in the Fifties and early Sixties, and Shapey himself was close to many art-world figures during his years in New York. Since 1964, he has been the director of the Contemporary Chamber Players of the University of Chicago, where he has devoted himself to conducting. In fact, for a number of years he virtually stopped composing and actually withdrew his works from circulation. Recently, however, he has relented and permitted some of his work to be performed and recorded (I hope he has taken up composition again).

The Quartet VII was written in 1971-1972—just at the beginning of the famous silence. It is a work of intense and tremendous lyricism, expressed—as always in Shapey's music—in a very dissonant, block-like form. This is a bleak, heart-rending musical landscape—especially in the long and difficult final *Pas-sacaglia*—but the beauty, although stark, is very real. The performance here is excellent, not just in detail, but in sustaining the bigger line of the piece—no easy task! E.S.

**SIBELIUS:** *Symphony No. 4, in A Minor, Op. 63; Tapiola, Op. 112.* Berlin Philharmonic Orchestra, Herbert von Karajan cond. ANGEL □ S-37462 \$7.98.

Performance: **Powerful symphony**  
Recording: **Symphony fares better**

**SIBELIUS:** *Symphony No. 5, in E-flat Major, Op. 82; En Saga, Op. 9.* Berlin Philharmonic Orchestra, Herbert von Karajan cond. ANGEL □ S-37490 \$7.98.

Performance: **Provocative symphony**  
Recording: **Symphony better**

In this new recording of Sibelius' redoubtable Fourth Symphony, Herbert von Karajan's tempos are decidedly broader than in his Deutsche Grammophon reading of a dozen years ago. This works in the opening movement, whose brass-timpani eruptions achieve a more than usually ferocious impact, but not so well in the scherzo and finale, which I feel could do with more of a sense of urgency. It is  
(Continued on page 126)





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in the slow movement, which he takes at the same very slow tempo as Colin Davis in his recording with the Boston Symphony, that Karajan and his Berliners are at their very best, leaving me almost convinced—as I was not with Davis—that this treatment can work. By and large, however, I still prefer Davis and the Bostonians.

The new Karajan reading of the Fifth Symphony is only marginally broader in pacing than the 1965 one. The real interest in this performance is in Karajan's ideas about the first movement: from the outset of the allegro proper he treats the music as a gradual but continuous *accelerando* right up to the exuberant close. Among the more provocative details in the same movement is the promi-

nence given to the famous solo bassoon "lament" as against the supporting string figuration, which here becomes a barely audible wisp (the noisy Angel surfaces were no help at this point). Karajan gives us a finely nuanced slow movement and a finale with plenty of dynamic contrast. I'm not sure, however, that I care to have the final chords spaced quite so closely (this happens in the 1965 recording too). Again, on direct comparison, I'll go with Davis.

The *Tapiola* and *En Saga* performances here were recorded earlier than the symphonies and previously issued as part of Angel S-37408, which also included *Finlandia* and *The Swan of Tuonela*. The microphone setup seems closer up than for the symphonies, and

the recordings profit little from four-channel playback. (There is a certain gain in spatial illusion from four-channel playback of the symphonies.) *Tapiola* gets a good performance, with especially fine playing in the delicate scherzando episode, but, on the whole, Davis is again the winner in my book. I found *En Saga* a trifle perfunctory in spots and the sound absolutely no match for that achieved in the Paavo Berglund recording on Angel S-37104. (The all-important bass-drum coloration is virtually inaudible in Karajan's performance, but spectacularly magical in Berglund's.) Both Berglund's and Okko Kamu's (DG 2530 426) readings have a good bit more of the witchery implied in the music. D.H.

#### RECORDING OF SPECIAL MERIT

SMETANA: *String Quartet No. 1, in E Minor ("From My Life")*. DVORÁK: *String Quartet No. 12, in F Major, Op. 96 ("American")*. Amadeus Quartet. DEUTSCHE GRAMMOPHON 2530 994 \$8.98.

Performance: **Supercharged**  
Recording: **Very good**

The Amadeus Quartet brings extraordinary power and vitality to these two popular masterpieces of the Czech chamber-music repertoire. The Smetana quartet bursts forth with passion and frenzy in the first two movements, then assumes a truly heartbreaking poignance in the slow movement and in the pages of the finale following the sounding of the chilling high E signaling the onset of the composer's deafness.

Many performers favor an idyllic approach to the Dvořák *American* Quartet, but first violinist Norbert Brainin and his colleagues take a sinewy and virile view of the music, with the slow movement being the high point of their reading. I found the body and warm room tone of the recorded sound exactly suitable to the music and this style of performance. For those whose tastes run to more refined interpretations of these works, the Guarneri version of the Smetana (RCA) and the Quartetto Italiano of the Dvořák (Philips) are excellent alternatives. D.H.

#### RECORDING OF SPECIAL MERIT

R. STRAUSS: *Salome: Final Scene; Dance of the Seven Veils. Five Songs for Voice and Orchestra*. Montserrat Caballé (soprano); Orchestre National de France, Leonard Bernstein cond. DEUTSCHE GRAMMOPHON 2530 963 \$8.98, © 3300 963 \$8.98.

Performance: **Very good**  
Recording: **Very good**

Richard Strauss' *Salome* is a sixteen-year-old adolescent whose music calls for the voice of an Isolde. Through the years, we have associated that music with such singers as Destinn, Fremstad, Lawrence, Welitsch, Nilsson, and Rysanek. But that is not the only kind of vocal interpretation possible for *Salome*; Mary Garden in Chicago and Maria Cebotari in pre-war Germany gave memorable proof of the validity of other approaches. As a matter of fact, Strauss, ever a practical composer, once tried to persuade Elisabeth Schumann to undertake the role by promising to lighten the orchestral texture to accommodate her limpid and silvery tones.

Monserrat Caballé's assumption of this role  
(Continued on page 128)

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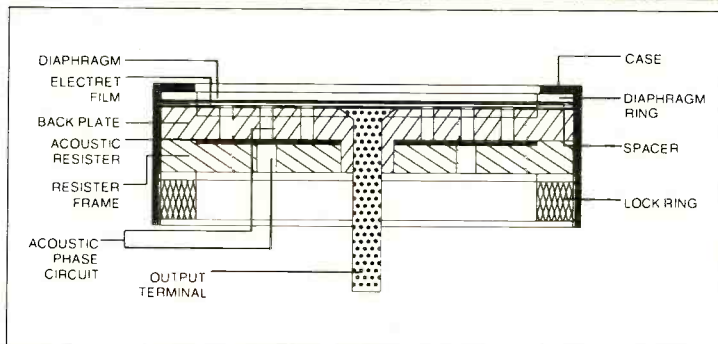
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# SONY AUDIO

is, therefore, certainly not without historical precedent. She has had the role in her repertoire for many years and has already recorded the opera under Leinsdorf (RCA LSC-7053). On this occasion with Bernstein her top notes ring out less freely, and, of course, she does not ride over the orchestral climaxes with the triumphant ease of a Nilsson, even though Bernstein provides a thoughtfully scaled orchestral background. On the other hand, there are qualities of warmth, youthful sound, and intimacy in Caballé's interpretation that are entirely appropriate, and the line "... und wenn ich ansah, hörte ich geheimnisvolle Musik" is spun out with a breathtaking pianissimo.

The five songs, performed in Strauss' own orchestration, comprise a varied sequence. *Wiegenlied* and *Morgen* are near magic in their combination of creamy vocal tone and bewitching orchestration, and *Zueignung* would be very effective if paced less hurriedly, but in *Cäcilie* the vocal line is engulfed by the orchestra, and *Ich Liebe Dich*—a man's song with an almost Wagnerian heroic declamation—should have been bypassed in favor of more suitable alternatives. Salome's Dance, performed by Bernstein in a broadly lyrical fashion that savors the music's erotic exoticism, rounds out a fascinating, very well recorded album. G.J.

**STRAVINSKY: *Le Sacre du Printemps*.** Berlin Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON 2530 884 \$8.98, © 3300 884 \$8.98.

Performance: **Polished**  
Recording: **Good**

What, another *Sacre*? Who needs it? Even from the redoubtable Herbert von Karajan, who here essays the Stravinsky masterpiece for the second time. The Karajan/Berlin Philharmonic virtues of superb attention to inner

details of line and color are clearly evident throughout, and there is topnotch Deutsche Grammophon recording to match it. A certain lack of urgency is evident in the first half of Part One, but by the time the final *Danse Sacrale* is ushered in, Karajan and his players are thoroughly "with it." Taken as a whole, however, I find no particular reason to add this *Sacre* to those I already have by Solti (London), Abbado (DG), and the composer himself. With twenty-three currently available stereo recordings, I think it's time to call a halt to this conductorial "rite." D.H.

#### RECORDING OF SPECIAL MERIT

**WAGNER: *The Flying Dutchman: Overture. Tannhäuser: Overture. Die Meistersinger: Prelude. Tristan und Isolde: Prelude and Liebestod.*** Chicago Symphony Orchestra, Sir Georg Solti cond. LONDON CS 7078 \$7.98.

Performance: **Thrilling**  
Recording: **Excellent**

The overtures and preludes to Wagner's music dramas are like little music dramas all by themselves, and inspired performances of them can lift the dead hand of familiarity and excite us as though we had never heard them before. At one time it was Toscanini, with his crisp, incisive, almost impatient attack, who could blow the dust from these scores. Today, I can think of nobody better than Sir Georg Solti at bringing them to life with a fine balance of fervor and nobility of proportion. Yet his approach is much more leisurely than Toscanini's; the sense of bigness is achieved not so much through the lightning flash of a sudden crescendo as in the course of a slow, inevitable buildup to a grand climax of luxuriant sound. And when it is the Chicago Symphony that is realizing Solti's Wagnerian concepts, the results can be pretty thrilling. Certainly they are thrilling on this record-

ing, whose familiar contents have been traversed by a long procession of other conductors. Here, however, every note is exactly where it ought to be. The Dutchman wanders over the stormiest of seas while wind whistles in what sounds like real rigging; the grace of his redemption is so poignant that one is almost ready to settle down and hear the rest of the opera right then and there. In the *Tannhäuser* overture, sensuousity is contrasted with spirituality in a way that compellingly sets the stage for the opera to follow. Again, in the prelude to *Die Meistersinger*, nothing is hurried, nothing forced, yet the progression of themes foreshadowing the action—Walther's wooing of Eva, the Prize Song, the Trial Song, the spring motif—unfolds in an utterly gripping way. Only in the *Tristan und Isolde* Prelude and *Liebestod* did I begin to long for something more akin to real passion and less of the mere gloss of brilliant orchestral playing. Yet before it, too, was over, I was swept along by the logic of Solti's strong approach, and finally overwhelmed. London's recorded sound is unexaggerated but typically full and spacious. P.K.

#### COLLECTIONS

#### RECORDING OF SPECIAL MERIT

**FROM SOLO TO QUARTET. Schumann: *Spanisches Liederspiel, Op. 74; Der Contrabandiste. Brahms: Four Duets, Op. 28. Schubert: Der Hochzeitsbraten, Op. 104; An die Musik.*** Märta Schéle (soprano); Edith Thallaug (mezzo-soprano); Gösta Winbergh (tenor); Erlend Hagegård (baritone); Lucia Negro (piano). Bis LP-77 \$8.98 (from Quality Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

Performance: **Excellent**  
Recording: **Excellent**

As its title implies, this imaginatively arranged program combines solo songs and vocal duets, trios, and quartets with piano accompaniment. Schumann's *Spanisches Liederspiel*, a cycle of nine songs that must have been the model for Brahms' *Liebesslieder* Waltzes, includes all these variants. These enterprising settings of Geibel's song adaptations may not be great Schumann, but they are engagingly colorful and make effective use of the Spanish bolero rhythm. The Brahms duets, for mezzo and baritone, are in the composer's characteristic folkloric style and are quite lovely (there is another recording of them, with Janet Baker and Dietrich Fischer-Dieskau, on Angel S-36712). Schubert's *Der Hochzeitsbraten* is a comic scene for three voices involving a pair of young lovers who decide to have rabbit for their wedding feast; they proceed to steal it but are foiled in the attempt by a resolute hunter. It was composed by Schubert for his intimate circle of friends in a jolly style that, at times, seems to anticipate the spirit of Johann Strauss' operettas.

With the exception of *An die Musik* (beautifully sung by Edith Thallaug), all the selections are generally unfamiliar but welcome. All four singers are good, and they perform in an outgoing, unpretentious manner, with clear diction and an obvious sense of involvement. Lucia Negro is an excellent accompanist, and the recorded sound and tasteful album presentation are in keeping with this Swedish label's fine reputation. G.J.



"Oh, yes, we loved it! How many times was it, Vernon, that you applauded during the Bruckner?"

**SUSANNA MILDONIAN:** *Three Centuries of Harp Music*. Posse: *Etude No. 3 for Harp*. Hasselmans: *La Source, Op. 44*. Halffter: *Danza de la Pastora*. Bartók: *Six Roumanian Folk Dances*. Prokofiev: *Prelude in C Major, Op. 12, No. 7*. M. Albéniz: *Sonata No. 13, in D Major*. D. Scarlatti: *Sonata in B-flat Major*. Daquin: *Le Coucou*. Soler: *Sonata in D Major*. Granados: *Spanish Dance, Op. 37, No. 2 ("Oriental")*. Susanna Mildonian (harp). PETERS INTERNATIONAL PLE 029 \$6.98, © PCE 029 \$6.98.

Performance: **Expert**  
Recording: **Sumptuous**

Everything on this record is beautifully played, and the performances are set off to their best advantage in sumptuous sound on impeccable surfaces. But the program is aimed at harp fanciers rather than general listeners who might be interested in music written for the harp, for all but two of the items here are transcriptions from keyboard or orchestral works which are readily available in their original form. I would have liked to be told something about the two pieces that were composed for the harp; the notes contain a few sentences on Alphonse Hasselmans (1845-1912), but there is not a word on Wilhelm Posse (1852-1926), who is indeed hard to track down. The documentation in general might have been more helpful: the notes say that Beethoven's contemporary Mateo Albéniz composed only one sonata, but the work is listed in the heading and on the label as "No. 13"; Granados' Spanish Dance No. 2 is given as No. 11, etc., etc. But none of the documentary lapses affect the performances or the pleasure they offer, of course, and that, in its own right, is considerable. R.F.

**THE TARANTULA.** Couperin: *Les Baricades Mystérieuses*. Paniagua: *D'Après une Basse Ostinée de Dietrich Buxtehude; Taranto de Almería*. Monteverdi: *Laetatus Sum (Psalm 121)*. Sanz: *La Tarantela*. Praetorius: *Ballets des Sorciers Qu'il Faut Sonner Devant le Ballet du Roy*. De Murcia: *Tarantelas*. De Huete: *La Tarantela*. Recuero: *Tarantela I*. Anon.: *Antidotum Tarantulae; Choreia; Scottish Gigg; Country Dance ("Running Footman")*; *Nana Andaluza*; and seventeen tarantellas. Atrium Musicae de Madrid, Gregorio Paniagua cond. HNH 4050 \$7.98.

Performance: **Spirited**  
Recording: **Shrill**

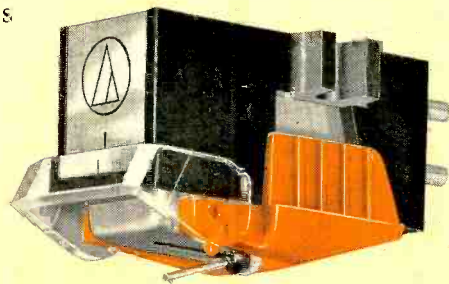
The music here ranges from medieval and Renaissance dances and folk songs to a harp-sichord masterpiece by Couperin and a couple of pieces by conductor Gregorio Paniagua, whose notes for the album comprise a veritable essay on the tarantula spider and the symptoms and cure (compulsive dancing and therapeutic music, respectively) of the illness its bite was once thought to cause. The seven members of the Atrium Musicae are armed with the usual ancient instruments we have come to know in the last few years, as well as a bizarre battery of such more exotic items as the ocarina, Panpipes, jew's-harp (of both metal and bamboo), water glasses, hammer and anvil, assorted whistles, and all manner of things to be struck. Unfortunately, most of the music is basically dull, and the performances are more spirited than polished. Nonetheless, Paniagua does get his vision of the tarantella across with some moments of wild beauty that are truly intriguing. S.L.

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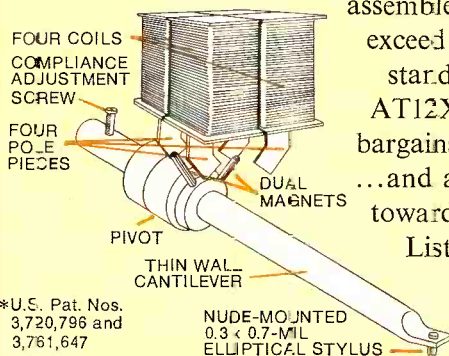
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# POPULAR DISCS AND TAPES

Reviewed by CHRIS ALBERTSON • NOEL COPPAGE • PHYL GARLAND • PAUL KRESH  
PETER REILLY • STEVE SIMELS • JOEL VANCE

**ASLEEP AT THE WHEEL:** *Collision Course*. Asleep at the Wheel (vocals and instrumentals). *Pipe Dreams*; *Song of the Wanderer*; *Pine Grove Blues*; *One O'Clock Jump*; *Louisiana*; *Don't Forget*; and four others. CAPITOL SW-11726 \$7.98, Ⓞ 8XW-11726 \$7.98, Ⓞ 4XW-11726 \$7.98.

Performance: **Routine**  
Recording: **Very good**

Well, this isn't as dull as country swing can be, but then Asleep at the Wheel no longer plays country swing all that much. There's still a steel guitar around, but nowadays the sound is just plain swing and other stuff for which there are no labels. The trouble with this one is not what style it is, but how little excitement there is about it, as if everyone involved cared enough to do a competent professional job of it but not enough to go beyond that. A particular disappointment, given the band's talent, is the flat, disinterested reading of Randy Newman's *Louisiana*. An exception with some juice in it is the version of Neil Moret's *Song of the Wanderer*. "Collision Course" is a competent album, but listening to it is a noncontact sport. N.C.

**BAD BOY:** *Back to Back*. Bad Boy (vocals and instrumentals); instrumental accompaniment. *It's All Right*; *Always Come Back*; *Accidental*; *Girls, Girls, Girls*; *Keep It Up*; and

four others. UNITED ARTISTS UA-LA869-H \$7.98, Ⓞ UA-EA869-H \$7.98, Ⓞ UA-CA869-H \$7.98.

Performance: **Mediocre**  
Recording: **Average**

It is getting more and more common for rock groups to release albums in which many of the songs deal with the travails of life on the road, the emotional burdens of stardom, and appeals to the value of rock-and-roll itself as a justification for their own mediocrity. More than any other musical form, rock depends on individual brilliance and personality in its creators, and Bad Boy simply doesn't have what it takes to make good rock. Constantly singing *about* rock-and-roll, as Bad Boy does here, doesn't make a good rock group out of a characterless Saturday night bowling-alley bar act. J.V.

## RECORDING OF SPECIAL MERIT

**CARLENE CARTER.** Carlene Carter (vocals, guitar); the Rumour (instrumentals). *Love Is Gone*; *Smoke Dreams*; *Between You and Me*; *I Once Knew Love: I've Been There Before*; *Never Together but Close Sometimes*; and four others. WARNER BROS. BSK 3204 \$7.98, Ⓞ M8 3204 \$7.98, Ⓞ M5 3204 \$7.98.

Performance: **Excellent**  
Recording: **Very good**

With thousands of people making a living singing, you'd think we'd no longer get excited about a new one who isn't gravel-voiced like Bonnie Tyler or wobble-throated like Kaye Starr or otherwise outlandish stylistically—whose thing is singing in perfect tune, knowing exactly where the beat is, toying with subtleties in phrasing a line, stuff like that. Of course, a lot of singers make a living in spite of being slightly (or worse) out of tune and off the beat a percentage of the time, the old by-dint-of-personality factor coming into play. A lot of people are going to get excited about Carlene Carter, a rock singer (so far) who happens to be the granddaughter of a legendary country singer, Maybelle Carter. All

that feel for pitch and timing and so forth is very likely inherited, and the by-dint-of-personality factor, from what I can tell from a first album, promises to develop nicely too.

In this one Carlene's backed by Graham Parker's band, the Rumour, which does what it does well but may not have the ideal sound for her. It seems to me she could use something a little warmer-blooded: electric guitars but played more lyrically, fewer of the holes crammed with instrumental fills, and that sort of thing. The simple bass-and-piano backing on the very last song, her own lovely *Who Needs Words*, gets at what I'm getting at. Another of her songs, *I Once Knew Love*, is another highlight of the album, as is her reading, in front of a somewhat simplified arrangement, of Alex Call's *Mr. Moon*. But there isn't a weak song here, nor one in which she fails to do something vocally that makes me say "Yeah!" under my breath. We may have to add one more name to the list of real people. N.C.

**DAVID ALLAN COE:** *Family Album*. David Allan Coe (vocals); instrumental accompaniment. *Family Album*; *Million Dollar Memories*; *Divers Do It Deeper*; *Guilty Footsteps*; *Take This Job and Shove It*; and five others. COLUMBIA KC 35306 \$5.98, Ⓞ CA 35306 \$6.98, Ⓞ CT 35306 \$6.98.

Performance: **Twangy hokum**  
Recording: **Very good**

Like the Osmonds, David Allan Coe, who bills himself as the "High Priest of Country Music," comes from a Mormon family in Salt Lake City, and if I were to tell you everything else I know about him from reading his liner notes (complete with letters home) and listening to his songs, we would be here all week. Among his songs, which range from confessionals to maudlin hymns, is the bluntly titled *Take This Job and Shove It*, made popular by Johnny Paycheck. Coe was once billed as the "mysterious rhinestone cowboy," but those days are over: "Those rhinestones turned to diamonds/And those diamonds soon got old/I had everything that you could buy/To have

### Explanation of symbols:

- Ⓜ = reel-to-reel stereo tape
- Ⓢ = eight-track stereo cartridge
- Ⓞ = stereo cassette
- Ⓞ = quadraphonic disc
- Ⓜ = reel-to-reel quadraphonic tape
- Ⓢ = eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol Ⓜ

The first listing is the one reviewed; other formats, if available, follow it.

but not to hold/But all that glitters is not gold. . . ." Well, if you're a confirmed Coe fan, don't let my inability to stomach the sound of his twangy voice or the mushy sentimentality of his interminable, all too intimate autobiographical ditties stand in your way.

P.K.

**THE COMMODORES:** *Natural High*. The Commodores (vocals and instrumentals). *Fire Girl*; *X-Rated Movie*; *Three Times a Lady*; *Such a Woman*; and four others. MOTOWN M7-902R1 \$7.98, Ⓣ M7-902-HT \$7.98, Ⓣ M7-902-HC \$7.98.

Performance: **Predictable**  
Recording: **Very good**

Now that the Spinners have melted away into mediocrity, the Commodores have swiftly taken over as the nation's top r-&-b vocal group. Of course, the Spinners followed in the footsteps of the Temptations, who had taken over from the Four Tops . . . and so on, as far back as you might care to trace things. These new kingpins wear their mantle comfortably. Still, I find it difficult to become terribly excited about them. They have followed so many good acts that their material is, at best, rather predictable, though they perform with as much professional spit and polish as any of their predecessors.

Their new album does nothing to alter that opinion. It has a certain spirited appeal, and the tasteful program includes variously paced selections, from up-tempo dance fare to the gentle, folk-flavored *Three Times a Lady*. The group sings flawlessly against instrumental backgrounds that are several notches above the average, lending a special sass and drive to the whole and particularly to *X-Rated Movie*. In short, everything about this album is good, but it just isn't outstanding.

P.G.

**MAC DAVIS:** *Fantasy*. Mac Davis (vocals, guitar); orchestra. *Music in My Life*; *Fantasy*; *You Are*; *Sad Girl*; *For No Reason At All*; and five others. COLUMBIA JC 35284 \$7.98, Ⓣ JCA 35284 \$7.98. Ⓣ JCT 35284 \$7.98.

Performance: **Sell-sell-sell**  
Recording: **Good**

Mac Davis has written a fairly good song, *Music in My Life*, and he performs it well enough. But there are nine other tracks to be gotten through here, and I'm not at all sure it's worth the effort. Davis' grumpy, flashy vocal style—his whole performing aura, in fact—is one of sell-sell-sell. This insistent hype works just fine on TV, where he seems like an amiable commercial for something or other. On recordings, however, it's as oppressive as an Avon Lady still droning through her spiel as dinnertime approaches.

P.R.

**DION:** *Return of the Wanderer*. Dion DiMucci (vocals, guitar); instrumental accompaniment. *Heart of Saturday Night*; *Midtown American Main Street Gang*; *You've Awakened Something in Me*; *Guitar Queen*; and five others. LIFESONG JZ 35356 \$7.98, Ⓣ JZA 35356 \$7.98, Ⓣ JZT 35356 \$7.98.

Performance: **Almost relevant**  
Recording: **Good**

Dion DiMucci was one of those innocent rebels the late Fifties used to turn out, and even in his jagged-edge Dion-and-the-Belmonts phase he never fooled many of us into believing he was a real hood. "I feared the friends I

ran with," he says here in *Midtown American Main Street Gang*, "but I loved to live the role." That jibes with my impression at the time. Now there's a punk consciousness around that's vaguely reminiscent of that time, and Dion is back after an absence of several years with a sort of nice/hard-sounding band with a cute name, the Streethearts. Still innocent. In between the hiatus and the Belmonts, you may recall, he was around for a while with some John Sebastian-type soft-rock/folkie albums. He did better songwriting in that period, in my judgment, than he's done for this, and the Streethearts, as captured here, sound a little dry (that could be the doing of producers Terry Cashman and Tommy West, who, in their own performing days, made *themselves* sound a little dry). But there are three or four nice songs here and some of

the best singing Dion's done yet. He still has that pleasant nasality, and now it's augmented with the true veteran's savvy about how to use dynamics and teensy little ornamentation. If you comb your DA straight down over your ears, a lot of it sounds pretty good.

N.C.

**THE DRAMATICS:** *Do What You Wanna Do*. The Dramatics (vocals); instrumental accompaniment. *Why Do You Want to Do Me Wrong*; *Do What You Want to Do*; *Disco Dance Contest*; *Stop Your Weeping*; and four others. ABC AA-1072 \$7.98, Ⓣ 8020-1072(H) \$7.95, Ⓣ 5020-1072(H) \$7.95.

Performance: **Gratifying**  
Recording: **Good**

It seems like the Dramatics have been around forever. Fortunately, they don't sound like it.



HOLLY



BUSEY

## The Buddy Holly Story

I HAVEN'T seen *The Buddy Holly Story* yet, but advance word indicates that actor Gary Busey captures Holly's character magnificently and the film itself plays fast and loose with the facts in an utterly surreal manner—in other words, a standard Hollywood star-bio pic in the grand tradition of *American Hot Wax* and *I'll Cry Tomorrow*. I'm sure it's a lot of fun, but the soundtrack album now before me is pretty tepid stuff. Busey and his colleagues occasionally manage to sound like a real Fifties rock trio, if not like Holly and the Crickets, but a lot of the stuff is far too modernized (the drummer is obviously a Seventies session cat) and the studio efforts, particularly *Everyday*, don't even make it as cover versions. I applaud the decision to cast actual musicians in the film (at least they know what to do with their hands), but this kind of period re-creation is difficult even for such genre specialists as Dave Edmunds.

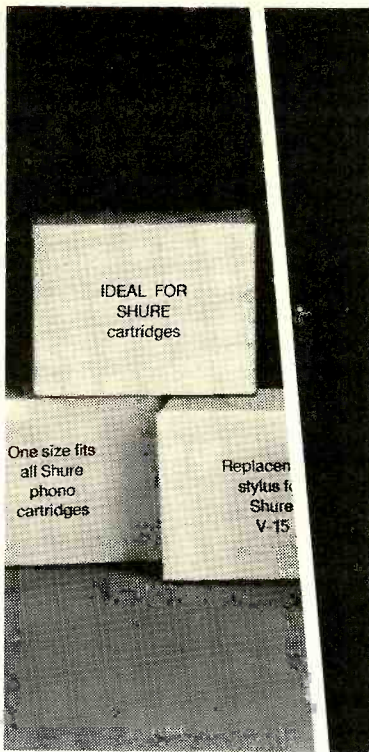
Fortunately, MCA has seen fit to release yet another of its compilations of the "real" Buddy Holly at the same time, and they've done quite a good job of it. Everything that should be in real mono (and notice how imaginatively produced these songs are, which

is almost miraculous considering the conditions under which they were done). We get twenty—count 'em—twenty songs on one little album, and almost all of them are flat-out great. It's nice to be able to hear the originals again for the marvelous, vital, visionary things they are.

—Steve Simels

**THE BUDDY HOLLY STORY.** Original-soundtrack recording. Gary Busey (vocals and guitar); Charles Martin Smith (bass); Don Stroud (drums); other musicians. EPIC SE 35412 \$7.98, Ⓣ SEA 35412 \$7.98, Ⓣ SET 35412 \$7.98.

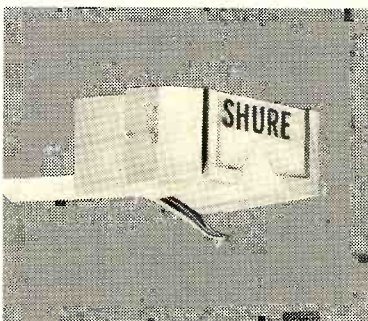
**BUDDY HOLLY/THE CRICKETS:** *Twenty Golden Greats*. Buddy Holly and the Crickets (vocals and instrumentals); other musicians. *That'll Be the Day*; *Peggy Sue*; *Words of Love*; *Everyday*; *Not Fade Away*; *Oh Boy*; *Maybe Baby*; *Listen to Me*; *Heartbeat*; *Think It Over*; *It Doesn't Matter Anymore*; *It's So Easy*; *Well Alright*; *Rave On*; *Raining in My Heart*; *True Love Ways*; *Peggy Sue Got Married*; *Bo Diddley*; *Brown Eyed Handsome Man*; *Wishing*. MCA MCA-3040 \$7.98, Ⓣ MCAT-3040 \$7.98, Ⓣ MCAC-3040 \$7.98.



## Needle in the hi-fi haystack

Even we were astounded at how difficult it is to find an adequate other-brand replacement stylus for a Shure cartridge. We recently purchased 241 random styli that were not manufactured by Shure, but were being sold as replacements for our cartridges. Only ONE of these 241 styli could pass the same basic production line performance tests that ALL genuine Shure styli must pass. But don't simply accept what we say here. Send for the documented test results we've compiled for you in data booklet # AL548. Insist on a genuine Shure stylus so that your cartridge will retain its original performance capability—and at the same time protect your records.

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Somehow, they have managed to retain a deep involvement in their music, giving each song here everything it's worth—and even more than some of the material deserves. There is no reliance on slick, tested formulas, but rather a funky honesty that shines through as long solo lines are skillfully balanced against fine ensemble singing without any of it sounding contrived. The music, lyrics, and delivery of *Why Do You Want to Do Me Wrong* are full of the zest of old-time r-&-b goodies, and the record is worth getting if only for the soul-satisfying version of the title track. *Do What You Want to Do.* P.G.

**CRYSTAL GAYLE:** *When I Dream* (see page 90)

### RECORDING OF SPECIAL MERIT

**LARRY GRAHAM AND GRAHAM CENTRAL STATION:** *My Radio Sure Sounds Good to Me.* Graham Central Station (vocals and instrumentals). *Pow; Boogie Witcha Baby; It's the Engine in Me; Turn It Out;* and four others. WARNER BROS. BSK 3175 \$7.98. © M8 3175 \$7.97, © M5 3175 \$7.97.

Performance: **Rambunctious**  
Recording: **Fine**

Ever since Larry Graham separated himself from Sly and the Family Stone, for which he had been the bass player and musical collaborator during the group's peak period, he has been filling the air with rambunctious sounds that are more than vaguely reminiscent of his former association. He has served as a bridge linking the playful, high-energy styles of the late Sixties with the almost woefully bland soul settings of the Seventies. Like Sly, he has incorporated a raw-edged rock flavor into his music, though his rhythmic line is pure get-down, gut-bucket r-&-b at its most captivating. And he's never dull.

This record is no exception. The music surges forth with a pulse that is unmistakably Sixtyish in character, though there are intermittent statements echoing everything from madrigals to American Indian chants, with more than a touch of space-age technology on the electrifying opener *Pow*, which does just what it says. But Graham also has a firm footing in the doo-wop styles of the Fifties, as the title track readily attests. Admittedly, there are times when so much seems to be crammed into this album that a lot of loose ends are left hanging, but I'll give Larry Graham and his group, along with producer Benny Golson, full credit for the imagination they display in their concerted effort to be different in a time of stultifying conformity. P.G.

**HALL AND OATES:** *Live Time.* Daryl Hall (vocals, keyboards); John Oates (vocals, guitar); vocal and instrumental accompaniment. *Rich Girl; The Emptiness; Do What You Want. Be Who You Are;* and four others. RCA AFL1-2802 \$7.98. © AFS1-2802 \$7.98. © AFK1-2802 \$7.98.

Performance: **Fair**  
Recording: **Fair**

Here is yet another example of that suspect species, the live album. Such records are almost always inferior to studio product for several reasons (which I have enumerated in these pages in the past), and this one by Hall and Oates has all the defects of the genre. The performances are excessive, riddled with



LARRY GRAHAM  
*Raw-edged rock and gut-bucket r-&-b*

overacting to keep the audience happy—or at bay. Hall and Oates write interesting material with something of a jazz flavor, and they are energetic singers, but nearly everything goes out of whack here as they try to amuse the customers. Too bad. J.V.

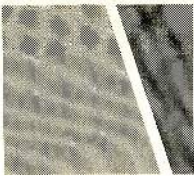
**CAROLE KING:** *Welcome Home.* Carole King (piano, vocals); vocal and instrumental accompaniment. *Main Street Saturday Night; Sunbird; Changes; Morning Sun; Disco Tech;* and four others. CAPITOL SW 11785 \$7.98. © SXW 11785 \$7.98. © 4XW 11785 \$7.98.

Performance: **Good**  
Recording: **Good**

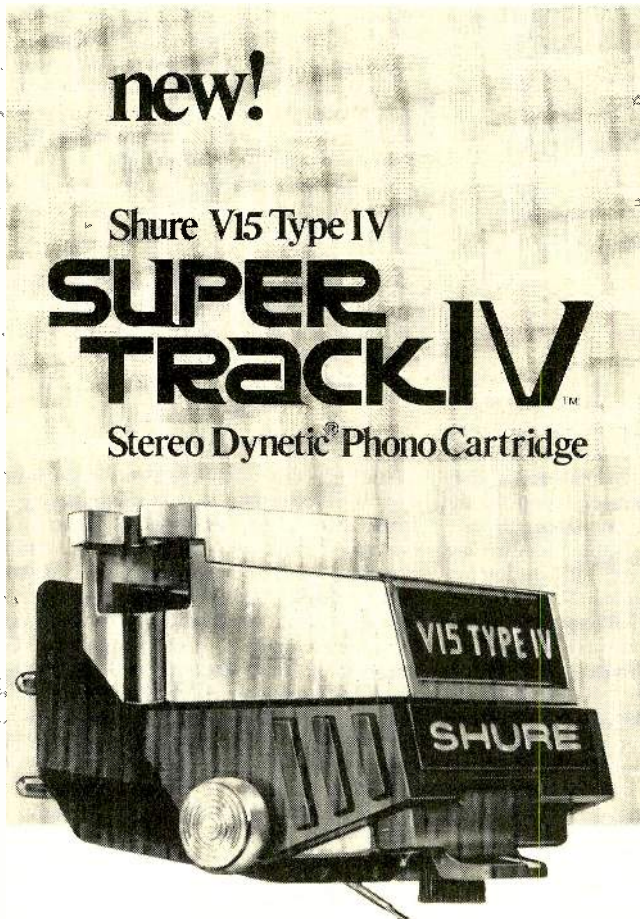
The trouble with Carole King is that even when she's good, as she is on "Welcome Home," it isn't enough; she's got to be great to be considered good. That's because of "Tapestry," the phenomenally successful album that has haunted her for seven years now. Maybe this new LP will change all that. "Welcome Home" isn't so much an album as a testament to the durability of a long career, to some personal changes, and, mostly, to the memory of her late husband Rick Evers, who died earlier this year. She's pieced together lyrics Evers wrote and set them to music; she's written songs about loving him and losing him. Evers' memory emanates from the grooves, making the album seem a bit eerie. But it's also lovely, and some of the songs are superb in any context, especially *Sunbird*, about staying young, and *Morning Sun*, a typical King "good to be alive" song. There's some real dreck, too, such as a Beatles ripoff (do we really need another one?) called *Venusian Diamond* and a silly dance song called *Disco Tech*. But when King chimes out with *Ride the Music*, one of those rollicking, upbeat, come-along songs that only she can write and sing, all is forgiven. "Welcome Home" is good enough to lift Carole King's seven-year curse. —Rick Mitz

(Continued on page 134)





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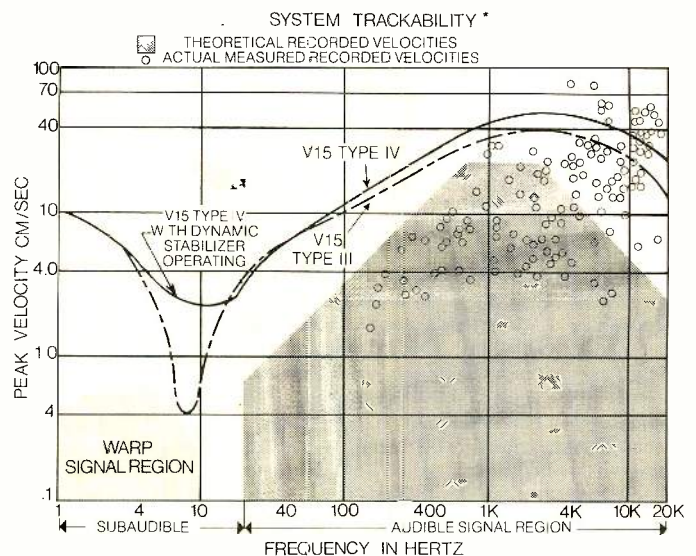


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MOODIES: John Lodge, Ray Thomas, Justin Hayward, Graeme Edge, Michael Pinder

## The Moodies: Nostalgia Time

DANG me, I'll forgive anything—hell, even applaud some of it—if it's done well enough. Even wallowing in nostalgia. Unlike Quicksilver, Country Joe and the Fish, and that balding, pot-bellied crowd Crosby, Stills, Nash, and Young—all people who were important to me once and who've regrouped to make balding and pot-bellied albums (*I don't get any older, damn it; why do they?*)—unlike these wallowings in nostalgia that merely saddened me, the Moody Blues (the Moody Blues!) have gotten down on all fours and slurped around in the stuff and made me . . . well, made me do it too. I've been on this binge of living in the present (and I still recommend it and mean to get back to it), but "Octave," this dense, thick, grandiose album of the regrouped Moody Blues (and isn't "Octave" a properly cryptic and snobbish title, doesn't it just fit the Moodies some of us grew middle-aged with?) has got me thinking, "Ah, the Sixties. The *music* we had then—and the preoccupation we had with it."

It was a rare time (and actually included the first couple of years of the Seventies), and the Moodies, as Joel Vance said in the pages of this magazine, were its "Mantovani with teeth." Their mellotron and sweep of sound were its backwash; their pomp was as one with its naïveté. But their words, often pompous, sometimes sappy, also reflected, in the Moodies' own peculiar style, its idealism. Their sound was a good thing to contrast with that of the Rolling Stones or to compare with those of emerging groups ranging from It's a Beautiful Day to Genesis. The sound, the whole attitude, was one of the time's benchmarks.

And now they're back. My guess is that they don't need the money but do need the love, the adoration of the multitudes. As scattered singles acts, the various members of the Moody Blues didn't get that—I mean *really* get it, selling out the kind of gigantic places the Moodies routinely sold out every time they toured as a group. I don't know how

they'll fit into the Seventies, even after listening to this album, but I wouldn't be surprised if they drew out a number of us once again. One thing "Octave" does indicate is that they are willing to make some concessions to the present. The style is still grandiose, the production still sounds as if the Moodies are playing on a mountain top and the microphones are on another mountain top half a mile away, the melodies still sweep grandly; but the words are a little more with-it, a little less know-it-all, and, technically, set down in a better order and rhythm. Oh, there's an excursion or two into the likes of "You'll never see the woods . . . while you're a tree." But there's some felt, honest simplicity, too, such as Justin Hayward's "What mattered to me/Was the right to be free/Like I'll be someday . . ."

That last is from *Had to Fall in Love*, in which the featured sounds are acoustic guitars and a spartan harmonica. It still manages to have that Moody Blues curvature of flight, but it's an easy place to see how they've put some concessions to the present into their sound as well as their messages. It's the old Moody Blues sound all right, but with just a touch of nap where there used to be a spit shine. It still takes your mind to the best restaurant in town, but it doesn't leave such an ostentatious tip.

THERE'S a lot of squash playing too, of course; don't forget that. It is the Moody Blues we're talking about—still elegant, and doing some of the most graceful wallowing you ever heard. —Noel Coppage

**THE MOODY BLUES:** *Octave*. The Moody Blues (vocals and instrumentals). *Steppin' in a Slide Zone; Under Moonshine; Had to Fall in Love; I'll Be Level with You; Driftwood; Top Rank Suite; I'm Your Man; Survival; One Step into the Light; The Day We Meet Again*. LONDON PS 708 \$7.98, © PS-8-708 \$7.98, © PS-5-708 \$7.98.

**SERGIO MENDES:** *Brasil '88*. Sergio Mendes (keyboards); Marietta Waters, Carol Rogers (vocals); orchestra. *Bridges; Misturada; Harley*; and six others. ELEKTRA 6E-134 \$7.98, © ET8-134 \$7.98, © TC5-134 \$7.98.

Performance: **Worst so far**  
Recording: **Good**

On the evidence of his latest album, Sergio Mendes has nowhere to go but up. His elegantly charming work of the late Sixties has melted, year by year, into the glutinous mess that's offered up here as entertainment. It's a shame that Mendes seems to think so little of his talent as a musician and as an arranger-producer that he's allowed himself to decline to this level. The nadir here is reached on *Bridges*, an English adaptation of a song by Milton Nascimento and Fernando Brant. It is a total shambles as sung in an outright Streisand imitation by either Marietta Waters or Carol Rogers (there's no label credit supplied), and it's swamped by Mendes' arrangement, which possesses all the crisp chic of a shopping-bag lady. P.R.

**JOHN MILES:** *Zaragon*. John Miles (vocals, guitars, keyboards); instrumental accompaniment. *Plain Jane; Zaragon; Borderline; No Hard Feelings*; and three others. ARISTA AB 4176 \$6.98.

Performance: **Professional**  
Recording: **Excellent**

John Miles obviously knows his business, and that business seems to be to create the kind of rock that glides effortlessly through the speakers, ignites no strong feelings, and has a cozy, it-seems-to-me-I've-heard-this-song-before quality. It is equally obvious that he's a fine musician and a facile songwriter, and he manages to make a good, highly professional impression here. Still, it is all pretty tepid stuff, as unconvincing as Miles' claim to be a rocker. Actually, he's a good musician who just happens to be working within the rock form. P.R.

**MAX MORATH:** *Living a Ragtime Life. The Charleston Rag; At the Drugstore Cabaret; The Cubanola Guide; When It's All Goin' Out And Nothin' Comin' In*; and six others. Max Morath (vocals, piano, narration). VANGUARD VSD 79391 \$7.98.

Performance: **Ingratating**  
Recording: **Very good**

I have long been an admirer of Max Morath, and I am as pleased as punch that another of his one-man shows has been issued by Vanguard. On this latest release he sets out to prove that "our music labels our history more than our wars—more than our politics." He offers a convincing exposition of this theme, illustrated by such songs of the Twenties as Eubie Blake's first hit, *The Charleston Rag*, a set of anti-Prohibition ballads, Zez Confrey's intricate *Dizzy Fingers*, *The Heliotrope Bouquet* by Louis Chauvin and Scott Joplin, and other landmarks of our musical development. There are times when Morath is better as a showman than as a preserver of the musical styles of our American past that he seeks to celebrate, but one can forgive him much since he is never a bore. Hearing him describe how black comedian Bert Williams used to appear in the Ziegfeld Follies in blackface is fascinating, and his description of Mrs. Winston's (Continued on page 136)

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*Peter Nero*



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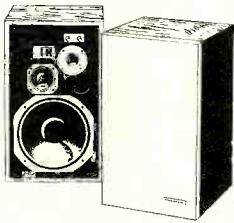
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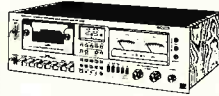
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"Soothing Syrup for Teething," on which many a respectable housewife used to get drunk, is hilarious. On the other hand, his version of *The Alcoholic Blues* compelled me to dig into my late father's collection of acoustically recorded 78's to refresh my memory as to how Billy Murray used to sing that hit of 1920, the year Prohibition was passed. The comparison was devastating: Morath is all too casual in his treatment of this protest song ("I got the blues, I got the blues/Since they amputated my booze...") and throws away most of the fun. Still, all things considered, "Living a Ragtime Life," with its informative script and ingratiating guide, is a happy trip through the Twenties. P.K.

**JOAN MORRIS: Other Songs by Leiber & Stoller.** Joan Morris (mezzo-soprano); William Bolcom (piano). *Ready to Begin Again; Is That All There Is?; I Ain't Here; I Remember; Humphrey Bogart; Tango;* and five others. NONESUCH H-71346 \$3.96.

Performance: **Careful**  
Recording: **Good**

Joan Morris commits murder most foul here, rendering into teeny-tiny pieces of nonsense what is perhaps Jerry Leiber and Mike Stoller's best song so far, *Is That All There Is?* Her twittering delivery sounds like Beatrice Lillie's imitation of Mrs. Wentworth-Brewster's discovery of the true meaning of life in *a Bar on the Piccolo Marina*. Unforgivable.

Except for this moment of outrage, however, Miss Morris acquires herself quite well in careful, musicianly readings of these purplish, deliberately theatrical "hart" songs written very much in the style of the Berlin cabaret songs of the Weimar Republic by two men who gained recognition as the composers of such as *Hound Dog* and *Black Denim and Motorcycle Boots* (the latter, for some weird reason, is included in this collection). Actually, the Leiber and Stoller songs here are closer to the kind of doomed-glamour set pieces that Friedrich Hollander used to whip up for Marlene Dietrich films (things such as *Illusions* and *Black Market* and *In the Ruins of Berlin*) than they are to the grimy, bitter world of Brecht/Weill. But they are effective and dramatic and certainly stand on their own even in the chaste white-salon atmosphere created by Miss Morris with William Bolcom's impeccable accompaniment. When they are sung by a great popular artist such as Peggy Lee, as most of them have been on an album titled "Mirrors," they become small jewels of mood, color, and passion—the kind of passion that makes fools of clever men, as Rochefoucauld observed. But it takes a talent like Miss Lee's to accomplish that. P.R.

**RECORDING OF SPECIAL MERIT**

**THE NIGHTHAWKS: Jacks and Kings.** The Nighthawks (vocals and instrumentals); instrumental accompaniment. *For You My Love; Come Baby; Got a Mind to Travel; Love Me or Leave Me; Dust My Broom; Sugar Mama;* and four others. ADELPHI AD 4120 \$7.95.

Performance: **Excellent**  
Recording: **Good**

The 'Hawks are a slugging quartet based near Washington, D.C., who have put out several hot, tight albums. They are inspired by  
(Continued on page 140)

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THE TRUTH COMES OUT.**

"CELEBRITY is the chastisement of merit, and the punishment of talent." That is but one of many wise things said by the French aphorist Sébastien Chamfort. (And a fat lot of good the observation did him, since his own celebrity at court, plus his ungovernable tongue, got him denounced during the French Revolution's Reign of Terror; rather than wait for the blade, he took his own life.)

Neither the late Teddi King, whose singular enchantment glows throughout the Inner City album "... This Is New"; nor Barbara Lea, whose quite different, quite special vocal gifts are displayed in "The Devil Is Afraid of Music"; nor the impeccably musical Marlene VerPlanck, whose "You'd Better Love Me" is just out on the Audiophile label; nor even Sylvia Syms, whose satin-ribbon voice once earned her a chart hit some years ago and is still flowing gorgeously along in her new album "She Loves to Hear the Music," could ever be called celebrities. They are *known*, but mostly to small but worldly audiences who cherish merit and celebrate talent, and who are also faithful, perhaps because they are very secure in their tastes and therefore almost totally fad-resistant. The objects of their affections are often kept in a privileged limbo—rather like some rich men's wives—to be appreciated, savored, and even loved. They are spoiled in a way, but not in the same way they would be if they were the celebrated darlings of the masses—at the cost of their art, that is.

And so it isn't their audiences who are to blame—if blame be the word—for their lack of celebrity. It is the women themselves who have set extraordinarily high standards and have kept them, come hell or fast-talking agents. As a group (and there are many more of them than the four who happen to have albums out now), they have dedicated themselves to singing the best of American popular music in the best way they know how. The results can be dazzling. Serious though they may be about their art, in performance they are blithe enchantresses, spinning their stories, illuminating every hidden cranny, finding new meaning in songs we had flattered ourselves we already knew.

**N**OWHERE is this ability to transmute, to alchemize the over-familiar into purest gold more fully realized than in Teddi King's "... This Is New," a collection of songs with lyrics by Ira Gershwin. Consider her treatment of the title song, *This Is New*, for instance. I've heard Gertrude Lawrence's recording, made at about the time she was appearing in *Lady in the Dark*, from which it's drawn, and it is among her finest recorded songs: poignant, wistful, and touching. And Lotte Lenya's recording of it in the great Weill/Lenya tradition is fabulous. But Teddi King's interpretation is the one I'll have to go with from now on. She touches all the bases Lawrence and Lenya touched, but she also adds a sense of awakening joy to the lyric. It is the joy of a woman who probably has had many love affairs but has never, until this moment, been *really in love*. It is thoroughly adult entertainment. (All of these ladies are of a certain age, which of course they would have to be to get as good as they are, to know as much as they do.) When she sings *But Not*

*for Me*—"They're writing songs of love/But not for me . . ."—it isn't the self-pitying complaint one singer after another has been telling us it is down through the years. No, Teddi King's version—and I suspect it is the real one—is about a Dorothy Parkerish kind of lady who sees herself all too clearly and knows damned well why everyone else always gets the bonbons and the roses. You have to have lived a while to get a perception like that across. Throughout the album Miss King is accompanied by the wondrous piano playing of Dave McKenna, who also takes

that swan's-down voice, one realizes that she isn't going to rest on that, but that her phrasing, with its sliding connective arcs, and her intonation are found treasure. More of a stylist than any of the others here, Syms has great integrity when it comes to lyrics—which is why, perhaps, she gives a brush-off to Peter Frampton's slight *I'm in You* and still sings it for every ounce of its worth.

Marlene VerPlanck has had a large, almost-cult audience for some years now. Her new album, "You'd Better Love Me," gives several of the reasons why. She has an absolutely straight-ahead approach to singing, tender but never maudlin, and a wonderful ear for the right song. Here she revives eight Hugh Martin songs from various Broadway and film musicals, and her version of *Have Yourself a Merry Little Christmas* in particular is the kind of small-scale delight that will make your toes curl. *An Occasional Man*, another Martin gem, finds VerPlanck in a slightly less ladylike posture that perhaps she ought to adopt more often.

**A**FTER listening to all four recordings alone and in succession, I think that what all these women share, along with musical talent, is the ability "to enjoy and to give enjoyment, without injury to [themselves] or to others [that is, without distorting their talent or their material in the pursuit of fame]; this is true morality." Chamfort said that too. Wise old bird, wasn't he?  
—Peter Reilly



over five bands (she didn't live to complete the recording) as a solo artist. He deserves an album of his own.

Barbara Lea's "The Devil Is Afraid of Music" is a collection of songs by Willard Robison. I wish I shared the apparently high opinion of Mr. Robison's work that Miss Lea seems to hold. She has a striking ability to make lyrics sound immediate, in an almost conversational vein, and a fine, clean-edged vocal style. But I fear the only song here that meets her on her own level is the title one, and that is quite good indeed. Otherwise, the album is strictly about the pleasure of Barbara Lea's thoroughly inimitable company.

There is a sheer *attractiveness* about Sylvia Syms' voice that is as irresistible as the girls in their summer dresses were to the hero of Irwin Shaw's famed short story. In "She Loves to Hear the Music" the Syms spell is cast upon some relatively new material, such as Peter Allen's title song and Stevie Wonder's *If You Really Love Me*, and the results are predictable: after the initial rush of hearing

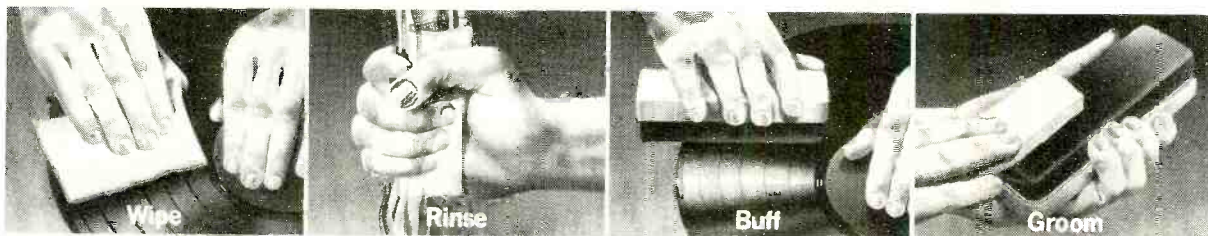
**TEDDI KING:** . . . *This Is New*. Teddi King (vocals); Dave McKenna (piano). *Isn't It a Pity?; Fun to Be Fooled; This Is New; How Long Has This Been Going On?; But Not for Me; My Ship; I Can't Be Bothered Now; Long Ago and Far Away; For You, for Me, for Evermore; One Life to Live; I Can't Get Started; Here's What I'm Here For*. INNER CITY 1044 \$6.98.

**BARBARA LEA:** *The Devil Is Afraid of Music*. Barbara Lea (vocals); Loonis McGlohon (piano); Mel Alexander (bass); Tony Cooper (drums); Bob Mitchell (clarinet). *The Devil Is Afraid of Music; Guess I'll Go Back Home This Summer; Lonely Acres; Deep Elm, You Tell 'Em I'm Blue; Peaceful Valley; A Woman Alone with the Blues; A Cottage for Sale; 'Tain't So, Honey, 'Tain't So; Old Folks; Little High Chairman; My Egotism; 'Round My Old Deserted Farm*. AUDIOPHILE AP-119 \$6.98.

**SYLVIA SYMS:** *She Loves to Hear the Music*. Sylvia Syms (vocals); orchestra. *She Loves to Hear the Music; Teach Me Tonight; Touch Me in the Morning; Sweet Georgia Brown; When It Was Done; After the Lovin'; If You Really Love Me; I'm In You; It Had to Be You*. A & M SP-4696 \$6.98.

**MARLENE VERPLANCK:** *You'd Better Love Me*. Marlene VerPlanck (vocals); Loonis McGlohon (piano); Terry Lassiter (bass); James Lackey (drums). *What I Was Warned About; Tenderly; An Occasional Man; Have Yourself a Merry Little Christmas; You Go to My Head; The Crickets Are Calling; I Know Your Heart; This Funny World; Gone with the Wind; You Are for Loving; Ev'ry Time; Tiny Room; You'd Better Love Me*. AUDIOPHILE AP-121 \$6.98.

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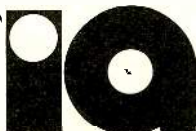
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rhythm-and-blues and have appeared as the opening act for Muddy Waters, the wonderful bluesman whom they rightly revere. Several members of Waters' band are featured guests on this album, which isn't meant to spotlight Muddy's back-up band or the Nighthawks so much as to showcase the blues. The album is, in fact, a prayer meeting. What distinguishes the 'Hawks and prevents them from being blues cultists is that, having taken the blues as their religion, they are wise enough to know that any humanistic religion should provide for lots of good times right here on earth. The blues is easy to play, which allows good blues musicians a lot of room to mess around. Here we have a gang of players who know exactly what they're doing and why, and they have a marvelous time doing it.

Though the 'Hawks defer to Waters' players (and to Dave Maxwell from the James Cotton Band), "Jacks and Kings" is very much a happy collaboration. Even such overdone numbers as Elmore James' *The Sky Is Cryin'* and James' version of Robert Johnson's *Dust My Broom* are played as kick-off and stomp numbers instead of anthems. Respect is shown in the treatment of all the selections, but there is no false dignity and no false pride. The album really should have been called "Aces." because everybody's cooking here.

J.V.

again. A couple of years ago her comeback album, "Smile," failed to raise any, and it was followed by a lackadaisical live double album that sounded as if it had been recorded inside a freeze locker.

But now, as if out of nowhere, comes "Nesting," which suggests that Nyro has flown the country coop and built herself a more comfortable nest on a firm foundation of that same musical stuff her early songs were made from. The songs here aren't just memorable; they stick to you like flypaper. The excitement and driving energy of *Rhythm and Blues* fairly leaps off the disc; *My Innocence* is a snappy explanation of how she lost it; and *Light* (or *Light-Pop's Principle*, as it's identified on the label) is an uplifting, positive love song that nearly bursts with joy. "Nesting" is a gem, and I'm glad Laura Nyro has decided to open up her jewel box once again and share its contents with us. —Rick Mitz

**GRAHAM PARKER AND THE RUMOUR:**

**The Parkerilla.** Graham Parker and the Rumour (vocals and instrumentals); instrumental accompaniment. *Lady Doctor; Fool's Gold; Tear Your Playhouse Down; Don't Ask Me Questions; Silly Thing; The Heat in Harlem;* and seven others. MERCURY SRM-2-100 two discs \$10.98, © MCT8-2-100 \$10.98, © MCT4-2-100 \$10.98.

Performance: **Highly disappointing**

Recording: **Okay**

**RECORDING OF SPECIAL MERIT**

**LAURA NYRO: Nesting.** Laura Nyro (piano, organ, guitar, vocals); vocal and instrumental accompaniment. *Mr. Blue (The Song of Communications); Rhythm and Blues; My Innocence; Crazy Love; American Dreamer; Springblown;* and four others. COLUMBIA JC 35449 \$7.98, © JCA 35449 \$7.98, © JCT 35449 \$7.98.

Performance: **Delightfully loose**

Recording: **Good**

I've missed Laura Nyro. Back in the early Seventies, she used to write the most unexpected songs—*Stony End, Time and Love, Flim Flam Man, Eli's Coming*—and you never quite knew where the next chord was coming from. There was a dizzy energy to her songs, a dazzling display of lyrical and musical innovation that gave her music a fresh feeling that set it apart from anyone else's. Then she moved to the country. Retired. Raised babies. Bred bees. Made quilts. Whatever. The music stopped. And then it started

Boring, dispirited two-record live sets by artists who have either run out of things to say or who have yet to make their commercial breakthroughs are becoming something of a rock commonplace these days—take, for example, Bob Seger, the Stones, or Peter Frampton. Nevertheless, I somehow hoped for more from Graham Parker, whose three earlier albums, for all their occasional faults, were passionate and committed. This one, sadly, is mere hack work, a rush job put out to fulfill contractual obligations. The song selection is weak, the band overplays, and the recording is erratic. Worse, a few of the better selections have already appeared on Mercury's "authorized bootleg," "Live at Marble Arch," in far superior versions. "The Parkerilla" ought to be subtitled "Pure Product for Now People." Save your money, folks; it's sad to see people this gifted prostituting themselves this early in their careers. S.S.

(Continued on page 142)



LAURA NYRO: out of the country coop and back into the business of making brilliant music

Columbia Records



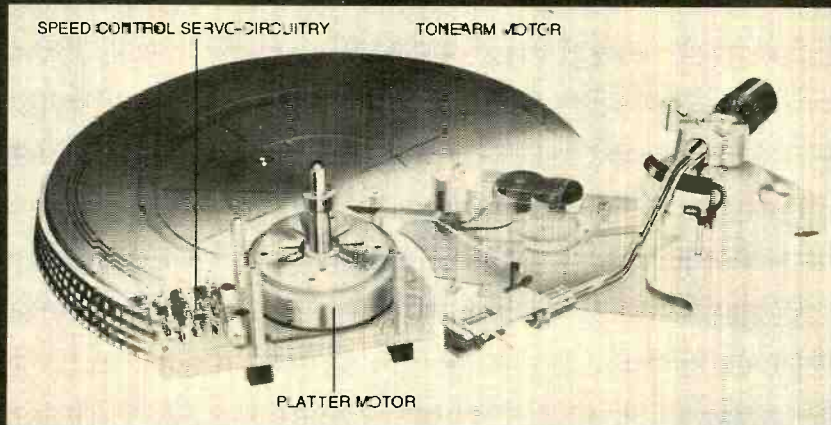
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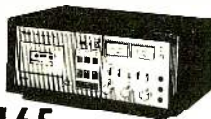
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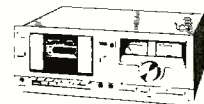
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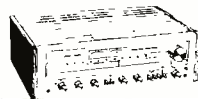
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**DOLLY PARTON:** *In the Beginning.* Dolly Parton (vocals); instrumental accompaniment. *Dumb Blonde; Fuel to the Flame; The Company You Keep; Why, Why, Why; Something Fishy;* and five others. MONUMENT MG 7623 \$6.98, © MG8-7623 \$7.95, © MGC-7623 \$7.95.

Performance: **Excellent vintage**  
Recording: **Variable**

No, Dolly isn't going back in anticrossover, hard-country directions. This is a reissue of the 1972 "The World of Dolly," itself a collection, and it all dates back to when Dolly first signed with Monument over a decade ago. It is an unspectacular but solid assortment of her early stuff, certainly substantial enough to have tipped off anyone listening back then that she was more special than your average country girl singer. The engineering on some of the cuts seems to try to exacerbate the piercing aspect of Dolly's vocals, but what the hell—it's still a good way to pick up on the early Parton and/or replace scratched or overplayed old tracks. Like most of hers, those were good years. *N.C.*

**POUSETTE-DART BAND:** *3.* Pousette-Dart Band (vocals and instrumentals). *Next to You; Stand by Me; Love Is My Belief; I Stayed Away Too Long; Where Are You Going;* and four others. CAPITOL SW-11781 \$7.98.

Performance: **Very good**  
Recording: **Very good**

The Pousette-Dart Band is a pleasant, low-key, relaxed outfit. Its efforts are marked by the calm, comfortable professionalism you'd expect from producers Hank Medress and Dave Appell—who, as writers, arrangers, music publishers, producers, and performers, have been turning out hits for fifteen years, most notably the early smasheroos by Tony Orlando and Dawn. (It was Medress, owner of the copyright to *He's So Fine* by the Chifons, who sued George Harrison for appropriating the melody for *My Sweet Lord*. He won.) Jon Pousette-Dart sings a bit like David Gates of Bread and on occasion writes like him—*Where Are You Going* is airy, sentiment-

tal, and nicely felt. The band now and then plays in the fresh-air style of the early Pure Prairie League, but all in all they sound like themselves, and that's just fine. *J. V.*

**RECORDING OF SPECIAL MERIT**

**TOM ROBINSON BAND:** *Power in the Darkness.* Tom Robinson (vocals, bass); Danny Kustow (guitar); Mark Ambler (organ); Dolphin Taylor (drums). *Long Hot Summer; Grey Cortina; Too Good to Be True; Ain't Gonna Take It; Up Against the Wall; 2-4-6-8 Motorway; Glad to Be Gay; The Winter of '79;* and seven others. HARVEST STB-11778 two discs \$6.98, © 8XVV-11778 \$8.98, © 4XVV-11778 \$8.98.

Performance: **Passionate**  
Recording: **Fine**

Tom Robinson, in case you haven't heard, is a militant Englishman with a passionate commitment to a whole slew of civil-libertarian causes. An outspoken homosexual who leads an excellent hard-rock band, he writes what used to be called topical protest songs; yet he is equally likely to produce an apolitical ditty about the joy of the open road or a music-hall/cabaret number in the great English tradition of Ray Davies (his early mentor). All of which is, if nothing else, an indication of just how much has changed since the days when Phil Ochs was grinding out earnest, one-dimensional, musically limited antiwar songs in the back office of *Sing Out*. Still, it's refreshing somehow to hear someone making music this good that actually does address important issues, even if some of the issues addressed are a bit parochial, things that the average American rock fan will have little knowledge or comprehension of. I'm sure that the National Front (England's neo-Nazis), for instance, is as dangerous as Robinson makes it out to be, but a Yank pontificating about it would probably sound as naive as Eric Burdon with his flower-power pronouncements.

On the other hand, a lot of Robinson's concerns are of more than merely regional interest—gay rights, for example, or abortion reform—and I'm glad that he's doing what he's

(Continued on page 144)

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# REVOX

doing, which is to sugar-coat his messages with infectious rock-and-roll. *Glad to Be Gay*, probably his best song, is really stingingly bitter in a way that suggests Brecht/Weill, but in form it's a sing-along with an ominous but addictive melody. And his nonpolitical songs, such as *Motorway* or *Grey Cortina*, are so good on their own that I don't think Robinson is going to be trapped the way a lot of the Sixties folkies (or the post-Beatles John Lennon) were. In other words, people won't be able to ignore him, to write him off as a tedious, whining kook pushing this week's fashionable Party Line. Successful, political, mainstream rock—it's a remarkable synthesis. Tom Robinson is going to matter. S.S.

**DEMIS ROUSSOS.** Demis Roussos (vocals); orchestra. *Loving Arms; Life in the City; I Just Live; This Song; The Other Woman*; and five others. MERCURY SRM-1-3724 \$7.98. © 8-1-3724 \$7.98, © 4-1-3724 \$7.98.

Performance: **Mild**  
Recording: **Accommodating**

This is a mild recital of equally mild songs. The only quality offering here is the Bacharach/David *I Just Don't Know What to Do with Myself*, and Demis Roussos doesn't seem to know either, since his reading of the lyric has the baffled quality of, let us say, a pregnant astronette. The production by Freddie Perren accommodates Roussos' apparent desire for a peaceful atmosphere, so that the whole enterprise just rolls along like a rubber-wheeled subway train passing through a local station on the express track. P.R.

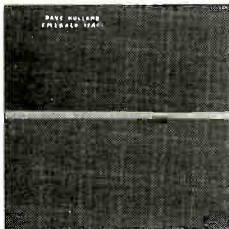


... SO, Roger! This is where your remote speakers are!"

**THE EARL SCRUGGS REVUE: Bold and New.** Earl Scruggs (banjo); Randy Scruggs (guitar, steel guitar, vocals); Gary Scruggs (vocals, bass, harmonica); Steve Scruggs (keyboards); Taylor Rhodes (guitar); other

musicians. *The Cabin; Our Love Is Home Grown; Two Lovers'll Get You Down; Sea of Love; That's Alright Mama; Games People Play*; and four others. COLUMBIA JC 35319 (Continued on page 147)

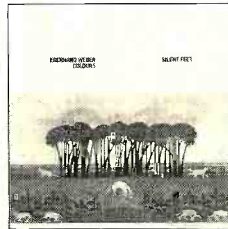
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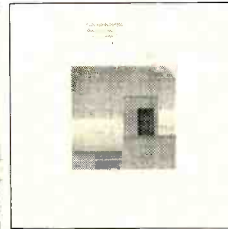
Dave Holland  
*Emerald Tears*



Egberto Gismonti  
*Sol Do Meio Dia*



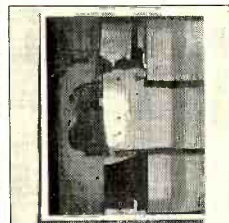
Eberhard Weber  
and Colours  
*Silent Feet*



John Abercrombie, Dave  
Holland & Jack DeJohnette  
*Gateway 2*



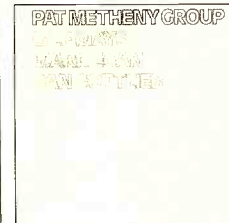
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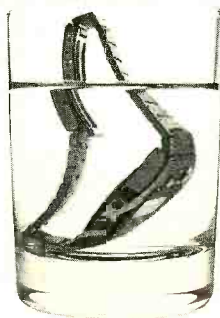
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Songwriter Berlin with a salty friend

## Irving Berlin Is Ninety

EVERY once in a while the Great American Dream Machine *does* work, you know. Take Irving Berlin, for instance: immigrant boy, singing waiter, struggling composer strikes it rich, marries socialite, lives happily ever after. And I do mean *ever*. Mr. Berlin recently celebrated his ninetieth year on Space-ship Earth, and it is hard to think of anyone who has contributed more in his chosen field than he has.

Monmouth/Evergreen's new (well, not really *so* new—the two records are culled from a three-record set released in honor of his *eightieth* birthday ten years ago), "Say It with Music" is a thirty-four-song tribute to a modest genius who is, purely and simply, probably the greatest American *songwriter* who has ever lived. Others may have developed more style or content or had greater single achievements (although *Annie Get Your Gun* surely is the only musical in history in which *every* song was a popular hit), but there is no way of comprehending American popular music in this century without considering the work of Berlin.

The songs included in this new package were all written before 1933; after that date Berlin mostly wrote complete scores for Broadway and for Hollywood. Gives one pause, doesn't it?—to consider that much of

this music has been a part of the national musical consciousness *for over forty-five years*. Would you believe that *Blue Skies*, *All By Myself*, *Always*, *The Song Is Ended*, *Shakin' the Blues Away*, *Remember*, *Say It Isn't So*, *How Deep Is the Ocean*, *Puttin' On the Ritz*, *Easter Parade*, *Supper Time*, *Harlem on My Mind*, and *Soft Lights and Sweet Music*, to name just a few, were all written before Franklin D. Roosevelt became President? Well, they were, and somewhere today you will probably hear at least one of them on the car radio, Mu-zak, the phonograph, or TV.

That this album really covers only about half of Berlin's successful output and that the golden years of *White Christmas*, so many of the Astaire-Rogers films, *Annie Get Your Gun*, *Call Me Madam*, etc., etc., were still ahead of him seems unbelievable. But no more unbelievable perhaps than the myth circulated about him for years: that tucked way, way back in a secret room at Irving Berlin Enterprises was a little black man who *actually* wrote all the songs and had been doing so ever since the days of *Alexander's Ragtime Band*. The story probably gained currency because Berlin himself can play the piano in only one key. He never bothered to learn how to transpose and had a special piano (it's now in the Smithsonian) built to do the job for him.

Berlin's genius is a bit tepidly served up here by the Jack Manno Singers, Annette Sanders, Steve Clayton, the Gentlemen of Jazz, and the jazz-oriented arrangements. But no matter, for his work still shines through with a luster that can be attained only by a perfect master of his art. Unforgettable melodies and the simplest of lyrics have always been Berlin trademarks. His melodic lines are seldom surprising, but they always have an overwhelming sweetness and an undertow of emotionality. His lyrics make their points with broad, firm strokes that are unafraid of the Grand Statement. Together, music and lyrics have a wonderfully ordered kind of commonsensical logic, and you can never simply hum the melody *without* thinking simultaneously of the lyric that goes with it.

Berlin was no innovator in either art or craft; as a matter of fact, he was something of a trend follower rather than setter. When ragtime was "in" he whipped up *International Rag* and *Alexander's Ragtime Band*. When the Gershwins, in their Twenties musicals, began to write a new kind of love song, Berlin came up with the likes of *What'll I Do* or *All Alone*. The Thirties fitted the talents of Cole Porter like a spray-on glove—so Berlin put on his monocle and trotted out such things as *Let's Face the Music and Dance* and *Top Hat*. Rodgers and Hammerstein "discovered" Americana for the musical stage in the Forties, and Berlin soon arrived in a golden covered wagon called *Annie Get Your Gun*.

ALL of which is to say that Irving Berlin was always a part of the popular-music *business* in America, as aware of the changing styles as the next man. But that does not make what he accomplished any the less incredible. That his songs will live, because they are indisputably art, is now taken as a matter of course. The honors have come to him without his having to seek them. He did his job superlatively well, and all the rest followed.

So, a little late, the happiest of birthdays to you, Mr. Berlin, and I hope you know you are keeping a lot of people feeling a lot younger simply because your music is still being played about as much as it ever was. If you wonder why that is such a marvel to me, perhaps you'll understand when I tell you that I was *born* in 1933. —Peter Reilly

**IRVING BERLIN: Say It with Music.** Annette Sanders, Steve Clayton, Gentlemen of Jazz, Jack Manno Singers (vocals); instrumental accompaniment. *Say It with Music; Everybody Step; All By Myself; Pack Up Your Sins and Go to the Devil; Lady of the Evening; Medley—All Alone/What'll I Do; Tell Her in the Springtime; Lazy; Medley—Always/Remember; How Many Times; Blue Skies; Russian Lullaby; Medley—It's Up to the Band/Rainbow of Girls/Shakin' the Blues Away; The Song Is Ended; Roses of Yesterday; How About Me; Marie; Coquette; With You; Puttin' On the Ritz; Waiting at the End of the Road; Medley—Say It Isn't So/How Deep Is the Ocean; Soft Lights and Sweet Music; Heat Wave; How's Chances; Harlem on My Mind; Easter Parade; Supper Time; Not for All the Rice in China; Maybe It's Because I Love You Too Much.* MONMOUTH/EVERGREEN MES 7084/5 two discs \$11.98.

\$7.98, © JCA 35319 \$7.98, © JCT 35319 \$7.98.

Performance: **Tennessee sippin' music**  
Recording: **Very good**

The Scruggs bunch has changed producers since its last outing, from Ron Bledsoe to Chips Moman, and this album is more acoustic and airy as a result: good music for a jug-equipped front porch in the hazy, late-summer afternoon. The front porch would have to have an outlet so the electric bass could be plugged in, and it is music of the electric-light era, not strictly old-timey—although the new songs have a sort of back-country feel to them. I have a couple of small complaints about how the vocals don't really fit in a couple of the songs, notably in Phil Phillips' good old *Sea of Love*, and about the lack of any really hot cuts—with both Earl and Randy in a band, the band is almost obligated to give them each room for a solo spectacular. This one is more integrated, but Randy sings lead once—first time I've heard that—and does it well enough to indicate he should do more of it. As it is, it's good enough to make you haul the stereo and the jug out to the porch. *N.C.*

**NINA SIMONE:** *Baltimore* (see Best of the Month, page 99)

#### RECORDING OF SPECIAL MERIT

**BARBRA STREISAND:** *Songbird*. Barbra Streisand (vocals); orchestra. *Tomorrow; A Man I Loved; I Don't Break Easily; Love Breakdown; You Don't Bring Me Flowers; Honey Can I Put On Your Clothes*; and four others. COLUMBIA JC 35375 \$7.98, © JCA 35375 \$7.98, © JCT 35375 \$7.98.

Performance: **Memorable**  
Recording: **Good**

Streisand's newest Columbia release might at first be looked on as one of her throwaway efforts, an album made only because the sales department needed a new one or, perhaps, because she needed to fill up some time or to make even *more* money. But that, you see, is the kind of conventional entertainment-industry thinking that Streisand has always fought.

BARBRA STREISAND  
*A theatrical genius, and she knows it*



Columbia Records

You can be quite sure that she made "Songbird" for no other reason than that she wanted to. She likes to work. And she very much likes to create.

This time out she has created at least three memorable tracks, and considering the level at which Streisand functions you really shouldn't need any more notice than that to go out and grab the album. First there's *Tomorrow* from *Annie*, a soppy, soupy song that sounded old and worn on the night the show opened; here it's transformed (in much the same way as *Cry Me a River* and *Happy Days Are Here Again* were earlier) into something absolutely personal and unique—pure Streisand. Then there's Neil Diamond's really lousy *You Don't Bring Flowers*, with which she merely breaks your heart, and, finally, *Honey Can I Put On Your Clothes*, in which she throws off enough sexual steam to fog up Gloria Steinem's aviator glasses for good.

But what the hell. Words can neither add to nor detract from what Streisand does. You have to experience her for yourself, as half the world knows already. She is a theatrical genius. And she knows it. *P.R.*

#### RECORDING OF SPECIAL MERIT

**TALKING HEADS:** *More Songs About Buildings and Food*. Talking Heads (vocals and instrumentals). *Thank You for Sending Me an Angel; With Our Love; The Good Thing; Warning Sign; The Girls Want to Be with the Girls; Found a Job*; and five others. SIRE SRK 6058 \$7.98, © M8 6058 \$7.98, © M5 6058 \$7.98.

Performance: **Brilliant**  
Recording: **Crisp**

Talking Heads may be the oddest band in America right now (not counting the various as-yet-unrecorded imitators they've inspired, such as Teenage Jesus and the Jerks), and a lot of writers have sort of gone off the deep end in rhapsodizing about their particular kinks. But that shouldn't put you off, as it did me for a time. You have to realize that although superficially Talking Heads is not all that different from some earlier English Art Rock annoyances, like Sparks or Roxy Music—one of whose former members, Brian Eno, produces Talking Heads—they're a lot smarter and a lot more accessible. Oh, David Byrne may do a lot of pointless glottal contorting as he spits out the lyrics that caused one critic to classify him as "an uptight WASP finally rocking out"; Eno may have tarted up the sound with his usual gratuitous electronic effects (mostly percussive); and yes, this kind of theoretical Soho Minimalism generally makes me wish that anyone schooled in the visual arts were prohibited from dabbling in rock-and-roll. And yet, for all the reserve of their songs and performances, Talking Heads is one of the wittiest, sharpest instrumental groups since Booker T. and the MG's. I don't doubt that these kids could have backed James Brown, so precisely tooled is their ensemble work. And if that seems an absurd comparison, I suggest you take a listen to the cover version included here of Al Green's (!) *Take Me to the River*, which by no stretch of the imagination qualifies as White Soul but is sexy as hell.

Not all of the Heads' own material comes off as well. There are times (on *Found a Job*, for instance) when the eccentric chord changes, Eno-isms, and Dink-Stover-on-psil-

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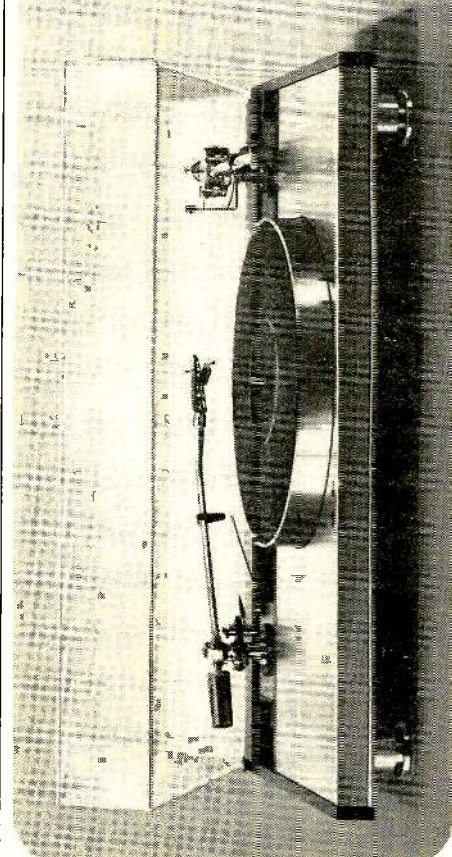
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ocybin lyrics combine to make the Heads sound like a bad surf band run amuck. But at other times (*Warning Sign* and the really quite exciting *Thank You for Sending Me an Angel* are my favorites at this point) one simply has to accept this music for what it is: the quirky, charming musings of a bunch of emotionally constipated yet brilliant kids who are breaking all sorts of rules, not because they're incompetent primitives but because they really don't know any other way to vent their particular frustrations. It's not Punk, and it may not even be rock, but if your ears are the slightest bit open, I can't imagine your not liking at least some of it. S.S.

**TOWNES VAN ZANDT: *Flyin' Shoes*** (see Best of the Month, page 102)

**WENDY WALDMAN: *Strange Company*.** Wendy Waldman (vocals, guitar, keyboards); orchestra. *You'll See; Hard Times; Train Runnin'; Love Is the Only Goal; The Man Is Mine*; and five others. WARNER BROS. BSK 3178 \$7.98, © M8 3178 \$7.98, © M5 3178 \$7.98.

Performance: **Good**  
Recording: **Good**

That Carly Simon seems to be Carly Simon so effortlessly may be a large part of her tremendous success. Wendy Waldman often seems to be running out of breath (and ideas) trying to be Wendy Waldman. Both are composer-performers; both speak of and to that same generation of intelligent, uneasily uncommitted women who want to put a little thinking space and time between themselves and the old rules and roles. But there's a difference between the two women's albums. Simon has the drop-dead, unselfconscious honesty of the girl in the crowded elevator confiding to a friend about her intimate life—and not caring much who overhears. Waldman, on the other hand, is the carefully prepared member of a therapy group telling you about her hang-ups and about how she's overcome them, rolling in with the cosmic meanderings of *Love Is the Only Goal* or the supposed daring of *Long Hot Summer Nights*, about two girls on the prowl ("You take Johnny, I'll take Joe/If we change mid-stream, no one will ever know. . .").

Perhaps comparisons between creators are always unfair, but I'll make one more: Waldman is probably a better musician than Simon has shown she is so far. Waldman's work here, vocally and on a variety of instruments, is often very fine indeed. Now, if only she'd loosen up her lyric approach to get down to the gut stuff, toss the Emotional Sponge Pillow act out, and let us know who she really is. I'll bet she would prove to be a lot squarer and less with-it than she cares to admit, but she would probably produce some dynamite work. P.R.

**JOE WALSH: *But Seriously, Folks*.** Joe Walsh (vocals, guitar, synthesizer); instrumental accompaniment. *Over and Over; Second Hand Store; Indian Summer; At the Station*; and four others. ASYLUM 6E-141 \$7.98.

Performance: **Good**  
Recording: **Good**

This first solo album on Asylum from Eagles guitarist Joe Walsh isn't very exciting, but it is solid and it is at least another sign of healthy mainstream rock activity. Acoustic guitars

are judiciously used in the rhythm section, making for some nice contrasts in texture. There's a long, quiet rock instrumental—if you can imagine such a thing—that's quite pleasant. And there are lyrics worth catching here and there, as in *Second Hand Store* and in the could-this-be-irony effect of *Life's Been Good*. The superstar in that one says everyone's changed but himself, and in a way he could be right. Walsh seems to sing through a lot of reverb or something most of the time, and he wouldn't win many singing contests anyway, but in general the album has to be called likable. N.C.

**THE WHISPERS: *Headlights*.** The Whispers (vocals); instrumental accompaniment. *Headlights; Try and Make It Better; Disco Melody; Children of Tomorrow*; and four others. SOLLAR BXL1-2774 \$7.98, © BXS1-2774 \$7.98, © BXK1-2774 \$7.98.

Performance: **Smooth but not slick**  
Recording: **Good**

This album is something of a disappointment in that the previous set by the Whispers was such a whopper, but after several listenings I was able to appreciate anew the fundamental qualities that lift this singing quintet above the pack. Most important, they have one of the smoothest vocal blends of any group on the boards. They toy with the music, though somewhat timidly, and even dabble in a bit of scatting à la Al Jarreau, though on a far more elementary level and not nearly as much as they should. *Headlights* and *The Planets of Life* are the fun tracks here, but the best singing occurs on *Olivia (Lost and Turned Out)*, *Try to Make It Better*, and *Disco Melody*, which is far sweeter than its name suggests and should have real staying power. P.G.

#### RECORDING OF SPECIAL MERIT

**NANCY WILSON: *Music on My Mind*.** Nancy Wilson (vocals); orchestra. *I'm Gonna Let Ya; Let It Flow; Easy; I'm in Love; I Really Need Him*; and four others. CAPITOL SMAS-11786 \$7.98, © 8XW-11786 \$7.98, © 4XW-11786 \$7.98.

Performance: **First-class**  
Recording: **Good**

Nancy Wilson's "Music on My Mind" is more proof that class will always tell. But just as class has always been a part of Wilson's performances throughout her long career, so has a powerful grasp of elemental sexuality. When these combine with her newly developed acting abilities, as they do here in the really fine title song, the result is champagne with a kick like hundred-proof vodka. She reprises *Music on My Mind* at the end of the album, as well she might, for it is the kind of material that doesn't come along all that often for anyone. If you've ever seen the film *Life at the Top*, you'll probably always remember the feeling Simone Signoret's performance gave you, and Nancy Wilson's work in *Music on My Mind* is on that same superb communicative level. There are some other very nice things on the album, including *I'm in Love* and *Easy*—and only one bad choice, *I'm Gonna Let Ya*, which calls for some unconvincing raunch from the lady—but it's the title song that will fasten itself onto you for a long time. P.R.

(Continued on page 150)



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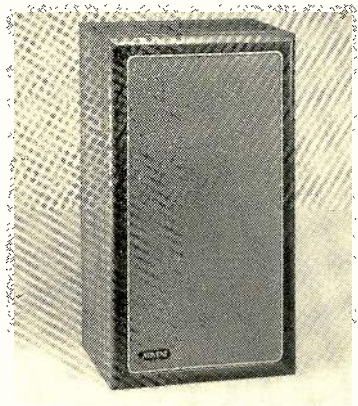
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## DISCO



**THE ANVIL BAND.** The Anvil Band (vocals and instrumentals). *The Tunnel; Let's Dance; Continental Square Dance; Begin the Beguine; The Man; Nice Vibes;* and five others. FREE SPIRIT FA 6700 \$7.98.

Performance: **Exhausting**  
 Recording: **Good**

Remember the samba? When you play disco music too fast, that's what you get. And that's my problem with this first album by the Anvil Band. The rushed tempos, especially on side one, are exhausting, with the single exception of a pleasant, danceable rendition of the disco favorite of a few months ago, Charo's *Let's Dance (A Little Bit Closer)*. It's a shame, because two of the cuts—*Continental Square Dance* and *Begin the Beguine* (yes, Cole Porter)—evoke ruffled sleeves and banana-hat time and could have worked at a slower pace. Side two is better, though *The Man* is so synopocated and rhythmically complex that I think even experienced dancers will stand there scratching their heads until *I Can't Give You Up* takes over. The next number after that is called—guess what? *Samba* it is! Oh well, maybe I'm just too old to dance that fast. The album ends with *I'll Be True*, a pleasant little toe-tapper, and *Nice Vibes*, a lush, violin-laden respite from all the hurry. The Anvil Band's debut is ambitious, but maybe too ambitious. It just isn't consistent enough to hit any one audience squarely.

—Edward Buxbaum

**THE HUES CORPORATION: *Your Place or Mine.*** The Hues Corporation (vocals); instrumental accompaniment. *Get Up off Your Backsides; Love Dance; Don't Forget to Woogie; Love Fire;* and four others. WARNER

BROS. BSK 3196 \$7.98, ® M8 3196 \$7.97, © M5 3196 \$7.97.

Performance: **Party time**  
 Recording: **Good**

The opening track, *Get Up off Your Backsides*, aptly defines the purpose of this record, which didn't excite me when I listened to it alone but sounds like it should go down well in a room full of noisy people intent on partying down. Everything here is tailored for dancing, including the slower numbers, such as *Needed* and *With All My Affection*. A touch of humor in the simulated party patter of *Bringin' It* and on *Don't Forget to Woogie* is an extra. The combination of one female and two male voices is a welcome departure from the usual group composition, but they don't seem to have much to say musically. P.G.

**TRINI LOPEZ: *Transformed by Time.*** Trini Lopez (vocals); orchestra. *Helplessly; If I Had a Hammer; Lemon Tree;* and four others. ROULETTE SR 3020 \$6.98.

Performance: **Good**  
 Recording: **Good**

It's nice to have Trini Lopez back again in this disco-slanted album. He was one of the better pop entertainers of the Sixties, Folk-Frenetic Division, and he's mellowed gracefully without losing any of his old infectious energy and enthusiasm. He's best (or perhaps it is only nostalgia surfacing) in *Trini's Medley*, which includes *Candida*, *Yellow Bird*, and *Save the Last Dance for Me*. Next best would have to be *Any Time You Wanna Make Love to Me*, which Lopez performs with the darting grace of a picador. The excellent arrangements by Harold Wheeler are somewhat marred by overproduction, but not enough to distract from the overall quality of this disc. P.R.

**LOVE COMMITTEE: *Law and Order.*** Love Committee (vocals); vocal and instrumental accompaniment. *Law and Order; Tired of Being Your Fool; If You Change Your Mind;* and five others. GOLD MIND GA 9500 \$7.98.

Performance: **Sincere**  
 Recording: **Good**

Love Committee's lead singer, Ron Tyson, is clearly someone special. He not only sings his way through the eight cuts on this rockin',



A TASTE OF HONEY: terrifically talented Janice Johnson (left) and Hazel Payne

Capitol Records

dancin', soul album, but he had a hand in writing all of them. And well written they are, for the focus here is as much on the songs as on the dancing. The title track, for instance, rather daringly preaches the importance of "law and order" to us all, ghetto citizens or not. It's a heavy message delivered with a solid, upbeat feel. It's also the first of three Tom Moulton mixes in the album, and that makes it very fancy. Nothing else here comes close to the level of *Law and Order*, but my other favorites are *Tired of Being Your Fool*, which rocks along nicely; a second Moulton mix, *Just As Long As I Got You*; and the driving, soul-based *Cheaters Never Win*.

Unfortunately, though, Love Committee's sound doesn't rise above the ordinary often enough. And there's a measure of pop cliché about the album—especially in the rock-'n'-roll homage of *If You Change Your Mind* and the TV guest-spot predictability of *Put It in the Back of Your Mind*—that keeps it from being truly memorable. —Edward Buxbaum

#### RECORDING OF SPECIAL MERIT

**A TASTE OF HONEY.** A Taste of Honey (vocals and instrumentals); vocal and instrumental accompaniment. *Boogie Oogie Oogie*; *This Love of Ours*; *World Spin*; *Disco Dancin'*; and five others. CAPITOL ST-11754 \$6.98.

Performance: **Mainstream disco**  
Recording: **Rather nice**

A Taste of Honey consists of two young women named Janice M. Johnson and Hazel P. Payne, and they are terrific. They sing sweetly and distinctively, play bass and guitar, respectively, and wrote the words and music for several of the songs on this debut LP, which gives fresh impetus to disco's movement into the mainstream of popular music. Listen especially to the classy close harmony on *This Love of Ours* and *Sky High* and you'll see what I mean. Then catch the gentle, jazz-like instrumental work in the middle of *Distant*. These girls have talent! Throughout the album, they are miked closely, as excellent singers should be, and the beat therefore has a less dominant role than "pure" disco would have it. But the beat is still there, it's strong, and—especially in *Boogie Oogie Oogie*—it's very danceable.

I have only one quibble. Johnson and Payne deliver every song with so much restrained taste that I found myself wishing that they'd let go and belt one out occasionally. But that complaint is minor in comparison with the joy this disc provides. —Edward Buxbaum

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● MUSIQUE: *Keep On Jumpin'*. PRELUDE. PRL 12158 \$7.98.

(List compiled by Marsha Stern, special disco consultant for STEREO REVIEW)

(Continued on page 153)

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Arnold J. Smith

David Amram with Dizzy Gillespie aboard the *Daphne* en route to Cuba, May 1977

## David Amram's Peripatetic "Havana/New York"

IF there is such a thing as a musical "Renaissance man," David Amram surely fills the bill. A cousin of conductor Otto Klemperer, Amram—now approaching forty-eight—began his musical studies in the classical field, but his scope soon went beyond. He has performed with symphony orchestras, street musicians, and just about everything in between, assimilating each role in the spirit called for and tackling each new challenge with radiant, boyish enthusiasm. To see Amram spark an impromptu street-corner session or add some of his many voices to a musical happening in a Greenwich Village coffee house, one would hardly suspect that he was the New York Philharmonic's first composer in residence; wrote the scores for such films as *The Manchurian Candidate*, *Splendor in the Grass*, *The Young Savages*, and *Seven Days in May*; has composed two operas and over one hundred orchestral and chamber-music works; has had his autobiography published; has worked with such major jazz figures as Lionel Hampton, Sonny Rollins, Charles Mingus, and Oscar Pettiford; and has written music for close to fifty Broadway, television, and New York Shakespeare Festival productions.

Amram's recordings include a 1957 session with the Prestige All-Stars, jazz albums under his own name for the French Swing label and American Decca, and, more recently, three RCA releases, the latest of which contains his ambitious Triple Concerto for Woodwind, Brass, Jazz Quintets, and Orchestra and the *Elegy* for Violin and Orchestra (ARL1-0459). These recordings reflect many facets of his musical talent, but they don't by any means tell the whole story. Not surprisingly, Amram's newest album is, to use the famous Monty Python phrase, something completely different.

"Havana/New York" consists of music recorded by Amram and friends in three locations under vastly different circumstances: in a New York studio, on a midtown Manhattan street corner, and at a historic concert in Havana. Chronologically, the Havana concert (the whole of side two) came first; it was the first meeting of American and Cuban musicians on Cuban ground since 1961, when the

U.S. government restricted travel to the Caribbean island. To help turn the cruise ship *Daphne's* thirty-six-hour stopover in Havana into a media event, the ship's owners invited a group of jazz musicians along and arranged for them to give a concert on the night of May 18, 1977. Amram, who brought with him percussionist Ray Mantilla, immediately began work on his *En Memoria de Chano Pozo*, dedicated—as was the entire concert—to the late Cuban drummer. (Pozo, who has been called the greatest of all Cuban percussionists, came to the U.S. in 1947 to work with Dizzy Gillespie's orchestra, and he became a prime force in what was called Afro-Cuban jazz. A year after his arrival, at the height of his influence, Pozo was fatally shot in a Harlem bar.) Borrowing bassist John Ore and drummer Billy Hart from Stan Getz (who was aboard, along with Gillespie and pianist Earl Hines), Amram rehearsed his piece en route and enlisted the support of several Cuban musicians, who obviously had no problem realizing what the composer had in mind.

... tackling each new challenge with radiant, boyish enthusiasm

The solos by alto saxophonist Paquito de Rivera and trumpeter Arturo Sandoval are fiery and as current as anything one might hear at a New York loft session. Amram's piano introduction to *En Memoria de Chano Pozo* is slow, soulful, and stunningly beautiful, but the piece soon erupts into an orgasmic frenzy of rhythm, with Ray Mantilla and Billy Hart joined by Los Papines, four Cuban brothers whose percussive skills have won them a worldwide reputation. Throughout all this, Amram contributes a characteristic series of personal touches, switching from instrument to instrument. The audience, includ-

ing both Cubans and Americans, claps hands and responds enthusiastically.

Side one contains two more Amram compositions, *Havana/New York* and *Para los Papines*—dedicated to Gillespie and Los Papines, respectively—recorded under studio conditions in New York two months later. Los Papines, then touring the U.S., are on hand again, as are such local figures as Thad Jones, Pepper Adams, Jerry Dodgion, Billy Mitchell, George Barrow, Eddie Gomez, Candido, Nicky Morero, Ray Mantilla, and four women vocalists. These tracks don't have the historical value of the Cuban recording, but they contain the best music I have heard in the Afro-Cuban genre for many years.

Finally, there is a track titled *Broadway Reunion*. It was recorded—remarkably well—on a portable cassette machine during an appearance of Billy Taylor's jazzmobile at the corner of Broadway and 44th Street, in New York's Times Square area, in June 1977. David Amram just happened to be there and he just happened to have some instruments in his pocket. Trucks and subways also just happen to rush by and underneath, but their noise and that of the crowd merely lend an appropriate atmosphere to the kind of brief happening that is a typical occurrence in David Amram's life.

**F**LYING FISH, a small Chicago-based label, plans to release more Amram goodies, including reissuing the three RCA albums, to which they have acquired the rights, and "Summer Nights/Winter Rain," an album so far released only on Canadian RCA. As for *En Memoria de Chano Pozo*, Amram has since scored it for symphony orchestra as a nine-minute work. Let's hope that version will also eventually be available on disc.

—Chris Albertson

**DAVID AMRAM: *Havana/New York***. David Amram (piano, Spanish guitar, French horn, wooden flutes, penny whistles, pentatonic xylophone, percussion); other musicians. *Havana/New York*; *Para los Papines*; *Broadway Reunion*; *En Memoria de Chano Pozo*. FLYING FISH FF-057 \$7.98.

# JAZZ



**AURACLE: *Glider*.** Auracle (instrumentals). *Columbian Bubblegum; Slezzy Listening; Sartori; Chez Amis*; and four others. CHRYSALIS CHR 1172 \$7.98.

Performance: **Artful and original**  
Recording: **Excellent**

This is Auracle's first commercially released record, but the sextet of former Eastman School of Music students, now in their early to mid-twenties, has been an active unit for close to five years. In 1974 Auracle won an Upstate New York Battle of the Bands sponsored by Columbia Records; the prize was 250 pressed copies of a demo recording made in a Columbia studio. Armed with their demos, the group split into three search parties: two went to Los Angeles, two to Chicago, and two to New York. A month later, they assembled in Chicago to compare notes, finally deciding to go with Chrysalis, a label that has an old-fashioned but sensible policy of signing and developing unproved acts. In a way, Auracle had already proved itself by being voted first in the Small Group category at the 1975 Notre Dame Jazz Festival, but the most persuasive argument for signing the band was probably the sound it generates.

Considering their background, it is no surprise to find that all six members of Auracle play their many instruments with impressive technical skill, and considering the length of time they have played together the group's well-blended sound is equally predictable. I heard the group perform at Donte's in Los Angeles earlier this year, and it is as impressive on the bandstand as on its debut album. I mention this because Auracle's music is so rich in tonal colors, so precisely executed, and its sound so full that one might easily suspect technological trickery when listening to the album. One reason for the rich and varied textures in Auracle's music is that most of its members play a variety of instruments and numerous combinations of them are employed within each selection. The compositions—all originals by members of the group—are as interesting and complex as they are diversified, with frequent use of odd meters. Auracle has been called a jazz-rock group, but that is a misnomer. Make no mistake about it, Auracle is all jazz, and if its sound bears any kinship to something you might have heard from a rock group it is only because that rock group has taken a cue or two from jazz.

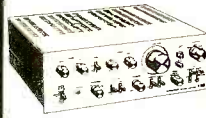
My only criticism is that Auracle tends to be a bit rigid; the arrangements are very tight, and there are times one wishes these guys would loosen up and extend some of those fine solos. That is not a minor complaint, and others have expressed the same objection, but there is so much genuine talent in this sextet that I am sure they will overcome this one flaw. Auracle is refreshing, and I have a feel-

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ing that the group will be widely accepted when it blossoms. C.A.

**RY COODER:** *Jazz* (see Best of the Month, page 103)

**RECORDING OF SPECIAL MERIT**

**DEXTER GORDON:** *Bouncin' with Dex.* Dexter Gordon (tenor saxophone); Tete Montoliu (piano); Niels-Henning Ørsted Pedersen (bass); Billy Higgins (drums). *Easy Living; Four; Catalonian Nights;* and two others. **INNER CITY IC 2060 \$7.98.**

Performance: **Electrifying**  
Recording: **Good**

Dexter Gordon's recent reintroduction to the American public continues to swell the record catalogs, and I don't have any complaints about it as long as the releases are as good as this 1975 Copenhagen date. Gordon's robust and pure sound is a wonderful antidote to the bland crossover music of this era, and this quartet session is even better than his more recent efforts on Columbia. That is likely due—in part, at least—to the presence here of a rhythm section Gordon has been working with since the early Sixties. That drummer Billy Higgins and Danish bass ace Niels-Henning Ørsted Pedersen (if only he would shorten that name) sound splendid was not a surprise to me, but I must say that Spanish pianist Tete Montoliu performs far beyond my expectations on this set. He is obviously more in tune with Gordon than he was with Ben Webster on the recently released "Did You Call?" album (Nessa N-8). Since record companies are deletion-happy, especially when it comes to jazz, Dexter Gordon fans had better grab this album while it's still around. C.A.

**RECORDING OF SPECIAL MERIT**

**SOPRANO SUMMIT:** *Live at Concord '77.* Bob Wilber (clarinet, soprano and alto saxophones); Kenny Davern (clarinet, soprano saxophone); Marty Grosz (guitar); Monty Budwig (bass); Jake Hanna (drums). *Puggles; Elsa's Dream; Panama Rag; How Can You Face Me?;* and three others. **CONCORD JAZZ CJ-52 \$7.98.**

Performance: **Rompin' and stompin'**  
Recording: **Excellent remote**

For the second year in a row, Concord Jazz has recorded Soprano Summit in performance at the Concord Summer Festival, and, once again, the resulting album is a joyful, superbly played mixture of old and new material. The style is of another era, to be sure, but the approach is wonderfully fresh and guaranteed to put your body in motion. Co-leaders Bob Wilber and Kenny Davern weave free-flowing patterns in the finest Bechet tradition, and the rhythm section—with Monty Budwig in the spot occupied the previous year by Ray Brown—swings madly on *Strike Up the Band, Elsa's Dream,* and Fats Waller's *The Panic Is On.* The last also features guitarist Marty Grosz singing the humorous lyrics with the same wonderful sensitivity he exhibits in his playing. Few contemporary musicians can capture that spirit of old without sounding imitative, and Soprano Summit would not be the same with any other guitarist.

I did not review the previous Soprano Summit album from Concord ("Soprano Summit (Continued on page 157)

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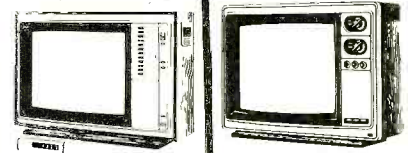
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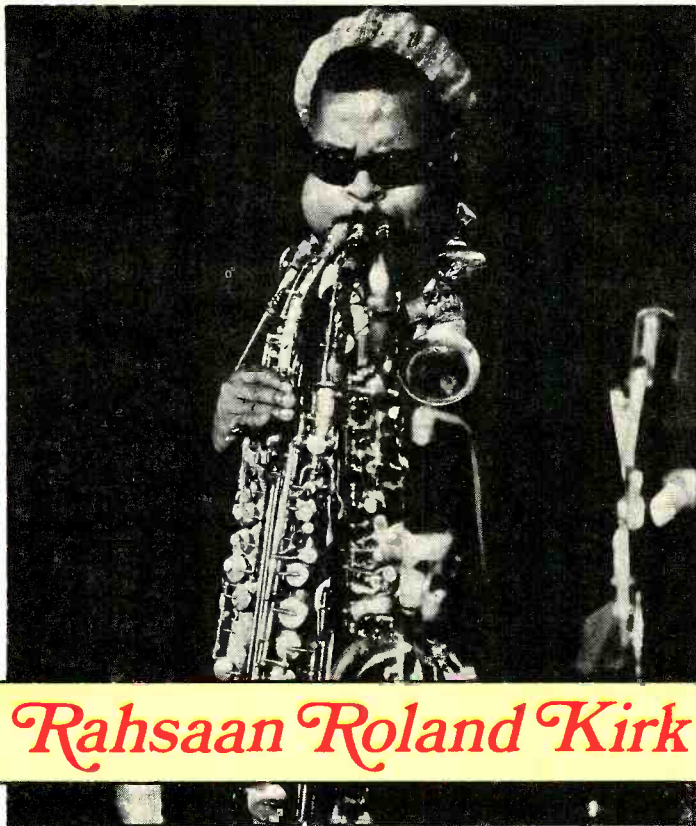
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## Rahsaan Roland Kirk

WHEN Rahsaan Roland Kirk died last year at the age of forty-two, jazz lost one of its unique and most colorful performers. Kirk, blinded in infancy by a careless nurse, first came to the attention of critics in the late Fifties, not so much because he was a great musician (though he was a very good one) as because he played more than one wind instrument at a time, and he did it very effectively. That sort of thing wasn't exactly new—one Wilbur Sweatman had done it in an earlier jazz age, and so had a number of vaudeville performers—but Kirk added a new and significant dimension by being able to play simultaneously more than one melodic line (later, more than two).

Understandably, many critics approached Kirk's music cautiously at first, seeing it as little more than a gimmick. It was that, to be sure—and Rahsaan Roland Kirk loved all kinds of gimmickry—but he was first and foremost a musician, and thus able to turn novelty into art. That is, he frequently reached artistic heights—but not always, and therein lies an enigma. Kirk showed a marvelous command of his various instruments, and he generally used that proficiency to express, in a highly individual manner, the thoughts of a most fertile musical mind. But there were also times when this extraordinary man gave performances that were so ordinary as to be banal. While I have never understood Kirk's lapses into mediocrity, I have found even more perplexing the fact that he recorded such moments. It became fashionable to regard Kirk as some sort of eccentric genius, and many writers tended to accept anything he did as art; perhaps he believed them, but he could also merely have been testing us.

Fortunately, Kirk's good moments outweighed the bad ones, and when he was good he was often awesome. "The Vibration Continues" is a collection of recordings made by Kirk for Atlantic between 1967 and 1975. It includes some of his best work for that label and offers enough variety to give the listener a good idea of the many directions Kirk traveled in. There are also enough of Kirk's own compositions included to give the correct impression that, for all his other original qualities, Rahsaan Roland Kirk was a most unimaginative composer who tended to assemble the melodic lines of others rather than invent his own. *Portrait of Those Beautiful Ladies* is a gross example of this, being unashamedly pieced together from bits of *Good Morning Heartache*, *Lover Man*, and *Early Autumn*. Other compositions were often simple, straightforward blues, such as *The Black and Crazy Blues*, but he could also weave familiar threads into exciting new cloth, as he did in *Old Rugged Cross*. The reason so much of Kirk's music is laced with familiar strains is probably that innate curiosity he had about

... and when he was good he was awesome

the music of his predecessors; he was constantly making references—both musical and verbal—to the great individuals and pioneers of jazz, exploring every old nook and cranny

of the music while never hesitating to leap into its present. All of that comes through in this retrospective double album, which contains wonderful examples of his multiple-instrument techniques, bold patches of harmonic textures and colors, demonstrations of his amazing ability to play incredibly long passages without seeming to take a breath, and a few inevitable rough spots.

I cannot as strongly recommend Kirk's very last album, "Boogie-Woogie String Along for Real." But I hasten to point out that some of Kirk's performances here are astounding given the circumstances. In November 1975 he suffered a severe stroke that permanently paralyzed his right hand, a handicap that would probably have discouraged most reed players from taking up their instruments again—but not Rahsaan Roland Kirk. Of course, we don't hear his multiple-instrument technique on this album, but he does separately play both clarinet and tenor saxophone with remarkable fluency and less simplicity than one might expect. What helps the album along is the solid, deep-rooted blues piano of Sammy Price (with guitarist Tiny Grimes and former Armstrong bassist Arvell Shaw) on five selections and Percy Heath's wonderfully buoyant, plucked cello on *Hey Babe!bips* and *Watergate Blues*. Kirk plays harmonica on the latter and also on *Summertime*, but not very well.

THERE is a certain warmth about "Boogie-Woogie . . ." but it lacks the excitement Kirk used to be able to generate, for he was a man struggling to express himself with a limited vocabulary. It must have been a painful experience, and one has to admire his spirit. Those of us who met this remarkable man, or experienced him in performance—dressed like a street musician, instruments dangling in front of him and protruding from his pockets—will not soon forget the joyous, swinging sounds he gave us, nor the sense of history he exuded. —Chris Albertson

**RAHSAAN ROLAND KIRK: *The Vibration Continues*.** Rahsaan Roland Kirk (English horn, flute, clarinet, tenor saxophone, reed trumpet, manzello, stritch, flexaphone, other instruments); instrumental accompaniment. *The Inflated Tear; Introduction and Medley; Water for Robeson and Williams; Volunteered Slavery; I Love You, Yes I Do; Rahsaanica; Do Nothin' Till You Hear from Me; Ain't No Sunshine; A Tribute to John Coltrane; Three for the Festival; Old Rugged Cross; The Black and Crazy Blues; Portrait of Those Beautiful Ladies; If I Loved You; Creole Love Call; Seasons.* ATLANTIC SD 2-1003 two discs \$9.98, ® TP 2-1003 \$10.98, © CS 2-1003 \$10.98.



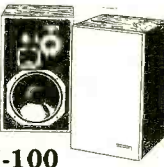
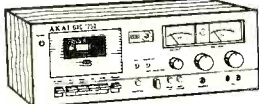
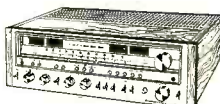


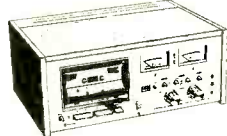


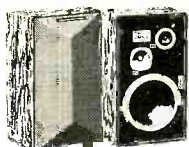
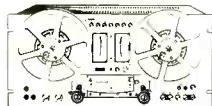
**RAHSAAN ROLAND KIRK: *Boogie-Woogie String Along for Real*.** Rahsaan Roland Kirk (clarinet, tenor saxophone, harmonica, electric kalimba, flute, vocals); Sammy Price (piano); Percy Heath, Arvell Shaw (bass); Tiny Grimes (guitar); other musicians. *I Loves You, Porgy; Boogie-Woogie String Along for Real; Make Me a Pallet on the Floor; Hey Babe!bips; In a Mellow Tone; Summertime; Dorthaan's Walk; Watergate Blues.* WARNER BROS. BSK 3085 \$7.98.



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bass, lent a distinct character to many outstanding small-band recordings of the Forties, including a series of celebrated sides by the Art Tatum Trio. During the latter half of the Forties, he also headed his own small groups on such labels as Savoy, Continental, Manor, Arista, and Musicraft, counting among his sidemen Erroll Garner, Red Norvo, Don Byas, and Billy Taylor. In recent years, Slam Stewart has most often been heard working with Rose "Chee Chee" Murphy.

Though Bucky Pizzarelli is a fine artist in his own right, it is Stewart who dominates this new album. Pizzarelli plays his amplified guitar in a relaxed style, exhibiting excellent technique and an awareness of his instrument's past masters, but he is not the individualist Stewart is; nevertheless, they work extremely well together. Slam still employs his unusual technique effectively, occasionally sneaking a word into his otherwise wordless vocals. Leon Russell's *Masquerade* shows him reclaiming his technique from George Benson, who used it on his hit version of the song a couple of years ago, and *Jersey Bounce* is a good example of that combination of musicianship and wit that made Slam Stewart and Dizzy Gillespie such perfect musical partners in the 52nd Street days.

The Stash label has previously been devoted to reissue collections based on such themes as drugs, sex, and women in jazz—this is the company's first original release, and it is a very encouraging start. C.A.

#### RECORDING OF SPECIAL MERIT

**EARL SWOPE SEXTET: *The Lost Session.*** Earl Swope (trombone); Shorty Rogers (trumpet); Emmett Carls (tenor saxophone); Lennie Tristano (piano); Billy Bauer (guitar); Chubby Jackson, Leonard Gaskin (bass); Don Lamond (drums). *Tea for Two* (two versions); *Yesterdays*; *Talk of the Town* (two versions); *A Night in Tunisia*; *These Foolish Things* (two versions); and six others. JAZZ GUILD ® 1008 \$7.98 (from Jazz Guild, P.O. Box 194, Plainview, N.Y. 11803).

Performance: **Fascinating and historic**  
Recording: **Vintage, but very good**

This album is a must for any student of modern jazz. It may seem incongruous to refer to something recorded over thirty years ago as modern, but jazz radically changed its course in the mid-Forties, when these recordings were made. It became modern with the advent of bop, which introduced harmonic and rhythmic concepts that have yet to be improved upon. The musicians heard in this album were in the avant-garde of the new music, especially pianist Lennie Tristano, whose innovative harmonic ideas brought the art of jazz improvisation to new heights and developed for him a cult following. Tristano is the real star of "The Lost Session." The Earl Swope Sextet tracks that take up all of side one were his first recordings, and, though he was not the leader on the date, he was its dominant force. The four piano solos that begin side two were made the following year, 1946, and they, too, were privately recorded and not previously released. The album's last two tracks, *I Can't Get Started* and *A Night in Tunisia* by the Lennie Tristano Trio, were issued on V-Disc, but not on the commercial market. This, then, is an extraordinary document of Tristano's work prior to his celebrated *Keystone* recordings. On hearing this music

some thirty years later, Tristano remarked that it was "rather prophetic." Indeed it was.

The sextet sides—four standard tunes, three of which are represented by two noticeably different takes and none of which follows the composer's intended melody line—also contain fine performances by Swope, Shorty Rogers, and Emmett Carls. Swope, whose widow provided the well-preserved acetate discs of this session, was one of the pioneers of modern jazz trombone, and his playing on these 1945 sides is very impressive considering the period; his two approaches to *These Foolish Things* are studies in eloquence.

Tristano recorded the four solo tracks just before leaving Chicago for New York. Again, standard material is virtually rewritten. My favorite is *I Found a New Baby*, which only the keenest ear would recognize as such. The two trio numbers, with bassist Leonard Gaskin and guitarist Billy Bauer (who left Woody Herman's orchestra that same year), come closest to the sound that soon was to give Tristano wide renown. Bauer and Tristano always worked well together, and this, their first recorded collaboration, shows how well. The 1949 Capitol sessions with Bauer and fellow Tristano disciples Lee Konitz and Warne Marsh are, of course, the ultimate Tristano sides, but this album offers a vital and fascinating prelude. C.A.

#### RECORDING OF SPECIAL MERIT

**RUSS TOMPKINS AND JOE VENUTI: *Live at Concord '77.*** Joe Venuti (violin); Russ Tompkins (piano); Scott Hamilton (tenor saxophone); Ray Brown (bass); Jake Hanna (drums). *Softly As in a Morning Sunrise*; *I Got It Bad and That Ain't Good*; *Do Nothin' Till You Hear from Me*; and four others. CONCORD JAZZ CJ-51 \$7.98.

Performance: **Master at work**  
Recording: **Excellent**

Joe Venuti "invented" the violin as a jazz instrument more than fifty years ago in a series of duets with his pal Eddie Lang (who "invented" the jazz guitar). Today Venuti, almost an octogenarian, is still a thrilling creator with a rugged, flexible technique.

The recordings here were made in the summer of 1977 at a San Francisco jazz festival, and Venuti is in top form. He is featured on *I Want to Be Happy*, *Do Nothin' Till You Hear from Me*, *Almost Like Being in Love*, and *Dark Eyes* (interestingly arranged by Russ Tompkins, a pianist of verve and diligence). Tenor saxophonist Scott Hamilton, whose tone is something like Coleman Hawkins' and whose thinking is something like Bud Freeman's, is turned loose on *I Got It Bad and That Ain't Good*, while *Softly As in a Morning Sunrise* and *Witchcraft* are showcases for Tompkins. Bassist Ray Brown and drummer Jake Hanna are, like all good rhythm sections, both admirably consistent and creative.

A word about the recording itself: Concord Jazz is a small label, but it has given time and attention to achieving a superior sound on this live recording; were it not for the applause, it might be taken for a studio album. High marks to recording engineer Phil Edwards. This is a lovely job on stage and off. J.V.

**FATS WALLER: *Ain't Misbehavin', Original-cast Recording*** (see *The Pop Beat*, page 72)

(Continued on page 163)







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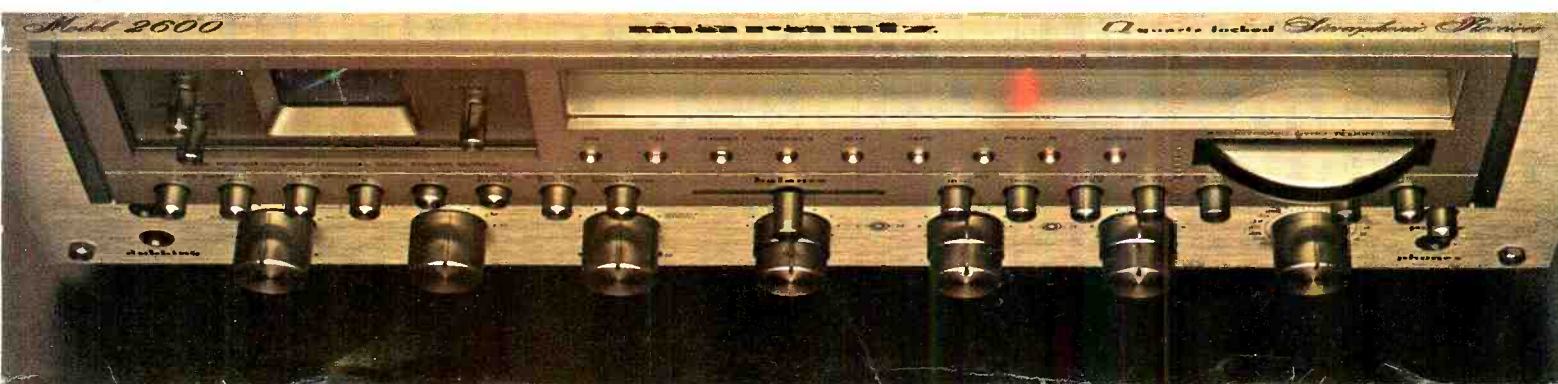
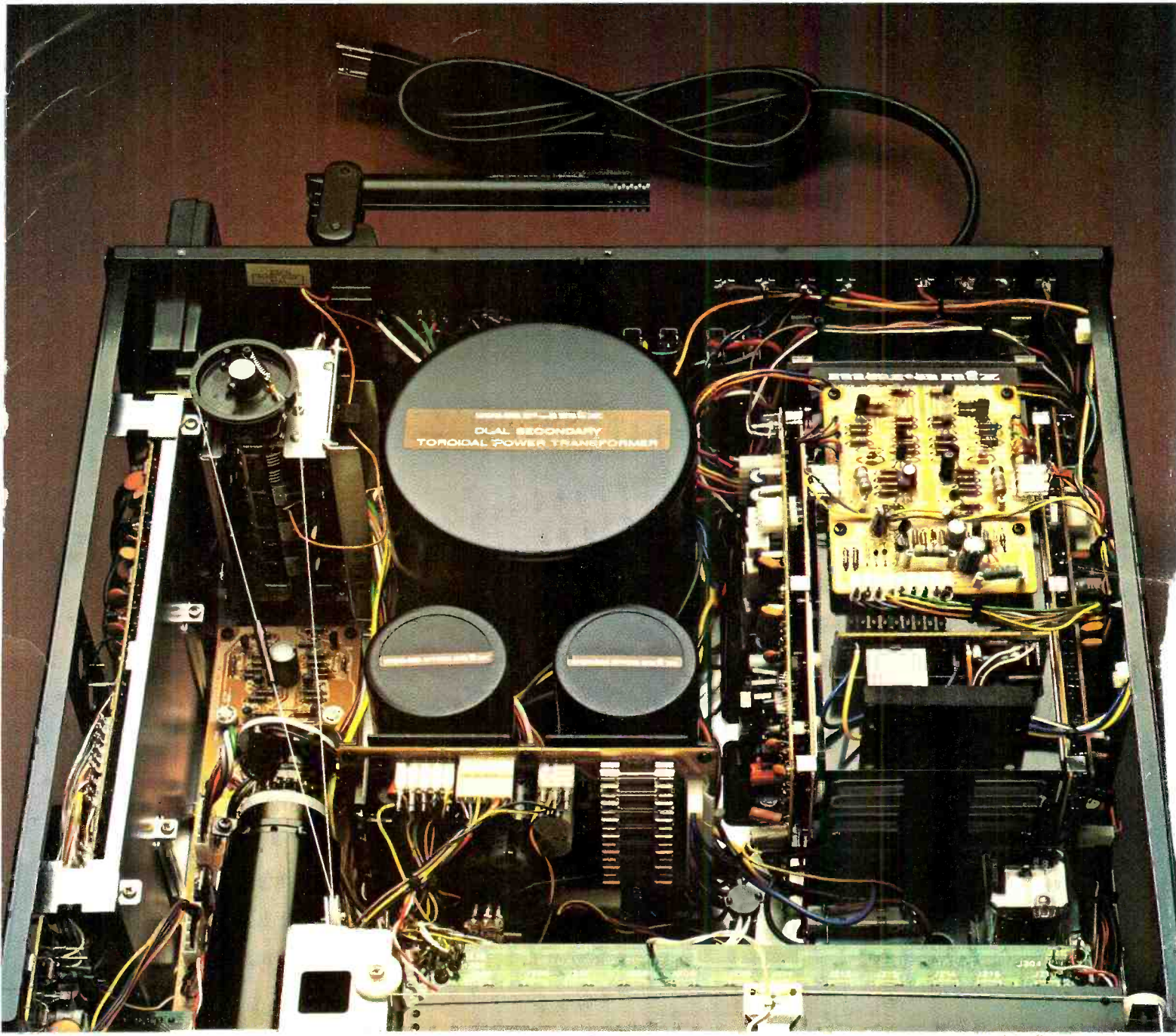
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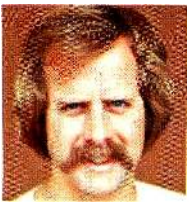
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