

SPECIAL
TAPE ISSUE

MARCH 1979 • \$1.25

Stereo Review[®]

THE FUTURE OF MAGNETIC TAPE • HOW TAPE RECORDERS WORK
CONDUCTOR RICCARDO MUTI • FIRST VIDEODISC ON THE MARKET

EQUIPMENT TEST REPORTS: B.I.C. FM-8 "Beam Box" FM Antenna
Design Acoustics D-12A Speaker System • Kenwood KT-917 Stereo FM Tuner
Philips AF 877 Record Player • Sansui AU-919 Integrated Amplifier

PORTABLE CASSETTE RECORDERS: GUIDE TO THE MARVELOUS MIDGETS



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

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

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

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

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

A METERING SYSTEM AS FAST AS THE SPEED OF SOUND.

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

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

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

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

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

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

A DIGITAL BRAIN WITH AN INCREDIBLE MEMORY.

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

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

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

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

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

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

Memory Stop automatically stops the tape wherever you select. Memory

ONCE AGAIN, PIONEER BUILT IT SOONER.

THE CT-F900. THE FIRST 3-HEADED, DUAL CAPSTAN CASSETTE DECK THAT OFFERS FLUROSCAN METERING, DOUBLE-DOLBY, A DIGITAL BRAIN AND BIASING BY EAR.

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

WE'RE HARD HEADED, BUT SENSITIVE.

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

And while you can expect three heads from most reputable cassette

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

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

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

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

control what you monitor.

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

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

FEATURES OTHERS DON'T EVEN OFFER.

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

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

Obviously, all that went into the

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

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

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

Value.

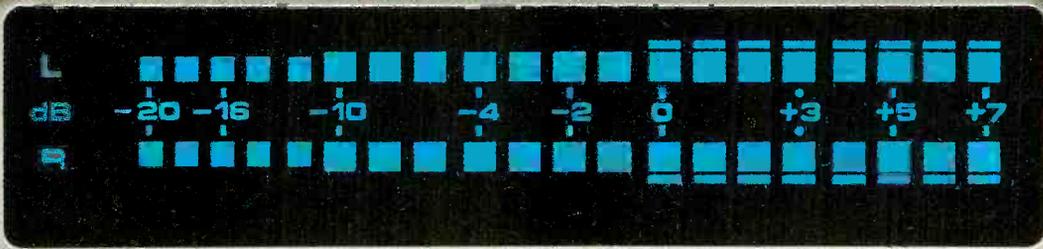
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PIONEER
We bring it back alive.

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

Wood cabinet optional.





TAPE COUNTER



MEMORY /REPEAT DOLBY NR



TAPE

CrO₂ Fe-Cr



COUNTER

RESET



MEMORY REPEAT
STOP PLAY COUNTER END OFF



TIMER START

PLAY

REC

OFF



METER

PEAK

PEAK HOLD

AVERAGE





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

It was inevitable . . .

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

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

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

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

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

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

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

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

That's because the new Empire EDR.9 is the first phono cartridge that not only meets the highest technological and design specifications—but also our demanding listening tests.

Empire Scientific Corp. **EMPIRE**
Garden City, N.Y. 11530

FORMERLY HI FI/STEREO REVIEW

Stereo Review®

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COVER: Design by Borys Patchowsky; photo by Bruce Pendleton. See page 72.

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The first high-technology record cleaner was the Discwasher System. Four scientific revisions later, the Discwasher is literally years ahead of all other devices.

WITH PRIORITY TECHNOLOGY:

Discwasher D3 Fluid is proven by lab tests to be the safest active cleaning fluid for record care. But a good fluid is not enough. The Discwasher System is also a *precision removal system* that uses capillary action with slanted micro-fibers to lift dust, dirt, and dissolved debris off the record, rather than pushing them around like "dry" and "constant humidity" methods. The real dimensions of record care are safety plus integrated function.

WITH PROVEN VALUE:

The uniquely styled Discwasher handle is constructed of hand-rubbed walnut which will long outlast "plastic wonders". This easily held handle is lightweight because of an integral cavity which conveniently holds the D3 Fluid bottle. A special brush to clean the directional-fiber Discwasher pad is included without charge, and also fits inside the handle cavity.

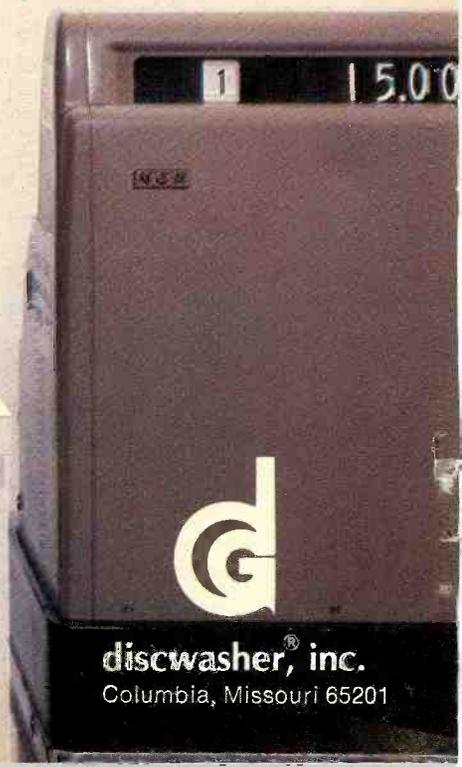
WITH GENUINE SATISFACTION:

Only Discwasher gives immediate performance, long-term record safety, pleasing physical characteristics and a price that hasn't changed in five years.

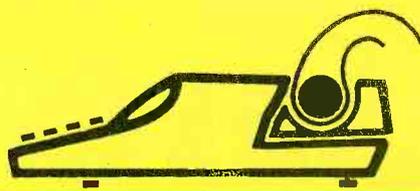
Seek out the Discwasher System, by name. Only Discwasher delivers technology, value and satisfaction.

CIRCLE NO. 20 ON READER SERVICE CARD

YOUR RECORDS DESERVE SUPERIOR CARE: SEEK OUT THE DISCWASHER® SYSTEM



discwasher, inc.
Columbia, Missouri 65201



Edited by William Livingstone

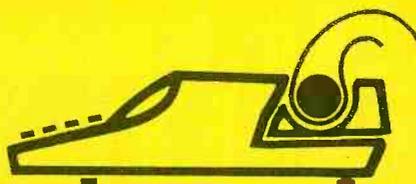
● NOTED AT LAS VEGAS' WINTER CONSUMER ELECTRONICS SHOW: much activity on the metal-particle-tape front, with introductions of metal-particle-compatible decks (or retrofit programs for current decks) by nearly a dozen manufacturers and announcements of availability of blank metal-particle tape by at least two others....More cassette decks that electronically test each cassette inserted into their wells, then automatically adjust bias, equalization, and other parameters for best performance.... First appearance of electronic components that adjust themselves automatically for various a.c. line voltages worldwide.... Carver Corporation's 200-watt-per-channel, 13-pound power amplifier in a 6 3/4-inch cube with highly unusual circuit design to sell for about \$300....First large-scale introduction of cigar-box-size mini-components to the U.S. market.

● REVISED STANDARDS FOR DISC RECORDINGS have been issued by the Recording Industry Association of America. Although the revisions are not extensive, they do include increasing the frequency range covered by the RIAA standard: formerly 30 to 15,000 Hz, it is now 20 to 20,000 Hz. Copies of the revision (Bulletin E-1) are available free from the RIAA, 1 East 57th Street, New York 10022.

● A LIQUID-COOLED AMPLIFIER using a tubular heat-exchanger filled with a special fluid has been shown in Japan by Sony. The novel technique is said to permit a more compact layout through better heat dissipation in critical output stages. This could mean more widespread use of pure Class-A amplifier designs, which up to now have generally had low power outputs because of the need for massive heat-sink assemblies.

● A TECHNICAL BREAKTHROUGH IN AUTO STEREO, or perhaps just the ultimate vibrator, has been announced by Pioneer of America. Their Bodysonic seat cushion transmits bass vibrations of music played on the car stereo directly to the body of the person sitting against the cushion. A separate amplifier with a control labeled "intensity" affords adjustment of the degree of vibration. Pioneer advertises it as the first product "that allows the listener to feel the music."

● WORKS IN PROGRESS: Harry Nilsson is at Cherokee Studios in Los Angeles completing his first album for United Artists; Memphis legend Steve Cropper (fresh from backing the Blues Brothers) is producing. Power pop-sters the Knack are also in L.A. recording their Capitol debut, which will include yet another giveaway song (Rendezvous) by the magnanimous Bruce Springsteen. Gary Brooker, the voice and piano behind the now defunct Procol Harum, is readying his first solo effort in collaboration with Beatles producer George Martin for a tentative April release on Chrysalis. Founding Father Chuck Berry, newly signed to Atco, may be produced by Keith Richards. And the Rolling Stones are following Dire Straits (who've just wrapped up their second effort, with Jerry Wexler at the helm) into the Bahamas' Compass Point Studio to work on the follow-up to "Some Girls," also scheduled (but don't hold your breath) for April.



Edited by William Livingstone

● 9.4 MILLION AMERICAN HOUSEHOLDS have component stereo systems with a value of \$600 or more, according to a recent survey conducted by Opinion Research of Princeton, New Jersey, for STEREO REVIEW. This figure represents about 12.3 per cent of all American households having telephones, according to the pollsters. The survey is the first nationally projectable measurement of audio-component popularity in the U.S.

● RCA'S SELECTAVISION VIDEODISC SYSTEM will be introduced to the consumer market with "maximum speed," according to RCA president Edgar Griffiths. Industry observers view this announcement as a reaction to the introduction of the Magnavox videodisc system last December (see this month's Audio News, page 30). The RCA disc player, which operates on a capacitance principle and is incompatible with the Magnavox system, is projected to sell for about \$400, the discs to cost between \$10 and \$17.

PIONEER has demonstrated an industrial videodisc player that is compatible with MCA's videodiscs. Pioneer manufactures the player in a joint venture with MCA, the supplier of discs for the Magnavox system. The Pioneer unit is intended primarily for commercial and educational use, and it was shown to demonstrate the company's capability in this field. Pioneer's intentions in the consumer videodisc area will be revealed, the company says, by October 1979.

● BEETHOVEN'S NINE: Herbert von Karajan's award-winning recording of the complete Beethoven symphonies with the Berlin Philharmonic, released by Deutsche Grammophon in a boxed set in 1977, is now available on single discs. Lorin Maazel has just recorded the symphonies with the Cleveland Orchestra for Columbia, and his de luxe eight-record set should be in stores by March 1.

● A SPECIAL PILOT-TONE SYSTEM for Dolbyized broadcasts will automatically switch in the noise-reduction system of properly equipped FM receivers. The system, to be submitted to the FCC this year for approval, was demonstrated at the recent Las Vegas Winter Consumer Electronics Show.

● CAR-STEREO AMPLIFIER-POWER RATINGS in general are as untrustworthy (or at least noncomparable) as home-stereo amplifier ratings were before the Federal Trade Commission brought everyone into line. Discussions have taken place among the IHF Standards Committee members on the question and at least one manufacturer (Pioneer) has called for standardization of specifications.

● CARVER CORPORATION is the name of the new hi-fi manufacturing company established by Bob Carver, founder of Phase Linear. The name was chosen in a contest first announced in these pages in July 1978, with a prize of Carver Corp. equipment to go to the person whose entry was chosen as the most suitable. Only seventy people had the wit and imagination to suggest Carver Corporation. The winner, who was chosen by lot from among those seventy, is STEREO REVIEW reader Tony Rank, of Tulsa, Oklahoma.



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

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The end of paper cones and their distortion

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

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

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True Infinity sound. From a definitely finite space.

† Manufactured by Infinity under license from Watkins Engineering, Inc.

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

The logo for Infinity, featuring a stylized 'i' symbol followed by the word 'Infinity' in a serif font.

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CIRCLE NO. 28 ON READER SERVICE CARD

Speaking of Music...

By William Anderson



POLITICAL MUSIC/MUSICAL POLITICS

POLITICS and poker, according to the Jerry Bock/Sheldon Harnick musical *Fiorello*, go together as naturally as, say, grits and red gravy. There are those who claim to see a similar affinity between politics and music, but the evidence is, I think, overwhelmingly against them. Trying to get music to snuggle up to any kind of ideological message, either implicit or explicit, is like trying to teach a nightingale to sing stockmarket reports. But people continue, ingeniously, to try.

One such attempt arrived on my turntable recently just in time to be decisively refuted by the evening news. I had, in fact, scarcely finished listening to a two-disc Angel release (SB-3865) called "Treasures of the Baroque Era" and featuring the National Iranian Radio & Television Chamber Orchestra when I was treated to the TV spectacle of 2,000 Iranian "students" mounting a flaming assault up a Beverly Hill-side to communicate their dis-

pleasure to Tadj ul Moluk, the ninety-year-old wheelchair-bound mother of Iran's Shah Mohammed Reza Pahlavi. Others, including President Jimmy Carter, have commented on that persuasively sophisticated "political statement," so let us return to the "Treasures of the Baroque."

The NIRT Chamber Orchestra, founded in 1967, has developed a repertoire that ranges from the Baroque to the twentieth century and includes commissioned works by Iranian composers. It plays a regular concert season under Bulgarian-born conductor Emil Tcharov (who has conducted in Minneapolis and at Tanglewood) and tours both at home and abroad (Paris, Brussels, Amsterdam, Moscow). The Angel release is a kind of sampler, containing works (and parts of works) by Vivaldi, Handel, Rameau, Bach (the Allegro from the *Brandenburg* No. 3), Marcelllo, Torelli, Corelli, Albinoni (yes, the Adagio in G

Minor—some of these works are perilously, surprisingly close to becoming warhorses already), and Boccherini. The playing, though competent, is uninspiring—rather like the "Baroque" music we used to hear a lot of about fifteen years ago. It is note perfect, but disturbingly lacking in affect. A good example would be the metronomic Bach; perhaps a better one the Boccherini *Musica Notturna di Madrid*—pretty, but with none of the electric atmosphere, the almost palpable Iberian air that suffuses the version by Karajan and the Berlin Philharmonic (DG 2530 247).

Why would anybody go to the trouble of releasing internationally two discs full of provincial music making? Because the message is not the music but the musical organization itself, a kind of status symbol meant to suggest paid-up membership in the cultural community of modern nations in a way mere Cadillacs and Mercedes-Benzes never could. Unfortunately, it works neither as politics nor as music, and the reason has nothing to do with the bad timing. Iran, formerly Persia, has a proud five-thousand-year history and perfectly respectable music to go with it. The vocal music is filled with a kind of melismatic cantillation (ululation?) reminiscent of Spanish flamenco, the instrumental with echoes of Indian ragas (check "The Persian Santur," Nonesuch Explorer Series H-72039). There is, significantly, none of it on the Angel discs, and if there are many more such unbridged chasms separating the modern and traditional cultures in Iran, little wonder that the country's leap into the twentieth century fell short.

Another such leap is about to take place in China, and we have already heard the phonographic curio—the *Yellow River* piano concerto (see April 1974 STEREO REVIEW)—that may be its theme song. It remains to be seen, however, just how this cultural wrench will be handled in the years to come. As Cole Porter observed in *Come to the Supermarket (In Old Peking)*, the Chinese are tremendous merchandisers; perhaps even the most exotic of Western music will not be too much for them.

Stereo Review

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P.O. Box 2771, Boulder, Colorado 80323

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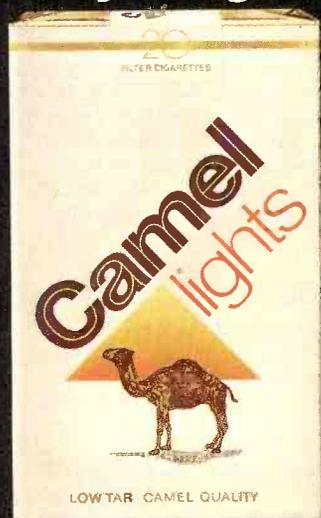
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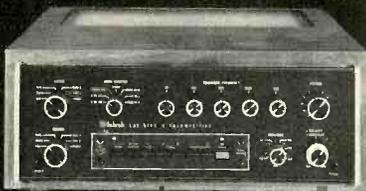
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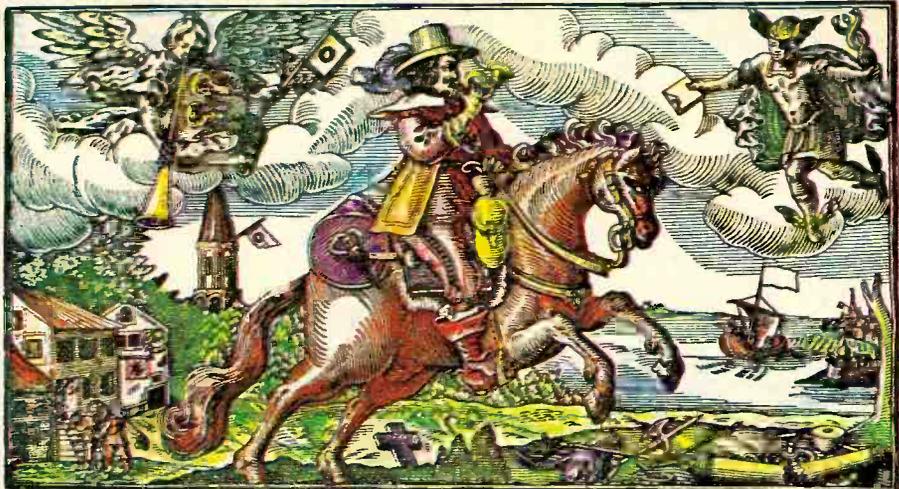
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LETTERS TO THE EDITOR

Dear Record Company

● January's article on record quality control by "Engineer X" is one of the most novel and informative pieces on the subject that I have read. The author seems to be doing his job with the utmost accuracy, and I hope that what he has said will help readers understand the plight of the quality-control people at record companies and appreciate what they are doing for audiophiles. I am an audiophile and owner of a small music-production company; I have the finest equipment and a record collection that I am proud of. I handle my records by the edge (the more valuable ones with gloves on), and I am happy to report that out of close to 1,500 that I have purchased I have had to return only about ten because of defects, mostly warps. Damn few have had anything that I would call a *manufacturing* defect. Moreover, I have *never* had any difficulties in returning defective records. I feel that the quality of record manufacturing today is great and getting better all the time. "Engineer X" should be proud of his product!

JOSEPH J. JAHRLING
Kansas City, Mo.

● The author of "Dear Record Company" should know that the Postal Service no longer has a mailing category called "Educational Material." Materials sent to and from the audiovisual center in the school where I work are now marked "Library Rate." For the ordinary person who does not qualify for this category, the words "Special 4th-Class Rate—Sound Recordings" should be used on parcels of phonograph records or audio tapes. I guess the form letter that "Engineer X" used was wrong both for the customer who wrote to protest it *and* for the Postal Service.

DICK THOMAS
Whitesboro, N.Y.

David Bowie

● I'm sure that plenty of David Bowie's fans will write vicious replies to Steve Simels' review of Bowie's "Stage" album in the January issue, but I won't bother waiting to see them before writing to defend Steve in the names of God and Lou Reed. That review

was mild in comparison with those of some past Bowie fiascos. In one memorable critique, Steve took on not only Bowie but also Mel Tormé and Franco Zeffirelli. And then there was his column (back when he was Pop Music Editor) about Bowie's acting . . .

I'm from Michigan, and I lean against the clown because of his recent work with—or, rather, *on*—Iggy Pop (hmm, "Iggy," "Ziggy"—makes you wonder, doesn't it?). If it were up to me, all of Bowie's followers would have to listen to Velvet Underground albums until they realize what suckers they've been.

JIM McDONALD
Flint, Mich.

Mt. Rodrigues

● All right, wise guys! What's the point of Rodrigues' "Anechoic Mountain" cartoon on page 56 of the January issue?

RICK ANDERSON
Phoenix, Ariz.

There are probably, in these United States as well as elsewhere in the world, more awful eminences (or considerable protuberances) that go by the name Echo Mountain than there are mountain ranges to accommodate them. Mr. Rodrigues, however, is the first in our limited knowledge of the subject to put a name to one of that considerably larger group of convexities—mountains that have no echo. . . . They're never as good when they have to be explained, are they?

Recording Costs

● A most enthusiastic *Bravo!* for Norman Mendenhall's excellent article, "How to Make Good Records," in the January issue. Those of us who have for years been going through the sheer hell of trying to make top-quality records appreciate any effort to enlighten consumers about the problems and costs involved.

It should be emphasized that the base figure of 1,000 copies used in the production-costs table on page 80 is not so fictitious. Many classical recordings are manufactured in that

(Continued on page 13)

4-head cassette recording is here.

(1) Erase head (2) Record head (3) Playback head (4) Your head



Give us your head, we'll supply the other three. You'll end up getting exactly what you want on tape. The first time. Because our new A-300 3-head cassette deck lets you hear your recording while it's being made.

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A-300

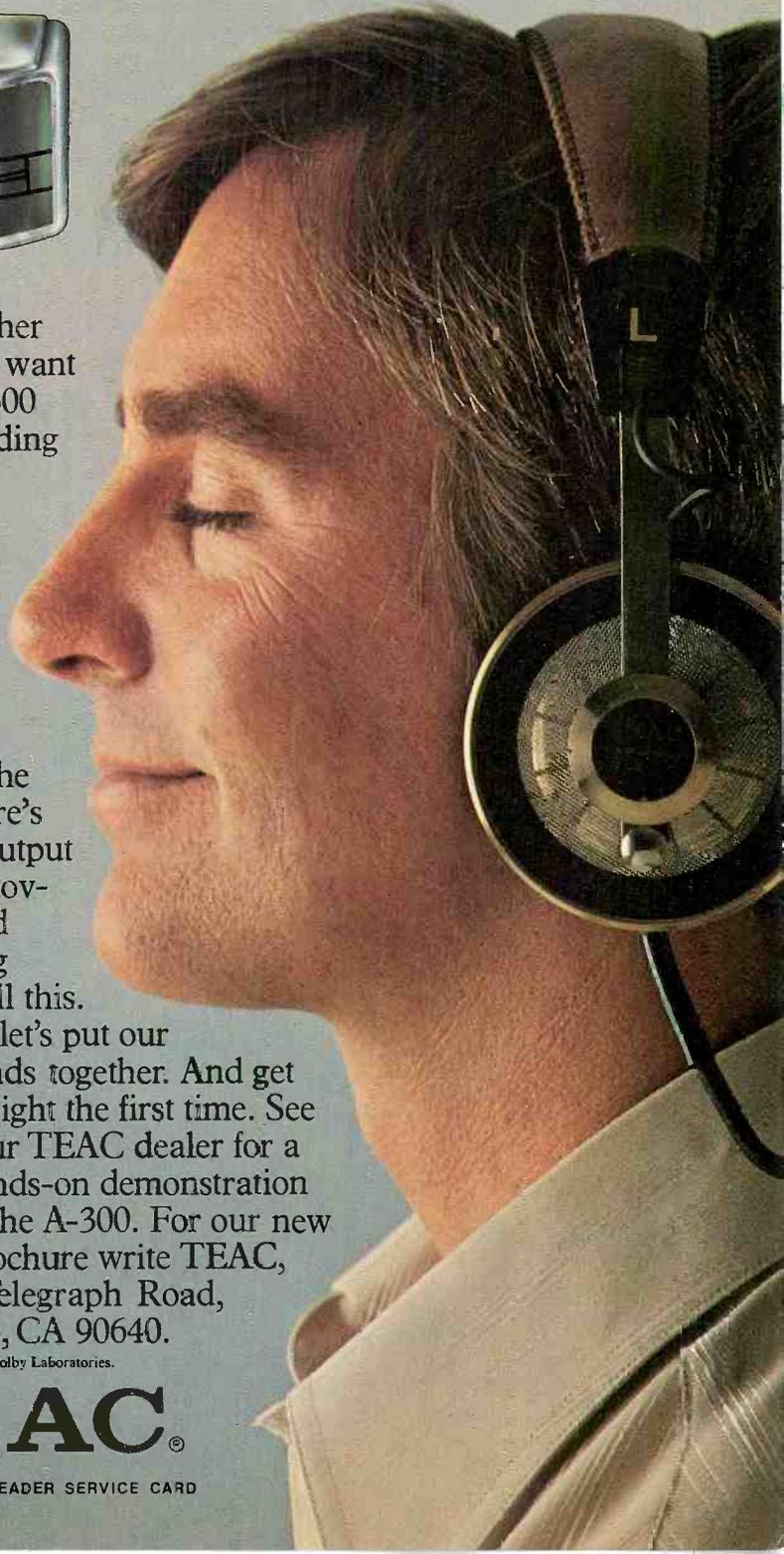
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The Bose® 901® Series IV: A new approach to room acoustics creates a major advance in performance.

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

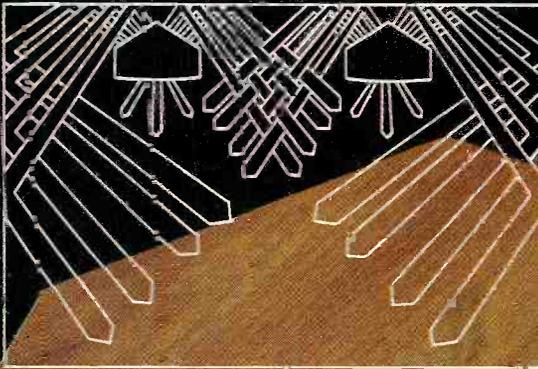
cipal effects can be isolated to specific types of frequency unbalances.

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

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

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



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quantity, and it may take several years to sell even those few. Add to the production costs the very substantial artist, studio, and recording costs and one can easily see why the "major" companies are most interested in releasing popular war-horse classics.

The American Federation of Musicians has established a minimum-wage scale of approximately \$160 per player (including taxes) per three-hour recording session. From such a session, according to union rules, a maximum of only fifteen minutes of taped music may finally be used, and the price goes up in double-time half-hour increments for each additional five minutes of recorded music. [There is a more liberal "symphonic scale," but this is applicable only to established organizations recording under their own names.] And you must add in double scale for the session "leader," which the union requires you to have. All of which comes out to a *minimum* of approximately \$2,060 in artist fees for a string quartet recording a single disc with normal eighteen-minute sides. The additional costs for studio time, recording-equipment rental, and tape editing can start as low as perhaps \$800 if you have a friend in the business—but the sky is the upper limit.

Besides the original recording costs there are also difficulties in selling classical product to hesitant dealers, who pay little and tend to pay slowly. It all makes one wonder how and, even more, *why* any classical records are ever pressed.

PETER CHRIST
President, Crystal Records
Los Angeles, Calif.

Chapman Reaction

● As a long-time, faithful reader of STEREO REVIEW, I find it necessary to express my concern over "The Marshall Chapman Report" in the December issue. The tone of the article and the quotations attributed to the featured "entertainer" were distasteful. In general, exalting that sort of thing as culture does not befit the stature of the magazine that I have enjoyed for so many years. But then, one bad article among so many fine ones is not such a poor batting average.

ARLAN H. RIPPE
Portland, Ore.

● In my estimation, Marshall Chapman's *mother* (photo on page 88, December) would rank high in any international beauty contest. I envy her guy!

JOHN WASSO SR.
Pen Argyl, Pa.

Devo and Beefheart

● After having read much silly praise for Devo from some critics, and after *Newsweek* bothered to run an article on them, I was pleased that Steve Simels pointed out in his December review how lousy they really are. I object, however, to his comparing them with Captain Beefheart. Although "Trout Mask Replica" has its share of repetitious garbage, it is also funny, sincere, and sometimes inspired, not to say fast 'n' bulbous. The Captain's poetic lyrics, often expressing the beauty of nature, make his music especially enjoyable. In comparison, Devo's lyrics, which are usually critical of something or other, range

from fair to bad. I would suggest that people are more likely to care for Devo if they like Brian Eno, the charlatan who produced them.

THOMAS ACE
Rockville Center, N.Y.

Lynyrd Skynyrd

● I want to commend Joel Vance for giving Lynyrd Skynyrd the credit they really deserve in his December review of "Skynyrd's First and . . . Last." That album of early material shows the band in their most basic, down-to-earth performing style (except maybe for *Nuthin' Fancy*); it's a quite excellent blend of foot-stomping rock-and-roll, mellow Southern rock, and r-&-b. Individually, the members of the band had great talent, and together no one could match them. If the album had been the group's first, it would have indicated a promising future; being Skynyrd's last, it's a reminder of how good they were. Such may never come out of the South again.

DAVID R. SCHLESINGER
Baltimore, Md.

Time-delay Alternatives

● I didn't quite expect to hear what I heard when I tried out the pseudo time-delay system, or "Hafler hookup," recommended by Ralph Hodges in his December 1978 "Audio Basics." I have a \$2,000 system and added a pair of \$120 speakers for the "rear channel." The sound of most records improved tremendously. I was really surprised at the difference, and I would recommend a similar experiment to anyone considering purchasing a time-delay system.

STEVE GRIFFIN
Syosset, N.Y.

● Bravo to Ralph Hodges for his December column on pseudo time-delay. I've read with interest about all the expensive new systems, but why should I use such technical contraptions when for more than five years I've had ambient sound from two extra speakers and a four-channel adapter? Most records have ambient-sound information, and the setup I'm using really reinforces bass tones. The effect is thrilling and sounds great; I'll never return to two-speaker stereo again!

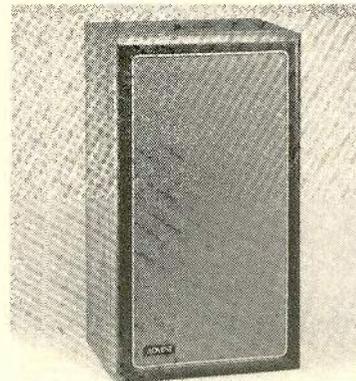
JOSEPH GIARDINA
Brooklyn, N.Y.

● October's otherwise excellent cover story on time-delay systems failed to make one important point: most four-channel amplifiers and receivers are ideally suited for use with time-delay units; the delayed channels can easily be fed into the rear-channel amplifier inputs. This means that purchasing either a time-delay unit with a built-in amplifier or an additional amplifier is not necessary if you already have quadraphonic components. This is surely one way of putting the Edsel of the audio industry to good use!

CLARK E. ALLWORTH
Hillsboro, Ore.

● I tried the Hafler hookup that Ralph Hodges recommended on the rear speakers of my system. It worked! I have a quadraphonic system, the heart of which is a Pioneer QX-747 quad receiver. To test whether my

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imagination was deceiving me, I put on a stereo record and asked my wife to listen and tell me whether it was stereo or quad. She said it sounded quadrasonic! Here is a bonus that Mr. Hodges seems not to have considered—but to get the effect it is critical to balance the relative loudness levels of all four speakers.

Now, I have a question: if the Hafler hook-up is good for rear speakers, wouldn't it also help the "pseudo time-delay" effect to use it for the front speakers as well? If so, just how should the wiring be done?

LUCIEN JOUBERT
West Caldwell, N.J.

Ralph Hodges replies: The Hafler system was

originally conceived as a quadrasonic matrix system, and at least one demonstration record was produced by Dynaco to exhibit its potential in this regard. But its ability to "enhance" many stereo recordings, making them sound quadrasonic, was considered one of its strongest selling points.

And, yes, logically you'd expect time delay to be appropriate for the front speakers as well, since reverberation impinges on a listener from all directions. Most time-delay devices do in fact provide switches to inject some delay into the front channels. Interestingly enough, however, this is not their usual mode of operation; employing the front delays is left as a user option. In any case, the Hafler system itself involves no time delay but simply

provides some of the subjective effects that time delay affords. No processing of the front-channel signals is necessary or appropriate.

Reviewer Ratings

Ever since I started reading STEREO REVIEW in February 1976, I have noticed, on the average, at least one letter per issue either attacking or defending the record reviewers. As my interest in hi-fi equipment has grown, I have used the reviews to expand my record collection, often adding records by artists I would ordinarily have paid little or no attention to without STEREO REVIEW's critics' endorsements. About a month ago I had fantasies of writing the definitive letter on the ability and integrity of these reviewers; however, Larry Winter's letter in the December issue says just about what I wanted to say. I would like merely to add some statistical support. Since the February 1976 issue I have bought sixty-four albums reviewed in STEREO REVIEW. Those receiving positive reviews that I also liked number fifty, or 78 per cent; favorably reviewed records that I did not like number five, or 8 per cent; records receiving negative reviews that I happened to like make up the remaining nine, or 14 per cent. Although liking a particular record is a purely individual matter, STEREO REVIEW's critics and I agree more often than not.

WENDELL EMERY
Holland, Mich.

Unemployed Discs

My wife and I do volunteer work at a home for retarded adults, and we have found that it is an excellent place to donate used discs. Many of the residents have a real love for music and have their own record players. Perhaps other STEREO REVIEW readers might be interested in this use for their old records. It certainly beats letting them sit on the shelf gathering dust.

VIRG FRIEBEL
Boulder, Colo.

The Ultimate Insult

A friend of mine was in church one recent Sunday, head devoutly bowed, listening fervently to the benediction being delivered over the P.A. system (as it now is in many large holy edifices), when suddenly to his amazement and to the utter chagrin of the priest the services were rudely interrupted by a sharp crackle and then the words, "Breaker one-nine, breaker one-nine . . ."

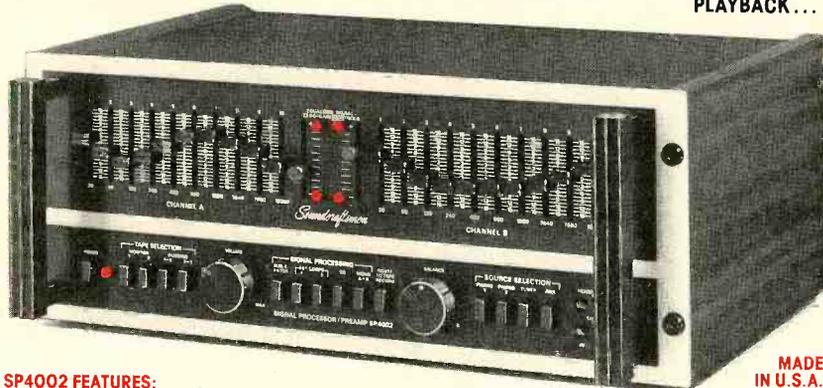
My first impulse on hearing this story was to laugh, but then I thought of the terrible implications. I mean, is *nothing* sacred? How often have we prayed to the Great Spirit to banish this pernicious plague from our transistors forever? This incident seems to be a dark augury that our prayers may never be answered. If God can't stop RFI, what chance have we? Perhaps He allowed it through that once to demonstrate His sense of humor, or maybe to deflate any possible pomposity in the delivery of the lesson. But, brethren audiophiles, I beg ye, tell me true and without dissembling: God is on our side, isn't He?

PETER TOCCI
Leominster, Mass.

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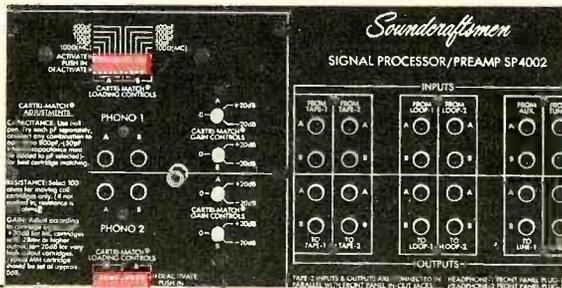


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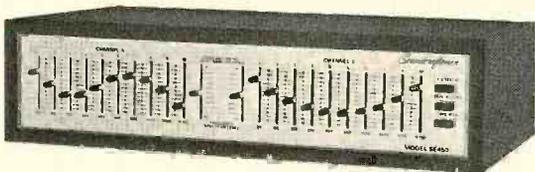
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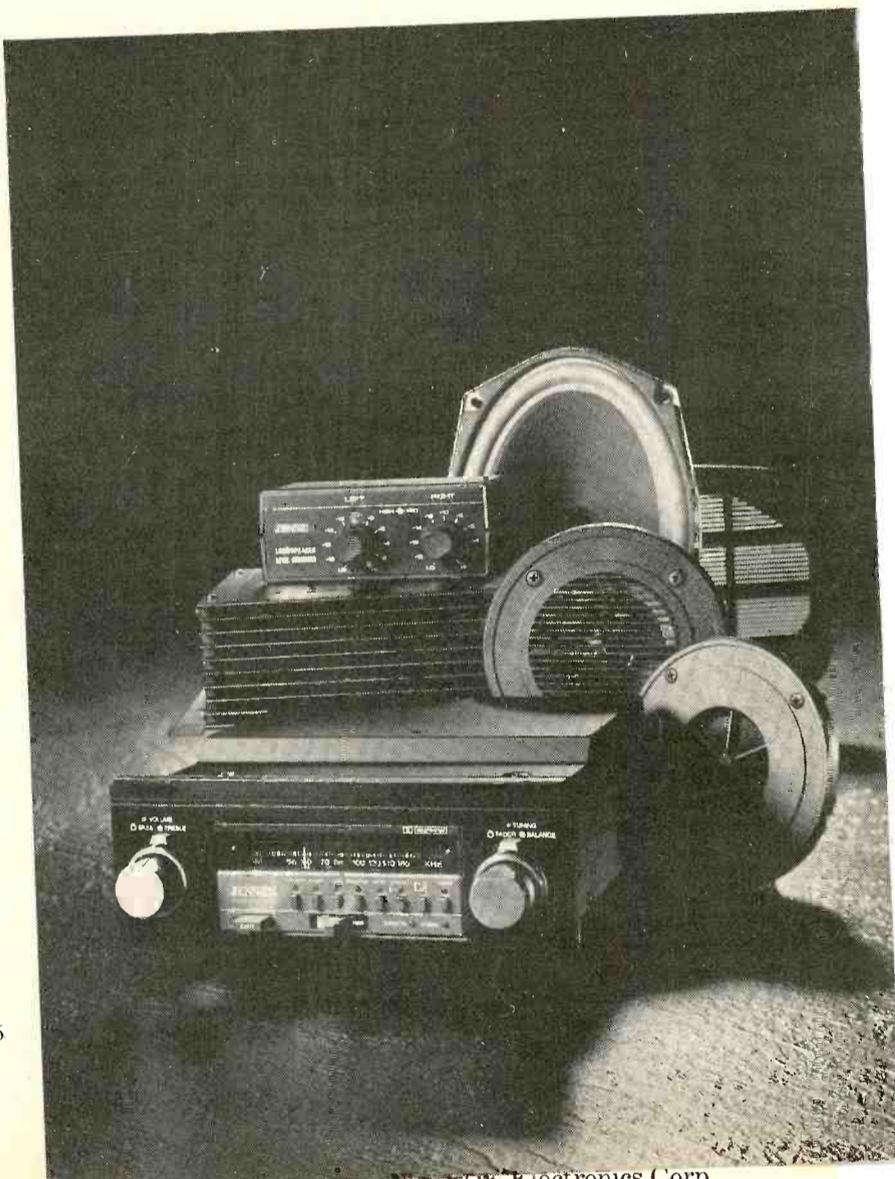
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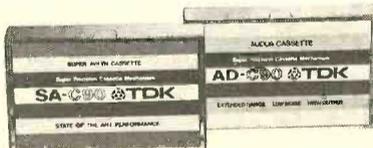
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CIRCLE NO. 21 ON READER SERVICE CARD

New Products latest audio equipment and accessories

ommended power is 40 watts. Frequency response is rated at 38 to 22,000 Hz ±2 dB on axis at 2 meters. Sensitivity is 86 dB for a 1-watt input, and nominal impedance is 8 ohms. The enclosure is finished in walnut veneer and has casters for mobility. Approximate dimensions: 38 x 16½ x 18 inches. Price: \$800. Imported by Intratec, P.O. Box 17414SR, Dulles Airport, Washington, D.C. 20041.

Circle 126 on reader service card



SAE Introduces Mid-price Components

□ The SAE Two series of electronic components includes the T3U tuner (top), the C3A integrated amplifier (center), the C3D cassette deck (bottom), and the R3C receiver (not shown). The AM/FM receiver is rated at 30 watts per channel with total harmonic and intermodulation distortion of 0.09 per cent or less. The phono section has a signal-to-noise ratio (S/N) of 78 dB, an overload point of 125 millivolts (mV) or greater, and an RIAA frequency-response accuracy of ±0.5 dB. The tuner section of the R3C has a usable sensitivity of 11.2 dBf or 2 microvolts, a sensitivity of 40 microvolts (37.3 dBf) for 50-dB quieting in stereo, and a capture ratio of 1.5 dB. Alternate-channel selectivity is 80 dB, and harmonic distortion in stereo FM is 0.25 per cent or less. Price: \$335.

The C3A integrated amplifier is rated at 50 watts per channel with a total harmonic and intermodulation distortion of 0.05 per cent or less. Its phono section has a S/N of 85 dB, frequency-response accuracy of ±0.25 dB, and an input overload greater than 150 millivolts. The C3A is equipped with front-panel power meters, two tape-monitor circuits with full dubbing in both directions, and an audio-muting switch. Price: \$325.

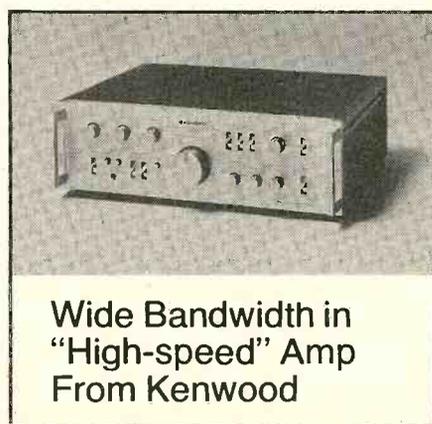
The T3U AM/FM tuner has a usable sensitivity of 1.8 microvolts (10.3 dBf), a quieting sensitivity of 40 microvolts (37.3 dBf), and total harmonic distortion in stereo below 0.2 per cent. Alternate-channel selectivity is 80 dB and capture ratio 1.5 dB. Front-panel controls of the T3U include switches to activate a high-frequency blend (to reduce noise in weak stereo FM signals) and interstation-noise mut-

ing circuits. The tuning dial spans almost the full width of the tuner beneath the signal-strength and channel-center meters and ancillary controls. Price: \$275.

The front-loading C3D cassette deck has a record-playback frequency response of 30 to 16,000 Hz ±3 dB with ferrichrome, chromium-dioxide, or high-output ferric tape, and 30 to 15,000 Hz with "standard" tape. With the Dolby circuits operating, the S/N is 64 dB with ferrichrome or chromium-dioxide tape and 61 dB with standard ferric tape. Wow and flutter (weighted) are rated at 0.06 per cent. The C3D incorporates a memory-rewind function and facilities to permit unattended recording and playback controlled by an external timer. There are also bias and equalization switches for three types of tape (ferrichrome, chromium-dioxide, and high-output ferric). The transport uses a frequency-controlled servomotor drive system and full-logic solenoid-activated functions. Price: \$400.

Dimensions of all four units are approximately 17½ x 5½ x 14 inches; the enclosures and faceplates are finished in matte black with white lettering.

Circle 127 on reader service card



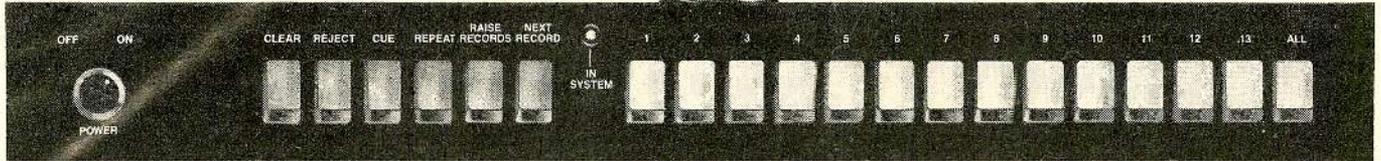
Wide Bandwidth in "High-speed" Amp From Kenwood

□ The Kenwood KA-907 integrated amplifier uses the same basic circuit techniques that were employed in the design of Kenwood's esoteric series of single-channel amplifiers. The point of these techniques is said to be to reduce transient forms of distortion by increasing bandwidth (0 to 400 kHz for the Model 907) and improving the amplifier's reaction to complex, rapid waveforms.

The KA-907 is rated at 150 watts per channel with both channels driven into 8 ohms from 20 to 20,000 Hz. Total harmonic distortion under these conditions is no greater than 0.01 per cent, and intermodulation distortion is no greater than 0.0045 per cent. Signal-to-noise ratio for the moving-magnet phono stage is 96 dB or greater, and for the moving-coil phono input it is 76 dB or greater. RIAA accuracy is within 0.2 dB of the ideal, and phono overload at 1,000 Hz is 230 millivolts

(Continued on page 24)

6 records have never been lowered, lifted, programmed and played like this before. Even remotely.



You touch a few buttons.

A record lowers gently on to the platter. The tonearm lifts, glides silently over the record. Past the first track, the second track, the third track, and lowers to play the fourth track. The music you wanted to hear first.

The quality of the sound is something you've never experienced before.

Suddenly, with the Accutrac® +6, you enter a whole new world of music enjoyment.

Because when you're at the computerized feather touch controls of the Accutrac +6 you'll realize it's more than just a turntable.

It's an experience.

Its features go far beyond your imagination.

A computerized track selector lets you hear the tracks you like, in any order you like, even skip the tracks you don't like, on all six records.

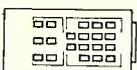
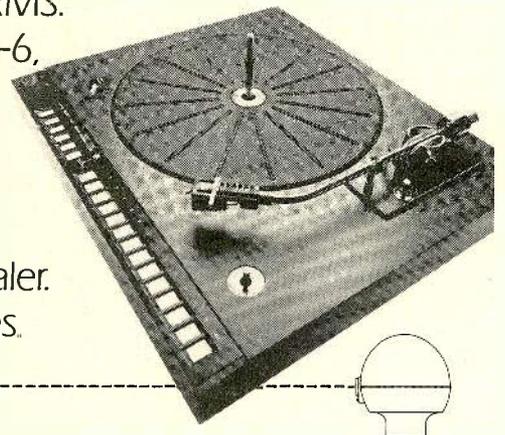
The Accuglide® Spindle is like a record elevator. It doesn't drop your records, so there's "no pop." It even raises all six back up when you're through playing.

And the Accutrac +6 is available with a remote transmitter which lets you control everything from across the room. On some models, there's even remote volume control. The specs are also remarkable. Rumble is better than -66dB (Din 45539B). Wow and flutter are less than .04% WRMS.

With the computer technology of the Accutrac +6, the operation of a turntable has never been easier. And the micro-electronics eliminates hundreds of mechanical parts to achieve new levels of reliability and performance.

Experience the Accutrac +6 at your Accutrac dealer.

You're not going to believe your ears or your eyes.



Accutrac® +6

It plays on your emotions.

A BSR Company

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ADC Professional Products, a Division of BSR Consumer Products Group, Route 303, Blauvelt, New York 10913. Distributed in Canada by BSR (Canada) Ltd., Ontario.

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You can now own every record or tape that you may ever want... at tremendous savings and with no continuing purchase obligations. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

Look at these benefits:

TREMENDOUS SAVINGS

on every record and tape in print—no "agree-to-purchase" obligations of any kind.

DISCOUNTS OF 43% TO 73%

off mfg. suggested list... special catalog features hundreds of titles and artists.

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including most imports through special custom ordering service. If we don't stock it we'll get it for you.

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lists thousands of titles; classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country, etc.

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happenings in the world of music; concerts, critiques, new releases... special super-sale listings at discounts of up to 73%.

DISCOUNT ACCESSORY GUIDE

Diamond needles, cloths, tape cleaners, etc. Discount Music Club is your complete one stop music and accessory buying service.

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same day shipping on many orders... rarely later than the next several days. Partial shipments always made in the event of unforeseen delay... all at no extra cost to you.

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on all products and services. Everything is guaranteed factory fresh and free of defects or damages of any sort. Your total satisfaction is unconditionally guaranteed.

Discount Music Club is a no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want... when you want... or not at all if you choose.

These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon below for immediate information.

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CIRCLE NO. 18 ON READER SERVICE CARD

New Products

latest audio equipment and accessories

for moving-magnet inputs and 9 millivolts for the moving-coil input. Front-panel controls include two tape-monitor and dubbing circuits, low (6-dB-per-octave rolloff below 18 Hz) and high (6-dB-per-octave rolloff above 8,000 Hz) filters, variable-turnover-point tone controls (bass is ± 7.5 dB at 150 or 400 Hz, treble is ± 7.5 dB at 3,000 or 6,000 Hz), a loudness control with six different positions to provide a variety of compensating curves, a direct-coupling switch, and switching for two pairs of speakers. Dimensions are approximately 18 $\frac{1}{8}$ x 6 $\frac{3}{8}$ x 18 $\frac{1}{4}$ inches; weight is 56.9 pounds. Price: \$1,000.

Circle 128 on reader service card

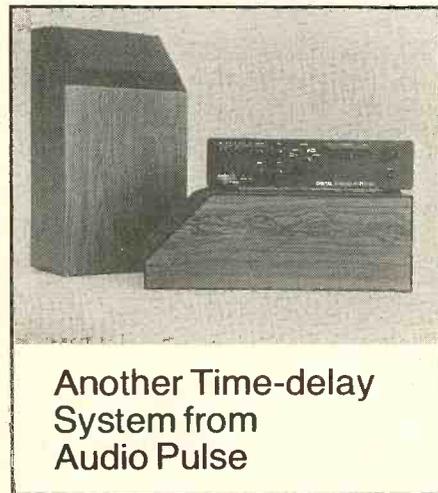


AR's Second Columnar Speaker

The Acoustic Research AR90 is a four-way columnar loudspeaker system incorporating many of the same design characteristics as AR's top-of-the-line AR9. The AR90 uses two 10-inch bass drivers side-mounted in an acoustic-suspension enclosure (system resonance is 32 Hz), an 8-inch lower-mid-range driver (also mounted in a sealed sub-enclosure), a 1 $\frac{1}{2}$ -inch upper-mid-range driver front-loaded by a shallow "semihorn," and a $\frac{3}{4}$ -inch dome treble unit. As in the AR9, an "acoustic blanket," a sheet of dense felt said to reduce cabinet-diffraction effects, covers the area of the front panel surrounding the upper three drivers. Crossover frequencies of the system are 200, 1,200, and 7,000 Hz, with three-position level-control switches for adjustment of all drivers except the bass units. Nominal impedance is 4 ohms, with a minimum impedance value of 3.2 ohms. Power-handling capability is specified as 300 watts continuous (with the amplifier clipping no more than 10 per cent of the time), and minimum recommended power is 50 watts. The

enclosure, which is finished in oiled walnut with a black front panel and grille material, has approximate dimensions of 43 $\frac{3}{8}$ x 14 $\frac{1}{2}$ x 15 $\frac{1}{4}$ inches. Weight is 82 pounds. Price: \$550.

Circle 129 on reader service card



Another Time-delay System from Audio Pulse

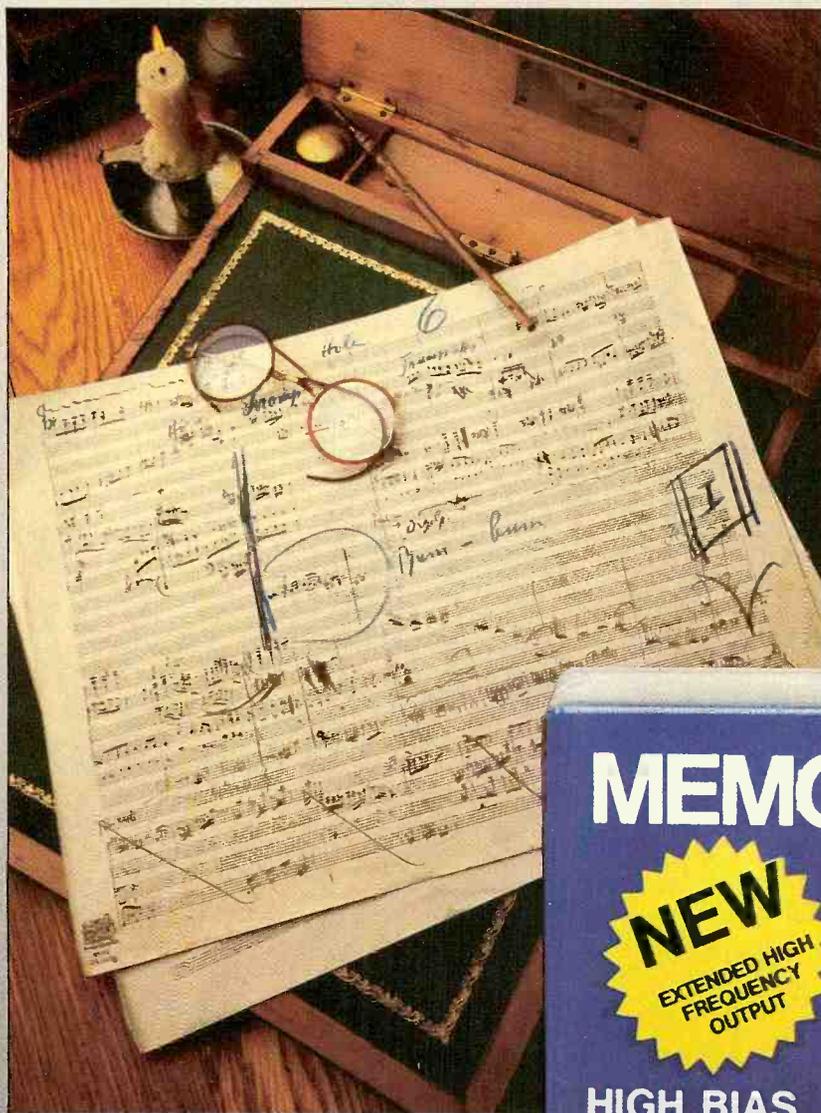
Audio Pulse has introduced its second ambient-synthesis system, the Model Two, which was developed to provide a complete time-delay system with built-in amplifier and optional low-cost secondary speakers. The Model Two contains reverberation-simulating circuitry very similar to that of the company's Model One, including facilities for initial delay times ranging from 19 to 103 milliseconds and a reverberation decay time variable from 0.1 to 0.6 second. Additionally, the Model Two has bass and treble controls for adjusting the rear-channel balance (the bass can be varied from +2.5 to -12.5 dB at 70 Hz, the treble from +4 to -7 dB at 7,000 Hz). There is a 25-watt-per-channel amplifier to power both rear speakers. The amplifier section has a total harmonic distortion rating of 0.5 per cent or less; signal-to-noise ratio for the unit is rated at -80 dB for the direct output and -72 dB for the delayed output. An auxiliary line-level output that is variable from 0 to 1.5 volts is on the rear panel. Dimensions: 16 x 3 $\frac{1}{2}$ x 10 $\frac{1}{2}$ inches. Price: \$539.

Designed specifically for use as a secondary speaker in time-delay applications, the Audio Pulse AP52 is a two-way vented-enclosure design with a 5 $\frac{1}{4}$ -inch bass driver that crosses over to a 2-inch cone-type treble unit at 9,000 Hz. Frequency response is specified as 80 to 20,000 Hz ± 3 dB, nominal impedance is 8 ohms, and maximum input power is 25 watts on musical program material. The drive units are mounted on a slanted top panel, and the enclosure is finished in walnut-grain vinyl. Dimensions are 19 $\frac{1}{2}$ x 11 x 7 inches. Price: \$100 per pair (sold only in pairs).

Circle 130 on reader service card

(Continued on page 28)

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



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

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

Record it on your favorite high bias cassette, using the Chrome/CrO₂ setting. Then again on new MEMOREX HIGH BIAS.

Now play back the tapes.

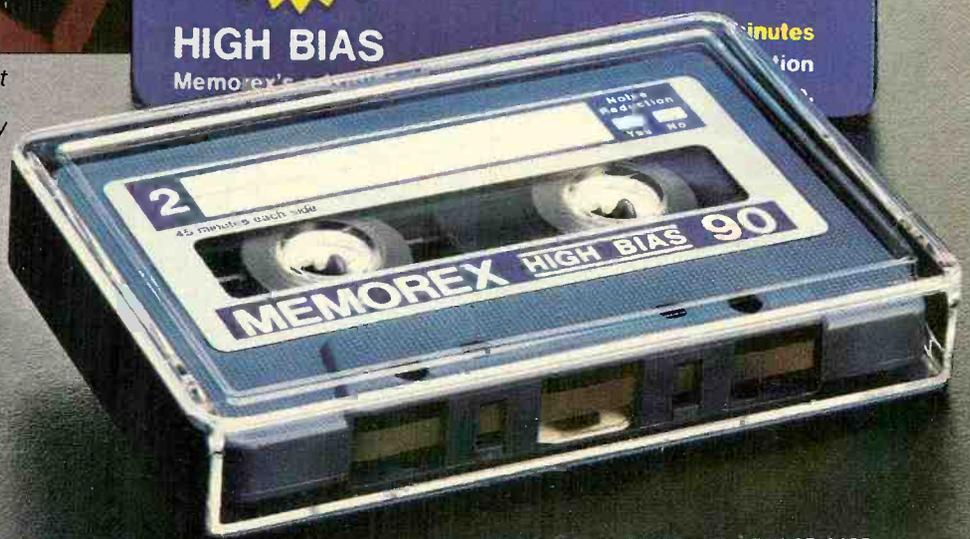
We're convinced you'll have a new favorite.

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

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

MEMOREX

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



CIRCLE NO. 35 ON READER SERVICE CARD

Yamaha goes its separates performance,

We've never done things the conventional way. Witness our legendary B-1 and C-1 separates. These components, utilizing Yamaha-developed Vertical-FET technology, brought into being a new level of natural, accurate sound, advanced features and dramatic styling. Our new C-4 and M-4 separates follow in this tradition, while doing some precedent setting of their own.

C-4 We were determined that the performance of the C-4 should put you in touch with the outermost limits of the audio art. So it has the most advanced circuitry imaginable to give you sound so real and true, you'll swear it's live. State-of-the-art DC circuitry in the phono preamp section reduces distortion to a miniscule 0.0035% at 2V output. Signal-to-noise ratio has been tamed to the virtually inaudible level of 97dB at 10mV. Plus we've added an exclusive Current Noise Reduction Circuit to maintain this high S/N ratio regardless of varying impedances caused by using different cartridges. But the sound of the C-4 goes beyond super specs and state-of-the-art circuitry. You have to hear the sound to believe such pure, musical tonality could pass through a piece of electronics.

The C-4's features put you in total command of its superb sound. Unheard-of tone control is yours with the exclusive, continuously variable turnover frequencies for the bass and treble controls. No need to hook up an expensive outboard parametric or graphic equalizer to make meaningful tone adjustments. The C-4 gives you the

best of both at the twist of a finger. And with the C-4, you don't have to settle for anything less than the absolute optimum performance from your choice of phono cartridge. Select from five ranges for both capacitance and

resistance to perfectly match the amp's load resistance to your cartridges' characteristics. You also have the luxury of indulging in the beautifully transparent highs available from a moving coil cartridge, because we've outfitted the C-4 with its own head amp. It provides the boost necessary for a moving coil cartridge, saving you the expense of buying a separate head amp or transformer. Completely independent Input and Output selectors give you the freedom of listening to a signal from one source while recording a signal from another. Features like these make the C-4 a super-sophisticated device whose possibilities and applications are limited only by your imagination.

With graceful, yet bold styling, executed with ease-of-operation in mind, the C-4 is a marvel of modern technology leaving nothing to be desired but its ownership.



way. With unprecedented features and price.

M-4 Our passion for pure tonality reaches toward perfection in the M-4. To deliver the cleanest, most musical sound possible, we built it with DC circuitry in a dual mono amp configuration, each with its own signal path from input to output. The input section consists of dual-FET's in a differential configuration with a cascode bootstrapping circuit. So you get the unbeatable advantages of DC circuitry—minimal low frequency phase shift and maximum low frequency accuracy and musicality—while beating the inherent instability of DC circuitry.

The M-4's specs are nothing short of spectacular. THD takes a bow at an incredibly low 0.005% at rated output

0.005% THD

of 120W per channel into 8 ohms, 20Hz to 20kHz. Signal-to-noise ratio is, (please

plause) an utterly silent 118dB.

Again though, specs can't do the sound of the M-4 justice. When it comes to doing justice to amplifying a signal from a preamp (especially the C-4) we feel the M-4 deserves a standing ovation. If you love musically accurate sound coming from your speakers, you will be equally enthralled with the sound of the M-4.

And with its functional features.

Visually arresting LEDs monitor your amp's power output, while overload indicators allow you to see when you're pushing it beyond its intended limits. The M-4 is a musical experience you participate in. Drive two sets of speakers independently or simultaneously with the simple push of a computer-grade switch, as well as select

the DC or AC operating mode with the back panel switch.

And while you are driving your M-4, its drilled metal-mesh top allows the amp to "breathe." It's just one example of the unique design philosophy of form-follows-



function in styling, features and performance.

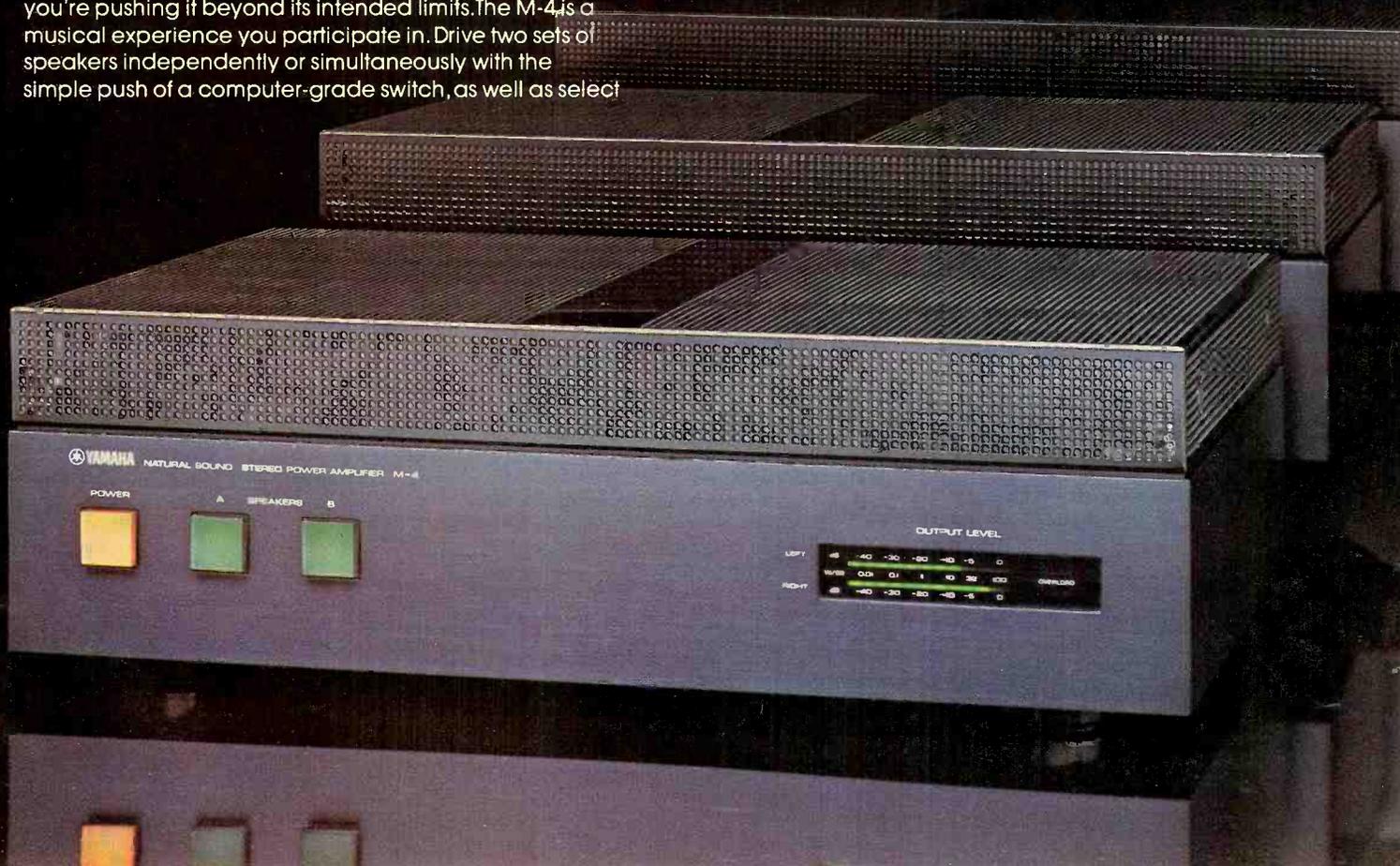
And that's what our new separates are all about. Unprecedented performance, features and styling. And price? Well, you can benefit from what we learned with our cost-no-object B-1, C-1. Without paying the price. Audition our new, rack-mountable (with optional kit), super separates, the C-4 and M-4, for yourself. It's an ear-opening experience you won't want to miss. For the name of your Yamaha Audio Specialty Dealer, check your Yellow Pages or write us.

From Yamaha, naturally.



YAMAHA

Audio Division, P.O. Box 6600, Buena Park, CA 90622



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latest audio equipment and accessories



We build
a speaker
that sounds
like music

It can accurately reproduce the 120+ dB peaks that are found in some live music. That's more than just being able to play music loud. It can accurately reproduce the music bandwidth—from below 25Hz to 20kHz. And the Interface:D's vented midrange speaker reproduces midrange sounds with the clarity and purity that allows precise localization of sound sources—both lateral and front-to-back.

The Interface:D is the only commercially available speaker we know of that can meet these criteria. Audition them at your Interface dealer.



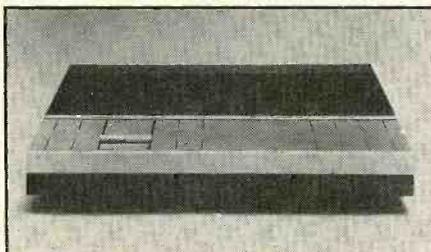
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a gulton company
600 Cecil Street
Buchanan, Michigan 49107

Interface:™ D

Teac Offers Primer On Multitrack Recording Technique

□ Teac Corporation is making available a forty-six-page booklet written by tape specialist Dick Rosmini. The *Multitrack Primer* covers all phases of multitrack recording technique: setup and layout, impedance matching, cable connections, studio acoustics, cueing systems, and microphones. The booklet will be sold through Teac dealers and can also be ordered by mail from Teac's advertising department (7733 Telegraph Road, Montebello, Calif. 90640). Price: \$4.95 (add \$1 postage and handling for mail orders).



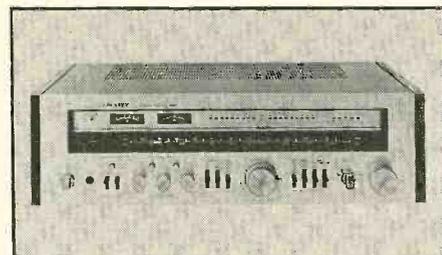
Bang & Olufsen's New High-style Cassette Deck

□ The B&O Beocord 5000 is a two-motor, top-loading cassette deck with a low-profile design and a Sendust-alloy record/play head. The transport mechanism of the deck is of the dual-capstan type and employs an a.c. motor regulated by a servo-loop and two heavy (325-gram) capstan flywheels to reduce tape-speed variation. A second, d.c. motor serves to wind the take-up spool and fast-wind the tape. Transport functions are controlled by "light-touch" keyboard switches that activate full-logic-governed solenoids. A special circuit automatically eliminates magnetization of the tape head by reducing the bias current supplied to the record head in a gradual manner rather than switching it off suddenly. The deck has peak-level indicators consisting of two vertical rows of numerical readings, from -25 to +3 dB, that are illuminated from the rear and disappear when not lit. Additional top-panel features include a control that permits smooth fade-ins and fade-outs, bias switches for chromium-dioxide and conventional ferric type tapes, and a smoke-color acrylic panel that closes to cover the cassette well, meters, and status lights. A headphone jack with volume control and a DIN-style dual microphone input with a stereo/mono switch are found on the lower left side of the

front panel. (The 4C-4650, an accessory adapter to convert this input for use with two ¼-inch microphone plugs, is available for \$9.)

Frequency response of the Beocord 5000 is 30 to 15,000 Hz ±3.5 dB with either chromium-dioxide or ferric tapes. Signal-to-noise ratio is 65 dB with either type of tape. Dolby circuits operating. Weighted rms wow and flutter is rated as 0.1 per cent or less, and fast-winding time is 60 seconds for a C-60 cassette. Dimensions of the enclosure, which is finished in rosewood and brushed steel, are 18½ x 3⅞ x 11 inches. Price: \$595.

Circle 131 on reader service card



High-power Receiver From H. H. Scott

□ H. H. Scott's new top-of-the-line receiver, the Model 390R, is a 120-watt-per-channel unit that heads up their new series of electronic components. The 390R incorporates a high degree of tonal and control flexibility. Bass and treble controls each have two switchable turnover points (bass at 200 or 400 Hz, treble at 2,500 or 5,000 Hz), as do the high- and low-cut filters (low at 18 or 40 Hz, high at 8 or 12 kHz). Additional front-panel controls include a mid-range tone control, two tape-monitor and dubbing circuits, and a tone-control-defeat switch. Two banks of LED's indicate peak power levels.

The FM tuner section of the 390R has an IHF sensitivity of 1.7 microvolts (9.7 dbf); sensitivity for 50-dB quieting in stereo is 33 microvolts (36.5 dbf). Capture ratio is 1 dB, alternate-channel selectivity is 80 dB, and FM distortion in stereo is below 0.2 per cent. The receiver can be switched to operate on any of the power-line voltages in use throughout the world. Dimensions are 22⅞ x 6½ x 15¾ inches; weight is 49 pounds. Price: \$775.

Circle 132 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.

This 4-speed has something no other 4-speed has.

Stick shift fanciers. Economy car devotees. You're both going to love this one.

It's called TWIN-STICK. Devilishly clever. And exclusively yours when you choose the

Mitsubishi-built 1979 Dodge Colt or Plymouth Champ Hatchbacks. Here's

how it works. Release the clutch and push the lever into ECONOMY mode, and you've selected the four-speed range designed to deliver optimum fuel efficiency. Choose POWER, and you get livelier performance. For running through the gears, you use the regular H-pattern lever.

Averaging the mileage achieved in both POWER and ECONOMY ranges resulted in EPA estimates of **32** EST. MPG, 44 EST. HWY. with the 1.4 liter



MCA-Jet engine. Use the EST. MPG number for comparison purposes.

Your mileage may differ depending upon speed, weather and trip length.

Actual highway mileage will probably be lower than the HWY. EST. Calif. estimates are lower.



TWIN-STICK is standard on the new 1979 Dodge Colt or Plymouth Champ Hatchbacks.

You get the benefit of a total of eight speeds to play with. Which means you can get the optimum gear for just about any driving situation that comes along. City or country. Uphill or down. Or passing gas stations.

Mitsubishi cars and pickup trucks are sold in the U.S. by Chrysler Corporation.



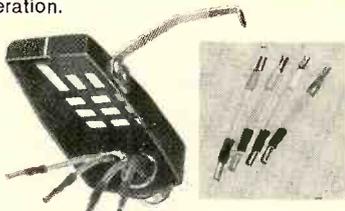
MITSUBISHI
MOTORS CORPORATION

Dodge: Colt • Challenger • D-50 pickup truck.
Plymouth: Champ • Sapporo • Arrow pickup truck.

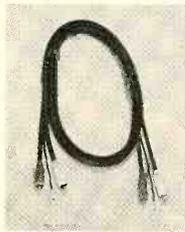
The better your ear,
the more you
need new
Audio-Technica
**VITAL
LINKS!**

Every wire, every connection in your stereo system is a source of trouble, a chance for losses which can keep your system from achieving its full potential.

Introducing three new Vital Link wire sets from Audio-Technica... each a positive step toward ideal performance and trouble-free operation.

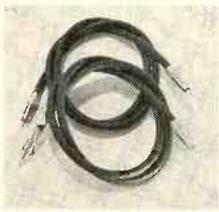


Start at the cartridge with the AT609 Head Shell Wire Set. Color-coded, insulated wires with 14 strands of pure silver Litz wire, terminated in corrosion-free gold terminals. No losses, no intermittents. Easy to install. Just \$6.95 and worth every penny.



Between turntable and amplifier (or any two stereo components) use new AT610a High Conductivity Cable. A stereo pair 60" long, plus an independent ground wire with lugs. Each gold-plated plug is color-coded. Both resistance and capacitance are far below ordinary cables. Only \$7.95.

For the most critical installations use our AT620 Superconductivity Cable Set. Two individual cables, each 48" long, with heavily gold-plated plugs. Inside the wire shield is a second conductive layer of polypropylene shielding. Special foam dielectric keeps capacity low, while superb conductivity is assured by using Litz-wire inner conductors with maximum surface area which reduces high frequency losses. The set lists for \$29.95.



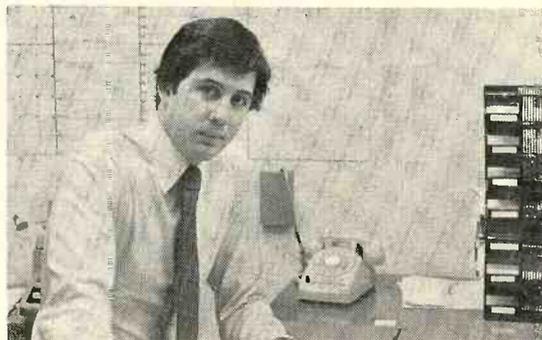
From phonograph cartridge to loud-speaker, each audio system is a chain, no stronger than its weakest link. Connect your system with Vital Link cables from Audio-Technica. At your A-T dealer now. Or write for our complete audio accessory catalog.

 **audio-technica**
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Fairlawn, Ohio 44313
In Canada: Superlor Electronics, Inc.

CIRCLE NO. 10 ON READER SERVICE CARD

Audio/Video News

By Gary
Stock



FINALLY: A VIDEODISC HITS THE MARKET

This month's big news is that the videodisc has arrived as a commercial product. The world has waited close to ten years for a "new era in home entertainment"—the era of *selectable* TV programming—as ballyhooed in countless press conferences, demonstrations, and Sunday newspaper supplements. Now, finally, after a long stalemate during which a number of manufacturers have demonstrated ingenious (and incompatible) videodisc systems but never brought any to market, Magnavox is the first company to make both a videodisc player and a substantial catalog of feature-length discs available to the public.

On December 15 last year, four Atlanta department and appliance stores began selling the "Magnavision" system; the player itself costs \$695 and the discs between \$6 and \$15, depending on content and length. According to industry sources, Magnavox intends to make about 20,000 players in the first year, with a decision on whether to invest in large-scale production to follow. Both Magnavox

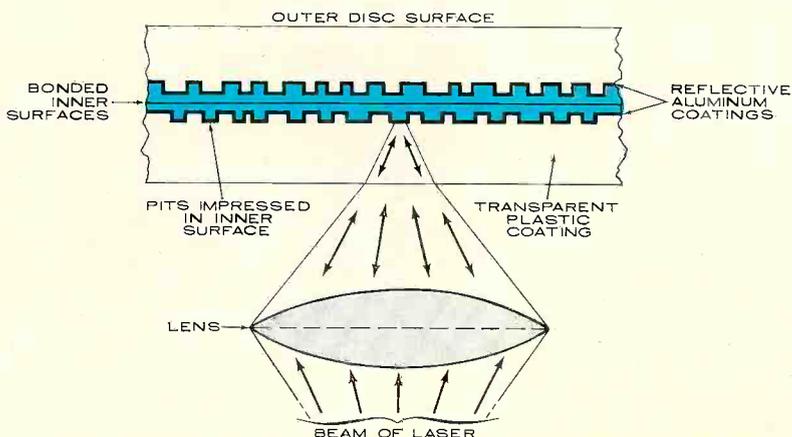
and MCA, the firm making and distributing the program discs, are betting heavily that the Atlanta marketing program will verify their predictions of an American public hungry for personally programmable video entertainment at modest cost—this despite the relatively lukewarm consumer response thus far to the one other form of selectable video available, the videocassette recorder.

The basic theory of the Magnavision system—and the corporate rivalries that have spawned at least four distinct and separate videodisc formats—has been detailed in these pages previously (see "Audio/Video News," August 1978, page 26). To review briefly the technical aspects of the system, Magnavision uses an optical approach to "reading" what might be described as an "outside-in" disc. A laser beam of minute power is directed through a series of prisms and mirrors up through the player's transparent platter and the disc's transparent-plastic outer layer to be

(Continued on page 32)

Shown below is a much-simplified diagram of how the Magnavision videodisc system works. A laser beam passes through a lens which narrows the beam width. This beam is then reflected from and modulated by tiny pits impressed in

the disc's inner surface, back through the same lens to a beam-splitting prism that separates the input beam from the reflected light. The reflections pass finally to a photosensor that "reads" the pattern and converts it to audio and video.



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The new Sansui TA rack-mountable receivers offer both rack-mounting sophistication and all-in-one-unit simplicity. High performance and attractive pricing make them unmatched values.

The TA-500 receiver delivers a comfortable 50 watts per channel, min. RMS, both channels into 8 ohms from 20-20,000Hz, with no more than 0.05% total harmonic distortion. The DC power amplifier configuration, with wide frequency response and very low TIM distortion, ensures clean and true-to-life music reproduction.

The tuner section of the TA-500 performs better than most separates in a comparable price category. With a sensitivity of

10.8dBf ($1.9\mu\text{V}$ IHF T-100) and a S/N of 75 dB, FM reproduction is of the highest quality.

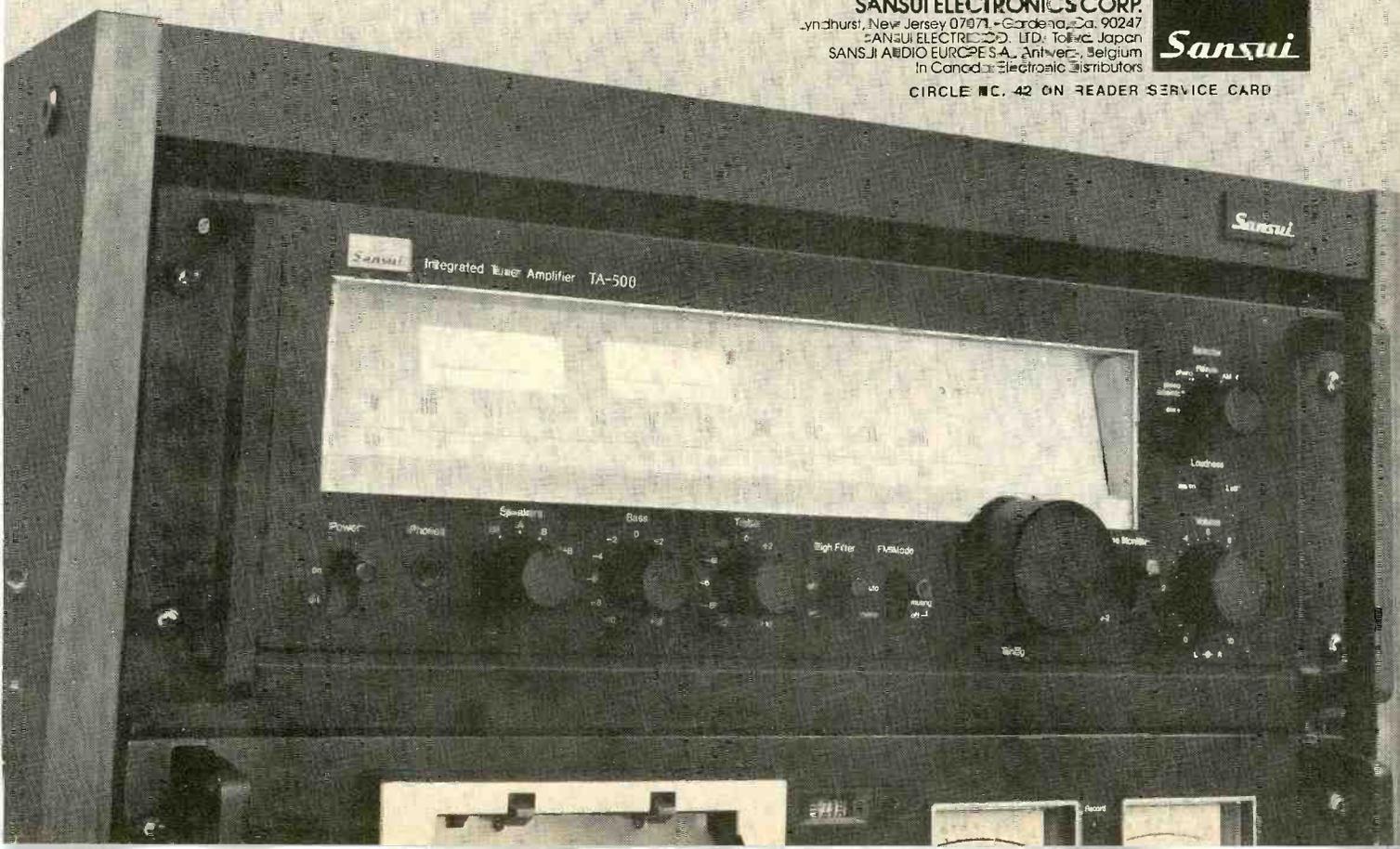
Also available in the TA series is the new TA-300, providing 30 watts per channel, with no more than 0.06% THD, under the same conditions. Offering specifications and features that are highly competitive with other receivers in the power/price class, and with the extra benefit of rack-mounting convenience, the TA-300 receiver will surely be one of this year's most popular components.

To find out about this exciting Sansui innovation and many others, visit your nearest authorized Sansui dealer and ask him for a demonstration.

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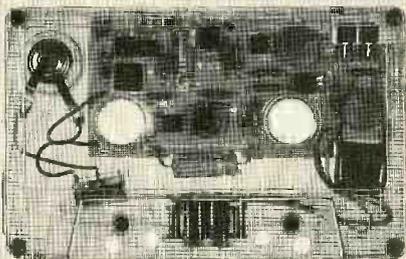
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reflected from its aluminum-coated inner surface and back to a photoelectric sensor. The sensor responds to the reflections that distinguish between the presence or absence of tiny "pits" (millions of them) pressed into the plastic disc's inner surface by means of an extrusion-molding process. These pits are digitally encoded representations of the screen image and the soundtrack that have to be decoded by the player's electronic circuits into suitable audio and video electronic signals. The disc revolves at 1,800 rpm, and one revolution corresponds to each "frame" of the video program.

If such a thing as a "visual metaphor" exists, the videodisc itself is it. Held in the hand, it appears to be a circular slice of opal, changing color with each new angle. Spinning on the player, it takes on some of the qualities of a Steven Spielberg UFO—shimmering, indistinct, apparently immaterial. The purely technical, workaday reason for this brilliance is the light-diffracting grid formed by the microscopically pitted inner surface of the plastic and its mirrorlike aluminum coating; it would be difficult to conceive of any other object whose sheer physical beauty contains more promise of an exciting two hours of entertainment locked inside.

In terms of picture quality, the Magnavision system reproduces as clear an image as cable-transmitted television programming. Its audio section, which is two-channel (stereo TV is coming!), has a bandwidth and dynamic range about as wide as a normal FM broadcast, and it can be connected to the auxiliary input of a receiver or amplifier for playback through wide-range electronics and speakers. The total impact of the system, particularly with well-produced and interesting source material (such as the Elton John performance that was shown at the New York demonstration), is closer to that of a movie showing than to ordinary television—evidence, perhaps, of the significance of high-quality audio to a convincing total presentation. Indeed, the two-hundred feature programs scheduled to be available shortly in disc format draw heavily from the ranks of older "blockbuster" feature films—*Jaws*, *The Godfather*, and *The Ten Commandments* among them. A fairly broad spectrum of other materials is represented too: children's cartoons, theater productions (*The Man in the Glass Booth* and *A Delicate Balance*), vintage sports events, and instructional programs on cooking, athletics, and self-improvement.

THE Magnavision introduction does not by any means *decide* the issue of which is to be the dominant, accepted videodisc format. It is rather the first round in a commercial struggle for the favor of the American public, a struggle that may well prove to be more extended and bitter than the one that decided the standard format for the long-playing record. Industry observers feel that a combination of player cost, extent and nature of the software catalog, and large advertising budgets will resolve the question within the next several years. At least two other well-financed competing formats—from RCA and Sony—are technically ready for introduction at any time, though neither company has yet responded to Magnavox's opening move.



The Magnavox player, about the size of a large turntable, can be connected to any TV set through its antenna terminals.

ON an entirely separate topic, an isolated incident in a West Coast retail store has triggered a controversy over the flammability of open-cell foam loudspeaker grilles. As reported originally in the audio-trade press, the incident involved a foam grille ignited by a voice coil that had overheated due to a malfunctioning amplifier. Although the only immediate effect of the fire has been a recall of foam grilles on two brands of loudspeakers—Quadraflex and TransAudio (the manufacturers are offering replacement fabric grilles)—the larger implications of the incident have set off a wave of rumors and uncertainty over the safety of foam grilles in general.

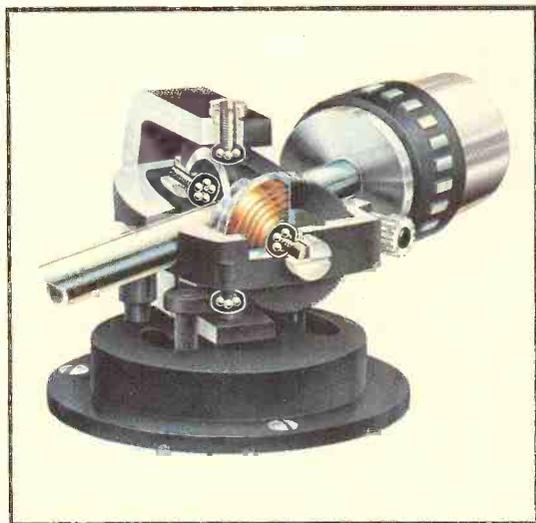
STEREO REVIEW's investigation of the question, which involved discussion with foam manufacturers, the retail store involved, Consumers Union, and Underwriters Laboratories, has disclosed the following:

1. The incident is the sole reported instance of a grille fire to have occurred since the introduction of open-cell foam as a grille material about eight years ago.

2. A substantial number of manufacturers, both foreign and domestic, manufacture foam grilles of various types, and therefore no single definitive statement on the flammability of foam grilles is possible. Further, no Underwriters Labs or federal standards for testing or specifying loudspeaker flammability exist. However, UL has recently opened an inquiry into extending UL flammability testing of stereo components to encompass all types of speaker grilles, cabinets, and cones, and authoritative sources at UL believe that such a standard, which will incidentally call for labeling of speakers that pass the tests, will be forthcoming in the next year.

3. The sequence of events that led to the fire in the West Coast incident is an unusual one in that voice coils generally open up safely long before reaching temperatures capable of igniting cones or grilles. This can further be effectively prevented simply by fusing the loudspeakers, a step that does not significantly affect speaker performance (and one that should be taken to protect speakers in any event). Plastic in-line fuse holders that are "pigtail" connected to the speaker wires are available from most radio-supply stores. The exact amperage values of fuses are best decided by the manufacturer. They may be given in the speaker's instruction manual, or they can be obtained by writing or calling the manufacturer of the speaker. By far the more likely cause of such a fire, however, would be a festive candle or dropped match, and of course reasonable caution should be exercised when using such items around speakers or any flammable material. □

We'd sell even more Dual turntables if they didn't last quite so long.



At a time when "planned obsolescence" is an unhappy fact of life, it may be reassuring to know that Dual turntables continue to be produced with the same dedication and manufacturing precision that has made Dual so highly respected throughout the world.

Dual turntables are made in the legendary Black Forest where meticulous craftsmanship remains a way of life. And the company is still owned and personally managed by the family that founded it more than three-quarters of a century ago.

But more than tradition is responsible for Dual's leading position in a lineup of some fifty competitive brands. The performance provided by Dual's precision engineering has always exceeded the demands of either the record or cartridge.

For example: the tonearms of every current model, including our least expensive one, are mounted in four-point gyroscopic gimbals, a design widely acknowledged as the finest suspension system. Bearings are machined and finished to specifications that exceed the demands of aerospace components. And frequently ignored problems such as those caused by resonance are solved by our exclusive anti-resonance filters. (Dual engineers have earned more than seventy international patents related to record playback equipment.)

The manufacturing process is of the same high order. For example: every fifth step is a quality-control check. Fully assembled turntables undergo separate and lengthy mechanical, electrical and acoustical examinations. Later, quality-control auditors open and recheck one out of ten packed and sealed models in order to inspect the quality of the quality control.

Perhaps this explains why such Dual classics as the 1009 and 1019 (produced in the early 1960's) are still in service. If you still own one of these models, you may find it's worth more in trade today than you originally paid for it.

If you insist on the finest in turntables—as we do—ask your audio dealer to demonstrate one of our new Duals. He will be pleased to do so. After all, reliability is as important to him as it is to you.

The Dual CS1237, illustrated, is priced at less than \$180. Other Dual turntables are priced up to \$440.



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Audio Q. and A.

By Larry Klein



Technical Director Klein and N. Matsushita, chairman of the board of Technics' parent company.

Double Power Supplies

Q. *Aside from the advertising advantages, exactly what is the purpose of dual power supplies in amplifiers?*

IRWIN ADLER
Chicago, Ill.

A. Assuming that an amplifier's output transistors are adequate to their task, then the limiting element for the output power of an amplifier is its power supply. The power supply must be able to provide enough voltage/current to the output devices for them to achieve the desired output power.

Some manufacturers claim that the dual power supplies prevent "dynamic crosstalk" or "dynamic-intermodulation" distortion, which presumably occurs when a strong signal in one channel modulates the power supply to such a degree that it affects the performance of the other channel. There's no question that it is possible to set up a circumstance that will demonstrate some undesired inter-channel effects in a single-supply amplifier that a dual-supply unit is free of. The question arises, however, as to what degree such a contrived experiment represents what occurs normally. I raised that point with Hirsch-Houck Labs; their reply was as follows:

"Frankly, we have never been able to find any audible or measurable advantage of a dual power supply in any of the units we have tested. There are no standardized tests for 'dynamic intermodulation,' or even any definition of the term that we know of, which makes it difficult to evaluate the 'problem' or its cure. The few tests we have seen set up by manufacturers of amplifiers with dual power supplies were, in our opinion, contrived to reveal 'differences' which could hardly happen during music reproduction.

"Recently we ran some special tests on an excellent dual-supply integrated amplifier in an effort to reveal whatever special performance virtues are provided by that sort of design. We drove one channel with a 10,000-Hz sine wave to an output of 0.1 watt and the other with a 20-Hz sine wave to an output of 10 watts (and also to 100 watts). We examined the 10,000-Hz output on our spectrum analyzer in a high-resolution (1-Hz) mode, measuring the level of the 20-Hz modulation sidebands above and below the 10,000-Hz 'carrier' frequency. The spurious signals resulting from interchannel interaction were at a level

of about -72 dB relative to the high-frequency signal. We would not consider this to be significant. We then repeated the measurement on an older conventional amplifier using a single power supply and obtained essentially the same results. So far as we are concerned, the case for dual power supplies is not proved. But, on the other hand, they certainly can do no harm."

As for me, I'm surprised that no one has given any thought to the fact that even when an amplifier has dual power supplies, they are both fed from the same a.c. line cord. Under heavy power-output conditions, I'm sure that a voltage drop can be measured in the line cord itself. I wonder if there's a market for a four-conductor line cord with a separate pair supplying the a.c. to each channel's power supply?

Amp/Speaker Fusing

Q. *I have a 35-watt receiver with 3.3-amp fuses in each channel. My speaker manufacturer recommends 1-amp slow-blows in the speaker line, which I understand will pass about 400 watts for 1 second. Would it be safe to change the 3.3-amp fuses in the receiver to the 1-amp slow-blows recommended for my speakers? Will they still protect my output transistors from damage in case of disaster?*

PETER H. SANIUK
Worcester, Mass.

A. Your question is much more complicated than it appears. First of all, are you sure that the 3.3-amp fuses in your amplifier are actually installed in series with the speaker-output terminals? There's a good chance that, although your amplifier's internal fusing arrangement serves indirectly to protect your speakers against problems originating within the amplifier circuitry, those fuses are not intended to protect the speakers against excessive drive signals. Therefore, it's best to follow the speaker manufacturer's recommendations regarding external fuses, even if there is a possibility of redundancy. Since the fuse with the lowest current rating will always blow first if both are of the same slow-blow type, double fusing (if that's what the hookup turns out to be) will do no harm.

Note: speaker engineers as a group hold the opinion that speaker-fuse values should be

(Continued on page 37)

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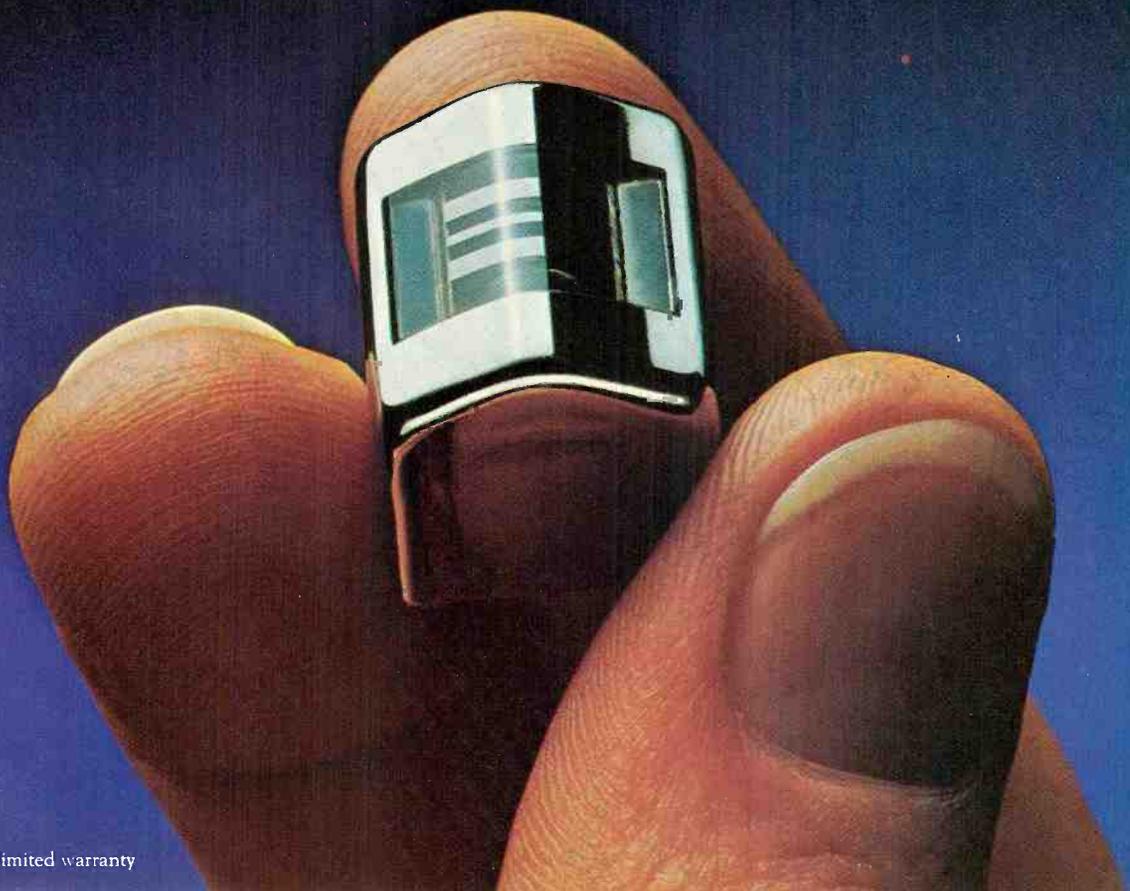
It's a head that many audio-philosophers feel has set the industry's performance and durability standards. And you'll find it exclusively in AKAI cassette and reel-to-reel decks.

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

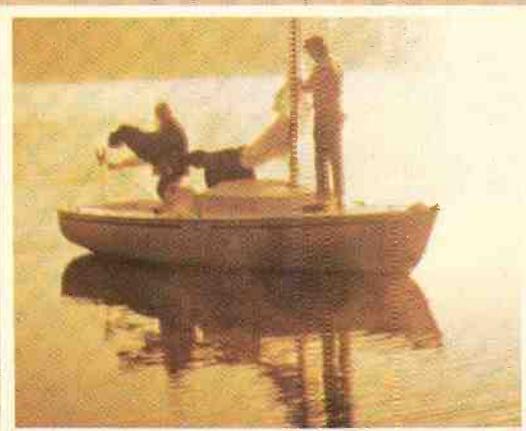
Probably not because of its looks (although it is unusually handsome). Probably not because of the Fisher name (although millions of people know and trust our reputation for quality). And probably not because of its reasonable \$219.95* price (although you could spend a lot more and get a lot less).

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

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

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

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



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

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

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

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

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ST430

Audio Q. and A. . . .

chosen so that, whenever possible, the fuse gives out *before* the speaker voice coil. The trick, however, is to choose fuses that will not blow out on very loud "normal" program material but will nevertheless protect the various drivers in a system—all of which have different damage points.

Ohm's Law is of little help in determining the proper fuse value for a speaker. Unfortunately, trial-and-error testing with a variety of pulsed, pink, and clipped audio signals is needed to arrive at optimum and practical fuse values. The fuse's response time and current rating are juggled to find the type and value that will protect the most fragile member of the system's driver complement without blowing out on loud material.

Incidentally, speaker manufacturers report that the majority of voice coils are burnt out by overdriven underpowered amplifiers (which provide a destructive clipped signal to the speakers) rather than by super-power amplifiers played loudly.

FM Recommendations

Q. *I am trying to pick up a station situated north of me using a receiver with the following specifications: FM sensitivity (IHF), 1.7 microvolts; signal-to-noise ratio, -70 dB; alternate-channel selectivity, 65 dB; and capture ratio, 1.9 dB. There is an adjacent station located to the east and at a higher altitude that creates a lot of interference ranging from a slight background hiss to total takeover of the station I want, depending on the weather situation. What type of tuner or receiver do you recommend that I use in order to pick up the desired station without the interference?*

SHANG-WANG CHANG
Modesto, Calif.

A. The tuner specifications you list are quite good, and it's anyone's guess as to whether any improvements in them would solve your problem. It is possible—but by no means certain—that a tuner with a higher alternate-channel selectivity rating may alleviate the interference problem, but such tuners tend to be quite expensive. A much cheaper and sounder approach would be to invest in a high-gain FM antenna (the more elements, the better). If possible, it should be installed on a high tower with a rotator. Since your two stations are at an angle of 90 degrees to each other, it should be possible to orient the antenna to give maximum discrimination against the unwanted signal while receiving a usable signal from the other station.

System Lisp

Q. *I have a high-power integrated amplifier feeding a pair of good-quality, floor-standing speaker systems. When played at, say, 40 watts, some DJ's sound like they lisp. Which product needs replacing? Any idea?*

TIMOTHY LONG
Brooklyn, N.Y.

A. Assuming that the DJ's in question are not in need of an improved dental-plate adhesive (even when they are played at 40

watts) and that there isn't something wrong with their microphones or the way they use them, I'm at a loss to explain a "lisp." However, if I assume that some other listeners (or speech therapists) would describe what you are hearing as excessive sibilance, then I have some ideas on the matter.

Harsh "sss" sounds in reproduced vocal music or speech can occur for any of a very large number of reasons. The list of possible causes that follows is probably not complete, but it should provide clues as to where to look for the source of your high-frequency breakup problem—for that is what it probably is.

At the record-playing end of things, lots can go wrong. For example, right at the beginning, a fault may develop somewhere in record-mastering and/or production steps that will ultimately be heard as high-frequency breakup. Or your phono cartridge may be mistracking because of some defect in it, your using too low a tracking force, or some fault in the record player itself.

There isn't too much that can go wrong in your amplification equipment to cause such high-frequency problems except, possibly, overload of the magnetic phono-input circuits. (A high-output cartridge playing a "hot" record feeding a phono input with inadequate dynamic range can sound spitty or "raspy.")

At the speaker end of things, a defective or peaky tweeter, or excessive high-frequency boost from your amplifier or speaker-level controls, can also cause a spitty quality in the sound. And, finally, to return to your DJ, your FM tuner may need alignment, the specific station(s) you listen to may be overmodulating, or your reception may be troubled by intermittent multipath distortion.

Listen to a friend's system to determine if his DJ's are troubled by the same sort of speech impediment. In any case, your problem is probably a rare one; certainly my thymem is free of thuch defecths.

Two Kinds of Time Delay

Q. *I've just finished reading Peter W. Mitchell's October feature article on time delay. Why weren't there any comments on the time-delay-compensated speakers available from Leak, B&O, Technics, and others? Certainly they must be worth discussing.*

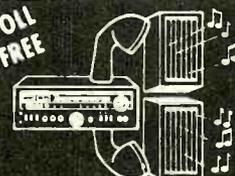
CARLIN CARR
New York, N.Y.

A. The term "time delay" has confused Mr. Carr. The electronic accessory devices listed and described in the October issue were designed to *add* time delay to program material fed to the back channels of a four-speaker system as a means of simulating the naturally delayed reverberant sound energy normally reflected from the walls and ceilings of an actual concert hall. Time-delay-compensated speaker systems, on the other hand, are physically and electrically designed to *eliminate* the differences in time of arrival at the listener's ear of parts of a signal reproduced separately by the various drivers of the system. Obviously, the two techniques have different purposes, achieve their ends in different ways, and share nothing except the term "time delay," if that. For that reason, many of the manufacturers of such speaker systems prefer such descriptions as "time-compensated" and "phase-coherent."

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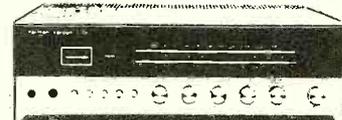


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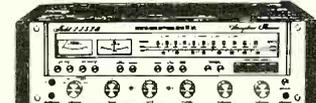
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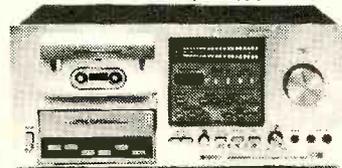
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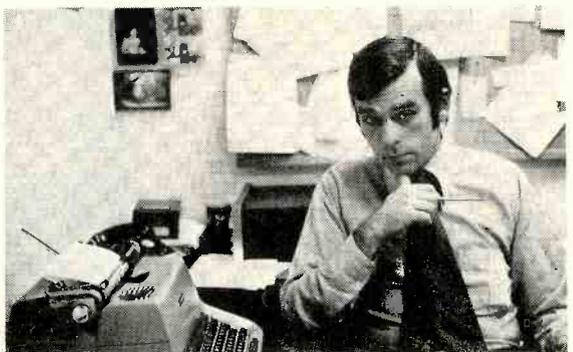
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Audio Basics

By Ralph Hodges



TAPE BIAS: A POPULAR VIEW

IN 1962 the eminent Marvin Camras, then editor of the Institute of Radio Engineers' *Transactions on Audio*, wrote a brief editorial on the role of bias in tape recording. He began by characterizing the popular conception of bias in these terms: "... the high-frequency bias shakes up the magnetic domains and loosens them until they can be molded by the audio signal." He then plunged deeply into the various then-current engineering theories and models dealing with the precise action of bias, exploring them this way and that, rejecting bits of some and adopting parts of others, until he came to a grand conclusion: "... the high-frequency bias shakes up the magnetic domains and loosens them until they can be molded by the audio signal."

Seventeen years later we flatter ourselves that we have arrived at a somewhat better understanding of bias than that—or at least we have come to appreciate its complexity and to honor that complexity with an appropriately complex technical description. Nevertheless, for the home tape recordist who feels he needn't fully understand bias but would merely like to become *comfortable* with it, nothing I have seen beats Camras' whimsically non-technical formulation. Nothing, that is, except a terse little capsule of an article by tape authority Terence O'Kelly that I came across a few weeks ago; I'd like to share it with you in slightly modified form. I know Mr. O'Kelly wouldn't dream of suggesting that it is a satisfactory *engineering* view of bias. It is instead a *popular view*, designed to give us enough of a glimmer as to what's going on to treat bias with appropriate respect and appreciate its benefits. Here's what Mr. O'Kelly has to say about bias:

"Bias is a four-letter word that is used more often than it is understood. It appears on most of today's cassette decks associated with a switch bearing the labels "Fe" or "NORMAL," "HIGH," "CrO₂," "FeCr," and so forth. Some decks' switches have two positions, others have three. What they are all trying to do is to provide several fixed bias settings to accommodate the different types of tape available, because different types need different amounts of bias.

"Bias is a steady signal at such a high frequency that it cannot be heard. It is usually at least five times higher than the highest frequency a tape deck can reproduce. If a cassette recorder can handle an audio signal as high as 20,000 Hz, the bias should be at least 100,000 Hz. Increasing the bias (as is called for by certain types of tape) does not raise its frequency; it raises the strength or amplitude of the bias. Its frequency stays the same.

"Although the bias signal cannot be heard, it helps those signals that can be heard by eliminating some of the distortion in the tape-recording process (bias is present only during recording, not during playback, and the position of a bias switch—provided it controls *only* the bias—is irrelevant when a tape is played).

"The signals that music or voices set up in a tape recorder can be represented pictorially as combinations of sine waves. These sine waves travel up and down in positive and negative excursions. Curve 1 shows a single complete positive-and-negative "cycle" of a sine wave. As the wave is passing from positive to negative (or negative to positive) it crosses the zero point shown in the center of the curve. At this zero point, distortion can occur when recording on tape because the tape does not become properly magnetized there (see curve 2). Technically, we might say that the tape-recording medium is nonlin-

ear for weak values of the recording signal.

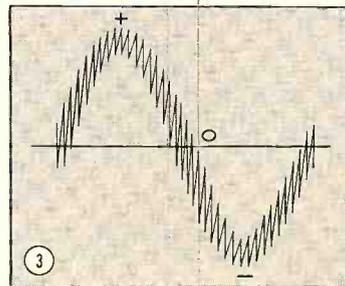
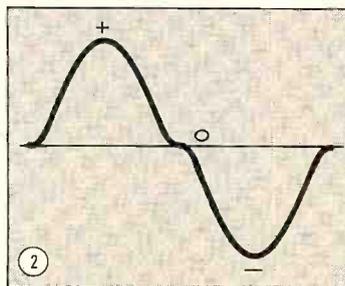
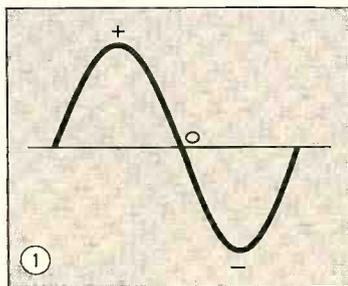
"Like the audio signal, bias is itself a sine wave. But since it has so many more cycles per second than any audio signal (at least five times more, remember), when the audio signal is mixed with the steady bias signal there is always a strong element of bias present to "influence" the tape magnetically even when the audio waveform is at a very weak point or actually at zero. The distortion that would otherwise occur is greatly reduced when the proper amount of bias signal is added (see curve 3). The proper amount is essential, because too *little* bias would not get rid of enough distortion and would permit the high frequencies recorded on the tape to be exaggerated as well; too *much* bias would get rid of distortion as well as much of the high-frequency content of the recording that we want to keep. As it happens, different tapes need different amounts of bias owing to the differences in their magnetic characteristics."

Thank you, Mr. O'Kelly. Even the best tape can and does sound bad when the amount of bias signal applied to it is too great or too little. High frequencies fade on the one hand and increase on the other, and eventually the point is reached where distortion can be heard (it can be *measured* as increasing at a much earlier point). In the cassette format, tapes that we tend to consider as providing the highest level of performance generally require the strongest bias signal. They are harder to magnetize to begin with, and hence they can be thought of as being more resistant to the effects of bias. The high-performance tapes of the future, such as the metal-particle tapes discussed elsewhere in this issue, will require more bias still—even, perhaps, challenging our technical ability to apply such a large amount of signal to the tape.

Bias should not be considered essential to tape recording. It isn't. You could disable the bias oscillator in a tape recorder (or leave it out entirely, as has been done in some toy recorders) and still make a recording of, say, a speaking voice, and on playback you would be able to make out the words amidst the rasp of distortion and the rush of tape noise. But the experience would not be a pleasant one.

The first magnetic recorders employed no bias, and they were so unsatisfactory as to be useless except as stepping stones for further research. Very soon it was discovered that a strong d.c. bias—not a high-frequency a.c. bias such as we use today—applied to the tape along with the signal improved matters considerably. Unfortunately, d.c. generates an enormous amount of noise in the tape-recording process, and although recorded voices could be made intelligible, they were still in danger of being buried in hiss. Finally, the beneficial effects of a.c. high-frequency bias were discovered and applied to recording equipment with enthusiasm. And that development essentially set tape recording on the road that has led to its present refinement. □

The three curves show (1) a normal sine wave, (2) a sine wave with distortion at its zero-axis crossing, and (3) the effect of adding a high-frequency bias signal to the audio signal at the time it is applied to the tape.



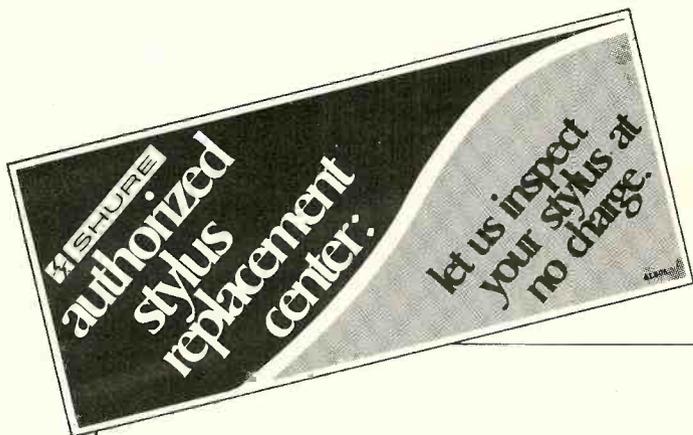


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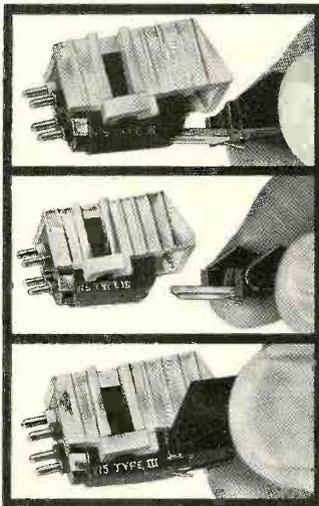


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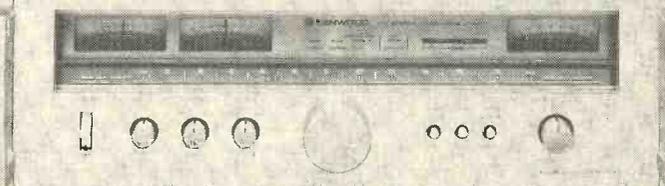


THD: Less than 1.5%
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S/N Ratio (Dolby on): 66 dB
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Kenwood KT-917 Stereo FM Tuner

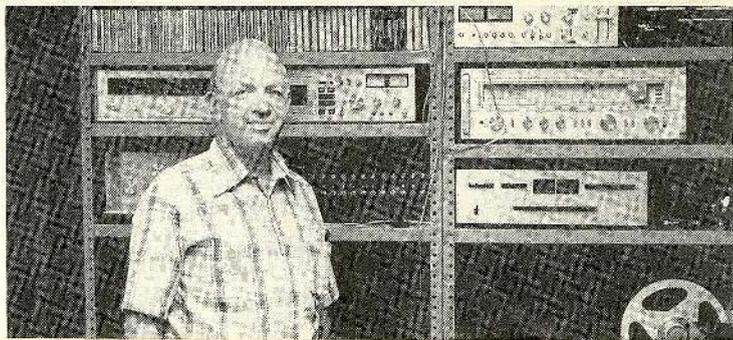
ry test instruments and which embodies exceptional engineering and construction features. Not surprisingly, most such tuners are quite expensive.

Kenwood's new KT-917 is, we believe, the company's first entry in this category of product. Like most "super tuners," the KT-917 is an FM-only unit. There is no reason AM capability could not be included in such a product, except that an AM tuner of comparable refinement would make the unit prohibitively expensive.

Kenwood has designed the KT-917 to give
(Continued overleaf)

Technical Talk

By Julian D. Hirsch



the lowest possible distortion in actual use as well as under laboratory conditions. To this end, it incorporates a very sophisticated and costly automatic-tuning system called the "Distortion Detection Loop" (DDL). To the user, it appears to work like an automatic-frequency-control (AFC) system that is disabled when the tuning knob is touched, coming on after it is released. Internally, however, it is not at all like conventional AFC.

AFC normally tunes a receiver so that the d.c. output of its discriminator (FM detector) is zero; ideally, this occurs when the signal is in the center of the detector passband. However, discriminators are not necessarily linear, and they also may not be tuned accurately to the center of the i.f. passband (which in itself is not symmetrical). The result is that minimum distortion is rarely obtained at the same tuning point that gives a zero d.c. detec-

tor output. We have alluded to this many times in tuner and receiver reports, noting that the channel-center meter's center reading (which also corresponds to zero voltage from the detector) does not necessarily correspond with minimum distortion. Even a synthesizing tuner, which is as accurate as a quartz crystal, is no assurance that the discriminator and i.f. amplifier are symmetrical, linear, and centered at the same frequency.

complex and expensive, is inherently the most linear form of FM demodulator. For best signal-to-noise ratio it should operate at a relatively low frequency, and in the KT-917 the 10.7-MHz i.f. frequency is transformed down to 1.96 MHz by a second conversion stage before detection. The selective elements in the 10.7-MHz i.f. amplifier are Surface Acoustic Wave (SAW) filters. These are a form of highly refined ceramic filter which has superior group-delay characteristics compared with the inexpensive ceramic filters used in most FM tuners. The number of SAW filters in use is controlled by the I.F. BANDWIDTH switch; one filter is used for WIDE, two for NORMAL, and four for NARROW.

The front end of the Kenwood KT-917 uses seven cascaded tuned circuits for maximum selectivity and image rejection. The nine-section variable capacitor is the largest compo-

Across the lower portion of the panel are three small knobs that control the OUTPUT LEVEL, the MUTING threshold (with positions for off, 20 dBf, and 40 dBf), and the I.F. BANDWIDTH (NARROW, NORMAL, WIDE). To the right of the tuning knob are three small pushbuttons: a DIMMER (for the dial lights), an ANTENNA switch that connects either of two sets of antenna inputs to the tuner, and the METER switch (deviation or multipath). The remaining control is a knob marked QUIETING CONTROL; it is actually a mode selector with positions for MONO, AUTO, and STEREO (only).

On the rear of the tuner are coaxial inputs for two 75-ohm antennas (A and B). There are also two sets of binding-post terminals for antenna B, for both 75- and 300-ohm systems. The front-panel switch selects either the A or the B system, giving considerable flexibility in the installation of the tuner. There are two sets of audio outputs, one of them at a fixed level (nominally 0.75 volt) and the other adjustable by the front-panel control from 0 to a nominal 1.5 volts. There are also outputs for driving vertical and horizontal oscilloscope inputs to display multipath distortion.

The Kenwood KT-917 is 18½ inches wide, 18¼ inches deep, and 6¾ inches high. It weighs 33 pounds. Price: \$1,000.

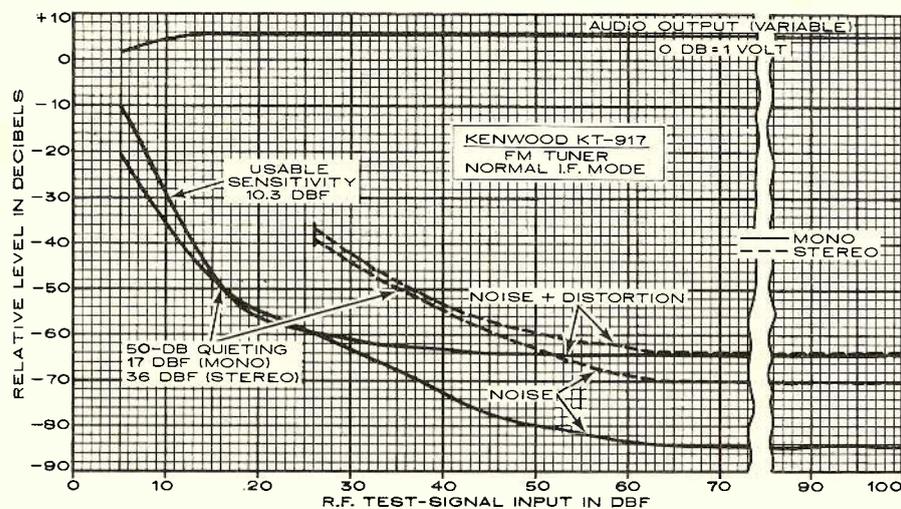
● **Laboratory Measurements.** From the outset it was obvious that we would not be able to confirm all of the performance ratings of the Kenwood KT-917, because our Sound Technology signal generator is rated at 0.1 per cent distortion and stereo separation of 50 dB, whereas the tuner ratings are as high as 60 dB for separation and as low as 0.02 per cent for distortion. Although we know the generator to be much better than its guaranteed limits, any measurements in that range would be of doubtful validity. We also knew that the generator's intrinsic noise level was higher than the -90 dB claimed for the tuner.

Because the i.f. bandwidth can affect many of a tuner's properties, we had to test the KT-917 three times, using each of the bandwidth settings. With normal bandwidth, the measured IHF usable sensitivity was exactly the rated 10.3 dBf (it was 13 dBf in the narrow mode and 11 dBf in the wide). The 50-dB quieting sensitivity was 17 dBf (mono) and 36 dBf (stereo) for all three bandwidths. The signal-to-noise ratio was 84 dB in mono and 70 dB in stereo, again for all three bandwidths.

As expected, the distortion was a function of bandwidth. The normal and wide modes gave identical readings of 0.064 per cent in mono and 0.062 per cent in stereo. These are approximately the residual distortion levels of our signal generator. (The few occasions we have measured lower distortion have been due to cancellation between the distortion of the generator and that of the tuner.) With narrow bandwidth, the mono and stereo distortion readings were 0.09 and 0.17 per cent.

Channel separation is also a function of bandwidth—to some extent. In measuring separation, we encountered a peculiarity that may have been a property of the test sample (a very early production model). When the signal was tuned in the normal manner, the channel separation was in the range of 30 to 43 dB, depending on bandwidth. These are perfectly good figures (the FCC requires only 30 dB from the broadcast stations), but not as good as claimed or as we would expect from

(Continued on page 46)



ment of that type in any tuner that we know of (most use no more than five sections). Two sections are used in the local oscillator; one of these tunes the oscillator and the other tunes a buffer amplifier that isolates the oscillator from the rest of the tuner. The mixer is also unusual in being a double-balanced circuit with four Schottky diodes for maximum immunity to overload from strong signals.

The Kenwood DDL is a distortion-detecting system that works by internally modulating the tuner's local oscillator with a 95-kHz signal that subsequently appears at the detector output. Any second-harmonic distortion (the result of a slight mistuning or an i.f./detector asymmetry) appears as a low-level 190-kHz component. This is amplified and detected separately from the regular FM signal, and its average (d.c.) value is used as an AFC voltage to correct the local-oscillator frequency so as to minimize the level of the 190-kHz component. In other words, the DDL is an AFC system that operates by using the second-harmonic distortion of its own internally supplied signal, rather than detector d.c. output, as an indicator of correct tuning.

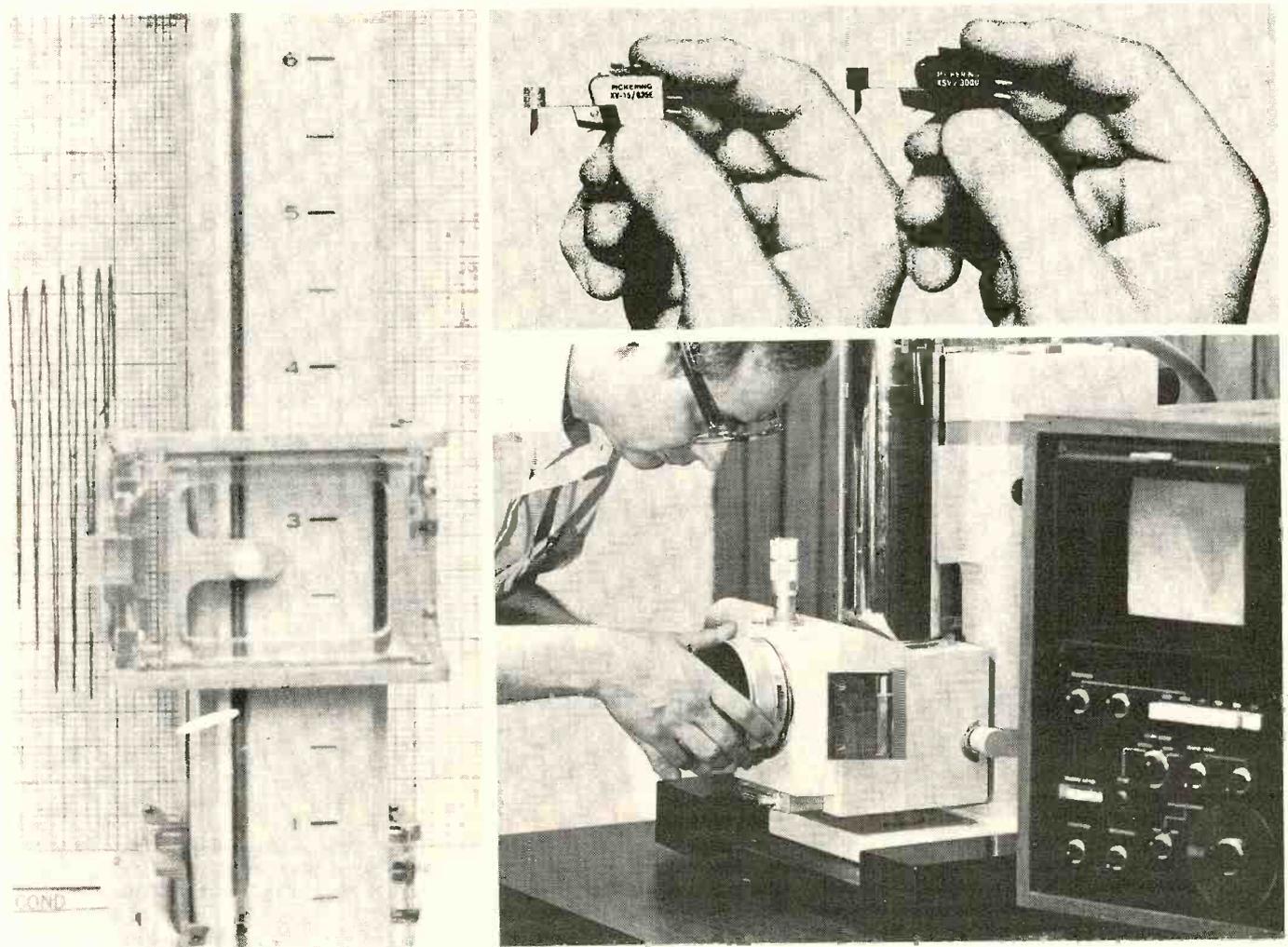
Tuning aids aside, the circuits of an FM tuner must be carefully designed for low distortion, and Kenwood has opted for a pulse-counting detector instead of the usual ratio detector. A pulse-counting circuit, though

tor output. We have alluded to this many times in tuner and receiver reports, noting that the channel-center meter's center reading (which also corresponds to zero voltage from the detector) does not necessarily correspond with minimum distortion. Even a synthesizing tuner, which is as accurate as a quartz crystal, is no assurance that the discriminator and i.f. amplifier are symmetrical, linear, and centered at the same frequency.

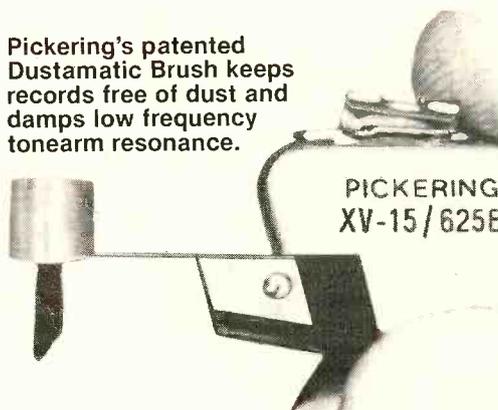
tor output. We have alluded to this many times in tuner and receiver reports, noting that the channel-center meter's center reading (which also corresponds to zero voltage from the detector) does not necessarily correspond with minimum distortion. Even a synthesizing tuner, which is as accurate as a quartz crystal, is no assurance that the discriminator and i.f. amplifier are symmetrical, linear, and centered at the same frequency.

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through electronic circuits. Two of them turn on the motor, at either 33 $\frac{1}{3}$ or 45 rpm, and adjacent red LED's show which speed has been selected. Touching the STOP contact shuts off the motor and touching REJECT causes the arm to lift and return to its rest before the motor is shut off (this also happens automatically at the end of a record). This is the only automatic feature of the AF 877, since the initial cueing of the pickup must be done manually. Next to the two ON contacts are small knobs that vary each speed, individually, over a nominal range of ± 3 per cent. The speed is monitored by a linear array of nine LED's instead of the usual stroboscope markings. The center LED lights when the speed is exact, and the others come on at 1 per cent intervals over a range of about ± 4 per cent about the nominal value.

Forward of the speed indicator is the tracking-force scale. This unique Philips feature has been used on some of their earlier record players. A mechanism built into the arm-rest post is so arranged that whenever the arm is on its rest, the scale shows the force that would be exerted on the record surface. The tracking force is adjusted in the usual manner by turning the threaded counterweight at the rear of the arm (except that, unlike other tone arms, no initial balancing is required). The scale is calibrated from 0.5 to 3 grams at intervals of 0.25 gram.

The Philips AF 877 is furnished on a handsome brown base with a hinged, tinted-plastic dust cover that remains open at any angle. With the cover closed, the record player measures 16 $\frac{1}{2}$ x 13 $\frac{3}{4}$ x 5 $\frac{1}{2}$ inches; it weighs 12.8 pounds. Price: \$239.95.

● **Laboratory Measurements.** We tested the Philips AF 877 with a Sonus Red Label cartridge installed in its arm. The installation was simple and straightforward because of the open design of the head shell and the easy-to-use plastic positioning jig. The tracking error was less than 0.4 degree per inch for record radii from 2.5 to 6 inches (this is about as low as can be measured with a protractor). The tracking-force gauge of the AF 877 was very

accurate when checked against our balance-type gauge. When the tip of the indicating line just reached the scale line, the error was less than 0.1 gram (usually much less) over the entire 0.5- to 3-gram range of the scale.

The arm and cable wiring, measured at the end of the signal cables, had a very low capacitance of 70 picofarads. The arm mass, including the cartridge, was only 16.5 grams, indicating a net effective mass of only 11 grams for the arm (one of the lowest figures we have measured on any tone arm). With the very compliant Sonus stylus, the arm resonated at an ideal warp-insensitive frequency of 10 Hz with an amplitude of only 3 to 4 dB.

The flutter was 0.09 per cent in an unweighted peak (DIN) measurement and 0.07 per cent unweighted rms (JIS) using a DIN 45-545 test record. Both figures, though slightly higher than the Philips specifications of 0.05 and 0.03 per cent, represent good turntable performance. The major flutter components were in the 15- to 18-Hz region. Rumble was very low, -34 dB unweighted and -66 dB with ARLL weighting. The latter ranks with the lowest rumble readings we have ever obtained, being matched by only a couple of very expensive turntables. The principal rumble frequency was 8 Hz, with a much smaller component at 30 Hz.

The antiskating dial calibration was essentially correct for the elliptical stylus on the Sonus cartridge. The outward drift of the arm during its descent under the control of the cueing lift was very slight, usually no more than a groove width. The automatic shut-off cycle, from the time the REJECT contact was touched until the motor shut off, required 12 seconds. The operating speed was essentially accurate to within ± 0.1 per cent, although some care was needed to set the vernier speed control to the center of the small range (about ± 0.3 per cent) through which the center LED remained lit.

The isolation of the pickup from base-conducted vibration was very good. Not only was the Philips AF 877 much better than most direct-drive turntables in this respect, but it was also noticeably better than the average belt-

driven turntable. Shaking the turntable or its support while playing a record rarely caused the pickup to lose contact with the groove; however, it did tend to cause a transient "wow" (an effect we have noticed on earlier Philips record players using the same type of suspension). In normal handling, there is no tendency for this to occur.

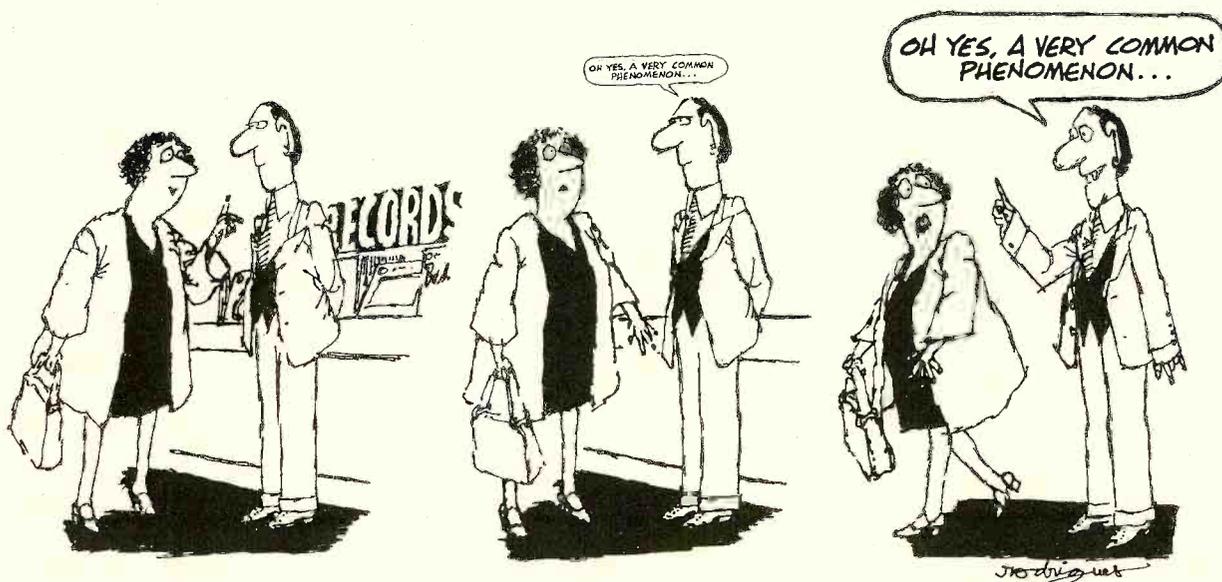
● **Comment.** The Philips AF 877 is a refreshingly "different" record player. And, best of all, its features are functional and genuinely useful rather than "gimmicky" in nature. Despite its unconventional aspects—or perhaps because of them—we found the AF 877 to be unusually easy to set up and operate. As our tests showed, its performance, without regard to its features, ranges from good all the way to outstanding.

The low-mass tone arm proved its worth when we played our growing collection of severely warped records. Very few conventional tone arms can play any of these discs without jumping out of the groove; the Philips managed to play all of them, with no more than a brief "wow" or "thump" as its stylus passed over the crest of a warp. The AF 877 was almost unique among the integrated record players we have used in its ability to "stay with" badly warped records.

The touch controls worked very well (similar controls have been used on other Philips record players for some years). They are powered from a separate power supply that is always on when the player is plugged into a "live" outlet (there is no power switch on the AF 877), so perhaps it would be best to plug the unit into a switched outlet on an amplifier or receiver. However, we left it energized for long periods of time with no problems (the standby power consumption is negligible).

The built-in stylus-force gauge is such a simple and effective device that we wonder why no one else has adopted it. It is apparently more accurate, and certainly much easier to set up, than most conventional balance-and-adjust systems, if for no other reason that there is no ambiguity about the arm-balance

(Continued on page 52)



"Perhaps you can help me. On some of my records I hear music very faintly even before the composition actually begins."

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



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

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

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

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



THE PHASE 1000 SERIES TWO

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

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

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

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

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

Phase Linear[®]
THE POWERFUL DIFFERENCE

condition. Over the years, we have come to expect (but never to accept) a number of clicks and other mechanical sounds during the cycling of any record player with some automatic features. The virtually total silence of the AF 877 came as a welcome surprise—it appears to be as quiet mechanically as it is electroacoustically.

The "Direct Control" feedback system appeared to work well, and we found no unde-

sirable side effects from its use. Its ability to restore correct speed under the added load of a record-cleaning brush was dramatically demonstrated by the way the speed-indicator LED's dropped to their lower limit when the brush was pressed firmly against the record and then returned to a center reading in a couple of seconds. The torque of the drive system appears greater than that of most belt-driven turntables.

Philips has done a fine job of engineering value as well as performance into their new record players. The AF 877 is not only one of the better semi-automatic record players we have seen, but it is priced very competitively. According to the manufacturer, the same basic qualities and drive mechanism are incorporated in the lower-price models of the new line.

Circle 135 on reader service card



TODAY, some six years after the introduction of their D-12 speaker, Design Acoustics has replaced it with the D-12A, a totally redesigned system whose major kinship to its predecessor is its dodecahedral (twelve-sided) construction. Like the D-12, the new D-12A is virtually omnidirectional, radiating energy through most of the sphere surrounding the speaker. However, in the physical distribution of its drivers, and in their individual characteristics, the D-12A is very different from the D-12.

The D-12A is about 25 inches in diameter and is mounted on a stubby chrome pedestal that raises its top about 26 inches from the floor. Most of its visible surface is finished in walnut-veneer particle board accented by circular black grilles on the pentagonal faces of the dodecahedron (this speaker could be an excellent educational aid for the student of solid geometry!). The top surface of the system is solid and is thus able to support a lamp, vase, or similar object.

The bass frequencies are radiated by two 8-inch woofers. They face generally forward, are angled downward, and are ported through a duct that opens through one of the rear panels. The duct is normally plugged by a piece of foam plastic which can be removed if desired to enhance the low-bass output of the system slightly. On the front (upward-facing) side of the D-12A are a 1½-inch dome mid-range driver and a 1½-inch cone tweeter. On each of the two sides that face sideways and up-

ward is a 1-inch dome tweeter. On each of the side-facing sections, angled downward and to the rear, is a 5-inch cone mid-range speaker (the woofer duct opening is on one of these sides). Finally, on the two rear upward-facing sides of the dodecahedron are 1½-inch cone tweeters similar to the one that faces forward. The crossover frequencies of the three-way system are 650 and 2,000 Hz.

The system's binding posts are located underneath the pedestal on a formed-plastic panel which is part of one of the lower rear facets. There are also three toggle switches that adjust the levels of the bass, mid-range, and treble drivers over a ± 2 -dB range, a 5-ampere fuse to protect the speaker against excessive power levels, and an additional pair of toggle switches that convert the speaker's spherical radiation to a pattern covering only the forward hemisphere. It does this by switching off the pairs of rear-facing drivers (two mid-range and two tweeters).

The D-12A has a nominal impedance rating of 4 ohms and its power response is rated at 30 to 18,000 Hz ± 2 dB. It is suitable for use with amplifiers delivering from 25 to 200 watts per channel. The D-12A weighs 70 pounds, and special provisions are available for hanging it from the ceiling. Price: \$675; in the optional rosewood finish, \$850.

● **Laboratory Measurements.** Since we use a specially calibrated Design Acoustics D-12 as our omnidirectional reference system, we

were able to measure and listen to the new D-12A in a side-by-side comparison with the older version.

The composite and corrected frequency response of the D-12A, combining a close-miked bass measurement with a reverberant-field measurement at mid and high frequencies, showed a slightly rising output above 6,000 Hz (to a maximum of +6 dB at 15,000 Hz) and below 200 Hz (to +4.5 dB at 65 Hz). When we switched the dispersion from spherical to hemispherical, the high-frequency response flattened out considerably, since the rear radiation was no longer being reflected from the wood-panel wall behind the speaker and contributing to our measurement in the reverberant field of the system. In the hemispherical mode, the response was within ± 2.5 dB from 100 to 20,000 Hz (the bass response was not affected by the dispersion change).

Our bass-response measurement must be interpreted properly, however. The Design Acoustics D-12A, like any other rear-radiating, dipolar, or omnidirectional system, is quite dependent on room acoustics and speaker placement for optimum results. Normally the speakers will be installed at an unpredictable distance from a back wall (probably in the range of 1 to 3 feet) and an equally uncertain distance from a side wall. These distances can have a significant effect on the lower mid-range and bass response. We measured the speaker's response with 1- and 3-foot spacings from the back wall, with little difference in the reverberant-field measurement. There was some effect on the audible balance of lower and middle frequencies, however. Since these effects will be different in every room, it is unwise to take the measured low-frequency response too literally. It indicates the *potential* bass performance of the speaker, but the actual response in any specific room and at any given listening position can be determined only by experiment. We found little difference in the bass response when the plastic plug was removed from the port. We were told that this was a minor fault in the woofers in our early test samples. The current systems provide a bass increase of up to 3 dB in the 20- to 50-Hz range when the plug is removed.

When we measured the old D-12 in the same manner, we found it to have a somewhat smoother overall response, sloping slightly downward with increasing frequency, and with maximum output in the 70- to 80-Hz range. It could be described as having slightly less output at the extreme low and high fre-

(Continued on page 54)

THE JVC CASSETTE DECK.

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

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

Exclusive Spectro Peak Indicator System.

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

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

Expanded Dynamic Range and Better Noise Reduction.

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

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

New Head Design.

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

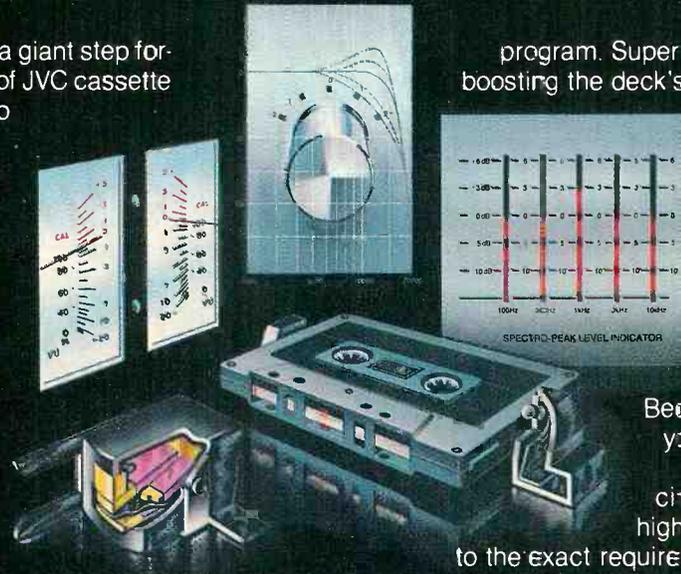
Get the most out of any tape

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

to the exact requirements of the tape. These innovations alone set JVC cassette decks apart from all the others. Then, when you consider our other refinements,

like precision-ground capstans, gear/oil-damped cassette coors, multi-peak LED indicators, independent

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

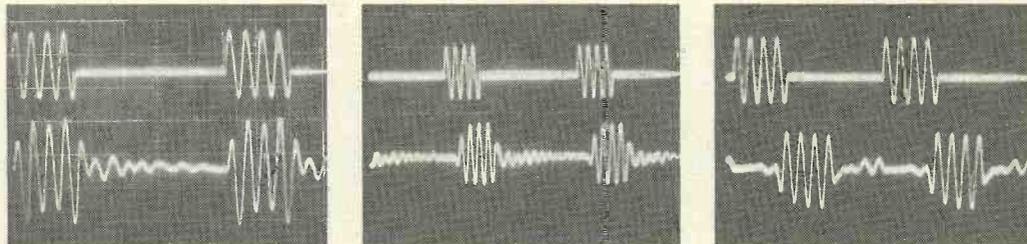


Top: KD-65, KD-55, KD-25. Bottom: MD-10, KD-1770 II, KD-1636 II. Not shown: KD-2, KD-3030, KD-S20.

JVC



The tone-burst response of the Design Acoustics D-12A is illustrated at (left to right) 100, 1,300, and 10,000 Hz. The upper trace is the input signal.



quencies than the D-12A, but with a slightly smoother overall response.

The bass distortion of the D-12A was unusually low—and might be even lower with the current woofers. At drive levels of either 1 watt or 10 watts into its 4-ohm rated impedance, the distortion was under 1 per cent (and typically about 0.3 per cent) down to 50 Hz. It increased only gradually at lower frequencies, to 3 per cent at 30 Hz and 10 per cent at 20 Hz (1 watt). At a 10-watt level, the distortion was about 7 per cent at 30 Hz. The impedance of the D-12A was approximately as rated, measuring about 5 ohms at most frequencies and reaching a maximum of 10 ohms at the bass resonance of about 30 to 40 Hz. However, the impedance drops to only 3 ohms at 1,500 Hz, so care should be taken to use an amplifier that can operate properly into that impedance. We measured a sound-pressure level of 83 dB at a distance of 1 meter from the front "point" of the cabinet when it was driven by 2.83 volts of random noise in the octave centered at 1,000 Hz. In this respect, it was similar to some of the better acoustic-suspension systems despite its ported design. When examining the tone-burst response of the D-12A, we had to use close microphone spacing to minimize interference from adjacent drivers. Generally speaking, the tone bursts were reproduced well, with no serious ringing or aberrations despite the multiple drivers.

● **Comment.** We found our listening tests of the D-12A to be at least as interesting and informative as our measurements. This was partly because we had previously found the original D-12 to be an exceptionally fine-sounding system and were curious to hear how the D-12A compared with it.

The first installation of the D-12A's was in an acoustically "hard" room, where we found the sound too bright for our taste (this has been the case with most speakers we have tried to use in that room). The speaker's level-balancing switches had very little effect—perhaps they would be suitable for a "final trim" of the sound, but they do not have the range needed to compensate for the more pronounced sonic imbalances found in some rooms. Our solution was to switch to hemispherical dispersion, which reduced the total high-frequency power sufficiently to balance the overall response very nicely. In that condition, the sound of the D-12A was smooth, open, and well balanced—easily the best we have heard in that room, where a number of good conventional speaker systems have produced indifferent (or worse) results.

In our laboratory/listening room, the acoustics are very different. It is fairly "dead," with a carpeted floor and acoustic-tile ceiling combined with wood wall paneling. Here we found the balance to be about right using the

spherical dispersion, and the sound took on that "invisible" quality that had appealed to us when we first heard the D-12 years ago (it is a property of most good "omnidirectional" speakers). By "invisible," we mean that the physical location of the speakers themselves cannot be pinpointed by ear, although the stereo imaging can be as pronounced as ever. One has to literally stand next to a speaker to tell that it is playing. The contrast between the spatial quality of the D-12A and that of our regular speakers (very good acoustic-suspension systems with excellent forward dispersion) was unmistakable. No doubt most people will choose one or the other type of sound. We tend to agree with George Sioles, designer of the Design Acoustics systems, who conjectures that the optimum radiation pattern for any speaker may be a function of the type of music being heard *and* (as we found out) the acoustic properties of the listening room.

In a large concert hall, with a sizable group of instrumental or vocal performers, the sound is a broad panorama. In reproducing such a performance, the added diffusion afforded by a spherical- or other wide-dispersion speaker can do much to enhance the naturalism of the reproduction. On the other hand, smaller-scale performances can sometimes sound poorly focused with omnidirectional reproduction, and in such a case the ability to restrict a system's radiation pattern to the front hemisphere (as with the D-12A) can be very useful.

We found that the D-12A is not quite as sonically "invisible" as the D-12, probably because of its different driver configuration. With the D-12, it is usually necessary to stand directly over the mid-range driver to be sure it is playing (when it is among a group of speakers). The location of the D-12A is a bit more obvious to the ear, though not nearly to

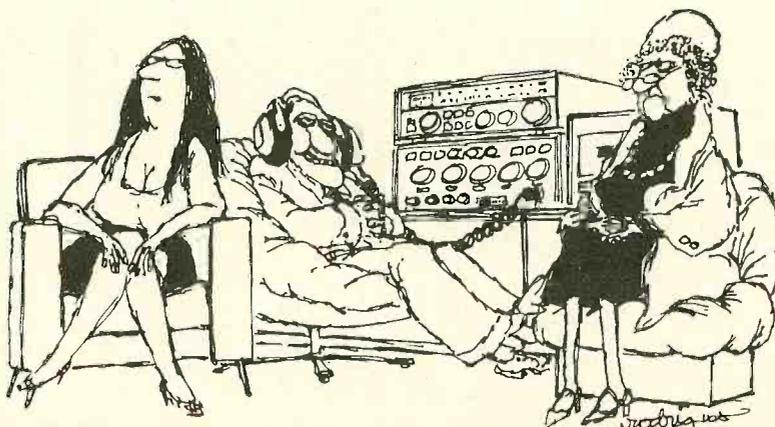
the extent shown by conventional forward-facing speaker systems.

Although we normally prefer not to become involved in matters of styling and visual aesthetics, it is unavoidable with the D-12A. We find it strikingly handsome, and it is one of the few recent top-quality speakers as pleasing to our eyes as to our ears. (In this case, the "our" includes my wife also!) It is deceptively small looking, and hence does not visually dominate even a fairly small room. However, anyone attempting to pick this speaker up will be convinced that it is a true heavyweight (or at least a "light heavyweight").

A final word on how it sounds compared to the D-12: it is obviously a very close relative, but by no means a twin brother. The wide bandwidth and the smooth and well-dispersed sound of the older speaker are very much present in the D-12A, but there is a slightly distant quality (compared with the D-12) that we believe to be connected with slightly less output in the vicinity of 700 Hz. The D-12 seems to sound warmer and more forward in this comparison. Either sound quality might be preferred over the other, depending on the individual doing the evaluation. In any case, since these qualities might well be affected by the room, we would suggest that some repositioning be tried if the initial result is not totally satisfying. Either of the Design Acoustics speakers was much more open in its sound than our standard calibrated reference speaker system, though not as powerful in the deepest bass register. And, when it comes to appearance, the D-12A is a hands-down winner, not only over the D-12, but in comparison with any "box" speaker we have seen.

Circle 136 on reader service card

(Continued on page 56)



"Watch what you say, Mama—he just finished a course in lip reading. . . ."

Technics

When it comes to turntable speed accuracy, we agree with our competitors. You can't beat quartz-locked direct drive. But when it comes to total turntable performance, many professionals agree. You can't beat Technics.

That's why so many radio stations and discos use Technics quartz-locked turntables. Because they need performance like wow and flutter of 0.025% WRMS, rumble of only -78 dB (DIN B), and speed accuracy of $\pm 0.002\%$. Those are impressive specs. And if you've wondered why you don't see specs like these in our competitors' ads, it's usually because you won't find them in our competitors' turntables.

You will find these specs in Technics new 5000 Series: the SL-5100 manual, the SL-5200 semi-automatic, the SL-5300 automatic (shown below) and the SL-5350 changer. Along with a lot more.

Like a full-cycle detection servo system packed into three high-density IC "chips." It assures proper rotational speeds, even under heavy loads. And TNRC, a unique Technics Non-resonant Compound virtually eliminates feedback.

At the same time, a highly sensitive statically balanced "S"-shaped tonearm drastically reduces friction to only 7 mg on both vertical and horizontal planes.

Each turntable features a prism-stylus illuminator to help prevent miscues. While front-panel controls with damped cueing make operation easy, even with the dust cover closed. There's also an anti-skating control. And pitch controls variable by $\pm 6\%$.

Now you know what many discos and radio stations already know: Quartz isn't the last word in turntables, Technics is.

Many hi-fi buffs think quartz is the last word in turntables. Technics knows it's just the beginning.



CIRCLE NO. 58 ON READER SERVICE CARD



Sansui AU-919 Integrated Amplifier

SANSUI's most powerful integrated stereo amplifier, the AU-919, is rated to deliver 100 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.008 per cent total harmonic distortion. It is a "fast" amplifier, even by today's standards, with a slew-rate specification of 200 volts per microsecond. The direct-coupled power-amplifier section has a rated frequency response of +0, -3 dB from d.c. to 0.5 MHz.

The AU-919 has five power supplies using two power transformers. Separate rectifier and filter systems are used for the output stages of the two channels, and another pair of electronically filtered supplies powers the driver stages. A separate highly regulated supply serves the various low-level stages in the amplifier. The circuits of the phono-preamplifier and power-amplifier driver stages are not shown in the schematic diagram that accompanies the amplifier. In each case, the circuit is indicated by a box marked "Diamond Differential DC Circuit," which is apparently a proprietary Sansui development whose details they do not wish to disclose at this time.

An elaborate protection system senses overloads, output short circuits, or the presence of a d.c. potential at the speaker outputs and shuts down the amplifier instantly with a relay if any of these conditions is detected. A red light on the front panel blinks when the circuit operates (the protective system also provides a turn-on time delay of several sec-

onds, during which time the light blinks). Under normal conditions, the light is steady and serves as a pilot light.

In many of its control features and circuit details, the AU-919 is unlike most other integrated amplifiers. It has a built-in head amplifier for moving-coil phono cartridges which can be connected to one of its two phono inputs. The input-selector switch has three phono positions: PHONO 1 for either moving-magnet (MM) or moving-coil (MC) cartridges, and PHONO 2 for MM cartridges only. There are two high-level inputs, which are marked TUNER and AUX.

The tone controls appear conventional, with eleven-position stepped controls for bass and treble. Next to each is a pair of pushbuttons that select its turnover frequencies (3,000 or 6,000 Hz for the treble, and 150 or 300 Hz for the bass). However, the range of the control action is considerably less than that of typical tone controls, being rated at ± 6 dB maximum at 50 and 15,000 Hz.

Toggle switches control some familiar functions, such as tone defeat, subsonic filtering (a 6-dB-per-octave slope below 16 Hz), and muting (a 20-dB level reduction). A fourth switch is marked JUMP. This rather cryptic term is explained in the instruction manual; the switch not only eliminates the tone controls from the circuit (as the TONE DEFEAT switch does) but removes all active circuitry between the inputs (or outputs of the phono preamplifier) and the power-amplifier input. Operating

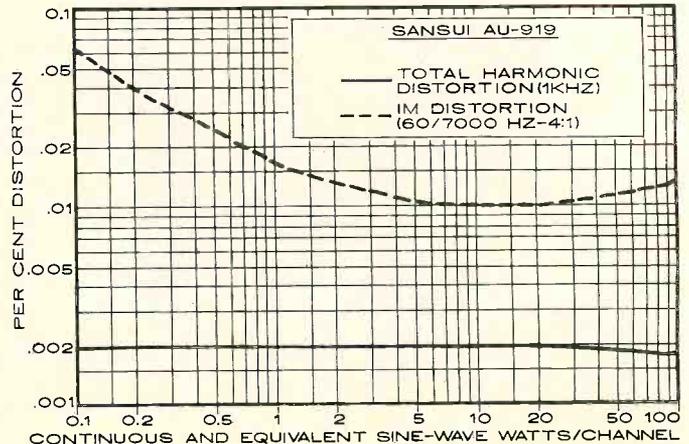
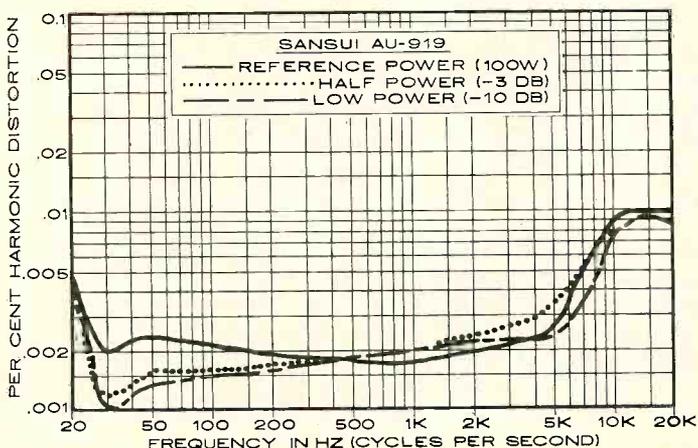
this switch also reduces the amplifier gain by 16 dB.

The volume control is a large knob that is detented at intervals of from 1 to 6 dB over its range of 70 dB. A small center-detented balance knob is located below it. The tape-recording and monitoring facilities of the AU-919 are unusual in being divided into recording and playback functions. There are three TAPE PLAY buttons, only one of which can be engaged at a time. When the SOURCE button is pressed, the selected program is heard through the amplifier. The TAPE 1 and TAPE 2 buttons connect the playback outputs of either of two tape decks to the amplifier. Working in conjunction with the TAPE PLAY buttons is a separate COPY knob, with positions marked TUNER, OFF, SOURCE, and two dubbing positions that connect the two tape decks for copying a tape from either one to the other.

In its SOURCE position, the COPY switch supplies the selected program to the recording inputs of both tape decks. In TUNER, the tuner program is delivered to both decks regardless of the setting of the input selector (which determines what is heard through the speakers). Regardless of what is being recorded at any time, the output of either tape deck can be heard by pressing the appropriate TAPE PLAY button. The OFF position of the COPY switch disconnects the tape-recording outputs of the amplifier from all signals.

The remaining front-panel features of the AU-919 are the SPEAKERS switch, with positions for connecting either, both, or neither of two pairs of speakers to the amplifier; the phones jack; the power switch; and the pilot light (marked PROTECTOR). On the rear apron, in addition to the various signal-input and output jacks, there are preamplifier-output and power-amplifier-input jacks normally joined by a slide switch. Insulated spring connectors are used for the speaker terminals. One of the three a.c. outlets is switched. The Sansui AU-919 is a moderately large and surprisingly heavy amplifier. It is 17 inches wide, 16 $\frac{3}{8}$ inches deep, and 6 $\frac{1}{2}$ inches high, and it weighs about 47 pounds. It is finished entirely in black and is furnished with accessory rack-mounting adapters and handles. Price: \$800.

● **Laboratory Measurements.** The one-hour preconditioning period left the top of the Sansui AU-919 moderately warm over the power transistors (which are aligned from front to rear within the cabinet). The outputs clipped
(Continued on page 58)



BOB LIFTIN THINKS YOU ARE READY FOR GRAND MASTER™ TAPE. ROY CICALA HAS HIS DOUBTS.

"Who wouldn't be knocked out by a tape with specs like Grand Master?"
—Bob Liftin
Regent Sound Studios,
New York City



"Sure, they'll know Grand Master sounds better. But not how much better, unless they actually test it."
—Roy Cicala
The Record Plant,
New York City

mean a lot to pros. But how many home systems are sensitive enough to pinpoint the improvement?"

Noting the difference of opinion, we asked other top engineers.

Most agreed with Bob. (Sorry, Roy.)

They felt Grand Master's sensitivity would yield a realistic, cleaner sound.

So now we make 4 new versions of Grand Master. Cassette. 8-track. Open reel. And a new Grand Master II high-bias cassette.

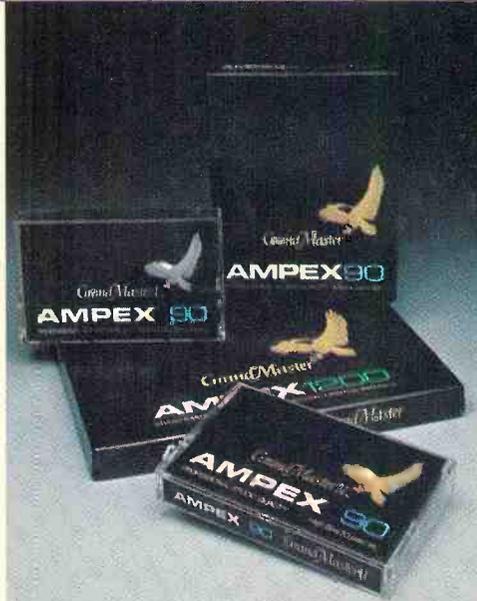
And we think you're ready for them. Even if Roy Cicala isn't sure.

We asked Bob Liftin and Roy Cicala if home audio buffs were ready for tape as sophisticated as Grand Master.

They should know. They're both nationally famous recording engineers who've been using Grand Master in the studio since 1973.

Bob said, "Sure they're ready. Grand Master's dramatic 4 to 8 dB improvement in signal-to-noise ratio allows a guy to hit the tape 3 to 6 dBs harder and still get better distortion figures."

Roy wasn't so sure. "Of course, Grand Master's lower distortion and higher output



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

AmpeX Corporation, Magnetic Tape Division, 401 Broadway, Redwood City, California 94063, 415/367-3887

CIRCLE NO. 6 ON READER SERVICE CARD

at 119 watts per channel into 8 ohms for an IHF clipping-headroom rating of 0.76 dB (the 4- and 16-ohm clipping outputs were 177 watts and 70 watts per channel, respectively). The IHF dynamic headroom was 1.02 dB, corresponding to a short-term clipping output of 126 watts.

The distortion of the AU-919 was literally unmeasurable over much of its operating range. Using our new H-P 239A low-distortion audio oscillator, whose inherent distortion is less than 0.0018 per cent, we measured a total harmonic distortion of 0.002 per cent or less at 1,000 Hz from about 0.1 watt to well over 100 watts output, and it was only 0.007 per cent at the clipping point of about 120 watts. For reasons that are not clear (they are probably related to the ground paths that existed in our test setup), the intermodulation distortion (IM) was slightly higher than Sansui's 0.008 per cent rating, although an IM level of 0.01 to 0.02 per cent over the rated power range of the amplifier can hardly be considered a serious fault!

At its rated power output and at lower power levels, the harmonic distortion (THD) of the AU-919 was typically about 0.002 per cent between 25 and 5,000 Hz. It rose slightly to almost 0.005 per cent at 20 Hz, and it reached its maximum of 0.01 per cent in the 10,000- to 20,000-Hz range. The minute discrepancy between our reading and Sansui's 0.008 per cent rating is again probably due to a combination of test-setup factors we are currently investigating. In any case, exact duplication of distortion measurements in this very low range is difficult even with the same instruments—and in a totally different test setup the difficulty is compounded.

The Sansui AU-919 reached a reference output of 1 watt with an input at the high-level

jacks of 15 millivolts, or a phono input (MM) of 0.215 millivolt. The corresponding signal-to-noise-ratio measurements, with A weighting, were 81.8 and 79.5 dB referred to a 1-watt output. The phono preamplifier overloaded at an extraordinary 460-millivolt input. Its input impedance was 47,000 ohms in parallel with 220 picofarads.

Although there are no universally accepted standards for measuring slew rate, we attempted to verify Sansui's 200-volt-per-microsecond rating. We didn't quite achieve that figure, but the 120-volt-per-microsecond measurement we did record would have to be considered quite remarkable for an amplifier with a 100-watt output rating. The IHF slew factor was in excess of 25, which is our measurement limit.

The phono equalization was within +1, -0 dB of the extended RIAA characteristic from 20 to 20,000 Hz, referred to the 1,000-Hz level. Measuring it through the inductance of a phono cartridge, we found the response up slightly less than 1 dB in the 10,000- to 15,000-Hz range, which would probably tend to flatten out the total response (subjectively) for those few people who can hear such a minute effect.

The tone controls had the specified characteristics, although the differences between the families of bass-control curves using the 150- and 300-Hz turnover frequencies were so slight as to be hardly measurable. As might be expected from a total control range of ± 5 to ± 6 dB, these controls are very subtle in their effect. They can be heard, however, and no doubt will appeal to those people who prefer to make only very slight adjustments to tonal balance. There is no possibility of creating any serious sonic unbalance with these tone controls, and even at their extreme settings

the sound quality was never unnatural.

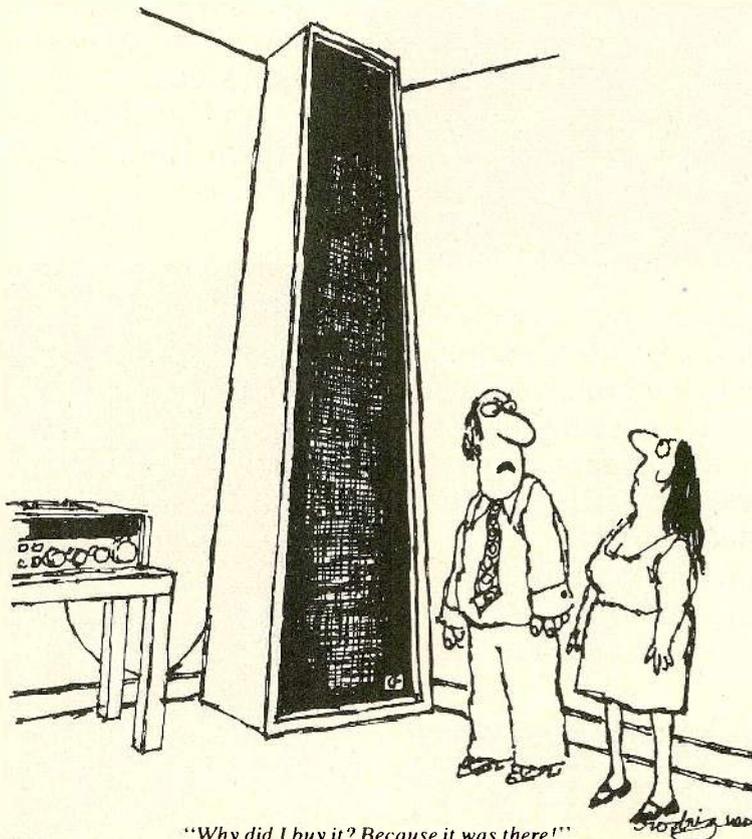
● **Comment.** Sansui has obviously chosen to follow their own careful path in the design of the AU-919. No matter how similar most integrated amplifiers may be (and most are more alike than different), the AU-919 provides a distinct alternative to the general run of amplifiers. Those who rarely, if ever, use tone controls probably will not care one way or the other about Sansui's choice of tone-control curves. However, these controls are more likely to enhance the total sound quality than to degrade it, which is more than can be said about most tone controls we have seen (and heard).

To us, the most unusual thing about the AU-919, in view of its position as the leading integrated amplifier of a high-quality component line, is its conceptual approach to various features. Take filters, for example. Sansui chose to leave them out entirely, perhaps because filters are not a part of their design philosophy (the "subsonic" filter does not fall into this category, being an inherently inaudible filter that serves merely to prevent grossly improper operation of the amplifier or speakers with certain program inputs). We also note that the AU-919 does not have a control for paralleling the channels to form a mono signal (or to cancel vertical rumble when playing mono records).

On the other hand, the tape-recording and monitoring facilities of the AU-919 are certainly among the most versatile we have seen from the standpoint of giving the user complete control over his listening and recording activities. And the inclusion of a moving-coil cartridge head amplifier must not be overlooked in light of the current and apparently growing popularity of that type of cartridge. (Expensive as it is, the cost of a moving-coil cartridge is usually more than doubled by the addition of an external transformer or head amplifier, and it makes good sense both technically and economically to build the necessary gain into the system amplifier.) We listened to both Ortofon and Nagatron low-output cartridges through the AU-919 head amplifier with perfectly fine results. At any reasonable listening level, one can lift the pickup from the record and experience total silence from the speakers, even at close range.

In regard to the "JUMP" feature of the AU-919, inasmuch as our minuscule distortion readings were obtained through the complete amplifier we cannot imagine how any improvement can result from bypassing the 16-dB gain stage and tone-control circuits (which are readily bypassed with the DEFEAT switch). We could not hear any effect from the JUMP switch other than the gain change.

To summarize, the Sansui AU-919 is an amplifier with exceptionally robust construction, more than ample power for most listeners, fantastically low distortion (quite literally unmeasurable under any realistic use conditions), extremely fast response at all power levels, inaudible noise levels, and a built-in head amplifier for moving-coil cartridges. Clearly, this is a superb amplifier meant to be used with the finest ancillary equipment to bring out the best in top-quality sound sources. For that purpose, it could hardly be surpassed, and its fairly high price is well justified.



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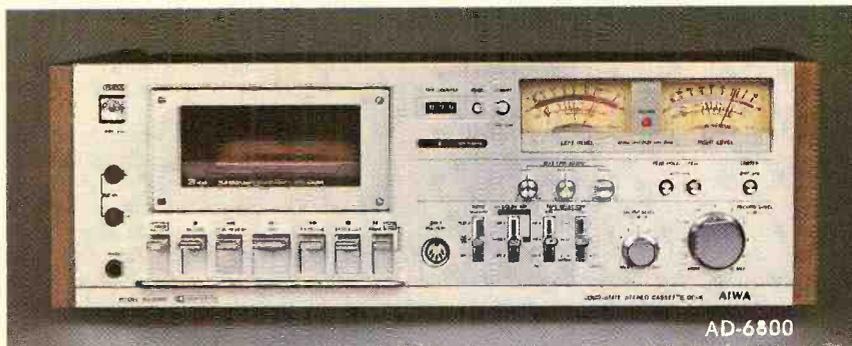
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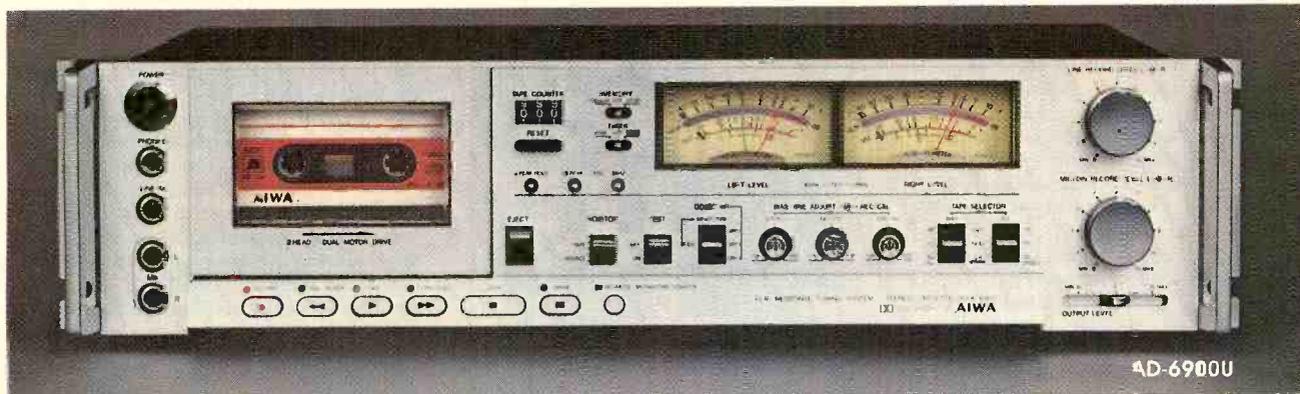
Like the AD-6900U, the AD-6800 offers its own Flat Response Tuning System, and with AIWA's 38-Pulse FG Servo-Motor, speed deviation is kept to a minimum. The AD-6800 also has Double Needle Meters and proven Peak Hold facility. A WOW and FLUTTER of 0.05% (WRMS), a Frequency Response of 20 to 19,000 Hz, and an S/N Ratio of 65 dB using FeCr tape with Dolby on all mean a superior

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Going on Record

By James Goodfriend



VOX POP

EVERYONE professionally involved in the classical-record industry ultimately discovers that his task is a dual one. The first part involves presenting his own particular product—selling it, that is—whether that product is a performance, a record, a critique, or something else. The second is selling classical music *in general* to an audience, most of whose members have never recognized it as a necessity of life nor even as a highly desirable luxury. Every record company has had its own way of approaching this dual problem, and a change in the management of a company has usually led to changes in that approach. Vox Productions (Vox, Turnabout, Candide) is one long-established company that changed hands in the past year, and it is of some interest to look at that company and its catalog again, at least partially through the eyes of the new management.

Vox was, under the long-time direction of the sophisticated and creative George Mendelssohn (short for George H. de Mendelssohn-Bartholdy), a fascinating company and catalog for a number of reasons. Primarily it was a repertoire-oriented company, by definition one that looks first for interesting and salable repertoire to record and then for the proper artists to do it (rather than looking, like most of the majors, for interesting and salable artists and then trying to decide what to record with them). Not that Vox was ever oblivious to performing talent. Such major figures as Otto Klemperer, Alfred Brendel, and Guiomar Novaes made their initial recorded reputations on Vox recordings, and a host of other estimable musicians have recorded for the label.

A second characteristic of a repertoire-oriented company is that its catalog is designed to be active for many, many years. There is minimum duplication of repertoire, there are relatively few cutouts, and the plan is to have available at least one of practically everything at all times. Many a record buyer searching for one particular piece has found that his specific desire can be accommodated only by a single available recording, and as often as not it is on Vox, Turnabout, or Candide. As of this moment, one might cite as examples the Albéniz Piano Concerto, the Beethoven Quintet in E-flat, Op. 4, the Buxtehude *Magnificat*, Spohr's Violin Concerto No. 8 (the *only* one

of his violin concertos currently on records), the Franz Biber "Mystery" Sonatas, Bloch's *Suite Hébraïque*, and, coming shortly, Smetana's *The Bartered Bride*. There are many other such examples, and in many cases where multiple recordings of works *do* exist, Vox's was often the first.

It is interesting also that when representation of American orchestras on records had fallen to an all-time low, it was Vox that stepped into the breach, arranging workable contracts with the St. Louis Symphony, the Minnesota Orchestra, the Cincinnati Symphony, and others. Similarly, when certain classic historical recordings were withdrawn from circulation by the companies that originally issued them here, it was frequently Vox that rescued them, arranging licensing and putting them back in the active catalog.

As a final point, all Vox's recordings have been available for a price—that is, a *low* price. The current list price for a Candide or Turnabout is \$4.98, for a Vox Box (three records), \$11.95.

Vox is now a division of the Moss Music Group, Inc., headed by Ira Moss. Though Vox will continue to expand its catalog in directions similar to those it has taken in the past, Moss' preoccupation is not with expansion of catalog but with expansion of audience, basically the second part of that dual record-business task discussed above. Moss' background is with mass distribution and sales. Though classical music interests him, it is not his creative area as it was George Men-

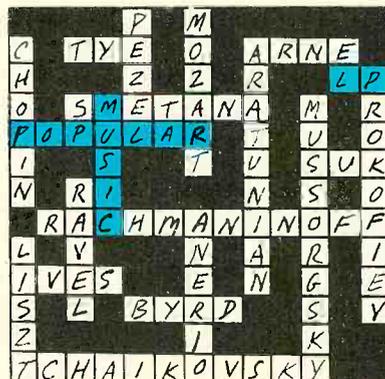
delssohn's. Why, then, did he take over the company?

Largely, I think, because one can be creative in the *marketing* of a product as well as in its conception and production. Moss' current marketing ideas go considerably beyond those of most classical companies. For example, there have been, in the past, highly successful merchandising schemes involving extensive sets of records offered, one or two at a time, through supermarkets. There are two distinct characteristics of these schemes: first, the costs are high and the unit profit small, but the quantities sold are enormous; and second, those who imitate such successful ventures too soon afterwards lose their shirts.

The extensive Vox catalog has been called on in the past to supply material for some of these ventures (including a very recent one), but, frankly, Vox has sufficient material to do the whole thing itself. It is far too soon to do so again domestically, but who says that all the supermarkets are in the United States? The record business today is international, and no one realizes the market significance of that more than Ira Moss. Mexico, to begin with, can expect such a campaign.

The very word "classical" is anathema in many sections of the record business. For example, most rack jobbers—the largest of them—will not touch a classical record. (For those who do not know what rack jobbers are, they are the people who set up and stock the record departments of those stores that cannot themselves afford the trained personnel necessary to run a commercially viable record operation; these range from the single record-filled "rack" in the corner grocery or drug store to the extensive record stocks of many department stores.) Rack jobbers have become among the most important factors in the entire record business because they buy in huge quantities, their market penetration is both broad and deep, and they can work fast. They generally will not buy classical, but they might well buy MOR mood music of thrice-familiar "favorites." Many of those thrice-familiar favorites are out-and-out classical music, and Vox has them all in its catalog. Creative cutting and coupling, romantic cover designs, suggestive album titles, and the playing down of the classical element to the point where not even the artists are named result in a record that can be distributed where classical records never are and that will be bought by people who never buy classical music. The profit margin is small and the aesthetic value, as we ordinarily calculate it, is nil, but the audience and the potential sales are of pop dimensions.

OBVIOUSLY, we are entering the territory of selling the right things for the wrong reasons. But consider this: There are two ways for an elite art form to survive in an egalitarian society. One is for it to command general respect for its quality and rarity, so that even those who do not partake of it agree on its value and importance. That is getting harder and harder to maintain. The second is for it to become, through every available means, so insidious and ubiquitous that it is absorbed by huge masses of people as an essential part of life. I am temperamentally an elitist—we all are, in one way or another; we differ merely in what we are elitist *about*—but I want great art to survive and I'll take that survival any way I can get it. So here's wishing Vox all the luck in the world. □



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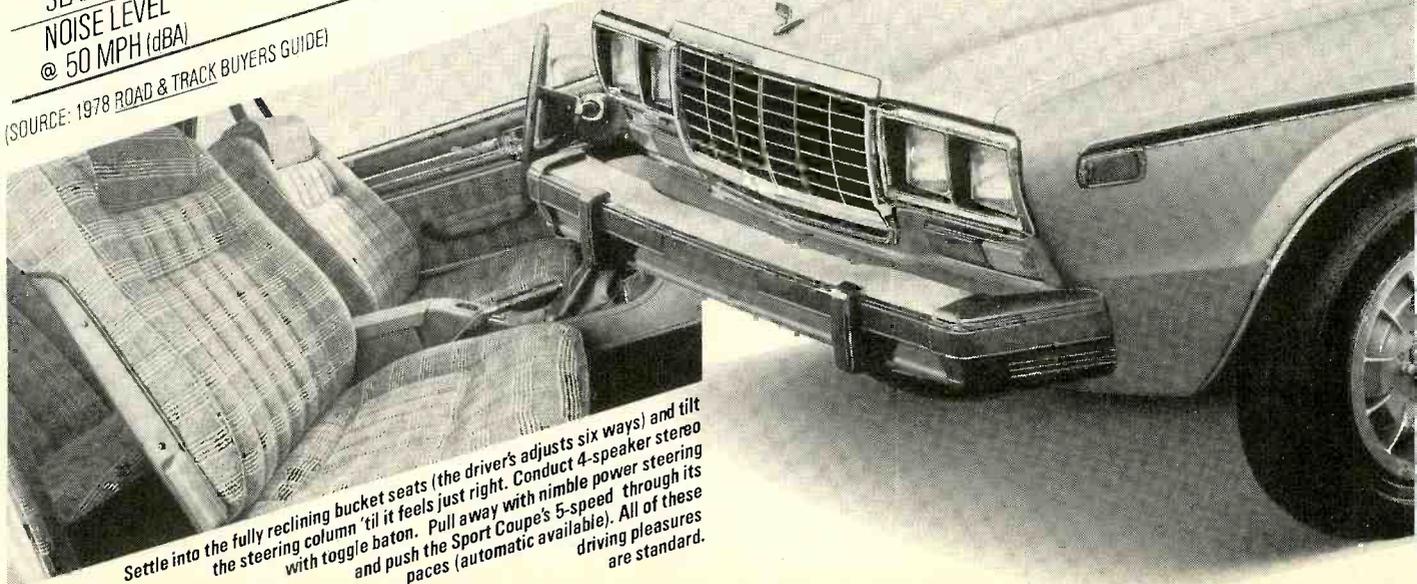
Kings, 17 mg. "tar", 1.4 mg. nicotine; Longs, 18 mg. "tar",
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WHEELBASE (INCHES)	DISC/DRUM	DISC/DISC	DISC/DRUM	DISC/DRUM	DISC/DISC
BRAKES	IND/IND	IND/IND	IND/BEAM	IND/IND	IND/LIVE
SUSPENSION	SOHC 6	DOHC 6	SOHC 5	SOHC 4	SOHC 4
ENGINE	127	137	103	112	114
HORSEPOWER (BHP)	BOSCH	BOSCH	BOSCH	BOSCH	BOSCH
FUEL INJECTION	18.7	18.6	19.5	18.7	19.8
PERFORMANCE STANDING 1/4 MILE (SEC.)	160	155	148	167	180
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RICCARDO MUTI

"The conductor must be Number One...
That is the lesson of Toscanini"

By Roy Hemming

MUTI as in *muted* or as in *silent*? Isn't that an ironic name, I asked, for an Italian conductor who's been making a big noise internationally with recordings of such splashy, large-scale works as Prokofiev's *Ivan the Terrible*, Verdi's *Aida* and *Macbeth*, and the Tchaikovsky symphonies?

"No, no," the intense, darkly handsome, thirty-seven-year-old Riccardo Muti replied, with a warm smile, in his fluent, lightly accented English. "You see, my name is not from the root for *mute*—but from the Latin *mutus*, meaning *mutual*." And that, he promptly added, is pretty much how he views music-making—as a mutual experience of all the per-

formers in a specific work. He paused briefly, looking me straight in the eye. "But the conductor must be Number One—especially in opera. That is the lesson of Toscanini."

We were talking backstage in Philadelphia's Academy of Music following a rehearsal for a Philadelphia Orchestra concert Muti would lead the next evening. In 1977, to the surprise of many, Muti was named principal guest conductor of the orchestra, the first so-named leader the Philadelphians have had since Eugene Ormandy became their music director in 1936. Actually, there had been earlier "heir apparents" to the solidly entrenched, popular Ormandy,

but Muti is the first to be given an official title—and, with it, the opportunity to record regularly with the orchestra over the next three years. (Recorded last year for Angel, and just released: Stravinsky's *Firebird*, the Moussorgsky/Ravel *Pictures at an Exhibition*, and Beethoven's Seventh Symphony—see review on page 102.)

There is little doubt in Philadelphia about Muti's popularity with audiences, with the Philadelphia management, and with Ormandy himself. Everyone in Philadelphia I talked with spoke of his magnetism on the podium and his warm, Italianate charm off it.

It was Ormandy who invited Muti to come to Philadelphia for the first time in 1972, after Ormandy heard him conduct a concert in Europe. But outside of Philadelphia and New York (where Muti has led regular Philadelphia subscription concerts for the past two seasons), few Americans have yet had a chance to see and hear Riccardo Muti in person. "I prefer to conduct often in a few places, not the other way around, *et cetera, et cetera*," he says, using the phrase he is almost as fond of as was the King in *Anna and the King of Siam*.

SUCH independence has marked much of Muti's life, and today it distinguishes him from most of the jet-hopping conductors of his generation. Born in Naples in 1941, he divided his education between Naples and Milan. He started out as a piano and composition student, working his way through the conservatory in Milan as a rehearsal pianist for vocal students. An unexpected opportunity to conduct a student orchestra changed his entire musical course. In 1967 he won the prestigious Guido Cantelli International Competition, and with it came an invitation to conduct at the Maggio Musicale in Florence. His performances there were such a success that in 1969 he was invited to be its music director, a position he still holds.

Muti's 1972 debut with London's New Philharmonia Orchestra made a similar impression, and when Otto Klemperer died the following year, Muti was named to succeed him as the Philharmonia's principal conductor (another position he still holds). Meanwhile, Karajan invited him to conduct in Salzburg and Berlin. Before long, he was also a favorite at the Vienna State Opera and London's Covent Garden.

As invitation after invitation poured in, Muti decided to dig in his heels and say no to most of them. His strong sense of perfectionism led him to choose the path, rather, of doing a few things well in a limited number of places. He has made it clear to his record producers, for example, that he

will not record any work—especially an opera—that he has not previously performed in public. He objects strongly to the way many conductors and singers learn works only for recordings, having no identity with the works other than those recordings.

"For an opera recording, in particular," he says, "I think the experience of the theater is essential. You need to experience the audience reaction, know the scenery, the staging, *et cetera, et cetera*, to create the right atmosphere, the right drama, even the right tempi. When singers don't know an opera, they are so busy with the score in their hands that they lose eye contact with the conductor. In a recording, just as in a performance, it's very important that the singers have their eyes fixed on the eyes of the conductor all the time. Not just to follow, but to understand the conductor's ideas and feelings. The eyes tell it all.

"Only once have I come close to recording an opera I had not previously done in a theater," Muti admits. "I was asked to do Verdi's *Nabucco*, and I kept saying I'd never done it. The record company kept insisting it was a work we should do, so I finally said maybe. But first I went to work to change my schedule at the Maggio Musicale so it would be possible for me to give eight performances of *Nabucco* in Florence. After those performances, I felt right about making the recording—and we did so. I believe the theater still has the most to say to a conductor. Too many recordings just aren't theatrical because the conductor or leading singers have not had experience with that opera in a theater. You can always tell.

You can hear the difference right away."

How does Muti feel about the fact that he will be recording with an orchestra (the Philadelphia) that has already recorded virtually *all* of the major concert repertoire over the past fifty years, first under Leopold Stokowski and then under Ormandy? "I have no problems about this," he replied. "I don't want to seem arrogant, but any conductor has a personal view of Beethoven, Brahms, Tchaikovsky, Prokofiev, *et cetera, et cetera*. So each new recording is bound to be different. And, frankly, I don't care so much about comparisons. I think some critics spend too much time comparing and not analyzing performances. When you do Brahms with the Berlin Philharmonic, if you worry about how you'll be compared with Furtwängler or Bruno Walter, or if you do Brahms with the Vienna Philharmonic and you remind yourself that this orchestra gave the first performance of this work—well, that's no good. The fact that the Philadelphia Orchestra has recorded all of Beethoven's or Brahms' or any other composer's major works with Stokowski and Ormandy is not a problem for me because, after all, some conductors have already recorded the same works *themselves* two or three times. There is always something new to say about a great work. That doesn't mean it's always better, of course. But I think it is not right to listen to *any* performance only to compare it with a memory of other performances."

Of his recordings to date—almost all with the Philharmonia—Muti admits "a special sympathy" for the Mendels-

Left to right: producer John Mordler, Riccardo Muti, and Montserrat Caballé at Walthamstow Town Hall during recording sessions for the Angel/EMI set of *Aida*.



Reg Wilson/Angel/EMI

"Today, for Verdi, you have in the world only two possibilities for recording casts."

sohn Third Symphony (the *Scotch*) and Verdi's *Macbeth*, both on Angel. "With *Macbeth*," he noted, "the balance between the orchestra and the singers is the nearest to my ideal. It's not a case of the singers being the stars and the poor orchestra just accompanying. The *Aida* recording is also a good performance, but the sound favors the singers more than I prefer. The one recording I'm least happy about is *Un Ballo in Maschera*, mostly because of some singers in the cast."

What kind of a say does a young, still "rising" conductor like Muti have in the casting of his opera recordings? Can he control who sings major roles, or is it pretty much up to his recording company and its contracts with principal singers? "With EMI [Angel's English-based parent]," he answered, "I'm happy to say we always discuss this before I agree to record an opera. But let's be candid. Today, for Verdi, for example, you have in the world only two possibilities for great recording casts. By that I mean a choice from among two sopranos, two contraltos, two tenors, two baritones, two basses. No, please don't ask me to tell you the names, because that wouldn't be fair to them or to other singers. It's only my view. Everybody at EMI and in the opera houses in which I conduct knows my views on this; but it would not be right to say the names publicly. My point is that casting for an opera recording today is indeed a problem. The singers must not only have good voices and good musicality, but must also be the right persons to understand the conductor's concept."

What about the charge of some singers—such as Shirley Verrett in a STEREO REVIEW interview several years ago—that it's not singers who don't understand the conductor but more often vice versa: conductors who understand only the orchestra, and not the voice? Muti smiles, and plunges in without hesitation. "This is a very fair question, because it is true today that some very active conductors don't understand much about the voice. When I say that the conductor must be the center, must be Number One, I mean he's

the one with the unifying musical concept. He must seek to realize *his* ideas with the orchestra, the chorus, and the singers. But that doesn't mean killing the personalities of the singers. You can't use singers in an opera like clarinets or oboes in a symphony. But using their personalities, you must bring them to realize *your*—the conductor's—overall musical concept.

"It's true that some conductors of my generation say, 'Today I conduct a symphony, tomorrow I conduct an opera.' Opera is another world; you cannot conduct opera like a symphony. It's completely different because the words and the action, not just the musical notes, are important. You must know and understand the technical problems of the voice in achieving all that."

As Muti spoke, I couldn't help but notice the rapt attentiveness of his

SAMPLING MUTI

- **CHERUBINI:** *Requiem in D Minor*. Ambrosian Singers, New Philharmonia Orchestra. ANGEL S-37096.
- **PROKOFIEV:** *Ivan the Terrible; Sinfonietta*. Arkhipova, Morganov, Ambrosian Singers, New Philharmonia Orchestra. ANGEL SB-3851.
- **SCHUMANN:** *Symphony No. 4* ("*Italian*"). New Philharmonia Orchestra. ANGEL S-37412.
- **TCHAIKOVSKY:** *Symphony No. 1* ("*Winter Dreams*"). New Philharmonia Orchestra. ANGEL S-37114.
- **VERDI:** *Aida*. Caballé, Domingo, Cossotto, Ghiaurov, New Philharmonia Orchestra, Covent Garden Chorus. ANGEL SCLX-3815; highlights, ANGEL S-37228.
- **VERDI:** *Macbeth*. Milnes, Cossotto, Carreras, New Philharmonia Orchestra. ANGEL SCLX-3833.
- **VERDI:** *Overtures. La Forza del Destino, Giovanna d'Arco*, and four others. New Philharmonia Orchestra, ANGEL S-37407.

wife. Muti also noticed and explained. "My wife is a singer, a *soprano lirico*. We met when we were both students in Milan. But she gave up singing when our children came."

The attractive Mrs. Muti added a telling point. "We met in a *vocal class*," she noted.

"Yes," Muti continued, "as a student I spent five years as an accompanist in a singing class—to earn money. I heard singers—good singers, bad singers—for six hours a day. I came to understand their vocal problems and all

the business about singing technique."

Muti carefully limits himself to three opera productions a year, and the rest of the time to orchestral work. He believes that the public today is prepared to recognize and accept more types of music than previous generations, and that recordings have had a lot to do with this. "The culture keeps going up compared with forty or fifty years ago. For example, in my first concerts with the Philadelphia Orchestra as their principal guest conductor, the first work on the program was Penderecki's Symphony No. 1. It's a fantastic piece, but hardly a standard. At first there were a few murmurs in the audience, even some laughs. But after a few minutes I was aware that everyone was *listening*—they had gotten involved in the emotion of the score, in its message. At the end there was much applause. Twenty or thirty years ago people would have been leaving the hall."

In addition to championing new music (besides Penderecki, his Philadelphia programs have included Ligeti, Britten, Rota, and Ghedini), Muti believes there are many neglected works from the past that deserve a hearing. "One composer I believe is particularly underplayed and underrated is Cherubini," he declared. "He is one of the greatest composers. Beethoven had great admiration for him, and says so in his letters. Toscanini often played Cherubini's D Major Symphony, but not other conductors any more. I hope I can do something in the future to make Cherubini more popular." Muti's first recording for Angel a few years ago, not so coincidentally, was the Cherubini Requiem in D Minor. "It won a Grammy nomination in America," he noted proudly, "which wasn't a bad way to start."

WHEN his tripartite conducting schedule doesn't keep him in Philadelphia, London, or Florence, Muti prefers to spend as much time as he can with his family at their home in Ravenna. "I like to fish—but not because the fish are mute like you thought my name meant," he said with a broad smile. "Also, I inherited from my late father-in-law a fantastic collection of puppets, one of the best collections in Italy. I enjoy working the puppets together with my wife, sometimes for people in the hospital, sometimes for the children, and sometimes just for our own amusement, *et cetera, et cetera*."

As I left I couldn't help but wonder how this might some day influence a Muti performance of Stravinsky's *Petrouchka*, or Delibes' *Coppélia*, or the Rossini/Respighi *Boutique Fantasque, et cetera, et cetera*. □

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In addition to evaluating products for *Hi-Fi/Stereo Buyers' Guide*, Herb Friedman is Chief Engineer for Tridac Electronic Laboratories and a major New York radio station. As such, he produces taped programming and he knows the real differences between truly professional recorders and others that claim to have “professional features”.

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If you'd like to know what else Herb Friedman thinks about the B77, please circle reader service number or write to us for complete information including a reprint of his article and a list of dealers where you may see and hear the ReVox B77 demonstrated.

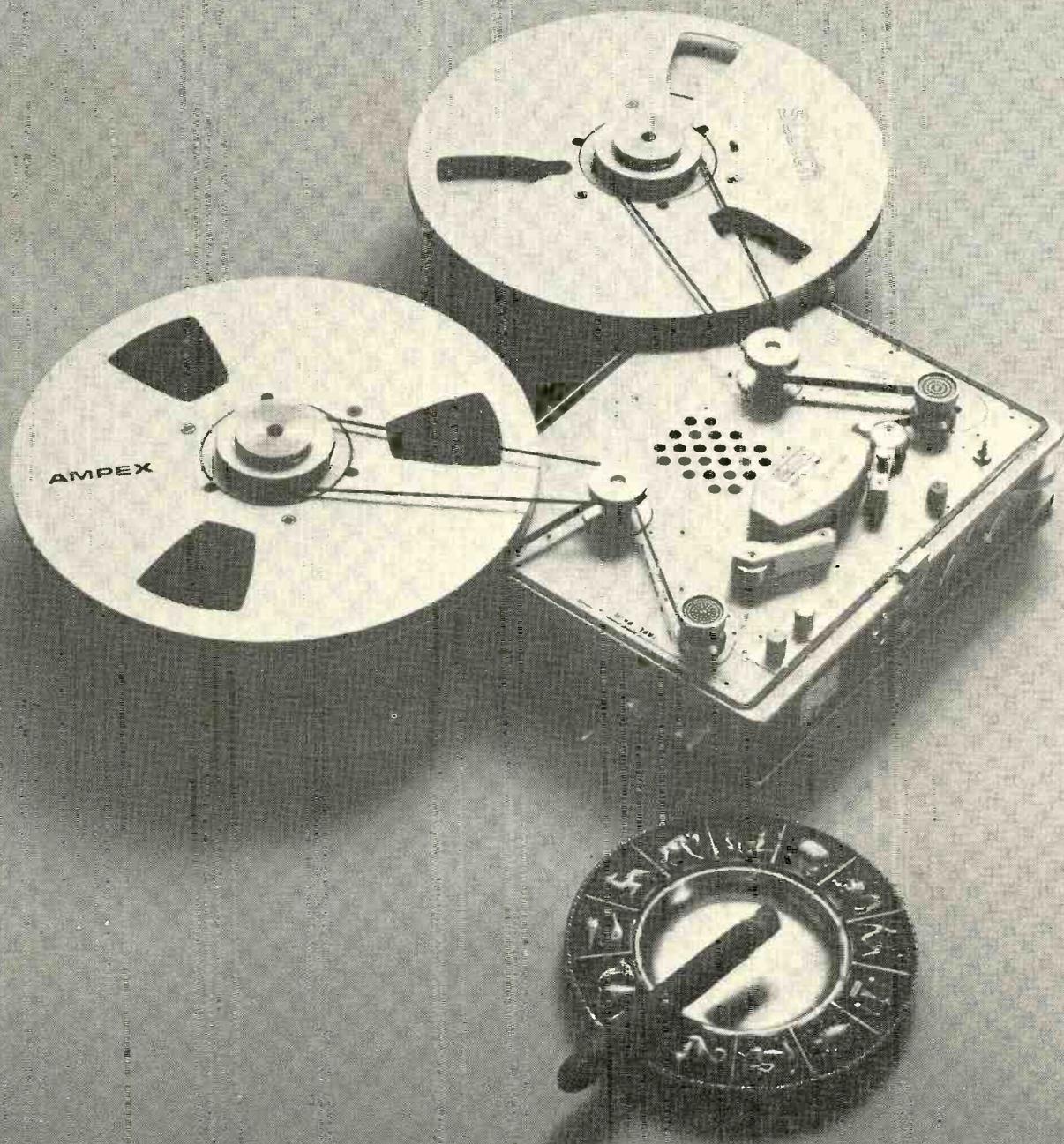
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CIRCLE NO. 54 ON READER SERVICE CARD

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Not a cassette recorder, to be sure, but one of the few top-quality alternatives for convenient recording in the field. Depending on which features you choose, the open-reel Stellavox SP-2—shown here with its 10 1/2-inch-reel adapters in use—will run you about \$5,000 (cigar not included). For more on open-reel portables, see the box on page 73.

PORTABLE CASSETTE RECORDERS

A guide to the marvelous midgets that have revolutionized serious field recording

ALL the world is a recording studio, full of sounds and music worth preserving, if you can only get a good recorder out to where those sounds and music are. In the fifteen years or so that I've been taping live shows, folk concerts, street performers, and sound effects, I've found that getting recording gear to a location and making good "remote" recordings once I'm there have both gotten easier and easier. And it's a good thing, too, since after fifteen years I've gotten less eager than I used to be to lug a 75-pound, open-reel recorder up four flights of stairs to a choir loft.

The big differences between today's portable recorders and those of yesteryear are owing to two inventions: the transistor and the cassette. Transistors made portability more practical for every kind of electronic device. Not only were transistor circuits smaller and lighter than their vacuum-tube ancestors, but they were also designed to operate on the low voltages easily available from batteries—and their low power consumption meant that those batteries could be smaller, lighter, and longer-lasting as well. The next stage of development, today's integrated-circuit construction, cut recorder size and weight still further.

The tape cassette was, of course, designed from the start with portability in mind. (In fact, for the first year or two after cassettes were introduced, only portable machines were available to use them.) It was immediately obvious that cassettes had a lot to offer the walk-about recordist. Their small size, though it limited the tape supply, permitted the use of smaller motors, smaller batteries, and smaller machines generally. Moreover, the quick, snap-in loading of cassettes made them ideal for taping spontaneous events.

All told, we've come a long way from the days when a portable recorder

had tube circuits, a battery-saving clockwork motor, and at least 15 to 20 pounds of weight. Today's lightest portable stereo cassette deck, the Uher CR 210 (only 4½ pounds without batteries!), gets better performance at 1⅞ ips with narrow (⅛-inch) tape than the early open-reel portables got at 15 ips with standard ¼-inch tape. And, in addition, it has a host of operating features that users of those early models never dreamed of—though some of today's bigger portable cassette decks of



course offer still more features and even better performance. (And there are some high-performance open-reel portables as well; see the box on page 73.)

The better cassette portables are, in fact, true *component* decks, and they should not be confused with cheap pocket- or book-size recorders or the ones built into portable radio/cassette combinations. Thanks to servomotors, often controlled by frequency-stable oscillators, the speed constancy (absence of wow and flutter) of the better portables is nearly as good as that of

similarly priced a.c.-powered decks. (Most line-powered decks now use servomotors too, so any differences with respect to wow and flutter are very likely due to the less massive flywheels often used in portables to save on weight.) Special "anti-roll" measures have been taken in most portable-cassette designs to prevent the tape speed from varying if the deck is held at an odd angle or even moved about while recording.

Comparable portable and non-portable decks generally have similar electronics, so other aspects of their performance are fairly similar also. Actually, there's one way a portable's performance might even be superior: with power coming from batteries (or, sometimes, from an a.c. adapter placed well away from the deck) there's far less chance of getting 60-Hz power-line hum or buzz in your recordings. On the other hand, noise-reduction devices are not as nearly universal among portables as they are among stay-at-home decks. Of the fourteen cassette models examined for this article (two each from JVC, Nakamichi, Sony, Technics, and Uher, plus four from Superscope), only eight have Dolby circuits; the JVC models are equipped with ANRS and Super-ANRS circuits, bringing the built-in noise-processor tally up to ten. Only one stereo model, the Uher CR 210, has no noise-reduction system at all, but two of the three mono models (one each from Sony and Superscope) lack it, and the remaining mono deck, Superscope's C-205, has an "ambient noise control" system that is apparently similar to a filter.

If you buy one of the better-quality portable cassette recorders, therefore, you won't be missing much, if anything, in terms of performance; the measurements may seem a little less impressive than those of the stay-at-homes, but when you listen to these

By Ivan Berger

PORTABLES...

“. . . compare the *total cost* of the units when they're fitted out with everything you'll need to operate them.”

portables through a wide-range audio system, they sound *good*. What you trade for portability, though, is a long string of features—any one of which you may or may not miss. (There are also a few well-conceived features in some portables that are uncommon in non-portable decks, perhaps because you're less likely to need them when you're taping quietly at home.) It's easy to decide whether you need a portable deck; what's hard to decide is which one to get. As is usual in hi-fi, the answer to that question depends on your special needs and intended uses.

How Portable?

In one sense, a “portable” recorder is any machine that can run off batteries (even with that definition, the Nakamichi 350 on our list just sneaks by; it was designed for automobile use and its portable power pack is in the optional carrying case, not in the recorder itself). But there are *degrees* of portability. Relative sizes and weights are a big factor, and weights are the harder of the two to compare. Astonishingly, not all specification sheets list a weight, and some of those that do give a figure that includes the batteries, and others don't. There's no question, anyway, that in our group the previously mentioned Uher CR 210 (4½ pounds, 116 cubic inches) is both the smallest and the lightest, and the Technics 646DS (12½ pounds, 666 cubic inches) is the biggest and the heaviest.

If you plan to record “on the run,” you'll have some specialized requirements, such as controls and meters you can easily see and use while walking and good vibration and tilt resistance. You can check these qualities out in the store by taping a guitar or a piano record as you walk about with the machine slung from your shoulder.

Other portability factors are equally important whether you make walk-about recordings or just want a portable because it's small, light, and able to be used in places that extension cords won't reach. For instance, consider the batteries. Virtually all portables will run off the kind of replaceable batteries

(usually D cells) you can buy almost anywhere, and nearly all of them also have rechargeable (usually NiCad) batteries available. The latter can be a big money saver if you record with batteries a lot and are sure you'll have a chance to recharge them (which sometimes takes quite a while) between tapings, but it's a costly extra otherwise. Some of these batteries are rechargeable while they're in the machine, some must be removed; most decks have accessory cords (sometimes supplied, usually extra) to take power from a car's cigarette-lighter socket.

Battery life is another important but frequently unstated specification for a portable deck. When they're given, the ratings are in terms of the life of a full complement (from four to six cells, depending on the machine) of standard alkaline batteries. At the long-life end of the scale are the Sony TC-158SD (10 hours), the JVC KD-1636 Mk II (12 hours), and the Nakamichi 550 (15 hours); at the other end are the Technics 686DS (4 hours) and 646DS (8 hours), all four Superscope models (5 hours each), and the Nakamichi 350 (2 to 3 hours—but remember that this is really more a car unit than a true, general-use portable).

The JVC KD-1636 Mk II, the Nakamichi 550, and the Sony TC-158SD can credit some of their long battery life to circuits known as d.c.-to-d.c. converters. These boost the batteries' low d.c. voltages to slightly higher ones. Feedback keeps the output voltage constant as the battery voltage falls.

All of the decks considered here can also be powered by the a.c. line by using an a.c. adapter. The adapter for the Uher models can be set to operate at either the European standard voltage (220 to 240 volts) or the U.S. standard (110 to 120 volts), but if you go abroad you can probably find adapters available locally to use with any of the other units. Some of the list prices quoted for these decks include batteries, car lighter-socket cords, and/or a.c. adapters, but others do not. So, when comparing prices, compare the *total cost* of the units when they're fitted out with everything you'll need to operate them.

Still another aspect of portability to bear in mind is how well a machine's controls are protected both from accidental damage and unintentional operation. Few things are more frustrating than to have your deck's record button break off when you're miles away from a repair shop. And it's almost as bad to hit an on/off switch or the record button accidentally and either lose a recording you wanted to keep or drain your batteries while recording only ambient noise. JVC's KD-1636 Mk II,

Technics' 646DS, and Sony's TC-158SD all have protruding grab rails that give some protection to the controls, and the control keys of the Nakamichi 550 are well recessed.

Live Taping

Since live recording necessarily lets you in for the unexpected, your recorder should be designed to help you cope swiftly and easily with whatever happens. Ideally, the human-engineering aspects of the machine should be such that you can operate it with no mistakes even when you're in a state of incipient panic—or so fascinated with what you're taping that you practically leave the recorder to fend for itself.

The Technics 686DS is a good example of such engineering. Instead of a smooth row of identical-looking control keys, there's a two-way lever for fast-forward and rewind, a big round stop button, and just three conventional keys (record, play, and pause). The record and play keys (which you sometimes want to press simultaneously) are next to each other, but the record key is noticeably bigger than the play key; the pause key is placed a little bit away from the other two. The design isn't quite perfect, however, since eight other functions are controlled by a row of identical pushbuttons. It's no easy task to set controls like these properly in a dim light.

Level-setting functions call for human-engineering foresight as well. In doing live recording, you can't always just check levels at the start and leave them at the same setting throughout (as you often can when taping a broadcast or record or dubbing another tape). Therefore, a portable machine should make it as easy as possible to maintain a correct level. But that immediately requires a compromise. To keep you constantly aware of your recording level, the indicator should be as large and conspicuous as possible; but to be easily portable, the machine has to be kept small. Future portable recorders may have liquid-crystal bar-graph indicators which can cover a wide scale range in a relatively small panel area.

Peak-reading meters, like those used on the Nakamichi and Uher models, are often more useful for live recording than averaging, VU-type meters are, especially considering the limited headroom of cassette tape. A recording-level indicator that reliably shows even the briefest of signal peaks can warn you about possible tape overloading and consequent distortion. (Nakamichi's peak-reading meters, by the way, have unusually extended scales, going down to -30 dB on the Model 350 and

PORTABLE FIELD RECORDERS

Make and Model	Price (dollars)	Weight (pounds)	Dimensions (inches)	Wow and Flutter (per cent)	S/N (dB)	Frequency Response (Hz)	Battery Life (hours)	Remarks
JVC KD-1636 Mk II	\$370	11.7	14.6 x 4 x 9.7	0.08	57 ^w	30 to 16k	12	Super ANRS, master gain, mic. att.
JVC KD-2	330	7.9	10.9 x 3.7 x 11.4	0.09	57 ^w	30 to 16k	12	ANRS, master gain, mic. att.
Nakamichi 550	630	11.2	12.2 x 3.5 x 13.8	0.08 ^w	65 ^w	40 to 17k	15	Three mic. inputs, Dolby and Dolby cal. tone, 45-dB peak meter, tape-footage indicator, LED end alarm, limiter.
Nakamichi 350	440	6.6	7.3 x 3.5 x 9.5 ²	0.08 ^w	58 ^w	40 to 15k	2 ² to 3	For car; switches ADS 2002, battery in optional case, 35-dB peak meter, Dolby, three mic. inputs.
Sony TC-158SD	382	10.6	13.8 x 4 x 9.4	0.08 ^w	59 ^f	30 to 15k	10	Dolby, limiter, peak LED, auto. meter-light shutoff, mic. att.
Sony TC-142 (mono)	260	5.8	9.8 x 2.9 x 7.6	0.26 ^w	45	70 to 12k	n.a.	ALC, LED tape-end alarm, three heads, built-in mic., tone control.
Superscope CD-330	240	n.a.	11.8 x 3.2 x 7.7	0.12 ^w	60 ^w	40 to 14k	5	Three heads, Dolby, ALC and limiter, punch-in record, mic. att., tone control.
Superscope CD-320	190	n.a.	11.8 x 3.2 x 7.7	0.12 ^w	60 ^w	40 to 14k	5	Two heads, otherwise same as CL-330.
Superscope C-205 (mono)	170	n.a.	11.8 x 3.2 x 7.7	0.12 ^w	50 ^w	40 to 14k	5	Three heads, "ambient noise control," ±20% pitch control, ALC and limiter, punch-in record, memory rewind, tone control.
Superscope C-204 (mono)	120	n.a.	11.7 x 3.2 x 7.7	0.12 ^w	50 ^w	40 to 12k	5	Same as C-205, but two heads, no memory rewind.
Technics RS-686DS	650	6.2	9.6 x 3 x 7.9	0.07 ^w	63	50 to 16k	4	Three heads (see text), Dolby, master gain, two peak LED's, lockable meter illumination, LED end alarm, low filter, record LED, mic. att.
Technics RS-646DS	330	12.5	14.3 x 4.2 x 11	0.1 ^w	65	50 to 14k	8	Dolby, ganged gain controls, LED tape-end alarm, tone control, mic. att.
Uher CR 240	1,211	5.9	9.3 x 2.3 x 7.3	0.2	66	30 to 16k	n.a.	Peak meters; Dolby; ganged gain controls; auto-CR bias; front-loading; LED record, charge, start/stop indicators; built-in mic.
Uher CR 210	1,138	4.4	7.3 x 2.2 x 7.1	0.2		30 to 17k	n.a.	Auto-reverse, front-loading, peak meter, ganged gain control, car bracket available, built-in mic.
Uher 4400 Report Stereo IC	1,054	8.4	11.2 x 3.7 x 8.9	0.2 ¹ 0.25 ² 0.35 ³	62 ¹ 60 ² 59 ³	35 to 20k ¹ 30 to 16k ² 35 to 8k ³	n.a.	5-inch reel, four speeds, quarter-track.
Uher 4200 Report Stereo IC	1,054	"	"	"	64 ¹ 62 ² 60 ³	"	n.a.	Half-track, otherwise same as 4400.
Uher 4000 Report (mono)	861	7.9	"	"	"	"	n.a.	S/N 63 dB at 3¾ ips, other specs same as 4200.

w = weighted; f = with ferrichrome tape; n.a. = not available; 1 = 7½ ips; 2 = 3¾ ips; 3 = 1½ ips



PORTABLES...

"All portables either have or are equipped to take at least one mike per channel."

to -40 dB on the Model 550, instead of the nearly universal -20-dB lower reading.) Next best to a peak-reading meter is a LED indicator that shows when peaks are exceeding permissible levels. JVC's KD-1636 Mk II has a three-color LED indicator that changes color according to the level being reached. Technics' 686DS has a separate red peak-warning LED for each channel, and Sony's TC-158SD has one that serves for both.

The meters on most portables can be illuminated if you're using the machine in a dim light. To prevent unnecessary current drain during battery operation, you have to switch them on instead of their lighting up automatically (some decks have meters that light automatically when an external power source is used). The meter light on the Technics 686DS can be locked on if desired, and the Sony TC-158SD has a "memory" light that can be locked on during use but which goes off when the machine shuts down at the end of a tape. Most meters also do double duty as built-in battery testers. (The Nakamichi 550's meters serve a third function as well: one of them shows the battery status while the other shows how much recording time is left on tape.)

Just knowing the recording level isn't enough; you have to be able to control it easily as well. For recording music and many natural sounds, manual level control is far better than automatic level control (ALC), although the latter is very useful for recording speech. A limiter—which keeps peaks from overloading the tape but leaves most of the signal unaffected—is useful under almost all circumstances. Both Uher cassette models and Sony's monophonic TC-142 have defeatable ALC; both Nakamichis, both Technics, and the Sony TC-158SD have switchable limiters. All four Superscope machines have both features.

When the recording level is being controlled manually, it's important to be able to fade both stereo channels in and out together. Portable decks have too little space for adequate sliding controls, but a large master gain control plus smaller individual-channel adjusters is at least as good, perhaps bet-

ter; you'll find that arrangement on the Technics 686DS and both of the JVC models. The Uher CR 240 and the Technics 646DS have only individual channel knobs, but they can be mechanically coupled; the tiny Uher CR 210 has a single control knob for both channels. The other stereo machines have concentrically mounted individual channel controls that can be turned together. The mono decks, of course, need only one level control.

Hearing your recording is the best way to judge its quality. All these decks except the two Nakamichis, the JVC KD-2, and the Sony TC-158SD include speakers, but they're too small to tell you much about recording quality; for that you'll need good headphones. Each deck has a separate headphone jack, and most of these have volume controls. You could also connect some of the decks to external loudspeakers, but these would have to be of very high efficiency since the decks all have quite low output power (none offers more than 1.3 watts per channel). The Superscope CD-330 and the Technics 686DS let you monitor a tape as you record it by using separate record and playback heads (the third head on the Technics is really *just* for monitoring, not playback).

It's well to be able to monitor tape consumption, too. Three-digit index counters are found on most portables, though they're not always visible while you're operating with the deck hanging

from a neck or shoulder strap. More useful are LED's signaling the end of a tape, as on Sony's mono TC-142, both Technics portables, and the Nakamichi 550 (the signal on this one can be programmed to go off as far ahead of the tape's end as you wish—and that's in addition to the recording-time scale on one of the meters). Also check whether the deck you're considering lets you monitor the remaining tape by eye. Some decks have clear lids over their cassette compartments, others have hard-to-see-through smoked ones (the Uher CR 210 has no window at all). And while you're at it, check how easy it is to change tapes in a hurry.

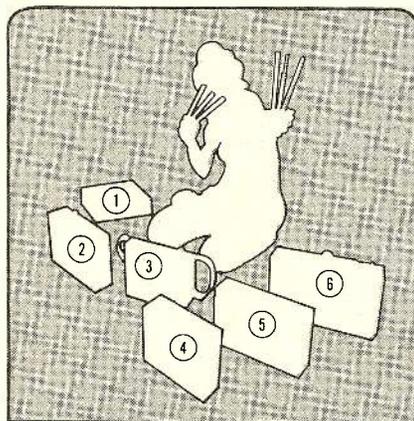
For returning to the start of a recording you've just made, you'll find the memory counter on the Superscope mono C-205 quite handy, as is the "cue-and-review" feature (which lets you hear the "monkey-chatter" of the tape in the fast-forward and rewind modes) found on all four Superscope portables.

For live recording you'll need one or more microphones, of course. All portables either have or are equipped to take at least one mike per channel; the two Uher cassette models can take a stereo mike directly, and the two Nakamichi units actually each take *three* microphones—one for the left channel, one for the right channel, and a center "blend" mike mixed equally into both (and with its own separate level control). To use even more microphones than that, you'll need an external mixer; luckily, all the portables discussed here have line-input jacks that can connect to a mixer. The cassette Uhers have DIN jacks that their optional external stereo microphones plug into, plus internal stereo microphones you can use for quick, informal taping (the mono Sony and Superscope models also have built-in mikes).

Very loud sounds, or very high-output microphones (such as the condenser types that are now becoming common), can overload the input circuits of a recorder. To prevent overloading, the JVC and Technics decks, as well as the stereo Sony and Superscope models, have switchable attenuators that reduce input levels by 20 dB. The Technics 686DS also has a filter to attenuate unwanted very-low-frequency sounds such as wind or room noise.

Other Features

Most high-quality portables allow you to set the appropriate bias and equalization levels for at least two types of tape (Sony's TC-158SD adjusts for all three common types—ferric, chromium dioxide, and ferri-



THIS MONTH'S COVER

Deborah Harry of the popular rock group Blondie addresses some remarks to an attentive audience of portable cassette recorders through a few Nakamichi electret condenser microphones. By the numbers: (1) Nakamichi 550, (2) Sony TC-158SD, (3) Uher CR 240, (4) Technics RS-686DS, (5) Superscope CD-320, and (6) JVC KD-1636 Mk II.

OPEN-REEL PORTABLES

How about open-reel portables? With wider tape and higher tape speeds, you'd expect to get better-quality recordings. And you do, which is why open-reel portables are still made and sold despite the overwhelmingly greater popularity of cassette models. Nagra's 4-SD (\$5,750 without accessories) and Stellavox's SP-8 (\$4,145 without accessories) are beautiful, solid, professional machines with professional-level price tags. For an amateur's budget, the only choice is Uher, and you have to be a fairly well-heeled amateur at that: Uher's stereo open-reel portables, the half-track 4200 and the quarter-track 4400, each list at \$1,054. That's more than \$400 above the price of any cassette portable other than Uher's own models—which cost even more than their open-reel portables. (Uher's open-reel mono machine, the 4000, is a bit cheaper, only \$861.) And these machines are also bigger and heavier than many portable cassette decks (though they are still only a bit more than half the size and weight of the Technics 646DS).

What do you get for the extra bulk and cost? For one thing, you get a choice of four speeds, from 7½ ips all the way down to 15/16 ips. The performance at 1½ ips (the standard cas-



sette speed) isn't as good as that of the cassette decks, but at 3¾ and 7½ ips it's noticeably better. And at the slowest speed, 15/16 ips, you can record up to six hours in each direction with triple-play tape (but forget about fidelity; the frequency response at that speed is extremely limited).

Specifications can't tell you all the differences between the perfor-

mances of open-reel and cassette machines unless you know how to read "between the numbers." High-speed recording doesn't overload tape as easily as slow-speed recording, so the high-frequency response of an open-reel deck at 3¾ or 7½ ips is measured at only 10 dB below the 0-dB level rather than the usual -20 dB for a cassette deck's specs. If you try to match an open-reel's performance at the higher speeds with a cassette deck used under the same operating conditions, you'll run into high distortion. And open-reel signal-to-noise ratios *without* Dolby noise reduction match those of a typical cassette model *with* its Dolby circuits operating. And there's one more plus: open-reel tapes can be edited and, for all practical purposes, cassette tapes cannot.

The various models of open-reel portables take a host of accessories, such as voice-operated record switches, synchronizers for slides or movie soundtracks, telephone adapters, timers, mixers, power adapters for a.c. wall outlets or car batteries, and even, for the Stellavox and Nagra machines, adapters for use with 10½-inch reels (they cost about \$1,000 extra for the Nagra, \$250 extra for the Stellavox).

chrome). The two Uher cassette portables have automatic switching keyed by a notch on chromium-dioxide cassettes; the JVC KD-1636 Mk II, Sony TC-158SD, both Technics, and the Superscope CD-330, CD-320, and C-205 all have separate switches for bias and equalization; these are both more versatile and a bit more cumbersome than the combination bias/equalization switches found on the remaining decks. As of this writing, no manufacturer has yet announced a portable cassette deck designed to use the new pure-metal tapes, but one or more may be around soon.

Portable decks eventually come to rest at home, and all of these have "line"-input and -output jacks for connection to home audio systems. The Nakamichi 550 and the Technics 646DS have multiplex filters to eliminate the 19-kHz "pilot tone" from FM broadcasts you're recording (it can interfere with the operation of the Dolby circuits), and the 550 also has a built-in 400-Hz oscillator for Dolby calibration.

Several of the portable decks have useful and rather unusual features. Surprisingly, the tiny Uher CR 210 has

more such points of interest than any of the larger models. It's the only auto-reversing unit, for instance, and one of only two front-loading portables (the Uher CR 240 is the other). Both of these features make the CR 210 very suitable for in-car use, and Uher sells an optional mounting-bracket/adaptor that can be wired so as to connect the unit automatically to your car's battery for power and to its built-in radio and speaker(s) when you plug the deck in. You can even get a motion-picture synchronizing accessory if you want to use the CR 210 for film soundtracks!

The Nakamichi 350 is specially designed for use in a car (which is why its own battery unit is an extra, not built-in). It includes power switching for the self-amplified ADS 2002 speakers and a mounting bracket. (Curiously, the top-loading 350, which would be easy to use as a floor-mounted car player, comes with an under-dash bracket, while the front-loading Uher CR 210, so practical for under-dash use, has a bracket designed for floor mounting!)

The Uher CR 240 and the Technics 686DS have LED's to indicate when they are recording—a common enough

feature on home cassette decks, but one that's rare on portables. The 240 also has a LED to indicate when its battery is charging, plus a 12-volt tap in its microphone jack to power a stereo condenser mike.

TRULY, the marketplace holds something for everyone who wants a portable tape recorder, and the machines we've discussed here may not be best for every budget and need. They all aim at performance of a very high caliber, and they are priced accordingly. If all you need a portable recorder for is to make, say, verbal notes or correspondence tapes, or to tape an interview for print (as opposed to broadcast), it would be better to look a good deal lower down on the dollar scale. The decks we've discussed are actually triple-duty machines, since in most cases they will function quite satisfactorily as the tape component in a high-fidelity home audio system as well as serving (in conjunction with other equipment) as music sources when you're in transit and at the task for which they're really designed: making high-quality recordings in the field. □

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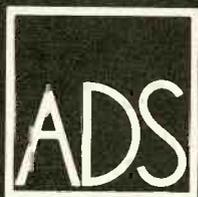
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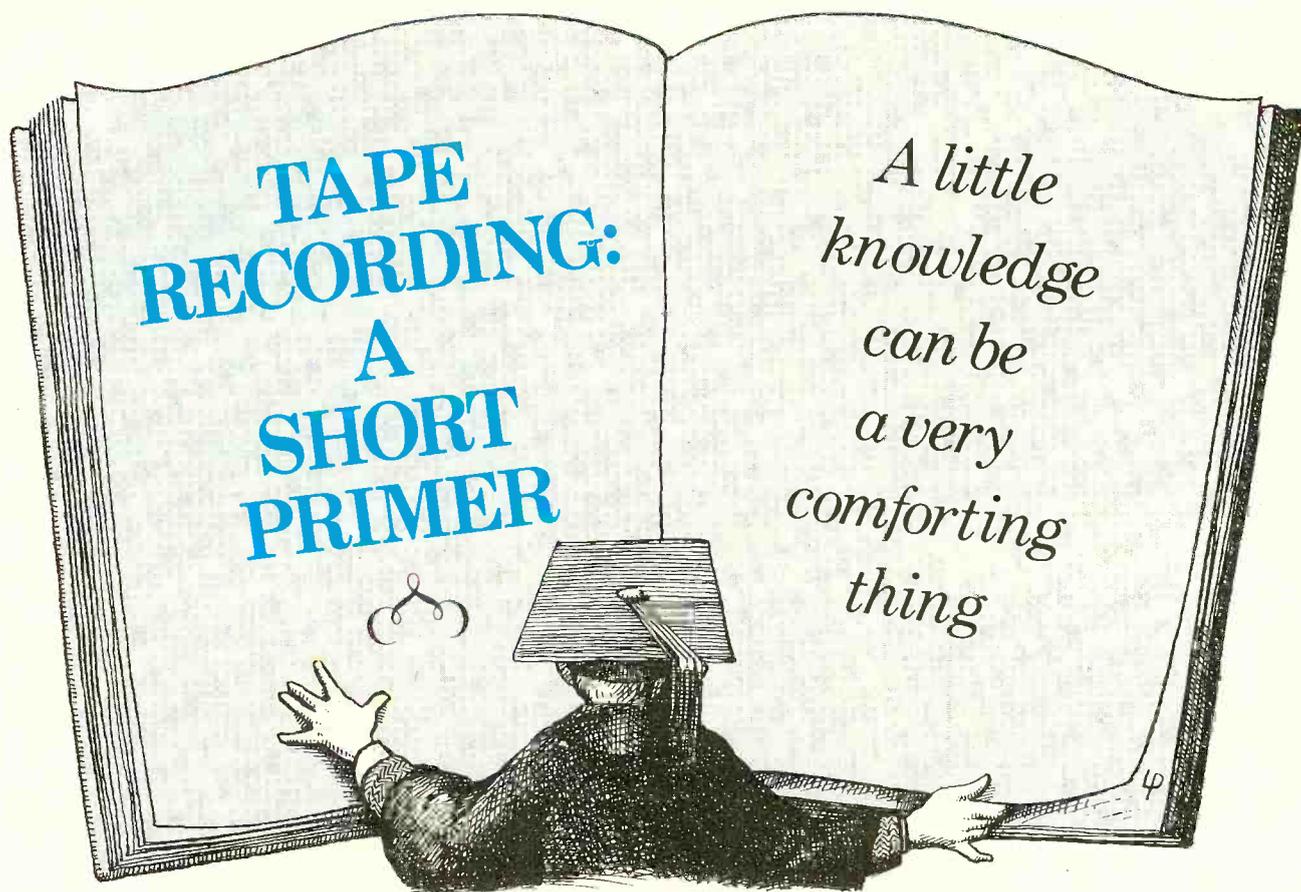
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EVEN though you've never cut a disc, you probably have some idea of how the sound gets into and out of a record groove. But do you know just how your tape recorder does its job?

FOR disc recording and playback, electricity is a refinement rather than a necessity (remember the acoustic phonograph?). Tape recording, on the other hand, is entirely electromagnetic in principle, and no physical changes representing the audio signal take place either in the tape or in the heads over which it moves. Obviously, however, there must be *something* happening; that something is a change in the *magnetic patterns imprinted on the tape*. To imagine what this entails—the patterns are not, of course, visible to the naked eye—some understanding of the physical structure of the tape itself is helpful.

Tape

Recording tape consists of a thin film of plastic to which is permanently

bonded a coating of magnetic material. Although the plastic film as well as the various bonding agents are critically important to good performance, the magnetic coating is the actual recording medium. In most cases, some form of iron oxide is used, though other materials have appeared in the past few years.

The magnetic particles used are usually needle-shaped, and a rather large one might measure about 25 by 4 millionths of an inch, although typical high-output/low-noise tapes will use much smaller particles that are more densely packed. In order to make use of the individual particle's bar-magnet properties, the floating needle-shaped

oxide particles are physically aligned by a magnetic process while the coating is still fluid so that their long dimension corresponds, in general, with that of the tape. When the coating has dried, no further *physical* motion of the particles is possible, but they can be magnetized in one direction or the other depending on the magnetic field that is applied to them.

Heads

If you opened up a tape-recorder head you'd find electromagnetic coils and pole pieces (with two sets stacked in a stereo head as in Figure 1). The pole pieces terminate at the surface of the head, over which the tape passes, and are separated by a very tiny gap filled with non-magnetic material. The size of this gap is measurable in mi-

By Robert N. Greene

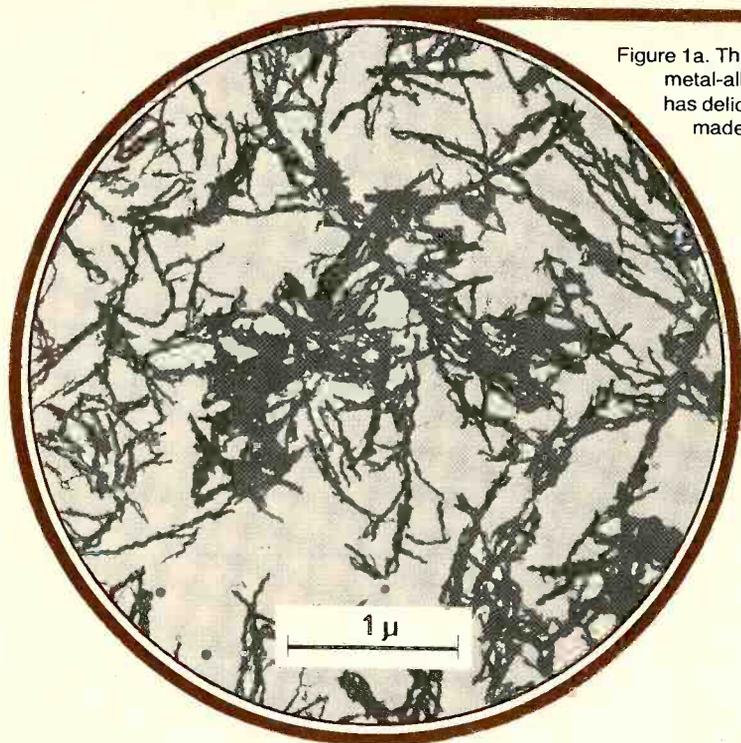


Figure 1a. This sample of metal-alloy particles has delicate threads made up of small crystals.

By Craig Stark

Craig Stark, who holds a doctorate in philosophy, has been STEREO REVIEW's tape columnist for more than ten years. He operates Starksonic Studio, a facility for professional recording and for the testing of tape and audio equipment.

THE FUTURE OF MAGNETIC TAPE: TWO VIEWS

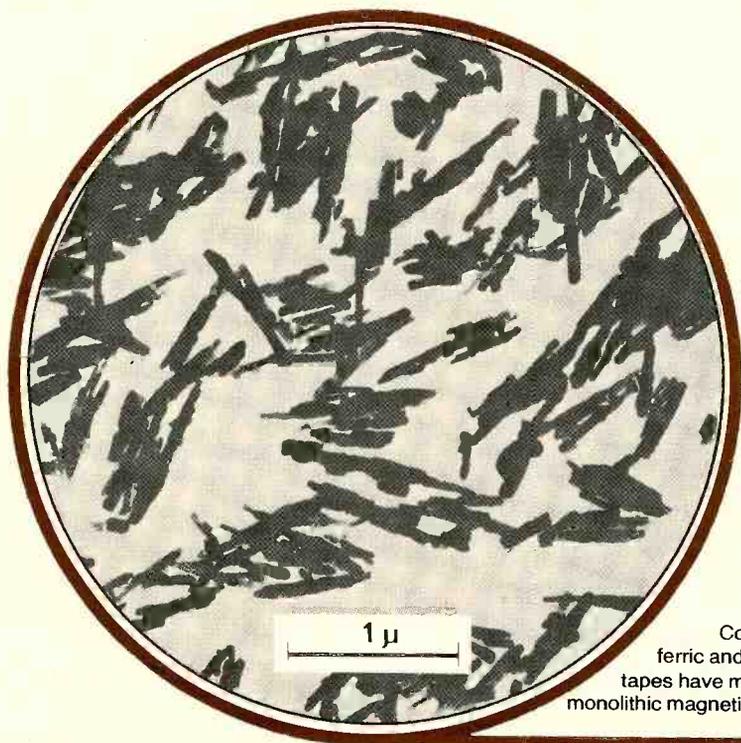


Figure 1b. Conventional ferric and chromium tapes have more or less monolithic magnetic particles.

By Yasuo Imaoka

Dr. Imaoka, who holds degrees in chemical engineering from the Tokyo Institute of Technology, is the general manager for R&D of TDK's Magnetic Tape Division.

"MAGNETIC tape is the writing paper of the electronics age," remarked the president of a major Japanese tape company as he guided a group of visiting American journalists through his plant's impressive production, research and development, and quality-control facilities. It is the kind of comment that sends the mind on a quick scan of communications history, from Stone Age cave paintings through Babylonian clay tablets, to movable type and modern newsprint, and on to Edison's cylinders, the LP disc, open-reel tape, and today's audio and video cassettes.

This fascinating tale of a continuing evolution in storage media is paralleled by an equally dramatic evolution in the types of "message" we are able to store and communicate. And the saga is far from over. Looking ahead just a short distance into the future of magnetic recording, we see a familiar pattern shaping up again, one that spells REVOLUTION. It may not overwhelm all of us at once, and it may progress in a somewhat disorderly fashion, but make no mistake, it's coming.

Metal Tapes

At just about the time these words reach print, it is expected that metal-particle tape (variously called "metal-alloy" and "fine-metal" tape), together with the first generation of tape decks capable of recording and erasing it, will be available at consumer retail outlets. Both "hardware" (the decks) and "software" (the tapes) have been publicly shown on a number of occasions, and I recently had the chance to put several samples of both machines and tapes to the laboratory test. The machines I have personally tested have been preproduction samples, as have the tapes. But the latest batches of

tapes are intended for machine calibration, so they cannot be far removed from what the final product will be. And, on the whole, that final product seems to be shaping up rather well.

Stated briefly, the overall potential of fine-metal tape could lead to a low-frequency maximum-output level approximately *twice* that of conventional cassettes—plus a comparable increase at high frequencies. (In engineering terms, both "retentivity," for low-frequency performance, and "coercivity," for high-frequency performance, have been boosted, the former to perhaps 3,000 or 3,300 gauss and the latter to about 1,000 oersteds.) The very first products off the line will probably not be able to exploit the *full* potential benefits theoretically available, but they are likely to have significantly improved performance over ordinary cassettes, particularly in the area of high-frequency capacity, the traditional weak point in cassette performance.

Unlike other magnetic materials used in making tape, the pure-metal particles used in the new tapes do not contain the oxygen atoms that, in a sense, use up space within molecules of the "standard" ferric oxide (Fe_2O_3) and chromium dioxide (CrO_2). Rather, the new metal-alloy tape particles consist—in at least one formulation, anyway—of approximately 70 per cent iron (Fe) and 30 per cent cobalt (Co) by atomic weight. Such particles must be protected from rusting (oxidizing) both during manufacture and in actual tape coating and slitting, for if they were permitted to combine with oxygen it would adversely modify their superior magnetic performance. The deepest tape-industry secrets today lie in the methods used to form a protective shell around each metal particle. The *theoretical* advantages of this kind of tape have been known to magnetics experts for many years;

getting a chemically stable tape manufactured before the pure-metal material changes into something else has been the problem.

At TDK I saw an actual demonstration of how (by one of several methods) the metal particles themselves are created. A lab technician took two partially filled beakers of colorless, transparent liquid (one containing a solution of iron and cobalt salts, the other an aqueous solution of sodium borohydride), poured the one into the other, and instantly produced an inky-black fluid which cleared in a few moments as the black metal particles settled to the bottom. In industrial production of tape "powder," this mixing would be carried out in the presence of a strong magnetic field so that the precipitate would form thinly linked chains like beads on a necklace, each "jewel" of which would have the approximate diameter of one magnetic "domain" (about 260 angstroms). The differences, seen through an electron microscope, between the metal-alloy particles and those of a more conventional cobalt-treated ferric oxide are vividly obvious in the photos of Figure 1 on the facing page.

THEORY aside, how well does the tape actually work? Trying to pin that down put me through a good deal of personal travail, not just because of the tapes themselves but also because of the scarcity of suitable machines to use them on. Two tape-machine companies offered to provide production-line samples of their metal-ready tape decks, but they could not make my deadline. A third delivered a prototype that was still beset with a few unsolved problems. Finally, a prototype Nakamichi machine was acquired that seemed to represent the current state-of-the-art in handling metal tape (Nakamichi says that performance of its final production version will be even better).

THE goal of any compact information-recording system is to pack the highest possible amount of information into the smallest possible physical area. For magnetic tape, this information "density" is partly a function of the physical characteristics of the tape's oxide coating (long, thin, uniform particles of oxide packed like sardines and all oriented in the same direction are best), but the major contributor to density is the coating's electromagnetic *coercivity*. Coercivity is defined as the magnetic-field strength necessary to bring a fully recorded tape back into a state of full erasure. A tape that requires a comparatively large magnetic force to erase it is, in general, a tape that is able to take and hold a high density of information if recorded properly.

Increasing coercivity in tape is a two-fold job. First, you must find out what is theoretically possible; second, you must find a way to carry these possibilities into practical development and manufacturing. This is true whether we are talking about pure gamma ferric oxide, ferric oxide plus chrome or co-

balt, or the new pure-metal tapes. How has this job been progressing in recent years?

Today, one of the most effective ways to increase coercivity is to treat gamma-ferric-oxide particles with cobalt ions in order to utilize cobalt's special magnetic properties. Work along these lines was begun as far back as 1930 by the Japanese scientist Dr. Yogora Kato. His experiments involved *annealing* the magnetic materials together, subjecting them to intense heat followed by gradual cooling.

Though Dr. Kato's processes led to coercivities as high as 1,000 oersteds (conventional ferric-oxide tapes have coercivities of around 350 to 450 oersteds), there were attendant problems. The magnetic properties of the cobalt-treated oxides were invariably unstable, leading to demagnetization and other forms of deterioration as well as an undesirable tendency for the tape to transfer its magnetic imprint to an adjacent tape layer on the reel (print-through). Although the advantages of the cobalt ion were recognized and cobalt treatments actually began

to be adapted to tape technology as early as 1960, the solution to the instability problem was yet to be found.

Chromium Dioxide

In the meantime, in the early Seventies, advances were taking place in the development of chromium-dioxide tape, particularly in the Du Pont laboratories. Chromium dioxide looked like a good bet, for it had magnetic properties resembling those of ferric oxide but with higher coercivity, and, in contrast to cobalt-treated ferric oxide, it did not pose the problem of uniting dissimilar materials. The "chrome" tape finally developed made necessary a new cassette playback-equalization standard as well as higher recording-bias levels to suit its coercivity of some 500 oersteds.

But not everyone accepted chromium dioxide as the ultimate or most practical magnetic particle. There were objections to a complicated manufacturing process that en-

The two "families" of curves shown in Figure 2 pretty much tell the story of just how superior the new metal-alloy tape is to even a topnotch "conventional" tape (TDK SA). Four sets of output-vs.-frequency curves were made at input levels of +10, 0, -10, and -20 dB, "0 dB" being defined in each case as the input level which, at 1,000 Hz, produced a 200-nanoweber-per-meter flux level on the tape (this level is commonly referred to as "Dolby level" and, on most tape decks, corresponds to a reading of approximately +3 dB on the meters).

At the -20-dB level, at which normal cassette-deck frequency-response measurements are made, both tapes are essentially identical, with a frequency response (on the Nakamichi deck) that obviously extends beyond the 20,000-Hz limit of the graph. At a -20-dB level, however, the metal tape (in this case, a sample of 3M's Metafine, though samples from TDK and Fuji performed essentially similarly, if with very slightly less overall output) is down only 3 dB at 20,000 Hz, a point reached by the regular tape at 15,000 Hz. At a 0-dB level the metal-alloy tape is down only 1 dB at 10,000 Hz, at which frequency the regular tape is -6.5 dB and fading fast. And, confronted with a level (+10 dB) bound to produce overload, the metal tape shows a slightly greater resistance to saturation at the low-to-middle frequencies and an *enormously* higher signal capacity at all frequencies above a couple of thousand hertz.

Final pricing on all these new tapes has not been announced, but it is widely expected that—at least initially—fine-metal cassettes are likely to cost about twice as much as currently available premium cassettes. Also, since the vastly increased record-bias and erase-current requirements of metal-particle tape exceed the capacity of existing cassette decks, you'll need a new machine

(or extensive modifications on an existing one, including new heads and electronics) to record with the tape. Two companies—Tandberg and Eumig—have announced that they will have "retrofit" modifications available for specific models. (Any deck that will handle chromium dioxide will *play back* a metal tape, however.)

I have tested samples of three different manufacturers' tapes and found them, happily, to be astonishingly close in their bias and equalization requirements (a couple of samples from different batches showed *slight* bias-requirement differences, but certainly of no greater magnitude than one finds between premium conventional tapes). Oxide shed has seemed a bit greater than usual, calling for more frequent head cleaning, but this problem may be solved by the time production-line runs are undertaken. The machines, too, may have their little quirks when first introduced, but this is normal with any new technology.

From a purely theoretical basis, looking at the retentivity numbers, one would expect that low-frequency maximum-output levels from pure-metal tape should be considerably higher than for conventional tapes. As Figure 2 shows, they are somewhat higher, but not quite as much as might have been predicted. The reason for this is that the tape manufacturers are using a somewhat thinner magnetic coating (expected to be standardized at about 4 microns) than is customary on more conventional tapes. At least one reason for this has to do with the *erase* capabilities of the first-generation decks, which, though perhaps adequate for the thinner-coated tape, would probably not suffice for a somewhat thicker coating—or for a theoretically possible higher-retentivity metal-particle tape. At present there is still room for improvement in this area.

Do you *need* the advantages, especially at

high frequencies, that metal-alloy cassettes will afford? Certainly not, if your only interest lies in dubbing from FM or if (unlike myself) you find no objectionable treble compression and distortion when recording more demanding source material. But if you find even the best cassettes currently available "running out of gas" at the very high frequencies, then you owe it to your ears to consider metal tape very seriously.

Digital Recorders

Waiting just a little farther down the road (but not quite as far as many think) is the home digital or PCM ("pulse-code modulation") recorder, which in consumer versions will undoubtedly use the kind of transport presently found in home videocassette recorders. By converting the continuously varying ("analog") signals of music and speech into strings of numbers expressing their instantaneous values, digital recording offers unquestionable potential advantages: a 90-dB (!) signal-to-noise ratio with 0.03 per cent distortion, flat response to 20,000 Hz at all signal levels, total elimination of wow and flutter, and reduction of modulation noise below measurability. For the professional who works constantly with "live" sources—and needs, moreover, to be able to produce copies, and copies of copies, and copies of copies of copies with absolutely *no* loss or degradation from one generation to the next—digital recording is undoubtedly *the way* to go.

On the consumer front, however, the situation is a little less clear. The specifications cited above are for a professional system using "sixteen-bit" digital numbers and a digital sampling rate of about 50 kHz, which, with today's technology at any rate, is expensive beyond belief (\$50,000 is a good

Imaoka

tailed not only intense pressure and high temperature but patent restrictions as well. Furthermore, chrome is relatively scarce, whereas ferric materials are abundant. Some manufacturers therefore chose to concentrate on ferric oxide and continued to experiment with cobalt enhancement, using as a performance reference base the characteristics of chromium dioxide.

Cobalt

In 1973, TDK introduced a tape with a new particle dubbed "Super Avilyn," and more cobalt-treated tapes were forthcoming from other manufacturers. The key to the stability of the new particles was the process of cobalt adsorption: the cobalt ion is "injected" into the thin outer layers of the ferric-oxide particles. And, as a preliminary step to achieving the full measure of enhanced performance, the basic ferric-oxide particle itself had to be highly refined to a uniform needle shape possessing a particu-

larly high length-to-width ratio. The result was a material capable of coercivities exceeding 500 oersteds.

The use of stable gamma ferric oxide, the achievement of good particle shape and orientation, improved coating uniformity, and refinements in the preparation of the coating substance all contributed to the success of the final result. As a significant bonus, cobalt-adsorption technology, like that of chromium dioxide, proved applicable to video, and tapes made in this way are to be found in some of the better videocassettes. (Incidentally, in the parallel development of audio and video tapes, each technology notably influenced and benefited the other. For example, the binder systems or coating adhesives necessary to withstand the comparatively rough usage of video applications—video machines use *rotating* heads, remember—are being used more and more in audio tapes, while various audio-tape sophistications have found their way into the video area.)

It seems almost self-evident that there are

many developments yet to come in the evolution of the cobalt-adsorbed ferric-oxide particle, as there are in the evolution of all other tape-coating materials. Many of them will be directed toward the needs of tomorrow's more refined technologies, but others have potential for ordinary consumer applications, and the products they lead to will be with us within the next decade.

Digital

The digital recording systems on the horizon will impose extreme information-density requirements on the tapes and other storage media they use—but there is little doubt that tapes of the future will be able to meet the challenge. Digital recording technology is still quite expensive for the individual consumer and is therefore, for the moment, largely limited to professional applications. But further developments in this area as well should make it possible for the various digital approaches not only to have greater

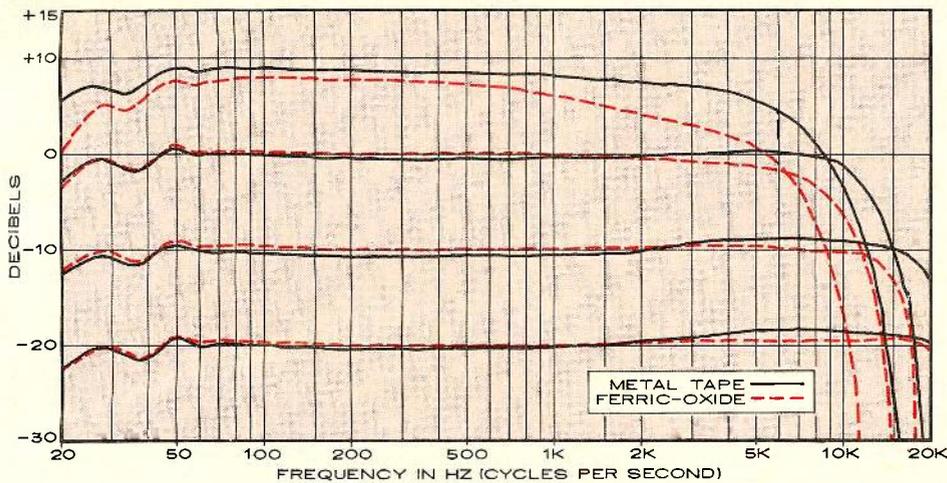


Figure 2. At higher recording levels, the enormous potential of metal-particle tape (solid curves) becomes evident. At 10,000 Hz and a +10-dB record level, its output is about 15 dB greater than that of conventional tape (dashed curve).

“ballpark” figure for such a recorder). And there are at least preliminary indications that the standards for home digital recorders (which, as you might expect, are being set by the Japanese) will be considerably less demanding: for example, twelve- to thirteen-bit numbers with a 32-kHz sampling rate. This will still yield very impressive performance—well beyond that of current analog recorders, metal or no metal—but by the time costs come down from their approximately \$3,000 level of today, other developments in analog recording (such as the introduction, expected shortly, of new noise-reduction devices) may raise its performance to a point a bit closer to that of home digital.

Ultimately, digital recorders will probably take over, just as the PCM disc will ultimately render the conventional LP obsolete. Though a full takeover is many years away, I would expect to see a significant penetra-

tion of digital into the top-end recorder market in the next three to five years. Does this mean that all the enormous effort that has gone into the development of metal-alloy tape will be lost? By no means, for the high coercivity of metal gives it an enormous advantage (for example, far greater “packing density” for the digital “bits”) over older, oxide-base tapes. Where the demand for top-quality tape performance is greatest, metal-alloy tape is where we are and—one way or another—where we’re going.

Two-speed Cassettes

In the meantime, another approach to surpassing the audio cassette’s present limitations has recently been introduced by B.I.C., and there is reason to believe that others will follow suit. This is the two-speed (1½ and 3¾ ips) cassette deck which, in

return for halving the available playing time per side, offers a far wider frequency bandwidth (to 30,000 Hz and beyond on the sample I’ve encountered) plus a significant improvement (about 4.5 dB) in signal-to-noise ratio. In designing its two-speed series of tape decks, B.I.C. did the job properly by reducing the playback-equalization time constants by a factor of two when increasing the speed by a factor of two, and one can only hope that when others bring out 3¾-ips decks they, too, will follow the B.I.C. procedure, establishing a *de facto* if not “official” standard. (Otherwise, interchangeability of recorded cassettes would be impossible.) We’ll have to see whether the marketplace will accept the shorter playing time for the higher quality obtainable at the higher speed. But ultimately, of course, there’s no reason why a two-speed, metal-compatible deck should not come on the scene. There’s something to ponder! □

impact on all types of recording but to be accessible to the average audiophile.

Metal-alloy

Pure metal-alloy tape holds such promise that it can accurately be described as the next big advance in home recording. The advantage of metal-coated tape as a recording material lies in the greater magnetic flux density and coercivity that can be achieved with it—as much as twice that of gamma ferric oxide. As a result, one can have much higher signal-to-noise ratios, wider overall dynamic range, and larger maximum-output levels: in short, these tapes can contribute vastly improved performance.

Many questions with respect to appropriate standards for metal tape remain unresolved. There are formidable challenges yet to be met in the manufacturing of the tape, and there are other challenges that face tape-machine manufacturers, particularly with respect to devising heads that will

handle the higher recording and erasing signals required.

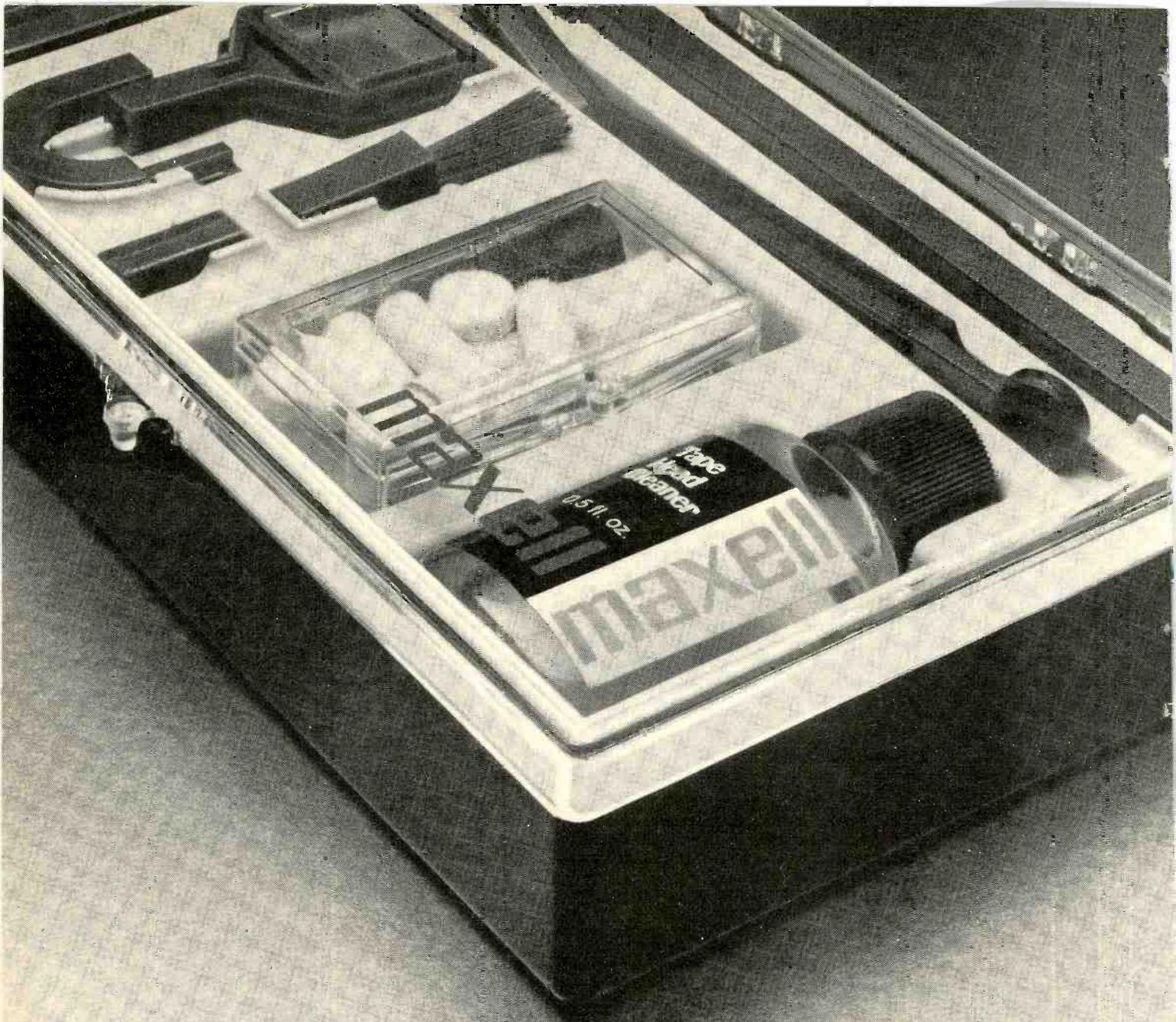
Ferric Oxide

In the rush of new developments, we shouldn’t neglect the yet unrealized potential of gamma ferric oxide. Progress there will come about through improving the uniformity of particle size and regulating particle shape. The “raw” gamma-ferrite crystal has several inherent problems. It tends to have many branches (dendrites), limiting the magnetic properties of the particle; and it occurs in various sizes, making uniform distribution of the particles difficult in the coating stage of manufacture. Should both these problems be totally solved, the gamma ferric-oxide particle has, according to theory, a potential coercivity of 1,000 oersteds, which would make for tremendous recording and reproduction capabilities. Of course, no manufacturer has yet attained anything like that potential, but it is evident that the use-

fulness of the particle has improved dramatically over the years, from an initial (and pretty good) coercivity level of 250 to 280 oersteds in the first really high-performance cassettes in 1968 to the present level of some 450 oersteds, which can provide genuine high-fidelity results.

In years to come, further refinements in manufacturing will lessen the number of tape-coating “pores” that cause distortion and dropouts. There is also the possibility of reducing the noise level of the gamma ferric particle itself, with obvious benefits for the signal-to-noise ratio.

In sum, it appears that both the older and the newer tape technologies are constantly moving forward. Those who have made considerable investments in present-day equipment and software need therefore have no fear of obsolescence, for although improved new recording media will inevitably emerge, recorders already in the hands of consumers will also be benefiting from the improved “conventional” tapes that will be reaching the market at the same time. □



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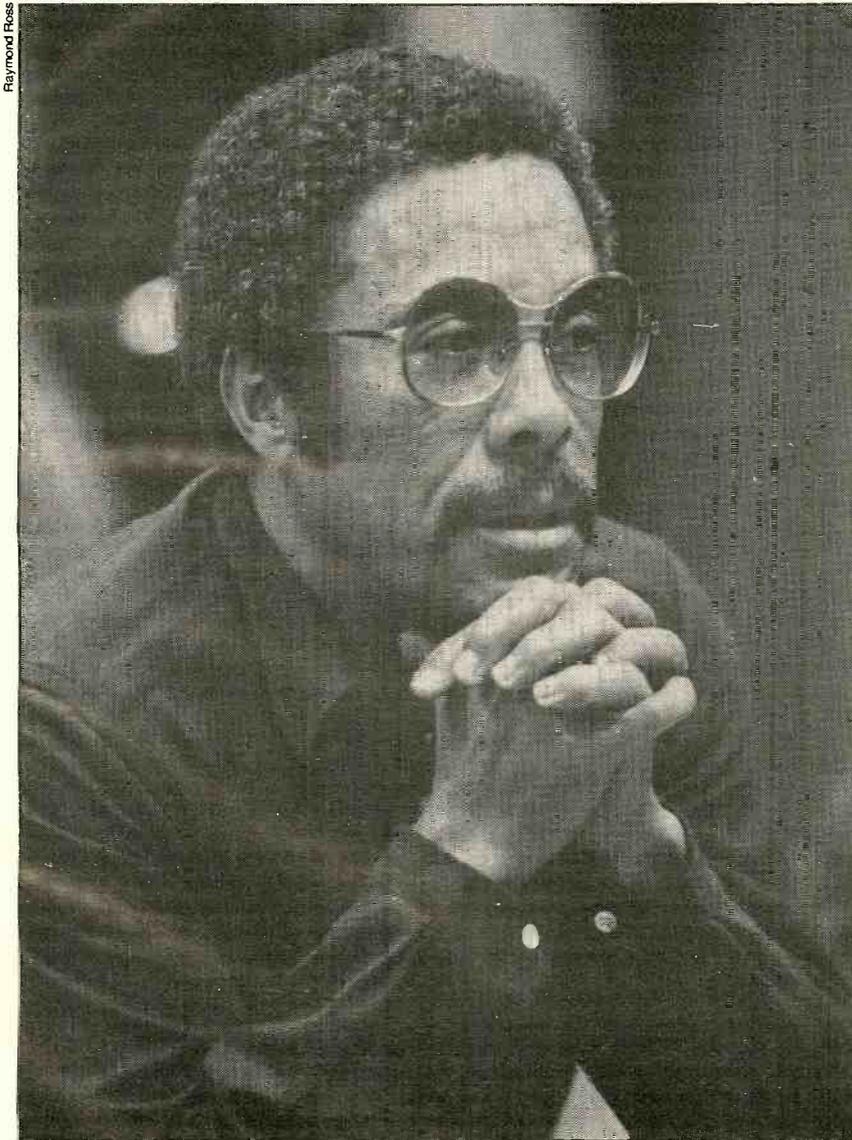
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STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT BEST OF THE MONTH



Surging, Blockbuster Jazz Spills from the Plenteous Horn of Expatriate Johnny Griffin In Inner City's New "Live in Tokyo" Set



Raymond Ross

TENOR saxophonist Johnny Griffin came into prominence during the late Fifties, first as a sideman with Art Blakey and Thelonious Monk, then as co-leader (with fellow tenor Eddie "Lockjaw" Davis) of a frenetically swinging quintet. He made numerous recordings as a leader (mainly for Riverside and its subsidiary label Jazzland) before 1962, when he took up residence in Europe. For the past decade and a half Griffin has been extremely active on the Continent, and that activity has been well documented on records, many of which have crept quietly into American catalogs.

Last September, Johnny Griffin made a rare appearance in the U.S.; he performed at the Monterey Jazz Festival and in clubs and concerts across the country, receiving critical acclaim wherever he went. Without the benefit of a record company's promotion machine, Griffin did not make quite the splash his fellow expatriate Dexter Gordon had made just before him, but he undoubtedly gained the following of a new generation of American jazz fans, and he certainly rekindled the fire some of us remember his setting years ago.

"Live in Tokyo" should help satisfy appetites whetted by Johnny Griffin's all-too-brief visit. Recorded at a concert in the Japanese capital in April 1976, it features a generous, representative serving of Griffin's robust, assertive tenor in an excellent quartet completed by pianist Horace Parlan, Danish bassist Mads Vinding, and drummer Art Taylor. Expatriates Taylor and Parlan moved to Europe in 1963 and 1973, respectively, but both had worked with Griffin before that; Parlan had replaced Junior Mance with the Griffin/Davis quintet, and Taylor—who developed a very close association with Griffin in Europe—taped a couple of sessions (for Riverside and Atlantic) with the tenor player during the latter's



Angeli/EMI

BARRY TUCKWELL: agile as a string player

Orchestral Music of Jan Dismas Zelenka (!) In the Persuasive Light of Virtuosity

RECENT studies in the active musical life of eighteenth-century Bohemia have resulted in a modest revival of the music of Jan Dismas Zelenka. Who? Well may you ask. A contemporary of J. S. Bach, Zelenka was educated in Prague, Vienna, and Italy, eventually settling down in Dresden at the court of Frederick Augustus II. Although his main preoccupation was church music, he produced sufficient orchestral music to fill a three-disc album, and a new Deutsche Grammophon release purports to present it all.

A first hearing of Zelenka's music leads one to believe that here is yet another high-Baroque workman echoing Telemann and Vivaldi. But the music wears surprisingly well, and Zelenka's quite individual voice soon comes to the fore. His preference for concertato writing gives his orchestral music brilliant, mosaic-like textures and a constantly varying sonority. All his players are treated like virtuosos, and as the music progresses we are dazzled by technical feats—not only, as we might expect, from violin and oboe, but also from horns, bassoon, and cello. No combination eludes him, and his palette includes such striking musical colors as duets for horns and the paired rich sonorities of cello and bassoon. Overall, the effect is not so much orchestral as it is that of highly developed chamber music.

Another individual trait of Zelenka's music is his occasional unusual turning of a phrase. Like any composer of the period, he draws heavily on stock harmonies and figuration, but every so often he will spice up an otherwise hackneyed sequence by taking it to an unusual harmony, or he will thwart our expectations of a commonplace melody by giving it a slight twist in an unexpected place. Zelenka may not be a composer of the first rank, but he must be given credit for an originality that can maintain one's interest even today.

Alexander van Wijnkoop has assembled a remarkable group of eight soloists who possess just the right balance of technical brilliance and instinctive feel for chamber music. Every participant is clearly heard at all times in Zelenka's lucid textures. With such a fine cast of characters, it is perhaps unfair to single out any individual, but one cannot help being struck by the horn

two-month return to New York in the spring of 1963. (Among Taylor and Griffin's more unusual collaborations was a complete and greatly modernized version of Vivaldi's *Four Seasons*, recorded in Paris and issued here on Philips PHS 600 198).

The album gets off to a rousing start with *All the Things You Are*, which takes up all of side one. It features an extraordinary, surging performance by Griffin, who goes part of the way unaccompanied, spilling over five minutes of raw, wide-ranging emotion from his horn. That his playing matured during his years in Europe is nowhere more evident than in this solo interlude.

Griffin can handle ballads with kid gloves, as he did on his 1961 tribute to Billie Holiday ("White Gardenia," Riverside RLP 9387), and though he here demonstrates that same gentleness with his own *When We Were Young*, he can also transform a tender love song like *The Man I Love* into a totally de-romanticized, fast-paced tour de force. He does that on all of side three, building up his solo with computer-like logic, then lashing out with unexpected asides; halfway through the sixteen-and-a-half-minute track he sums up his comments with another

unaccompanied statement, then throws the spotlight on Art Taylor, whose long solo sustains one's interest where most other drummers would induce boredom. Also taken at an exceedingly fast tempo, but lasting less than four minutes, is *Wee*, the Denzil Best tune previously known as *Allen's Alley* (for some reason it is credited here to J. J. Johnson instead of Best). Griffin gives a blockbuster performance on this version of it.

The album ends with an extended version of *Soft and Furry*, a Griffin composition originally recorded by him with a two-bass quintet in 1961 ("Change of Pace," Riverside RLP 9368). This version has Griffin's tenor floating gently to the corners of Yuhbinchokin Hall (where it was recorded) amid low-key, lyrical solos by Parlan and Vinding. In all, I would have to say that Johnny Griffin has made himself much too scarce in this country.

—Chris Albertson

JOHNNY GRIFFIN: *Live in Tokyo*. Johnny Griffin (tenor saxophone); Horace Parlan (piano); Mads Vinding (bass); Art Taylor (drums). *All the Things You Are*; *When We Were One*; *Wee*; *The Man I Love*; *Soft and Furry*. INNER CITY IC 6042-2 two discs \$11.98.

playing of Barry Tuckwell. Zelenka was merciless in his demands, taking the instrument to extreme heights and running it through contorted passage work. Tuckwell tosses it all off with the agility of a string player, leaving one all but breathless. Then, at almost the next measure, we are delighted by oboist Heinz Holliger's exquisite phrasing, followed by a lovely muted duet on bassoon and cello by Manfred Sax and Dieter Leicht. Such playing is really *la crème de la crème*, and it certainly presents Zelenka's music in its best possible light.

—Stoddard Lincoln

ZELENKA: *Capriccios I-V; Sinfonia à 8 Concertanti, in A Minor; Sinfonia à 8 Concertanti, in G Major; Overture à 7 Concertanti, in F Major; Hipocondrie à 7 Concertanti, in A Major.* Heinz Holliger (oboe); Barry Tuckwell (horn); others. Camerata Bern, Alexander van Wijnkoop cond. DEUTSCHE GRAMMOPHON ARCHIV 2710 026 three discs \$26.94, © 3376 014 \$26.94.

The Thompsons: Deeply Moving, Melodically Memorable, Beautifully Crafted Rock-and-roll

ABRIEF recap for those of you who don't recall any of my previous wild-eyed endorsements of the work of Richard and Linda Thompson: she, after the late Sandy Denny, is the best folk-oriented female vocalist out of England ever, and he is not only a brilliant songwriter but an innovative and

expressive guitarist. Over the course of several albums they have used the English folk tradition as a jumping-off point for the most intensely personal and original of visions, creating in the process some of the most deeply moving, melodically memorable, and beautifully crafted rock-and-roll (for want of a better word) of the Seventies. Anyone who doesn't own at least one of their records is living on the edge of both musical and spiritual pauperism.

"First Light," the team's new album, retains all the virtues of their earlier work, but for the first time (along with their friends Maddy Prior, Ian Matthews, and others from the Fairport Convention/Steeleye Span floating musical crap game) the Thompsons are working with one of those high-price American rhythm sections, and the result is that there's a vague whiff of California pop in the mix. A betrayal? Hardly, although this new stuff is certainly more accessible; lots of people I've tried to sell on Richard and Linda in the past (with a notable lack of success) have responded enthusiastically to "First Light," and I'd approve even if the music weren't so strong. Devotees need not worry, though; this is hardly the usual L.A. Bland Out. The opener, *Restless Highway*, may be as lush as anything by Fleetwood Mac, but it is still bedrock honest, and as for the rest, especially the hypnotic and chilling *Died for Love* and *Layla* (not the Clapton song), there isn't a band in California that could come within shooting distance of music this fine. If you think that I think that this is one of the most beautiful albums around right now in *any* genre, you catch on fast.

—Steve Simels

RICHARD AND LINDA THOMPSON: *First Light.* Richard Thompson (vocals, guitars);

Linda Thompson (vocals); Simon Nicol (guitar); Willie Weeks (bass); other musicians. *Restless Highway; Sweet Surrender; Don't Let a Thief Steal Your Heart; The Choice Wife; Died for Love; Strange Affair; Layla; Pavanne; House of Cards; First Light.* CHRYSALIS CHR 1177 \$7.98.

Sedaka: Not a Single Socially Conscious Line in a Quarter Century—Thank God

Poor fading rock star! Poor baby! It must be just awful, sitting there in your L.A.-canyon pad, remembering the hits you had only a few years ago, trying to get with the newest pop-socio-cultural mood swing, flicking the dust off your personally autographed picture of Bob Dylan, wondering why your record company hasn't even bothered to send you a sales report on your last album, why the audience at your last concert looked like the out-planet bar scene in *Star Wars*. It must be embarrassing, too, to be confronted with such a *personal* affront as Neil Sedaka's new release for Elektra, "All You Need Is the Music," which looks, smells, and listens like a smash on every count. "Oh, no," you moan, "not Sedaka—that *hack!*" That superannuated Fifties teenager who's never written a socially conscious line in his life, the guy who's been grinding out the same hits for *twenty-six years!*"

In a word and a half, uh-huh. Sedaka has come up with at least three jumbo goodie's on his latest platter: the title song, *All You Need Is the Music*, a disco number (read 'em and weep) so infectious that by the second chorus you find yourself moving around to the beat whether you particularly want to or not; a ballad, *Should've Never Let Her Go*, syrupy sweet, totally disarming, and sung in that androgynous falsetto he perfected years ago and which still exerts the same weird fascination; and the rip-snorting, high-spirited *Candy Kisses*. And that's not all. There's a little novelty titled *Tillie the Twirler*, about a girl who's paying for her ballet lessons by twirling her assets for audiences down at the Bijou. In this one Sedaka is pure delight, still the plump little precocity breaking up the relatives with his imitations and clowning at the parlor piano. Most of the song is performed with that pop-eyed mock shock

RICHARD AND LINDA THOMPSON: *the folk tradition extrapolated*





Elektra

NEIL SEDAKA: syrupy sweet—and totally disarming

Eddie Cantor used to bring to naughty, “Ma, she’s makin’ eyes at me” lyrics, and at the very end he does a dialect imitation of a thee-ay-ter manajah that is at least the equal of Streisand’s cutting up on *Second Hand Rose*.

There really isn’t much point in discussing whether or not Sedaka, after almost three decades of work and success in popular music, is good, bad, or indifferent. He’s here, he’s an established fact of our popular-music life. Personally, I happen to think he’s damed good most of the time—and that this time he’s simply terrific.

—Peter Reilly

NEIL SEDAKA: *All You Need Is the Music*. Neil Sedaka (vocals, keyboards); orchestra. *All You Need Is the Music*; *Candy Kisses*; *Should’ve Never Let Her Go*; *Sad, Sad Story*; *Tillie the Twirler*; *Love Keeps Getting Stronger Every Day*; *Born to Be Bad*; *What a Surprise*; *You Can Hear the Love*; *City Boy*. ELEKTRA 6E-161 \$7.98. Ⓢ ET8-161 \$7.98. © TC5-161 \$7.98.

Elly Ameling: the Right Tone and Mood for Every Brahms Song

ELLY AMELING: endearing warmth and tonal purity



Sheldon Soffer Mgr.

SOME of the greatest (and therefore most often recorded) of Johannes Brahms’ songs are contained in an excellent new collection on the Philips label, but there are also quite a few that seem to be first recordings—in my experience, at least. The program covers a wide span in the composer’s life—from Op. 6 (published in 1853) to Op. 105 (1889). From the former comes *Spanisches Lied*, better known to some, perhaps, as *In Dem Schatten Meiner Locken* through the Hugo Wolf setting that came decades later. (It happens to be superior to the Brahms, but a comparison between the two is illuminating. Not for Brahms was Wolf’s faithful submission to the poetic text, but, on the other hand, Brahms at least attempted to create a *Spanish* background for the song.) At any rate, the Brahms characteristics are all in evidence in this collection: songfulness, folk influences, directness, and mellow contemplation.

I make a point of the program’s contents because it is rare to find a recital so thoughtfully chosen. I should also add that these songs are perfectly suit-

ed to the unaffected style, endearing warmth, and tonal purity that make Elly Ameling such an exceptional interpreter. She is a subtle artist who need not resort to excessive sentimentality or coy exaggeration. A slight ritard, a perfectly timed rubato, and a roguish inflection suffice to make the much-recorded *Vergebliches Ständchen* emerge refreshed. The eighteen songs in this recital cover a considerable range of emotions, but Miss Ameling always manages to find just the right tone and mood for each one. As usual, Dalton Baldwin is just the right collaborator as well. —George Jellinek

BRAHMS: Songs. *Heimweh; Der Jäger; Agnes; In den Beeren; Der Frühling; Die Trauernde; Vergebliches Ständchen; Spanisches Lied; Von Waldbekränzter Höhe; Wiegenlied; Botschaft; Komm Bald; Des Liebsten Schwur; Dein Blaues Auge; Das Mädchen Spricht; Von Ewiger Liebe; Sandmännchen; Immer Leiser Wird Mein Schlummer.* Elly Ameling (soprano); Dalton Baldwin (piano). PHILIPS 9500 398 \$8.98.

Rediscovered Gems of The Vocal Repertoire: Joseph Haydn's Vocal Trios and Quartets

AMONG other noteworthy phenomena of the twenty years or so after the end of World War II—the period that brought the Big Baroque Boom and the confirmation of Mahler's conviction that his time would yet come—was one of the most exciting discoveries of all: the music of Joseph Haydn. A composer beloved as few of his colleagues have been, his reputation had nonetheless rested on relatively few works, and those for the most part performed year-in and year-out in inauthentic versions. By now, of course, the distorted scores have been corrected, all the symphonies, sonatas, trios, and string quartets have been recorded, and even the operas are in process of being recorded complete. Nonetheless, it would appear that there are still unfamiliar areas of Haydn's vast output to be explored—and how rewarding such exploration invariably proves! One needn't be a fancier of part songs, or especially oriented toward vocal music, to be enchanted by the baker's dozen of vocal quartets and trios Haydn composed between 1799 and 1801, all

of which have just appeared simultaneously on the Musical Heritage Society and Peters International labels—the same recording, derived from the French Arion catalog.

One needn't even be concerned with the texts, so delicious are these songs in terms of their harmonies alone, but it must be said that Haydn was most imaginative in choosing the verses for this project (which was planned to run to a total of twenty-five numbers but broke off midway). Most of the verses are lighthearted or humorous, some are unpretentiously devotional, and nearly all are philosophical in one sense or another. The best-known—if any may be so described—are *Die Harmonie in der*

covery” instead of having been long familiar and as cherished as Haydn's symphonies and string quartets. The first nine of the titles listed below are quartets; the next is a trio for soprano, tenor, and baritone; the one after that a trio for soprano, alto, and tenor; and the two final songs are sung by two tenors and baritone. Both discs offer not only the same recording but also the same annotation (though the English translation has been edited on the MHS version). I would recommend the MHS release over the Peters not only because it is a bit less costly, but also because the absolutely silent pressing is even more successful than Peters' very good one and, most important, because



J. HAYDN (1732-1809): beyond the recognized masterpieces, there are discoveries still to be made.

Ehe, whose sweetness gives a subtle edge to its satirical content, and *Der Greis*, whose first line (“My strength is gone, I am old and weak”) Haydn took to inscribing on his visiting cards. There are fresh twists in virtually all the songs, one of them being the barely whispered “stumm” (mute) at the end of *Die Beredsamkeit*, a setting of a verse by Lessing whose argument is that “Water makes us mute. . . . Wine inspires eloquence. . . .”

The care lavished on the words by the excellent singers of the Lieder Quartett is complemented by the musicianship of the performers (the fine harpsichordist as well as the singers). The extremely well-recorded results are enchanting, leaving the listener to wonder why such gems should be appearing now in the context of a “dis-

MHS provides texts in both German and English, while Peters offers only the German. —Richard Freed

HAYDN: Vocal Trios and Quartets. *Die Harmonie in der Ehe; Aus dem Dankliede zu Gott; Abendlied zu Gott; Der Augenblick; Die Beredsamkeit; Der Greis; Alles Hat Seine Zeit; Warnung; Wider den Übermut; Betrachtung des Todes; An den Vetter; Daphnens Einziger Fehler; An die Frauen.* Lieder Quartett—Ana-Maria Miranda (soprano), Clara Wirz (alto), Marcel Quillevere (tenor), Udo Reinemann (baritone); Helmut Reinemann (tenor); Brigitte Haudebourg (harpsichord). MUSICAL HERITAGE SOCIETY MHS 3869 \$4.95 (plus \$1.25 postage and handling from the Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

HAYDN: Vocal Trios and Quartets. (Same contents and performers as above.). PETERS INTERNATIONAL PLE 076 \$7.98.



CLASSICAL DISCS AND TAPES

Reviewed by RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH
STODDARD LINCOLN • ERIC SALZMAN

J. S. BACH: *Concerto in A Minor (BWV 1056)*; *Concerto in E Minor (ed. Radeke from BWV 1059 and 35)*; *Suite No. 2, in B Minor (BWV 1067)*. James Galway (flute); I Solisti di Zagreb. RCA ARL1-2907 \$7.98, © ARK1-2907 \$7.98.

Performance: **Solid**
Recording: **Good**

In order to create an all-Bach disc of music for flute and orchestra, James Galway has resorted to arrangements and restorations. The A Minor Concerto here is a transposition and arrangement of the F Minor Harpsichord Concerto. The E Minor Concerto is more problematic, and credit must be given to Winfried Radeke for a logical reconstruction of the work. BWV 1059 consists of nine bars of a concerto for harpsichord, oboe, and strings; the same torso, only completed, was also used by Bach for the opening of Cantata No. 35, and, felicitously, the second part of the same cantata starts off with a sinfonia in the same key. Ms. Radeke assumed that these are the outer two movements of a lost concerto and filled in the slow movement with an arrangement of the first aria from the cantata.

Arranging music composed for one instrument for another is part and parcel of the Baroque tradition, and Bach certainly put his stamp of approval on the practice. But it does not always work. The outer movements of the A Minor (F Minor) Concerto are strong pieces

that need the pithiness of a violin, oboe, or harpsichord to sustain their vigor. When played by the flute, the music becomes flabby. Galway's constant pushing of the tempos and his legato playing in no way compensate for the flute's being simply the wrong instrument for this music. The slow movement is perfect for the flute, however, and Galway turns in a very nice performance of it. The E Minor Concerto, even though not designed for the flute, comes off rather more effectively and is a handsome addition to the repertoire.

But if Galway is to play Baroque music, he owes it to his listeners, as well as to himself, to study and apply consistently the performance practices of the era. He rightly applies double dotting to the dotted eighths in the overture of the Suite in B Minor, for instance, but he plays the dotted quarters as written. All dotted notes should be double- or even triple-dotted, and this application to one rhythmic value but not to another produces an unwanted raggedness. Galway should also reconsider the length of appoggiaturas, especially in the sarabande and menuet, and apply the excellent articulation he uses in the variation of the polonaise and badinerie to the passage work of the overture, rondeau, and bourrées. Such felicities would lend lightness and grace to a rather routine solidity. S.L.

BEETHOVEN: *Piano Concertos Nos. 1-5*; *Rondo a Capriccio in G Major, Op. 129* ("Rage over a Lost Penny"); *Bagatelle in A Minor ("Für Elise")*; *Rondo in C Major, Op. 51, No. 1*; *Thirty-two Variations in C Minor*. Alexis Weissenberg (piano); Berlin Philharmonic Orchestra (in concertos only), Herbert von Karajan cond. ANGEL □ SD-3854 four discs \$31.92.

Performance: **Elegant**
Recording: **Good**

Given the dozen-plus Beethoven piano-concerto cycles currently listed in Schwann, at least half of which fall into the category of "distinguished achievement," I can only say of this latest entry that it is neither the best nor the least and does have some distinctive merits of its own.

Refinement and elegance are the hallmarks of every performance here. More often than not, it is Herbert von Karajan's Berlin Philharmonic that sets the tone and establishes the musical balance in the concertos, for the piano is very seldom up front, seeming rather to emerge from within the orchestra. This works best, I think, in the first two concertos. In the later ones I began to feel a little uneasy about it. Of course, the orchestral playing, especially in the Fourth and Fifth Concertos, is altogether superb. Where Alexis Weissenberg distinguishes himself is in the fluency and elegance of his pianism in the fast movements and the remarkable tonal beauty he brings to the slow ones. I would question, however, the treatment accorded the adagio of the *Emperor*, which seems almost static. In general, tempos here tend toward the deliberate, and utmost attention is paid to matters of dynamic detail, texture, and carefully articulated figuration. It would be wrong to call these performances "fussy," but they do lack the sinew and drive of many others. If you prefer your Beethoven piano concertos more elegant than rugged, this package will be very much to your taste.

The four solo piano pieces are carried off with great brilliance, most notably in the so-called *Rage over a Lost Penny* (Weissenberg makes the most of its Hungarian flavor) and the handsome C Minor Variations. D.H.

BERLIOZ: *Harold in Italy, Op. 16*. Robert Vernon (viola); Cleveland Orchestra, Lorin Maazel cond. LONDON CS 7097 \$6.98.

Performance: **Volatile**
Recording: **Good**

Berlioz's marvelous evocation of explorations and experiences in Italy is not only well represented in currently available recordings, but at least two—the McInnes/Bernstein and the Zukerman/Barenboim versions—are of both recent vintage and exceptional distinction. The earlier Menuhin/Davis recording, though, still occupies a special niche.

Robert Vernon's viola protagonist in this newest recording is perhaps the most withdrawn and dreamy of all, even to the point of

Explanation of symbols:

- Ⓜ = reel-to-reel stereo tape
- Ⓢ = eight-track stereo cartridge
- Ⓒ = stereo cassette
- = quadraphonic disc
- = digital-master recording
- Ⓛ = direct-to-disc recording

Monophonic recordings are indicated by the symbol Ⓜ

The first listing is the one reviewed; other formats, if available, follow it.

seeming uninvolved. But is this his or conductor Lorin Maazel's view of the matter? When it's the orchestra's turn to show its stuff in the Brigand's Orgy finale, Maazel and his men give their all, to splendid effect. Even with the general excellence of London's recording in Maazel's favor, I rate the recent entries in the *Harold in Italy* race as: *win*, Bernstein; *place*, Barenboim; and *show*, Maazel. D.H.

BRAHMS: Songs (see *Best of the Month*, page 86)

RECORDING OF SPECIAL MERIT

FALLA: *La Vida Breve*. Teresa Berganza (mezzo-soprano), Salud; José Carreras (tenor), Paco; Paloma Perez Iñigo (soprano), Carmela; Alicia Nafé (contralto), Grandmother; Juan Pons (bass), Uncle Sarvaor; Ramón Contreras (baritone), Manuel; Manuel Mairena, the Singer. Narciso Yepes (guitar); Luce-ro Tena (castanets); Ambrosian Opera Chorus; London Symphony Orchestra, Garcia Navarro cond. *El Amor Brujo*. Teresa Berganza (mezzo-soprano); London Symphony Orchestra, Garcia Navarro cond. DEUTSCHE GRAMMOPHON 2707 108 two discs \$17.96, © 3370 028 \$17.96.

Performance: **Very good**
Recording: **Very good**

La Vida Breve is, in a way, a Spanish *Cavalleria Rusticana*. But whereas the Mascagni opera sprang from the abundant well of Italian verismo, Falla's concise little drama was the only viable manifestation of Spain's impoverished operatic life in the early 1900's—the zarzuela was the only form of musical theater the Spanish public favored. Falla was not an experienced opera composer, and *La Vida Breve* is not without some intrinsic constructional flaws, but it has haunting music and its combination of high emotions and spirited dances is undeniably effective. Sarah Caldwell's projected Boston revival with Victoria de los Angeles will probably lead to a general renewal of interest in this undeservedly neglected opera.

De los Angeles sang Salud in two previous recorded versions of *La Vida Breve* (RCA mono LM 6017, deleted, and Angel S-3672, still in the catalog). In the present set, Teresa Berganza sings beautifully, but she cannot quite equal De los Angeles' blend of spontaneous lyricism and touching poignancy. Falla's bewitching sonorities and pungent rhythms are nicely captured by the young Spanish conductor Garcia Navarro, and the rest of the cast is uniformly good. I still prefer the Angel set, but only by a small margin. Both sets, incidentally, use an authentic flamenco *cantaor* (singer) in the wedding scene, and here, too, the Angel version is slightly ahead of the DG one.

The fourth side in the Angel set is devoted to *Tonadillas* by Granados, which De los Angeles sings enchantingly, but *El Amor Brujo* seems like a more appropriate pairing. That familiar and much-recorded work sounds really convincing to me only with a native vocalist, for non-Spaniards tend to compensate for a lack of authenticity by overstatement. Thus, in contrast to some explosive and raucous treatments in previous versions, Teresa Berganza is here sultry and seductively insinuating. The orchestral execution is not the most exciting imaginable, but it is elegant and richly recorded. G.J.

HANDEL: *Acis and Galatea*. Norma Burrowes (soprano), Galatea; Anthony Rolfe Johnson (tenor), Acis; Martyn Hill (tenor), Damon; Willard White (baritone), Polyphemus. English Baroque Soloists, John Eliot Gardiner cond. DEUTSCHE GRAMMOPHON ARCHIV 2708 038 two discs \$19.96.

Performance: **Frustrating**
Recording: **Crystal clear**

HANDEL: *Acis and Galatea*. Jill Gomez (soprano), Galatea; Robert Tear (tenor), Acis; Philip Langridge (tenor), Damon; Benjamin Luxon (bass), Polyphemus. Academy of St. Martin-in-the-Fields, Neville Marriner cond.

ARGO ZRG 886-7 two discs \$17.96, © KZRG 886-7 \$17.96.

Performance: **Dramatic**
Recording: **Marvelous**

The trouble with the DG Archiv *Acis* is that the singers and conductor seem to be at odds most of the time. The singing ranges from very good to outstanding. Norma Burrowes has the perfect voice for Galatea, uses it dramatically where needed, and is always conscious of word coloration. She is also conversant with Baroque tradition and offers some fine ornamentation. Her equal is found in Martyn Hill as Damon. Anthony Rolfe John-



Prague String Quartet

PCM: Two Quartets

DENON's continued emphasis on chamber music, with the conspicuous involvement of some of the outstanding Czechoslovak ensembles, reconfirms the high musical purpose to which its PCM (pulse-code modulation) digital technique is applied. A new disc by the Prague String Quartet, recorded in Tokyo in November 1977, shows the now familiar PCM characteristics at their best—apparently unrestricted dynamic range, freedom from distortion, no sound but the music—and the engineer has contributed a thoughtful and realistic balancing of the performers. It happens that neither Borodin's Second Quartet nor Prokofiev's Second is very well represented in the current catalog, so this particular coupling is of real interest. The Borodin performance is less voluptuous than some listeners may wish—less, certainly, than in the hands of the Komitas Quartet (Angel 35239 of blessed memory) or in the best of the previous stereo versions, that of the Drolč Quartet (Deutsche Grammophon 139 425, also deleted)—but there is a very appealing gutsiness that wears very well. Only in the famous *Notturmo* did I feel the Praguers' eschewal of sentiment led to a degree of coldness and a touch of the prosaic, most noticeable in the throbbing viola

figure at the end of the movement. On the whole, though, this is a handsome performance as well as the best-sounding version yet of this lovely work.

THE Prokofiev side makes an even stronger impression. The work is based on Caucasian folk music, and the relish with which the performers dig into it is almost visible. Like the Carmirelli Quartet in its oldish but still attractive version (London STS-15152), they set a deliberate tempo in the first movement in order to accommodate the emphatic accents of the bearish theme, which comes off with an abundance of good humor. The middle movement, derived from a love song, is taken a bit slower than I have ever heard it before (no eschewal of sentiment here), but it never loses momentum, and the finale is set forth as the spirited summing-up it is. A real winner—and now attention might be directed to Prokofiev's neglected *First Quartet*.

—Richard Freed

BORODIN: *String Quartet No. 2, in D Major*.
PROKOFIEV: *String Quartet No. 2, in F Major, Op. 92*. Prague String Quartet. DENON/PCM 0X-7131-ND \$14.



Erick Friedman, violin; Emanuel Vardi, viola; Jascha Silberstein, cello

Beethoven String Trios

THE string-trio literature is rather like Old MacDonald's farm: plenty of stock but not many thoroughbreds. What results from the challenge of writing for a trio of strings is usually just the kind of makeshift that players can turn to when the second fiddler fails to show up for a quartet evening.

Even Beethoven found the challenge less than exhilarating. His five string trios begin with one (the E-flat Major, Op. 3) that is an echo of Mozart's famous K. 563 divertimento (same key, same instruments, same number of movements) and end with one (the C Minor, Op. 9) that similarly foreshadows his own Fourth Quartet (Op. 18). Between are the other two trios of Op. 9 and the jolly Serenade in D Major, Op. 8.

Since chamber groups have rarely made a living (even a poor one) from playing string trios, most ensembles that purvey such music belong to the category known as *ad hoc*. Two such are responsible for recently issued recordings of the Beethoven trios. One ensemble (on Musical Heritage Society) consists of the fine, well-known players Erick Friedman (violin), Emanuel Vardi (viola), and Jascha Silberstein (cello)—and principal cellist of the Metropolitan Opera Orchestra, and the other (on Hungaroton) of the fine, little-known players Dénes Kovács, Géza Németh, and Ede Banda (same order of instruments).

The difference in the musical approaches of the two groups is evident even before a note is heard, for the annotation for the Friedman/Vardi/Silberstein recording advises us that "not since the legendary days of the Heifetz, Primrose, Piatogorsky trio has there been a truly extraordinary virtuoso string trio." What that augurs is plenty of *brío*, broad bow strokes, vigorous scherzos, swift-moving finales—it's Beethoven, remember? The Kovács/Németh/Banda grouping is no such trio of stars, but it is not earthbound either. Balances are subtly maintained, leader Kovács is clearly in charge, statements and answers are neatly dovetailed—it's *early* Beethoven, remember?

What I fail to hear in either group's performances is an approach to each of the five works on its own terms rather than from a set of values applied to the collection as a whole.

Once Messrs. Friedman, Vardi, and Silberstein have laid out their agenda for Beethoven, the ground rules are clearly fixed and points are scored only for vigor. When all three of them are vigorous at once, the scoreboard lights up, but Beethoven is sometimes the loser. There is not a *con brío* marking to be found in the seven movements of the serenade, for instance, but their attacks are no less "vigorous" than where that is what the composer called for. The Kovács/Németh/Banda ensemble, on the other hand, is as restrained playing the forward-looking C Minor Trio as in the backward-focused E-flat. More than anything else, I miss in both these sets a sense that the performers are working together in a familial, all but instinctive way.

To ask that players of three different instruments be equally accomplished and blood relations as well may strike some as asking just too much. But to those familiar with the subject I need say no more than "Pasquier" to rouse immediate memories of Jean (violin), Pierre (viola), and Étienne (cello), who were both artists and siblings. Among contemporaries I would settle for Arthur Grumiaux as violinist with George Janzer (viola) and Eva Czako (cello) in the Op. 8 trio on Philips 6500 167 (they also recorded two of the Op. 9 trios, Nos. 1 and 3, for Philips, but that album has unfortunately been deleted). The three are not siblings. However, not only are the latter two wed to the high standards personified by Grumiaux, but Ms. Czako is also Mrs. Janzer.

—Irving Kolodin

BEETHOVEN: *String Trios (complete)*. Erick Friedman (violin); Emanuel Vardi (viola); Jascha Silberstein (cello). MUSICAL HERITAGE SOCIETY MHS 3689 three discs \$14.85 (plus \$1.25 postage and handling from the Musical Heritage Society, Inc., 14 Park Road, Tinton Falls, N.J. 07724).

BEETHOVEN: *String Trios (complete)*. Dénes Kovács (violin); Géza Németh (viola); Ede Banda (cello). HUNGAROTON SLPX 11781/3 three discs \$23.94 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

son's *Acis* is a little pale in comparison, but then so is the character. Willard White's *Polyphemus* is rather too pompous and blustery, but the characterization works. All in all, they put on a fine show and bring off the drama of Handel's opera.

John Eliot Gardiner is a knowledgeable conductor, but here his knowledge is misapplied and his conducting is unmusical. His role in this performance is more to sabotage the fine singing than to accompany it and keep things moving. Admittedly, many conductors of the last generation played Baroque music too slowly, and the present generation is quite right in its desire to quicken the basic tempos. But the pendulum has swung too far, as is seen in *Acis*: "Where shall I seek the charming fair?" The ubiquitous dotted rhythmic pattern becomes skittish at Gardiner's tempo and renders the piece trivial. The excessively fast tempo of the duet "Happy we" debases pastoral joy into panting desperation. Some of the tempos show a lack of understanding of the dramatic role of the airs. For example, Damon's air "Would you gain the tender creature" is in a seductive triple meter; it works at a moderate tempo, and is beautifully sung that way by Hill. *Acis*' answer, "Love sounds the alarm," is militant and aggressive. Like the preceding air, it is also in triple meter, but that is no indication that it should be taken at the same tempo as its predecessor, as it is here. True, *Acis* is hopelessly weak, but he is aroused at this moment and should display some bluster rather than lassitude. Johnson tries to swagger vocally, but the tempo weakens his backbone.

A few musicologists have attempted to prove that the final cadence of a recitative should be played as written—that is, with the first of the two chords struck simultaneously with the singer's last note, rather than delaying it until a beat after the final vocal note. Gardiner apparently subscribes to this theory, and the result here proves that it is musically untenable. Another case of misused knowledge is the application of French rhythmic inequality to an Italianate score. Gardiner's use of this device in the *da capo* of the opening chorus is not only patently wrong, it sounds ridiculous. Even the French would not have used it in the context of this movement.

Still another obstacle the singers have to contend with is the playing of the original instruments. The oboes cannot keep up the breakneck tempo in the *sinfonia*, and in lyric aria passages the exaggerated articulation of the oboes and violins destroys any sense of phrase. Moreover, in his attempt to re-create the conditions of the first performance of the work, Gardiner uses the four soloists plus another male singer for the choruses. Although they are all fine solo singers, their voices do not blend in the ensemble work.

Perhaps this recording does accurately reflect the conditions Handel faced in his early days in England at Cannons. But that situation was far from ideal, and one wonders why it should be reproduced and the results thrust upon the public today. *Acis and Galatea* deserves the best possible realization, rather than being treated as a document of Handel's early English frustrations.

In contrast to the Archiv recording, the musical merits of the Argo *Acis* must be credited to the conductor and orchestra, Neville Martin and the instrumentalists of the Academy of St. Martin-in-the-Fields. Their clean, articulate playing is exciting and, in fact, the very

life of the performance. Marriner's choice of tempos is uncanny; the mood of each individual number is perfectly captured, and the pacing of the work as a whole brings out the operatic sense of drama that is inherent in Handel's score but is rarely realized. The problem with *this* performance is the singers. Both Jill Gomez and Robert Tear emphasize the dramatic elements of their roles, but one immediately senses that Miss Gomez is more at home in the repertoire of the later eighteenth and early nineteenth centuries than in Handel's highly controlled vocal idiom. Mr. Tear is rather too heroic for an Arcadian shepherd, and his frequent scooping for high notes is annoying. Philip Langridge is too bland even for the part of Damon. The exception is Benjamin Luxon, whose marvelously blustering portrayal of Polyphemus makes a wonderful mockery of Baroque operatic tradition, especially in his mad scene and his bull-in-a-china-shop version of "Ruddier than the cherry."

It is ironic and frustrating that Archiv and Argo recorded *Acis* at about the same time, for a composite of their different musical forces—Norma Burrowes, Anthony Rolfe Johnson, and Martyn Hill from the Archiv production and Benjamin Luxon, Neville Marriner, and the Academy of St. Martin-in-the-Fields from the Argo—might have created a single ideal performance. S.L.

RECORDING OF SPECIAL MERIT

HANDEL: *Water Music*. Concentus Musicus Wien, Nikolaus Harnoncourt cond. TELEFUNKEN 6.42497 \$8.98, © 4.42368 \$8.98.

Performance: **Hair-raising**
Recording: **Beautiful**

This is, I guarantee, so unlike any *Water Music*—nay, any Handel, indeed any Baroque orchestral music—you have ever heard that it will astonish you. Perhaps even astonish and delight... but of that I am far less certain. Right from the first needle drop, into a *Grave* that sounds as though it's being played at the wrong speed, Nikolaus Harnoncourt and his Amazing Original Instrument Ensemble produce the most hair-raising music that has ever been made in the name of the Baroque: whirlwind tempos, brassy blasts, triple dotting, as well as the most exquisite and the most vulgar sound and phrase. All of it performed to perfection, of course. No halfway measures or approximations here; fast is fast, slow is slow, and the sound is big, urgent, rollicking, almost frenetically festive.

Is this King George's *Water Music*? Is it Handel's? Is it Baroque? Is it good sense or merely willfulness? Damned if I know. When it works, it's thrilling. Harnoncourt is capable of instilling a vitality, a contemporaneity, into Baroque music that is unique and exciting. It is exceedingly rare that our concert classical music ever approaches anything like this in live performance, let alone in recording, and my instinct is to stand up and cheer. Why should popular music get all the high times while classical-music lovers have to suffer the pieties of a respectable church service? On the other hand, I warn you that this performance is so off-beat and even outrageous that old lovers of this music may find themselves feeling personally insulted. I do think that Harnoncourt and the Concentus are setting a new standard and style in the performance of early orchestral music—pure in sound, viva-

cious, even passionate in style. It will, I think, have a profound effect on our view of the Baroque and the origins of "modern" music. But that's only my opinion. E.S.

RECORDING OF SPECIAL MERIT

HAYDN: *The Creation*. Helen Donath (soprano); Robert Tear (tenor); José van Dam (bass). Philharmonia Chorus and Orchestra. Rafael Frühbeck de Burgos cond. ANGEL □ SB-3859 two discs \$15.98.

Performance: **Good**
Recording: **Excellent**

Haydn's *The Creation* is such a magnificent work that its frequent appearances on records

should not surprise us. This new release joins six others in the current catalog, including a Karajan-led Deutsche Grammophon set that is lavish in casting and profoundly moving in execution, a Bernstein version on Columbia that is flamboyant and uneven but frequently exciting, and two sets on London (conducted by Münchinger and Dorati, respectively) with which I am not familiar but which received good critical reactions.

Angel's new entry is a distinguished effort. Frühbeck paces the music in a loving, relaxed manner, reveling in its colorful orchestration and revealing the richness of its choruses. It is not the most dramatic presentation imaginable, but this is a work that sprang from its composer's deep-felt piety, and stressing the

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reverential over the dramatic is not, in my view, inappropriate.

Outstanding among the three soloists is José van Dam, whose clearly focused sound is balm to the ear and whose utterances are noble, eloquent, and flowingly lyrical. Helen Donath's tones reveal a little more flutter than has heretofore been evident in her singing, but she is always clear, secure, and in full command of the florid requirements. Robert Tear's voice is not basically attractive, but he is a well-schooled singer who cannot be faulted on musical grounds. In sum, this is an un-spectacular but thoroughly satisfying new re-Creation. G.J.

HAYDN: Vocal Trios and Quartets (see Best of the Month, page 87)

RECORDING OF SPECIAL MERIT

HUSA: Sonata for Violin and Piano. LAYMAN: Gravitation I for Solo Violin. Elmar Oliveira (violin); David Oei (piano). GRENADILLA GS-1032 \$7.98.

Performance: **Stunning**

Recording: **First-rate**

Elmar Oliveira is, of course, the first Ameri-

can violinist to win a gold medal in the Tchaikovsky Competition in Moscow, which accomplishment he added to his already impressive list of credits last summer. Last September I heard him play the Franck sonata and Bartók's Roumanian Dances in Washington, and I came away thinking that while there are lots of prize winners these days, there are never many fiddlers in his class. Oliveira is a stunning player: he has flair, passion, and extraordinary identification with the material he chooses to play; his tone is rich and warm, his intonation apparently flawless—and he is exceptionally musical. I would have expected his recordings to focus on the big Romantic staples, but his championing of these new works is a further indication of his seriousness. Karel Husa is a gentle man with deep feelings about the human condition; his music can't help expressing compassion, even when he is admittedly experimenting with instrumental effects. His thirty-six-minute sonata, completed in 1973, calls for slides and quarter-tones from the violinist and Cowellesque clusters and plucking from the pianist. It is an intense and striking work, austere in its language, influenced, Husa tells us, "by some events of the past years . . . continuous wars, senseless destruction of nature, killing

of animals, and, on the other hand, man's incredible accomplishments in space." It is not in any way a graphic representation of such events, but rather reflects the deep emotional response they have provoked in the composer. Oliveira does nobly by the work, and David Oei is a full partner in terms of both the part assigned to his instrument and the level on which he deals with it.

I had not encountered Pamela Layman's work, or even her name, before. Her *Gravitation I*, composed for Oliveira in 1974, was "largely inspired by the work of Earle Brown and the graphics of M. C. Escher." The score is laid out with a section of music inside a large central circle and other sections in smaller circles positioned around it; once the material in the large circle is performed it is up to the violinist to choose the sequence in which the rest is played, but between any two of the smaller circles he must return to the larger one. Depending on the performer's choices, the piece may run from five to eight minutes. Oliveira clocks in at five minutes, twenty-six seconds, and if he doesn't make me impatient for the appearance of *Gravitation II*, his beautiful tone does set up an eagerness for the *Kreutzer* Sonata and the Brahms concerto—which, I suspect, will not be too long in coming. The recording, produced by Richard Gilbert, is absolutely first-rate, and the surfaces on my review copy were as quiet as one could ask. R.F.

IVES: Songs (see Collections—William Parker)

LAYMAN: Gravitation I for Solo Violin (see HUSA)

LISZT: Angelus; La Lugubre Gondola; Epithalam; Am Grabe Richard Wagners; Romance Oubliée; Élégies I and II; Benedictus. András Kiss (violin); Zoltán Tóth (viola); Ede Banda, Miklós Perényi (cellos); Hédy Lubik (harp); István Lantos (piano, organ); Sándor Margittay (harmonium); New Budapest String Quartet; Hungarian Chamber Orchestra, Vilmos Tátrai cond. HUNGAROTON SLPX 11798 \$7.98 (from Qualiton Records, Ltd., 65-37 Austin Street, Rego Park, N.Y. 11374).

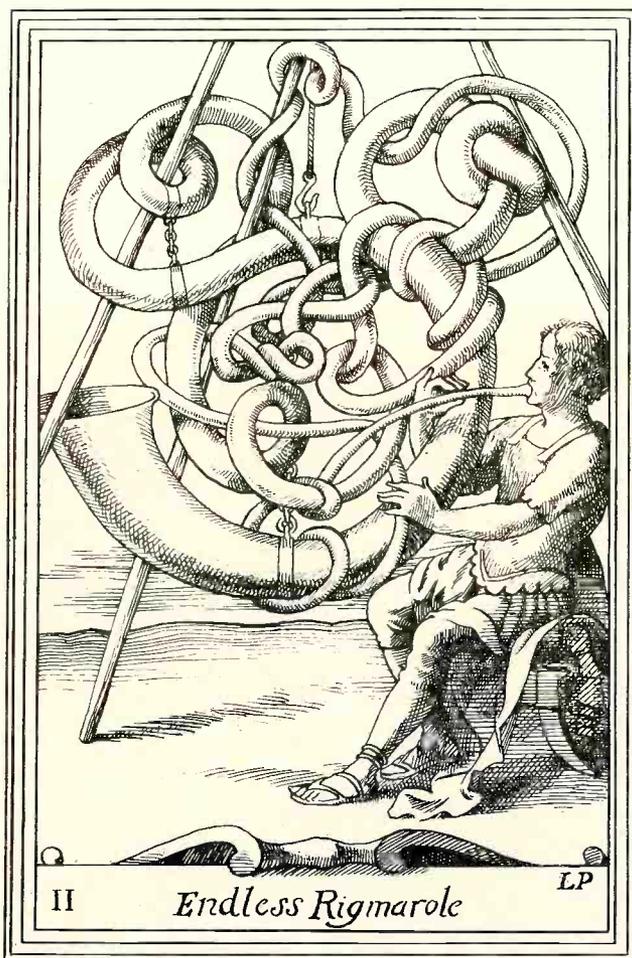
Performance: **High-quality Hungarian**

Recording: **The same**

Did you know that Liszt wrote chamber music? I didn't either, but here, from Hungary, is a whole album of it. Actually, there isn't all that much, and a lot of it is arrangements by Liszt from his other works. The *Angelus* here is a string arrangement from the *Années de Pèlerinage*, the *Benedictus* is a violin-and-organ version of a movement from the *Coronation* Mass, the *Romance Oubliée* is a viola-and-piano transcription of a solo piano piece. Much of this music is also late and introverted, such as *At the Grave of Richard Wagner* for string quartet and harp. Only the *Epithalam* for violin and piano and, most especially, the two wonderful elegies—one for violin and piano, the other for cello, piano, harp, and harmonium—have anything like a real chamber-music character. But everything here offers insight into an intimate, meditative, and decidedly unfamiliar Liszt. The performance and recording are of high quality throughout. An interesting oddity. E.S.

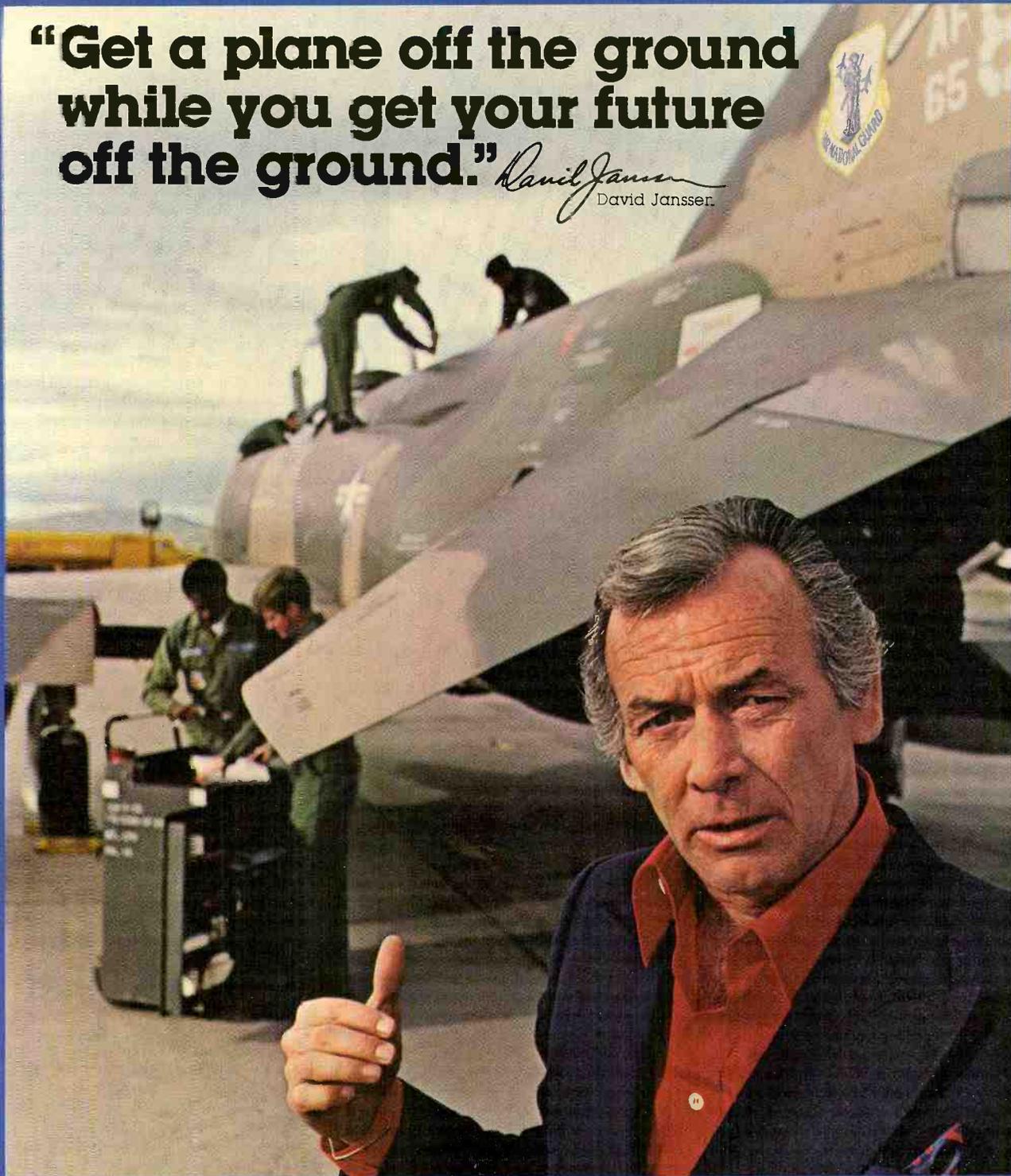
MAHLER: Symphony No. 5; Symphony No. 10, Adagio. Philadelphia Orchestra, James (Continued on page 96)

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**Bernstein's
"Songfest":
Superb**

THE notes accompanying Deutsche Grammophon's première recording of Leonard Bernstein's recent *Songfest* (subtitled "A Cycle of American Poems for Six Singers and Orchestra") describe the work as a contemporary artist's evocation of America's artistic past. For texts Bernstein chose thirteen poems spanning three hundred years of this country's history; annotator Jack Gottlieb summarizes their subject matter as "... the American artist's experience ... within a fundamentally Puritan society." I found the recorded performance to be deeply affecting, equally apt both literarily and musically to provoke thought and emotion. *Songfest* seems to me one of the finest things Bernstein has done as a composer of art music: there appears to be no discrepancy here between his creative persona and his inner self, and I was both entertained and moved by it from start to finish.

The mock-pompous "Opening Hymn" (on Frank O'Hara's *To the Poem*—"Let us do something grand just this once ...") for all six singers ceremonially echoes the opening of Ives' Second Symphony. The ensuing solo by baritone John Reardon on Lawrence Ferlinghetti's *The Pennydandy Store Beyond the El* is jazz flavored and seems a kind of memorial to Marc Blitzstein. Things turn fierce and serious with soprano Clamma Dale's impassioned projection of a poem in Spanish (by Puerto Rico's Julia de Burgos) that contrasts woman as homebody with woman as free spirit. With the other singers functioning as a chorus, bass Donald Gramm is next heard in an immensely poignant Walt Whitman poem on the plight of the homosexual in our society ("Behold love choked, correct, polite, always suspicious ..."); the musical language is an intense Coplandesque lyricism.

The sequence of three solos is followed by a group of ensembles: duet, trio, duet. The first, with Reardon and mezzo-soprano Rosalind Elias, stunningly combines texts by Langston Hughes (*I, Too, Sing America*) and June Jordan (*Okay "Negroes"*) to display the great contrast between black attitudes of the Twenties and the Seventies (Elias is definitely the star of this number). At the opposite emotional extreme is the trio for Dale, Elias, and mezzo Nancy Williams on colonial poet Anne Bradstreet's *To My Dear and Loving Husband*; this gets a quasi-Ivesian treatment with exquisitely interlaced vocal lines. Gertrude

Stein's *Storyette H.M.* (a duet for Dale and Gramm) allows the mordant irony so characteristic of Bernstein's best music to come to the fore. The jazz and Latin elements he uses here underline this irony, recalling for me his score for *Trouble in Tahiti*.

The next four settings evoke loss and despair, and the music, I think, is the finest in the entire work. All six singers are heard in e. e. cummings' *if you can't eat you got to*, a grim, desperate setting in Thirties-radio jazz style. The sentiments of Conrad Aiken's *Music I Heard with You* (a solo by Elias) are treated in a decidedly theatrical manner; the instrumental word painting is highly effective and the canonic ending works beautifully. The irony and sarcasm of *Candide* are recalled by the music for Gregory Corso's *Zizi's Lament* (a solo by tenor Neil Rosenshein), but with a distinctly Arabic tinge. And Nancy Williams truly does herself proud with Edna St. Vincent Millay's famous sonnet, "What lips my lips have kissed," which Bernstein treats with great effect in an arioso chromatic style.

Redemption is evoked in the "Closing Hymn," in which all the singers perform both solo and in ensemble. The text is Edgar Allan Poe's highflown apostrophe to the Islamic angel of music ("None sung so wildly well as the angel Israfael"), and it gets an all-out virtuoso setting, with much rhetorical stress on "wildly." Musical invention as an end in itself and its own justification appears to be the message here.

Leonard Bernstein's musical eclecticism (not epigonism) has borne superb fruit with *Songfest*. The performance I found gripping in every respect, but the recording, though never less than good, is a bit inconsistent; the extremely close microphone setup for the soloist in *A Julia de Burgos*, for example, produces a somewhat unsettling split perspective between voice and orchestra. But that is a minor flaw in an otherwise fine achievement all around.

—David Hall

BERNSTEIN: *Songfest (A Cycle of American Poems for Six Singers and Orchestra)*. Clamma Dale (soprano); Rosalind Elias, Nancy Williams (mezzo-sopranos); Neil Rosenshein (tenor); John Reardon (baritone); Donald Gramm (bass); National Symphony Orchestra. Leonard Bernstein cond. DEUTSCHE GRAMMOPHON 2531 044 \$8.98.

Levine cond. RCA ARL2-2905 two discs \$15.96, © ARK2-2905 \$15.96.

Performance: **Strong**
Recording: **The finest**

Mahler's Fifth Symphony and his unfinished Tenth have more performance-edition problems than any other of his works, the former because he revised the instrumentation so many times, the latter because he never even reached the final stage of instrumentation before his death. (A complete performing edition of the Tenth was realized from Mahler's sketch only a few years ago by Deryck Cooke; until then only the Adagio, the only part Mahler himself finished, was widely known and performed.) For this recording, James Levine used the now-accepted final revision of No. 5, which Mahler made in 1911 for a New York Philharmonic performance, and the Deryck Cooke edition of the No. 10 Adagio. The impressive performances are part of a projected complete Mahler symphony cycle that Levine is recording with various orchestras.

Levine's Mahler is strong, clear, long-lined, and much to the contemporary taste. As in the opera house, Levine here shows his ability to evoke a high level of spirit and individuality from orchestral musicians while controlling clarity and overall form. There is some loss of moment-to-moment excitement, as if the conductor were deliberately holding himself back in favor of responsibility to the score and good relationships with the musicians. Also, the fiendishly difficult string parts (the high violin passages mostly) are not always realized with the final bit of polish. But in general Levine is very successful in sustaining movement, and the performance was recorded with the greatest sensitivity to balance and tonal quality.

E.S.

RECORDING OF SPECIAL MERIT

PROKOFIEV: *Piano Concerto No. 1. Romeo and Juliet: Scena; Dance of Young Girls with Lilies.* **RAVEL:** *Piano Concerto for the Left Hand; Pavane pour une Infante Défunte.* Andrei Gavrilov (piano); London Symphony Orchestra, Simon Rattle cond. ANGEL S-37486 \$7.98.

Performance: **Youthful, zesty**
Recording: **Fat**

Prokofiev wrote his First Concerto at the age of twenty-one, and its interpreters here—a Soviet pianist and an English conductor—are scarcely more than a year or two older than that. Although the brashness and iconoclasm that set the St. Petersburg Conservatory on its ear six and a half decades ago is not so obvious any more—the work sounds almost Romantic today—the music's qualities of zest, fantasy, and wit are enduring. Andrei Gavrilov and Simon Rattle catch the spirit, not in the old motoric-futuristic mode that used to be considered the style for early Prokofiev, but with genuine affection and liveliness.

The Ravel Left Hand Concerto, written for pianist Paul Wittgenstein who lost an arm in World War I, is late, dramatic, intense, modernistic, and, for Ravel, rather weighty. The work has a curious amalgam of Hispanic, jazz, and modernist influences that are a long way from the impressionism and neo-Classicism usually considered the hallmarks of Ravel's style. This music also lends itself to the

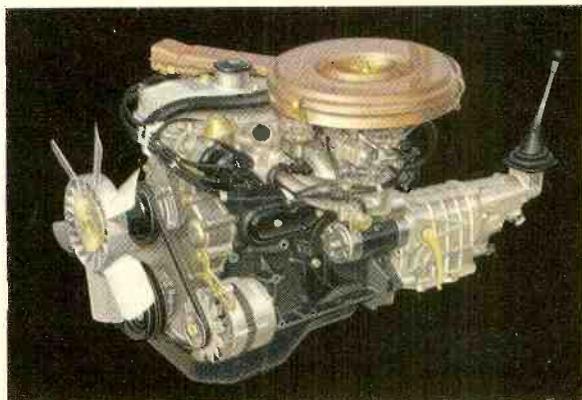
(Continued on page 98)

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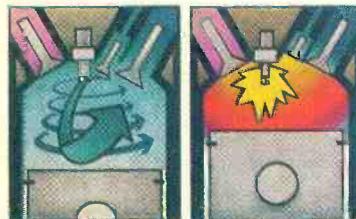
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Julian Bream: in a Class by Himself

JULIAN BREAM recorded one of Villa-Lobos' twelve guitar etudes (No. 8, in C-sharp Minor) and the second movement of the *Suite Populaire Brasileira* (the *Schottish-Chôro*) some years back on RCA LSC-3231, along with the Guitar Concerto and Five Preludes. Now RCA has released Bream's versions of all the etudes and the entire suite. It is good to have these collections in full, for they are among the most fascinating works anyone has

created for the guitar—not so much in terms of the challenges posed to the performer, but simply for their strong and direct appeal to listeners who may or may not be especially guitar-oriented. The *Suite Populaire Brasileira* (usually known, as RCA lists it, under its French title, *Suite Populaire Brésilienne*) has four movements in which European dance forms (mazurka, schottish, waltz, gavotte) are quite effectively "Brazilianized." It is one of those works one finds oneself going back to again and again with unfading pleasure. And, lovely as the *Schottish-Chôro* is, the suite's concluding *Gavotta-Chôro* is more ingratiating still. There is a sort of gentle therapy in this music, or so it seems in Bream's sensitive performance—unhurried, lingering over each phrase just enough to distill its essence, never fussy enough to make the listener unduly aware of the presence of an "interpreter." The etudes are no less stunning in his hands. These too are highly expressive pieces, and Bream brings a great deal of subtlety and varied color to his evocative realizations. He is quite in a class by himself in this music, which seems to withhold none of its secrets from him; indeed, if he has given us anything more altogether cherishable in his two decades and more in the recording studio, it has not come my way. The sound is just about ideal, rich enough to create a warm presence yet untroubled by overblown reverberation or the extraneous sounds that gum up some close-focused guitar recordings. The only complaints I might register would concern RCA's failure to list the etudes by key and to provide clear band separations between the individual pieces.

—Richard Freed

VILLA-LOBOS: *Twelve Etudes for Guitar; Suite Populaire Brasileira*. Julian Bream (guitar). RCA ARL1-2499 \$7.98, Ⓞ ARS1-2499 \$7.98, © ARK1-2499 \$7.98.

Russo-British youthful bounce. The side fillers are, by the way, the composers' piano versions of music more familiar in orchestral form. They are expressively played by Gavrillov; I love his *Pavane*. Altogether a brilliant debut recording.

E.S.

RECORDING OF SPECIAL MERIT

RAMEAU: *Zéphyre*. Philip Langridge (tenor), Zéphyre; Michele Pena (soprano), Cloris; Isabel Garcisanz (soprano), Diane. Ensemble Instrumental de France, Jean-Pierre Wallez cond. PETERS INTERNATIONAL PLE 078 \$6.98.

Performance: **Exquisite**
Recording: **Alive**

If ever a score captured the formal delicacy of the visual art of Lancret or Boucher it is Jean-Philippe Rameau's unjustly neglected operaballet *Zéphyre*. Never performed during the composer's lifetime, *Zéphyre* has a slim plot dealing with Zéphyre's love for Cloris, a nymph of Diana who responds to his advances emotionally but rejects him physically because of her vow of chastity. When Diana arrives on the scene with her latest amour,

Endymion, she releases Cloris from her vows and blesses the ecstatic pair.

Rameau set the text in his most tender and delicate manner. The vocal writing reveals the emotion behind each word, and the violins and flutes hover around the singers in an intricate dialogue of twittering birds, gentle breezes, and languid sighs. In the central part of the score, a portrayal of young love, the exquisite singing is interrupted by delicious minuets, gavottes, sarabands, and other elegant dances. Two airs, "*Je dois la naissance à l'Aurore*" and "*Vous ne devez l'éclat des fleurs*," are particularly striking, and the final chorus is a miracle of hushed rejoicing.

This première recording is of a realization by Roger Blanchard prepared for the Albi Festival in 1976. The singers are well suited for their roles and keep their voices light for Rameau's detailed ornamentation; their diction, so important in French opera, is good. Michele Pena's ornamentation is outstanding, that of Philip Langridge and Isabel Garcisanz serviceable. Jean-Pierre Wallez's pacing of the score shows his experience with stage performances, fluctuating as it does with the subtle moods of the work. This album is a most welcome addition to the catalog. The music is

on a par with, if not better than, Rameau's *Pygmalion* and *La Guirlande*, and the performance certainly does it justice, once again revealing Rameau's operatic genius.

S.L.

RAVEL: *Piano Concerto for the Left Hand; Pavane pour une Infante Défunte* (see PROKOFIEV)

RECORDING OF SPECIAL MERIT

SCHUBERT: *Quintet in A Major for Piano and Strings, Op. 114 (D. 667, "Trout")*. Alfred Brendel (piano); members of the Cleveland Quartet; James van Demark (double bass). PHILIPS 9500 442 \$8.98, © 7300 648 \$8.98.

Performance: **Robust**
Recording: **Very good**

Schubert's *Trout* Quintet is probably the most widely beloved of all chamber-music masterworks, and it has been fortunate in its many recordings. To my ear, the *Trout* is most deliciously served by pianist Jan Panenka with three members of the Smetana Quartet and bassist František Pošta on Supraphon SUAST-50174; theirs is a warmhearted yet enlivening presentation that seems steeped in the Schubert idiom. But that idiom is broad enough to embrace a healthy variety of interpretive approaches, and what Brendel and his associates have given us here strikes me as no less idiomatic in its exuberant way. This is surely the most robust *Trout* on records, and its lusty vigor and drive—especially in the first movement and the penultimate one (the variations)—may put off listeners accustomed to a gentler, cosier sort of *Gemütlichkeit*. However, this performance is abundantly *gemütlich* in its very exuberance, emanating the spontaneity, the exhilarating give-and-take and joyous sense of discovery one associates with the Schubertiads themselves—though it is doubtful that those fabled evenings were graced with playing of such assurance as we hear on this record. What is appealingly invigorating to one listener may be aggressive to another; to this listener, the new *Trout* is a joy, and I look forward to enjoying it more and more. The recording itself is well up to Philips' high standard (though the double bass might have been given a bit more prominence) and the surfaces on my copy are flawless.

R.F.

SIBELIUS: *Symphony No. 1, in E Minor, Op. 39. Humoresques for Violin and Orchestra: Op. 87b, Nos. 1 and 2; Op. 89, Nos. 2-4*. Anja Ignatius (violin); Berlin Radio Symphony Orchestra, Jussi Jalas cond. VARÈSE SARABANDE Ⓞ VC 81043 \$7.98.

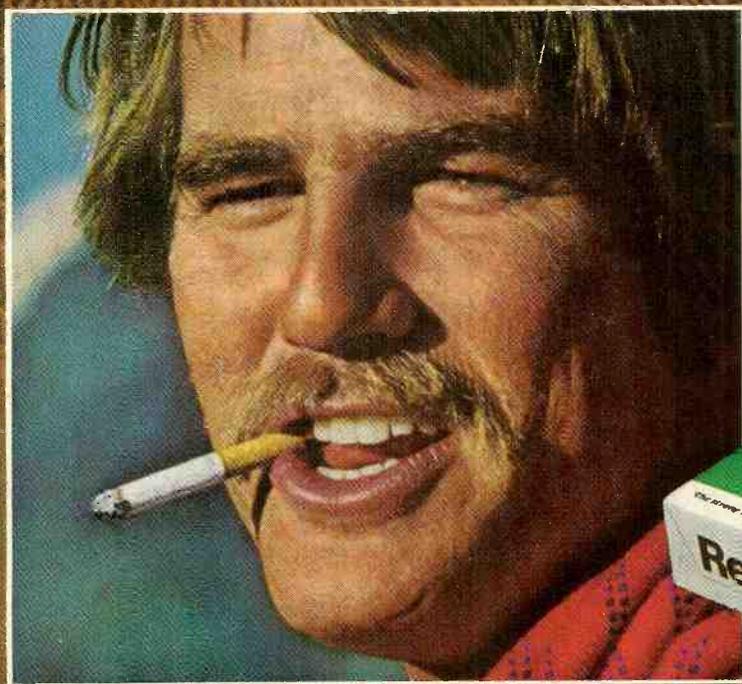
Performance: **Authoritative**
Recording: **Good 1954 mono**

Jussi Jalas, the son-in-law of Jean Sibelius and for many years chief conductor of the Finnish National Opera, has not enjoyed the good fortune of his compatriots Tauno Hanrikainen, Paavo Berglund, and Okko Kamu in being able to record with first-rate orchestras under ideal production conditions. Having heard numerous Sibelius concerts conducted by Jalas both in Finland and here—most recently a memorable Carnegie Hall appearance with the Yale Philharmonic—I can say that the Sibelius discography is the poorer for it. The London issues of relatively minor Sibe-

(Continued on page 102)

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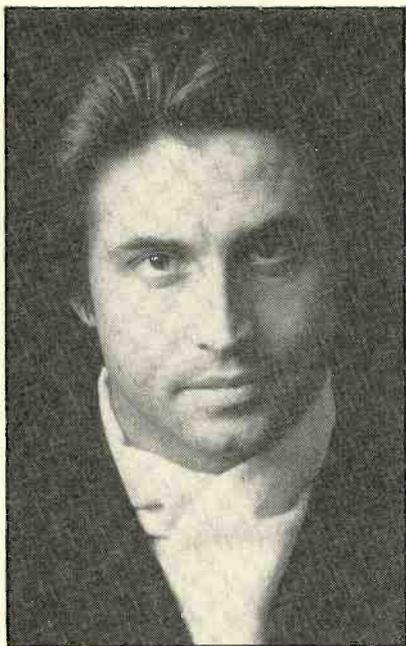


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Christian Steiner/Angel/EMI

Riccardo Muti's First with the Philadelphia

RICCARDO MUTI's first recordings with the Philadelphia Orchestra are also Angel's first recordings with the Philadelphia Orchestra, and, to complicate matters still further, they are the Philadelphia's first recordings in a new location: the old Metropolitan Opera House, now the Evangelical Church of the Reverend Thea Jones, on North Broad Street in Philadelphia. It is impossible to separate out all these factors in determining the character of these new records. I don't doubt that what I hear is in part due to Muti, in part to the orchestra, in part to Angel's recording philosophy and their equipment, and in part to the hall, but the proportions of things, as well as their interactions, are beyond me just now.

Muti, of course, is the Philadelphia's principal guest conductor and presumptively Ormandy's successor at such time (which might be very soon) that he decides to retire as music director. Muti has recorded enough with other orchestras to give us some idea of his conductorial abilities and style, but not really enough for us to predict what he might do with various areas of the repertoire. He has not, to my knowledge, recorded a Beethoven symphony before, although he and Richter made an estimable combination in the Beethoven Third Piano Concerto. But, as I say, what I hear here I cannot attribute solely to his direction.

What I hear (particularly in the Beethoven) is splendid orchestral execution, a smooth homogenized orchestral sound, rather fast, Italianate tempos in the faster movements and a decisive sticking to the chosen tempo, a con-

cert-hall ambiance without highlighting at either end of the frequency spectrum, and a general rounding-off of the sharp corners of the music. In short, there is virtually everything necessary here to provide a sparkling performance of Mendelssohn. What I *don't* hear are those near-barbaric yelps of the horns, the Classical opposition of wind band and strings, enough timpani, enough dynamic contrasts, the Beethovenian crescendos, and the expressive ritards and accelerandos; in short again, the Beethoven Seventh Symphony as I know it. Muti drives his forces spectacularly, but the dramatic points in Beethoven are not made through driving tempos alone (as they sometimes are in Mendelssohn). I cannot say, then, that it is the wrong time or the wrong place for this recording, but I can say that though the face of the music is charming, it is most definitely the *wrong* face.

THE Ravel/Moussorgsky (or Moussorgsky/Ravel) *Pictures* gets a strong, straightforward reading that shows Muti (unlike, say, Ozawa) sensitive to the spacings between sections and contrasts of tempo and sonority from one "picture" to another. Ravel's scoring is far more open than Beethoven's (and rests on different principles), so the homogenized sound of the orchestra is not such a problem here. Still, at the close of the *Limoges* section, what one wants to hear running up that spectacular scale is the solo trumpet, and it is very much covered here. On the other hand, when one *hears* the solo trumpet (as the "poor" Polish Jew) the playing seems to lack empathy and sounds all too much like virtuosic trumpet playing. On the whole, though, this is a very successful performance, and the brass and wind sonorities, in particular, are quite beautiful.

Pictures, which runs over to the second side, is broken at the usual spot (after *Catacombs* and before *Baba Yaga*), and the side is filled out with Stravinsky's *Firebird* Suite. This appears to be the 1919 version (I have been supplied with no printed information) for slightly reduced orchestra, which includes the *Berceuse* and the finale but is still shorter than either the 1910 version or the 1945 version. Again, Muti gives a sensible, straightforward performance, a bit smoothed out but beautifully played. And again, the recording is natural, listenable, but far from spectacular. Anyone who treasures the sound of the bass drum on the recent Atlanta Symphony/Telarc *Firebird* will find no parallel to it here.

This review has been based upon acetates, and there may be considerable rebalancing and other adjustments made before the final pressings emerge on the market. On the basis of what I have heard, though, I would say that while neither Muti nor Angel need be ashamed of these records, both can undoubtedly do better. I look forward to that.

—James Goodfriend

BEETHOVEN: *Symphony No. 7, in A Major, Op. 92.* Philadelphia Orchestra, Riccardo Muti cond. ANGEL S-37538 \$7.98.

MOUSSORGSKY/RAVEL: *Pictures at an Exhibition.* STRAVINSKY: *Firebird Suite.* Philadelphia Orchestra, Riccardo Muti cond. ANGEL S-37539 \$7.98.

liana recorded by Jalas in Hungary show signs of insufficient orchestra preparation and have indifferent sonics. His 1954 Sibelius tapings with the Berlin Radio Symphony for the Remington label present him in a better light, but only the Fifth Symphony was ever issued by Remington. We can, therefore, thank Varèse Sarabande for unearthing the recordings on this disc—and hope that they will reissue the Fifth Symphony recording in reasonably short order.

Despite a few orchestral rough spots and perhaps a bit too much relaxation in the pastoral sections of the slow movement, this reading of the First Symphony has much of the same power and authority as the historic 1930 recording by Sibelius' close friend Robert Kajanus. And, especially in the first movement, Jalas also conveys something of the fire that made Anthony Collins' London Symphony recording so memorable. (The Kajanus and Collins performances have been reissued by Turnabout and Vox, respectively.) The five (out of six) *Humoresques* are a splendid bonus. This is prime Sibelius in his lighter vein, with simply superb writing for the soloist, in this case the fleet-fingered Anja Ignatius, long one of Finland's most distinguished violinists.

Except for a slight underlying hum, the 1954 recording is on a par with the better product out of Berlin at that time. This orchestral sound has ample body in the low register, and there is a fine sense of space in the tutti; only a certain thinness in the violin tone betrays the vintage of the taping. Even though there are up-to-date recordings of this material in fine stereo sound, the true Sibelius fancier will certainly want this significant and unique sound document. D.H.

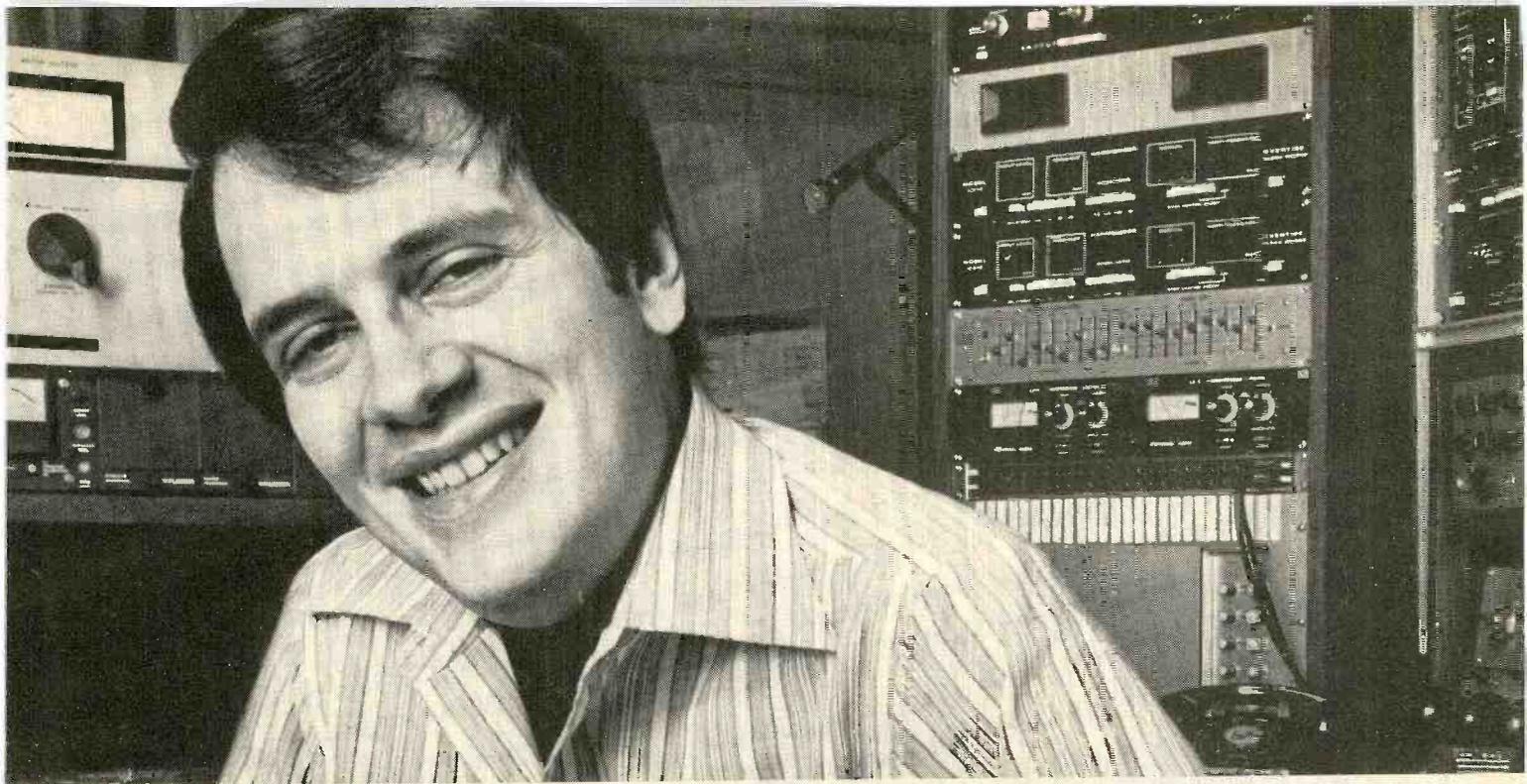
RECORDING OF SPECIAL MERIT

TCHAIKOVSKY: *Manfred, Op. 58.* New Philharmonia Orchestra, Vladimir Ashkenazy cond. LONDON CS-7075 \$7.98.

Performance: **A winner**
Recording: **Excellent**

I confess to a special weakness for this work, going back to when I first got to know it through Fabien Sevitzky's RCA 78's. I have heard every recording of it since that one, and I've kept far too many of them. But *Manfred* (which Tchaikovsky could never quite decide to designate a symphony, but which is one just as much as those he numbered as such) is a fascinating piece, filled with fine tunes brilliantly treated, so characteristic of Tchaikovsky and yet so different from his other works in so many ways. This newest recording was an occasion for trotting out all the others and going through the lot, and the upshot is that there is no need for owning more than one when that one is as consistently superior as Vladimir Ashkenazy's. The recordings he has given us in the role of conductor in the last year or two indicate that he is not only serious about conducting, but extremely capable on the podium. His *Manfred* (uncut, of course) is free of gratuitous emphases to make dramatic points; this is a thoroughly musical approach in which, not at all surprisingly, the drama takes care of itself more than adequately. There's no portentous use of the opening theme, but rather a subtly and sensibly plotted build-up to a sensationally convincing climax for the first movement. Every

(Continued on page 104)



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marvelous detail in Tchaikovsky's most inspired scherzo is shimmeringly in place, with an air of lyrical spontaneity and not a hint of preciosity—and indeed the entire work goes with such a fine, all but seamless sweep that one is hardly aware of great interpretive powers at work. The sprawling finale seems in less of a sprawl than it sometimes can be, because there is no dawdling or shifting of gears, and at the end, when the organ has entered to brood on Manfred's death, Ashkenazy rejects ceremonial gestures in favor of a simplicity and straightforwardness that not only make great sense musically but reflect the peace the driven hero has finally found. New, old, or renewed, the Philharmonia has never given a finer account of itself, and the recording is a model of how such things ought to be done in terms of richness, detail, and overall balance.

R.F.

WILLIAMSON: *Symphony for Organ; Vision of Christ-Phoenix*. Allan Wicks (organ). CHALFONT C77.015 \$7.98 (from Chalfont Records, P.O. Box 11101, Green Lantern Station, Montgomery, Ala. 36111).

Performance: **Fastidious**
Recording: **Excellent**

Australia-born Malcolm Williamson, now forty-seven, has made his presence felt over the years as a composer of considerable distinction, particularly in his ambitious works for organ. The *Symphony for Organ* recorded here is divided into six movements, the first two of which ("Prelude" and "Sonata") make use of a chant-like melody that returns

later in various permutations to unify the work. And a knotty work it is, full of surprising changes of direction, such as when the mood of the long, lovely, solemn third movement ("Aria I") is suddenly broken by a synopated, almost jazzy segment of the succeeding "Toccata." Brooding, introspective passages open out unexpectedly, like night-blooming flowers, into rich, exuberant patterns. The fifth movement, a passacaglia, is an intricate, noble tapestry of sound almost Baroque in style, and the concluding "Paeon" provides organist Allan Wicks (who commissioned the work in 1960 and introduced it in a performance for the BBC) a chance to exploit the magnificent resources of the Coventry Cathedral instrument he plays. The album is filled out with the eleven-minute *Vision of Christ-Phoenix*, which Williamson wrote for the dedication of the rebuilt cathedral at Coventry in 1961. It is a rapturous piece, more immediately accessible than the symphony, with a sculpted, monumental quality to the writing that is altogether impressive. Both works are fastidiously played and very well recorded.

P.K.

ZELENKA: *Orchestral Works* (see Best of the Month, page 84)

COLLECTIONS

RECORDING OF SPECIAL MERIT

AMERICAN FANTASIA. Rodgers: *Carousel: Waltzes. On Your Toes: Slaughter on Tenth Avenue.* Kern: *Mark Twain Portrait.* Herbert:

American Fantasia. Sousa: *The Stars and Stripes Forever.* Hayman: *Pops Hoe-Down.* Cincinnati Pops Orchestra, Erich Kunzel cond. TURNABOUT TV 34714 \$4.98.

Performance: **Buoyant**
Recording: **Excellent**

Take two parts of Richard Rogers, one part each Jerome Kern and Victor Herbert, add a dash of Richard Hayman for seasoning, stir to a fare-thee-well, and top with red, white, and blue sprinkles from a Sousa march, and what do you have? In the case at hand, a delicious concoction of Americana as spirited as anything that came along during the Bicentennial deluge a few years ago. The Cincinnati Pops Orchestra is really the ninety-eight-member Cincinnati Symphony in holiday garb, and conductor Erich Kunzel is an old hand at turning programs of the popular classics into real rousers. He was the first to conduct a pops concert at the Grand Old Opry in Nashville and one of the handful of guest conductors ever invited to conduct the Boston Pops on a regular basis. At his home base in Cincinnati he has made the winter pop series at the Music Hall the hardest ticket in town, and if this album is any indication of the caliber of those concerts, it's no wonder. None of these works has ever sounded more alive.

"American Fantasia" opens with the waltz from *Carousel*, which is really the graceful, whirling overture to the Rodgers and Hammerstein musical. This glowing performance is followed by a breath-taking treatment of *Slaughter on Tenth Avenue*, the ballet from Rodgers and Hart's *On Your Toes* that takes

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off on a gangster movie of the Thirties and never seems to sound the same way twice; there apparently are any number of orchestral treatments, but no other performance ever matched in glitter and intensity the stunning one here, complete with gunshots, police whistles, and a dazzling coda. A vigorous *Hoe-Down* by Richard Hayman, intensified with lusty claps and shouts, is another sizzler.

The *Mark Twain Portrait* that Jerome Kern wrote in 1942 at the invitation of André Kostelanetz is something of a hodgepodge as a whole, but there are pretty tonal impressions of a drowsy morning in Hannibal, Missouri, of young Sam Clemens as a river pilot, and of the townsfolk coming to meet a Mississippi steamboat at the Hannibal landing. Victor Herbert's *American Fantasia* is a more heavy-handed affair, a potpourri of patriotic and popular airs long on hokum and short on subtlety, but both it and the Sousa *Stars and Stripes* that comes parading in at the end are played with so much gusto that they're utterly disarming. A delightful disc. P.K.

ARS ANTIQUA—ARS NOVA: *Sacred and Secular Polyphony*. **Perotin:** *Organum Virgo*. **Ockeghem:** *Missa Cuiusvis Toni; Déploration sur la Mort de Binchois*. **Dufay:** *Missa L'Homme Armé; Kyrie*. **De la Halle:** *Four Rondeaux*. **Van Ghizheghem:** *De Quatre Nuits les Trois Veiller; Mon Souvenir*. **Anon:** *Belle Ysabelot; O Virgo Pia*. Ensemble Vocal Français "Da Camera," Daniel Meier cond. PETERS INTERNATIONAL PLE 068 \$6.98.

Performance: **Enjoyable**
Recording: **Very good**

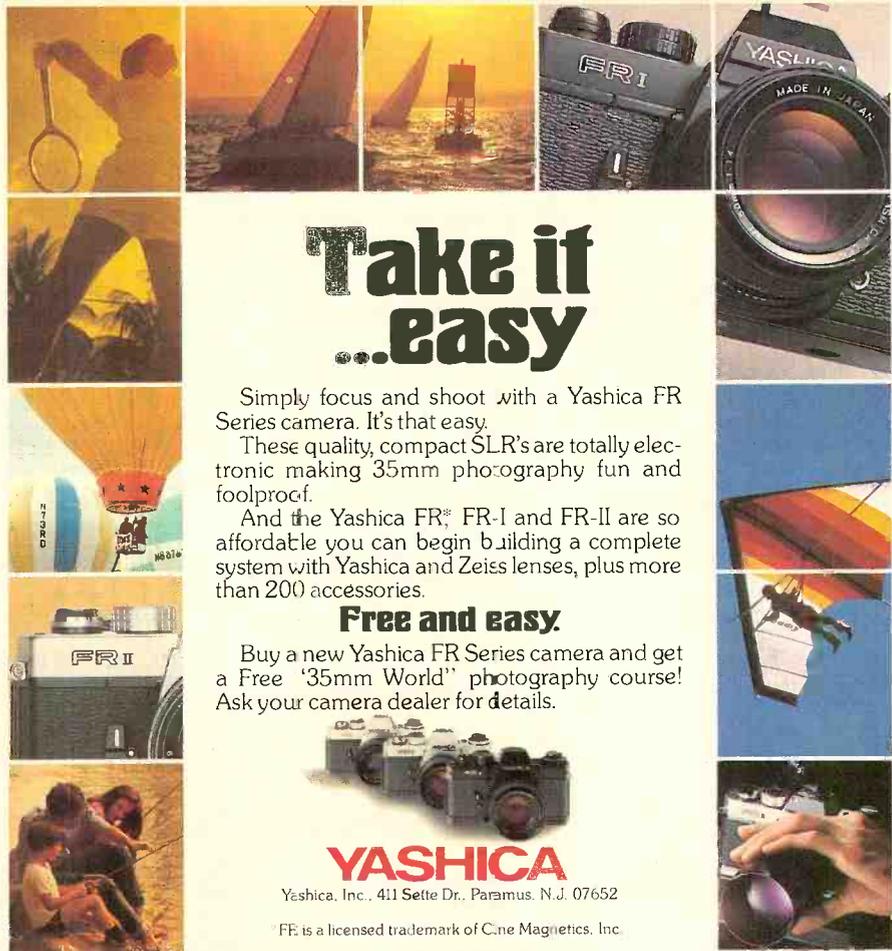
This record presents one of those strange, and nowadays rare, examples of a performance with a style that is beautiful in itself but is wildly removed from the music performed. The Ensemble Vocal Français sings with a lovely tone, the parts are well balanced, and the phrasing and dynamics are painstakingly worked out. But Pérotin's monolithic organum is treated like a gentle pastorale and Adam de la Halle's rondeaus are turned into Debussy-like chansons. The key to Daniel Meier's interpretations is perhaps found in the jacket notes, where the commentator remarks that it is impossible to hear one of these rondeaus "without recalling Debussy whose own chansons achieve the same mood through their harmonies." Such a comparison may be valid, but to apply the choral-performance practice of Debussy's age to that of the Ars Antiqua and Ars Nova is certainly not valid. No matter how inauthentic his performance, however, Meier has here caught a certain beauty that is well worth hearing. S.L.

JOHN BILEZIKJIAN: *The Art of the Oud*. **Bilezikjian:** *Armenian Dance; Taksim Opus 10; Taksim Opus 20; Ansial; Rondo for Oud*. **Rodrigo (arr. Bilezikjian):** *Concierto de Aranjuez; Adagio*. **J. S. Bach (arr. Bilezikjian):** *Prelude*. John Bilezikjian (oud). TREND Ⓛ TR 513 \$15.95.

Performance: **Remarkable**
Recording: **Hair-raisingly realistic**

The oud is a stringed instrument they started playing in Persia about two thousand years ago. It's shaped like a pear, has eleven strings, is traditionally played with an eagle's feather, and sounds like a cross between a lute and a broken-hearted guitar. John Bile-

(Continued on page 109)



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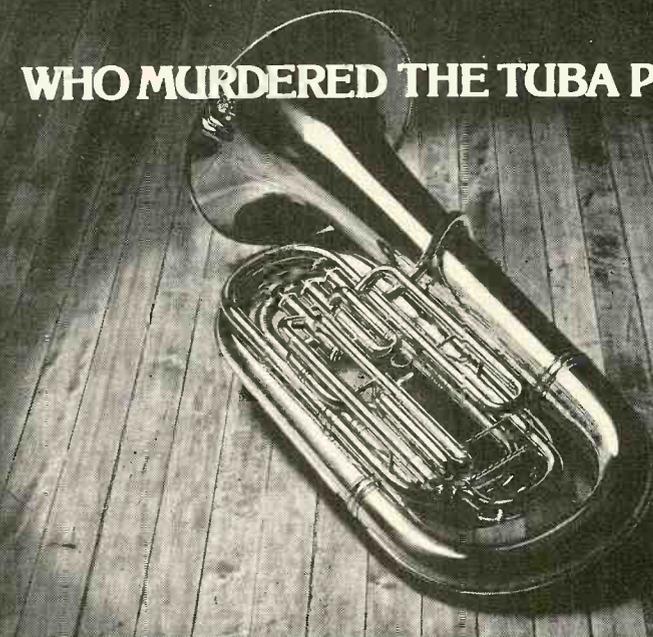


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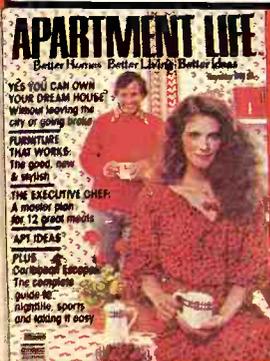
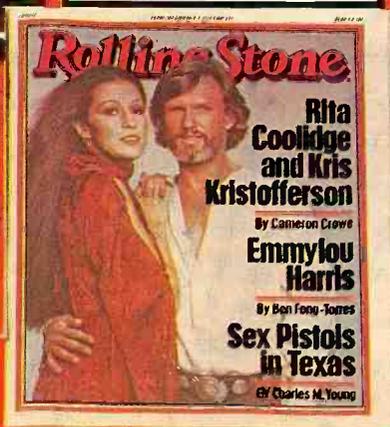
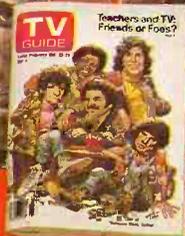


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zikjian, who plays the violin and thirty-nine other instruments besides the oud, is able to push the oud far beyond its ancient capabilities, coaxing out of it chords, harmonies, and contrapuntal effects that lend surprising color to this concert. The program is mainly made up of his own pieces, along with a Bach prelude originally written for the lute and an adaptation for oud of the second movement from Joaquín Rodrigo's sensuous *Concierto de Aranjuez*. The material is consistently appealing, and the playing abounds in subtle surprises, every nuance of which has been captured in the amazingly true direct-to-disc sound. P.K.

RECORDING OF SPECIAL MERIT

WILLIAM PARKER: *Songs and Ballads. Ives: At the River; His Exaltation; Watchman!; The Camp Meeting; Sunrise; Chanson de Florian; Rosamunde; Qu'il M'ait Bien; Élégie. Chanler: Four Rhymes from "Peacock Pie." Ward: He Who Gets Slapped. Dello Joio: The Listeners. Fine: Four Songs from "Childhood Fables for Grownups."* William Parker (baritone); Dalton Baldwin (piano); Ani Kavafian (violin, in Ives' *Sunrise*). NEW WORLD NW 300 \$8.98.

Performance: **Rewarding**
Recording: **Excellent**

Not much Charles Ives ever wrote was easy to perform, and his songs are no exception. He wrote more than a hundred of them, each one a challenge to the singer and accompanist as well as to the listener. Four of the nine on this disc are based on hymn tunes, and there is a surface simplicity about them that is totally deceptive. Even the seemingly straightforward *At the River* has its harmonic and rhythmic subtleties, and the others manage to turn their backs on musical convention as surely as the more obviously complex *Sunrise*, an exquisite piece of impressionism. The French songs are exercises that parody the approved musical forms of nineteenth-century Europe.

The rest of the program is a series of contemporary treasures that owe much of their freshness not at all to the stylistic influence of Ives but to his service in freeing American music from academic strictures. Theodore Chanler's settings of rhymes from Walter de la Mare's *Peacock Pie* have a delightful buoyancy, while Norman Dello Joio's treatment of the same poet's oft-anthologized, eerie *The Listeners* is a whole music-drama in miniature. Robert Ward's ballad from his opera *Pantalon* (based on Andreyev's *He Who Gets Slapped*) is touching in the simple, open way one would expect from him, and Irving Fine's whimsical settings of Gertrude Norman's *Childhood Fables for Grownups* are utterly appealing and supply a lighthearted finale to a diverting though demanding recital.

William Parker reveals a baritone voice of considerable range, even if his pure diction is sometimes at odds with the rough-and-ready nature of some of the texts. Dalton Baldwin's piano accompaniments are effective throughout, and Ani Kavafian's violin in Ives' *Sunrise* supplies exactly the strange atmospheric beauty the composer must have had in mind. A long, thoughtful essay, the kind we have come to expect from New World, was prepared for the album by George Gelles. It is included along with complete texts of the lyrics, a selected discography and bibliography, and brief biographies of the performers. P.K.



Vivaldi's "Tito Manlio"

So you thought last year's tricentennial Vivaldi revival was over? The Vivaldi *concerto* revival, perhaps; the Vivaldi opera revival is still proceeding apace. Hard on the heels of the RCA recording of *Orlando Furioso* (reviewed here in January) and the Hungaroton one of *L'Olimpiade* comes an immense, respectable *Tito Manlio* from Philips that gives probably the most complete picture to date of any high-Baroque Italian opera.

Italian opera of the seventeenth and early eighteenth centuries is a vast, almost unknown treasure trove—or is it a wasteland? Operas were churned out and produced at a rate and with a passion of popular enthusiasm that make American musical comedy seem like an art for connoisseurs. In those days, Venice had as many as *seventeen* opera houses operating simultaneously, together employing a veritable host of composers, librettists, impresarios, singers, and instrumentalists, many of whom became the toast of all Europe. Vivaldi himself claimed to have written ninety-four operas (if so, most of them are, perhaps luckily, lost). He also claimed to have written *Tito Manlio* in five days—which, if true, would certainly entitle him to the gold medal for Rapid Opera Composition, surpassing even Handel and Rossini.

Tito Manlio is one of those sprawling neo-classical canvases of the early Baroque, with no less than ninety numbers—including more than forty arias, a duet or three, and some huge stretches of dramatic recitative. All—except a few lines of recitative—is recorded here, totaling some four hours of music on five discs! Most of the lead roles, female and male, were written for either women or castrati (who together dominated the history of opera for two centuries); the plot, which concerns the usual conflicting demands of love and duty, is all but incomprehensible; and the arias—lively emotional abstractions largely irrelevant to the action—are almost all in the time-honored A-B-A form. As a character is about to leave a scene, the action is invariably suspended for a bravura or pathetic aria cal-

culated to show off the singer's strong points and bring down the house.

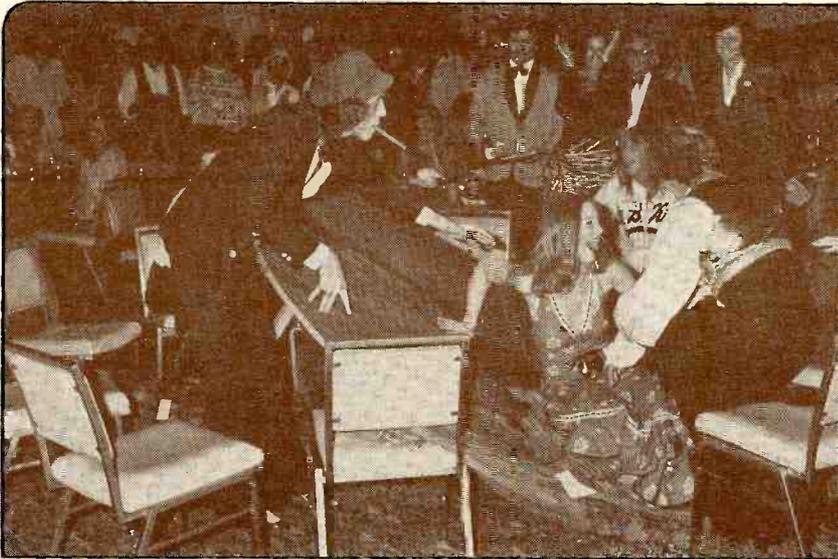
We must imagine that the appeal of such operas was a compound of glamour (the sets and costumes were always sumptuous), the virtuosity of the stars (which must have been astonishing), and, on occasion, the ingenuity of the composer in finding a novel coloristic effect or even a convincing representation of passion in a highly stylized and conventionalized form. For the rest, the audiences were presumably content to gossip, intrigue, receive guests, flirt, eat and drink, conduct business, see, be seen, and even once in a while listen to the music.

It may be churlish to ask why *Tito Manlio* was chosen for the honor of representing its age with such particular completeness. This recording is part of an ambitious Vivaldi series, but, even so, *Tito* is an early Vivaldi opera (1719) and not one of his greater successes, combining the merely perfunctory with flashes of extraordinary brilliance. The performance is reverently workmanlike, but workmanship and reverence are not enough to bring such spirits back to life.

The deepest impression here is made by the two Italian basses, Giancarlo Luccardi and Domenico Trimarchi, since their voices and style are in such contrast with the rest. The brief tenor part (the character is killed off almost immediately, leaving the way clear for a seemingly endless series of soprano, mezzo, and alto arias) is well sung by the Swede Claes H. Ahnsjö. The rest of the international cast (Germany, Hungary, Scotland, and Argentina are also represented) includes many specialists in early opera; I particularly enjoyed Margaret Marshall's clear soprano and Rose Wagemann's dramatic force.

THE vocal level is reasonably high throughout, with some real passion here and there (mostly in the recitatives), but the central performance problem of Baroque opera—combining virtuosity and stylization with expressiveness—is solved in only a few passages. Things pick up toward the end of Act II and at the beginning of Act III (side seven is unquestionably the richest of the ten), and the increase in intensity and the quality of inspiration hold intermittently throughout the last act. Whether such a payoff justifies the major expenditure of time and money this monster set demands depends on the dimensions of your own passion for Vivaldi and the Baroque. Frankly, I would like to see a more carefully considered attempt to open up the lost riches of Baroque opera, beginning with a systematic effort to find the *best* works and, through a deeper study than is evident here, to realize them with something of their former brilliance. —Eric Salzman

VIVALDI: *Tito Manlio*. Giancarlo Luccardi (bass), Tito Manlio; Rose Wagemann (mezzo-soprano), Manlio; Julia Hamari (mezzo-soprano), Servilia; Birgit Finnilä (contralto), Vitellia; Margaret Marshall (soprano), Lucio; Domenico Trimarchi (bass), Lindo; Norma Lerer (mezzo-soprano), Decio; Claes H. Ahnsjö (tenor), Geminio. Berlin Radio Chorus; Berlin Chamber Orchestra, Vittorio Negri cond. PHILIPS 6769 004 five discs \$44.90, © 3-7699 079 \$26.94.

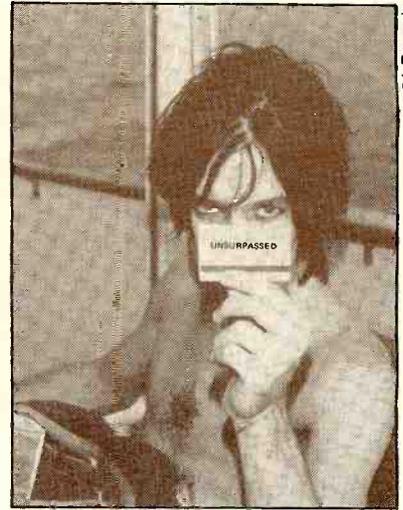


Capitol Records

□ They all (except the waiter) laughed when the table-top flamenco dancer ended up on the carpet at a party for Capitol artist **BOB WELCH** (cigar) after his homecoming appearance at Los

Angeles' Universal Amphitheatre. It looks like Welch (whose most recent album is titled "French Kiss," ST-11663) made his move just a little too late.

□ **WEREWOLVES** lead guitarist Seab Meador gives his opinion of the group's new album, "Ship of Fools" (RCA AFL1-2746) recorded, in the great Paul McCartney tradition of phono realism, on a yacht off the Florida Keys. Ah, to have had the Dramamine concession. . . .



RCA Records

POP ROTOGRAVURE

By Steve Simels

□ The quasi-legendary Jake (John Belushi) and Elwood (Dan Ackroyd), known paraprofessionally as the **BLUES BROTHERS**, are seen fumbling for their record contract in the com-

pany of some farsighted (or perhaps merely light-sensitive) honchos from Atlantic Records. The Brothers, when they aren't working their mojos on *Saturday Night Live*, travel around the

country in a 1967 Dodge Polara hawking the new single, *Soul Man*, from their just-released debut album, "Briefcase Full of Blues" (Atlantic SD 19217).



Atlantic Records

□ These two portly weight watchers at New York's Bottom Line are night tripper **DR. JOHN** (Mac Rebbenack) and songwriter **DOC POMUS** (seated). Both have been involved with classic rock-and-roll since the late Fifties at least, but they have only just now collaborated: Pomus penned three tunes on Mac's latest, "City Lights" (Horizon/A&M SP-732), including the title song. And it should be noted that the good doctors do *not* make house calls.

Russell Eliot Reif



Epic Records

□ What we have here is not a publicity still from Monogram Pictures' *The Bowery Boys at the Library of Congress* but Rick Nielsen, lead guitarist for power popsters **CHEAP TRICK**, proving that payola isn't what it used to be as he serves **WIBA-FM** (Madison, Wisconsin) pro-

gram director David Benson with a copy of the group's noncommercial live Epic LP "From Tokyo to You" and a Cheap Trick jacket. Ordinary folk will find satisfaction with the group's "Heaven Tonight" (Epic JE 35312), but sorry—the jacket's not wearable.

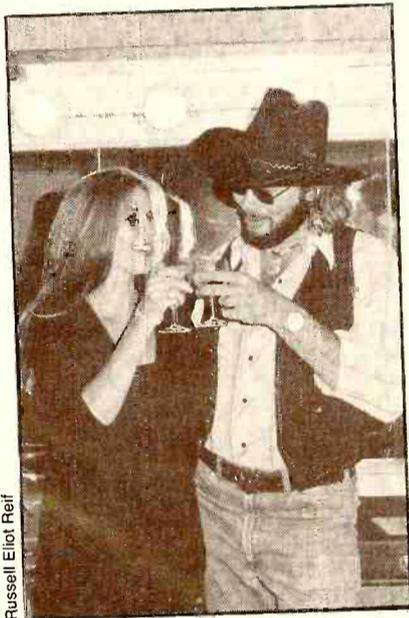
□ Jagger Clone Molests Waylon Jennings Lookalike? Well, actually, that's **AEROSMITH**'s Steve Tyler congratulating Dirty Dan Buck, lead singer of the **BOYZZ**, at a benefit gig at the Riviera Theater in Palatine, Illinois. Everybody who attended the show was asked to bring two cans of food as the price of admission, and the whole kaboodle was then donated to a home for the mentally retarded. Four thousand cans later, Tyler (to be heard on Aerosmith's latest, "Live Bootleg," Columbia JC 35564) and Buck (on the Boyzz's "Too Wild to Tame," Epic JE 35540) don't look too well nourished themselves.



Epic Records

□ From the land of koalas, kangaroos, Helen Reddy, Peter Allen, the immortal Easybeats, and Foster Lager now comes an exceptionally... er, dignified new rock band: the fabulous **MOTHER GOOSE!** The Moms (or the Geese, whichever you prefer) have been haunting the Bowery/CBGB sleaze circuit lately in an attempt to

duplicate in this country their earlier success *Down Under* (a gold album and several hit singles), and the Scotti Brothers, whose label brings you Leif Garrett, among others, are poised to release their first U.S. album. Can American stardom be far behind for such snappy dressers?



Russell Eliot Reif

□ What happens when the singing offspring of some formidable country-music legends get together? Sometimes they pick, sometimes they grin, and sometimes they give dramatic readings from their royalty statements. But **CARLENE CARTER** and **HANK WILLIAMS JR.**, backstage at Carlene's New York City debut, demonstrate that sometimes they jes' drink each others' health like the rest of us—look, Ma, no Mason jars!

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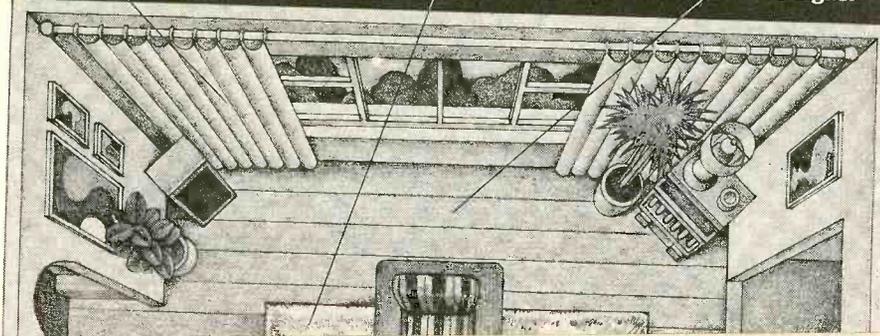
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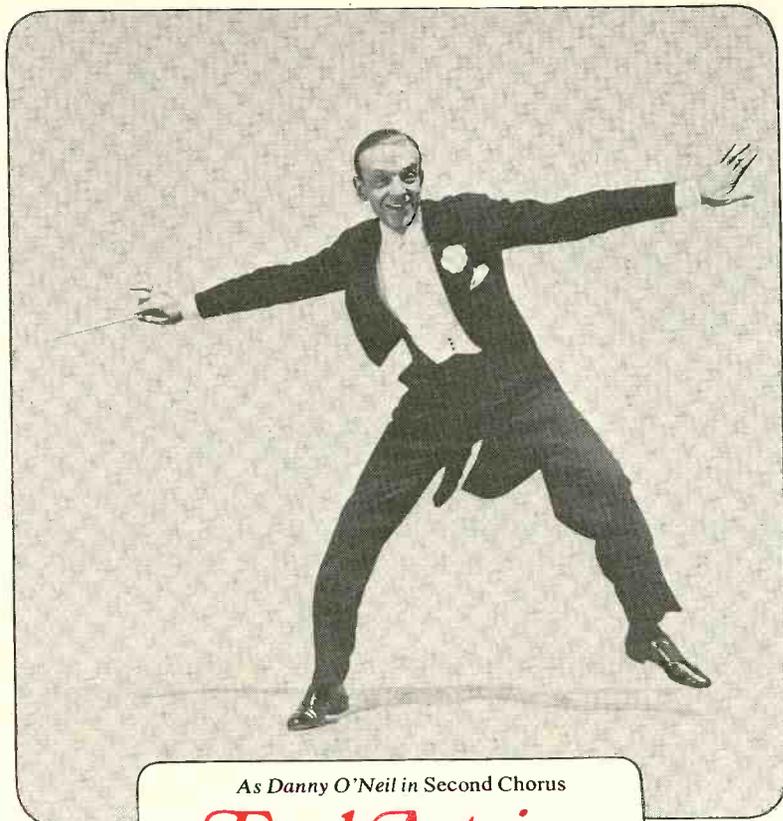


shallower than it could be considering the talent, while the other third is more interesting than you would have expected. Not bad, as they say, for openers, and it was probably a great learning experience for Nicolette Larson, which should be good for us later. N.C.

BARBARA MANDRELL: Moods. Barbara Mandrell (vocals); David Briggs (piano); James Burton (guitar); Mike Leach (bass); Janie Fricke (vocals); other musicians. *Sleeping Single in a Double Bed; No Walls, No Ceilings, No Floors; It's a Crying Shame; Early Fall; Pity Party; I Believe You;* and four others. ABC AY-1088 \$6.98, © 8020-1088H \$7.95, © 5020-1088H \$7.95.

Performance: **Pleasant but bland**
Recording: **Lush**

Here's another female "country" singer actually doing precisely what people used to mean by "middle-of-the-road." Together with the MOR success of Crystal Gayle, Dolly Parton,



As Danny O'Neil in Second Chorus
Fred Astaire

FROM time to time you can still catch him on the tube—in an interview, for instance, talking about George Gershwin's writing material especially for him; on a talk show where he just *is* and that's enough; and, last year, spectacularly, on NBC's made-for-TV movie *A Family Upside Down*, where, with Helen Hayes as his wife, he gave a fine and sensitive dramatic performance as an old man, stricken suddenly with a debilitating heart attack. And you can catch him in almost any of the televised award ceremonies, perfection in white tie and tails—no need to explain that this lean elf walking toward you with the jaunty, gravity-defying spring in his step is the Legend Himself, Fred Astaire.

In a *Today Show* interview, old-time folkie Milt Okun opined that the Thirties and Forties were a time of "whimsey" in pop music, that the Sixties were "protest" years, and that in the Seventies we've had "reflections of a lifestyle." So where does that leave "The Astaire Story," a new three-disc album on DRG Records' Archive label (not to be confused with the Deutsche Grammophon Archiv label)? Right at the top of the list for any record collector, that's where. Okun is probably correct in general terms, but surely one of the good things about the Seventies is that we are finally shaking loose from the tyranny of "relevance" that the Sixties tried to impose on us all. As for that overworked piece of pop sociology known as "lifestyle," how about an artist who *is* a lifestyle for millions of people? The Astaire hero, particularly in those art-deco, dreams-with-music films with Ginger

Rogers in the Thirties, is a personification most men would still like to identify with—and most women would like them to.

The character that Astaire created and still embodies is physically graceful without being effeminate, witty without being sour, romantically vulnerable yet devil-may-care, unsurpassably elegant without a trace of foppishness. The pure, unaffected splendor of a civilized being in a civilized situation doing civilized things, with nary an armpit or other bodily cleft in sight, drives me back to those old films again and again. (As a simple test for yourself, just say his name aloud and see what images spring to mind; I'll bet they're all pleasant.) When Astaire sang it was like one person talking intimately with another, and just the sound of his voice on these records immediately restores my sometimes failing belief that popular entertainment can furnish us with the dreams (and ample excuse to suspend disbelief) that in another age we relied on poets for.

In retrospect, the Seventies now seem a time when we were all making busy out in the garage hacking away at "our own thing" with tools left over from the Sixties, still assembling our patchwork "lifestyles." We wanted our pop entertainment to match those rickety constructs, and only funk—preferably morose, low-down funk—seemed real. Well, after listening to thirty-four tracks of Fred Astaire singing some of the finest works of Jerome Kern, Cole Porter, Irving Berlin, George Gershwin, and others, let me tell you: in a pig's posterior it is!

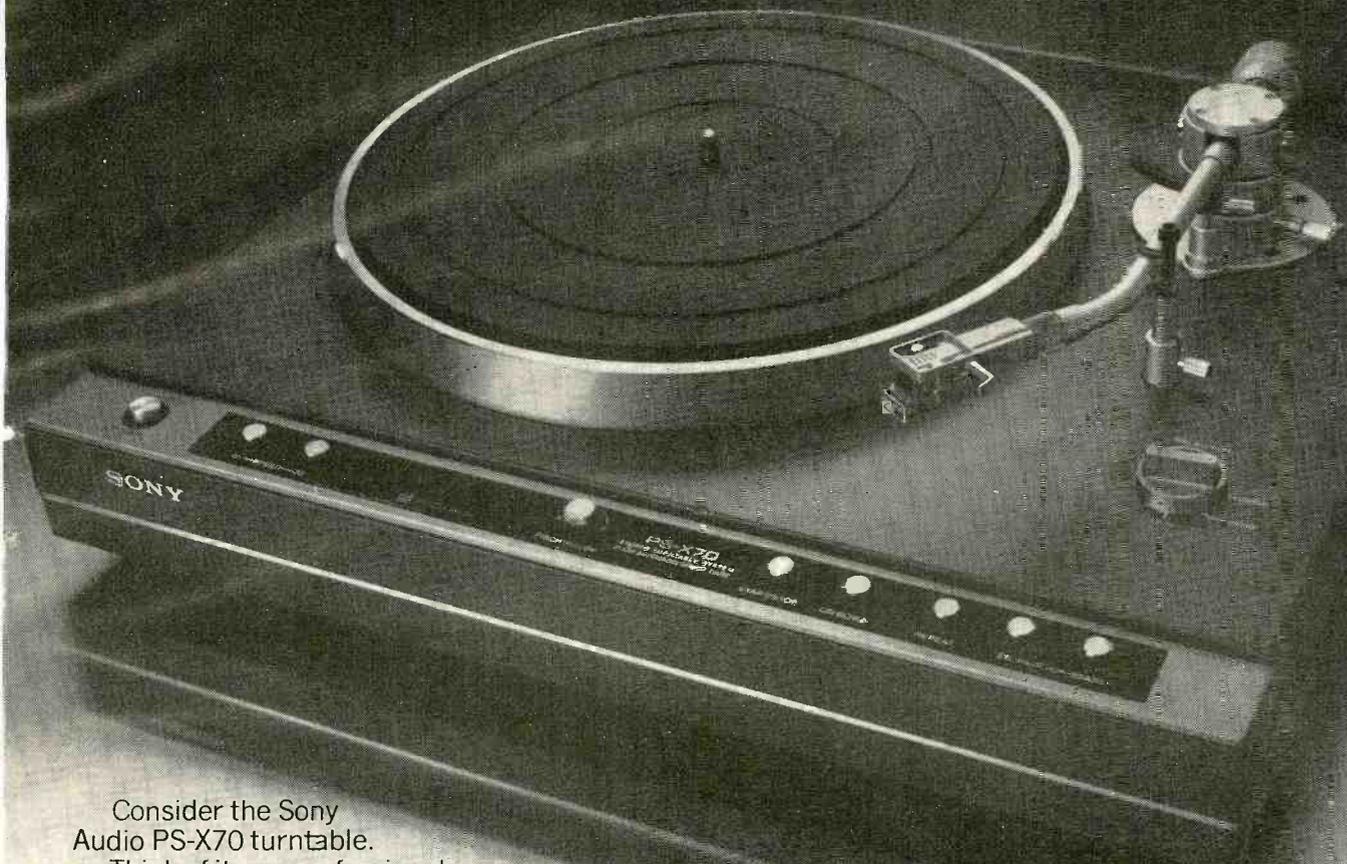
The reality that leaps from these grooves as Astaire skates blithely through such songs as *Cheek to Cheek* or *A Fine Romance* or *They Can't Take That Away from Me* is the reality of high romantic art. Someone once said that to create romance one must expend taste, energy, time, and means. No matter how casual his preliminary attack on the material, Astaire is a perfectionist (like so many of his generation of performers), and he expends those resources effortlessly, from a seemingly bottomless reserve. When I hear Astaire drop a phrase here, flick a note there, control the rhythm of a ballad in a way that no one else seems ever to have been able to do, or borrow (from somewhere) a slight, almost imperceptible ritard between words (in *Change Partners*, for example), I get a real gut reaction of Wow! Zowie! Bam! This is how grown-ups do it. This is real.

THE thirty-four vocal numbers and six instrumentals (three of them brief improvisations with the sound of Astaire dancing!) on "The Astaire Story" were all recorded in 1952 for a limited-edition release by Norman Granz, who selected the accompanying artists from his Jazz at the Philharmonic group. The sound is just fine, and the backing and solos by such greats in their own right as Oscar Peterson, Charlie Shavers, Ray Brown, Alvin Stoller, Flip Phillips, and Barney Kessel are superb. The large and nicely produced booklet includes copious notes by Granz and some remarks by Astaire about his career and repertoire that are as modest and unassuming as the gentleman himself. The whole production can best be summed up in a word that tends to rile people in our self-consciously egalitarian society, so I'll leave it to be uttered by one of Astaire's dancing partners, that iron-coiffed Egyptophile (she believes she lived there several thousand years ago in another life) Ms. Ann Miller: "Listen, honey, when you're dancin' with Fred Astaire ya got nothin' but class!" That goes for when you're listening to him too.

—Peter Reilly

FRED ASTAIRE: The Astaire Story. Fred Astaire (vocals); Flip Phillips (tenor saxophone); Charlie Shavers (trumpet); Oscar Peterson (celeste, piano); Barney Kessel (guitar); Ray Brown (bass); Alvin Stoller (drums). *Isn't This a Lovely Day; Puttin' On the Ritz; I Used to Be Color Blind; The Continental; Let's Call the Whole Thing Off; Change Partners; 'S Wonderful; Lovely to Look At; They All Laughed; Cheek to Cheek; Steppin' Out with My Baby; The Way You Look Tonight; I've Got My Eyes on You; Dancing in the Dark; The Carioca; Nice Work If You Can Get It; New Sun in the Sky; I Won't Dance; Top Hat, White Tie and Tails; No Strings; I Concentrate on You; I'm Putting All My Eggs in One Basket; (This Is) A Fine Romance; Night and Day; Fascinating Rhythm; I Love Louisa; They Can't Take That Away from Me; You're Easy to Dance With; A Needle in the Haystack; So Near and Yet So Far; A Foggy Day; Oh, Lady Be Good; I'm Building Up to an Awful Let Down; Not My Girl.* Instrumentals: *Fast Dances; Slow Dances; Medium Dances; Jam Session for a Dancer; The Astaire Blues.* DRG ARCHIVE DARC-3-1102 three discs \$23.98.

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Man in the Station written by, of all people, the intellectual and far-out jazz folkie John Martyn. Mostly there are good melodies and fair lyrics sung with a kind of unobtrusive splendor and played, as people almost always play behind Matthews, with grace and gusto. The instrumentals are slightly more controlled than is usual for a Matthews album, but they're not overcontrolled (I would halt it right there, though, fellows, and maybe even back off about a notch and a half). And it's one of those rare pop albums that make having a good stereo outfit worth it. Good job. N.C.

OLIVIA NEWTON-JOHN: *Totally Hot*. Olivia Newton-John (vocals); instrumental accompaniment. *Please Don't Keep Me Waiting; Talk to Me; Deeper Than the Night; Borrowed Time; A Little More Love; Never Enough*; and four others. MCA MCA-3067 \$7.98, © MCAT-3067 \$7.98, © MCAC-3067 \$7.98.

Performance: **More like mild**
Recording: **Good**

Let me put the title "Totally Hot" in perspective for you this way: if this were chili, the average Mexican would laugh it out of *la comida*. Actually, it's the name of one of the songs (one of the dumber songs of the year), but there is the germ of something new about Olivia Newton-John's approach here, and if you allow for the usual overstatement in these matters it makes some vague sort of sense. She seems a little more ambitious this time out, having written a couple of the songs herself (they're marginal, but the thought is what I'm talking about) and having been outfitted by producer John Farrar with rock-schlock instrumentals that seem pitched at someone a little older than her basic teenybopper constituency (not that anybody would object if two or three top-40 hits came out of it). Whether any actual growth is occurring, as opposed to something merely different, is a harder question. The whole thing sounds so ardently middle-class that it may seem even shallower than it really is. Olivia still seems to have a limited emotional range, and the songs here only approach—but don't answer—the

question of whether she could actually deliver a lyric that says something. This is a step in *some* direction for her, but I'll be danged if I can figure out whether it's a step forward or sideways. N.C.

POCO: *Legend*. POCO (vocals and instrumentals). *Boomerang; Spellbound; Barbados; Little Darlin'; Crazy Love*; and four others. ABC AA-1099H \$7.98, © 8020-1099H \$7.95, © 5020-1099H \$7.95.

Performance: **Mild**
Recording: **Good**

Rusty Young and Paul Cotton are all that's left of the old POCO, and of course Cotton himself was a replacement member. The new POCO, which includes Charlie Harrison and Steve Chapman, has the old POCO's way of coming up with timeless songs but not its way of putting something extra into the vocal harmonies. The band now plays extra clean, which sometimes helps (in, for example, *Spellbound*) and sometimes gives the whole works the nudge over into Blandness Gulch. I keep getting the feeling it's all too damned polite to be real. But the drawing of a horse on the cover is terrific. N.C.

RECORDING OF SPECIAL MERIT

SMOKEY ROBINSON: *Smokin'*. Smokey Robinson (vocals); instrumental accompaniment. *The Tracks of My Tears; Love So Fine; Quiet Storm; Daylight & Darkness; Madam X; The Tears of a Clown; Here I Go Again; Mickey's Monkey; You've Really Got a Hold on Me; Shoe Soul; Baby Come Close*; and seven others. TAMLA T9-363A2 two discs \$9.98.

Performance: **Tasteful**
Recording: **Satisfactory**

One of the things that distinguishes this two-disc set, recorded live somewhere in the universe (there is no indication of locale), is Smokey Robinson's fans. Sure, they cheer, applaud, and let out enough blood-curdling screams to indicate that they really *care* about Smokey, but even the most impassioned

shrieks subside when it's time for the main man to open his mouth.

Of course, Smokey also gives them a great deal to listen to. He's in excellent voice, his velvet-smooth high tenor roaming flawlessly through the best numbers in his repertoire, just about all of which he has written himself. My favorites occur on sides three and four where he launches into such golden oldies as *Mickey's Monkey, I Second That Emotion*, and *Ooo Baby Baby*. It's like a stroll through ole Motown during the days when it still stood for unpretentious soul sounds.

A bonus here is the instrumental back-up group, which includes Fred Smith on flute and "Wah Wah" Watson on guitar, both of whom get in some especially tasteful licks. Furthermore, the arrangements have a jazzier flavor than has been apparent on many of Robinson's other recordings. But what is most impressive of all is the general level of the personal vibes, particularly during the banter between numbers. Smokey's comments flow spontaneously, and it is possible to detect the character of a man whose ego has never outstripped his talent. I've never met Smokey Robinson, but I'm positive that he is one helluva nice guy. P.G.

KENNY ROGERS: *Love Lifted Me*. Kenny Rogers (vocals, guitar); instrumental accompaniment. *Love Lifted Me; You Gotta Be Tired; Home-Made Love; Heavenly Sunshine; Runaway Girl*; and four others. UNITED ARTISTS UA-LA607-G \$6.98, © EA607-H \$7.98, © CA607-H \$7.98.

Performance: **Cozy**
Recording: **Good**

It was many moons ago that Kenny Rogers first established his name with the "psychedelic" hard-rock hit *Just Dropped In* that he recorded with the First Edition. (Before that, he served anonymously as a member of the New Christy Minstrels.) Later, on his TV show with the Edition, he simmered down considerably and sang a good deal of what he termed "progressive" country music—Mel Tillis' *Ruby, Don't Take Your Love to Town*, Mac Davis' *I Believe In Music*, and so on. Today, minus the First Edition and recording out of Nashville, he's into such quasi-religious repertoire as Dion's tearful gasper *Abraham, Martin and John*, his own arrangement of the gospel hymn *Precious Memories*, and *There's an Old Man in Our Town*, a song he says was inspired by some advice his very own grandfather passed along to him. To label or to attempt to categorize precisely what Rogers is doing now would be as difficult to do as the album is to listen to. The only image that came to my mind was one of being strapped in between Ruth Carter Stapleton and Billy Graham, both in cozy talkative moods, in an economy-class seat on a non-stop flight from Baton Rouge to Grand Rapids. P.R.

RUSH: *Hemispheres*. Rush (vocals and instrumentals). *Prelude; Apollo; Dionysus; Armageddon; Cygnus; The Sphere*; and three others. MERCURY SRM-1-3743 \$7.98, © 8-1-3743 \$7.98, © 4-1-3743 \$7.98.

Performance: **Intense**
Recording: **Good**

Rush's mixture of hifalutin story lines and didactic lyrics ("When our very world was young/The struggle of the Ancients first be-
(Continued on page 127)



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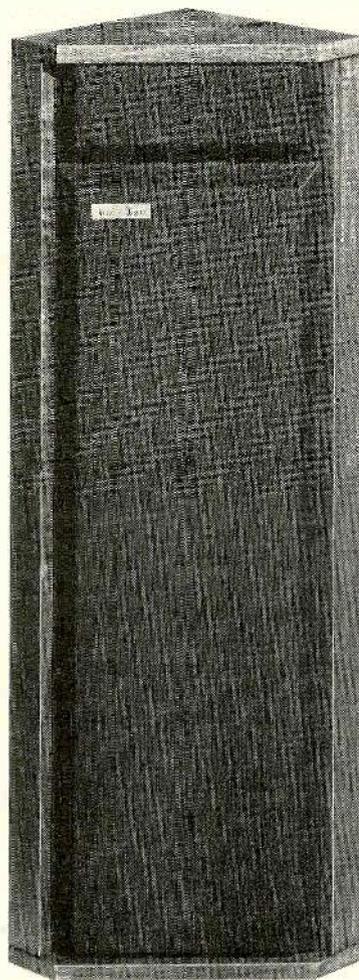
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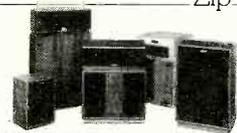
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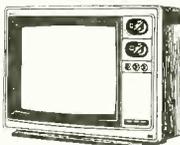
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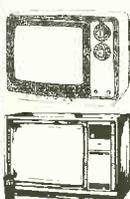
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gan/The Gods of Love and Reason/Sought alone to rule the fate of Man") and Geddy Lee's laser-intensity vocals have made this Canadian trio a very popular show band in the Midwest. The story lines and lyrics of "Hemispheres" teeter on the edge of presumptuous claptrap (they read like bad Victorian verse), but Lee makes everything work with his zeal and bravao. I'm not sure whether Rush actually believes in the stuff they write or whether they consider themselves, in the theatrical sense, an act, but Lee's vocals are the key. He has a remarkable voice, its only defect being a lack of subtlety. His head-on attack damages the only good song on the album, *The Trees*, a witty and bitter parable about "oppressed minority groups" and governmental problem-solving in which jealous maples form a union against the oaks with the result that all the trees are cut down in egalitarian fervor. More songs like that and a little subtlety from Lee would be pretty exciting chemistry. J.V.

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SAD CAFÉ: *Misplaced Ideals*. Sad Café (vocals and instrumentals). *Restless; Here Come the Clowns; Run Home Girl; Black Rose*; and six others. A&M SP-4737 \$7.98.

Performance: **Superior**
Recording: **Very good**

Sad Café is all the rage in London—as well they ought to be, for this is one of the most creative and accomplished bands to be heard in a long, long time. Although vocalist Paul Young owes something of his style and inflection to Mick Jagger and Van Morrison, he's an independent spirit and a most exciting one. All the musicians are fluent and tasteful, but highest honors go to keyboardist and arranger Vic Emerson, whose intelligent, subtle chart writing determines the band's superior ensemble sound.

The tracks here are culled from Sad Café's two English albums. The opening cuts on side one—*Restless* and *Here Come the Clowns*—are absolute knockouts, so strong, in fact, that the other performances, good as they are, can't quite measure up. The laid-back rhythm of *Restless* creates a tension that is held until Emerson's brilliant arrangement sets up the entrance of the guitar solo that dramatically releases it. Saxophonist Lenni Zaksen, guesting with the band, provides the hysteria on the rocking, eerie *Here Come the Clowns*. Other standouts are *I Believe (Love Will Survive)*, *Shellshock*, and *Hungry Eyes*. Be glad of good news and run get this album quick (also watch for the group's first American tour this year). Sensational! J.V.

NEIL SEDAKA: *All You Need Is the Music* (see *Best of the Month*, page 85)

ROD STEWART: *Blondes Have More Fun*. Rod Stewart (vocals); instrumental accompaniment. *Da Ya Think I'm Sexy?; Dirty Weekend; Ain't Love a Bitch; The Best Days of My Life; Is That the Thanks I Get?; and five others.* WARNER BROS. BSK 3261 \$7.98, © M8 3261 \$7.98, © M5 3261 \$7.98.

Performance: **Pitiful**
Recording: **Excellent**

Rod Stewart has taken so much abuse lately for going high rent on us that it's almost diffi-

(Continued on page 130)



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Gladys Knight



Warner/Reprise

Chaka Kahn



Motown

Bonnie Pointer



Epic/Portrait

Sarah Dash

WHEN Diana Ross, back in 1970, burst out of the sequined package that was the original Supremes and became one of the most celebrated solo acts of the decade, she stirred up a cloud of stardust that is still shimmering down on ambitious female soul singers who have made it as far as they can as members of groups. Increasingly, these performers are attempting to establish their own identities by severing, or at least loosening, their ties to old friends (and even relatives) with whom they've shared thousands of frenzied, sweat-drenched whoo-ooo-ooo's and yeah-yeah-yeah's.

Of course, this phenomenon is not a new one. Even the Seven Muses of the ancient Greeks, representing as they did such different arts, must have resented being lumped together in one "girl group." For today's artists, there are very real financial and personal rewards for a successful solo career, not the least of which is simply the satisfaction of being recognized as an individual and not just "one of the Whatevers." A shared pot, however large, may provide less for each shareholder than she or he feels is deserved, and a shared spotlight is necessarily more diffuse, less intense than one with a single focus. Since this is, supposedly, the "me" generation, why shouldn't the woman singer, now that she's no longer considered a "girl," seek her fair portion of the glory?

There is, however, much about the journey from group membership to solo stardom that makes it perilous. Singing well in a group, even as its lead voice, is no guarantee of safe passage to a solo role. To stand alone, a singer must have a voice whose unusual tonal quality immediately distinguishes it from all others. Aretha Franklin, Roberta Flack, Nina Simone, and Diana Ross, to mention some of the more notable successes, not only sound good, they sound like nobody else but themselves. And even if one's voice as such isn't all that great, a deeply individual style or approach to singing can make it unforgettable. It also helps, of course, to have material and production tailored to highlight a personal style, as all these stars have had. And, finally, the aspiring soloist will be challenged to demonstrate her staying power, her ability to change and grow so as to remain popular and in demand beyond the relatively brief lifetime of any single big hit—a fixed, rather than a shooting star in the entertainment firmament.

FOUR notable women soul singers, heretofore identified with top groups, have recently taken the bold step of recording solo albums: Gladys Knight, Chaka Khan, Bonnie Pointer, and Sarah Dash. Their albums differ considerably and give some indication of the particular route that each is following in her quest for solo success.

Gladys Knight might not have to work quite so hard as the others to confirm her individuality, since during her time with the Pips it was obvious that she was their dominant force. In striking out on her own, Knight is just shedding a group that was never much more than her back-up singers. And she does have that gift of a special voice: hers is thickly resonant, with a touch of a tremor at the edges that is especially apparent when she concentrates on projecting the meaning of a

pop/torch song such as *We Don't Make Each Other Laugh Anymore*. Nothing Knight does is perfunctory; she sings every song from the inside out, whatever its intrinsic worth.

"Miss Gladys Knight" is not one of the greatest records Gladys Knight has ever made, but at least the Pips are hardly missed at all. The Jim Gilstrap Singers provide pleasant backgrounds at the proper moments, though overall the sound is thinner than on her group discs. The songs themselves are a mixed bag, with one or two maudlin ones and a few disco tracks that a light touch makes seem less offensive than they might otherwise be. But the medley of *Sail Away and Freedom for the Stallion* is a hymn of joy. Gladys Knight should enjoy smooth sailing no matter where her new career takes her.

As for Chaka Kahn, it is said that she will continue recording with the vocal-instrumental group Rufus while also performing separately. Whatever she does, she'll certainly be heard, for this woman can whip up a fury of sound, lashing into a song like a banshee late to a wake. Chaka Kahn always seems to be singing to a crowd rather than to an individual (in contrast to Gladys Knight), but that just makes her music ideal for bars, discos, parties, and other places where extroverted hot sounds are a must. Her debut solo album should sell well. The opener, an all-out sizzler called *I'm Every Woman*, is already a staple on jukeboxes, and her rambunctious rendition of Stevie Wonder's *I Was Made to Love Him* is every bit as exciting. The sweet smell of success wafts from this album. In any case, I dare say no one's going to fall asleep listening to Chaka Kahn.

IN comparison with Kahn and Knight, Bonnie Pointer has had to wage an uphill struggle to emerge on her own. She was one of the four original Pointer Sisters, and, as much as I loved their campy first album, I could never tell them apart. The group has had its ups and downs since, but Bonnie has let nothing faze her. For her solo debut she has gone all out to show that she's her own woman, doing not only all the solo singing but the background vocals and arrangements as well. The effort that went into this set cannot be weighed on a purely musical scale, and Ms. Pointer deserves an A+ just for attempting it.

Adventurousness is the keynote of Bonnie's album. *Heaven Must Have Sent You* is a virtuoso tongue-in-cheek version of a Holland/Dozier/Holland number; a "group" made up of Bonnie's own overdubbed and multitracked voice whoops up an old-fashioned r-&-b storm in the background while Bonnie as soloist does everything else (from cutesie tricks to some Louis Armstrong-like scat singing) in the foreground. She adds a wry Billie Holiday twist to her voice on *My Everything*, and there are a few more rompers, but the most engaging tracks here are, surprisingly, two quietly stated folk-style numbers, *More and More* and *I Love to Sing to You*, which lead off the second side of the disc. Not everything works equally well, of course, but this album makes more of a home for itself the more you listen to it.

With the release of a solo album by Sarah Dash, the last member of Patti LaBelle's old trio has made her bid for the spotlight. Frank-

ly, I don't think that any of their solo efforts—Patti's, Nona Hendryx's, and now Sarah's—generate the kind of electric excitement that they did as a group when they were in peak form, which was always in live performances rather than in studio recordings. Performing as part of the audacious and raucous LaBelle, Sarah always provided a pleasing contrast to teasing, tough, pseudo-sinister Nona, and to Patti herself, whose calculated outrageousness extended to rolling around on the floor or having herself lowered from the ceiling. Sarah was the sensual "lady" of the trio—ultimately more alluring, more mysterious than the other two, and also capable of singing with a fuller, richer voice.

On her own, Sarah Dash retains much of her basic appeal, but she has also given in to some of the excesses of her former group mates. The opener, a pedestrian bit of disco called *Sinner Man*, is beneath LaBelle's level and thus certainly unworthy of Sarah. Although she sings quite well on a few tracks (especially on *We're Lovers After All*), there's a disappointing predictability to much of what she does here. The arrangements are by Leon Pendarvis, who has worked with Aretha Franklin and Roberta Flack, but he certainly didn't strain himself this time around. The superficial slickness undermines Sarah's efforts to plow through with her firm, expressive voice. Her record tries too hard to be popular, and it will probably end up pleasing fewer listeners than she might have done with better material and more personal production. There's no need for Sarah Dash to bring up the rear in this impressive quartet of female vocalism.

—Phyl Garland

GLADYS KNIGHT. Gladys Knight (vocals); instrumental accompaniment. *We Don't Make Each Other Laugh Anymore; Sail Away/Freedom for the Stallion; I'm Still Caught Up with You; It's Better than a Good Time; I'm Comin' Home Again; The Way It Was; I'll Take a Melody; With You in Mind; Love Gives You Power.* ARISTA/BUDDAH BDS 5714 \$7.98.

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BONNIE POINTER. Bonnie Pointer (vocals); instrumental accompaniment. *When I'm Gone; Free Me from My Freedom/Tie Me to a Tree (Handcuff Me); Heaven Must Have Sent You; Ah Shoot; More and More; I Love to Sing to You; I Wanna Make It; My Everything.* MOTOWN M7-911R1 \$7.98, © M8-911-H \$7.98, © M5-911-H \$7.98.

SARAH DASH. Sarah Dash (vocals); instrumental accompaniment. *Sinner Man; You; Touch and Go; I Can't Believe (Someone Like You Could Really Love Me); Do It for Love; Charge It; Give Your Man a Helping Hand; Look but Don't Touch; We're Lovers After All; (Come and Take This) Candy from Your Baby.* KIRSHNER JZ 35477 \$7.98, © JZA 35477 \$7.98, © JZT 35477 \$7.98.

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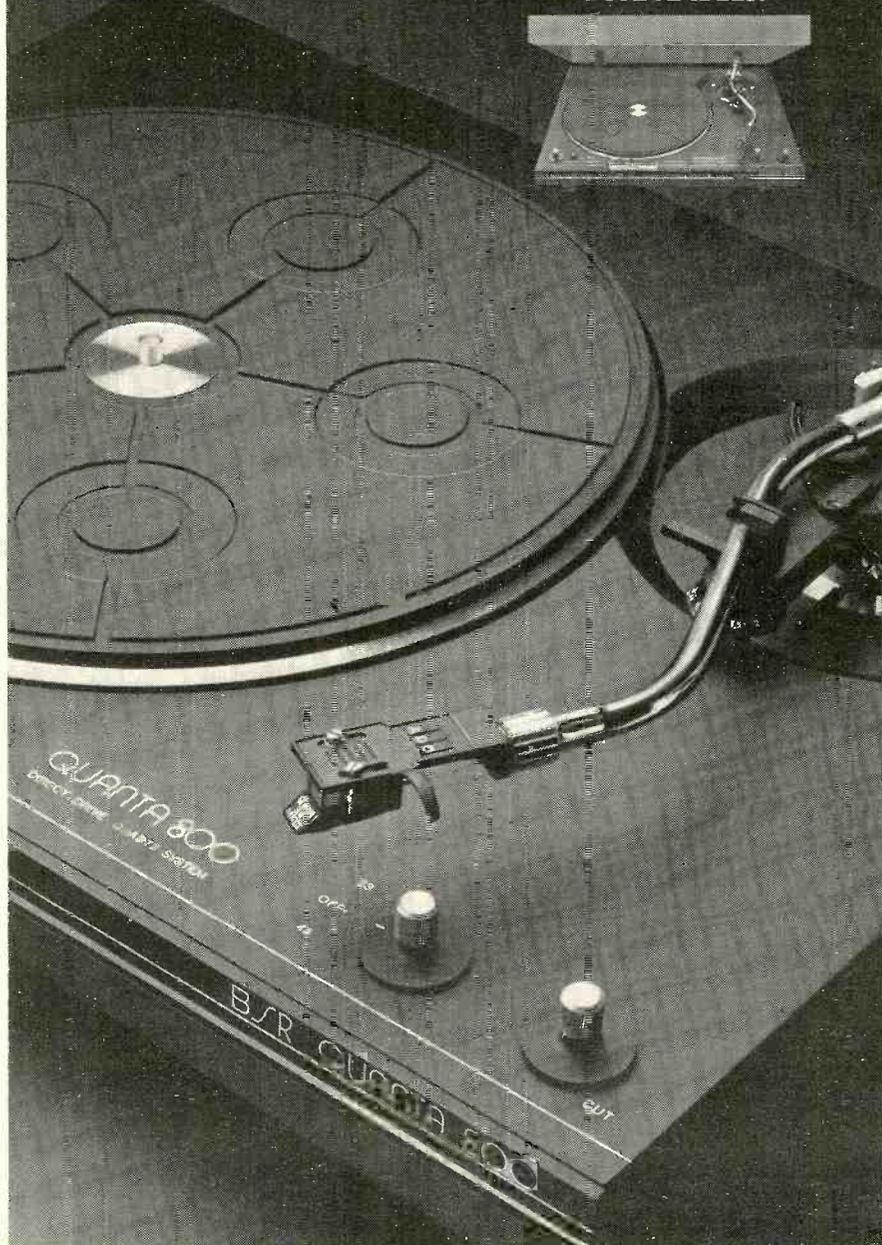
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ly. I don't think that any of their solo efforts—Patti's, Nona Hendryx's, and now Sarah's—generate the kind of electric excitement that they did as a group when they were in peak form, which was always in live performances rather than in studio recordings. Performing as part of the audacious and raucous LaBelle, Sarah always provided a pleasing contrast to teasing, tough, pseudo-sinister Nona, and to Patti herself, whose calculated outrageousness extended to rolling around on the floor or having herself lowered from the ceiling. Sarah was the sensual "lady" of the trio—ultimately more alluring, more mysterious than the other two, and also capable of singing with a fuller, richer voice.

ON her own, Sarah Dash retains much of her basic appeal, but she has also given in to some of the excesses of her former group mates. The opener, a pedestrian bit of disco called *Sinner Man*, is beneath LaBelle's level and thus certainly unworthy of Sarah. Although she sings quite well on a few tracks (especially on *We're Lovers After All*), there's a disappointing predictability to much of what she does here. The arrangements are by Leon Pendarvis, who has worked with Aretha Franklin and Roberta Flack, but he certainly didn't strain himself this time around. The superficial slickness undermines Sarah's efforts to plow through with her firm, expressive voice. Her record tries too hard to be popular, and it will probably end up pleasing fewer listeners than she might have done with better material and more personal production. There's no need for Sarah Dash to bring up the rear in this impressive quartet of female vocalism.

—Phyl Garland

GLADYS KNIGHT. Gladys Knight (vocals); instrumental accompaniment. *We Don't Make Each Other Laugh Anymore; Sail Away/Freedom for the Stallion; I'm Still Caught Up with You; It's Better than a Good Time; I'm Comin' Home Again; The Way It Was; I'll Take a Melody; With You in Mind; Love Gives You Power.* ARISTA/BUDDAH BDS 5714 \$7.98.

CHAKA KAHN. Chaka Kahn (vocals); instrumental accompaniment. *I'm Every Woman; Love Has Fallen on Me; Roll Me Through the Rushes; Sleep on It; Life Is a Dance; We Got the Love; Some Love; A Woman in a Man's World; The Message in the Middle of the Bottom; I Was Made to Love Him.* WARNER BROS. BSK 3245 \$7.98, © M8 3245 \$7.98, © M5 3245 \$7.98.

BONNIE POINTER. Bonnie Pointer (vocals); instrumental accompaniment. *When I'm Gone; Free Me from My Freedom/Tie Me to a Tree (Handcuff Me); Heaven Must Have Sent You; Ah Shoot; More and More; I Love to Sing to You; I Wanna Make It; My Everything.* MOTOWN M7-911R1 \$7.98, © M8-911-H \$7.98, © M5-911-H \$7.98

SARAH DASH. Sarah Dash (vocals); instrumental accompaniment. *Sinner Man; You; Touch and Go; I Can't Believe (Someone Like You Could Really Love Me); Do It for Love; Charge It; Give Your Man a Helping Hand; Look but Don't Touch; We're Lovers After All; (Come and Take This) Candy from Your Baby.* KIRSHNER JZ 35477 \$7.98, © JZA 35477 \$7.98, © JZT 35477 \$7.98.

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CALENDAR OF CLASSICAL COMPOSERS

BACK by popular demand and updated from its original (1966) printing, Music Editor James Goodfriend's Calendar of Classical Composers is a listing of the most important composers from the year 1400 to the present, grouped according to the stylistic periods—Renaissance, Baroque, Classic, Romantic, etc.—in which they worked. This 12 x 24-inch aid, guide, and complement to your music listening is printed in color on heavy, non-reflecting stock suitable, as they say, for framing. A key to the calendar, consisting of capsule accounts of the principal stylistic characteristics of each musical period, is included. The whole will be sent rolled in a mailing tube to prevent creases; we pay postage. All you do is send 50¢ to:

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cult to remember the days when critics grasped at such words as *gemütlich* and *duende* to describe him. To be fair, although the post-punk revisionism was justified on one level—Stewart as working-class good guy no longer rang true after he moved to Hollywood Hills—up to now the albums he has made since he booted out his old bandmates haven't been as bad as the critical response would have you believe. Slightly lacking in personality, certainly, but hardly what I'd call dishonorable.

This new one, however, is the definitive stinkeroo. Stewart's self-absorption has become self-parody, his new band is not merely Face-less but downright inept, and the elegiac folkly arrangements that made such earlier albums as "Gasoline Alley" so memorable have here degenerated into the California-pop equivalent of Merv Griffin's old Tinkling Piano in the Next Room. The new material is uniformly dreadful, ranging from disco piffle (*Da Ya Think I'm Sexy?*) to repellent frat-house love songs (*Ain't Love a Bitch*), and even the obligatory oldie (here it's *Standin' in the Shadows of Love*, a nifty late-Sixties Four Tops tune), usually Stewart's forte, seems transparently insincere and unconvincing. I hate to hit a man when he's down (though since this one has already shipped platinum I doubt Rod's worrying), but "Blondes Have More Fun" is easily the worst release by an artist with a major reputation since George Harrison's "Dark Horse." S.S.

RICHARD AND LINDA THOMPSON: *First Light* (see Best of the Month, page 85)

RECORDING OF SPECIAL MERIT

TINA TURNER: *Rough*. Tina Turner (vocals); vocal and instrumental accompaniment. *Fruits of the Night*; *The Bitch Is Back*; *The Woman I'm Supposed to Be*; *Viva La Money*; *Funny How Time Slips Away*; *Earthquake and Hurricane*; *Root, Toot Undisputable Rock 'n Roller*; and four others. UNITED ARTISTS UA-LA919-H \$7.98, © EA919-H \$7.98, © CA919-H \$7.98.

Performance: **Righteous!**
Recording: **Good**

I have been a Tina Turner fan since the age of sixteen, when I discovered the black radio station WGES in Chicago and heard Richard "Crown Prince of all the Disc Jockeys" Stamms playing Ike and Tina Turner's *I Think It's Gonna Work Out Fine*. To me they were the Gable and Lombard of soul music. I've continued to follow Tina's career since her separation from Ike. Her solo albums have been interesting without always being exciting, for they were sometimes designed to present her as a versatile crossover artist rather than the all-stops-out r-&-b thriller that she is. This present album, however, turns her loose on first-rate material by a variety of writers—Elton John and Bernie Taupin, Hal David, Willie Nelson, Bob Seger, Barry Mann, and Allen Toussaint among them—and she is once again the magical, no-nonsense, volcanic, and royally erotic Tina of old. One hearing of *The Bitch Is Back*, *Night Time Is the Right Time*, *Fire Down Below*, or *Root, Toot Undisputable Rock 'n Roller* will convince you that if Tina temporarily abdicated as the queen of steamy soul, she has now reclaimed her throne with a sweet vengeance. J.V.

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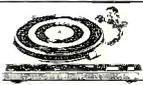
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STEREO REVIEW

DISCO



BRASS CONSTRUCTION: IV. Brass Construction (vocals and instrumentals). *Perceptions (What's the Right Direction); Help Yourself; Night Chaser; One to One; Sweet As Sugar;* and three others. UNITED ARTISTS UA-LA916-H \$6.98, Ⓢ EA916-H \$7.98, © CA916-H \$7.98.

Performance: **Predictable**
Recording: **Satisfactory**

There is a faint glimmer of originality in the format Brass Construction has chosen, for they back up their vocals with trumpets and saxophones as well as the usual keyboards and rhythm instruments. Unfortunately, they seem to lack the musical experience to do much with either the horns or the other instruments. Their songs fall into a woefully predictable pattern: the initial statement of a rather simple melody is repeated and loosely embellished ad infinitum. The horns are used only for punctuation, commonly along with equally repetitious unison shouts. Though I don't recall exactly what their albums "I," "II," and "III" sounded like, I would guess they were very much like this one. Not that this is really a bad set—the group has enough raw energy to keep a mob dancing from opener to end. Just don't listen too closely. P.G.

RECORDING OF SPECIAL MERIT

JUDY CHEEKS: *Mellow Lovin'.* Judy Cheeks (vocals); vocal and instrumental accompaniment. *The Little Girl in Me; Kiss Me Baby; Suspicious Mind; It's Just a Love Affair Gone;* and four others. SALSOU SA 8514 \$7.98, Ⓢ 8-8514 \$7.98, © C-8514 \$7.98.

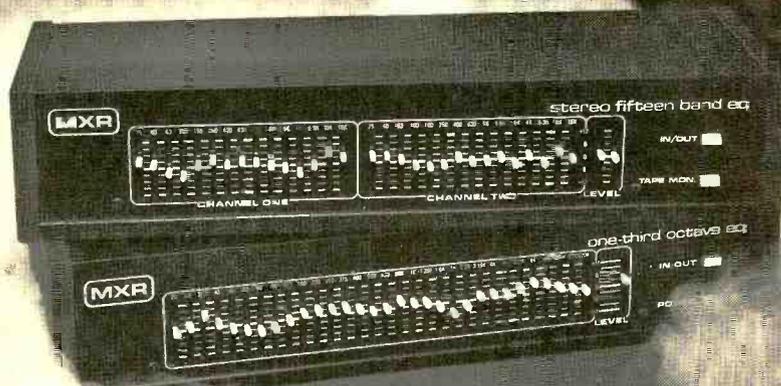
Performance: **Infectious**
Recording: **Just right**

Here is one terrific album by a double-dynasty lady: Judy Cheeks can write, and she sings, too. Her refreshingly little-girl breathy voice is very easy on the ears, and her Munich-based engineers know just how to keep that sweet voice from being drowned in sound. The result is an uncommonly listenable disco album. And then there are the songs. Two, especially, are so infectious that I haven't stopped humming them since my first hearing: *The Little Girl in Me* and the hit title song, both mixed by the omnipresent (and talented) Tom Moulton. For extra spice, there's a kind of country-western song called *Suspicious Mind* (the only song in the album Ms. Cheeks didn't write) and the solid bluesy treatment of *Darling, That's Me*. There's not a bad song here. Give a listen and become a fan. E.B.

ALEC R. COSTANDINOS: *The Hunchback of Notre Dame.* Alec R. Costandinos and the Synchronic Orchestra (vocals and instru-

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Lord of the Rings

The Wizard Gandalf



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TALK about the sound and the fury! Loyal admirers of the works of J. R. R. Tolkien who lined up for blocks at New York's Ziegfeld Theatre (and, no doubt, at other show-cases elsewhere) to see Ralph Bakshi's animated movie of *The Lord of the Rings* when it opened last November found out, if they didn't already know it, that Middle-earth is a pretty noisy place. Just about the most spectacular animated feature ever made, *LOTR* boasts a mammoth score by Leonard Rosenman that swells from a perky little Elvish tune to advanced sonorities of considerable complexity. At the Ziegfeld there were so many tracks being played over so many loudspeakers at once that the dialogue, sound effects, and music resounding together left my ears ringing and benumbed. With the new Fantasy album of the soundtrack, however, it is possible to admire the virtues of the music without being deafened by it.

Rosenman, now in his mid-fifties, gave up painting for music in 1947 and studied under both Arnold Schoenberg and Roger Sessions. His score for *LOTR* is far more daring than those he wrote for such other films as *East of Eden*, *A Man Called Horse*, or even *The Fantastic Voyage*. Dissonances and twelve-tone experiments abound, sometimes in curious contrast with the harmonious horns of Elfland that echo across the mock-medieval landscapes of Bakshi/Tolkien's Middle-earth, sometimes in frightening counterpoint to the whimsical tunes and rustic marches that

accompany the hobbits (Tolkien's version of the Little People) as they are drawn deeper into their dangerous adventures. The growling choruses of the orcs (the gruesome enemies of hobbits, elves, and men) and a ballad sung in one of the Elvish languages Tolkien invented would surely have delighted the master himself, and there is a wide enough range of orchestral power to tax the resources of the most advanced hi-fi system.

ALL in all, Rosenman's music is several cuts above John Williams' well-regarded and widely popular scores for *Close Encounters of the Third Kind* (which also has some avant-garde effects) and *Star Wars*. It is of more intrinsic interest and yet just as apt for accompanying the action of the film it was composed for. As W. H. Auden, one of Tolkien's greatest boosters, once admitted, the fantasy world of Middle-earth and Tolkien's plucky little heroes, with their English Midlands morality, "... will either totally enthrall you or leave you stone cold, and whichever your response, nothing and nobody will ever change it." You don't have to be a member of the cult, though, to enjoy Leonard Rosenman's fantastic, febrile score. —Paul Kresh

THE LORD OF THE RINGS (Leonard Rosenman). Original-soundtrack recording. Orchestra, Leonard Rosenman cond. FANTASY LOR-1 two discs \$13.98, © 8160-LOR-1TS \$13.95, © 5160-LOR-1TS \$13.95.

mentals). *The Pope of Fools*; *La Esmeralda*; *Phoebus*; *The Court of Miracles*; *Notre Dame*; *Hanging of the Sorceress*; *The Attack*; and six others. CASABLANCA NBLP 7124 \$7.98, © NBL8 7124 \$7.98, © NBL5 7124 \$7.98.

Performance: **Fine**
Recording: **Lush**

It doesn't follow the story as closely as the "Romeo and Juliet" album did, and it's not as fresh, but "The Hunchback of Notre Dame" is still very much a product of Alec Costandinos and Michael Jouveaux. And that means it contains some of the most irresistible, excit-

ing disco around. From the opening *Pope of Fools* (a reference to Quasimodo) through evocations of *The Court of Miracles* and *Notre Dame* to the finale at *Quasimodo's Wedding*, the strings sing, the bass throbs, and the feet rarely stop. Along the way, there is enough variation in the basic disco sound to keep things hopping—compare, say, the rock-'n'-roll feeling of *Phoebus* with the jazzy, tambourine-inflected opening bars of *Don Claude's Confession*. Some of the spoken narrative and sound effects are a bit silly, but when Costandinos refrains from taking his work too seriously, it's a lot of fun. E.B.

THELMA HOUSTON: Ready to Roll. Thelma Houston (vocals); vocal and instrumental accompaniment. *Saturday Night, Sunday Morning*; *Love Is Comin' On*; *Midnight Mona*; and six others. TAMLA T7-361R1 \$7.98, © 7-361HT \$7.98, © 7-361HC \$7.98.

Performance: **Courageous**
Recording: **Satisfactory**

Thelma Houston has a gift for making trite, repetitious material sound far less humdrum than it is. She uses her magnificently robust voice to blast the mediocrity out and whip up a joyful ruckus. This album is a perfect example of her talent. These leadenly unimaginative songs have been ground out by formula, and it is impossible to recall the melody of any one of them after hearing the whole disc several times. And yet Houston sings this awful stuff as if it really inspired her. I don't know how she does it. She has a little bit to work with on the final two numbers, *Am I Expecting Too Much* and *Can't We Try*, which nose out the real dogs on the trail. But Thelma shines throughout, dogs and all. The music matters less than what she does with it. In view of the courage she has demonstrated with such meager pickings, it's time for someone to give her some decent material. P.G.

ZULEMA: Z-licious. Zulema Cusseau (vocals); vocal and instrumental accompaniment. *Change*; *I'm Not Dreaming*; *See*; and eight others. LE JOINT LEJ 17000 \$7.98, © 8-17000 \$7.98, © 5-17000 \$7.98.

Performance: **Undistinguished**
Recording: **Fine**

Zulema Cusseau sings, Lord knows. Her voice has a lovely richness (in the same neighborhood as Roberta Flack's), and she can invest a lyric with a sense of truth. Just listen to how she feels her way through Van McCoy's *This Time I'm Not Dreaming*, on which McCoy himself joins her. It's too bad that she also writes songs (all but the three Van McCoy songs on this debut album are Zulema's own), plays the piano, and arranges, since most of her efforts along these lines don't pan out. *Higher Plane* and *Changes*, for example, are undistinguished songs of the "we all gotta love one another" variety. The disco arrangements here are better than the soulful ballads, but even the best of them—*Gotta Find a Way* and *You've Got Something for Me*—are really just gestures in the disco direction. There's no fire here to set your Saturday nights ablaze. E.B.

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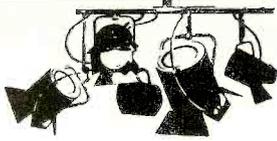
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● **NARADA MICHAEL WALDEN: Awakening.** ATLANTIC SD-19222 \$7.98, © TP-19222 \$7.98, © CS-19222 \$7.98.

(List compiled by John Harrison.)



THEATER • FILMS

THE BELLE OF NEW YORK (Harry Warren-Johnny Mercer). Original-soundtrack recording. Fred Astaire, Anita Ellis (vocals); MGM Studio Orchestra and Chorus, Adolph Deutsch cond. **FRED ASTAIRE**. Fred Astaire (vocals); Buddy Bregman and Dick Hazard Orchestras. *There's No Time Like the Present*; *Just Like Taking Candy from a Baby*; *Hello, Baby*; *Sweet Sorrow*; *The Martini*; and three others. DRG/STET DS 15004 \$8.98.

Performance: **Better than the material**
Recording: **Good**

The *Belle of New York* was a terrible MGM movie about a turn-of-the-century playboy (Fred Astaire) who falls in love with a beautiful mission worker on the Bowery (Vera Ellen) and promises to reform if she'll marry him. He gives up drink and even gets a job, but he backslides the night before his wedding, passing out and sleeping right through the ceremony. Don't worry, they're back together before it's over, and the movie supplies no end of choreographic spectacle, including a scene where Astaire—in his favorite outfit of top hat, white tie, and tails—dances high atop the Washington Square arch and over Greenwich Village rooftops. Astaire makes you think that the *Bachelor Dinner Song*, *Seeing's Believing*, and *Baby Doll* are treasures of the rarest musicality and wit when they're really only bits of forgettable fluff. Anita Ellis, who supplied Vera Ellen's voice, makes lovable items out of *Naughty but Nice* and the *Bride's Wedding Day Song*.

Most of side two of the album is devoted to five of Astaire's own songs (all but one written with a collaborator), which he sings with all his trademarked style and usual urbanity even though they are fairly mediocre. He also does a fine routine called *The Martini*, in which a customer at a bar supplies such elaborate instructions as to how his cocktail is to be made that he doesn't have time to drink it, as well as the title song from the movie *The Notorious Landlady*, an effort unlikely to add much to his legend despite the entirely engaging treatment he gives the piece. P.K.

DON'T GIVE THE NAME A BAD PLACE: *Types and Stereotypes in American Musical Theater, 1870-1900*. *The Babies on Our Block*; *Maggie Murphy's Home*; *John Riley's Always Dry*; *Stay in Your Own Backyard*; *De Golden Wedding*; *Darktown Is Out Tonight*; *Cat Song*; and seven others. Max Morath, Danny Barker, Clifford Jackson, others (vocals); Dick Hyman, piano and cond. NEW WORLD NW 265 \$8.98.

Performance: **Effective**
Recording: **Excellent**

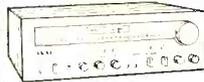
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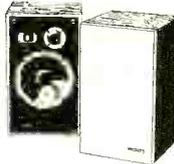
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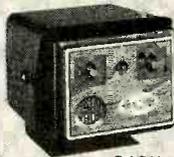
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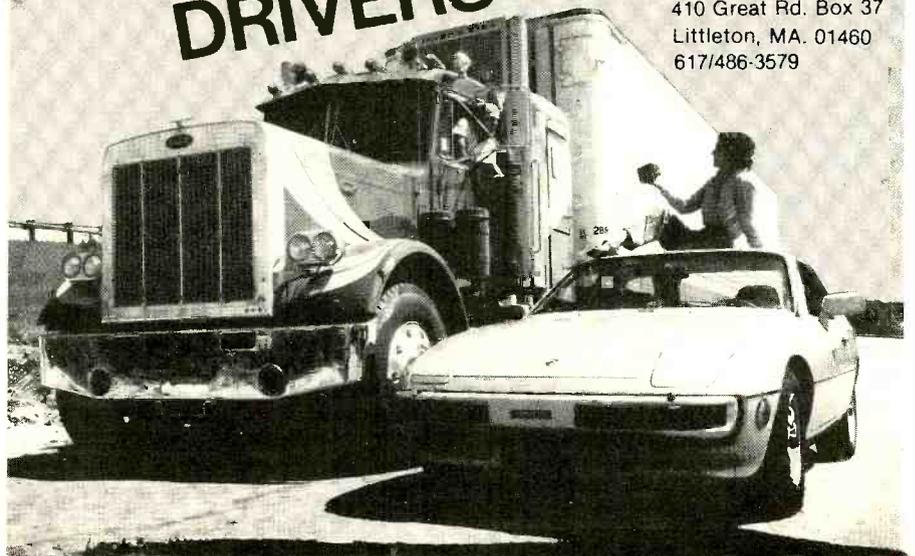
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ed on the musical stage in the late nineteenth century. Vaudeville songs and musical comedies tended to reinforce the negative images that audiences already believed to be true representations of people they felt it was too much bother to get to know or to consider on a more complex level. Here are songs suggesting that all Irishmen are drunks, blacks should stay in their own part of town. Germans are goose-stepping dunderheads, and so forth—not a very admirable part of our musical heritage, but unquestionably an authentic one.

The anti-Irish songs on the first side are comparatively tender lyrics about the babies in a block of tenements, the joys of an evening at a drunken party, how alcohol keeps John Reilly alive, and helping the Irish win an election. Most of them were written by Tony Hart and Edward "Ned" Harrigan (the very one referred to in George M. Cohan's "H-A-Double-R-I" song). The songs dealing in black stereotypes may once have been regarded as funny, but today they make one squirm with their allusions to razor-carrying "coons" and black "buffoons." Less vicious are the German-accent comic songs of Gus Williams, a vaudevillian born in New York's tough Bowery who aspired to the legitimate theater but was jeered back to vaudeville by the critics. Responding to the anti-German feelings roused here by World War I, Williams lampooned the accents and alleged stupidities of the "Huns" in such ballads as *Can Any One Tell Vere Dot Cat Is Gone?* and *Don't Give De Name a Bad Place*.

All the songs are effectively put over by Max Morath, that inveterate champion of turn-of-the-century American music, Danny Barker, and Clifford Jackson, who seem to be instant experts at any accent demanded of them. There are back-up vocal ensembles on some of the selections conducted by Dick Hyman, who also plays the piano throughout and did all the arrangements. Complete texts and voluminous notes are supplied, together with reproductions of vintage sheet-music illustrations. All in all, an interesting record—but not one to play for impressionable ears. P.K.

NEFERTITI (David Spangler-Christopher Gore). Original-cast recording. Robert Lupone, Andrea Marcovicci, Michael Nouri, Michael Smartt, Jane White (vocals); orchestra, Robert Billig cond. TAKE HOME TUNES THT 7810 \$8.95 (plus \$1 postage and handling from Take Home Tunes, Box 496, Georgetown, Conn. 06829).

Performance: **Good, but . . .**
Recording: **Very good**

Nefertiti opened at the Blackstone Theatre in Chicago on September 20, 1977, and closed after forty-four performances. On the surface it seemed to have everything going for it. Here is a lavishly staged tale about ancient Egypt made ready for the same ticket buyers who formed lines to see the Tutankhamun exhibition at a time when every souvenir store in the land was selling Egyptian statuettes as fast as plaster could be gilded. The story of the princess who falls in love with a common foot-soldier destined to rise to the rank of Pharaoh and bring down the Great Society instituted by his New Deal predecessor Akhnaton would seem to have been just what the public wanted. The sets were lavish, the costumes worthy of a high-budget production of *Aida*, the background information diligently

researched. But musically the show did not seem to be able to make up its mind whether it wanted to resemble *Jesus Christ, Superstar*, *The King and I*, or maybe an MOR rock treatment of *Aida*. Lyricist Christopher Gore settled for lines like "The great wife is worried/She watches the Hittite advances/While Pharaoh writes poems/Picks flowers, has daughters/And dances." David Spangler's tunes are flaccid, and his idea of Egyptian atmosphere seems to be to throw in an occasional flute solo and what sounds like a couple of sleepy tambourines.

As Tiy, the Great Wife and Mother of Egypt, Jane White makes the most of her predictable opportunities. Andrea Marcovicci in the title role, Robert Lupone as the young Pharaoh Akhnaton, and Michael Nouri as the upstart who winds up on the throne as Hor-emhap do well, if not sensationally, with the songs assigned to them. The world is still ready for a good spectacular musical set in ancient Egypt, if only somebody—maybe the same collaborators—would set higher standards for the results. This one should have been sealed up along with the show in its Chicago tomb and forgotten. P.K.

RECORDING OF SPECIAL MERIT

OH, KAY! (George and Ira Gershwin). *Maybe* (three versions); *Clap Yo' Hands* (two versions); *Do, Do, Do* (three versions); *Someone to Watch Over Me* (three versions); *Oh, Kay!*; prologue and entr'acte medley. Gertrude Lawrence, Claude Hulbert, Harold French (vocals); George Gershwin, Victor Arden, Phil Ohman, Tom Waring, others (pianos); various orchestras and conductors. SMITHSONIAN 011 \$6.99 (from the Smithsonian Collection, P.O. Box 10230, Des Moines, Iowa 50336).

Performance: **The originals**
Recording: **Intelligently restored**

Way back in 1926, when the Gershwin brothers had already given the world the flop musical *A Dangerous Maid*, which closed in Pittsburgh, and *Lady, Be Good*, which seems never to have closed at all, they got Guy Bolton and P. G. Wodehouse to write them a book about the then-timely subject of rum-running on Long Island. The unwieldy plot of *Oh, Kay!* is virtually immune to synopsis, but the songs the Gershwins supplied (a few had lyrics by Howard Dietz, the rest by Ira) sound as wonderful today as ever. Some of them—such as *Someone to Watch Over Me*—are still being sung, in fact, and in its own time the show was the longest-running American musical on Broadway, with 256 performances after the November 1926 opening.

In addition to the good songs, the original productions of *Oh, Kay!* had Gertrude Lawrence as *Lady Kay*. If you just want to get acquainted with the complete score, I heartily recommend the Columbia Special Products album featuring Jack Cassidy and Barbara Ruick (ACL 1050). But if you'd like to hear the inimitable Lawrence tremulously singing *Maybe*, *Someone to Watch Over Me*, and *Do, Do, Do*, plus George Gershwin himself at the piano thumping out keyboard treatments of the same songs as well as his gospel number *Clap Yo' Hands*, then you'd better get hold of this latest "archival reconstruction" from the Smithsonian Institution. Besides Lawrence and Gershwin, who should provide reason enough for buying the album, there's also a

two-piano medley of the show's hit tunes together with *Fidgety Feet* to set your own toes tapping. The less said about the male singers (from the London cast) who accompany Lawrence, the better, but it is worth mentioning that the record comes with whole pages of reproductions of photos of the original productions, analytical notes, and a summary of every single thing that happens on stage, just in case you want to mount your own revival. P.K.

SOUVENIRS OF HOT CHOCOLATES. Louis Armstrong: *Sweet Savannah Sue*; *Ain't Misbehavin'*; *Black and Blue*; *That Rhythm Man*. Fats Waller: *Sweet Savannah Sue*; *Ain't Misbehavin'*. Edith Wilson: *Black and Blue*; *My Man Is Good for Nothing but Love*. Eddie Green: *Big Business*; *Sending a Wire*. Harlem Feetwarmers: *Snake Hips Dance*; *Jungle Jamboree*. Seger Ellis: *Ain't Misbehavin'*. SMITHSONIAN R 012 \$6.99 (from the Smithsonian Collection, P.O. Box 10230, Des Moines, Iowa 50336).

Performance: **Enticing**
Recording: **Good restoration**

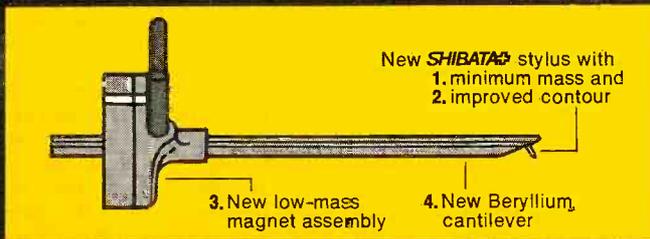
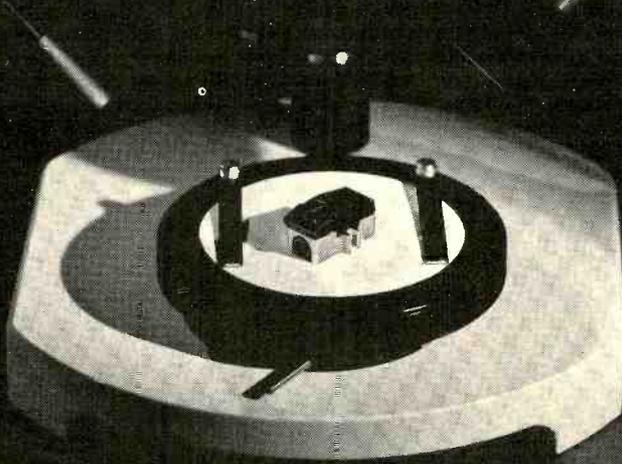
Hot Chocolates opened at the Hudson Theatre on Broadway in 1929 and ran for more than three hundred performances, a healthy run for that time. It was an expanded version of a floor show from Connie's Inn, one of the great Harlem night clubs. The score and lyrics were by Fats Waller, Andy Razaf, and Harry Brooks, with Eddie Green writing the comedy sketches. The show featured Waller, Louis Armstrong, and some of the best Harlem vaudeville talent of the era.

This Smithsonian Collection "reconstruction" presents surviving individual recordings by some of the cast members. Waller is heard on two frequently reissued piano solos, *Sweet Savannah Sue* and *Ain't Misbehavin'*. The former was written for a chorus of male dancers, and the latter—plugged incessantly in the show—turned out to be one of the all-time hits. Armstrong's versions with his 1929 orchestra, which included the great Zutty Singleton on drums, give a better impression of how *Sue* sounded on stage; his virtuoso performance on *Ain't Misbehavin'* became a hit record for him. Armstrong also tackles *That Rhythm Man*, the finale of Act I, and *Black and Blue*—the most ingenious and controversial song in the score. Edith Wilson, who sang it in the show, gives it a straightforward reading here, whereas Armstrong's vocal delves into the social and emotional core of the song. Wilson is also heard in *My Man Is Good for Nothing but Love*, a double-entendre tune of the genre often featured in lavish Harlem clubs. The two comedy sketches by Eddie Green are treasureable period pieces, well written and well performed.

The Harlem Feetwarmers were a small group from the Duke Ellington band. Here they play two dance numbers from the show, *Jungle Jamboree* and *Snake Hips Dance*, the latter of which featured the remarkable Earl "Snake Hips" Tucker, a master of the shimmy. *Ain't Misbehavin'* comes around once again in a cut by vocalist Seger Ellis, with Armstrong present for the trumpet obbligato. The sound restoration is uniformly good, and the informative liner notes by Dan Morgenstern are most welcome. Ah, if only the whole show had been recorded! J. V.

(Continued on page 137)

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Left to right: Martin Carthy, Rick Kemp, Nigel Pegrum, Tim Hart, Maddy Prior, and John Kirkpatrick.

Steeleye Packs It In

STEELEYE SPAN went out with something between a bang and a whimper—closer to a whimper—and one who has never done them any harm aside from praising them feels almost a responsibility to jump in quickly and remind everyone that this band in its day was just about as close as anything ever gets to marvelous.

With "Live at Last," recorded at Bournemouth on March 7, 1978, the band officially dissolved. Singer-guitarist Tim Hart lent the event the legitimacy of print in his liner notes—which, unfortunately, are among the things that shade the album closer to a whimper. There is something in Hart's tone in these notes that makes one want to pick at what he asserts to be facts. "We were told it couldn't be done," he actually, grandiloquently says at one point, reminding anyone who reacts automatically against that sort of thing that the Pentangle and Fairport Convention may already have done it, depending on what he means by "it." There's a kind of hollow bravado in Hart's notes: "We proved them wrong with a gold album, five silver albums," etc. Okay, Tim, but by *that* standard you didn't prove them as wrong as David Bowie proved *his* detractors wrong.

My little buddy Steve Simels called the last Steeleye album, "Storm Force Ten," dispirited. So is part of this one, although anticlimactic is just as good a word if you're feeling generous. It makes a lame start with back-to-back instrumentals of a Scottish thing and a polka, and then, before you know it, Maddy Prior's wrestling with Brecht-Weill again. The rest of the songs on the first side are performed fairly well, but, as old songs go, there's not a real charmer among them. And then *False Knight on the Road*, one of the duller items in Steeleye's repertoire for a long time, takes up valuable space on the second side.

Even when the album is good it can be frustrating, as in the curious last cut, *Rag Doll*, the old Crewe-Gaudio tune not recorded live but in a studio (although I believe they had performed it live). It seems to me that Prior sings it inside out here, using up the top part of her range on the early part of the verse and having to drop anticlimactically down just where things should get *more* dramatic, not less. But Steeleye does parts of that song so well it reminds you of the brilliant moments they had in albums like "Below the Salt," "Parcel of Rogues," "Commoner's Crown," and "All Around My Hat." They do *parts* of the song so well they made me fall in love with it, but I still wanted to hear the *whole* song sung the other way.

Martin Carthy, who was in the group, then out, then back in, is heard on guitar here, he and Hart and bassist Rick Kemp being the main inventors of the sometimes brilliant Steeleye instrumentals. Kemp's importance shouldn't be underestimated; he plays a strange, savage bass that may have been the most distinctive and unifying sound Steeleye had. The instrumentals here, however, make the recurrent impression of being too obviously controlled. It becomes evident that these are *arrangements*, that this is not a rock band playing the way its people feel at this particular time. That works against a live album, and in this case it also suggests a sobering contrast with the days when Steeleye's sound was convincing. It sounded spontaneous enough a few albums ago, not to mention as spacey as Pink Floyd, and not to mention complementary to the ancient songs. It was the vocals that reconciled these extreme elements. Maddy Prior has a soprano voice with a clarion ring to it, and Steeleye could give you ear-boggling five-part harmonies.

Hart's liner-note assertion that Steeleye

was trying something new is too easily interpreted to mean the band was doing something radically new; they were, in fact, using much the same formula as the Pentangle and Fairport: a dug-up repertoire, electric guitars, a quality female voice, and some nasal but strong male ones. But Hart actually may have been trying to say this: that Steeleye was the first one with a dug-up repertoire and the other stuff *and* an actual, bona fide rock consciousness. Not a radical distinction, but an important one. The Pentangle and Fairport, when you think about it, weren't fully committed, once past the repertoire, to rock. They were at that folk-rock stage, which involves remaining partly committed to folk. In its heyday, Steeleye Span was one of the most inventive rock bands around, repeatedly.

As I say, this album's breakdowns into a mechanical state are recurrent and not constant. *Almost* everything about *Rag Doll* is exemplary, and *Montrose* is quite a pleasing cut, and the old shine comes back a few times in other odd places. But it's a sad album because it's just good enough to suggest what Steeleye Span really was about. I'm grateful for the reintroduction to *Rag Doll*, but the rest of the program has an offhand, almost thoughtless quality about it. I suppose it is an honorable bowing-out exercise, but I'd almost recommend a reunion to make *another* final album, a real one.

—Noel Coppage

STEELEYE SPAN: *Live at Last*. Steeleye Span (vocals and instrumentals). *The Atholl Highlander's/Walter Bulwer's Polka; Saucy Sailor/Black Freighter; The Maid and the Palmer; Hunting the Wren; Montrose; False Knight upon the Road; Rag Doll*. CHRYSALIS CHR 1199 \$7.98, © 8CH-1199 \$7.98, © CCH-1199 \$7.98.

JAZZ



RECORDING OF SPECIAL MERIT

ART BLAKEY: *Live Messengers*. Art Blakey (drums); Clifford Brown, Freddie Hubbard (trumpet); Lou Donaldson, Wayne Shorter (saxophone); Curtis Fuller (trombone); Horace Silver, Cedar Walton (piano); Curley Russell, Jymie Merritt (bass). *Arabia*; *Mosaic*; *Wee Dot*; *The Way You Look Tonight*; *It's Only a Paper Moon*; and four others. **BLUE NOTE** BN-LA473-J2 two discs \$9.98.

Performance: **Outstanding**
Recording: **Good mono, so-so stereo**

These previously unissued club sessions featuring two Art Blakey groups recorded at Birdland and the Village Gate in New York and at the Renaissance Club in Hollywood are bursting with creative energy. Just why it has taken so long to make this material available is not explained in Ira Gitler's otherwise informative notes, but it defies the imagination. Also hard to understand is why producer Michael Cuscuna has thrown chronology to the wind and programmed the earliest (and best) session last. But these are only minor criticisms; the important thing is that this music is now out for all to hear.

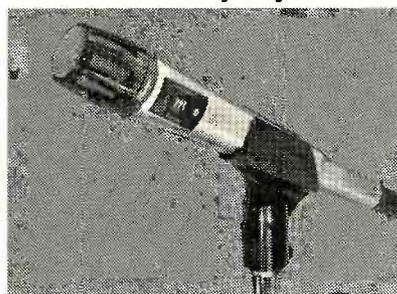
Side four (to ignore Cuscuna's order of things) is a February 1954 Birdland session by an Art Blakey quintet containing Clifford Brown, Lou Donaldson, Horace Silver, and Curley Russell. It wasn't called the Jazz Messengers then, but the instrumentation is the same as for numerous so-named groups that followed. Other recordings from that night at Birdland began appearing on Blue Note in the days of ten-inch LP's, but this is fresh stuff and only one title, *Wee Dot*, reappears here in an alternate version. It is *Wee Dot*, in fact, that starts the side at well above the boiling point. Blue Note president Alfred Lion hand-picked this group for the occasion, showing the kind of good judgment and keen perception that had kept his label alive and relevant for fifteen years. Trumpeter Clifford Brown, then twenty-three, had recently toured Europe as a member of a Lionel Hampton band brimming with budding jazz stars, and he was about to form a historic quintet with Max Roach. His work on these tracks—fiery, technically stunning solos that burn themselves into one's memory as indelibly as the solos of the young Louis Armstrong—is alone worth twice the price of the album. Brown's death in a 1956 auto accident becomes all the more tragic in light of the breathtaking vitality and originality of such performances as these.

Like Brown, alto saxophonist Lou Donaldson had previously made his recording debut as a leader on Blue Note (with Horace Silver as a sideman), and the two had recorded together for the label in 1953. An excellent technician with a style derived from Charlie



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Parker, Donaldson was the perfect front-line mate for Brown; the way they kick off *The Way You Look Tonight* with Brown playing *Can't Help Lovin' That Man of Mine* as a counter-melody to Donaldson's statement of the theme is a delight exceeded only by the inspired solos that follow. Donaldson, who was subsequently forced into taking rhythm-and-blues jobs, is in top form here. Igniting the fire in the two horns is a superb rhythm section sparked by a thirty-five-year-old Art Blakey, who, with fifteen years of big-band experience behind him, was beginning to come into his own. Add to that the strongly blues-oriented, at times churchy piano style of another emerging star, Horace Silver, and a driving rhythmic foundation laid down by Curley Russell, one of the bop era's most sought-after bassists, and it's easy to understand why Birdland rocked on the night of February 21, 1954.

The album's remaining three sides feature a sextet recorded in New York and Hollywood in 1961 and 1962. Here the youthful front line consists of trumpeter Freddie Hubbard, trombonist Curtis Fuller, and tenor saxophonist Wayne Shorter; Cedar Walton is on piano, and the bassist is Jymie Merritt, a thirty-five-year-old veteran of rhythm-and-blues bands who had been with Blakey since 1957. While the Birdland session is recorded in well-balanced mono, the 1961 Village Gate session is stereo, and poorly balanced. Unfortunately, it is also comparatively spiritless, but there are a couple of interesting solos by Hubbard.

The 1962 Renaissance Club date is another matter: it takes up two sides, is in well-balanced (if not well-separated) stereo, and has the group playing with such spirit that it is hard to believe these are the very same men we heard on side one. Hubbard had played briefly with Sonny Rollins, Slide Hampton, J. J. Johnson, and Quincy Jones before joining the Jazz Messengers in 1961, but it was with the Messengers that he first made his mark. To hear his rapid-fire playing on such tracks as *It's Only a Paper Moon* and Cedar Walton's *Mosaic* is to understand why. *Mosaic* also includes an absolutely stunning, explosive solo by Blakey and one of the set's many fine examples of a blossoming Wayne Shorter—no wonder Miles Davis hired him the following year. This is an album no serious collector of modern jazz should be without. C.A.

RECORDING OF SPECIAL MERIT

CAPP/PIERCE JUGGERNAUT: *Live at the Century Plaza.* Frankie Capp (drums); Nat Pierce (piano); Joe Williams (vocals); other musicians. *Basie's Deep Fry; Tarragon; Souvenir; Joe's Blues;* and four others. CONCORD JAZZ CJ-72 \$7.98.

Performance: **Straightforward swing**
Recording: **Excellent remote**

When pianist Nat Pierce and drummer Frankie Capp formed their Juggernaut in 1975, both brought previous big-band experience to the venture. Capp had propelled the bands of Stan Kenton, Neal Hefti, and Billy May, and Pierce had been an important part of Woody Herman's band as well as a substitute pianist in the Basie and Kenton bands during the two leaders' illnesses. The Capp/Pierce band has undergone a change in personnel since making its 1977 record debut ("Juggernaut," Concord Jazz CJ-40)—gone are such strong

(Continued on page 142)

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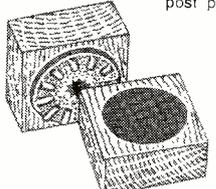
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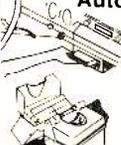
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voices as Blue Mitchell, Plas Johnson, and Richie Kamuca—but the orchestra's vitality is intact.

This disc preserves a live session recorded during two sets in the Westside Room of Hollywood's Century Plaza Hotel. The sound is as clean and crisp technically as it is musical. The band's style here favors that of Count Basie, but with a dash of Woody Herman. It is not an innovative band, but it's not imitative either; it just swings merrily along with plenty of drive and a goodly number of wonderful solos. Former Basie vocalist Joe Williams is featured on the last two tracks, *Joe's Blues*—a slow, ten-minutes-plus tale told in his own inimitable fashion with some very soulful comments from Marshal Royal's alto—and a lively rendering of *What the World Needs Now* as arranged by Ernie Wilkins. This band brings out the best in Joe Williams, providing as good a frame for him as it did for Ernie Andrews on the previous album. Messrs. Capp and Pierce ought to contemplate future records featuring whole sets with these two fine vocalists. C.A.

JOHNNY GRIFFIN: *Live in Tokyo* (see Best of the Month, page 83)

RECORDING OF SPECIAL MERIT

SCOTT HAMILTON/WARREN VACHÉ: *With Scott's Band in New York City*. Warren Vaché (cornet, flugelhorn); Scott Hamilton (tenor saxophone); Norman Simmons (piano); Chris Flory (guitar); Phil Flanigan (bass); Chuck Riggs (drums); Sue Melikian (vocals). *Freego; I Love You; Raus!; Darn That Dream; Danny Boy*; and four others. CONCORD JAZZ CJ-70 \$7.98.

Performance: **In the masters' footsteps**
Recording: **Very good**

Scott Hamilton and Warren Vaché, those two keepers of the mellow swing flame, are at it again here, playing the music of an older generation as if it were their own. This is a delightful set of two Hamilton originals and seven old standards performed with effortless dedication and graceful swing. Hamilton is as fluent as ever and Vaché is more articulate than I have ever heard him before—they are perfect teammates. The rhythm section, headed by pianist Norman Simmons (erstwhile accompanist for Dakota Staton and Carmen McRae), operates with equal smoothness, but I'm afraid I can't say the same for vocalist Sue Melikian. She is apparently making her recording debut with this disc, but she is not in the same league as her accompanists; she lacks both breath control and style, and she delivers the lyrics as if she were reading them for the first time. Apart from that, this album certainly contains enough small-band swing to delight anyone who values the music of such past masters as Coleman Hawkins, Ben Webster, and Bunny Berigan. C.A.

ILLINOIS JACQUET: *With Wild Bill Davis*. Illinois Jacquet (tenor saxophone); Wild Bill Davis (organ); Al Barte (drums). *Pamela's Blues; Cotton Tail; The Man I Love*; and three others. CLASSIC JAZZ CJ 112 \$7.98.

Performance: **No-noise Illinois**
Recording: **Good**

Louisiana-born Illinois Jacquet first came to national attention in the early Forties when he was the star tenor saxophonist in Lionel

Hampton's band (seated next to him and relegated to ensemble playing was Dexter Gordon). Jacquet's fiery solo on *Flying Home* was the band's *pièce de résistance*; it was so widely copied that it became virtually a permanent part of that composition and so successful with audiences that it inspired a generation of players to emulate Jacquet's extroverted, orgiastic style. His marathon solos were guaranteed to whip Jazz at the Philharmonic audiences into a frenzy during the mid-Forties, but his mellower, more musical side was often overlooked. That side comes through in this album with pioneer Hammond organist Wild Bill Davis, which was recorded in France six years ago. Jacquet's association with Davis goes back to the 1940 Milt Larkins orchestra (in which Davis was still playing piano); each went his own way later, but they worked very well together on this reunion date. The organ/tenor combination sounds a bit dated now (it was dominant in the mid-Sixties), and the r-&-b style of *Pamela's Blues* is still as boring as today's funk, but on the whole this is a good album by two men we have not heard much from lately. I have to admit that I prefer to listen to what Dexter Gordon has to say these days, but that may be only because he has been recorded in more favorable settings. Reuniting Jacquet with Gordon seems like a very logical idea that Columbia should seriously consider. C.A.

RECORDING OF SPECIAL MERIT

HANK JONES/TONY WILLIAMS: *The Great Jazz Trio at the Village Vanguard*. Hank Jones (piano); Ron Carter (bass); Tony Williams (drums). *Moose the Mooche; Naima; Favors; 12 + 12*. INNER CITY IC 6013 \$7.98.

Performance: **Very together**
Recording: **Could be better**

It was Tony Williams' idea to combine his talent with that of Hank Jones and Ron Carter for a week at New York's Village Vanguard in the spring of 1975. A year later, the three formidable players were reassembled for a recording session with Japanese saxophonist Sadao Watanabe, and in February 1977 they collaborated for the third time, again at the Village Vanguard. This album is the first of two volumes resulting from the 1977 date; it was recorded for the Japanese East Wind label, which also arranged for the Watanabe session.

That Jones, Carter, and Williams are a winning combination should come as no surprise when one considers their individual merits. But, though Carter and Williams spent fruitful time together in the Miles Davis rhythm section, this is not what is known as a "working" group, and combining even the greatest of individual talents does not guarantee a successful joint effort. In this case, it *does* work: in fact, the rapport and cohesiveness of the trio could not be better if they had worked together on a regular basis. My only complaint is that Jones' piano is poorly recorded. As the notes point out, the small Village Vanguard poses recording problems in general, but some of the problems I hear on this album seem traceable to the recording engineer.

Don't let that deter you from acquiring this album, though, for the music is without flaw, and the second volume (which will also be released here by Inner City) is something to look forward to. C.A.

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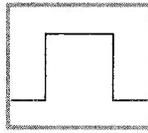
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