

**SPECIAL
TAPE ISSUE**

MARCH 1983 • \$1.25

Stereo Review

How to Choose a Cassette Deck

How to Make Better Tape Recordings

How to Evaluate Frequency Response

Equipment Test Reports

- **Revox B710 MkII Cassette Deck**
- **IMF Professional Monitor Speaker System**
- **Harman Kardon CD91 Cassette Deck**
- **AudioSource EQ-One
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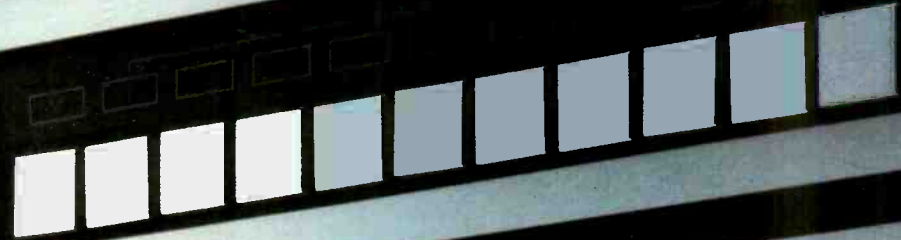
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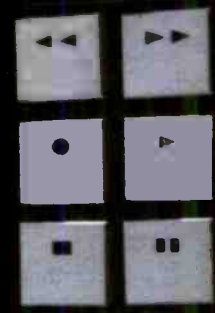
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MARCH 1983 • VOLUME 48 • NUMBER 3

Equipment

NEW PRODUCTS

Roundup of the latest audio equipment and accessories..... 13

AUDIO QUESTIONS AND ANSWERS

Digital Slowdown?, Undriven Drivers, A.C. Overload..... LARRY KLEIN..... 20

TAPE TALK

Against the Grain, Track Compatibility, Muted Highs, Signal Peaks..... CRAIG STARK..... 24

CAR STEREO: ROAD AND LAB TESTS

Blaupunkt CR-3001H..... CHRISTOPHER GREENLEAF AND JULIAN D. HIRSCH..... 26

TECHNICAL TALK

Upgrading Your Stereo System—Part I..... JULIAN D. HIRSCH..... 28

EQUIPMENT TEST REPORTS

Hirsch-Houck Laboratories test results on the Revox B710 MkII cassette deck, IMF Professional Monitor speaker system, Harman Kardon CD91 cassette deck, AudioSource EQ-One graphic equalizer/analyzer, and Dynavector DV10X Type 3 phono cartridge..... JULIAN D. HIRSCH AND CRAIG STARK..... 31

HOW TO CHOOSE A CASSETTE DECK

Deciding which features you really need..... CRAIG STARK..... 60

FREQUENCY RESPONSE

How to evaluate the specifications..... PETER W. MITCHELL..... 66

HOW TO MAKE A GOOD CASSETTE RECORDING

A few simple rules for getting the best out of your equipment..... DAVID RANADA..... 71

Music

THE BASIC REPERTOIRE

Recommended recordings of the orchestral essentials..... RICHARD FREED..... 58

BEST RECORDINGS OF THE MONTH

Schumann: Symphony No. 3 ("Rhenish")..... 79
Donald Fagen: "The Nightfly"..... 81
Purcell: The Fairy Queen..... 82
Little Steven & the Disciples of Soul..... 82

CLASSICAL MUSIC

Mozart: Requiem; Other Sacred Works..... 86
Rameau: Anacréon..... 88
Rossini: Mosè in Egitto..... 90
Smetana: The Bartered Bride..... 92

POPULAR MUSIC

Arthur Blythe Quintet: "Elaborations"..... 100
"The Adventures of Johnny Cash"..... 102
Thelonious Monk..... 104
"Casino Lights"..... 106
Mike Lipskin: "Harlem Stride Piano"..... 108
John Renbourn Group: "Live in America"..... 110

Regulars

BULLETIN..... CHRISTIE BARTER AND GORDON SELL..... 5

SPEAKING MY PIECE..... WILLIAM LIVINGSTONE..... 6

LETTERS TO THE EDITOR..... 9

GOING ON RECORD..... CHRISTIE BARTER..... 56

ADVERTISERS' INDEX..... 114

COVER: Design by Borys Patchowsky; photo by Bruce Pendleton. See pages 31 and 40 for Hirsch-Houck Laboratories' test reports on the Revox B710 MkII (top) and Harman Kardon CD91 cassette decks.

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Stereo Review BULLETIN

Edited by Christie Barter and Gordon Sell

● **CES NEWS FLASH:** As we went to press the Winter Consumer Electronics Show was just closing its doors....The Beta format VCR manufacturers, Aiwa, Sanyo, Marantz, NEC, Sony, Teknika, Toshiba, Sears, and Zenith, introduced Beta hi-fi with an 80-dB S/N and flat frequency response....Also, Nakamichi and Pioneer joined the Beta group.... Carver is developing an add-on car stereo noise-reduction box based on the TX-11 tuner....Jensen demonstrated an audio-video receiver with a decoder that extracts four channels from a Dolby surround-sound movie track. ...The full CES wrap-up will be in our next issue.

● **WAGNER ON THE TUBE.** Texaco's Live from the Met series on PBS continues this month with Tannhäuser on March 28 at 8 p.m. The title role will be sung by Richard Cassilly. Others in the cast include Eva Marton, Bernd Weikl, Tatiana Troyanos, and John Macurdy. James Levine will conduct. Stereo simulcast will be available in some cities. Check local stations.

● **PRICE CUTS** on records and tapes continue, one of the most sweeping being the \$2 knock-down on over 1,000 titles in the Warner/Elektra/Atlantic catalog. The new list price for these LP's and cassettes, all in release for a year or more, is \$6.98, down from \$8.98....Even more drastic is the \$2 cut on all product by WEA's Australian subsidiary to combat the "cancer" of home taping....The classical Arabesque label has dropped the price on both its analog and digital LP's to \$7.98.

● **AM STEREO UPDATE:** Sansui is introducing a car stereo, Model ST-7, that receives and processes all four types of AM stereo broadcasts. It should be available before June. No price has been set....National Semiconductor will supply integrated circuits that decode Magnavox AM stereo broadcasts to fourteen electronics manufacturers in Hong Kong, Taiwan, and South Korea. Most of these companies produce radios that are sold as "house brands" in this country. Products will be on the

shelves by early summer. At present, only WOWO in Fort Wayne, Indiana, is broadcasting using the Magnavox system....Jensen has announced its preference, after testing all the AM stereo systems, for the one developed by the Harris Corporation.

● **COUGAR TRACKS:** The tally is in, and the best-selling album of 1982 was John Cougar's "American Fool" on Riva/PolyGram. The album's sales of 2.5 million beat out its nearest competitor, Asia's debut LP on the Geffen label, by 500,000 copies.

● **VIDEO GAMES FOR AUDIOPHILES.** Future Pac-Man addicts may know the end is near when they can hear the monsters breathing down their necks. A company called Ultravision has developed a video game with a built-in two-speaker sound system that "enhances special effects such as reverberation, time delay, and echo." Frequency response, stereo separation, signal-to-noise ratio, and similar specifications have not been revealed.

● **TECH NOTES:** Stereo TV has suffered a setback. One of the three contenders, Telesonics, has questioned the testing procedures used by the Electronics Industries Association. The EIA is now revising the tests and hopes to finish testing by midsummer. There is concern in the industry that the FCC will not wait for the EIA to recommend a stereo TV system and will make a "free-market" decision similar to last year's AM stereo ruling, which allowed any system that didn't affect standard broadcasts....Harman International, the parent company of JBL, has bought Infinity Systems. The two loudspeaker companies will retain their separate design, engineering, and management organizations....French electronics giant Thomson-Brandt (Dual, Nordmende, and Saba) is negotiating to buy a controlling interest in Grundig A.G. of West Germany. Thomson officials, it is reported, have said the combination would be able to compete successfully with the Japanese consumer electronics companies.

Speaking My Piece

By William Livingstone



Editor Livingstone (right) with the Swedish baritone Håkan Hagegård

AUDIO/VIDEO WAGNER

IN 1879 the French composer Emmanuel Chabrier went to Munich with friends to attend a performance of Wagner's *Tristan und Isolde*. It was Chabrier's first *Tristan*, and when the music began he started to cry so noisily that one of his companions asked whether he was sick. Chabrier replied that he was quite well and said, "It's just that I've had to wait ten years to hear that A in the cellos."

Back then Wagner's influence on Parisian artistic circles was so strong that French cultural chauvinists feared for the survival of pure French music. After the era of Debussy and Ravel, it's hard to understand how French intellectuals of the 1880's got so worked up over the issue of Wagnerian musical imperialism.

It is even harder in 1983, the year in which we are observing the centenary of Wagner's death, to imagine a time when one had to travel to hear any of his major works. The electronic means of reproducing music have given us easy access to all of them. There are five stereo recordings of *Tristan und Isolde* now available, and another from Philips is among the Wagnerian releases scheduled for this year.

For me the greatest event in the tenth anniversary season of Exxon's Great Performances series on PBS is the telecast now being shown of Wagner's monumental four-opera cycle *The Ring of the Nibelung*. This performance of the *Ring*, taped at the Bayreuth Festival, was shown in England last fall in ten weekly installments. According to our London Editor, Henry Pleasants, it succeeded so well as a television series about sex, greed, and power that it was jokingly referred to as *The Cosmic Upstairs, Downstairs* or as *Dallas on the Rhine*.

Ideally the *Ring* should be seen complete in four consecutive evenings. I

don't know why we are getting it in seven installments spread out from January 24 to June 13 with no segments in March or May. Is fare from the Rhine considered unsafe in months beginning with "M"? Are executives at PBS and Exxon afraid that American culture is too fragile to sustain the impact of a complete *Ring* in one week?

The French no longer worry about Wagnerian imperialism, but the current French minister of culture, Jack Lang, has called for resistance to cultural influences from the United States and the bombardment of images from the audio/visual industry. He's probably worried about video games and the fallout from such movies as *E.T.*, *the Extra-Terrestrial* or *Star Wars* and *The Empire Strikes Back*.

John Williams, who composed the scores for those movies, once told me that if Wagner were alive today he'd be a film composer. And come to think of it, there are certain mythic similarities between the *Ring* and the *Star Wars* cycle of movies.

If Lang is really worked up about the impact on French cultural life of the audio/video software generated by such movies as *Star Wars*, I would remind him that this year the same industry will bring the music of Wagner to more people than could have heard it during his lifetime. Also, the TV *Ring* we are seeing was produced by one Frenchman, Patrice Chéreau, and conducted by another, Pierre Boulez. If French artists can control all of Wagner's gods and monsters, in time they can surely manage to subdue Luke Skywalker and Darth Vader.

But watch out! The audio/video industry will get a big boost on May 27 when *Revenge of the Jedi* has its world première. It's the third film in the *Star Wars* cycle, and we've all had to wait three years for that. □

Stereo Review

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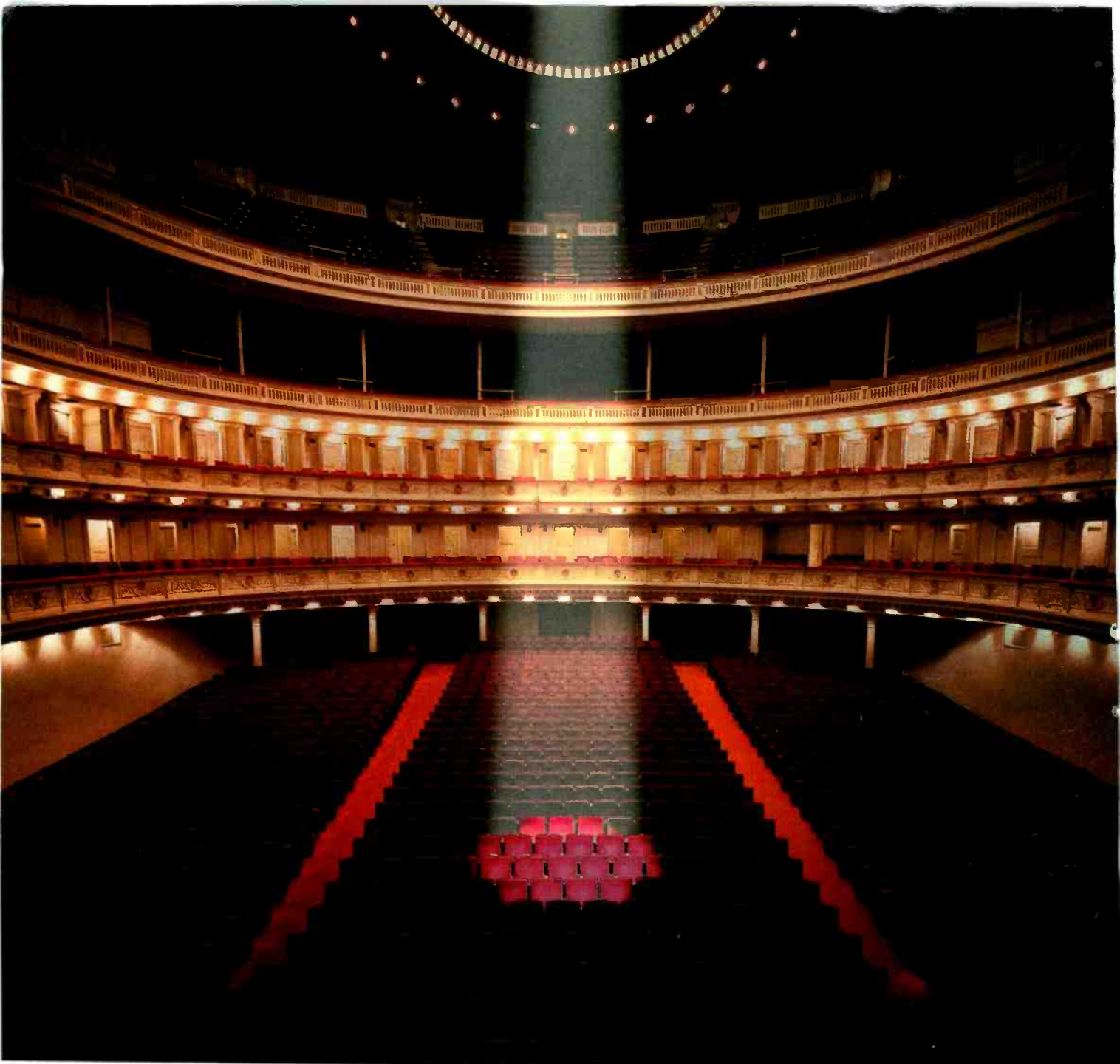
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Letters

Car Stereo

● I was glad to see the January feature comparing car stereos and hope to see more in the future. An important issue that was missed, however, was warranty protection. I would certainly choose a unit with a one- or two-year warranty over one with only ninety days, especially in view of the hourly rate for electronics repairs. I have yet to figure out why manufacturers can produce so-called "car receivers" that carry price tags like those of home receivers and yet give only ninety days to a year of warranty coverage—unless, of course, they're aware of just how much punishment their products can take, and for how long.

RICHARD D. ANDERSON
Dade City, Fla.

Tape Tax Again

● I am seething at the January letter by Joseph A. Aniello regarding the proposed tax on blank tapes. Every record company seems to try to cheapen its product while shouting hosannas about its superiority. Only a very few, mostly foreign, put out quality records today. When I get a new record, the first thing I do (after cleaning it thoroughly, along with my stylus) is to zap it with a Zerostat and then dub it onto a cassette on the first playing. That way, from then on I can get all the frequencies I'm entitled to!

This may be another case in which whoever has the most money to support the politicians' campaigns will win, but we might defeat the tape-tax bill if we holler loud enough and strong enough. If they do put a tax on tape, the only recourse I see is to go to the black market or take up another hobby.

EDWARD J. LUDS
Mission Viejo, Calif.

● I agree with William Livingstone's November editorial opposing a royalty on blank tapes. It will be great for the lawyers, who will end up with most of those royalties in their pockets after representing the artists and record companies in their disputes over how to share the wealth.

Since the days of automatic sequence and stacking of records seem to be over, since each side of a disc has to be meticulously cleaned, etc., compared with playing a cassette tape, playing a record has become a royal pain in the neck. Because a beautiful performance excellently recorded on disc sounds far superior to any tape recording pirated from FM broadcasts, I keep on buying record after record; but because tapes are more convenient, the records seem to collect a lot of dust. I don't believe that price is the object. People will start spending money like mad to buy fine recordings

on disc as soon as they are made as convenient and easy to play as cassette tapes.

A. THOMAS PARKE, III
West Chester, Pa.

Jon Anderson

● Mark Peel's December review of Jon Anderson's "Animation" very predictably downgraded Anderson's voice, but the choice of words made my adrenalin flow. "Nails on a blackboard" more aptly de-



scribes such alleged singers as the vocalists in such bands as AC-DC, Rush, or Van Halen. It should have been applied to the "controlled screams" of Billy Squier on his trashy album that Mr. Peel reviewed in the same issue. I hope some day Mr. Peel wakes up and accepts Jon Anderson's crystal-clear vocal tone and exceptional range as a breath of fresh air among the current crop of undertalented commercial rockers.

Moreover, it doesn't require much familiarity with Anderson's songwriting to realize that *Surrender*, which Mr. Peel called "unbelievably naive," is a purely symbolic song. Mr. Peel, who was relieved to find the new songs "less pretentious" than Anderson's earlier material, may also be surprised to learn that there is a considerable audience for music that is intellectually stimulating, that is about more than making it with women or partying and rocking on a Saturday night.

PATRICK BECHER
Syracuse, N.Y.

Sinatra's Credits

● I appreciated Peter Reilly's January review of the Tommy Dorsey/Frank Sinatra sessions recently rereleased on RCA, but I must advise Mr. Reilly to file under the "never quite believe everything anyone says in liner notes" category the bit about the

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In sharp contrast the M-400a's power supply is signal responsive and highly efficient. It produces *exactly and only* the power the amplifier section needs from moment to moment to carry the signal with complete accuracy and fidelity.

Once the crudeness of conventional power supplies was overcome, a wholly uncompromised signal path was designed: Fully complementary topology from input to output; the latest, fastest, highest current transistors; direct coupling; linear metalized film capacitors; precision laser trimmed resistors; vapor-deposited 24 Karat gold connectors; and finally, an output inductor whose corner frequency is almost a quarter of a megahertz.

Audition the Carver M-400a and hear the difference: transparency, openness, detail. Without the clipping, distortion, and constraint of lesser amplifiers. With Carver the *pure* sound of music can be, very affordably, yours.

CARVER

Powerful • Musical • Accurate

P.O. Box 664 14304 N.E. 193rd Pl. Woodinville, WA 98072

CIRCLE NO. 8 ON READER SERVICE CARD

original discs not crediting Sinatra but merely stating "with vocal refrain" on the label.

Ridiculous. I had all and still have several of those 78's, and Sinatra's name appeared on every one, including his first side. As a matter of fact, Dorsey always credited his vocalists, even the lesser-known Allan Dewitt, Anita Boyer, Buddy Gately, and others. So, as I said, don't always believe those liner notes—except mine, of course. (Come to think of it, I did goof on an obscure saxophonist a while back, so you can add me to that list.)

GEORGE T. SIMON
New York, N.Y.

Previn and the Pittsburgh

● We wish to correct the statement regarding André Previn's tenure with the Pittsburgh Symphony Orchestra in January's Classical Music "News Briefs." Although Maestro Previn has accepted the post of music director of London's Royal Philharmonic Orchestra beginning in 1985, the appointment will have virtually no effect on his continuing activities with the Pittsburgh. Recently, Previn said, "I will continue to do fifty concerts here [in Pittsburgh] annually, plus the various tours, recordings, and TV dates. With the Royal Philharmonic, I will do about ten."

MARSHALL W. TURKIN
Managing Director
Pittsburgh Symphony Orchestra
Pittsburgh, Pa.

Who's Boring?

● I strongly disagree with Steve Simels's December review of "It's Hard" by the Who. I feel that this is one of their best albums since "Who's Next." To say it is "boring" and "flat" is unbelievable. Pete Townshend's and John Entwistle's lyrics may not equal the classic writings of Shakespeare, but I don't think you could call their messages "graceless."

JEFF TIBBETTS
Coram, N.Y.

Air Supply

● I don't know about anyone else, but I could have gone all my life without being told that Air Supply recently tied the Beatles for the longest string of consecutive Top Five hits by a debut act (December Popular Music "News Briefs"). This is the most depressing thing I've heard since I found out that Paul McCartney really *is* alive and that he really *did* write *Uncle Albert*.

KAREN SEXTON
Orange, Calif.

Honorable Mention

● Regrettably omitted from the list of Honorable Mentions for 1982 Record of the Year Awards in the February issue was the DG Archive recording of Purcell's sacred choral music sung by the Choir of Christ Church, Oxford, under Simon Preston's direction (2723 076).



ROCK 'N ROLL WILL NEVER DIE

Presenting High Bias II and the Ultimate Tape Guarantee.

Memorex presents High Bias II, a tape so extraordinary, we're going to guarantee it forever.

We'll guarantee life-like sound.

Extraordinarily flat frequency response at zero dB recording levels, combined with remarkably low noise levels, means music is captured live. Then Permapass™, our unique oxide-bonding process, locks each oxide particle—each musical detail—onto the tape. So music stays live. Not just the 1st play. Or the 1000th. But forever.

We'll guarantee the cassette.

We've engineered every facet of our transport mechanism to protect the tape. Our waved-wafer improves tape-wind. Silicone-treated rollers insure precise alignment and smooth, safe tape movement. To protect the tape and mechanism, we've surrounded them with a remarkable cassette housing made rigid and strong by a mold design unique to Memorex.

We'll guarantee them forever.

If you ever become dissatisfied with Memorex High Bias II, for any reason, simply mail the tape back and we'll replace it free.

YOU'LL FOREVER WONDER,

**IS IT LIVE,
OR IS IT
MEMOREX**





Come to where
the flavor is.



Marlboro Red or Longhorn 100's—
you get a lot to like.

© Philip Morris

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

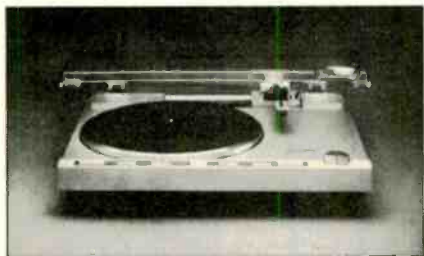
Kings: 16 mg "tar," 1.0 mg nicotine—100's: 16 mg "tar,"
1.1 mg nicotine av. per cigarette, FTC Report Dec '81

New Products

Latest Audio Equipment and Accessories

Phase Linear Turntable Has Graphite Tone Arm

□ Phase Linear's 8000A turntable features a polymer-graphite tangential-tracking tone arm driven by a direct-induction linear motor. Tracking error is sensed by an opto-electronic detector, and the tone arm is



driven so that the error is corrected. The 12¼-inch platter is driven directly by a quartz-locked-PLL-controlled motor, whose Stable Hanging Rotor is said to eliminate "platter wobble." A double isolation suspension system minimizes acoustic feedback and susceptibility to vibration. All controls (power, 33/45, disc diameter, repeat, horizontal cueing, tone-arm lift, and start/stop) are accessible with the unit's dust cover closed.

Wow-and-flutter is given as less than 0.013 per cent (wrms); signal-to-noise ratio is greater than 78 dB (DIN-B). Speed deviation is less than 0.002 per cent, while speed drift is less than 0.00008 per cent per hour at 33⅓ rpm. The turntable reaches full speed in 0.6 seconds. Tone-arm length is 7½ inches. Headshell weight is 10.5 grams. The range of usable cartridge weights extends from 4 to 14.5 grams. The 8000A measures 19½ x 6 x 17½ inches and weighs 26½ pounds. Price: \$650.

Circle 120 on reader service card

LofTech's All-in-One Audio Test Instrument

□ The LofTech TS-1 multipurpose audio test set incorporates a sine-wave oscillator, a decibel meter, and a frequency counter in a single compact unit. A comprehensive in-



struction booklet included with the TS-1 shows how to use the unit for level calibration and adjustment of mixers and tape recorders, how to measure frequency response of recorders and other stereo components, and how to verify proper operating levels in an audio signal chain. Other capabilities covered in the manual include measuring impedance, troubleshooting loudspeakers, determining loudspeaker resonance frequencies, setting recorder bias and equalization, and measuring signal-to-noise ratios.

The sine-wave oscillator can be tuned from 15 to 30,000 Hz with an output-level accuracy of ± 0.25 dB from 20 to 20,000 Hz. Distortion of the sine wave is 0.3 per cent maximum. Oscillator output level is adjustable between -70 and $+18$ dBV (0 dB = 0.775 volt). Output impedance is 50 ohms, unbalanced.

The decibel meter reads out in whole decibels on a numerical LED display over a

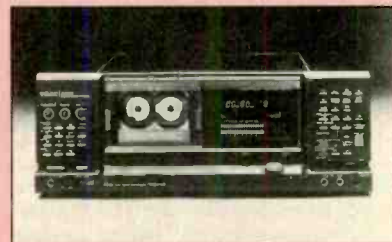
range of -50 to $+24$ dBV. Meter accuracy is ± 1 dB from 20 to 20,000 Hz. The 0-dB reference level can be changed from -10 to $+8$ dBV with a rear-panel control. The frequency-counter section, which measures frequencies from 1 Hz to 99.99 kHz, reads the output of the oscillator or an external frequency input. Frequency resolution is 1 Hz from 1 to 9,999 Hz and 10 Hz from 10 to 99.99 kHz; accuracy is ± 1 count. Frequency-meter input level can be from -40 to $+24$ dBV.

All connections of the LofTech TS-1 are with ¼-inch two-conductor phone jacks. The test set measures 8 x 2½ x 6¼ inches and has a power requirement of 115 to 120 volts a.c. Price: \$299. For the nearest dealer write: Phoenix Audio Laboratory, Dept. SR, 91 Elm Street, Manchester, Conn. 06040.

Circle 121 on reader service card

(Continued next page)

Teac's Z-Series Cassette Decks



□ The Teac Z-Series three-head cassette decks contain three major noise-reduction systems: Dolby-B, Dolby-C, and dbx. Other features common to the three decks in the line include a solid die-cast chassis for stable alignment of the transport system, a tape timer reading out in minutes and seconds, the Computomatic Program System of programmable-sequence playback, fluorescent peak-reading meters, and motorized head-assembly loading.

The top-of-the-line Z-7000 (shown) is a three-head, three-motor recorder with fully automatic bias, level, and equalization calibration. A reference button sets the parameters at factory-calibrated levels. The dbx noise-reduction system can also be switched to decode dbx-encoded discs. An on-board microprocessor controls such convenience features as the tape counter/timer, search-to-zero and search-to-cue functions, the Computomatic Program System for programming playback of up to nineteen selections, Intro Check (which plays the first 10 seconds of each cut), search-to-record (for rewinding back to where re-

cording was initiated), and a spot-erase system that lets the user edit out unwanted program material after it has been recorded.

The transport of the Z-7000 has an FG servo direct-drive capstan motor and two coreless direct-drive reel motors. The closed-loop dual-capstan system keeps wow-and-flutter to 0.018 percent. Additional features include a Sendust record head, a ferrite playback head, -40 - to $+10$ -VU fluorescent meters, variable pitch control, automatic fade-in/fade-out controls, self-contained timer operation, a built-in headphone amplifier, and a remote-control jack. Rated signal-to-noise ratio with dbx on is greater than 100 dB with metal tape. Frequency response is 20 to 24,000 Hz ± 2 dB (metal tape).

The Z-6000 has fewer automatic tape-search features and provisions for manual tape optimization. The Z-5000 has only two motors but retains the manual tape-calibration adjustments. Prices: Z-7000, \$1,800; Z-6000, \$1,400; Z-5000, \$800.

Circle 122 on reader service card

New Products

Adcom Improves the GFA-1 Power Amplifier

Adcom has introduced the GFA-1A stereo power amplifier as an improved version of its GFA-1. A sophisticated new fail-safe protection system assures safe operation under the most demanding conditions. The heart of the system is a real-time analog computer that continuously monitors circuit temperature, current, and voltage. Automatic shutdown results if a fault condition is detected. An integral two-speed



fan cools the output transistors to maintain safe operation at high power levels. Peak-indicator lights alert the user to near-overload conditions. Like the GFA-1, the GFA-1A delivers 200 watts per channel into 8-ohm loads with less than 0.05 per cent total harmonic distortion from 20 to 20,000 Hz. Also like its predecessor, the GFA-1A employs a "balanced-bridge" output configuration. Price: \$450.

Circle 123 on reader service card

JBL's High-Performance Compact Loudspeaker

As the most compact three-way model in JBL's L Series of loudspeakers, the L86 shares the same midrange transducer and



much of the technology of larger models in the series. The 1-inch dome radiator in the tweeter is driven by a 1-inch copper voice coil. The 5-inch midrange cone driver is said to handle program peaks with mini-

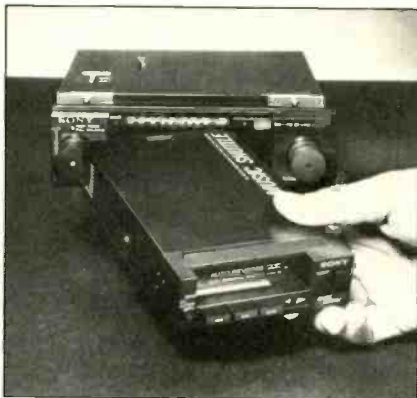
mum distortion. The 8-inch bass driver utilizes a symmetrical-field magnetic structure for reduced second-harmonic distortion. The woofer cone is coated with Aquaplas, a special chemical that damps spurious cone resonances. The vertical arrangement of the drivers is said to assure a stable, centered image during playback. The enclosure is cut from 3/4-inch compressed wood and veneered in American black walnut. The brown cloth grille is removable.

Nominal impedance of the L86 is 8 ohms. Crossover frequencies are 800 and 3,700 Hz. Sensitivity is 88 dB sound-pressure level at 1 meter with a 1-watt input. Dimensions are 21 3/8 x 13 x 10 inches. Price: \$295 each.

Circle 124 on reader service card

Sony Personal Tape Player Works As Car Stereo Unit

Sony's XRM-10 Music Shuttle is an in-dash AM/FM stereo receiver with a removable cassette player that becomes a separate personal portable tape player with headphones. The system is said to combine the



security of removable car stereo with the flexibility of alternating car and portable use. The player alone weighs 1 3/4 pounds.

A touch of a button releases the cassette-player module from the in-dash receiver. A supplied battery pack, headphones, and carrying case convert the player into a portable stereo unit. The radio portion of the receiver will continue to function after the cassette module is removed. Each major component of the Music Shuttle can be purchased separately so that users can install extra receivers in a second car or other vehicle and shuttle the cassette module between them.

The receiver portion of the XRM-10 has four speaker outputs with built-in fader control and a system-EQ switch to tailor the response for a car. The tape player is a "metal-capable" unit with auto-reverse. The servo-controlled motor and flywheel assembly are said to minimize audible wow and flutter.

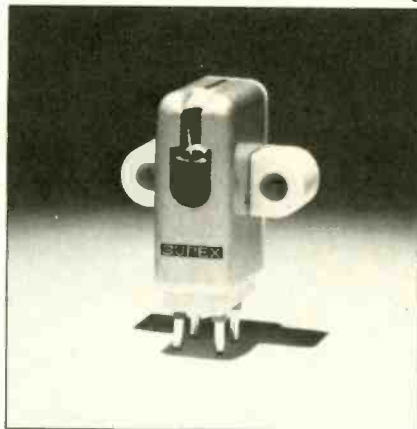
Tape-player specifications include a frequency response of 40 to 12,000 Hz \pm 6 dB. Signal-to-noise ratio is 57 dB. Wow-and-flutter is 0.12 per cent wrms. The tuner section's 50-dB-quieting sensitivity is 20 dBf. Capture ratio is 3 dB. Signal-to-noise ratio in stereo is 60 dB. The amplifier section is rated at 4 watts per channel into 4-ohm loads from 180 to 10,000 Hz with no more than 1.0 per cent total harmonic distortion. Maximum output power is 6 watts per

channel. System EQ is +6 dB at 100 Hz and +3 dB at 10,000 Hz. Price: \$379.95.

Circle 125 on reader service card

Supex's High-Output Moving-Coil Cartridge

According to Supex, the limitation of high-output moving-coil cartridges has traditionally been that the additional coil and armature material necessary to boost output compromised rise time and tracking



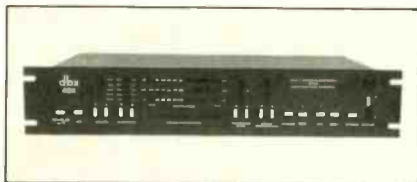
ability. With the SDX-2000, Supex has used a unique coil-winding configuration together with high-energy samarium-cobalt magnets to increase cartridge output without increasing moving mass.

The SDX-2000's boron-pipe cantilever is almost as rigid as one of diamond but has lower mass. The stylus is a line-contact grain-oriented diamond. Frequency response is given as 10 to 30,000 Hz \pm 2 dB. Output voltage is 1.75 millivolts with a 3.54-cm/sec groove velocity; channel balance is \pm 0.5 dB at 1,000 Hz. Cartridge impedance is 78 ohms; recommended load resistance is 47,000 ohms. Compliance is given as 11×10^{-6} cm/dyne. Recommended tracking force is 1.9 grams. Price: \$500.

Circle 126 on reader service card

dbx Expander Has "Impact Restoration"

The dbx 4BX remote-control dynamic-range expander incorporates an "impact restoration" circuit. The circuit was devel-



oped to bring greater impact to the audio signal, increasing the "punch" and immediacy of musical attacks by restoring the transients that are clipped, dulled, or muted during recording or broadcasting.

Offering up to 20 dB of dynamic-range expansion, the 4BX has separate expansion bands for high, middle, and low frequencies. A handheld remote wireless "Logicontrol" allows the user to set volume, expansion impact restoration, and transition levels. Vertical multisegment LED displays

ADVENT

The one thing we never change.

During the last fifteen years, we've made a lot of improvements on our Advent speakers. 137 to be exact. We've redesigned woofers and tweeters. Crossover networks and phase plates. Cabinets and mounting hardware. Even screws. But there's one thing we haven't changed. That's the value. The ability of an Advent speaker to out-perform many speakers that cost more. How? By making changes that sound good not just look good. While other speaker companies have spent their time adding all manner of dials, knobs and wild grilles, we've quietly gone about the business of perfecting the two-way speaker.

For example, our newest change is the Advent "Direct Report" tweeter. It is a parabolic rather than hemispheric design. And the special phase plate for the tweeter has been tapered to improve dispersion. Stereo Review liked it as much as we did. They said, "We cannot recall ever having measured a front-radiating dome tweeter whose dispersion equaled that of the new Advent design."

We think you'll agree with Stereo Review. The new tweeter is indeed exceptional. The change substantially improved the sound quality. But it hasn't substantially changed the price. You see, value has always been a part of the Advent legend. And that's something we haven't changed... never will.

For the location of the Advent dealer nearest you, call toll free 800-323-1566. (In Illinois call 800-942-0502.)



ADVENT

The legend continues.

CIRCLE NO. 59 ON READER SERVICE CARD

*Excerpted by permission, Jan. 1981, Stereo Review.

ADVENT

ADVENT

New Products

show the settings while four horizontal LED's indicate the amount of expansion taking place. A lighting control adjusts LED brightness. The rack-mountable device measures $3\frac{1}{2} \times 17\frac{5}{16} \times 12\frac{1}{4}$ inches. An optional wood side-panel kit will be available.

Maximum expansion ratio for each band is 1.5:1. Impact-restoration gain is 0 to +12 dB. Transition levels may be set between 30 and 300 millivolts. Frequency response at 1:1 expansion is 20 to 20,000 Hz ± 0.5 dB. Total harmonic distortion is less than 0.1 per cent; intermodulation distortion is at most 0.15 per cent. Overall dynamic range is 106 dB. Input impedance is 1 megohm; output impedance is 200 ohms. Price: "under \$1,000."

Circle 127 on reader service card

R. G. Dynamics' TV-Sound Processor

□ The R. G. Dynamics VC-1 Videoscopic Stereo Phasor connects to most television sets and nearly all video recorders and processes the sound in three ways. A dynamic-range expander offers up to 15 dB of



expansion to "restore and deliver the depth, fullness, impact and clarity" of the original production sound. A stereo-synthesis circuit provides two different stereo-synthesis functions. Three noise/hiss filter networks allow the user to adjust the noise reduction for any video source's characteristics. Distortion is no more than 0.12 per cent. TV-headphone input impedance is 1 kilohm; VCR-audio input impedance is 30 kilohms. Dimensions are $8\frac{7}{8} \times 8\frac{1}{8} \times 2\frac{1}{2}$ inches. Price: \$199. For more information call 800-323-3665 (in northeast Illinois call 312-673-7003). R. G. Dynamics, Dept. SR, 6440 North Ridgeway Avenue, Lincolnwood, Ill. 60645.

Circle 128 on reader service card

Cerwin-Vega Speaker Is "Digital-Ready"

□ Cerwin-Vega's D-4 three-way floor-standing speaker system is said to meet the requirements of a digital playback system, including high phase accuracy, very low distortion, wide frequency response, rapid transient response, wide dynamic range,

high efficiency, and high power-handling capability. The D-4 has a 10-inch high-out-



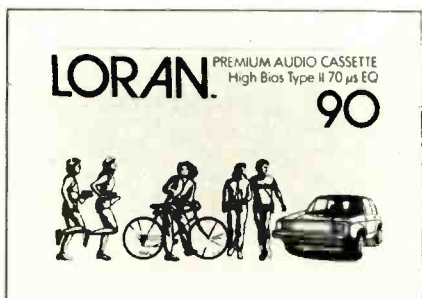
put woofer in a cast-aluminum frame that crosses over at 700 Hz to a 6-inch midrange. This crosses over at 3,500 Hz to a 1-inch-voice-coil horn driver. Mid- and high-frequency level controls are provided as well as a high-frequency protective circuit breaker. The enclosure is a vented, direct-radiating design. The vinyl covering is available in either simulated oak or walnut pattern. Chocolate-brown grilles are provided with the oak cabinets, black grilles with the walnut. A pedestal base comes with each speaker.

Usable frequency response is given as 27 to 20,000 Hz. Minimum recommended amplifier power is 5 watts; maximum is 100 watts rms. The 8-ohm speaker will develop a 92-dB sound-pressure level at 1 meter with a 1-watt input. Maximum output is 112 dB SPL at 1 meter when driven at full power. Dimensions are $33\frac{1}{2} \times 14 \times 10\frac{1}{16}$ inches. Price: \$700 per pair.

Circle 129 on reader service card

Loran Improves Two Tape Formulations

□ Loran has improved its High Bias Type II and Normal Bias Type I cassette tapes. Both tapes still come in Lexan cassette shells for stability and durability through a wide range of operating temperatures (-60



to +250 degrees F.). The new High Bias Type II has an increased maximum output level for greater headroom and increased output level at 10 kHz for a brighter high-end response. The new Normal Bias Type I also has a slightly elevated high-frequency response and improved high-frequency

headroom. Loran says the 55.8-dB signal-to-noise ratio of its Normal Bias Type I "is the highest of any type-I tape on the market." The price of a C-90 tape of either type is \$7.95.

Circle 130 on reader service card

Seven New Speakers From Infinity Systems

□ Infinity Systems' new, lower-priced speakers all use polypropylene low-frequency drivers, and six of the seven models also use EMIT samarium-cobalt, etched-planar-diaphragm tweeters. The Infinity Reference Standard Models 5, IIIA, 6, and 4 (left to right in photo) all use a new polypropylene-dome midrange driver. The dome is driven around its entire periphery so that the voice coil can more accurately control



diaphragm movement. This "PolyDome" driver is claimed to have very low distortion or coloration and very broad dispersion characteristics. "Diffraction distortion" from the build-up of out-of-phase diffracted sound waves on the front and sides of speaker cabinets is said to be reduced by the curved edges of the Reference Standard enclosures. Nominal impedance of the four speakers is given as "4 to 8 ohms."

The largest model, the Reference Standard IIIA, uses two 10-inch polypropylene woofers, a PolyDome midrange, and an EMIT tweeter. Frequency response is given as 35 to 32,000 Hz ± 3 dB. Recommended amplifier power is 50 to 200 watts per channel. Crossover frequencies are 600 and 4,000 Hz. Dimensions are $48 \times 18 \times 7\frac{1}{4}$ inches. Price: \$1,170 per pair. The smallest unit shown, the Reference Standard 6, has one 8-inch woofer along with its PolyDome midrange and EMIT tweeter. Frequency response is given as 45 to 32,000 Hz ± 3 dB. Suggested amplifier power is 35 to 100 watts per channel. Dimensions are $22 \times 13\frac{1}{2} \times 10$ inches. Price: \$259 each. Other models in the line are the smaller RS7, RS8, and RS9, which range in price from \$199 to \$98.

Circle 131 on reader service card

Linn's Moderate-Priced Separate Tone Arm

□ The Linn Basik LVX arm incorporates some of the features of the more expensive Linn Ittok arm. Like the Ittok, the LVX is a rigid, straight-tube arm with a massive main-pillar/horizontal-bearing assembly

MAXELL IS PLEASED TO PRESENT AN EVEN HIGHER PERFORMANCE TAPE.



If you're familiar with Maxell UD-XL tapes you probably find it hard to believe that any tape could give you higher performance.

But hearing is believing. And while we can't play our newest tape for you right here on this page, we can replay the comments of Audio Video Magazine.

"Those who thought it was impossible to improve on Maxell's UD-XL II were mistaken. The 1981 tape of the year award goes to Maxell XL II-S."

How does high bias XL II-S and our normal bias equivalent XL I-S give you such high performance? By engineering smaller and more uniformly shaped epitaxial oxide particles we were able to pack more into a given area of tape. Resulting in a higher maximum output level, improved signal-to-noise ratio and better frequency response.

To keep the particles from rubbing off on your recording heads Maxell XL-S also has an improved binder system. And to eliminate tape deformation, XL-S comes with our unique Quin-Lok Clamp/Hub Assembly to hold the leader firmly in place.

Of course, Maxell XL II-S and XL I-S carry a little higher price tag than lesser cassettes.

We think you'll find it a small price to pay for higher performance.



IT'S WORTH IT.

Maxell Corporation of America, 60 Oxford Circle, Moonachie, N.J. 07074
CIRCLE NO. 58 ON READER SERVICE CARD

New Products

and close-tolerance, temperature-stable vertical bearings. The LVX departs from Ittok design in that it has an all-black finish



and a detachable headshell. To insure a rigid connection between the headshell and the arm tube, a C-shaped clamp is locked securely around the headshell by tightening an Allen set screw.

Effective length of the arm is 230 millimeters (mm); overall length is 284 mm; overhang is 18 mm. Necessary clearance behind the arm is 55 mm. Friction is given as less than 20 milligrams. The LVX accepts cartridges weighing from 2 to 10 grams with stylus forces of 0 to 3 grams. The arm comes with a medium-compliance, elliptical-stylus cartridge that tracks at 1.7 grams. Price: \$199. Audiophile Systems Ltd., Dept. SR, 6842 Hawthorn Park Drive, Indianapolis, Ind. 46220.

Circle 132 on reader service card

Fiesta Arts Imports Ricordi Opera Posters

Originally prepared for La Scala and painted in oil in the first decades of this century, eleven Art Nouveau posters announce



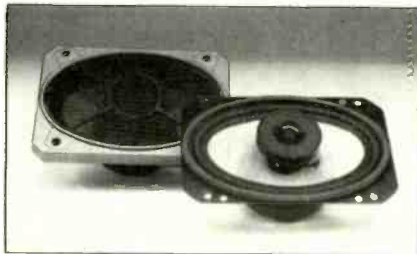
such operas as *Madama Butterfly*, *Tosca*, *Manon Lescaut*, *Turandot*, *Parsifal*, *La Bohème*, and *Adriana Lecouvreur*. The

posters measure 19½ x 27½ inches and are printed from archival stone matrices on heavy coated stock. Also available are other opera and popular-theater posters from the same era. Price: \$10 each (plus 75¢ postage when ordered direct). A color brochure is available for \$3 (refundable with first order) from Fiesta Arts, Inc., Dept. SR, Greenvale, N.Y. 11548.

Circle 133 on reader service card

Weather-Resistant Becker Car Speaker

The RCS 462 Radian-C-Series Poly Cone car speaker from Becker Electronics is said to be virtually impervious to mois-



ture, and it will not crack or dry out from constant exposure to ultraviolet radiation. The 4 x 6-inch speaker is for in-dash mounting; mounting depth is 1½ inches. Frequency response of the two-way, coaxial system is given as 100 to 20,000 Hz ± 6 dB. Nominal impedance is 4 ohms. Sensitivity is 90 dB sound-pressure level at 1 meter with a 1-watt input. Crossover to the ½-inch dome tweeter is at 5,500 Hz. Price: \$109. Becker Electronics Manufacturing Corp., Dept. SR, East Durham, N.Y. 12423.

Circle 134 on reader service card

Constant-Directivity Electro-Voice Speaker

Electro-Voice's CD Series Types 35 and 35i speaker systems are designed to have controlled directionality. A "Direktor" as-



sembly in front of the 1.5-inch dome mid-range driver controls its output so that it matches the spatial coverage of the 12-inch woofer at the 1,500-Hz crossover frequency. A similar assembly is in front of the 1-inch Kevlar-diaphragm tweeter. Thus virtually every frequency is directed into a defined and sufficiently wide volume. This controlled spatial coverage, it is claimed, largely eliminates diffraction effects and optimizes the speaker interaction with the listening room.

Axial frequency response under anechoic,

half-space conditions is said to be "essentially flat from 40 to 30,000 Hz." The acoustic coverage zone is held to 100 degrees by selection of the woofer size, crossover frequencies, and "Direktor" geometries. System sensitivity is 92 dB sound-pressure level with a 1-watt input at 1 meter. Minimum impedance is 5 ohms (nominally 6 ohms). Dimensions are 21¼ x 32¼ x 10½ inches.

The Type 35 is finished in an oak veneer; the Type 35i (shown) is finished in walnut. The speakers are essentially identical except that the Type 35i has a removable grille and an Automatic Power Sentinel driver-protection device. Both the Power Sentinel and the built-in speaker equalization controls are concealed behind the 35i's roll-down antique-brass control cover. Prices: Type 35, \$650; Type 35i, \$750.

Circle 135 on reader service card

Audio-Technica's Personal, Portable Record Player

Named "Mister Disc," Audio-Technica's AT770 personal, portable phono playback system contains turntable, tone



arm, cartridge, headphone jack, and volume control in a package just over 11 inches long, 4 inches wide, and 2½ inches high (folded for travel) weighing 2½ pounds.

The unit comes with a dual-magnet phono cartridge with diamond stylus and plays standard LP's and 45's. It is powered by three self-contained C cells or by the optional AT652a a.c. adaptor. Although designed for headphone listening through a supplied pair of collapsible headphones, the unit has a standard headphone jack for use with other headphones as well as line-out jacks for playing a disc through any standard component system.

The turntable portion of the player (which supports a disc only at the label area) has a "platter" driven through a belt by a d.c. motor. A supplied rubber chuck doubles as an LP disc stabilizer and a spindle adaptor for 45's. A carrying pouch is also supplied. Price: \$169.95.

Circle 136 on reader service card

NOTE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturers, who will respond directly to reader requests for further information.

Domestic inflation and fluctuations in the value of the dollar overseas affect the price of merchandise imported into this country. Please be aware that prices quoted in this issue are therefore subject to change.

INSIDE-OUT™ HEADPHONES.



Introducing Inside-Out™ MS 100 headphones from Sennheiser. If you thought you couldn't get the kind of lifelike musical reproduction from your portable that you get from the finest home equipment, prepare to think differently.

Most people who know audio know that Sennheiser's Open-Aire® design delivers sound that clearly surpasses even the most expensive home loudspeakers. It's unequalled in wide linear response, in transient ability, in ultra lightweight comfort.

Now comes the breakthrough.

For the first time you can have headphones rugged and reliable enough to bring you that same performance not only at home, but outdoors as well.

All thanks to the advanced electroacoustic technology that made Sennheiser a legend among recording studio technicians, astronauts, and audiophiles alike.

Of course, you'd expect Inside-Out headphones to cost more. But once you go to your Sennheiser dealer and put them on, you'll be so fascinated you won't want to take them off. Inside or out.

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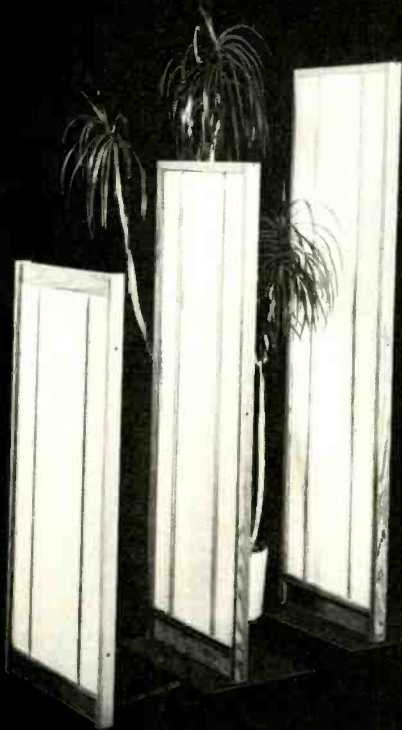
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CIRCLE NO. 27 ON READER SERVICE CARD

Audio Q. and A.

By Larry Klein



Technical Director Klein checks out the open-reel tape decks in the Sato Musen showroom in Tokyo

Digital Slowdown?

Q. Just when I thought the new digitally mastered analog records would overtax only my speakers and woefully inadequate power amp. I am told by a dealer that they will also cause excessive drag on my ancient (five-year-old) turntable. How so?

K. HIGGINS
Humboldt, Ariz.

A. Long before the advent of digitally mastered discs, I heard claims that some turntables slow down when playing loud musical material. The theory is that the increased groove-to-stylus friction brought on by extreme or rapid groove-wall excursions causes enough drag to slow down the turntable platter. It seems to me that it would be easy enough to test such a theory by using a calibrated disc with known test tones of increasing amplitudes, checking for frequency shift in the tones (because of turntable speed change) as they get louder.

Considering the torque and inertial forces operating on the turntable platter versus the intermittent rise in frictional drag between the groove and the stylus tip, I find it quite unlikely that an *audible* effect could occur with any modern turntable in good condition. In my view, your five-year-old turntable would rate as modern, although I don't know its condition.

Incidentally, a tone-arm/cartridge combination whose resonant frequency is both too high (over 13 Hz or so) and poorly damped might at times sound as though the turntable is slowing down. What actually occurs is a large physical "vibration" or oscillation in the tone arm that modulates the sound in a way that is misinterpreted as a turntable speed irregularity.

Undriven Drivers

Q. When a speaker is surrounded by other speakers, as in the typical hi-fi showroom arrangement, does its sound when it is playing cause the drivers and tuned enclosures of the other speakers to resonate audibly? Wouldn't this effectively invalidate all side-by-side speaker comparisons? Also, is this why it is difficult to

determine which speakers in a showroom setup are playing without walking right up to each one?

SCOTT ORSHAN
Somerville, N.J.

A. I'm sure that there is some measurable effect from the stacks of unconnected speakers in a showroom. Theoretically, the acoustic-suspension systems would function as Helmholtz absorbers at their system resonance, and the ported systems would react similarly, but at their vent resonance. In either case, the absorption resonances would be very low in frequency and right in the area where standing-wave room effects are also likely to be prevalent. The result—if there is any *audible* effect at all—could be a slight suck-out at the basic resonant frequencies of the speaker systems, which might just serve to reduce the standing-wave effects. But, given the very large "normal" bass-response irregularities found in most rooms—including dealer demo rooms—I very much doubt that even the most golden of ears could really hear a significant negative (or positive) effect resulting from the presence of a dozen or more undriven speakers.

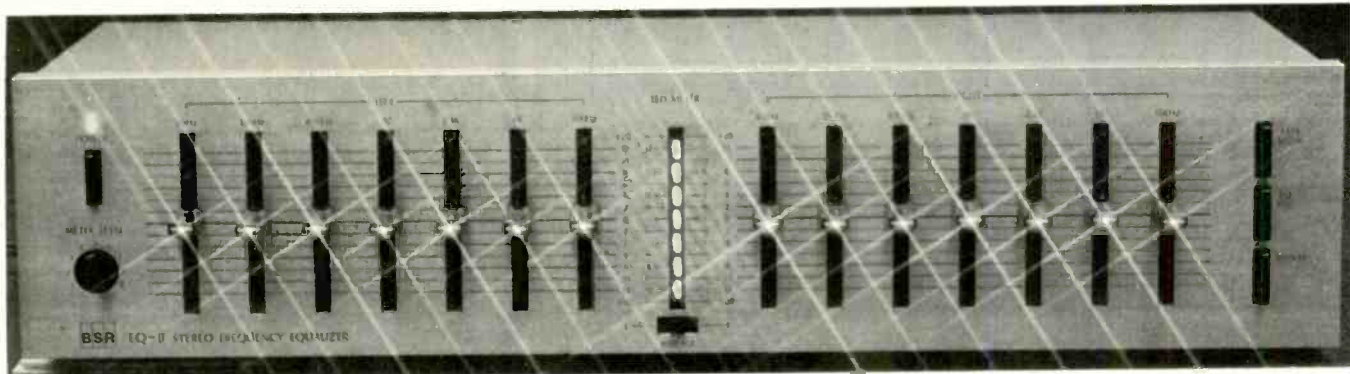
In regard to the difficulty in picking out which showroom speakers are playing, I would charge that up to psychoacoustics rather than resonating drivers. When only two systems are in a room, *visual* cues play a large role in determining the apparent sonic sources. If you doubt that the visual element can have that much effect on sonic localization, try listening to a TV set with headphones. Even though the TV may be across the room and the sound delivered directly to your ears, the sound seems to come from the area of the TV screen.

When there are several sets of speakers in a room, visual cues are no longer any help, and the ear is sufficiently confused by normal reflections from room surfaces that it is unable to single out the playing systems. (If my theory is correct, one should have no trouble determining which of several systems is playing in an anechoic chamber because the confusing wall reflections won't occur.)

I understand that some devout audio freaks advocate removing not only undriven speakers from the listening room but also

\$79 CLOSE-OUT Sound Detonator

Make your stereo system's sound explode with life, improving the sound quality by 30 to 50%, with this limited \$79 close-out from BSR.



It's like night and day. Crashing cymbals, the depth of a string bass, more trumpets or more voice. Now they'll all come bursting forth from your stereo system at your command.

You'll make your music so vibrant that it will virtually knock your socks off when you use this professional quality stereo Sound Detonator equalizer.

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CAN YOUR STEREO SOUND BETTER?

Incredibly better. Equalizers are very different from conventional bass and treble controls.

Bass controls turn up the entire low end as well as the low mid-range making the sound muddy and heavy. With an equalizer, you simply pick the exact frequencies you want to enhance.

You can boost the low bass at 60hz, and/or 150hz, and the mid-bass at 400 hz to animate specific areas of the musical spectrum.

And, best of all when you boost the part of the bass you like, you don't disturb the mid-range frequencies and make you favorite singer sound like he has a sore throat.

The high frequencies really determine the clarity and brilliance of your music. You can boost the high mid-range at 2400hz, or the high end at 6000hz and 15,000hz. So, you can bring crashing cymbals to life at 15,000hz while at the same time you cut tape hiss or annoying record scratches at 6000hz.

You can also boost or cut specific midrange frequency areas to add or subtract vocal, trumpets, guitars or whatever instrument ranges you prefer.

THERE'S MORE

You can push a button and transfer all the equalization power to the input of your tape deck. So, if you have a cassette deck in your car, or a personal stereo that you wear, now you can pre-equalize your cassettes as you record them with no cables to switch.

Now you can get all the dramatically

enhanced sound wherever you are. This is an especially great feature for bass starved portables and high-end starved car stereos to make them come alive.

EASY HOOK UP

Use your tape monitor circuit, but don't lose it. Just plug the equalizer into the tape 'in' and 'out' jacks on your receiver. We even supply the cables.

As you listen to your records, FM stereo or 'aux', any time you push the tape monitor switch on your receiver you'll hear your music jump to life.

For your tape deck, simply plug it into the tape 'in' and 'out' jacks on the equalizer exactly as it was plugged into your receiver.

The output from your receiver is always fed direct to your tape deck for recording and with the touch of a button, you can choose to send equalized or nonequalized signal to your recorder.

When you want to listen to your tape deck, just press tape monitor on the equalizer and your tape deck will work exactly as it did before. Except, that now you can choose to listen to it with or without enhancing equalization.

You won't be listening to any distortion or hum. The Sound Detonator has a 95db signal to noise ratio and total harmonic distortion of only 0.018%.

Once you've set your equalizer controls, switch it in and out of the system. Then you'll hear such an explosive improvement in sound you'll think you've just added thousands of dollars of new speakers and equipment.

No one would believe that a \$159 component let alone one at our \$79 close-out price could do so much.

WHY A CLOSE-OUT

BSR is a very large company. Somebody decided to market equalizers under both their ADC subsidiary and the BSR names. Well, we never thought it was a very practical idea. And, now they seem to agree.

From now on you'll only see ADC equalizers. But, because they didn't know what to do with these that were labeled BSR, we got them for a song.

So, you can go to any HiFi store and buy an ADC equalizer made by the parent company BSR, or you can get

this super BSR equalizer while our limited supply lasts for only \$79.

Oh yes, if you want to know more about BSR, they also own DBX, the noise reduction company and if you're familiar with the X10 remote control system for your home, that's BSR too.

THE FINAL FACTS

There are 14 slide controls each with a bright LED to clearly show its position. Each control will add or subtract up to 12db. (That's a 24db range!)

There are separate sound detonation slide controls for each channel at 60hz, 150hz, 400hz, 1000hz, 2400hz, 6000hz, and 15,000hz.

There's an LED VU meter to show the relative channel output levels of the left, right and average of both. Plus there's a meter level control. It's 16-9/16" wide, 7-1/2" deep, and 3-9/16" tall.

PUT LIFE INTO YOUR MUSIC RISK FREE

Prepare for a shock the first time you switch in this equalizer. Instruments you never knew were in your music will emerge and bring a lifelike sound that will envelop you and revolutionize your concept of your home stereo.

Hook this BSR into your system and really give it a workout. If you aren't 100% satisfied for any reason, simply return it to DAK within 30 days in its original box for a courteous refund.

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The Hafler equalizer, model DH-160, is a frequency shaping control unit which, in many cases, can improve the sound of a high quality audio system. It permits correction of deficiencies in loudspeaker and room acoustics as well as reduction of aberrations in the recording process. It is of a quality level which matches the finest audiophile sonic requirements. Your authorized Hafler dealer can demonstrate the DH-160 for you and can supply it in either kit or assembled form.

Write to us for comprehensive data on the DH-160. If you enclose \$1.00 with your inquiry, we will send you a DH-160 construction and application manual (normally \$3.00) so you can see how easy and enjoyable the economical kit building option can be. We will also include a compilation of test reports and reviews on other Hafler products.

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telephones, since their parts are thought to somehow resonate destructively with the music. Truth to tell, every listening room has dozens of objects that resonate slightly at specific frequencies, and to focus on poor persecuted Ma Bell's product seems to me to be downright unfair!

A.C. Overload

Q. *In my system there are a receiver, two turntables, a mixer, five tape decks, an equalizer, and two types of noise-reduction components. I connect some of the a.c. cords to a power strip with six outlets and some to the receiver outlets. My question is: am I risking an a.c.-line overload problem even if the outlet strip has a circuit breaker? And why hasn't STEREO REVIEW had articles about the problem of possible overload when powering many components simultaneously?*

BOB PATTERSON
 Des Plaines, Ill.

A. We haven't run articles about that problem because there really isn't any. Different components have different current demands, and if you check the rear panels of your equipment you'll find their specific a.c. current ratings given in watts or amperes at 120 volts. [To convert amperes to watts multiply by 120 (volts); to reverse the process divide by 120.]

A fast check of some equipment in our offices turned up preamps rated between 15 and 20 watts, turntables at 18 and 21 watts, and a digital-disc (CD) player with all its built-in electronics at 25 watts. A large multiband equalizer was also rated at 25 watts. A pair of expensive two-motor cassette players were 55 and 60 watts, and a videodisc player was rated at 85 watts. It's clear that if *all* the equipment mentioned were operating simultaneously, the load on the a.c. line would still be less than that of, say, a two-slice toaster.

The only audio components that are likely to consume very large amounts of current are power amplifiers—or the power-amplifier sections of integrated amplifiers and receivers. And, in general, the harder you drive them, the more current they use. A 200-watt-per-channel amplifier with both channels driven to full output with test signals is likely to consume more than 1,200 watts, but under normal music-playing conditions 100 watts or less would be typical.

The bottom line on all this is that a.c. overload is not likely unless you are running two or three high-powered amplifiers at very loud levels (for sound reinforcement or disco use). Incidentally, when I had a 200-watt-per-channel quad system set up, I switched the power amplifiers on and off using a separate relay activated by connection to the preamp's a.c. convenience outlets. This avoided damaging the preamp's on-off switch with high-current turn-on surges. □

Because the number of questions we receive each month is greater than we can reply to individually, only those letters selected for use in this column can be answered. Sorry!

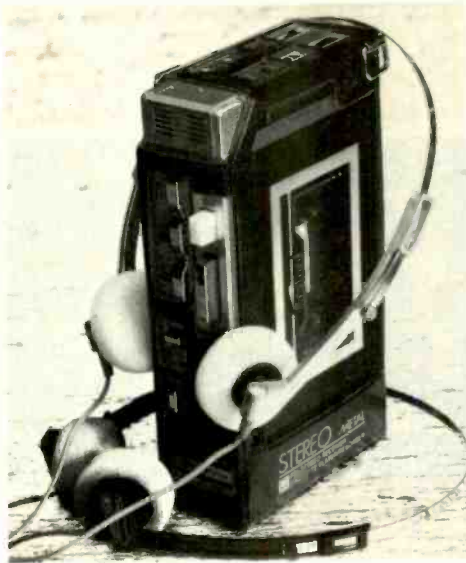
Lean machine

Only 3/8" thin and a scant 3 1/2 oz., the Mura HI-EX personal receiver provides quality high fidelity stereo FM. The HI-EX comes with the 1/2 oz. Stereo Buds ear speakers, another ultra light, high fidelity Mura innovation. Mura HI-EX...it's light, it's lean, it sounds great.

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It records!



Kasuga What?

It records! In stereo! And, it plays both cassettes and FM stereo.

You're at a concert. While you stand in line waiting to get in, you're listening to a 'preview' of the artist on cassette.

As the concert starts, just pop in a blank cassette. And, you'll have your own personal recording in full stereo of the actual concert you attended.

It'll be complete with all the little personal comments and happenings that make each concert special. Note: It may be illegal to record some live events.

But, if you're not into recording live events, consider your next airplane trip. While the rest of the passengers sit bored in their seats waiting for the 'exciting' movie to start, your mind will be soaring a million miles away as you listen to your favorite music.

If you get a million dollar idea or if you just want to dictate some letters, pop in a blank cassette and you'll be dictating in real style.

Of course you'll be dictating in stereo, (compatible with all monaural transcription machines). You'll have one button record, pause, and cue and review.

You'll even have a tape counter to keep track of the exact position of your thoughts, or during musical play, the location of specific songs on the tape.

REALLY FOR MUSIC

And, speaking of music, that's what this stereo recorder/player is all about.

Most better personal stereos have a high/low tone switch and some even have a normal/metal switch. Both are tone controls. This machine has both, for multiple level tone control.

Of course you have 2 headphone jacks, which is really neat because you're going to get 2 pairs of headphones with this personal stereo. So, read on.

But first you ought to know what a Kasuga is. It's a company in Japan, where this recorder is made. You've probably never heard of Kasuga, but then you're probably not Japanese.

We at DAK have sold over 40,000 personal stereos and we look at literally

dozens of different machines.

Even if Kasuga isn't a brand name you are likely to know, it's a substantial company in Japan. In the unlikely event that service should be required, there is a local service by mail facility.

WHAT SOUND

The sound is easily equal to a several thousand dollar home stereo system. Yet, the Kasuga Recorder is only 6½" by 3¾" by 1½". It comes in a hard protective leatherette case that attaches on your belt or with an adjustable strap.

So, whether you are into long walks, sitting in airplanes or washing your car, you can now hear better sound than when you are sitting in front of your home stereo.

ENGINEERED FOR STRESS

Most fine stereo equipment is designed to be lovingly placed on a shelf and never moved. Obviously this isn't a practical way to listen when you're walking your dog, skiing or commuting to work.

The Kasuga recorder incorporates a special tape movement system with a unique stabilizing mechanism that tends to keep your music stable even when you're not. (Caution: Absolutely no personal stereo is perfectly stable, but the Kasuga is excellent).

It is operated by 4 standard AA batteries, (not included), has an LED operation indicator, and it shuts itself 100% off at the end of a cassette. There is a single volume control and separate balance control just like on a home stereo.

SUPERB FM STEREO

The Kasuga has a built-in FM stereo tuner that really locks in on your FM stations. It uses the headphone cord as its antenna so that when you're on the move, your FM stereo stations won't be. Stereo /mono switching is automatic, or you can take control with a switch.

You can record direct from the FM by simply putting in a blank cassette and pushing record. The level control is automatic. And, if you want to record

from other outside sources like other tape decks or tuners, there's an 'aux' input as well.

TWO PAIR OF STEREOPHONES

The most important single element to the great sound produced by any personal stereo is the Samarium Cobalt headphones. Well, Kasuga makes absolutely superb cassette decks, but frankly we didn't like their headphones.

At our expense, so it's free to you, we are adding our own fabulous pair of Samarium Cobalt stereophones. With a frequency response of 20hz to 20,000hz and sound levels up to 100db, you'll experience a mind blowing sound extravaganza with these headphones and the Kasuga that is second to none.

So, you'll get one fabulous set of headphones and one we think is only so so.

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Take your Kasuga wherever you go. Listen to absolutely incredible sound from cassettes or FM. Then make your own great recordings from the built-in stereo mikes, the FM tuner or any outside 'aux' source.

If you aren't 100% satisfied for any reason, simply return it and the free second set of phones in their original boxes within 30 days for a courteous refund.

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Now you can have (or make) vibrant beautiful music wherever you are with this new super high quality recorder and player from Kasuga.



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Tape Talk

By Craig Stark



Against the Grain

Q. In your review of an open-reel deck some time ago you commented that at the 3 $\frac{3}{4}$ -ips speed there was a very slight "graininess" to the sound. This suggests the analogy of a coarse-screen photograph (as in a newspaper) compared with a high-quality original print. Can you explain this phenomenon more fully? Is there a specification for it? Can it be amplified or exaggerated by copying a tape?

JACK AYRES
Jermyn, Pa.

A. Your reference to the grain in a photograph was, indeed, precisely the analogy I had hoped to provoke. What we are talking about is a combination of two principal qualities, only one of which has so far been put in the form of a specification.

In an ideal world, the tape in an analog open-reel system would flow perfectly smoothly across the tape heads and would itself have absolutely unvarying physical and magnetic properties. None of these conditions can be met in the real world, of course. "Wow" and "flutter"—for which we have specifications, the DIN peak-weighted measurement being, to my mind, the more useful—characterize every recorder transport mechanism, imposing some periodic (repeating) and some quasi-random speed variations on the tape motion. Even recorders that are nominally identical have slightly different combinations of mechanical imperfections that influence the sound of recordings made on them. (It was by a painstaking analysis of the wow/flutter spectrums of a number of supposedly identical recorders that experts were able to identify the specific machine that made the famous eighteen-minute gap in the Watergate tape.) When the speed fluctuations occur at a low repetition rate they are heard as "wow," a term derived from the sound of a record with an off-center hole. When the variations occur too rapidly to be perceived as distinct pitch changes they are called "flutter," and these contribute to what I have called "graininess." And if you look at any set of recorder specifications you'll find that at slow tape speeds there tends to be more wow and flutter than at higher ones.

The other component in the grainy sound picture also has a name—modulation noise—but no specification. It comes from the tape itself, which is neither physically nor magnetically homogeneous. A slightly rough coating causes intermittent tape/head contact, and a less-than-perfect dispersion of less-than-perfect particles causes magnetic inhomogeneities. Modulation noise differs from plain "tape hiss" in that its intensity seems to vary with the strength of the signal being recorded, and it has been described as causing a sound "behind" the desired sound.

If you want to hear "graininess" in its most virulent form, all you have to do is to record and play back a pure, steady tone of about 3 kHz. On even the finest professional analog recorders the wavering and graininess will be unmistakable.

Track Compatibility

Q. I have a regular four-track home stereo open-reel deck, and a friend of mine recently bought a used four-channel open-reel recorder. Can I record tapes on my machine that he can play on his, and vice versa? Should he record on channels 1 and 2, then turn the tape over and record on channels 3 and 4?

DANIEL F. ROBIDOUX
Nausupo Lamad, Italy

A. Yes, you can exchange tapes with your friend, but to avoid disappointing mistakes you must learn how the tracks on your two decks are laid out. Both of you have quarter-track machines—that is, you can record four different audio signals on a standard $\frac{1}{4}$ -inch-wide tape. In your case, when you have recorded two tracks (a left- and right-channel stereo pair) on side one of the tape, you turn it over and do the same for side two. Your friend's deck gives him a choice: he can do just as you do by recording and playing back only one pair of tracks at a time in each direction, or, if he has a quadraphonic system, he can record all four tracks in the same direction, so that in playback one pair will feed his front speakers and the other pair the rear ones. If you were to play a quad tape on your deck, you'd hear only two of the four tracks in one

direction, and when you turned the tape to play "side two" you would hear the other two tracks backwards!

It is standard practice for the edge tracks of a quarter-track recorder—tracks 1 and 4—to be used for the left stereo channel. In the forward direction your deck will record on tracks 1 (left) and 3 (right). When you turn the tape over the other edge of the tape (track 4) is now where track 1 was previously, and the same with tracks 2 and 3. Just have your friend use the front two channels only (tracks 1 and 3), as he should for anything but true quadraphonic material, and turn the tape over at the end of side one, just as you do, and you won't have a problem.

Cure for Muted Highs

Q. I record on my "chrome equivalent" cassettes using high bias and 70-microsecond equalization, but they sound better played back with normal bias, 120-microsecond equalization, and the Dolby switch on. Is this hurting anything?

MIKE KIRKPATRICK
Des Moines, Iowa

A. If it sounds better, do it! You can't hurt either the tapes or your deck by playback with the "wrong" equalization. What you're doing when you play a 70-microsecond tape in the 120-microsecond position is basically equivalent to turning up your amplifier's treble control by 4 or 5 dB. That raises the level of tape hiss, but evidently, with Dolby, it doesn't raise it sufficiently to annoy you. If you record a high-bias (70-microsecond equalization) tape with normal bias (120-microsecond EQ) you will get severe distortion and much-exaggerated treble response. Bias settings alone have no effect during playback since there is no bias used in that process.

Controlling Signal Peaks

Q. My old cassette deck had one important feature that no one seems to offer any more: a switchable peak limiter. Properly used, it acted as an automatic level control, evening out the overall volume when I dubbed selections from different sources. While I can do a reasonable job by ear (I am sightless), why isn't a peak limiter even an option on today's decks? Does anyone offer it as an accessory device?

TANDY WAY
Tampa, Fla.

A. Signal processors of this kind that are simple enough to be economically feasible to build into a cassette deck tend both to produce high distortion and to constrict the dynamic range of music. While intended originally as a dictation medium, the cassette format has finally achieved status as a high-fidelity medium, and manufacturers naturally don't want to compromise its image or performance as such.

There are, however, a number of more sophisticated onboard automatic level controllers available, generally in the \$200 to \$500 range (check the "Sound Processor" section of our 1983 *Tape Recording & Buying Guide*), and perhaps one of these will serve your purpose. □

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CIRCLE NO. 10 ON READER SERVICE CARD

Car Stereo

By Christopher Greenleaf and Julian D. Hirsch



BLAUPUNKT CR-3001H

With this issue *STEREO REVIEW* begins a regular series of road and lab tests of car stereo equipment. Christopher Greenleaf will report on the units' performance in use, and Julian Hirsch will report on their bench-test measurements.

THE Blaupunkt CR-3001H is an AM/FM tuner, cassette player, preamplifier, and digital clock all in one in-dash unit. It is designed to be used with a separate power amplifier. (For our road test—see below—we used a Blaupunkt BPA-415 four-channel amp rated at 15 watts per channel.) The digital-synthesis tuner has six FM and six AM presets, automatic station scanning (stations are sampled for 5 seconds each after the right-hand knob is pushed; a second push on the same knob stops scanning), a local/distant switch (the bottom left button on the center panel), a mono/stereo switch (bottom right button on center panel), and Dolby-FM decoding (top left button on center panel).

The auto-reverse tape player features Dolby-B (same button as for Dolby FM), 70- and 120-microsecond equalization, Sendust heads, locking fast-forward and reverse, and automatic tape eject when the car's ignition is shut off. The preamplifier section includes separate bass and treble controls (the outer ring tabs on the main knobs), left-right balance (pull and turn the left knob), front-rear fader (pull and turn right knob), and on/off/volume (left-hand

knob). The balance and fader controls lack center detents. Pushing the left knob switches the time display to frequency in the radio mode or ejects the cassette in the tape mode. Simply turning the right knob changes stations in the radio mode, and pushing it reverses the tape. A remote-control button with a 6-foot cable can be clipped to the steering wheel. It keys either radio-seek or tape-reverse.

The front panel is well lit and easy to read. The little symbols do take a bit of getting used to, and you could wipe out a few telephone poles trying to reason them out. The functions are, however, very easy to memorize. The helpful, well-written operator's manual includes installation instructions. A 3-foot output cable on the back of the unit connects directly into any matching Blaupunkt amplifier by a seven-pin DIN plug. A phono-plug adaptor is also included for use with other manufacturers' amplifiers. Also on the back of the unit is an automatic-antenna lead and a second power lead intended to bypass the ignition for the clock, tuner memories, and automatic tape-eject mechanism. Price: \$519.95.

Laboratory Measurements

SINCE the CR-3001H uses a separate amplifier, we were able to make most of our measurements at the line-level outputs with an adaptor fitted with stand-

ard phono jacks. The tuner distortion was relatively high by the standards applied to home receivers but still below the level of audibility (which is about 4 to 6 per cent with most program material). The radio's frequency response (which included the effects of its tone controls as well as the FM de-emphasis) was very good for a car stereo. The stereo separation, unlike that of most tuners we have measured, improved steadily with increasing frequency to a very good 38 dB at 10,000 Hz.

FM Mono Usable Sensitivity (75-ohm input): 20 dBf (3 μ V)
Mono 50-dB Quieting Sensitivity (75-ohm input): 23 dBf (4 μ V)
Stereo 50-dB Quieting Sensitivity (75-ohm input): 38 dBf (22 μ V)
Tuner Signal-to-Noise Ratio: mono, 65 dB; stereo, 64 dB
Tuner Distortion at 65 dBf: mono, 2.4 per cent; stereo, 1.5 per cent
FM Frequency Response: +0, -1.5 dB from 100 to 15,000 Hz; -3 dB at 30 Hz
Stereo Separation at 100, 1,000, and 10,000 Hz: 20, 24, and 38 dB
Capture Ratio at 45 dBf: 7 dB
Selectivity: alternate-channel, 66 dB; adjacent-channel, 9 dB
AM Rejection at 65 dBf: 45 dB
Image Rejection: 46 dB
AM Frequency Response: -6 dB at 80 and 3,000 Hz
Tape Playback Frequency Response (standard BASF test tapes, -3-dB limits): 120 μ sec, 70 to 11,500 Hz; 70 μ sec, 70 to 12,000 Hz
Tape Signal-to-Noise Ratio (referred to 250 nWb/m): unweighted, 53 dB; weighted (CCIR/ARM) with Dolby, 62 dB
Flutter: weighted rms (JIS), 0.1 per cent; weighted peak (CCIR), 0.17 per cent
Tape Speed Accuracy: 1 per cent fast
Fast Rewind Time for C-60 Cassette: 64 seconds
Tone Control Range: +12.5, -11 dB at 100 Hz; +6, -9.5 dB at 10,000 Hz

Although the capture ratio seems to represent poor performance, it should not be a problem unless you find yourself equidistant between two equally powerful stations on the same frequency. The alternate- and adjacent-channel selectivity were both good, especially the latter. The image rejection would be considered marginal in a home receiver, but the operating conditions of an automobile receiver should make this a less critical consideration (most FM image responses are from low-flying aircraft in the vicinity of an airport). The local/distant switch reduces the tuner sensitivity by about 20 dB in its local position. The tape-deck frequency response was good

Blaupunkt's CR-3001H in-dash unit contains a digital-synthesis AM/FM stereo tuner, an auto-reverse cassette player, a preamplifier, and a digital clock.



(the low-frequency rolloff can be ignored in view of the acoustic limitations of car speakers and their environment), and both the flutter and signal-to-noise ratio were quite comparable to those of many medium-priced home tape decks.

The installation instructions were thorough, and the manual is one of the few to include a schematic diagram. Judging from our bench tests and observations (I did not listen to the unit except through headphones), the Blaupunkt CR-3001H is a well-designed and well-made car stereo unit. While some of the specifications were not up to par, most of the limitations will never be audible in use, especially when the car's motor is running. —J.H.

Road Test

My Volvo and I took the CR3001H for several rides over a Brooklyn and Manhattan test route that offers considerable challenges to both tuners and tape transports. The tape mechanism was only slightly fazed by driving over ancient granite-block streets at moderate speeds and otherwise showed few signs of difficulty even from potholes. All the tape functions worked as they should and were easy to control by feel alone. The fast-wind modes could be canceled by lightly pushing the button for the opposite direction or by tapping the program-reverse (or remote) button. The loud pop that occurred each time I used the program reverse was affected by the volume setting and became very annoying at times, especially in quiet music passages, but otherwise the tape player was a genuine pleasure to use.

The FM tuner was generally quiet and clear without attaining the ultimate in those respects. With Dolby-encoded broadcasts I found the noise reduction quite noticeable, and the accompanying slight equalization change improved the sound even more. Multipath noise tended to be loud and hashy, but the overall FM performance with both local and distant stations was essentially very good. Very strong signal sources needed the local sensitivity setting to sound clean. AM and FM alike seem to be well shielded against external pulse interference and unwanted electronic garbage, which made listening to the excellent AM tuner especially satisfying. Sometimes it was difficult to get the memory access to work properly with very powerful signals, but this was remedied by changing the local/distant setting. In both the tape and tuner modes, pressing some of the preset buttons caused a momentary high-pitched buzz in the right channel.

With the power amp we used for the tests, the unit put out clean and very clear transients and authoritative bass. Maximum volume produced physical pain. At normal levels there was very realistic sound both in percussive music and in passages with deep-bass energy. The bass and treble controls were adequate, but I sorely missed a loudness button. The only control that could have worked better was the fader, which changes the balance from front to rear too quickly to be easily adjusted while driving. These two small quibbles aside, the CR-3001H was a flexible, musical, and very enjoyable passenger—one I'd gladly invite for a ride again. —C.G.

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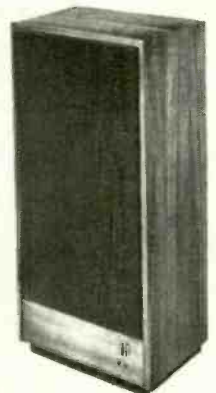


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Technical Talk

By Julian D. Hirsch



Upgrading Your Stereo System—Part I

RECENTLY, at a concert intermission, I overheard one man asking another whether he should replace his fourteen-year-old, vacuum-tube stereo receiver, and, if so, with what? Much the same question is often asked of me, and probably of most people with any close connection to the hi-fi world. Obviously, if something no longer works, it should be repaired or replaced. Which of those routes to take is, unfortunately, not always so obvious. People tend to develop a strong attachment to a piece of hardware that has given good service over the years and are reluctant to replace it even if it no longer meets its original performance standards. On the other hand, repairing older components can be very expensive, if it is possible at all. Most tube devices fall into the expensive-to-fix category, and, as a general rule, I would not recommend trying to keep a vacuum-tube component operating after it begins to become unreliable. In any case, if a system doesn't (or never did) sound as good as you want it to, the cause should be determined and the necessary changes made.

Behind most of the "should I replace it?" inquiries that come to me, however, I sense a vague feeling of discontent rather than a specific complaint, an ill-defined feeling that the system should sound better somehow, even though all the knobs and buttons seem to function. Perhaps this is the result of hearing a newer and better system at the home of a friend, at a dealer's showroom, or at an audio show, or it may simply arise from reading advertisements or reviews of the latest wonders of audio technology.

While a total replacement of an old stereo system can often yield dramatic results, it may be unnecessarily costly, especially if only one component is substandard. On the other hand, simply changing one arbitrarily selected component may fail to produce the hoped-for sonic rejuvenation. Following a logical procedure to isolate the weakest part of an old or ailing system can help you realize the greatest possible improvement in sound per dollar spent.

In general, modern solid-state components do not deteriorate with age in the same way the earlier vacuum-tube models did. The greatest enemy of all electronic components is heat, which shortens the life of practically everything—capacitors, resistors, insulation, etc.—that goes into a tuner, amplifier, or receiver. Tube equipment generally runs hot because of the numerous power-wasting vacuum tubes usually squeezed into a small space with barely adequate ventilation for cooling. Transistors typically operate with much less power (heat) dissipation than tubes performing similar functions. Moreover, transistors do not require the heating filaments intrinsic to the operation of a tube, which typically add a couple of watts per tube to the total power requirements of the system. Except for the output stages of a power amplifier, most transistorized stereo components run only slightly warm at their hottest, and even power transistors rarely become hot except under sustained bench-test conditions. The reduced overall heat dissipation in solid-state components lowers internal temperatures and considerably lengthens life.

This does not mean that a transistorized component is necessarily trouble-free. A defective part or connection can occur in any product. However, most of them are detected in the manufacturer's final checkout or "burn-in" procedures, and most defective parts that escape detection in those stages will fail early in the life of the product (preferably within the warranty period!). If a modern hi-fi product survives its first few months of service, it is likely to continue operating without significant deterioration for many years.

It is almost axiomatic, however, that a product being considered for replacement is not completely up to date, and most will be perhaps five to ten years old. Many older components were never designed to meet today's high standards of performance and probably have internal trim or alignment adjustments that are no longer needed in current designs. For example, few, if any, new tuners and receivers today have i.f. transformers or multiplex decoders requiring critical alignment settings, which can (and do) change with time. The coils have been replaced with ceramic filters and the multiplex decoders with integrated circuits. These solid-state parts making up today's hi-fi components need little or no maintenance or calibration after manufacture.

Despite the impressive advances in electronic technology in recent years, the *mechanical* portions of an audio system are still its "weak links," the ones most likely to wear out or at least to limit overall sound quality. These include record-playing components (turntable, tone arm, and car-

Tested This Month

Revox B710 MkII Cassette Deck • IMF Professional Monitor Speaker System
Harman Kardon CD91 Cassette Deck • AudioSource EQ-One Graphic Equalizer/Analyzer
Dynavector DV10X Type 3 Phono Cartridge

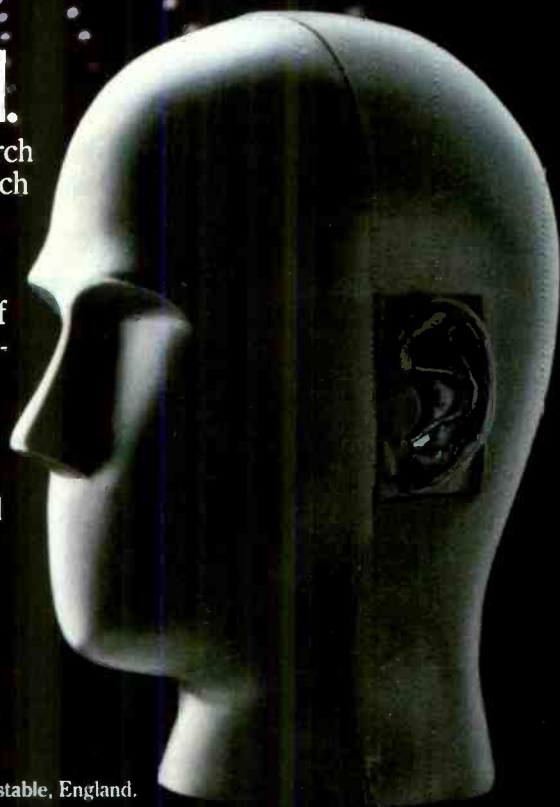


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tridge), tape decks, and loudspeakers. Although a speaker is among the most durable and long-lived of components (I have never had one fail or even deteriorate significantly in normal service over a period of more than twenty-five years), most of the really important audible improvements in sound reproduction have resulted from advances in speaker design. A given speaker system, therefore, will probably be rendered obsolete by new technology before it "wears out" from normal use, though it is certainly possible to damage a speaker by overdriving it or other careless usage.

The first step in deciding whether some or all of one's system is due for replacement is to consider whether its sound is displeasing, or at least unsatisfying. Without a frame of reference this may be difficult, so a visit to a good audio showroom or to the home of a friend who has a good modern system is a logical beginning. If you have some favorite records with which you are thoroughly familiar, take them along. (Do not expect them to sound the same elsewhere as they do in your home—for better or worse, they should sound different in every location.)

During this process, you will probably be exposed to some of the newer "demo" records so popular at audio shows and among hard-core audiophiles, and their sonic splendor may convince you that your system is hopelessly obsolete. But unless these records include your favorite types of musical fare, don't be unduly swayed by what you hear. Many of them can make the least pretentious music system sound better than it has any right to sound! Play records that

represent your normal listening tastes. The differences between hi-fi systems are less spectacular with more mundane program material, yet this may be what you will ordinarily be playing. It seems sensible to me to choose a system that makes the most of what *you* want to hear. Incidentally, I am assuming that your interest in high fidelity is primarily in musical enjoyment, rather than investigating the most subtle sonic qualities of different audio components. If the latter is the case, I am afraid that a logical approach to system selection is invalid (although the final choice in both cases will presumably still be made on the basis of what sounds best to you).

Let us assume that you have heard a system that makes your favorite records sound better in some way than your old system. No doubt every part of that system is different from the corresponding part of your own. Probably most of the audible differences can be ascribed to the speakers and the room in which they are heard. It is risky to compare speakers that differ widely in size, price, or basic construction (a \$1,000 floor-standing speaker is unlikely to sound like an older \$100 "bookshelf" model). Therefore, after your initial listening sessions, consider your budget and try to audition mainly speakers falling within your price range (unless you enjoy being frustrated). It is often possible to find less expensive speakers, perhaps from the same manufacturer, whose sound coloration (or lack of it) is similar to that of a higher-priced model that you like.

If your speaker auditioning is done in an

audio showroom, you cannot assume that a speaker that appeals to you there will continue to do so in your home (or that one whose sound you detest will still be objectionable at home). It is best, then, to try out a pair at home—if you can find a cooperative dealer who will allow returns for credit. Whatever your original speakers are, new ones will probably still be electrically compatible with your amplifier. A very few speakers have unusually low sensitivity and require higher input power for a given listening volume, but most speakers are enough alike in this respect that sensitivity can be ignored as a selection criterion. Speaker impedance *should* be considered, since if it falls much below 4 ohms at any frequency some amplifiers may not be able to function properly. Here the manufacturer's specifications can be used as a guide, augmented by test reports, such as those in *STEREO REVIEW*, that state the actual minimum measured impedance throughout the audio range. In my experience almost any amplifier will operate correctly into the load presented by one pair of almost any model speakers; the problems (if any) arise when one attempts to drive two pairs of similar speakers in parallel.

Perhaps simply replacing your venerable speakers, which may have been "state of the art" performers in their day, will give your system the sound you expect of it (or what you fondly remember it to have been in days past). If so, you are fortunate indeed, although I would still advise examining your other components for signs of senility. We will continue that process next month. □

Equipment Test Reports

Hirsch-Houck Laboratories: Julian D. Hirsch and Craig Stark



Revox B710 MkII Cassette Deck

LIKE many other cassette decks, the Revox B710 MkII is a three-head model with both Dolby-B and Dolby-C noise-reduction

systems. It is unlike other cassette decks in its appearance and operating features, however, and its performance is essentially at

the highest levels that have yet been achieved in the cassette medium.

(Continued on page 34)

Pictures simulated



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1948 The living room was dark, the neighbors crowded around the couch, no one made a sound, and you turned on the black-and-white box. Suddenly, there weren't enough adjectives to describe it. Amazing! Unbelievable! Incredible! We were looking at something called television. And we were seeing magic.

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CIRCLE NO. 47 ON READER SERVICE CARD

The B710 is a large, rugged, and relatively heavy machine. A rigid die-cast frame supports the tape-transport mechanism, which uses no fewer than four direct-drive motors. Its dual tape-drive capstans are driven by individual Hall-effect motors locked to a common quartz-crystal reference oscillator. The tape hubs are driven by individual d.c. motors with tachometer feedback control. The B710 has no belts or clutches, all tape motions being handled directly by the drive motors under control of a microprocessor. Even the head assembly (which contains a configuration of three Sendust heads that permits monitoring from the tape while recording) is moved into place by a solenoid, and the motion is smoothed by pneumatic damping.

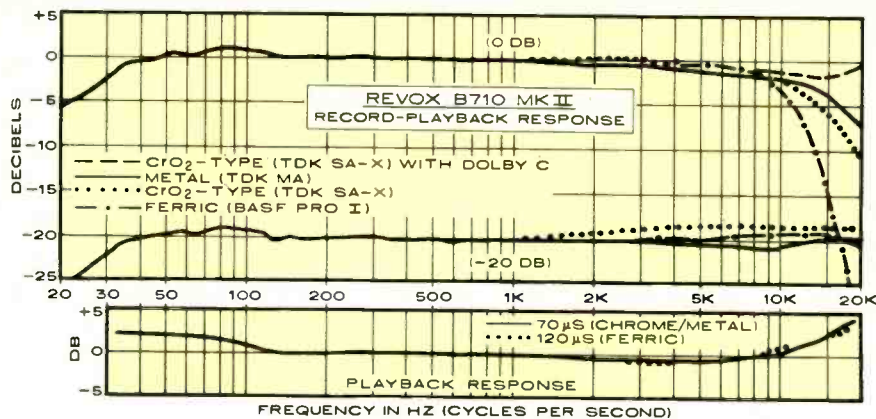
The microprocessor also controls the B-710 Mk II's non-volatile control memories, tape counter, and digital clock. The built-in timing facilities of the deck not only allow unattended recording or playback, starting and stopping at preset times, but permit the tape playback to be stopped and started at any desired settings of the tape index counter, so that any part of the tape or one whole side may be repeated indefinitely. The index counter is a large four-digit, seven-segment LED numerical display. The same digits show the time in the clock mode, which can be selected at any time by a front-panel button and is available continuously while the machine is turned off.

The cassette snaps into an open well on the front panel and cannot be removed unless the tape is stopped. The cassette opening has a removable (and easily misplaced) plastic cover. To the left of the cassette opening is the time/tape-index display, below which are six square momentary-contact buttons. All internal switching is done by FET's close to the affected circuits, so that the control buttons handle only low-level d.c. voltages.

The buttons are for pause, fast forward and rewind, play, stop, and record. A logic system permits the transport to be switched from any mode to any other without damage to tape or mechanism. To enter the record mode, both record and play buttons must be pressed simultaneously, but "flying start" recordings can be made while in play by pressing record and tapping the play button. The use of the record mode is shown by a red light on the right side of the digital display window. The pause control works as expected when recording, but it is inoperative during playback. The stop control can be used instead during playback, even for temporary interruptions, since the tape transport starts almost instantly and without an audible transient.

Similar buttons to the left of the numerical display are marked MODE, RUNUP, and ZERO. The MODE button switches between clock and index displays, ZERO resets the index reading to 0000, and RUNUP is used when setting index readings for repetitive playback or for changing the clock or timer settings. Toggle switches along the lower part of the panel control power, tape or source monitor, and Dolby noise reduction. One switch turns on the noise reduction, and another selects either the Dolby-B or Dolby-C system.

On the right side of the panel, opposite



The upper curves indicate overall record-playback response at the manufacturer's indicated 0-dB recording level using the tapes designated on the graph. In the center are the same measurements recorded at -20 dB relative to the upper curves, a level conventionally used for tape-deck frequency-response measurements. Bottom curves show playback response from calibrated test tapes and indicate performance with prerecorded tapes.

the time/index display, are the level "meters." They consist of two parallel twenty-four-element rows of red LED's corresponding to program levels from -30 to +8 dB (0 dB being at the Dolby reference level of 200 nWb/m). The LED's respond virtually instantaneously to level increases, but the response decays over a period of about 2 seconds. Their readings do not include the effect of recording equalization.

Two sets of concentric knobs below the meters (for left and right channels) adjust recording levels for the line and microphone inputs (which can be mixed). Standard 1/4-inch phone jacks below the knobs are used for the left and right microphone inputs (plugging a microphone into the left jack feeds its signal to both channels for mono recording) and for a pair of stereo headphones. The headphone output is designed for driving medium-impedance (200- to 600-ohm) phones, and a small knob next to the jack adjusts the headphone volume level.

A brushed-aluminum strip across the top of the panel hinges down to reveal a number of less-often-used controls. Four small buttons marked SET, START, STOP, and CLEAR are used to set the index points for automatic start and stop operation of the machine and to enter the clock time. A three-position timer-mode slide switch sets the machine for unattended playback or recording under the control of its own clock. Four small buttons at the right of the group set up the equalization and bias for various types of tape. Three are marked for IEC Type I (standard ferric oxide), Type II (chromium dioxide or chrome equivalent), and Type IV (metal) tapes, respectively. The fourth button (AUTO) can be used with most recent cassettes having notches on the rear edge for automatic setting of the bias and equalization. Manual selection must be used with older cassettes that lack these notches. A slide switch inserts a 19-kHz filter in the signal path for recording from FM tuners with inadequate suppression of the pilot carrier signal (which could interfere with the operation of the Dolby circuits).

On the rear apron of the Revox B710 MkII are phono jacks for the line inputs and

outputs, with screwdriver adjustments for setting the playback output levels (normally used at maximum settings). When the B710 is used with a Revox B739 or B780 receiver, the two can be connected via DIN sockets on the recorder, permitting remote switching of one by the other. The Revox B710 MkII is about 17 7/8 inches wide, 13 7/8 inches deep, and 6 inches high. It weighs 23 pounds. Price: \$1,995.

● **Laboratory Measurements.** We measured the record-playback frequency response of the Revox B710 MkII with a number of different types of tape (including samples of the IEC Type-I and Type-II reference standards) to determine if any were particularly suitable or unsuitable for use with this machine. For the most part, the response curves were so nearly alike that we would consider all the tapes equally compatible with the B710. The similarity of the curves also suggests to us that most current tapes conform so closely to IEC standards that user-adjustable tape bias or equalization, either manual or automatic, is a much less important feature for a top-of-the-line cassette deck now than it was only a couple of years ago.

We selected BASF Professional I Super as our Type I (ferric) tape, since it appeared to be closest to the IEC Type I in its response. For Type II (chrome) we chose TDK SA-X. The B710 is not designed to use Type III (ferrichrome) tape. For a Type IV (metal) tape we chose TDK MA, which we understand is essentially the standard IEC Type IV tape.

The playback response of the machine was measured (for both 70- and 120-microsecond characteristics) with the appropriate BASF IEC standard test tapes. Both tapes gave similar results, with a response flat within ± 1 dB from 80 to 12,000 Hz, rising to +3 or +4 dB at 18,000 Hz and to +2 dB at 31.5 Hz.

The 0-VU marking on the deck's front panel corresponded to the Dolby reference level as claimed. The overall record-playback response was essentially the same with all of the selected test tapes at a -20-dB recording level. It was typically flat within

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Test reports

approximately ± 1 dB from 35 to 20,000 Hz, rolling off to about -5 dB at 20 Hz. The "head bumps" in the low-frequency playback response were very small. At a 0-dB recording level, the playback output was -6 dB at 11,800 Hz with BASF Professional I, 15,500 Hz with TDK SA-X (Type II), and 18,000 Hz with TDK MA tape.

The "tracking" of the Dolby encode and decode circuits was measured at recording levels from 0 to -40 dB (using Type II tape, which was marginally flatter in its response than the others). For the Dolby-B system, the change in overall response when the system was switched on did not exceed 1 dB at any level over the full frequency range except between 15,000 and 20,000 Hz, where there was a 1.5- to 2-dB change at -30 dB. With Dolby-C, the tracking error was about the same up to 10,000 Hz, with a change of 1.5 dB between 10,000 and 20,000 Hz at most levels. All these response changes are inaudible in normal use with music as program material.

However, a striking benefit of Dolby-C could be seen in the 0-dB record-playback response curve made with the noise reduction on. The high-frequency saturation, above 10,000 Hz, was virtually eliminated, resulting in the astonishing 0-dB response of $+1$, -1.5 dB from 32 to 20,000 Hz. This is a relatively unpublicized feature of Dolby-C, which employs a "spectral skewing" circuit to attenuate frequencies in the 10,000- to 20,000-Hz octave during recording and boost them in playback. The proc-

ess greatly reduces high-frequency tape-saturation effects at the expense of about 12 dB of noise reduction in that octave. Since Dolby Labs has determined that the ear is relatively insensitive to low-level noise in the uppermost octave, the trade-off of noise reduction for headroom is highly beneficial.

The required input signal for a reference-level recording (at 400 Hz) was 62 millivolts (mV) for the ferric and chrome-equivalent tapes and 70 mV for metal tape. In each case, the maximum playback output from a 0-dB recording level was 0.81 volt. The third-harmonic playback distortion from the reference signal was 0.5 per cent for ferric and 1 per cent for chrome-equivalent and metal tapes. At 10 dB below reference level, the respective playback distortions were 0.13, 0.1, and 0.2 per cent. To obtain a playback distortion of 3 per cent, the recording level for the tapes was $+5$ dB for ferric, $+4$ dB for chrome-equivalent, and $+5.5$ dB for metal. The A-weighted signal-to-noise ratio (S/N) without noise reduction was approximately 55.5 dB for all three tapes. With Dolby-B and CCIR/ARM weighting, the S/N readings improved to 64.8, 67, and 66.3 dB. With Dolby-C, they were 75.2, 74.5, and 74.8 dB, respectively.

The microphone input's sensitivity was 0.3 mV, and it overloaded at 37 mV. The noise level through the microphone input increased by 17.5 dB over the line-input noise level at maximum microphone gain, but only by 3 dB with a center setting of the

mike-gain control. Although we did not measure the headphone output, its adequacy can be inferred from the fact that the acoustic output of 600-ohm phones could be heard throughout the room even at partial volume settings.

The tape speed was 0.3 per cent fast. Flutter was ± 0.065 per cent weighted peak (DIN) and 0.043 per cent weighted rms (JIS). The predominant flutter rates were 8 and 35 Hz. In fast-forward and rewind modes, the B710 MkII handled a C-60 cassette in only 47 seconds. In spite of this exceptionally fast tape handling (or, more likely, because of it), the tape was stopped with unusual gentleness, slowing down perceptibly in the final seconds of the process to avoid undue stress on either tape or leader. The meters were accurate and as readable as their calibration intervals allowed.

● **Comment.** The statement that we could find no significant flaw in the Revox B710 MkII should not be interpreted as meaning that it is perfect, but merely that it is so surpassingly well designed and constructed that even an occasional operating idiosyncrasy was easy to ignore. It should hardly be necessary to point out that this machine can record almost any program likely to be connected to its inputs with absolutely no audible degradation of signal quality. True, with interstation FM tuner hiss recorded at levels close to 0 dB, we could hear (barely) a minute change in the spectral balance when the playback was compared with the incoming signal. Not a very serious flaw, to be sure. Dubbing some wide-dynamic-range CX-decoded records we found (as expected) that Dolby-B noise reduction left an audible residue of hiss on the tape during quiet passages. However, the quiet background with Dolby-C was very nearly the equal of the CX residual noise level, and the tape hiss could be heard only on a critical source/tape comparison at a very high volume level.

The mechanical operation of this machine was a joy to experience. Instead of the usual "clunk" of solenoid operation, pressing any of the control buttons produced only a subdued and muffled click that never became obtrusive. The recorder is actually easy to use after one has carefully studied the manual (a well written, trilingual, spiral-bound book with numerous illustrations and a complete functional block diagram of the recorder). A little practice may be needed to master the techniques of setting the clock and using the programmed or timed-repeat modes, but for normal use the machine is as simple as any we have seen.

The Revox B710 MkII is a superlative machine by any standard that can be used to judge a cassette deck. The only nit we can pick about its design is the absence of a switched a.c. outlet. The accurate and convenient built-in clock/timer worked well, but it cannot switch on an associated tuner or receiver for unattended recording. As it is now designed only the fortunate owner of a Revox receiver can fully utilize this capability of the recorder. —Julian D. Hirsch

Circle 140 on reader service card

(Continued on page 39)



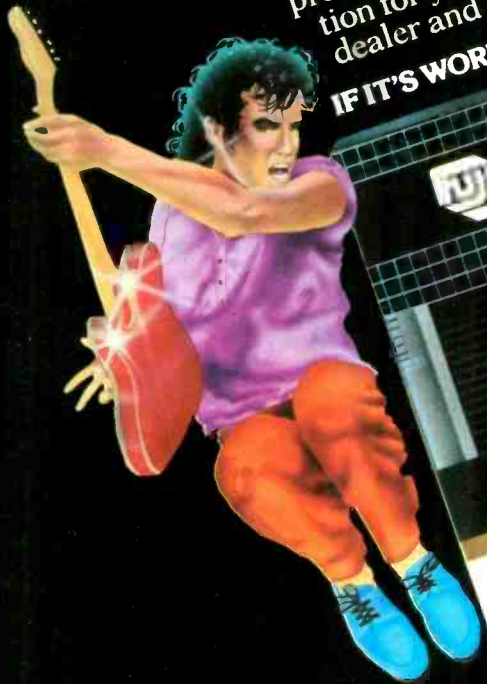
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IMF Professional Monitor Speaker System



THE IMF Professional Monitor is a floor-standing four-way speaker system measuring about 41 $\frac{3}{4}$ inches high, 18 inches wide, and 15 $\frac{3}{4}$ inches deep on its stand, which raises the bottom of the cabinet about 4 inches from the floor. The particle-board cabinet is veneered in genuine walnut, with a removable dark-brown plastic-foam grille. The fully finished front baffle board presents an attractive appearance even with the grille removed. Each speaker weighs about 87 pounds, including its black-finished stand.

A one-eighth-wavelength tapered acoustic transmission line loads the rear of the Monitor's oblong woofer, coupling to the room through two rectangular ports at the bottom of the front panel. The woofer cone, measuring about 12 x 8 $\frac{1}{4}$ inches, is located at the top of the front panel. The internal baffle structure also stiffens the cabinet walls.

The woofer cone, made of a rigid styrene-and-fiberglass material, is about 1 inch thick (!) at the center and tapers to $\frac{1}{4}$ inch at its rim. The woofer crosses over at 350 Hz to a 5 $\frac{1}{4}$ -inch midrange cone driver located near the top of the speaker panel. The midrange driver is also transmission-line loaded. Its closed-end transmission line extends straight to the rear of the speaker and is filled with sound-absorbing material. The cone of this driver is made of a polymer ma-

terial resembling the Bextrene used on some other high-quality British speakers.

The next crossover point, at 3,000 Hz, is to a 1 $\frac{3}{4}$ -inch tweeter whose voice coil is damped by ferrofluid. This driver is located just below the midrange speaker. Directly below it is a ferrofluid-damped "super tweeter," about $\frac{3}{4}$ inch in diameter, which operates above 13,000 Hz. The levels from the four drivers are matched in the design of the speaker, but a three-position switch in the rear, between the input connectors, provides what IMF calls "perspective control." It slightly raises or lowers the entire mid-band response relative to its "flat" center setting to shift the apparent sound source slightly forward or backward.

The drivers are placed asymmetrically on the front of the speaker, with the three higher-frequency drivers clustered closely and to the side of the woofer. The left- and right-channel speakers are designed as mirror-image pairs, with the woofer meant to be located toward the outside of the listening area. This configuration, combined with a crossover system designed to produce a phase-coherent system output, is said by the manufacturer to give the Professional Monitor outstanding imaging qualities and overall transparency.

The system's spec sheet indicates that its frequency response is 19 Hz to 40 kHz (no tolerance is given), that it develops a sound-

pressure level of 82 dB at 1 meter when driven by 1 watt, and that its nominal impedance is 8 ohms. It is recommended for use with amplifiers rated to deliver at least 40 watts per channel. Price: \$2,580 per pair, including stands.

● **Laboratory Measurements.** IMF supplied us with anechoic-chamber frequency-response curves run on our test samples of the Professional Monitor speakers. The quasi-anechoic measurements made with our IQS FFT analyzer agreed in their key features with the IMF data. We found the extended high-frequency response of this speaker very impressive. Using the 60-kHz maximum sampling rate of our analysis system, we could measure the speaker's output up to 30 kHz. Most speakers have little or no output above the audio range, but the IMF's tiny supertweeter maintained its output with only a 6-dB overall variation from 12 to 30 kHz.

Within the audio band, the Professional Monitor's axial frequency-response variation measured at a 1-meter distance was only 6 dB overall from 250 Hz to 23 kHz (the approximate measurement limits using the FFT analyzer's normal 46.5-kHz sampling frequency). Removing the grille had a minuscule effect, barely detectable above 27 kHz, on the high-frequency response. The response 45 degrees off the speaker

axis changed only above 13,000 Hz, with about a 6-dB loss at 20,000 Hz. The woofer response was measured with close microphone spacing, separately at the cone and the transmission-line ports, and the two curves were combined to form a total bass response curve. This showed a total variation of only 2.5 dB from 37 to 280 Hz, with the crossover network rolling off the response at the high end and the low-frequency output decreasing smoothly to about -9 dB (relative to the average woofer level) at 20 Hz.

The room response at middle and high frequencies was measured some 12 feet from the speakers using a swept warble-tone sine-wave signal. Correcting it for known room absorption (above 10,000 Hz) and splicing it to the woofer curve produced our composite system-response curve. This had the usual minor irregularities, most of which are due to room effects or speaker placement. The output over the entire range handled by the tweeter (3,000 to 13,000 Hz) was about 3 dB below the rest of the speaker's response at lower and higher frequencies. The overall variation of ± 3 dB (relative to the midrange output) from 32 to 20,000 Hz attests to the fine performance of this system. This response curve is an approximation of the speaker's total acoustic power output over most of the audio band, and its close similarity to the exceptional bandwidth it exhibited in our quasi-anechoic measurements implies a very well dispersed output in the forward hemisphere (the normal listening area for this speaker system).

The "perspective control" had a very small effect, shifting the level between

about 300 and 11,000 Hz by only ± 1 dB relative to the "flat" middle setting of the switch. As might be expected, the subjective effects of this control were quite subtle, but at least there was no possibility of degrading the performance designed into the Professional Monitor by any misuse of its own adjustments. The system impedance, which averaged about 8 ohms over most of the audio band, reached a minimum of about 5 ohms at 600 and 2,500 Hz and a maximum of 32 ohms at 40 Hz. The measured sensitivity at 1 meter was considerably better than rated, with an output of 89 dB for a drive signal of 2.83 volts of band-limited pink noise.

One of the major advantages claimed for transmission-line-loaded woofers is an extended low-bass response with very low distortion and freedom from coloration. The IMF Professional Monitor demonstrated these qualities most impressively. With a 1-watt input (based on an 8-ohm impedance), the distortion was less than 0.5 per cent from 100 to 50 Hz and between 35 and 25 Hz; it reached a maximum of 1 per cent at 40 and 22 Hz and 2 per cent at 20 Hz. At a 10-watt drive level, the distortion was less than 1 per cent from 100 to 70 Hz, 2 to 2.5 per cent from 60 to 32 Hz, and about 8.5 per cent at 20 Hz.

● **Comment.** The sound of the IMF Professional Monitor speakers was distinctly different from that of most of the other top-quality speakers we had on hand or have used in the same room. Our initial impression was of smoothness and transparency, and we had little or no sense that we were hearing a sound originating from the visual-

ly prominent speakers at the front of the room. The highs had a tendency toward brightness, but this was obviously due to the flatness of the system's output over a range extending at least an octave higher than most of its competitors. It would be fair to describe the middle- and high-frequency sound of the Monitor as sharply defined and smooth but not in the least overbearing.

Listening to the low end of these speakers provided an ongoing experience of sonic discovery. The total absence of a middle- or upper-bass peak eliminated the "chesty" or "tubby" coloration that mars the sound of male voices reproduced by most loudspeakers. They sounded like people talking rather than like hollow resonators being excited by the voices (which is what most speakers really are under similar conditions). Combined with this flatness was perhaps the most palpable bass we have experienced in some time. It could be felt through the skin, rather than just heard. (Too often the "bass" one hears from a speaker consists only of the distortion harmonics of a bass fundamental that it cannot radiate at an audible level.)

In short, we found the IMF Professional Monitors to be among the most exciting, natural, and downright listenable speakers to have come our way in many a year. Anyone who has come to the reluctant conclusion that ordinary speakers (even very good ones) sound nothing like a live performance owes it to himself to hear these speakers properly demonstrated. They have a disturbing tendency to sound too good to be speakers!

—Julian D. Hirsch

Circle 141 on reader service card



Harman Kardon CD91 Cassette Deck

MODESTLY priced cassette decks have tended in recent years to compete largely on the basis of their features—"bells and whistles," in industry jargon. The Harman Kardon CD91 is a notable exception to this general design trend. Here the manufacturer has decided to forgo all but such essential features as Dolby-B noise reduc-

tion in order to use the same tape head and transport mechanism found in some of the company's more costly models. The result is a two-head, single-motor cassette deck whose superior performance belies its budget price.

The Harman Kardon CD91 uses a Scandust record/playback head, and its single

capstan is belt-driven by a d.c. servomotor that also powers the reels. Cassettes are inserted, tape openings downward, into slides behind the lightly damped cassette-well door. Rear illumination and a transparent strip on the door permit viewing the approximate amount of tape remaining, though

(Continued on page 44)

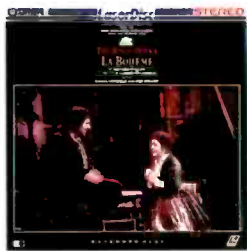
Aida



George Shearing



La Bohème



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Swan Lake



America in Central Park



Dave Mason



Grover Washington, Jr.



Paul McCartney & Wings "Rockshow"



The Tubes Video



Kingston Trio



The Nutcracker



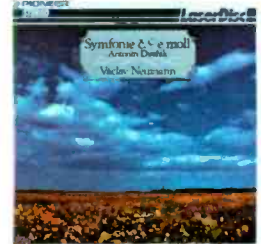
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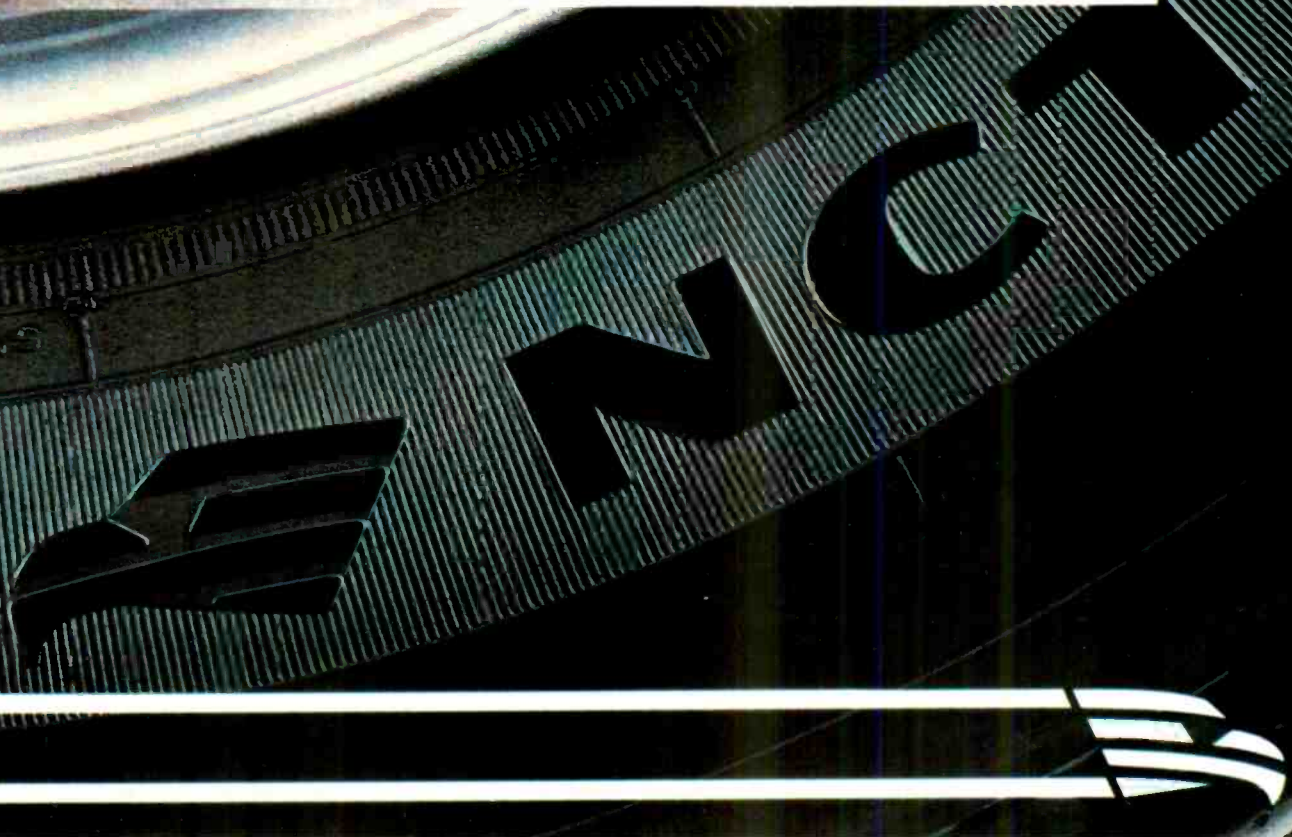
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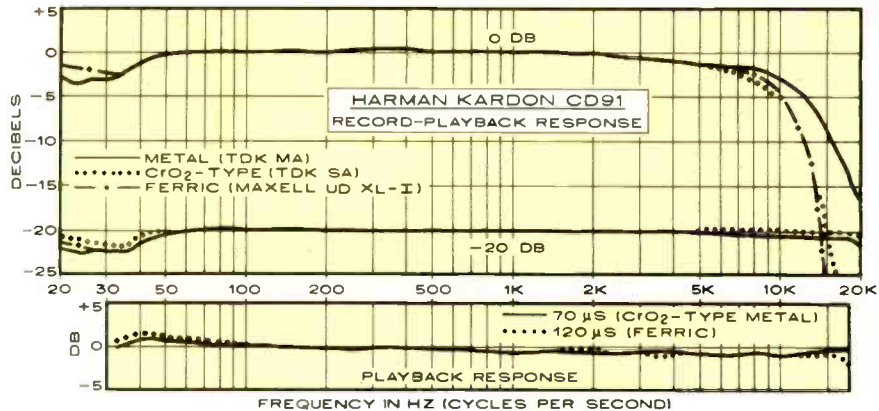
test reports

the cassette label areas are not visible. The door can be removed easily for routine cleaning and demagnetizing.

Transport operation is solenoid-controlled via transistor logic that permits rapid pushbutton switching from one mode to any other (even from rewind to record) without using the stop button. The record and pause buttons have tiny LED indicators, but in line with its "no frills" design the CD91 has no record-mute button to insert silent spaces between selections, nor is there any memory or timer rewind or memory play. Three pushbuttons set the proper record bias (even from rewind to record) without using the stop button. The record and pause buttons have tiny LED indicators, but in line with its "no frills" design the CD91 has no record-mute button to insert silent spaces between selections, nor is there any memory or timer rewind or memory play. Three pushbuttons set the proper record bias and equalization for ferric, CrO₂-type, and metal tapes. No microphone circuits are included, though it is possible, of course, to connect the outputs of an external microphone mixer in place of the regular line-level inputs. Recording levels are set by a single large control along with a smaller channel-balance knob. There is no playback-level control, so this function must be handled by your amplifier. Pushbuttons are used to switch the Dolby-B noise-reduction system and an FM-multiplex filter in or out; an LED lights when the Dolby system is in use. Recording levels, shown by tiny peak-reading, twelve-element LED displays, are calibrated from -20 to +8 dB, with 0 dB corresponding to Dolby level. A three-digit mechanical counter and reset button are provided, along with the customary front-panel headphone jack.

The rear panel of the CD91 contains only the line-in and line-out phono jacks, and there is no provision for timer activation. Overall, the unit measures 17³/₈ inches wide, 4³/₄ inches high, and 13¹/₂ inches deep, and it weighs a little over 13 pounds. Price: \$250.

● **Laboratory Measurements.** Our sample of the CD91 came supplied with the cas-



The upper curves indicate overall record-playback response at the manufacturer's indicated 0-dB recording level using the tapes designated on the graph. In the center are the same measurements recorded at -20 dB relative to the upper curves, a level conventionally used for tape-deck frequency-response measurements. Bottom curves show playback response from calibrated test tapes and indicate performance with prerecorded tapes.

ettes used to set up the deck—Maxell UD XL-I (ferric), TDK SA (chrome-equivalent), and TDK MA (metal)—so we used these for our measurements. Other premium formulations from TDK, Maxell, Sony, and BASF gave comparable results, consistent with their own slight characteristic differences. Playback response was checked with BASF's IEC standard calibrated tapes. As the playback graph shows, response was remarkably flat throughout the 31.5- to 18,000-Hz test-tape range. Indeed, the same was true of overall record-playback response, which was within 1 dB of ideal from 40 to 20,000 Hz and within +0, -3 dB from 20 to 20,000 Hz when measured at the conventional -20-dB level. At a 0-dB recording level all three tapes showed the usual high-frequency tape saturation,

with response down by 5 dB at 10,000 Hz (SA and UD XL-I) and at 12,500 Hz (MA).

At a 0-dB recording level the third-harmonic distortion of a 400-Hz tone measured 1 per cent with Maxell UD XL-I, 1.45 per cent with TDK SA, and 0.75 per cent with TDK MA. To reach the 3 per cent distortion point used for signal-to-noise measurements required raising the input level by 3.5, 2.5, and 5.5 dB, respectively. Referred to the 3 per cent distortion point, unweighted signal-to-noise ratios without Dolby-B processing measured 49.8 dB (ferric), 53 dB (CrO₂-equivalent), and 56 dB (metal). Adding Dolby-B and CCIR/ARM weighting increased the S/N's to 61.5, 64.8, and 66.8 dB, respectively. These values are close to the best that can be obtained with state-of-the-art tapes and Dolby-B.

Wow-and-flutter, checked with a Teac MTT-111 test tape, measured 0.04 per cent wrms and 0.06 per cent with the DIN peak-weighted standard, which is very good, though not exceptional, performance. The Dolby calibration was exact, and Dolby-B tracking error—the difference in low-level frequency response with and without the Dolby system—was within ±1 dB throughout the frequency range. The multiplex filter affected high-frequency response above 15 kHz and provided 32 dB attenuation at the 19-kHz FM-stereo subcarrier frequency. The input sensitivity of the CD91 was 0.061 volt (61 mV), and its output at 0 dB measured 0.48 volt (480 mV). Fast-forward and rewind times for a C-60 cassette measured 88 seconds, which is about average.

● **Comment.** The CD91 did an extremely good job of playing back top-quality prerecorded cassettes from InSync and Mobile Fidelity. Although its two-head design precluded direct A-B comparison while recording, it did a more than capable job of dubbing from discs and other tapes. The frequency response was outstanding, though on material with a wide dynamic range some background hiss was audible with the ferric Maxell UD XL-I. With TDK SA (chrome-type) and MA (metal) the added background noise (intrinsic in all analog



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copying) was more sensed than distinctly heard.

Mechanically, the CD91 behaved flawlessly throughout our tests. The controls were positive and precise in their operation, and, while we found the recording-level displays annoyingly small and hard to read ac-

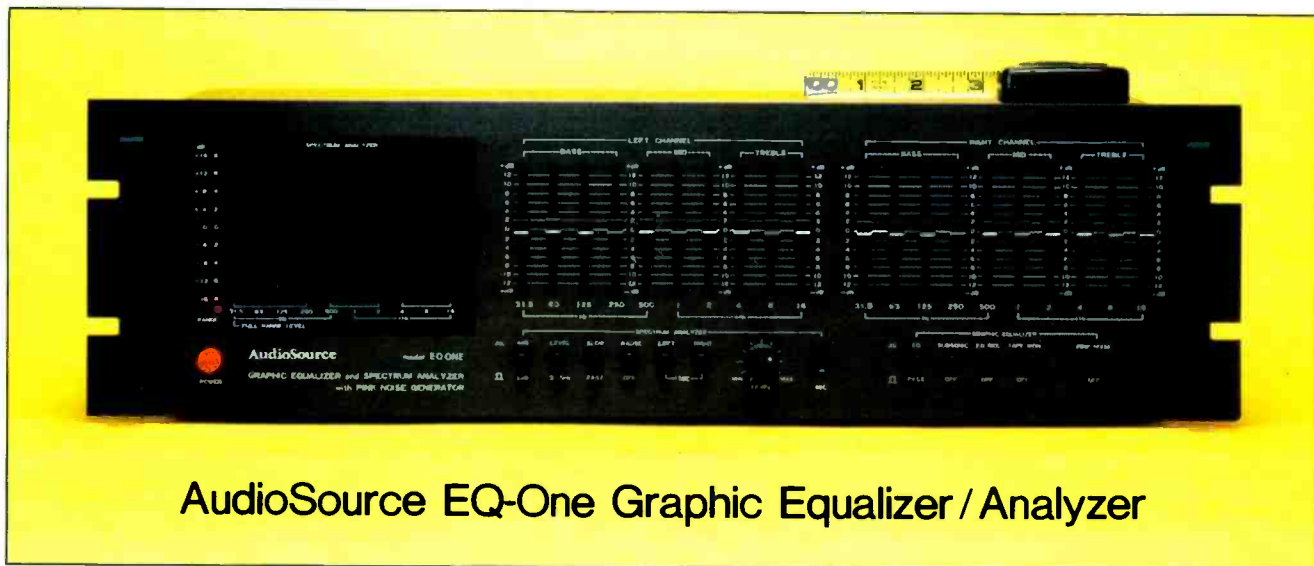
curately, they certainly provided adequate indications for everyday recording.

Some recordists may find the lack of some features, such as Dolby-C or microphone inputs, sufficiently important to justify looking at a higher-priced deck. But that's the proper way to regard features.

The Harman Kardon CD91 is an "entry-level" deck, but in terms of high-fidelity performance it is markedly superior to many decks that cost far more.

—Craig Stark

Circle 142 on reader service card



AudioSource EQ-One Graphic Equalizer / Analyzer

THE AudioSource EQ-One combines the functions of a ten-band graphic equalizer, a pink-noise generator, and a ten-band real-time spectrum analyzer in one compact unit. With this component one can easily equalize a music system, including the speakers and the room, for a reasonably flat frequency response at the listening position or at any other location.

The EQ-One is furnished with an omnidirectional electret microphone, powered from the main unit, which is placed at the location for which the system response is to be equalized. The EQ-One is connected into an amplifier's tape-monitor loop, and the tape recorder it may displace is plugged into jacks on the rear apron of the EQ-One. Alternatively, the unit can be connected between a preamplifier and its associated power amplifier.

During the speaker/room-equalization process the EQ-One supplies to the amplifier a pink-noise test signal (a hissing random noise having equal energy in each octave of the audio band), replacing the regular program source. Ten columns of LED's (one for each octave) show the spectral content of the signal picked up by the microphone. Green LED's across the center line of the amplitude (vertical) scale serve as zero-level reference points; the others are red. There are two amplitude scales, selected by a pushbutton, for 2 or 4 dB per LED step, with full-range displays of either 16 or 32 dB.

The center frequencies of the spectrum-analyzer filters correspond to those of the graphic-equalizer sliders. With the microphone placed at the listening position and with the amplifier balance control set to one

side, the equalizer sliders are moved (one at a time) until each of the analyzer lights is green, indicating a flat response across the audio band for that channel. Interaction between adjacent controls usually requires several passes through the process to achieve a reasonably flat response, and in some cases it may not be achievable at the frequency extremes (many loudspeakers are not even capable of full response at 31.5 and 16,000 Hz).

The process is repeated for the other channel, after which releasing the pink-noise button restores the normal program. The equalizer can be instantly bypassed or inserted into the signal path to judge its effect, and the equalization settings are easily modified to suit a user's personal taste (a "flat" room response often sounds too bright for most people). The EQ-One can also be used to compensate for shortcomings in the recording or equalization of a program. The spectrum analyzer can be set to display the frequency spectrum of the program material, which can be both educational and entertaining.

The AudioSource EQ-One is suitable for rack mounting. It has an edge-slotted panel 19 inches wide by 5 1/4 inches high (fitted with handles), and it is 8 3/4 inches deep behind the panel. It weighs only 8.4 pounds. The EQ-One is finished entirely in black, with white markings. The spectrum-analyzer display is at the left of the panel, most of the rest of the panel being devoted to two identical sets of vertical-slider equalizer controls. There are ten controls for each channel with center frequencies of 31.5, 63, 125, 250, and 500 Hz and 1, 2, 4, 8, and 16 kHz. Each control is center-detented, with a

calibrated range of ± 12 dB, and the panel markings identify them as being in the bass, middle, and treble ranges.

Pushbuttons below the left-channel equalizer sliders control the spectrum analyzer, connecting it to display either the left- or right-channel programs or the (mono) microphone input at the bottom center of the panel. Two other buttons control the response time of the display LED's; one selects either a fast decay or a slow decay for better visual averaging of the spectrum readout, and another (PAUSE) freezes the display while it is being pressed. Another button converts the 31.5-Hz column of LED's to read the total signal level (as in a sound-level meter) instead of the content of the lowest octave.

Next to the microphone jack is a small knob that adjusts the gain of the spectrum analyzer to provide a center-scale display over a wide range of signal levels. Buttons beneath the right-channel equalizer sliders control the equalizer section, which can be inserted into the signal path or bypassed for instant comparisons. Another button supplies an equalized signal to the tape-recorder jacks, in the rear of the EQ-One, which otherwise receive an unequalized signal. The tape-monitor button replaces the one on the amplifier to which the EQ-One is connected. An infrasonic filter rolls off the response at 18 dB per octave below 20 Hz when its button is pressed. The remaining button in this group replaces the audio program with pink noise. The red power button is at the lower left corner of the panel.

The rear apron of the EQ-One contains only the phono-jack inputs and outputs that

(Continued on page 50)

5

Fifth in a series on how Delco Electronics and Bose technology contribute to your enjoyment of driving.

"If your car is this well equipped, you won't want to go home again."

Rich Warren, Chicago Magazine

This Delco-GM/Bose speaker module incorporates new technology that for the first time matches sound to the acoustics of a specific model automobile. So you can hear sound with clarity and realism rarely heard in even very fine home music systems.

Four modules shape the sound specifically for a Cadillac Seville, Buick Riviera, and Oldsmobile Toronado.

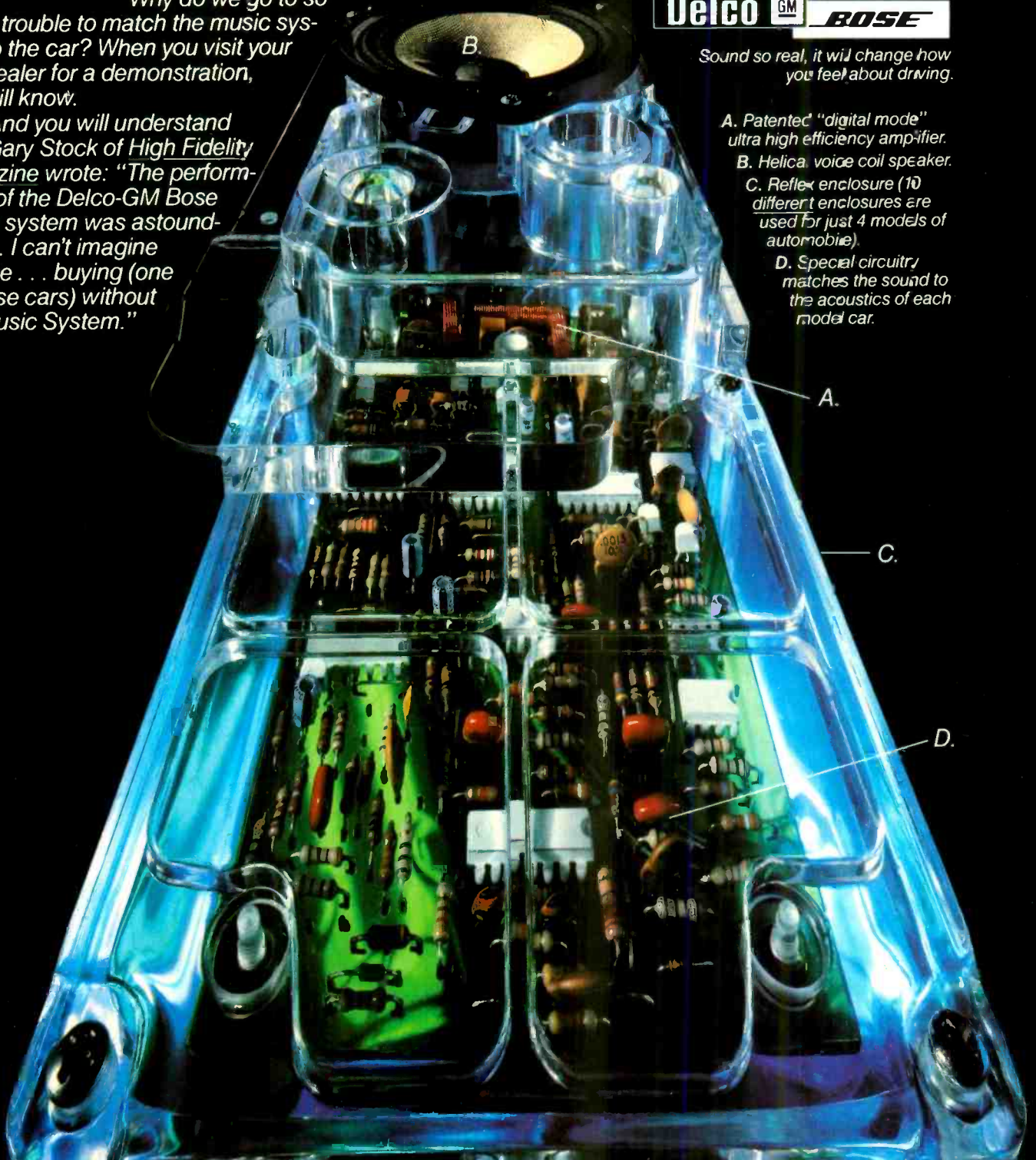
Why do we go to so much trouble to match the music system to the car? When you visit your GM dealer for a demonstration, you will know.

And you will understand why Gary Stock of *High Fidelity Magazine* wrote: "The performance of the Delco-GM Bose music system was astounding . . . I can't imagine anyone . . . buying (one of these cars) without the Music System."

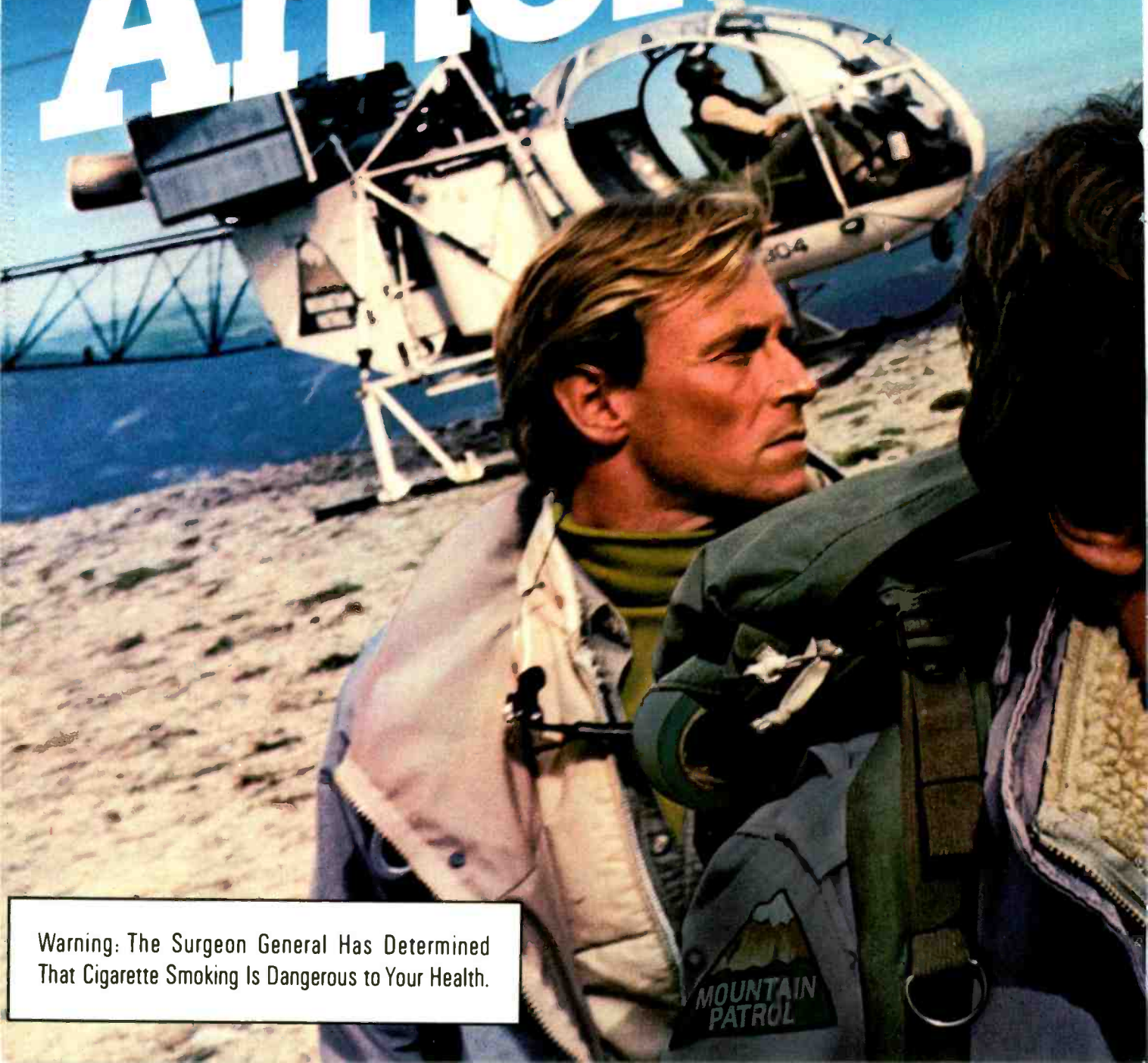
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Sound so real, it will change how you feel about driving.

- A. Patented "digital mode" ultra high efficiency amplifier.
- B. Helica voice coil speaker.
- C. Reflex enclosure (10 different enclosures are used for just 4 models of automobile).
- D. Special circuitry matches the sound to the acoustics of each model car.



Winston. America's

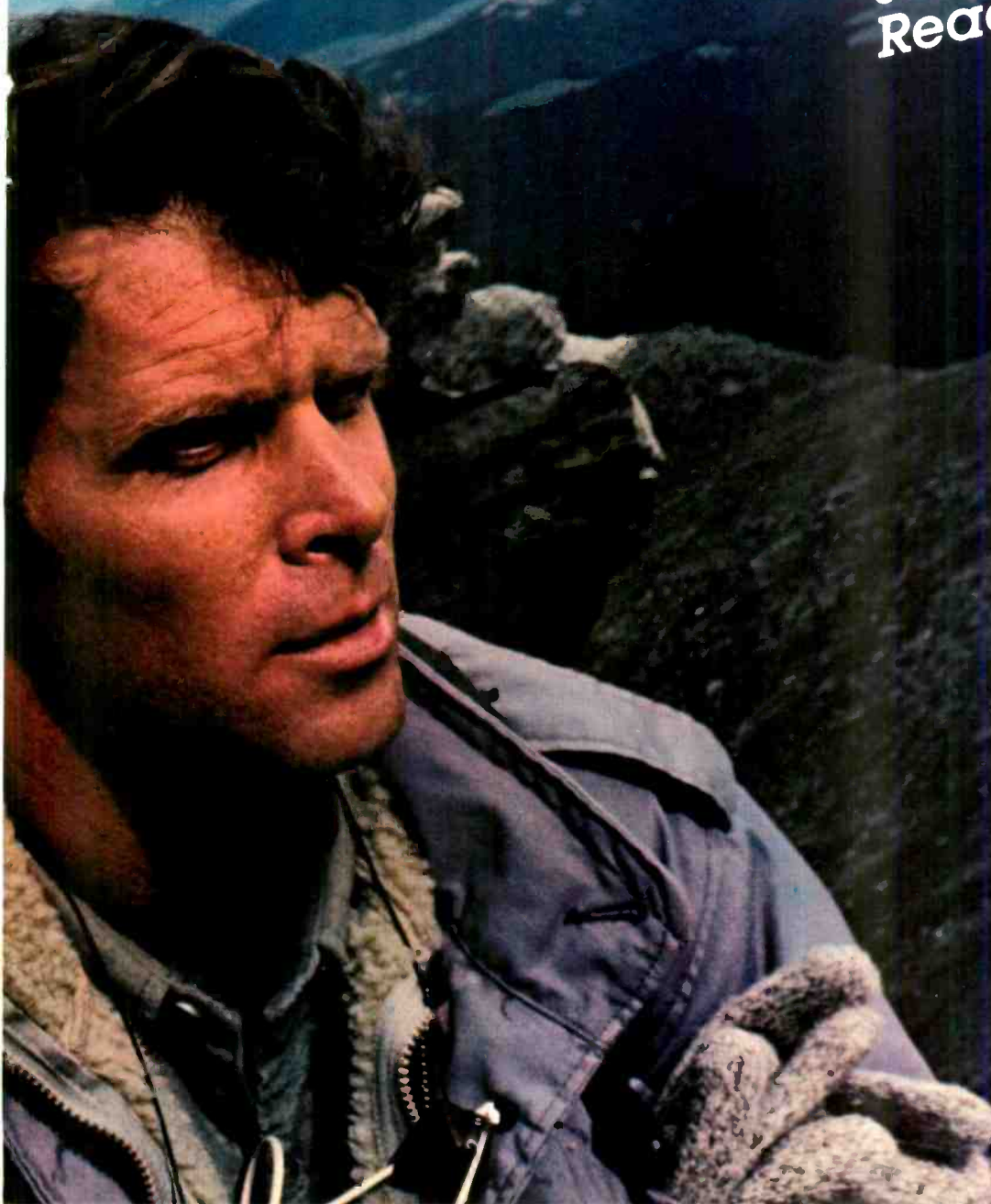


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Reach for Winston.

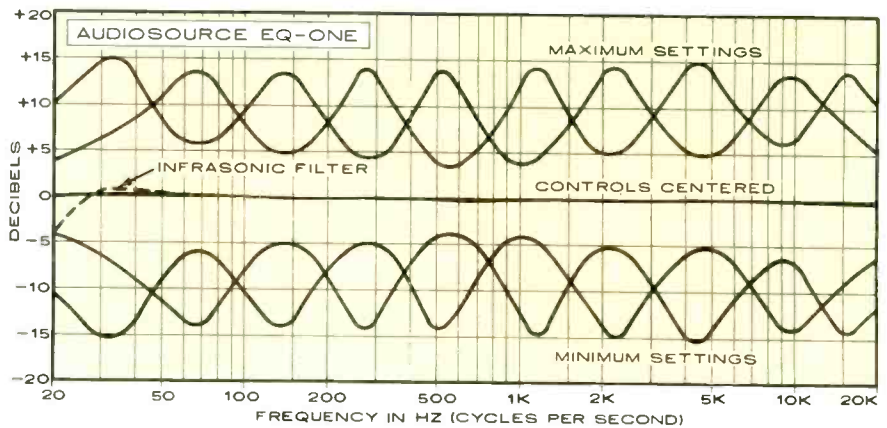


LIGHTS: 9 mg. "tar", 0.7 mg. nicotine,
LIGHTS 100's: 12 mg. "tar", 0.9 mg. nicotine,
av. per cigarette by FTC method.

connect to the amplifier and the tape-recorder inputs and outputs. The microphone supplied with the EQ-One is a slim, tubular omnidirectional electret unit that is powered from the EQ-One when it is plugged in (no other type of microphone should be plugged into the front-panel jack). It has an integral 19-foot connecting cable fitted with a molded plug. Price: \$400. AudioSource is located at 1185 Chess Drive, Foster City, Calif. 94404.

● **Laboratory Measurements.** The frequency-response characteristics of the EQ-One equalizer corresponded closely to its specifications, with a maximum control range of about 14 dB of boost or cut in each octave and a ruler-flat response with the controls centered. The infrasonic filter raised the output by 0.5 dB in the 30- to 40-Hz range and dropped it sharply to -3 dB at 21 Hz (our measurements stopped at 20 Hz). The 1,000-Hz distortion of the equalizer (with controls centered) was 0.0003 per cent at 1 volt, increasing to 0.0014 per cent at 5 volts. It was a little higher at 20 Hz, 0.0013 to 0.0016 per cent over the same range. At 15,000 Hz, the distortion was 0.0045 per cent at 1 volt and 0.09 per cent at 5 volts output. All these distortion levels are negligible.

The center frequencies of the spectrum analyzer closely matched those of the equalizer. The transition between the different levels on the analyzer readout was not instantaneous, so that often two adjacent lights were lit simultaneously. The "calibration" of the steps, therefore, was only approximate. For example, with the green indicator lights as the zero reference, lighting the 4-dB light in either direction from center could require a level change of



somewhere between 1 and 4.5 dB, and the 16-dB lights needed either -9.5 or +12 dB to turn on.

In an instrument such as this, however, accurate calibration is less important than a stable zero reference, since the adjustments are made to produce readings of "zero" at all frequencies. The EQ-One met that requirement easily. The maximum input sensitivity of the analyzer (for a 0-dB reading) was 30 millivolts (mV) on the 4-dB-per-step range and 80 on the 2-dB-per-step range. The pink-noise output, rated at 100 mV, measured 105, and its spectrum closely approximated that of ideal pink noise from 20 to 20,000 Hz.

The gain of the AudioSource EQ-One was exactly unity (as rated). Its unweighted noise was 0.44 (-67 dBV), and with A-weighting it was below our measurement limit of 100 microvolts (-80 dBV). The output clipped at 6.8 volts when driving a

standard IHF load of 10,000 ohms in parallel with 1,000 picofarads (the maximum rated input or output level is 5 volts).

● **Comment.** We have used a number of equalizers, some with built-in spectrum analyzers, whose function was similar to that of the AudioSource EQ-One. In general, they have all done their primary job well, although we have not always been completely satisfied with the audible results. It is well recognized that a "flat" response in a room, at some distance from the speakers, is likely to sound too bright to most people and that some modification at high frequencies may be necessary.

For some reason, we found little need for that action with the AudioSource EQ-One. It was easy to use, and in a matter of a few minutes we had equalized our system for a reasonably uniform response at the listening position. True, the sound was a little bright, but it was not as overbearing as we had expected. In fact, it was highly listenable in its equalized form, with no further modification required.

Switching the EQ-One into the system usually produced a distinct improvement, and after a short period of listening to the equalized system we began to find the un-equalized sound rather dull and flat. This would seem to be a reasonable criterion for success with a device such as this, since in the past we have welcomed the return to un-equalized sound.

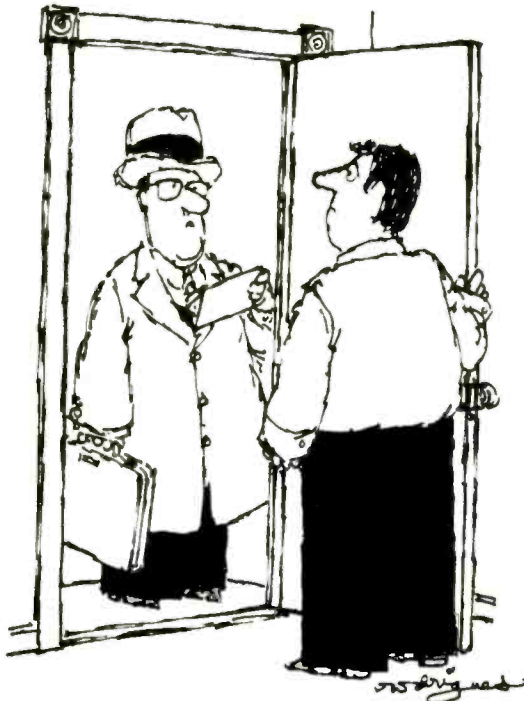
Looking at the rather extreme settings of the controls that were needed to flatten response, we could only wonder at the tolerance of human hearing for wide frequency-response fluctuations. Of course, these can be considered as "normal," being a part of our lifelong listening experience in closed rooms that support a multitude of standing-wave patterns.

At any rate, the AudioSource EQ-One does a first-rate job, at a reasonable price, of equalizing loudspeaker-room response. Furthermore, watching the spectrum-analyzer display gives one a better appreciation of how rarely we really encounter strong program energy at the frequency extremes, even with considerable equalization.

—Julian D. Hirsch

Circle 143 on reader service card

(Continued on page 52)



"I am Cyrus Bleyer, attorney, representing the estate of the late Ludwig van Beethoven. You have unlawfully taped the following compositions from frequency-modulation broadcasts, to wit: June 8, 1982, The Ruins of Athens; June 12, 1982, Sonata No. 21, in C Minor, Op. 53, Waldstein; July 3, 1982 . . ."

*"The quality of Smirnoff
is something to sing about.
Its value calls for encores."*



DIAHANN CARROLL,
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into delivering
a song. Because
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a performance is
very important to me.*

*"Quality is important in the vodka
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purity and clarity the Smirnoff way. Yet it costs only a little more to
have Smirnoff than regular vodkas. That's value.*

*"I admire quality. And I appreciate
value. And that's why Smirnoff
hits just the right note with me."*

Smirnoff
LEAVES YOU BREATHLESS®

There's vodka, and then there's Smirnoff.

Dynavector DV10X Type 3 Phono Cartridge



FOR some time, the least expensive Dynavector cartridge has been the Model DV10X, whose performance has been upgraded over the years and which is now in its "Type 3" version. All Dynavector cartridges use the moving-coil principle and have fixed styli that cannot be replaced by users. Several of them, including the DV10X Type 3, have an output high enough to drive the phono input of any amplifier without use of an external step-up transformer or head amplifier.

According to Dynavector, the new Type 3 incorporates many of the design features of the company's more expensive cartridges, such as the "Karat" units with diamond or ruby cantilevers. Like the previous 10X models, the Type 3 has a tapered tubular aluminum cantilever, but the 0.6-mil spherical diamond stylus of the earlier models has been superseded by an elliptical stylus. Also, the cantilever has been shortened, compared to that of the Type 2, from 7 to 6.5 millimeters. This is said to provide a more accurate and undistorted transmission of the signal from the stylus to the generating coils.

The DV10X Type 3 is rated to deliver 2.5 millivolts at a groove velocity of 5 cm per second. This high output level is made possible by a special manufacturing process in which several hundred turns of extremely fine wire are wound on each of the tiny generating coils in the cartridge. The wire used is 95 per cent silver and 5 per cent copper. Silver-plated stainless steel stranded wire is used for the suspension, supplying temperature-independent damping as well as positioning the cantilever system.

Also contributing to the high output of the DV10X Type 3 is the use of a samarium-cobalt magnet (replacing the cobalt magnet of the Type 2). The magnet is claimed to be not only considerably more powerful than the previous magnet but also much more stable with time. The body of the Dynavector DV10X Type 3, like that of its predecessors, is molded of transparent red plastic. Like the bodies of the Karat models, it is reinforced with a glass-fiber mixture. In addition, the weight of the Type 3 has been reduced substantially from that of the Type 2, from 9.5 to 4.6 grams.

The Dynavector DV10X Type 3 is rated

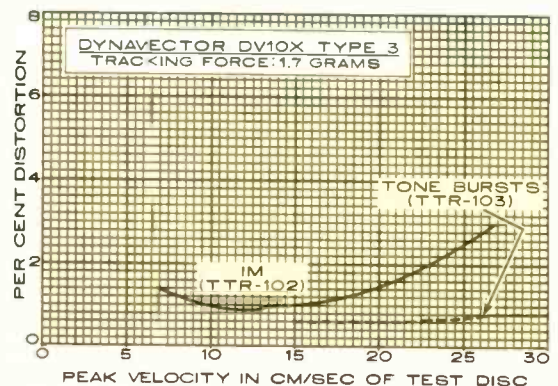
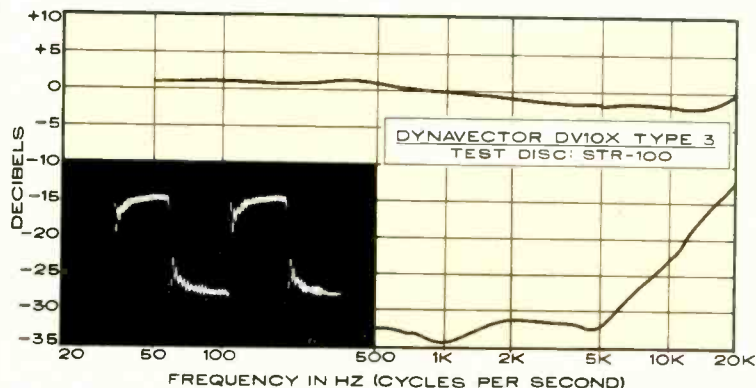
to track at 1.7 ± 0.2 grams. Its recommended load is the standard 47,000 ohms. Although the preliminary press release on the cartridge lists the recommended load capacitance as 50 picofarads, its response and overall performance are virtually independent of the full range of preamp input resistances and capacitances likely to be encountered in a home music system. The rated frequency response is 20 to 20,000 Hz ± 2 dB, with channel separation of 20 dB at 1,000 Hz.

The suggested retail price of the Dynavector DV10X Type 3 is \$150. Stylus service or replacement (actually a replacement of the entire cartridge) is \$82.50.

● **Laboratory Measurements.** The Dynavector DV10X Type 3 had a frequency-response variation of 2.5 dB (overall) from 40 to 20,000 Hz on the CBS STR 100 test record. The response curve sloped downward above 500 Hz to a broad minimum in the 5,000- to 15,000-Hz range, rising to equal its maximum mid-frequency level at 20,000 Hz. Since the individual response curve on the test sample (supplied to us by Dynavec-

In the graph at left, the upper curve represents the frequency response of the cartridge. The distance (measured in decibels) between it and the lower curve is the average separation between the two channels (anything above 15 dB is adequate). The inset oscilloscope photo shows the cartridge's response to a recorded 1,000-Hz square wave, which indicates resonances and overall frequency response (see text). At right is the cartridge's response to

the intermodulation-distortion (IM) and 10.8-kHz tone-burst test bands of the TTR-102 and TTR-103 test records. These high velocities provide a severe test of a phono cartridge's performance. The intermodulation-distortion readings for any given cartridge can vary widely, depending on the particular IM test record used. The actual distortion figure measured is not as important as the maximum velocity tracked before a sudden increase in distortion occurs.





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Dynavec DV10X Type 3

(Continued from page 52)

tor) was flatter and had been made with a JVC 1007 record, we also tested the cartridge with that record. The curve, very different from that of the STR 100, was flat within 1.5 dB overall, with its broad minimum between 10,000 and 20,000 Hz.

The differences between the two test records was less striking in respect to the cross-talk response. With the CBS record, the average channel separation was between 25 and 30 dB up to about 8,000 Hz, falling to 20 dB at 10,000 Hz and 11 dB at 20,000 Hz. Although the JVC record gave slightly different curves, the overall performance was about the same with both test records.

For these tests, as well as for listening, we installed the DV10X Type 3 in the tone arm of a medium-priced record player. The tone arm's effective mass (less cartridge) was about 18 grams. The tracking force was set to 1.7 grams, and the cartridge was terminated in 47,000 ohms and 140 picofarads (much higher capacitances had no detectable effect on its performance).

The Type 3 cartridge's output from the 3.54-cm/sec (1,000-Hz) test bands of the STR 100 record was 2.75 millivolts per channel. The output levels for the two channels were identical. In fact, the measured frequency responses of the two channels with the STR 100 record were virtually identical, differing by less than 1 dB in the 4,000- to 8,000-Hz range and coinciding ex-

actly elsewhere. The response to the 1,000-Hz square waves on the CBS STR 112 test record showed a single cycle of overshoot followed by high-frequency ringing across the "flat top" of the square wave. This ringing, engraved on the record, is at about 40 kHz. It is usually seen only in the output of moving-coil cartridges, whose response is not rolled off above the audio range as happens with most moving-magnet cartridges.

The cartridge had a vertical tracking angle of 22 degrees. It resonated in the moderately massive arm at about 8 Hz. The intermodulation distortion with the Shure TTR-102 test record (mixed 400- and 4,000-Hz signals) was about as low as we have seen from that record, varying between 0.9 and 1.4 per cent for recorded velocities between 6.9 and 19 cm/sec and rising to only 3 per cent at the record's maximum of 27.1 cm/sec. There was no sign of mistracking even at that very high velocity. The high-frequency tracking distortion with the 10.8-kHz tone bursts of the Shure TTR-103 test record was also close to the lowest we have measured, reading between 0.6 and 0.8 per cent over the record's 15- to 30-cm/sec velocity range.

The tracking ability of the DV10X Type 3 was checked with high-velocity records at low and middle frequencies. Levels of 30 cm/sec or higher were tracked at 32 and 1,000 Hz, using forces of 1.7 grams or less. The German HiFi Institute HiFi:2 record could be played at its 60-micrometer level with 1.5 grams, at 70 micrometers with 1.7 grams, and at 80 micrometers with the

cartridge's rated maximum of 1.9 grams.

● **Comment.** Subjective tracking tests of the Dynavec DV10X Type 3 were made with the Shure "Audio Obstacle Course" records (Era IV and Era V). All levels on the Era IV record and the fifth level of the Era V record could be played without audible mistracking.

The Dynavec DV10X Type 3, not surprisingly, sounded as neutral and smooth as our tests indicated it would. We have been using one of the early Dynavec 10X cartridges for several years and have always considered it to be one of the more "effortless" sounding cartridges we have used. The DV10X Type 3 has a much flatter response as well as a slightly higher output.

The low coil impedance of the DV10X Type 3 cartridge effectively shorts the preamplifier phono input, reducing preamp noise to a minimum as well as completely eliminating any interaction between cartridge inductance and amplifier equalization. This is, in my view, the major advantage of a moving-coil cartridge. The Dynavec DV10X Type 3 is one of the few moving-coil cartridges to provide this feature without the usual penalties of requiring additional amplification and without costing considerably more than comparable moving-magnet cartridges. In sum, we must say that Dynavec's research over the past years has made a fine product even finer.

—Julian D. Hirsch

Circle 144 on reader service card

The Mini-Wizard. Its wonders never cease.

Here is the car stereo that does just about everything. Mini-Wizard from TEN Car Audio.

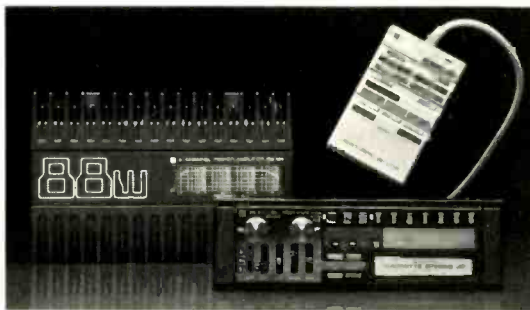
For starters, its digital electronic tuner lets you pin-point radio stations with uncanny accuracy, while the TEN exclusive internal circuits captures them clearly.

You can pre-set your ten favorite stations and recall them with a push of a soft-touch button. Can't make up your mind on what you'd like to hear? Just push the search tuning button to listen to the next station. And if you really can't decide, scan tuning lets you sample five seconds of a radio station. All of this, thanks to its memory.

Microprocessor memory technology, developed by Fujitsu Ltd. The world's second largest producer of computers.

Now, for those of you who enjoy tapes, the Mini-Wizard leaves little to be desired. Among its outstanding features: an automatic program selector that lets you skip songs, and an auto-repeat system that gives your favorite tune up to five encores.

For optimum tape performance, there are two TEN exclusive features: an anti-roll mechanism that keeps tapes from rocking, no matter where you're rolling. And a Hall Effect end-of-tape sensor that prevents them from being eaten.



With its five-band graphic equalizer and four-way fader, you can adjust sound for maximum enjoyment, plus loads of power with its 88 watt amplifier. And the optional remote control puts magic right at your fingertips.

Of course we could go on about all the amazing things that our Mini-Wizard does, but we prefer that you try one yourself. You'll soon agree that its possibilities are, indeed, endless.

FEATURES AND SPECIFICATIONS: CE-4133 Mini-Wizard—AM/FM Auto-Reverse Cassette Car Stereo. Digital electronic tuner with 10-station pre-set, auto search and scan tuning, pre-set program timing. Microprocessor FM noise blanker. LED digital quartz clock. 5-band graphic equalizer with 4-way fader control. Automatic program selector and auto-repeat system. Hall Effect end-of-tape sensing. Anti-Roll Mechanism. Dolby[®] noise reduction. OM-104 Amplifier—88 Watts total output power. 15 Watts (RMS) per channel minimum rating. OR-101 Remote Control optional. *Dolby is a registered trademark of Dolby Laboratories. Fujitsu Ten Corp. of America, 19281 Pacific Gateway Drive, Torrance, California 90502. In Canada: Norelco Canada Inc., Ontario. Manufactured by Fujitsu TEN Ltd.

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Barter**

*Music Editor Barter (left)
joins Editor-in-Chief
Livingstone (right)
in presenting our 1983
Certificate of Merit (and
original Hirschfeld
caricature) to conductor
Eugene Ormandy.*



Louis Hood/Philadelphia Orchestra

NOTES ON THE CASSETTE

TEN years ago the Sony Corporation ruffled a lot of record-industry feathers in London by running a consumer ad with a headline explaining just one of the uses of the cassette deck. "Lets you do delightful things," it read, "like recording other people's records." Today such a line would not get any further than a copywriter's wastebasket; if it did, industry feathers would fly. Its message certainly does not need repeating in these piratical days.

As it is, few of today's potential buyers need much convincing about the advantages of cassette decks—they are the hottest-selling components in the audio retail marketplace. In addition, the Sony Walkman and its many personal portable offspring have enjoyed an exponential growth in sales over the past year or two, far surpassing the once ubiquitous "ghetto blaster."

So it should come as no surprise that the prerecorded cassette itself, which in 1981 was selling at roughly half the rate of the LP record, was outpacing the LP in sales by the end of 1982. In fact, this past summer, when record manufacturers were bemoaning the dramatic decline in LP sales, it was rarely noted that prerecorded cassette sales had reportedly picked up to such an extent that the actual drop in dollar volume of all recordings from 1980 to 1981 was only about 1 per cent! While all the figures for 1982 are still not in, it's a fair bet that any decline in LP sales last year was actually offset to a significant degree by increased cassette sales.

It has taken almost twenty years for the cassette to come into its own. The LP and the 45 superseded the 78 pretty quickly in the early Fifties, and stereo took only a few years to drive out mono in the Sixties. But the cassette, though it never faced appreciable consumer resistance, was for a good while only the poor cousin of the open reel. It was good for dictation and, to the industry's dismay, for "recording other people's records," but the quality was never really there. Or at least it wasn't until the mid-Seventies when Advent was the first to opt for chromium-dioxide tape along with Dolby-B encoding, which was still considered a bit "new."

But then came the Walkman in 1979, and

suddenly it made sense to buy a prerecorded cassette or the blank tape to make one for portable use. The eight-track cartridge, which never developed any cachet as a quality item, was soon replaced in automobiles by the cassette, and the audiophile soon discovered the cassette as the equal or near-equal of the LP record in quality and its superior in terms of extended playing time, portability, and ease of handling. The record business thus entered upon a new era, which is now.

SOMETHING has been lost, however, or may be. I confess I am an unreconstructed lover of anything circular and flat, up to twelve inches across, with a hole in the middle. It needn't be black; the silvery Compact Disc will do just fine—even though it, like the cassette, is less easily rendered unplayable than the vinyl disc. A *real* record needs tender loving care and is therefore a "collectible" in a way the cassette is not. Moreover, LP packaging has traditionally offered unique opportunities to the graphic designer. The album cover has become a recognized art medium. In order to suit the cassette format it must be reduced by as much as 80 per cent.

And what do you do about liner notes and librettos? How can the little cassette compete with the often attractive presentations in LP packages? Some record companies are including notes with their classical cassettes, but generally what you get is a sheet of rather poor-grade paper folded over upon itself so many times that it looks like one of those mash notes you secretly passed under the desk in junior high. One exception is the handsome new multicassette box from CBS Masterworks, which encloses a perfectly readable libretto, reduced by roughly a quarter in size and folded over once. Otherwise what manufacturers should do, of course, is what they once did with open-reel tape: that is, to enclose a postcard that the buyer can return for a full set of notes, a libretto, or whatever.

Certainly no one would argue that the cassette is replacing the LP, which will continue to play an important part in our musical lives. But the cassette *has* arrived and is here to stay. □



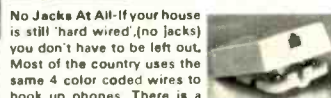
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Four Prong Plugs-If you've got 4 prong plugs, no problem. Just plug this handy adaptor into one of them and it will instantly convert it into a new modular phone jack.



No Jacks At All-If your house is still 'hard wired' (no jacks) you don't have to be left out. Most of the country uses the same 4 color coded wires to hook up phones. There is a red, a black, a green and a yellow wire. All you do is unscrew your current box and match your four wires to our identically colored wires. It's best to check with your phone company, but just about anyone can do it in less than 5 minutes with just a screwdriver. There's no soldering, no thinking. Just match the colors, tighten the screws, and start dialing.

Phone Thrustor

It's lightning fast. It speaks real rotary and real Touch Tone®. Plus, it's got an elephant's brain (with battery back-up) that remembers up to 24 numbers. And now you can install it just about anywhere.

Push button phones aren't new, nor are automated dialers. But, the Phone Thrustor combines the best of both into a powerful new tool that will save you time and money.

And, with Phone Companies making you buy or rent your old dumb phones anyway, why not skip their monthly service charges and get the latest in sound quality, modern good looks and automated features for your home or office.

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Whether you call across the street or around the world you'll find that this phone puts you in complete command.

First the sound. A high quality condenser microphone just like you'd find in a good tape recorder lets the person you're talking to hear you loud and clear.

And, you'll hear them like never before. Instead of the old diaphragm 'thing' that's been in phones for the last 20 years, you get a mylar® HiFi speaker just like you'll find in the best stereo headphones for real Hi Fidelity telephone conversations.

THE BEST PART

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The Phone Thrustor has a switch right above the keyboard that lets you select real rotary pulse (P) if you currently have rotary dial phones or true Touch Tone® (T) if you already have push button phones.

So, with the Phone Thrustor you'll have a perfect match to your personal phone line today or in the future. And you'll always have the ease of push buttons.

The switchable pulse and tone are especially nice if you live in a rotary dial area but would like to save big dollars on your long distance calls by using the super discount services like MCI and Sprint. You can dial in on pulse, then switch to Tone.

PROTECTED MEMORY

The Phone Thrustor will dial all your normal calls automatically in about 1 second by using its automated up to 24 number

memory. You can program it to dial your family, your office, or your friends. You can also program it to give the complicated Sprint and MCI codes so you don't have to memorize and dial them each time.

In addition you'll use the memory in the future, for more services like automatically paying bills and banking.

And, don't worry about forgetting. The phone itself is totally powered by your phone line, and needs no additional power. The memory is protected for over a year by two easily replaceable calculator type back-up batteries (included). So, forget power failures. And, you can move it from room to room, or between your home and office without losing the memory.

LOADED

The Phone hangs up automatically whenever you set it down. Or, with the included wall adaptor, and extra-long 11' coiled cord, it becomes a convenient wall phone that reaches just about anywhere.

The Phone Thrustor has instant save-a-number. If you get a busy line, just push the (S) button. Then you can call as many other phone numbers as you like before pushing (R) to retry the busy number.

The Phone Thrustor has an electronic mute button. Touch it once and a red LED lights to show that it's activated. Touch the button again and you're back on line.

This phone is built more like a fine piece of stereo equipment than a phone. And, it carries a full one year limited warranty from Code-A-Phone. It's a phone you can trust and name you can trust.

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In the United States there are really only three types of phone connections: modular phone jacks, four prong phone jacks, and hard wired.

If you already have the modular phone jacks, just plug the Phone Thrustor into any unused jack. But, don't worry if all your jacks are used, because we give you a free duplex adaptor plug that turns one of your jacks into two jacks.

4 pronged plugs? We give you an adaptor that changes it into a modular jack.

But don't despair if you don't have either type of jack. Now it's all easy. No matter where you live, you'll probably find your phones are connected using the same 4 colored wires. There's a red, black, yellow and a green wire. You'll get a free surface mount box that will turn your hard wired system into the new modular phone jack.

It just takes a screwdriver and 5 minutes. There's nothing to solder, nothing to figure out. Just match our colored wires to yours and tighten the screws. A 70 year old grandmother should be able to do it in less than 5 minutes.

TRY THE PHONE THRUSTOR RISK FREE

Wait till you feel and hear the quality of this phone. Its space age styling and beautiful chocolate brown color are a great addition to any room. There's even a place for a 24 name directory of names and numbers on the back of the phone.

And wait till you try dialing a number automatically in about one second. If you aren't 100% satisfied for any reason, just return it in its original box within 30 days to DAK for a courteous refund.

To order your Code-A-Phone 24 memory switchable Pulse and Tone, Phone Thrustor risk free with your credit card, call toll free or send your check for just \$58.50 plus \$2.50 for postage and handling to DAK. CA res add 6% tax.

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The Basic Repertoire

By Richard Freed

WHEN he was reviewing concerts for the *New York Herald Tribune* in the 1940's, the composer Virgil Thomson wrote that the backbone of the orchestral repertoire in the United States was made up of "fifty pieces" that were played over and over again. One effect of the LP record on American musical life has been the great expansion of our musical tastes and knowledge and the lengthening of that list of indispensable classical compositions. The symphonic works that our critics regard as essential on orchestral programs and in record collections now number close to two hundred.

For some years critic Richard Freed, a contributing editor of *STEREO REVIEW*, has listened to all the available recordings of those essential works and has selected the versions he considered the best. We have published his choices in a pamphlet, which we updated annually to serve as a buyer's guide for our readers. Beginning this month we will now publish in *STEREO REVIEW* Freed's choices of the best current recordings of the Basic Repertoire at the rate of about fifteen compositions a month. We hope it will be useful to you in building and maintaining a record collection worthy of your hi-fi equipment. For those who want the list in pamphlet form, the most recent updating (1982) is available; send \$1 (check or money order) and a stamped (40¢), self-addressed No. 10 envelope to Basic Repertoire, Box 506, Murray Hill Station, New York, N.Y. 10156.

All the selections are two-channel analog stereo discs unless otherwise indicated by one of our usual symbols: **Ⓢ** for a digitally mastered recording, **Ⓢ** for a stereo cassette, and, in a few instances, **Ⓜ** for a monophonic recording.

□ **BACH: Brandenburg Concertos.** The digital recording by Nikolaus Harnoncourt and the Concentus Musicus Wien (Telefunken **Ⓢ** 6.35620, **Ⓢ** 4.35620) is more stimulating than their earlier set, and the new entry by the Linde Consort (Angel **Ⓢ** DSB-3930, **Ⓢ** 4X2S-3930) may be even more fetching; both are outstanding sonically. There is every bit as much musical pleasure, though, in the less costly sets conducted by Karl Ristenpart (Nonesuch HB-73006, **Ⓢ** N5-73006) and Helmut Winschermann (Arabesque 8088-2, **Ⓢ** 9088-2).

□ **BACH: Suites for Orchestra.** Every phrase exudes life in the performances by Trevor Pinnock and the English Concert, though tempos in some individual movements may take some digesting (Archiv 2723 072, **Ⓢ** 3310 175). Milan Munclinger's *Ars Rediviva* of Prague is more overtly robust and warmhearted (Supraphon 1 10 1361/2). Scholarship, vitality, and fine sound are effectively combined in the earlier of Neville Marriner's two sets (Argo ZRG 687/8, **Ⓢ** KZRC 687/8).

□ **BARBER: Adagio for Strings.** Possibly the most frequently performed American work in the international repertoire, and surely one of the most beloved, the *Adagio* is especially well served in the stunning recording by the Saint Louis Symphony strings under Leonard Slatkin (Telarc **Ⓢ** DG-10059). The late Thomas Schippers was similarly persuasive in his expansive reading, which is part of an attractive and economical Barber package (Odyssey Y 33230, **Ⓢ** YT 33230).



Bernard Haitink

□ **BARTÓK: Concerto for Orchestra.** Until RCA gets around to a half-speed remastering of the Fritz Reiner/Chicago Symphony recording, its current incarnation is still first choice and especially attractive at the Gold Seal price (AGL1-2909). Sir Georg Solti's latest version with the Chicagoans is impressive sonically (London **Ⓢ** LDR 71036, **Ⓢ** LDR5 71036), as are the Eugene Ormandy version (RCA **Ⓢ** ARC1-4308, **Ⓢ** ARE1-4308) and the half-speed remastering of the insightful performance by Pierre Boulez (CBS HM 42132, **Ⓢ** HMT 42132). Rafael Kubelik's remake (DG 2530 479) and the vivid Lorin Maazel recording (DG 2531 269, **Ⓢ** 3301 269) are superb too.

□ **BARTÓK: Violin Concerto No. 2.** The most persuasive accounts of this work are still those by Henryk Szeryng, with Bernard Haitink conducting (Philips 6500 021), and by Itzhak Perlman with André Previn (Angel S-37014, **Ⓢ** 4XS-37014).

□ **BARTÓK: Music for Strings, Percussion, and Celesta.** Almost equally appealing are the fiery Leonard Bernstein reading (CBS MS 6956), the chilling Boulez (CBS MS 7206), the intense Ozawa (DG 2530 887, **Ⓢ** 3300 887), and the idiomatic Reiner (RCA AGL1-4087, **Ⓢ** AGK1-4087). The fine Stanislaw Skrowaczewski performance has a stunning account overside of the Bartók *Divertimento for Strings* (Vox Cum Laude VCL 9012, **Ⓢ** VCS 9012).

□ **BEETHOVEN: Piano Concerto No. 1, in C Major.** The large-scale and very live performance by Arturo Benedetti Michelangeli and Carlo Maria Giulini is quite in a class by itself (DG 2531 302, **Ⓢ** 3301 302). If applause on a record bothers you, consider the poised and expressive Vladimir Ashkenazy/Georg Solti performance (London CS 6853, **Ⓢ** CS5 6853), the unique flair shown by Alfred Brendel with Bernard Haitink (in Philips set 6767 002), or the straightforward elegance of the budget-priced Solomon/Menges version (Seraphim S-60016).

□ **BEETHOVEN: Piano Concerto No. 2, in B-flat Major.** Ashkenazy and Solti fuse grace and exuberance (London CS 6854, **Ⓢ** CS5 6854), Brendel and Haitink dazzle with spirit and wit (Philips 9500 471, **Ⓢ** 7300 628), and Rudolf Serkin's buoyant performance with Ormandy is also outstanding (CBS MS 6839).

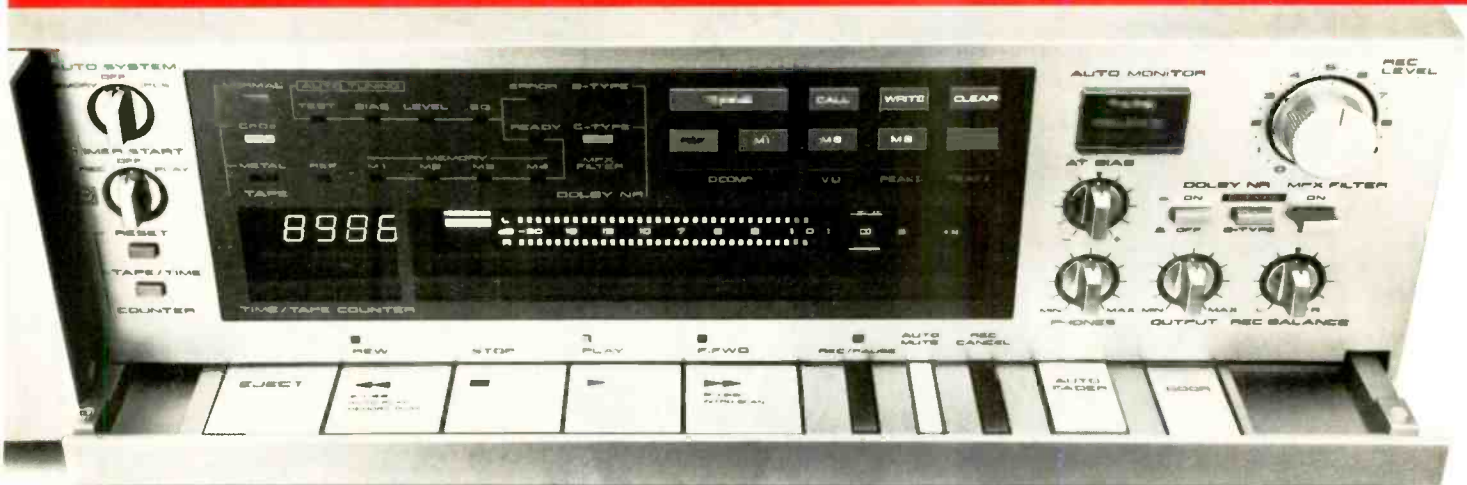
□ **BEETHOVEN: Piano Concerto No. 3, in C Minor.** Maurizio Pollini, with the late Karl Böhm conducting, is both brilliant and profound (DG 2531 057, **Ⓢ** 3301 057). Ivan Moravec, with Václav Neumann, balances those qualities with a warmer heart (Pro Arte PAL-1016, **Ⓢ** PAC-1016). Ashkenazy/Solti (London CS 6855) and Brendel/Haitink (in Philips set 6767 002) also leave little unsaid in this work.

□ **BEETHOVEN: Piano Concerto No. 4, in G Major.** Rudolf Serkin's new recording with Seiji Ozawa has exceptional authority and commitment (Telarc **Ⓢ** DG-10064). Also outstanding are the thoughtful and provocative realization by Charles Rosen, with Wyn Morris conducting (Peters International PLE-110), the somewhat cooler Pollini/Böhm (DG 2530 791, **Ⓢ** 3300 791), the lofty Brendel/Haitink (Philips 9500 254, **Ⓢ** 7300 600), and the expressive Ashkenazy/Solti (London CS 6856, **Ⓢ** CS5 6856).

□ **BEETHOVEN: Piano Concerto No. 5, in E-flat Major ("Emperor").** Rudolf Serkin and Ozawa are at their best in the best-sounding *Emperor* (Telarc **Ⓢ** DG-10065), and so are Pollini and Böhm in their recording (DG 2531 194, **Ⓢ** 3301 194). Ashkenazy and Solti uphold the high standards of their cycle (London CS 6857, **Ⓢ** CS5 6857). Robert Casadesu and Hans Rosbaud offer the outstanding budget version (Odyssey 32 16 0326), and the sterling Walter Gieseking/Bruno Walter disc is of more than historical interest (Turnabout **Ⓜ** THS-65011).

□ **BEETHOVEN: Violin Concerto in D Major.** Itzhak Perlman, with Giulini, blends warmth and vigor in a strong bid for top honors (Angel **Ⓢ** DS-37471, **Ⓢ** 4ZS-37471). Anne-Sophie Mutter and Herbert von Karajan are expansive and profound in their performance (DG 2531 250, **Ⓢ** 3301 250). Similarly distinguished, with somewhat more thrust, are the Nathan Milstein/Erich Leinsdorf recording (Angel RL-32030, **Ⓢ** 4RL-32030), Arthur Grumiaux with Alceo Galliera (Philips Festivo 6570 051, **Ⓢ** 7310 051), and Josef Suk's recording with Sir Adrian Boult (Vanguard Everyman SRV-353SD). □

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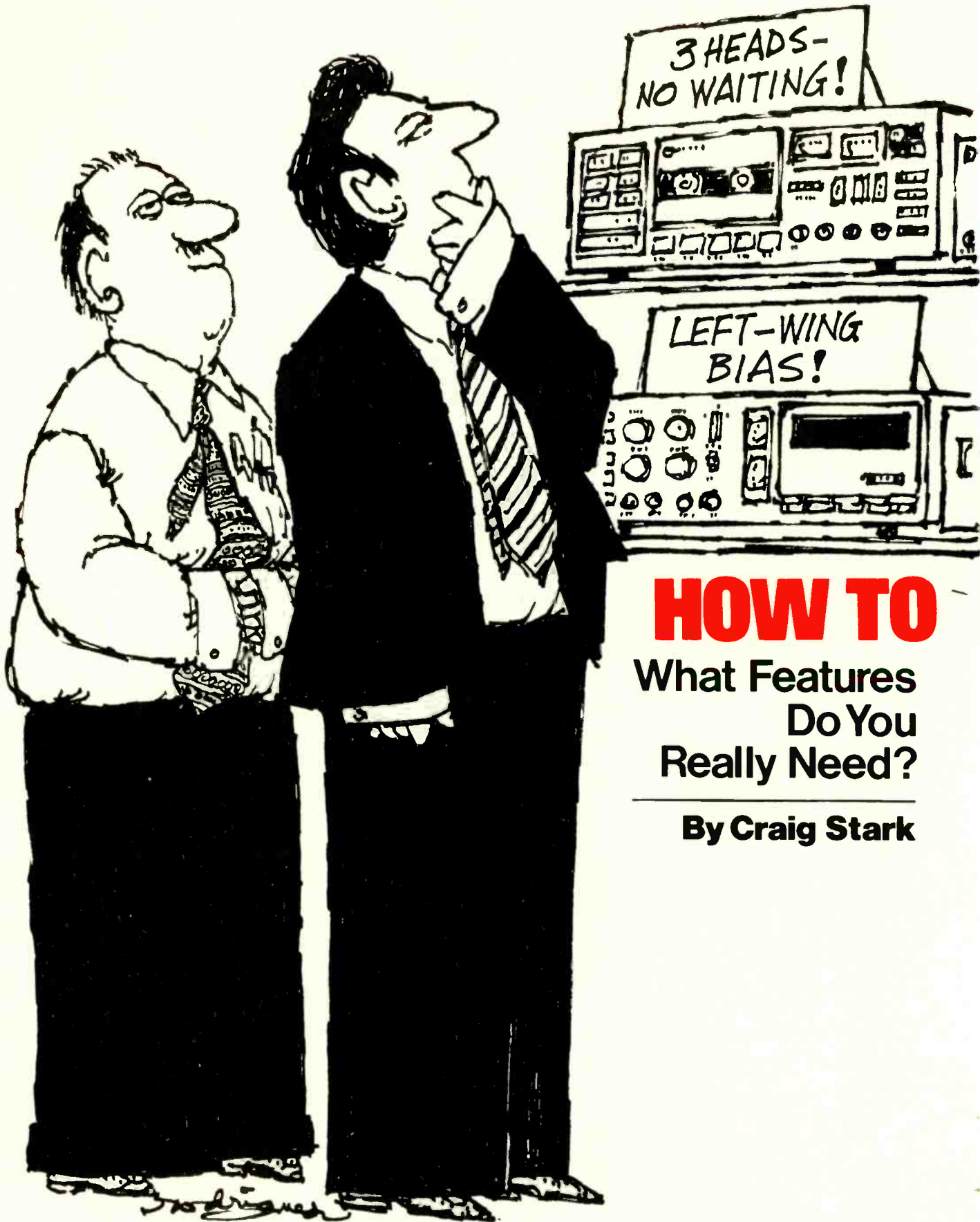
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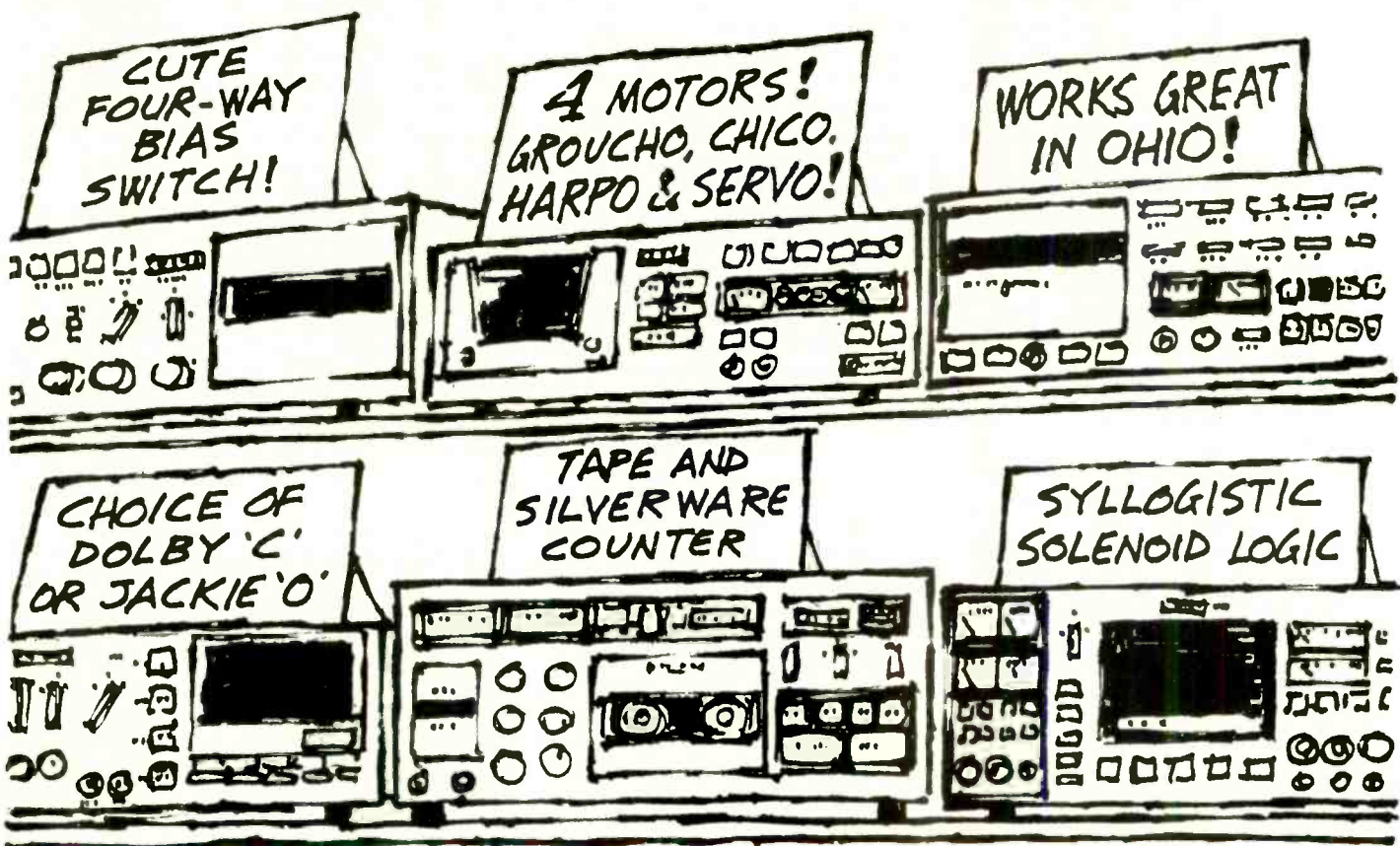
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HOW TO
What Features
Do You
Really Need?

By Craig Stark



CHOOSE A CASSETTE DECK

THREE heads or two? Dolby or dbx? What about Dolby-C? Or Dolby HX? How useful are bias-optimization controls? Whether you're seeking better performance than your old deck can provide or looking into cassette recording for the first time, answering these and similar questions before you start shopping will help you find the deck whose combination of features best meets your individual requirements.

The extent to which individual requirements genuinely differ is important, for as the cassette medium has matured even some of the most "obvious" answers of the past have become considerably less certain. The oldest controversy of them all, between two-head and three-head recorders, will illustrate the point.

Tape Heads

Tape heads, which induce a varying magnetic signal pattern on the tape during recording and which detect that pattern and turn it into an electrical signal during playback, are probably the most critical recorder components. Basically, a head is an electromagnet

with a microscopically small gap between its pole pieces at the point where the head contacts the tape. The exact width of the head gap is extremely crucial. For relatively loss-free playback of a recorded frequency as high as 20,000 Hz at the cassette's normal 17/8-ips tape speed, the gap width should be less than one micrometer (μm), or 39.37 millionths of an inch. For recording, however, a gap width of three to five times as great is generally required to ensure the best signal-to-noise ratio. A deck that uses the same head for recording and playback must compromise—a gap of 1.3 μm is typical in today's better two-head machines. That means a playback loss at 20 kHz of about 6.5 dB, which must be made up by a corresponding treble boost in the playback electronics. Treble boost during playback, however, amplifies tape hiss along with the attenuated high-frequency signals.

On the other hand, if your interest in high-frequency response doesn't go much over 15 kHz—the limit for stereo FM broadcasts—the playback loss from the 1.3- μm head will be a more easily managed 3.4 dB, and some of the manufacturing savings from using a

single record/playback head can be used in making an electronically quieter playback amplifier. Besides, in a three-head deck even the slightest discrepancy in azimuth alignment (the perpendicularity of the head gap to the tape edge) between the record and playback heads can very easily cause a 3-dB loss at 15 kHz (and much more at 20 kHz). This can even happen when separate record and playback heads are placed together in the same physical case, for as the deck ages the case itself can slip out of alignment.

Thus, unless extremely high-quality heads are used, meticulous care is taken to align them (and keep them aligned), and very wide frequency response is demanded—all of which translates into much higher cost—even the theoretical advantages of a three-head design may not be realized. Here, however, another, more personal consideration enters in. How important is it to you to be able to compare the signal going into your tape deck with a near-instantaneous playback of the recorded result? Only a three-head design permits such "monitoring off the tape," which is the ultimate quality control for tape recording. To me, this feature is a necessity, but,

since the great majority of cassette decks sold are of the two-head variety, my priorities must not be the same as most people's.

Whether you pick a two- or a three-head model, head design is of paramount importance, yet only a few manufacturers provide enough information about their decks' heads to give the consumer a reasonable basis for choice. In terms of materials, it's generally agreed that heads made of Sendust alloys or ferrites are three to five times as wear-resistant as permalloy-based heads. It's easy to understand how tape can wear down a head—it acts like a very fine-grain sandpaper—but except with very inexpensive decks this problem is easily overemphasized. Nakamichi, an acknowledged leader in cassette-head design, uses a crystal-permalloy material because it has some superior magnetic properties, and the company's heads are nevertheless rated to last for 10,000 hours of use!

Noise Reduction

After the choice between a two-head or three-head model, the next major choice concerns the deck's noise-reduc-

tion system(s). It is a fact of cassette life that the signal-to-noise ratio that can be achieved without some sort of noise reduction—approximately 50 dB (unweighted)—is unacceptable for most hi-fi recordings. (True, if you restrict your taping to highly compressed FM broadcasts of rock, the music may never get soft enough for you to hear residual tape hiss even without a noise-reduction system, but highly compressed sound is itself not high fidelity.) For years the Dolby-B noise-reduction system (or JVC's compatible ANRS) has been a standard feature of nearly every good cassette deck, and almost all prerecorded cassettes are Dolby-B encoded. The Dolby-B system provides 8 to 10 dB of noise reduction, principally in the frequency range where the ear is most sensitive to residual hiss (above 1 kHz). This amount of noise reduction does not render *all* hiss inaudible, how-

ever, and as recordings with much wider dynamic range (the spread between the loudest and softest sounds) have become available, the limits of Dolby-B have become more apparent. At present the weighted signal-to-noise ratios of high-quality decks with Dolby-B are typically in the 65- to 68-dB range, and for serious music listeners this is not quite enough.

The Dolby Corporation now offers a more powerful system, Dolby-C, which provides 20 dB of noise reduction instead of 10 dB, and you can expect to find this on many of the newer cassette decks. In (over) simplified terms, Dolby-C is essentially two Dolby-B systems working back to back, extending the range of frequencies treated down to approximately 200 Hz. Dolby-C also offers a potential improvement in high-level high-frequency response by reducing the treble boost during recording. With Dolby-B, this boost sometimes drives tapes beyond their saturation limit. A deck equipped with Dolby-C will always have a switch position for Dolby-B, so that recordings you've already made or purchased can be played back properly. Because the Dolby-C system involves twice as much process-

ing of the signal as Dolby-B, however, its tolerance of variations in tape sensitivity and frequency response is correspondingly lessened, and potential overall frequency-response errors are increased. Nevertheless, except when considerable ultrasonic energy was present in the signal being recorded (for instance, in synthesizer music), which can "fool" the noise-reduction system, the decks with Dolby-C that I have tested have behaved perfectly, and the audible improvement in recording quality is spectacular.

The only serious alternative to the two Dolby noise-reduction systems is dbx. Available both as an outboard accessory and in a number of tape decks from Teac, Technics, Yamaha, and Lux (and probably in more to come), the dbx system is not limited to 10 or 20 dB of noise reduction but instead uses a 2:1 compressor/expander. This gives it the ability to capture a dynamic range greater than 90 dB, which is positively awesome and can be rivaled only by digital recording. Since dbx is not compatible with the Dolby systems, however, recorders that offer it also provide at least Dolby-B decoding for playback of previously recorded material. If you need more noise reduction than Dolby-C (for dubbing Compact Discs or direct-to-disc or digitally mastered LP's, for example), dbx is clearly the answer. But remember that the compatibility problem works both ways: tapes you record with dbx can be played back only on a dbx-equipped deck (or with an external dbx processor). Some car systems and personal portables have dbx decoders, although this is far from common.

Some Dolby-equipped decks may also offer another feature unrelated to noise reduction although often confused with it. The original version of this feature is known as Dolby HX (which stands for "headroom extension"), but some refinements made by Bang and Olufsen, with Dolby's cooperation, are incorporated in the current version, Dolby HX-Pro. It is currently available in not only B&O's decks but some from NAD and Harman Kardon as well. What the HX-Pro (and HX) system does is to vary the amount of effective bias used during recordings so as to maximize the high-frequency storage capacity of the tape. By lowering the recorder-supplied bias when high-level high frequencies are prominent, the tape can hold more treble before reaching saturation. HX recordings can be played back on *any* tape deck, whether or not it has the HX feature for recording, and the degree of improvement in the high-frequency range very closely approximates the difference that metal tape provides over chrome or ferric tape formulations.

Bias Adjustments

We have long been aware that differences between tape brands of the same nominal *type* (ferric, chrome, ferrichrome, or metal) can create slight differences in frequency response. These differences can effectively be eliminated by "optimizing" the recording bias for each cassette. Attempts to make such fine tuning a user-adjustable control have been relatively unsuccessful, since to do the job properly calls for instruments (specifically, a high- and mid-frequency audio generator and a sensitive meter) that can only be built into rather expensive decks. Nevertheless, manufacturers have incorporated a bias-adjust control into many decks in which the only test instrument is the listener's ear—even in some two-head

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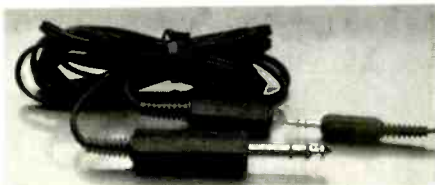
Sony fathered the technology for these headphones and obviously has no connection to DAK or Mura, but the technological heritage will become vividly apparent when you compare the sound of these marvelous headphones.

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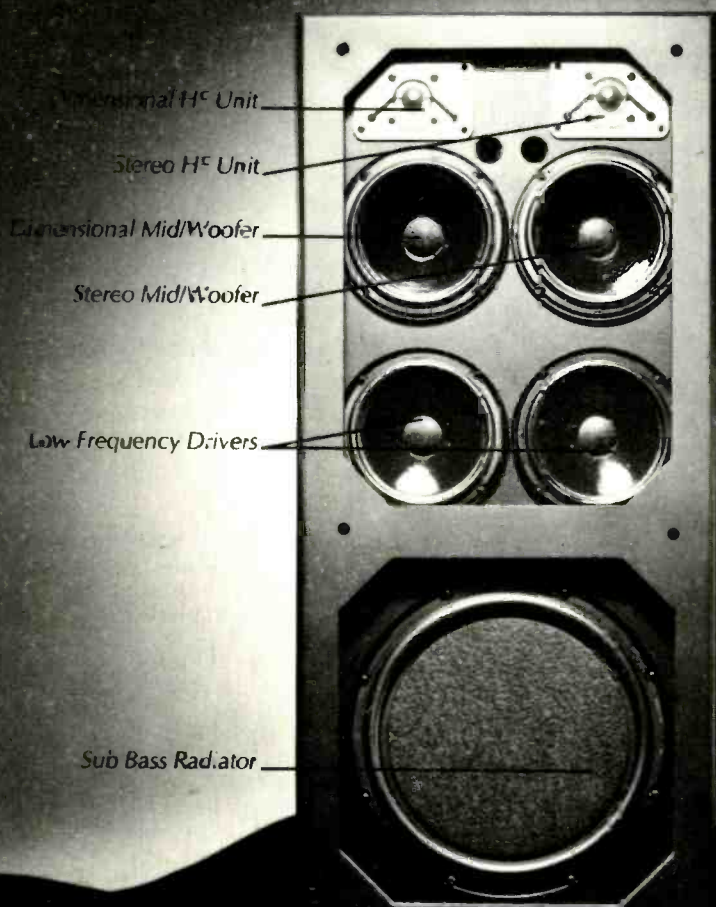
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Stereo Review raved: "Hirsch Houk Lab's tests of the Polk SDA-1 speaker show that it does indeed add a new dimension to stereo sound... completely without any undesirable side effects... it borders on the spectacular... the result is always better than would be achieved by conventional speakers... quite literally a new dimension in the sound... beautifully balanced... the speakers sound superb."

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High Fidelity raved: "The SDA-1 loudspeaker represents an altogether unique rethinking of what a loudspeaker can and should do... devastatingly dramatic... mind boggling powers of sonic persuasion... depth and precision of the stereo image were astounding... flabbergasting... simply bowled us over... great good fun... sonic portrait so palpable in its left-to-right positioning and depth as to leave auditors aghog... will influence other designers for years to come." — *High Fidelity* Jan. 1983

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decks that preclude instant comparison of the signal before and after adjustment. Built-in microprocessors, increasingly common in home cassette decks, allow bias to be fine-tuned automatically, making the process both quick and easy. Such convenience costs more, of course. Frankly, unless you buy either a deck with a built-in microprocessor or one with three heads and built-in or external test instruments—or unless the manufacturer supplies a listing of the proper settings for different tape brands—I would advise ignoring bias adjustments entirely.

Transports and Drives

Tape-transport mechanics provide another set of basic features to choose among. Decks are available with one, two, three, and even four motors, with single or dual capstans, and with a host of automated functions. All else being equal, a dual-capstan drive (also known as a “closed-loop” drive) is preferable to a single-capstan model, for it effectively isolates the important section of the tape—the part passing across the heads—from any disturbances induced by the supply reel. In theory, if you build a closed-loop transport properly you should be able to eliminate the need for the cassette pressure pad, but to date only one manufacturer, Nakamichi, has *that* good a dual-capstan drive, and some good single-capstan models have no more wow and flutter than their dual-capstan counterparts. Dual-capstan drives almost always use a separate motor for driving the reels, however, which generally leads to faster rewind and fast-forward times, and dual-capstan drives are naturally adapted for auto-reverse functions if this feature is important to you. Most auto-reversing decks record in only one direction, but a few will record bidirectionally.

While most transports today use solenoids to release the reel brakes and operate the tape gate mechanism (a great improvement over the mechanical “piano key” controls of yore), the most advanced transports use a servomotor for these tasks. This refinement eliminates both the noise and the shock induced by solenoid action and is certainly worthwhile in the “no-compromise” decks that employ it.

Record-Level Meters

The pseudo-VU meters that once were used for setting recording levels have now all but universally given place to peak-reading fluorescent or LED displays. These not only eliminate needle overshoot or undershoot but also read the peak rather than the average value



... No, I don't think fast rewind is necessary. He's in prison and there's no hurry or anythin'...

of the signal, and it's the peaks, not the averages, that cause distortion. At the same time, however, these displays show only discrete values, not the continuous range that can be conveyed by a meter. In terms of potential accuracy, then, look at the number of *segments* in each channel's display (twelve segments are usual, sixteen are better) as well as the intervals (in decibels) between segments. Some displays are deceptive in this respect, since what may look like three distinct segments is only one electronically. You can test this by slowly increasing the input level and checking how many indicator lights turn on at once.

Counters and Timers

Electronic control has also all but eliminated mechanical tape counters on top-of-the-line cassette decks, replacing them with digital readouts. The most useful of these actually display the time remaining on the cassette side. Even if these time indicators are not quartz-crystal accurate, they are certainly a great advance on arbitrary counter readings. Microprocessor control has also increased the number of available transport “memory” functions. Decks are now available that not only permit automatic rewind to (or, alternatively, replay from) a “counter 0” location;

some also permit marking a second memory location within the tape itself. And several permit fast winding past a specified number of selections (separated by blank spaces), sometimes with brief pauses to sample the cuts passed over. To me this kind of automation is hardly worth its cost, but then I don't usually record a lot of short selections on the same tape. And while timer-activated recording can be useful to avoid missing something that's broadcast while you are out, I don't find much appeal in timer-started playback since I wake up to a radio.

Finally, if you intend to do any recording with microphones, it would be well to check whether your prospective deck has microphone-preamplifier circuits. Several companies have eliminated the microphone input stages entirely on some models, so you may have to buy an active mixer in order to record live music or speech.

By the time you've studied the merits of all these features, deciding what you need or want and what you don't, there will undoubtedly be several new ones on the latest decks in the showrooms. Remember, however, that every additional “convenience” feature will cost you, either directly or in terms of what the manufacturer may sacrifice in performance to keep the total price down, so choose with care. □

AMONG the many numerical specifications that are used to describe the performance of audio equipment, "frequency response" is the one that is usually cited first and is cited most often. Sometimes it is naïvely regarded as *the* criterion of high-quality sound reproduction. A manufacturer may advertise proudly that his loudspeaker has a "frequency response of 30 to 15,000 hertz" even if its response at 30 Hz is a distorted croak and its response at 15,000 Hz is too weak to hear. But a mere statement of any component's frequency-response limits is *not* sufficient to describe that component's "sound." Frequency response is a more complex subject than many realize; it encompasses frequency-response limits *and* deviations from "flat" response, including the magnitude of those deviations and where they fall in the audible spectrum.

While some audiophiles speculate about the value of reproducing sounds at frequencies that are higher (ultra-

of most non-electronic musical sounds.

To be a useful indicator of quality, a frequency-response specification must also indicate how *accurately* the device reproduces the audio signal fed to it. Musical (and most other) sounds consist of "fundamental" tones at relatively low frequencies plus "overtones" at higher frequencies, and it is the relative strength of the overtones that defines the characteristic tonal quality of each musical sound—causing, for example, an oboe to sound different from a clarinet playing the same note. (Fundamentals are what printed music notates. Overtones come "free" with each instrument.) In order to reproduce musical sound faithfully, every audio component must not only reproduce all the audible tones but must also preserve the relative strength of the fundamentals and the overtones. Thus, one of the most important questions you can ask about an audio component is whether it alters these tonal relationships by strengthening some frequencies and weakening and by how much.

This can best be answered by a graphic plot showing the response of the device frequency by frequency. A constant-level signal is fed into the component or system, its frequency is gradually varied (usually from about 20 Hz at the low end to 20,000 Hz at the high end), and the output level at each frequency is measured and plotted in a continuous trace. By looking at the resulting line you can see which frequencies the system is exaggerating or weakening and by how much.

Of course, some devices are not *supposed* to have a uniform, or "flat," response. A phono-preamplifier circuit, for example, must incorporate a bass boost and treble cut (+17 dB at 50 Hz and -17 dB at 15,000 Hz) in order to compensate for the equal but opposite RIAA equalization used in making disc recordings. Accordingly, the accuracy of a preamplifier is measured by determining the *difference* between its actual response and the desired RIAA curve. If its electrical response is up only +16 dB at 50 Hz, then it has a frequency-response error of -1 dB at that frequency.

The information in a frequency-response graph is often summarized by a statement in the form, "x Hz to y kHz \pm z dB," which means that the useful response of the product extends from x Hz at the low end to y kHz at the high end, with no response error in between exceeding \pm z decibels. If the range is wide and the tolerance is narrow, "20 Hz to 20 kHz \pm 0.05 dB," say, that's all you need to know; such a response covers the entire span of human hearing, and the departures from perfect re-

Frequency Response:

How to Evaluate the Specs

By Peter W. Mitchell

sonic) or lower (infrasonic) than human beings can hear, a reasonable goal for a high-fidelity audio system is to reproduce the entire spectrum of frequencies normally audible. This range is often stated as extending from a low of 20 Hz to a high of 20,000 Hz. But frequencies up around 20,000 Hz are of interest mainly to children; high-frequency hearing tends to decline with increasing age, and most adults hear little above 15,000 Hz. Frequencies this high are "heard" not as distinct pitches but only as vague sensations of sound. The "whistle" from a TV set is about 15,700 Hz. At the low end, you can feel sound-pressure waves at frequencies well below 20 Hz (with your skin, rather than your ears, as the detector), but the lowest frequency that appears with any regularity in music recordings is the 32-Hz low C of a large pipe organ or a double bass. As a practical matter, therefore, a frequency range extending from 30 to 15,000 Hz will usually be more than adequate for lifelike reproduction

sponse are too slight to be audible. But if the frequency range is narrower and/or the tolerance is wider, then an actual graph of the frequency response is much more useful than a summary spec. The summary doesn't tell you how much of the audible frequency range is affected by the specified errors, and that is what determines how audibly significant the departures from ideal response will be. If you look at a frequency-response graph, you can readily see what frequencies—and how broad a range of frequencies—will be affected by response errors.

Consider, for example, the response curves shown in the accompanying graph. The solid line plots a response that is perfectly flat from 20 Hz to 10 kHz and then rolls off, being down 3 dB at 15 kHz; this would be summarized on a specification sheet as "20 Hz to 15 kHz +0, -3 dB." The dashed line is for a response flat up to 1,000 Hz but depressed by 3 dB for all frequencies above 2,000 Hz; this too could be sum-

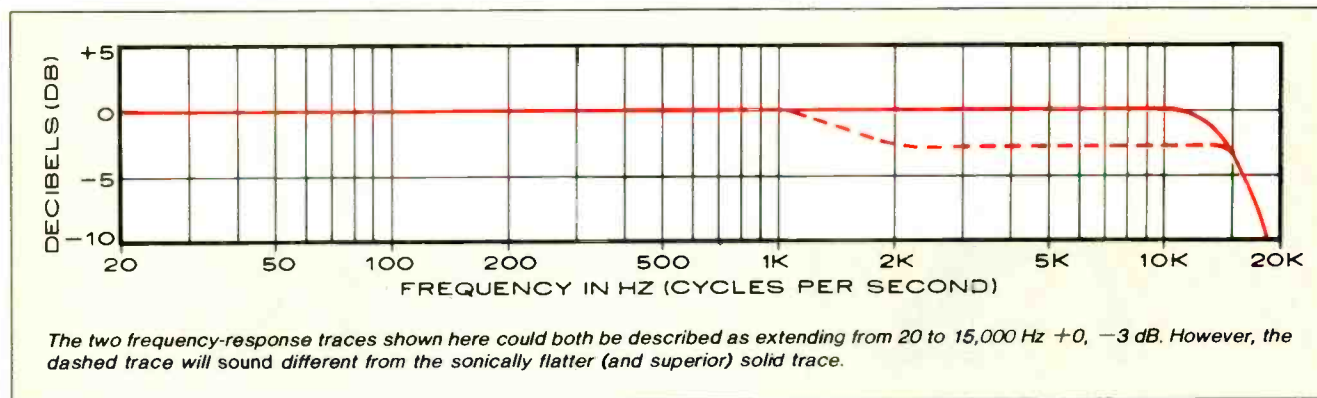
marized on a spec sheet as "20 Hz to 15 kHz +0, -3 dB." These curves, by the way, are not arbitrary examples. The solid line shows the response of an excellent FM tuner, the steep 15-kHz rolloff being produced by its stereo pilot-tone filter. The dashed line represents a defective or badly designed tuner with an incorrect capacitor in its de-emphasis circuit. By inspecting the response graphs you can predict how these products will sound, assuming that their distortion and noise characteristics are the same.

that are absent from much music and that occur only briefly in music that contains them. Listening experiments have confirmed that most listeners, most of the time, cannot detect the operation of a 15-kHz filter having the effect shown by the solid line in the graph. (Of course, if your record collection consists mainly of concertos for cymbals and bells, you might find this response inadequate—assuming that your own hearing extends to these high frequencies.)

But in the second tuner (dashed line), the response is weak over a much broader range of frequencies, more than three octaves (an octave is a range of frequencies with the higher limit being twice the lower, for example, from 440 to 880 Hz). The great majority of musical sounds include audible overtones that fall into this frequency range and will, therefore, be affected by this frequency-response error. The perceived timbre of the sound will be changed, not just occasionally or during

usually means that the recorder is over-biased for the tape being used, that the Dolby noise-reduction circuit is miscalibrated for the tape being used, that the recording level was set so high the tape became saturated (overloaded) at high frequencies, or that the heads are dirty or grossly out of alignment. If one loudspeaker is perceived as having more powerful bass than another, it doesn't necessarily mean that the "good" speaker has flat response down to 20 Hz while the "inferior" one stops at 40 Hz; a sensation of solid bass power usually results from elevated output in the 40- to 100-Hz region.

In conclusion, when you are examining frequency-response graphs and specifications, the best index of musical realism is not how far the response extends into the infrasonic and ultrasonic regions. What really counts is how accurate or "flat" the response is in the frequency range from 50 to 10,000 Hz, where most of the energy in musical sound is concentrated. □



brief, high-frequency transients, but constantly. Since all of the higher overtones will be weakened while the fundamentals and low overtones will be reproduced at full strength, such a response characteristic will cause the sound to be perceived as "warm" and "mellow" or, alternatively, as "veiled" and "dull," depending on whether a given listener likes it that way. If the overtones were being *boosted* by 3 dB rather than weakened, the sound would be described as "bright" and "clear" by listeners who like it that way, "cold" and "thin" by those who don't.

As a rule, the broader the frequency range that is affected by a response error, the easier the error is to hear. A 5-dB peak or dip in response may have relatively little audible effect if it spans only a very narrow frequency range (less than an octave), especially if it is confined to the highest or lowest audio frequencies, where there is seldom any musical energy that would be affected by the error and where the ear is less

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Warning: The Surgeon General Has Determined
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7 mg "tar," 0.5 mg nicotine av.
per cigarette, FTC Report Dec '81

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The new Technics cassette decks with dbx.[®] They don't just reduce tape noise. They eliminate it.

There is a new line of Technics cassette decks so technologically advanced they are capable of reproducing music with virtually no audible tape noise. None.

They not only feature Dolby* noise reduction, but also the dbx noise elimination system. With dbx, a Technics cassette deck compresses the signal so the dynamic range is halved. When a tape is played back, the process is reversed. The original dynamic range is then restored and noise is pushed below audibility. Loud passages can be recorded without distortion, and soft ones without tape noise. There is even dbx disc decoding available for playing dbx encoded records.

The Technics RS-M255X goes even further.

Wide range (-40 to +18 db), three-color FL meters handle the dynamic range dbx gives you. An electronic tape counter doubles as a remaining time indicator to show how much time is left on your cassette. Bias and EQ levels are automatically selected for any tape formulation. Microprocessor feather-touch controls give you fast, easy, mode switching. And Technics RS-M255X gives you the stability and accuracy of a two-motor drive system.

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Why settle for tape noise reduction when you can have tape noise elimination? From Technics.

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CIRCLE NO. 51 ON READER SERVICE CARD

How to Make a Good Tape Recording

By David Ranada

MAKING an accurate recording of a disc, a radio broadcast, another tape, or live music isn't difficult. Many home recordists fret unnecessarily over this process, which can, after a little experimentation and practice, become second nature. (On the other hand, home recordists *should* be concerned over the questionable ethics of recording copyrighted material in order to avoid buying the original.)

The steps outlined below take you through all the procedures needed to make a cassette dub. Lest they sound too much like "Stereo Review's Guide to Excruciatingly Correct Cassette Recording," keep in mind that they are just suggestions, that experimentation is the rule. Feel free to adapt the procedures to your



situation or to reject them altogether. In making a recording, you can rarely damage anything by any reasonable experiment you might try. After all, a tape that turns out badly can always be erased and used again.

(Continued next page)

1 Clean the tape deck. Dirty tape heads can cause a loss of high frequencies and subsequent noise-reduction-system mistracking. Capstans, pinch-rollers, and tape guides gummed up with tape-coating particles can create audible wow and flutter and, in very dirty conditions, can even damage the tape itself (by scoring or creasing the oxide surface). Cleaning a tape deck is so simple that it can be done before making any crucial recording. There are many deck-cleaning products available which can help in this basic first step. You can even use the old-fashioned alcohol (91 per cent isopropyl) and swab method presented in "How to Clean a Tape Deck" (November 1982).

2 Select a tape, one appropriate for the music and the recorder. The simplest way to choose a suitable tape is to follow the tape-deck manufacturer's

Dolby HX headroom-expansion system (see Step 4).

Advertising claims to the contrary, there is often little audible benefit to using a chrome or chrome-equivalent tape over a top-of-the-line ferric tape *provided* your tape deck is set up for optimum performance with each type of tape (see next section). If you are using a wide-dynamic-range noise-reduction system (Dolby-C or dbx), the differences in tape-noise levels are lessened in importance. And if you are recording a limited-dynamic-range source, the distinctions between tapes become even less important.

A good way to shop for tapes is to buy a sample of each of the types you are considering. Make test recordings of various types of music and choose the tape that gives the most *accurate* reproduction of the source, the one that changes the sound quality the least. Typical changes you can expect on a

controlled tape-matching functions while still others contain built-in test oscillators. If you have them, use them!

There are tricks you can use in *playback* to "distort" the sound quality to taste. For instance, playing back a chrome/metal tape with the ferric equalization settings or playing a Dolby-B encoded tape without Dolby-B decoding will produce an artificially elevated high end, which may be desirable during playback in an automobile. Comparable tricks, though possible, are *not* a good idea while recording, however. If nothing else, they will make the tape you record sonically incompatible with other tape decks.

4 Select the noise reduction. Some program material, such as spoken word records or highly compressed rock music, may not need any noise reduction. In fact, recording without noise reduction produces a tape that is "compatible" with all cassette decks of any vintage. In general, however, cassette recordings made without a noise-reduction system are unbearably hissy.

If you intend to make recordings that are also playable on a car stereo, on a "personal" cassette player, or on any other deck having no noise-reduction system, the system to use on your home deck is Dolby-B (or JVC's essentially equivalent ANRS). When played back without decoding, Dolby-B-encoded tapes have a boosted high-frequency response. This can be acceptably tamed, though not correctly decoded, by turning down the treble.

Dolby-C-encoded tapes produce much the same effect when played back on Dolby-B-only decks. Tapes encoded by the dbx system cannot be acceptably played back on other than dbx-equipped recorders or decks with attached dbx decoders. For faithful recordings of wide-range material (audiophile records, digital-audio discs, live music), a suitable wide-range noise-reduction system—Dolby-C or dbx—is almost mandatory.

Dolby HX is *not* a noise-reduction system but a means of increasing the level of high frequencies that can be recorded on a cassette tape. It is a record-only process and does not require decoding; HX-processed tapes can be played back on any machine. The system could, in theory, be used in conjunction with any or no noise-reduction system. Practically, however, Dolby HX seems to be available only on decks containing Dolby-B or Dolby-C noise reduction and operates only when the Dolby noise reduction is turned on also. The extra high-frequency headroom Dolby HX provides may let you get by

"In making a recording, you can rarely damage anything by any reasonable experiment you might try. After all, a tape that turns out badly can always be erased and used again."

recommendations or to use the same tape types he uses in setting up and calibrating the deck in the first place. STEREO REVIEW's tape-recorder test reports list those tapes that were found to give good performance with each machine tested.

If these initial guidelines are not available for your recorder, there's still no need to worry. A *top-of-the-line* ferric, chrome or high-bias, or metal tape from one name-brand manufacturer is usually very close in performance characteristics to a similar tape from another manufacturer, close enough to give essentially equivalent audible performance. If you find a tape that sounds marginally better on your machine, stay with it. The main practical differences may lie only in the prices.

As to which category from which to choose a tape (ferric, chrome or high-bias, or metal), the selection depends primarily on the characteristics of the deck, the music to be recorded, and its source (tape, disc, mikes, etc.). Metal tape is necessary for most live music recording or for taping prerecorded material with substantial (high-level) high-frequency content. You might get by with a less expensive grade of tape for live recording by using a deck with the

cassette recording are increased hiss levels, a slight rolloff of high frequencies (or a boost if the tape is under-biased), and a slight loss of "clarity" (from wow and flutter, distortion, and/or modulation noise). Choose the tape that suffers the least from these problems in your machine.

3 Match the deck to the tape. You cannot expect to get accurate cassette dubs unless the deck is matched to the magnetic requirements of the tape in use. Among the degradations resulting from a mismatch are higher distortion, high noise levels, rolled-off or boosted high-frequency response, and improper output levels. The last three problems can cause mistracking of a noise-reduction system, thus further worsening the sound quality.

Luckily, matching a recorder to a tape is relatively easy nowadays: just switch the bias and equalization controls on your deck's front panel to match the settings recommended by the deck manufacturer for the type of tape in use. (This assumes the manufacturer has correctly calibrated the settings. Otherwise, lab instrumentation is necessary for proper machine setup.) Some recorders have automatic, computer-

HOW COULD A CASSETTE DECK WITH TWO HEADS BE SO HARD TO GET?



The Kyocera D-801 Cassette Deck is hard to get because so much more is built into it. For example, it has five circuit boards where most decks have only one or two. But that's only the beginning.

It more than meets the ultimate tape deck challenge.

The challenge is to move tape across the heads at as nearly a constant speed as possible. Variations in speed, of course, come out in your speakers or headphones as wow and flutter.

Many decks claim a wow and flutter figure of 0.05% WRMS—trouble is, speed variations of 0.05% are clearly audible with piano music (one of the most revealing tests you can give a cassette deck—try it on the D-801 and marvel!).

The D-801 by Kyocera comes through with a remarkably low wow and flutter figure of 0.02% WRMS—and that is derived from a unique, three-motor, dual capstan drive mechanism. Two capstans are driven by a direct drive motor. A beltless/clutchless simple DC motor drives the feed and takeup reels, while a third motor is used as a head-position assist drive (it greatly prolongs head-to-tape azimuth accuracy). The dual capstan system provides that sensationally accurate tape travel, maintaining proper tension between capstans to eliminate external shock source modulating noise.

It more than meets the needs of the audio perfectionist.

The D-801 goes above and beyond even the fussiest audiophile's needs with 3-position bias/equalization selection (with fine bias adjustment), 400 Hz calibration tone, Automatic Program Mute Recording, automatic search, and electronic 4 digit display, including counter, elapsed time and time remaining functions.

The D-801's noise reduction systems were built for the audio purist. It has *two*—Dolby* B & C—Dolby B for music material of limited dynamic range, Dolby C for music of the widest dynamic range, so noise reduction can be tailored to program material.

Finally, the specs everyone wants: frequency response of 30-20,000 Hz \pm 3 dB using metal or CrO₂ tape, and a S/N ratio of 78 dB with metal tape in Dolby C NR mode.

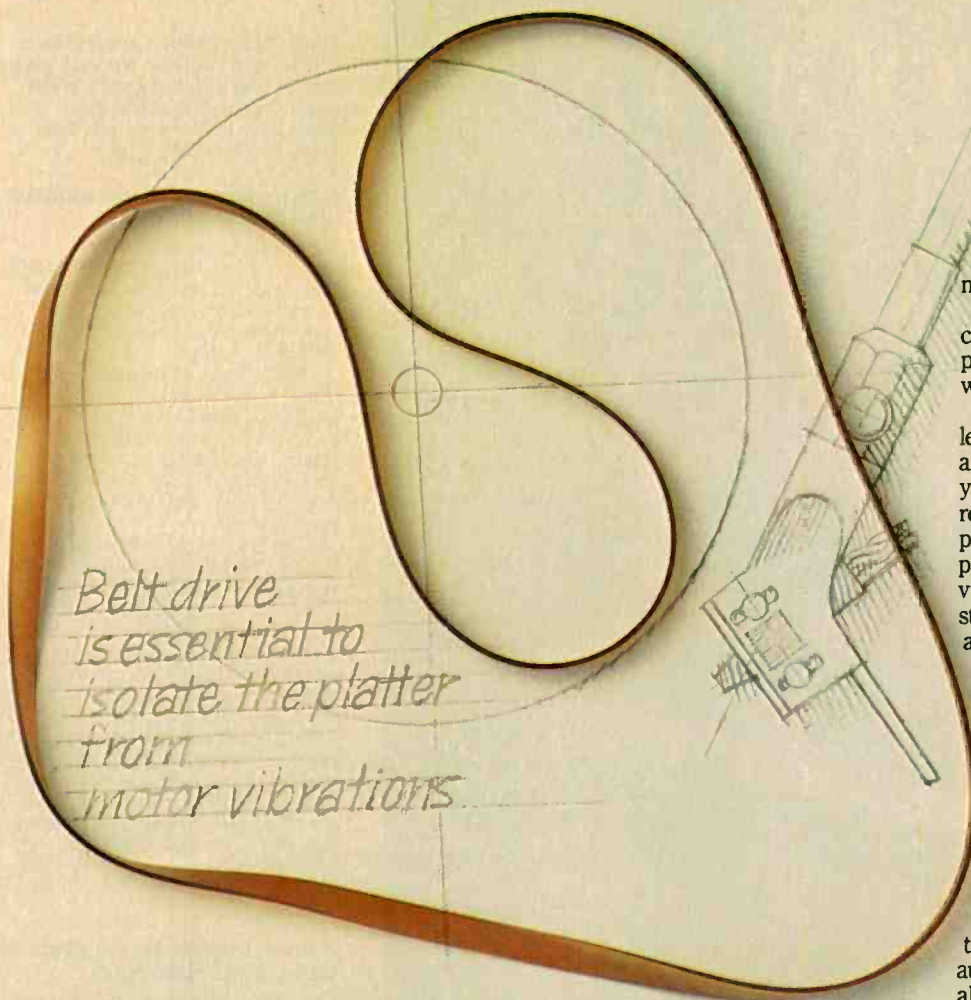
If you have any trouble finding a Kyocera dealer, contact: Cybernet International Inc., 7 Powder Horn Drive, Warren, NJ 07060 (201) 560-0060.

CIRCLE NO. 7 ON READER SERVICE CARD



KYOCERA

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*Belt drive
is essential to
isolate the platter
from
motor vibrations.*

The purpose of a turntable is to remain quiet. It should contribute no noise or vibration to the sounds picked up by the cartridge.

That's why our new T-Series turntables all use belt drive.

The belt drive provides acoustic isolation from motor vibrations. It literally separates the motor from the platter and spindle. This avoids the noise problems inherent in direct drive, where the motor is connected directly to the platter.

A belt design, of course, requires more careful engineering to achieve a constant platter speed. But we considered it well worth the effort.

In fact, we went to great lengths to make the T-Series among the finest turntables you can buy. Doing so required using massive platters; wooden bases that provide isolation from room vibrations; as well as disc stabilizers and vibration-absorbent platter mats.*

We also used low-mass tone arms to handle warped records, and capacitance trim to electrically match your cartridge and receiver.

And even though Harman Kardon's new T-Series delivers features found only on the world's most expensive turntables, we haven't made ours expensive. Harman Kardon turntables start at less than \$200. You can see them at quality audio retailers. But you certainly won't be able to hear them.



*Available on T40 and T60 models.

TO KEEP A TURNTABLE QUIET YOU HAVE TO GIVE IT A BELT.

hk harman/kardon

T20 T40 T60

BELT DRIVE
TURNTABLES

For your nearest dealer, call 1-800-528-6050, ext. 870, or write Harman Kardon, 240 Crossways Park West, Woodbury, NY 11797-2057. In Canada, Gould Marketing, Quebec.

with a less expensive grade of tape. From metal you may be able to move down to a chrome or high-bias formulation, or from a top-of-the-line ferric down to a middle-of-the-line ferric, depending on the music. I'd recommend the constant use of Dolby HX on all recorders equipped with it.

5 Set levels. This is the trickiest step in all types of audio recording and one which is best performed after some experimentation with each recorder/tape/music combination. As a first approximation, follow the deck manufacturer's recommendations as to where the peaks of the signal should read on the deck's meters. The recommended maximum level may vary with the type of tape used. Generally, I'd recommend setting as high a level as possible which does not result in either distortion or a perceived dulling of the high frequencies (due to tape saturation).

For lower noise in playback, it's perfectly okay to run recording levels higher than the recommended settings if there are no audible drawbacks. Experiment to see just how high you can get the levels with each different combination of tape and machine. Write down the highest allowable meter reading. Very short, very high peaks may sometimes go "into the red" with no ill effects on machine or tape. Print-through problems, however, are exacerbated with very high recording levels.

Try not to change recording levels while making a dub; it's just bad form unless absolutely necessary. Party tapes of dance music assembled from different LP's, for instance, may require some level adjustment between selections. Not only do dancers not like widely varying playback levels, but every disc-cutting engineer has his own idea about what constitutes a good disc-cutting level. If you must change too low levels drastically, boost them during a pause in the music (between cuts or movements). If the levels are slightly too high, it's okay to rescue the recording by slowly turning down the record levels. However, the best solution to grossly inappropriate recording levels is to start over.

There are a few tricks you can use that will enable you to set levels more quickly. They vary according to the medium you are dubbing from.

FM broadcasts. The maximum output level for a tuner or FM section of a receiver is *fixed*. Any station broadcasting a 100-per-cent-modulated signal will produce the same output level from a tuner's or receiver's output jacks. This being the case, you can set and forget levels for recording FM broadcasts simply by finding a station

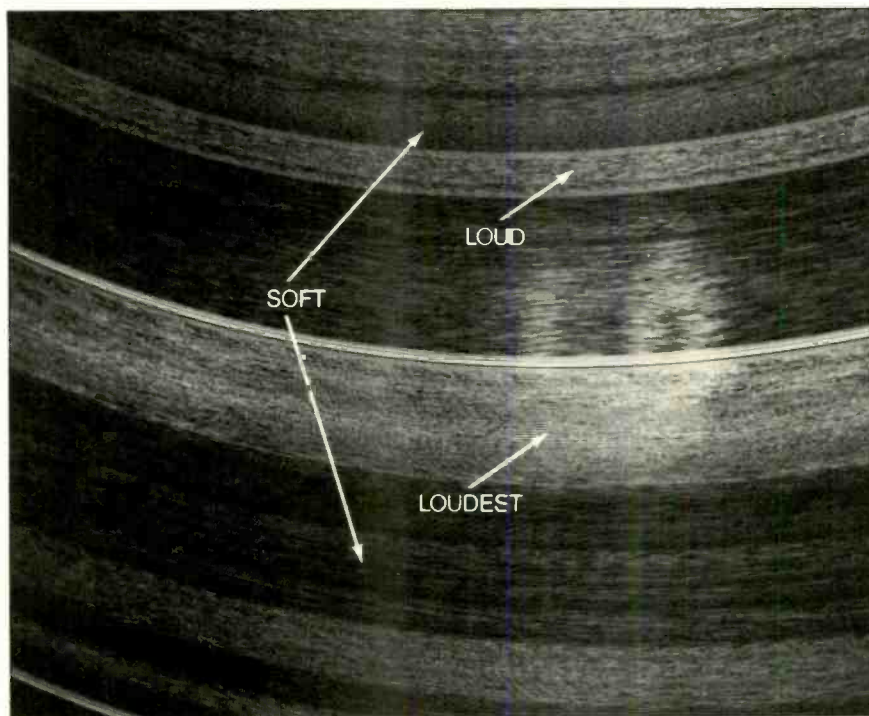
broadcasting high peak levels and setting the record-level controls on the recorder so that the meters indicate peaks at your experimentally determined maximum recording level.

Many stations broadcasting classical music hit peak modulation levels only rarely. Many rock stations, however, hit maximum legal levels quite often by using heavy compression of the music. Even if you tape only classical music, use a heavily compressed rock broadcast to determine where to set recording levels, then tune to the classical stations with your levels preset.

Although it is considered bad practice, many FM stations broadcast mon-

Unfortunately, reliable information on stereo-pilot rejection is usually available only in test reports on specific components, such as those published in *STEREO REVIEW*. The best solution is to experiment.

Discs. Setting levels with stylus-in-a-groove recordings is simple once you learn how to tell loud portions of a disc from soft portions. The "texture" of the surface of a stereo disc is "rougher" during loud passages. These passages also "sparkle" more when held up to a light. Soft signals on a disc appear smoother and darker under a light (see photo below). Play the loud portions and set your levels accordingly.



Showing not the rings of Saturn but the surface of a stereo LP, this photograph indicates how the varying loudness of the music changes the appearance of the disc surface.

ophonic recordings without switching off the stereo pilot signal that activates a receiver's or tuner's stereo decoding circuit and front-panel stereo-FM light. If you are dubbing a mono recording being broadcast in "stereo," switch your receiver or tuner into mono. You can gain more than 20 dB in signal-to-noise ratio. Playing the tape back in mono will also reduce the apparent noise levels by several decibels. This also applies to mono disc dubs.

If you know for sure that your tuner has good suppression of the 19-kHz stereo multiplex pilot signal, you can safely turn off the multiplex filter in your tape deck (if possible) when recording FM broadcasts. The two multiplex filters working in series could reduce the deck's record-playback response at 15 kHz by several decibels.

Unless the only loud portions of a record are at the start of the sides, try to find loud passages about halfway into the disc. This keeps beginning-of-the-disc infrasonic rumble from influencing the readings on the meters. By the time a stylus reaches the innermost grooves of a disc, the cutting process has already slightly rolled off the high frequencies and possibly slightly compressed the signal. Unless the loudest portions of the disc are known to be in the inner grooves, try not to use them as level-setting guides. (Infrasonic rumble, by the way, can cause extraordinarily high levels of infrasonic signals to be fed into a tape deck. If you are getting distortion in your dubs that seems to be synchronized with the passage of a small warp under the stylus, you might need to in-

stall an infrasonic filter between the amplifier and the tape deck.)

When disc-cutting engineers cut discs they usually try to set a constant overall level between disc sides and between discs in multiple-record sets. This obviates changing the playback volume at every side change. It also means that there is only one optimum recording level for the two sides of a disc or for all sides of a multidisc album. To avoid what could be annoying changes of level, try to find the single loudest passage and use it to set the recording level for the entire tape.

Prerecorded tapes. Because tapes have definite overload (saturation) limits, the comments about FM recording above generally also apply to the copy-

jective when making a dub is to introduce as few changes in background noise level as possible while making the necessary changes smoothly and slowly.

From these considerations comes the following procedure for dubbing a disc:

- a. Fully rewind the tape to the leader.
- b. Place the deck in RECORD, with the RECORD-LEVEL controls turned down.
- c. Let the tape roll for about 10 seconds to skip over the leader and to leave some blank tape at the end in case the leader should break.
- d. Place the deck in PAUSE.
- e. Place the stylus on the disc a few turns before the music starts (either in the lead-in groove or at the end of

be possible, for instance, to start the cassette with the end of the album. The first side of the album will thus start midway through the first side of the cassette with the rest of the music "wrapping around" the second side. The auto-search lets you start playback at the true beginning of the program without tedious searching or tape-counter watching.

A TIMER-RECORD feature allows you to make unattended recordings of broadcasts (remember that levels can be set for FM dubs beforehand). Unfortunately, unless you have a quick-reverse bidirectional-recording deck, the recording time is limited by the length of one side of a cassette, making a timer feature useless for recording whole operas or rock concerts.

"The objective when making a dub is to introduce as few changes in background noise level as possible while making the necessary changes smoothly and slowly."

ing of prerecorded tapes. High-speed-duplicated cassettes tend to be recorded at too-high levels, so you might want to reduce the recording level on any dubs you make of them.

Live music. Recording live music is simple if you can record a rehearsal or run-through. Even one loud chord can be enough. If not, then as a first try (with classical music, and with microphones placed 3 to 15 feet from the performers) set the level of applause that greets the musicians at 5 to 10 dB below the maximum acceptable recording level. For rock music, the first few notes will generally tell you whether your levels are set correctly.

6 Use all your deck's features. You paid for them, so you might as well take full advantage of their capabilities. The most useful feature in a cassette deck is probably the PAUSE control. It can be used to good advantage in making a recording with lower perceived noise levels.

Steady noise (such as hiss, record noise, or rumble) is more easily perceived when it comes and goes and when the transitions between noise and no noise are rapid. Many people don't realize that simply recording on a blank or bulk-erased tape raises the tape's background-noise level even when there is no signal recorded. This noise is called bias noise and is an inherent part of analog magnetic recordings. The ob-

jective when making a dub is to introduce as few changes in background noise level as possible while making the necessary changes smoothly and slowly.

- f. Release the deck from PAUSE.
- g. Bring the RECORD-LEVEL controls up to their appointed settings fairly slowly. Make sure you get there before the music starts, however.
- h. If, when the music ends, you are going to record some more (the other side, perhaps), *do not* fade down the record level. Just wait an appropriate period, with the stylus still on the disc, and then put the recorder back in PAUSE.
- i. Cue up the next selection or side to be recorded.
- j. Release the deck from PAUSE. This procedure creates a constant level of disc and tape background noise between the two selections.

A RECORD MUTE switch, which puts a "blank" segment on the tape, can also be useful in making a "low noise" dub of a disc. After Step d above, turn up the RECORD-LEVEL controls to their preset positions. Activate RECORD MUTE during Steps e and f; skip Step g. As close as possible to the start of the music release the RECORD MUTE. This will take some practice so as not to cut off the initial sound. It also works best with music that starts loudly.

An AUTOMATIC PROGRAM SEARCH feature on a deck allows you to fit on one cassette recordings that might, on first calculation, seem too long. It may

7 Document the recording. If you do a lot of dubbing, it's best to write down what you are recording while you are recording it. (Properly set levels will never need watching while the recording is in progress.)

If you don't mind the vocal interruptions it might be a good idea to record the intro or "out-tro" of a piece being broadcast. This gives an on-the-tape record of what the piece is, who the performers are, possibly the record number, and, if you are good at recognizing announcers' voices, what station it was broadcast over.

Protect your recordings by punching out the protection tab in the cassette shell as soon as you have finished recording the appropriate side of the tape. Doing this, in fact, is more important than sticking a label on. You can always put a piece of adhesive tape over the holes if you want to erase and rerecord on the tape.

8 Use accessories. Many "outboard" accessories connected between the amplifier and the deck can improve the sound or convenience of making tape copies. Companders (which can compress or expand an audio signal's dynamic range) may help make a poorly recorded tape of a conversation, speech, or telephone call more intelligible when used in "compress" mode. Dance tapes sometimes benefit from a slight compression. Equalizers can tame some of the shrill high frequencies sometimes found on discs. If your deck's inherent noise level is low enough and it doesn't already contain a wide-range noise-reduction system, Dolby-C and dbx processors are available as accessories. An inexpensive mixer will enable you to make DJ-quality party-music tapes. The best way to use all these devices should be explained in their owners' manuals. □



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Best of the Month

Stereo Review's Selection of Recordings of Special Merit

A Magical and Richly Satisfying New Account of Schumann's *Rhenish* Symphony

WHILE I nearly always have the highest admiration for Carlo Maria Giulini's thoughtful and imaginative orchestral leadership, I often have reservations about his recorded interpretations. Not so with his new reading of Schumann's *Rhenish* Symphony for Deutsche Grammophon. Paired with a most eloquent performance of

the *Manfred* Overture, it is the most magical and richly satisfying realization of the work to appear on records since the famous Bruno Walter/New York Philharmonic recording in 1941 (still available on Odyssey Y 35222).

The symphony's opening movement is notable here for its organic flow and an exquisite but not overstressed delin-

Conductor Carlo Maria Giulini



M. Evans / Deutsche Grammophon

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eatation of the inner voices. Some of the rhythmic articulation is unusual, but the effect is rather to pique the listener's imagination than to upset the sense of pulse. The orchestral sound throughout is magnificently full yet transparent—unusual in Schumann performances. And when the horns make their great entry to announce the climax of the movement, it is with near-Mahlerian grandeur. The genial *Ländler* movement comes off with fine "swing," and the song-without-words third movement is tenderness itself. In the two finale movements, Giulini and his Los Angeles Philharmonic players capture to the full the solemn grandeur of the first and the sun-drenched joyousness of the second.

This is by far the most satisfying recording I have heard from Giulini in Los Angeles. Besides the powerful orchestral presence, there is enough room tone to provide the feeling of space that this music needs in its big moments. All told, the disc is a most commendable achievement that leaves me wondering if Giulini plans to record the other Schumann symphonies. If they all turn out as well as the *Rhenish*, it should be a very rewarding series. —David Hall

SCHUMANN: *Symphony No. 3, in E-flat Major, Op. 97 ("Rhenish"); Manfred Overture, Op. 115.* Los Angeles Philharmonic Orchestra, Carlo Maria Giulini cond. DEUTSCHE GRAMMOPHON ● 2532 040 \$12.98, © 3302 040 \$12.98.

Donald Fagen's Solo: "The Nightfly" Combines Nostalgia, Surprises, and An Irresistible Beat

DONALD FAGEN's new solo album (without Steely Dan's Walter Becker), "The Nightfly," is a sentimental journey. Well, maybe not so sentimental—more like a slow ride back through adolescence, a reminiscence about growing up in the suburbs listening to Dave Brubeck. "Nightfly" refines even further the riff-based jazz sound Steely Dan has used since "Aja," mixing a subliminal disco beat with languid cocktail-lounge swing. Layers of synthesizer push along the relaxed vamping of organ, saxophone, and guitar, with Fagen's distinctively nasal vocals like a swizzle stick churning a Manhattan. It's not rock, but the beat is irresistible—the kind that gets the old man up on the dance floor with mom at the Harvest Moon Ball even *before* he's plastered.

I'll resist the temptation to call this record "brilliantly evocative," because I don't think many people remember the Fifties and Sixties quite the way Fagen does. Sure, we all know about Tuesday Weld and the Drifters, the March of Science, shopping centers, going steady, and high school graduation day. But how many of us used fall-out shelters as a great place to score?

Or talked about the "New Frontier" as a sexual come on? Or fled Cuba just as they ran up the red flag? When Fagen fills his girl's head with dreams, they're not of love and marriage but of driving all night to Mexico City.

Yet "The Nightfly" isn't at all the kind of ironic, cynical album you'd expect from the lead singer of rock's most aloof, sardonic group. In fact, it's practically romantic. Songs such as *New Frontier* and *I.G.Y.* capture the optimism of the period as much as they do its self-delusion and naïveté. *Maxine* and *Ruby Baby* recall what it was like to be all hopped up and too young to do anything about it—or young enough to believe that love really *is* all that matters. And *The Nightfly* reaches one of the loneliest corners of the night, the DJ on the graveyard shift, spinning jazz and answering the phone ("You say there's a race of men in the trees. . . /I wait all night for calls like these"). Alone at 4 a.m. with his coffee, his Chesterfields, and his memories, he muses on love lost. And leave it to Fagen to create a sharp visual image of even the most ordinary detail, in this case the station-break jingle: "An independent station, WJAZ . . . /From the foot of Mt. Belzoni." The nostalgic ride "Nightfly" takes us on is filled with surprises like this. Slide over, Tuesday. I'll drive. —Mark Peel

DONALD FAGEN: *The Nightfly.* Donald Fagen (vocals, keyboards); vocal and in-



Donald Fagen. portrait of the artist as a late-night DJ

strumental accompaniment. *I.G.Y.; Green Flower Street; Ruby Baby; Maxine; New Frontier; The Nightfly; The Goodbye Look; Walk Between Raindrops.* WARNER BROS. 23696-1 \$8.98, © 23696-4 \$8.98.

Authentic Performance and Digital Recording Capture All the Glories of Purcell's *The Fairy Queen*

HENRY PURCELL's score for *The Fairy Queen*—an extraordinarily elaborate masque based on an adaptation of Shakespeare's *A Midsummer Night's Dream*—is among his finest works, and the new Archive recording directed by John Eliot Gardiner allows us to savor its glories to the full. *The Fairy Queen* has been recorded before, once by Anthony Lewis with a stellar vocal cast (including Jennifer Vyvan, Elsie Morrison, and Peter Pears) on L'Oiseau-Lyre, and once by the Deller Consort on Vanguard. While parts of

the former reading will never be surpassed, it is unevenly paced; the latter is vigorous and dramatic but less profound. The new recording surpasses them both in every respect.

Gardiner and Peter Holman have together restored the score to its original form, and Gardiner guides his performers through Purcell's complex music with a stylistically firm hand. He has, of course, the advantages of the most recent research on seventeenth-century performance practices, of singers who are well versed in that period's style, of a production appropriately scaled to the music, and of an orchestra made up of skilled musicians who are experienced in playing authentic instruments. And, not least, there is the advantage of the digital recording. The overall result is stunning.

The singers are all strong; they sing lightly and naturally, revealing Purcell's genius for portraying the meaning of individual words through musical figuration. Jennifer Smith is superb in her portrayal of Night and eloquent in the moving "Plainte." Eiddwen HARRY lends supple poise to the Epithalamium, and Judith Nelson re-creates the utter

charm of "Ye gentle Spirits of the Air." Timothy Penrose is a welcome young countertenor; his saucy coyness as Mopsa is hilarious. Both tenors are excellent, and David Thomas carries off the role of the Drunken Poet with lusty swagger.

The chorus is remarkable for the clarity of its counterpoint, its massed brilliance in the Mask of the Seasons, and its hushed mystery in the Night scene. The orchestral playing is strong, and the early instruments bring out the wit and charm of Purcell's dances in a manner that modern instruments could not possibly do. When fortified by trumpets and drums, the orchestral sound is magnificent.

The real hero here is John Eliot Gardiner. His tempos and strong sense of rhythm keep the music sounding vital at every moment, and his command of phrasing and articulation bring clarity to Purcell's detailed inner parts. This album represents a peak in the performance of English Baroque music.

—Stoddard Lincoln

PURCELL: *The Fairy Queen.* Eiddwen HARRY, Jennifer Smith, Judith Nelson, Elisabeth Priday (sopranos); Timothy Penrose, Ashley Stafford (countertenors); Wynford Evans, Martyn Hill (tenors); Stephen Varcoe, David Thomas (basses); Monteverdi Choir; English Baroque Soloists, John Eliot Gardiner cond. DEUTSCHE GRAMMOPHON ARCHIVE ● 2742 001 three discs \$32.94.

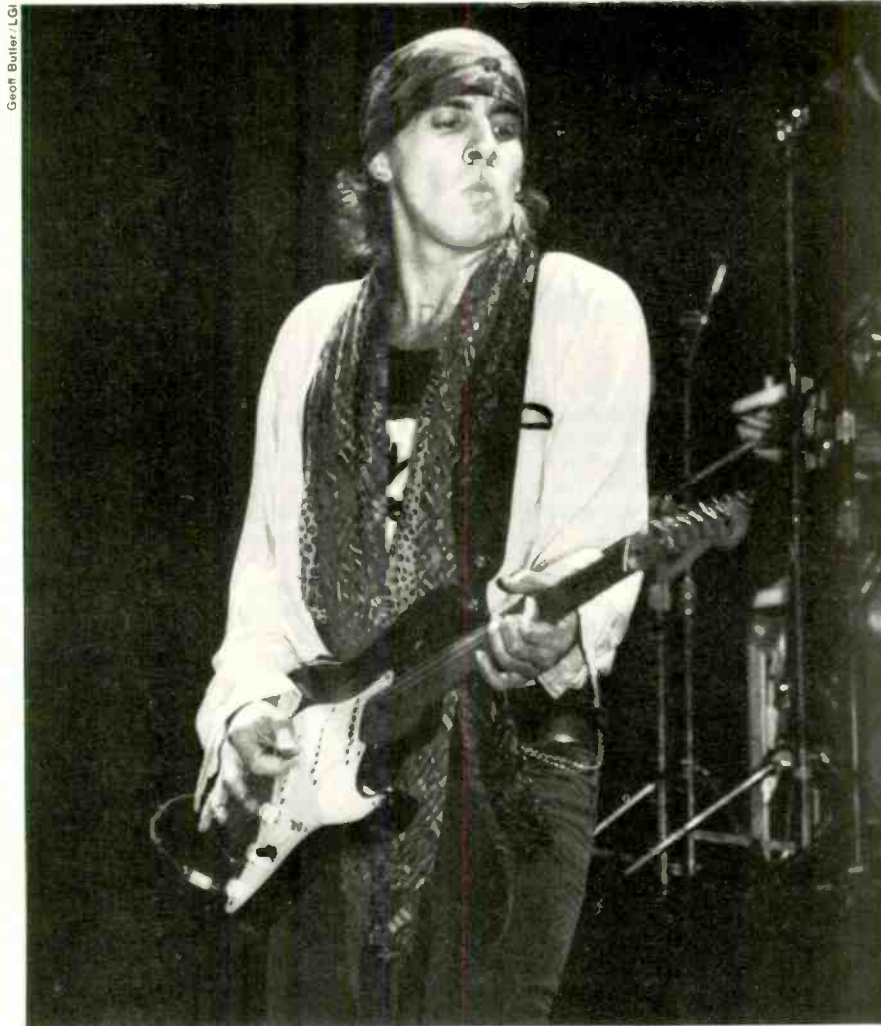
Conductor John Eliot Gardiner



"Men Without Women": Little Steven and the Disciples of Soul Keep the R-&B Faith

IF you've heard anything from the passionate new album "Men Without Women," you may be wondering about the performers, Little Steven and the Disciples of Soul. Well, "Little Steven" is the latest *nom de disque* of Miami Steve Van Zandt of the E Street Band, and the Disciples of Soul are a group of rock and r-&-b veterans—including Dino Danelli and Felix Cavaliere of the late and much-lamented Young Rascals—most of whom are connected with Bruce Springsteen's Asbury Park Mafia. So much for pedigree. What matters is that this is one hell of a band.

That shouldn't be a surprise. After all, as a producer and writer for Southside Johnny, Ronnie Spector, and Gary U.S. Bonds, leader Van Zandt has already staked a fair claim to being the



Miami Steve ("Little Steven") Van Zandt

last true keeper of the r-&-b flame, and "Men Without Women" confirms it. This kid has got soul galore.

Stylistically the album offers somewhat familiar stuff: Motown and Stax/Volt influences filtered through a bar-band sensibility into what is by now an identifiable Jersey Sound. But, unlike most other current efforts in the idiom, Van Zandt's sounds thoroughly alive. A blazing, undeniable conviction shines through every note, every phrase. What in other hands would be at best *homage* is here passionately felt, personal expression. Van Zandt is not a great singer technically, but he has a choked nasal intensity that gets to you the way Keith Richards does. (Actually, a lot of "Men Without Women" reminds me of the great late-night blues playing one hears on Stones bootlegs.) The songs themselves are brilliant, with glorious melodies, irresistible hooks, and lyrics that are compassionate and often wise. There are at least three or four instant classics here; the rest are never less than captivating. In short, genre music never sounded so good.

Listening to "Men Without Women"

brought back a memory from a hot summer night more years ago than I care to remember. I had gone to see the Asbury Jukes on the final stop of their first tour, but an exhausted Southside Johnny had lost his voice. Van Zandt filled in for him at the last moment, and he was transcendent, singing and playing as if his life depended on it. I left the show floating five feet off the ground, convinced I had just heard the most beautiful music of my life. Sure, I've had moments like that at concerts since, but this album gave me the most sustained shot of that feeling I've had in far too long. There may be better records before the public at the moment, but certainly none so grand sounding and real. Don't miss it.—*Steve Simels*

LITTLE STEVEN AND THE DISCIPLES OF SOUL: *Men Without Women*. Little Steven and the Disciples of Soul (vocals and instrumentals); other musicians. *Lyin' in a Bed of Fire; Inside of Me; Until the Good Is Gone; Men Without Women; Under the Gun; Save Me; Princess of Little Italy; Angel Eyes; Forever; I've Been Waiting.* EMI AMERICA ST-17086 \$8.98. © 4XT-17086 \$8.98.

Best of the Month

Recent selections
you might have missed

POPULAR

- Captain Beefheart & the Magic Band: *Ice Cream for Crow.*** VIRGIN ARE 38274. "... the most brilliant expression of Beefheart's strange muse since *Trout Mask Replica.*" (January)
- Aretha Franklin: *Jump to It.*** ARISTA AL 9602. "Glamour and magic from the *Queen of Soul.*" (December)
- King Crimson: *Beat.*** WARNER BROS./EG 1-23692. "An unbeatable combination of poetic words and strong, rhythmic music." (November)
- Cheryl Lynn: *Instant Love.*** COLUMBIA FC 38057. "... a true celebration of music making." (November)
- Dianne Reeves: *Welcome to My Love.*** PALO ALTO PA 8026. "An impressively varied debut solo album..." (January)
- The Roches: *Keep On Doing.*** WARNER BROS. 23725-1. "The Roches are... so far beyond borrowing that they've forgotten how." (February)
- Marty Stuart: *Busy Bee Cafe.*** SUGAR HILL SH-3726. "An all-acoustic, all-star album with aesthetic heft." (December)
- Utopia: *Network 60183-1.*** "A nearly perfect set of well-made pop songs." (February)

CLASSICAL

- J. S. Bach: *Goldberg Variations.*** CBS IM 37779. "Glenn Gould's legacy... the most stimulating and entertaining account of this remarkable work yet recorded..." (January)
- Berlioz: *La Damnation de Faust.*** LONDON LDR 73007. "An exceptional digital recording of Berlioz's most satisfying work." (December)
- Ives: *Violin/Plano Sonatas.*** MUSICMASTERS MM 20056/57. "A superb new set... from authoritative performers of Ives's music." (November)
- Mahler: *Symphony No. 7, in E Minor ("Song of the Night").*** RCA ATC2-4245. "Flawless performance and production..." (November)
- Mozart: *Le Nozze di Figaro.*** LONDON LDR 74001. "No other recorded Figaro can match the combined strength of the five principals in this one..." (January)
- Mozart: *Plano Concertos Nos. 12 and 20.*** DEUTSCHE GRAMMOPHON 2532 053. ***Plano Concertos Nos. 15 and 21.*** PHILIPS 6E14 148. "Exceptionally appealing performances by Rudolf Serkin and Alfred Brendel..." (February)
- Reich: *Tehillim (Psalms).*** ECM-1-1215. "A rare and really joyful listening experience." (February)
- Thomson: *Four Saints in Three Acts.*** NONESUCH 79035-1. "A beautifully performed and... stunningly engineered digital recording of the complete opera..." (December)

Classical Music

News Briefs



Soprano Gwyneth Jones

In the Bayreuth Festival production of Wagner's *Ring of the Nibelung* now being televised in installments on the Public Broadcasting Service, the role of Brünnhilde is portrayed by Welsh soprano Gwyneth Jones. At the Met this season Jones will sing her first American Brünnhilde in *Die Walküre*, beginning on March 18. She will be heard in the matinee performance broadcast on the Texaco-Metropolitan Opera Radio Network on April 2. Others in the cast are Hildegard Behrens, Mignon Dunn, Manfred Jung, Franz Ferdinand Nentwig, and Hans Tschammer. Silvio Varviso will conduct.

On records Jones is the Brünnhilde in the Philips recording of the *Ring*, which is conducted by Pierre Boulez and is derived from the same Bayreuth performances as the PBS telecasts. Philips released the complete boxed set in October 1981 and is now

bringing the four operas out separately. *Das Rheingold* came out last fall, and *Die Walküre* in January. The company's release schedule calls for *Siegfried* in February and *Götterdämmerung* in March or April. □

MORE Wagner on screen and disc is provided by Hans Jürgen Syberberg's somewhat controversial film version of *Parsifal*. Shown last year at film festivals in Edinburgh and Cannes and in a special one-night stand at Lincoln Center in January, the film was scheduled for release in this country at the end of February.

The controversy involves the unconventional visual presentation of *Parsifal*, which is performed on screen by actors. The soundtrack was recorded by singers Yvonne Minton, Reiner Goldberg, Wolfgang Schöne, and Robert

Lloyd with the Monte Carlo Philharmonic Orchestra conducted by Armin Jordan. Released in Europe on the Erato label, the five-disc recording has been brought out here by RCA. □

RECENT books on music include Oliver Daniel's *Stokowski: A Counterpoint of View* (Dodd, Mead, \$24.95), a lengthy biography of that showman of the podium, conductor Leopold Stokowski. Its 1,090 pages include a list of premières conducted by Stokowski as well as a lengthy discography.

Most books by or about singers might best be shelved with fiction and are of only routine interest. An exception is Giovanni Battista Meneghini's *My Wife Maria Callas* (Farrar, Straus & Giroux, \$16.50). It is a simple and convincing account of the twelve years that Meneghini spent with Callas, years that formed what was artistically the most distinguished period

in the soprano's life. Meneghini explains that he wrote the book specifically to refute claims made in the biography published in 1981 by Arianna Stassinopoulos, who never met Callas.

In a class by itself is *The Last Prima Donnas* by Lanfranco Rasponi (Knopf, \$22.50). It is a collection of more than fifty interviews with singers as diverse as Kirsten Flagstad, Eva Turner, Lily Pons, Lotte Lehmann, Bidú Sayão, Jarmila Novotna, and Callas. The author is knowledgeable, and he writes of these singers, whom he clearly admires, with sympathy but without gushing. Heartily recommended. *W.L.*

THE latest in an English series of critical surveys of recorded classical music is *The New Penguin Stereo Record and Cassette Guide* by Edward Greenfield, Robert Layton, and Ivan March (Penguin, \$12.95). Its editorial focus is primarily on recordings

Leopold Stokowski in 1916



N. Coulbourse Brown/International Leopold Stokowski Society

released or rereleased between 1977, when the last edition was published, and 1982. Since most major recordings are made for international distribution, they are readily available in this country, and American catalog numbers are given. Mail-order information is provided for records and tapes that may be hard to find here. □

AFTER a decade as music director of the Cleveland Orchestra, the American conductor **Lorin Maazel** gave up that post last year to take on the duties of general manager of the Vienna State Opera. His new job evidently is less demanding than the old one because Maazel spent the last few months of 1982 working on movies. He produced his first film, *Regina*, with Ava Gardner and Anthony Quinn, and composed the musical score for it himself.

In addition to that, Maazel completed a recording of Bizet's *Carmen* to serve as the soundtrack of a movie version

of the opera to be filmed this summer in Spain. The singers, who will also perform their roles on the screen, include **Julia Migenes-Johnson** in the title role, **Placido Domingo** as Don José, and **Ruggero Raimondi** as Escamillo. The soundtrack will be released on disc by Erato in Europe and by RCA in the United States late this year or early in 1984.

Back in Vienna at the end of December, Maazel conducted the Vienna Philharmonic in the traditional New Year's gala concert of waltzes by the Strauss family. The concert was televised on an international hookup and was recorded digitally by Deutsche Grammophon. That label has made digital recordings of three such gala concerts conducted by Maazel in previous years. All have sold well and expectations are high for the new one, which will probably be released late this year. The audience who saw this concert when it was televised at New Year's was estimated at 750 million viewers! □



Lorin Maazel and the Vienna Philharmonic, New Year's 1982

Disc and Tape Reviews

By RICHARD FREED • DAVID HALL • GEORGE JELLINEK
STODDARD LINCOLN • ERIC SALZMAN

RECORDING OF SPECIAL MERIT

BEETHOVEN: *Symphony No. 7, in A Major, Op. 92.* Collegium Aureum. PRO ARTE
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Performance: **Beautiful**
Recording: **Very fine**

This was my first experience with an "original instruments" performance of a Beethoven symphony, and I found it both fascinating and salutary. Too often in the past my ears have been assaulted in this piece with bellowing modern horns, pounding timpani, and strident strings. Hearing what this music sounds like played by a thirty-two-member ensemble using gut strings and small-bore natural horns and recorded in an ideal acoustic surround is a real pleasure, even if

the interpretation under concertmaster Franz Josef Maier does not efface those of Arturo Toscanini and a number of others. The reading is unmannered, reaching its high point in a lovely rendering of the famous allegretto. The beautifully textured *fugato* episode is itself almost worth the price of the disc, and the digitally mastered sound is simply superb. *D.H.*

BORODIN: *Quartet No. 2, in D Major.*
DOHNANYI: *Quartet No. 2, in D-flat Major, Op. 15.* Guarneri Quartet. RCA
ARLI-4331 \$8.98, © ARK1-4331 \$8.98.

Performance: **Fat and jolly**
Recording: **Tunnel-like**

Borodin's lighthearted Second Quartet was written in 1881, Dohnányi's powerful Second dates from 1907. The first represents late Romanticism in its first flowering, the latter the slightly overripe end of the tradition. These are rather big, fat, jolly performances that sound as though they had been recorded in one of the narrower passages of the Moscow subway. At one point, someone unaccountably turns on a leaky radiator, but fortunately it is turned off again before the end. *E.S.*

RECORDING OF SPECIAL MERIT

DEBUSSY: *L'Enfant Prodiges.* Jessye Norman (soprano), Lia; José Carreras

(tenor), Azaël; Dietrich Fischer-Dieskau (baritone), Simeon; Stuttgart Radio Symphony Orchestra, Gary Bertini cond. ***La Damoiselle Édue.*** Ileana Cotrubas (soprano), Damozel; Glenda Maurice (mezzo-soprano), narrator; Women's Chorus of the South German Radio; Stuttgart Radio Symphony Orchestra, Gary Bertini cond. PRO ARTE Ⓢ PAD-128 \$12.98.

Performance: **Excellent**
Recording: **Atmospheric**

One might not think of Stuttgart as a likely venue for such thoroughly Gallic works as these (almost more "Gallic" than specifically Debussyan, especially *L'Enfant Prodiges*), but this is a very attractive issue. Listening to the enchanting performance of *La Damoiselle Édue*, I was so moved that critical evaluation was set aside for a bit. Then I went back to the most recent previous recording, on Deutsche Grammophon (2531 263), which has much to recommend it in Daniel Barenboim's sympathetic conducting and the pure, fresh voice of Barbara Hendricks, and the reasons why the new version works so well became clear in terms of what the earlier one lacks. In the first place, the women of the Paris chorus, in the DG recording, have neither the assurance of their German colleagues, in terms of simple accuracy of intonation, nor the soft, luminous quality that is needed to make the enchantment complete. Moreover, both the

Explanation of symbols:

- Ⓢ = eight-track stereo cartridge
- Ⓢ = stereo cassette
- Ⓢ = digital-master recording
- Ⓢ = direct-to-disc
- Ⓢ = CX-encoded

Monophonic recordings are indicated by the symbol Ⓢ

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



Merred: Andere Artist Management

Conductor Nikolaus Harnoncourt

A Special Mozart Requiem

As almost everyone knows, Mozart's Requiem was completed by a pupil of his, Franz Xaver Süssmayr, at the behest of the master's widow, who was desperate to collect the promised fee. Süssmayr had to work out most of the orchestration on his own, and it is generally agreed that he did not do a very good job. In 1972, one Franz Beyer produced a much-simplified version that was claimed to be closer to Mozart's own style. Telefunken has now released a recording of Beyer's version performed by soloists, chorus, and the Vienna Concentus Musicus under the direction of Nikolaus Harnoncourt. We thus have an "authentic" performance on "original" instruments of a modern orchestration of Süssmayr's Mozart Requiem. And it is the best performance of it I have ever heard.

Of course, the major instrument used in this work has not changed at all since the eighteenth century—the human voice. On the other hand, singing styles have changed over two hundred years quite as much as instrumental performing styles have. One of the triumphs of this performance (as in Harnoncourt's monumental Bach cantata series) is that the singers have been selected and trained to produce a softer, purer, and cleaner—yet quite intense and dramatic—sound than we have been used to hearing. Is it authentic? I believe so.

Harnoncourt brings all his special knowledge and feeling for old music to this piece of late early music: double-dotting, accented dissonances and appoggiaturas (with soft, almost inaudible resolutions), dynamic terraces and dramatic planes. Above all, there is a real and serious attempt to treat

the work in a unified way as a single conception and not merely a sequence of numbers. Some of the results are extraordinarily dramatic—the entrance of the trombones near the beginning (early trombones, very close to modern instruments, are especially hair-raising when heard against the soft sound of early strings and woodwinds), some of the vocal solos, the screams of the men in the *Confutatis*, the ongoing directness of tempo and phrase. Other moments are exceptionally soft, sweet, contemplative, almost dreamy. But this contrast is beautifully framed by a conception in which popular and personal expression are blended with the more formal representational and classical *opera seria* elements. This is a special performance.

Except for the Requiem and one or two other non-liturgical Viennese works, one hardly thinks of Mozart as a church composer. And, of course, in Vienna he was not. But the Salzburg Mozart regularly supplied the local ecclesiastical establishment—which, after all, ran the town and patronized the young composer in more ways than one—with masses of Masses, vespers, offertories, motets, litanies, and hymns. These relatively early works were all composed in the spirit of the age—devotion with a light heart. No reason not to praise God with a spicurl, an operatic flourish, or a roulade. Good taste, lively tempos, melodies that fall softly on the ear, a bit of performer bravura, never far out, never boring. Philips has released a disc of this music, and, not surprisingly, the best thing in it is the latest: the *Vesperae de Dominica* (K. 321), written in 1779. The rest show the amazing skill and high level of inspiration that the young composer could achieve in traditional forms and a stifling environment. It was to escape the Archbishop Collelado and a life of churning out works like these that Mozart went to Vienna.

Herbert Kegel and his Leipzig forces are competent and musicianly. These are solid and substantial performances of music that hides its workaday workmanship behind a rococo mask. The recording, made in cooperation with the East Germans, is also decent, although not in a class with Telefunken's sensational digital sound. The clarity and dynamic range of the latter are, in every way, worthy of the music and the performance. —Eric Salzman

MOZART: Requiem (K. 626). Rachael Yakar (soprano); Ortrun Wenkel (alto); Kurt Equiluz (tenor); Robert Holl (bass); Vienna State Opera Concert Choir; Concentus Musicus Wien, Nikolaus Harnoncourt cond. TELEFUNKEN ● 6.42756 \$12.98, © 4.42756 \$12.98.

MOZART: Litaniae (K. 125 and 109); Regina Coeli (K. 127); Te Deum (K. 141); Vesperae Solennes de Dominica (K. 321); Dixit et Magnificat (K. 193). Mitsuka Shirai, Isabella Nawe (sopranos); Heidi Riess (contralto); Eberhard Büchner (tenor); Hermann Christian Polster (bass); Leipzig Radio Chorus and Symphony Orchestra, Herbert Kegel cond. PHILIPS 6769 092 two discs \$21.96, © 7654 092 \$21.96.

singers and the orchestra are more happily focused in Pro Arte's new digital recording than on the DG disc. The sound here is quite the opposite of the sometimes harsh quality of DG's sonics, with an almost veiled quality that is beautifully apt.

A sticker on the wrapper reads "première recording," and while both works have been recorded before, *L'Enfant Prodigue* hasn't been around for years. This *scène lyrique*, or cantata, on the parable of the Prodigal Son is the work with which Debussy finally won the Prix de Rome in 1884 (and it was in Rome that he discovered Rossetti's *The Blessed Damozel*, in translation, and decided to set it to music). Sir Thomas Beecham used to program *L'Enfant* now and then, but opportunities to hear the work today are rare. This lovely performance makes one wonder why.

Gary Bertini impresses me more and more as a conductor with broad sympathies and reliable effectiveness in many different styles. And, judging by their performances, the "big-name" soloists involved must have undertaken this assignment out of long and deep-seated enthusiasm for these works of the young Debussy. Full bilingual texts are provided, along with helpful notes by Allan Kozinn. R.F.

DOHNÁNYI: String Quartet No. 2 (see BORODIN)

DONIZETTI: Maria de Rudenz. Katia Ricciarelli (soprano), Maria de Rudenz; Silvia Baleani (soprano), Matilde; Leo Nucci (baritone), Corrado; Alberto Cupido (tenor), Enrico; Giorgio Surjan (bass), Rambaldo; Silvio Eupani (tenor), Il Cancelliere. Orchestra and Chorus of the Teatro la Fenice, Venice, Eliahu Inbal cond. CBS M 79345 three discs, © M3 79345, no list price.

Performance: **Passionate**
Recording: **Fair**

There was a period in Donizetti's life when his productivity defied belief. Two of his operas were premiered in 1835, four in 1836, two more in 1837. *Maria de Rudenz* came next, in 1838. Apparently even the composer and his inner circle were not pleased with it, and initial audience reaction at the Fenice in Venice was unfavorable. Though a few other Italian theaters subsequently ventured to stage it, the opera eventually disappeared from the boards.

In his 1965 biography of Donizetti, William Ashbrook said that "While it is risky to write a final epitaph for any opera, it is difficult to believe that *Maria de Rudenz* will ever see the stage again." Well, it did. In January 1981, the opera was revived by the Fenice, and it was recorded by Fonit Cetra, the licensor of the present set. Technically it is disappointing. The sound is boxy, ill-balanced, and, while listenable, far below today's standards.

The opera itself is not even second-best Donizetti. Melodic inspiration runs at a routine level throughout, and even in the more musically exciting moments the writing is predictable and formulaic. Interestingly, there are snatches of melodic material that make one think of *Il Trovatore* and *La Traviata*, suggesting that this opera must have caught the interest of the young Verdi. The Fenice cast supplies all the pas-

sion and commitment the work needs, but the performance is rather roughshod. Katia Ricciarelli has her hands full with the hysterical title role. Her intense singing goes a long way toward making it convincing, but vocally she is uneven. Leo Nucci's bright-sounding and vibrant baritone recalls that of Gino Bechi in the past, but he is unpolished in execution. Alberto Cupido is an earnest but tight-voiced tenor. The other singers are undistinguished, and the orchestral performance is unimpressive. *G.J.*

HAYDN: *Die Schöpfung (The Creation)*. Rüdiger Wohlers (tenor), Uriel; Norma Burrowes (soprano), Gabriel; James Morris (bass), Raphael; Siegmund Nimsgern (bass), Adam; Sylvia Greenberg (soprano), Eva. Chicago Symphony Orchestra and Chorus, Sir Georg Solti cond. LONDON ● LDR 72011 two discs \$21.96, © LDR 5 72011 \$21.96.

Performance: **Uneven**
Recording: **Excellent**

Topnotch recorded sound, magnificent orchestral playing, and fine choral work lend distinction to this new *Creation*, the first digitally recorded one. Sir Georg Solti conducts with a strong sense of drama, using generally brisk tempos that, while they do not actually sound hurried, do seem to lack repose at times (as in the Adam-Eva episode in Part III).

Rüdiger Wohlers, a sweet-toned and cultivated tenor, is a notable asset as Uriel—somewhat slender in tonal volume, but

graceful and expressive. Norma Burrowes is a good Gabriel without matching the lustrous standard set by Gundula Janowitz (in Karajan's Deutsche Grammophon set) or Lucia Popp (in Dorati's on London). It is a pity that Siegmund Nimsgern, a solid and sonorous Adam, did not assume the role of Raphael as well, for James Morris's singing in the part is unfocused and effortful. The models here are Kurt Moll (Dorati/London) and José van Dam (Frühbeck/Angel). All in all, any one of the other sets cited will provide a more satisfying presentation of this marvelous oratorio. *G.J.*

RECORDINGS OF SPECIAL MERIT

HAYDN: *The Seven Last Words of Christ (Hob. XX:1a)*. Hungarian State Orchestra, János Ferencsik cond. HUNGAROTON ● SLPD 12358 \$12.98.

Performance: **A testament**
Recording: **Rich**

HAYDN: *The Seven Last Words of Christ, Op. 51 (Hob. XX:1b)*. Gidon Kremer, Kathrin Rabus (violins); Gérard Caussé (viola); Ko Iwasaki (cello). PHILIPS ● 6514 153 \$12.98, © 7337 153 \$12.98.

Performance: **Noble**
Recording: **Luminous**

In 1785, on commission from a nobleman-priest in Cadiz, Haydn produced one of his most unusual compositions, *The Seven Last Words of Our Saviour on the Cross* (usually known in English as *The Seven Last*

Words of Christ), an orchestral work laid out in the form of an introduction, seven "sonatas," and an epilogue titled "*Il Terremoto*" ("The Earthquake"). Probably because Haydn knew this work had little chance of frequent performance in its original form, he also prepared settings of it for string quartet, for piano, and for chorus with orchestra. By general agreement, however, it is the original version for orchestra that is the most effective, though the one for strings perhaps matches it in poignancy.

It is not an easy work to bring off. The sequence of seven slow movements (the markings range from *Adagio* to *Lento*, broken only after nearly a full hour by the concluding *Presto*) would seem to offer little in the way of contrast, and, indeed, few readings succeed in realizing its subtle shifts of mood and tension. The performances on these two new discs, however, show more persuasively than any others I know how rich and vital a work this is after all.

János Ferencsik, who recently recorded the choral version of *The Seven Last Words* for Hungaroton, goes farther than any of his recorded predecessors in reaching the heart of this music and conveying its unique beauty with uncontrived urgency, without resisting or seeking to amend Haydn's unusual design. His players respond as if they were inscribing a joint testament, and the sound is exactly what one wants—rich, warm, yet beautifully detailed. This is surely a basic item for any Haydn collection.

The same may be said of the Philips entry, which I believe represents Gidon Krem-



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CIRCLE NO. 13 ON READER SERVICE CARD



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Conductor William Christie

The Glory of Rameau

INTO the one short, delightful act of his ballet *Anacréon* Jean Philippe Rameau managed to pack scenes of banquets, battles, slumber, storms, and a final joyous reconciliation between love and drink. "Bacchus does not forbid loving/And love allows us to drink!" the chorus triumphantly sings at the close. All the episodes are vividly depicted through vocal declamation, dances, and instrumental coloration, for which Rameau had an incredible flair.

On the stunning new Harmonia Mundi recording of the work by the vocal and instrumental ensemble Les Arts Florissants, baritone René Schirrer boisterously portrays Anacréon, who is torn between the pleasures of drunkenness and of love. Musically, it is L'Amour who really wins the day. In that role soprano Agnès Mellon somehow manages to sound exactly as one might imagine the pert little god. Her pure

voice, haloed by fluttering flutes, fairly flies through agile coloratura and knots of trills and turns. She exemplifies the ultimate in vocal style for Rameau.

The members of Les Arts Florissants play their authentic instruments superbly, contrasting the delicate music of the quieter sequences and the robust storms and bacchanals with dramatic sureness, and the choral singing is just fine. Congratulations to leader William Christie! With this splendid release we can finally hear Rameau in his full glory. —Stoddard Lincoln

RAMEAU: *Anacréon*. René Schirrer (baritone), Anacréon; Agnès Mellon (soprano), L'Amour; others. Les Arts Florissants, William Christie cond. HARMONIA MUNDI HM 1090 \$11.98 (from Harmonia Mundi USA, 2351 Westwood Boulevard, Los Angeles, Calif. 90064).

er's first recording of chamber music beyond duo sonatas. He and his three associates bring great urgency and intensity to the music without distorting any of the musical outline. The digital sound is even more luminous than Hungaroton's. R.F.

RECORDING OF SPECIAL MERIT

MAHLER: *Symphony No. 1, in D Major; Lieder eines Fahrenden Gesellen*. Klára Takács (mezzo-soprano); Hungarian State Orchestra, Iván Fischer cond. HUNGAROTON SLPX 12267/8 two discs \$19.96.

Performance: **Colorful**
Recording: **Very fine**

This Hungaroton Mahler First is billed as "the original Budapest version 1889." That is not strictly so, since Mahler's 1899 re-

vised scoring is used for all the movements except the second, the *Blumine* movement, which he suppressed following the 1889 Budapest première and the 1894 Weimar performances. In 1970 the British Pye-Virtuoso label issued the one and only disc documentation of Mahler's earliest surviving scoring, that of 1893, which used the standard Romantic orchestra and included the *Blumine* movement. There are distinctly audible differences in details in the scoring of all four of the standard movements between the 1893 and 1899 versions. So much for musicological matters.

The performance shows that conductor Iván Fischer is clearly one of the more gifted and imaginative young conductors on the international scene. His reading is akin to that of the late Jascha Horenstein (Nonesuch H-71240), whose treatment of

the four-movement version of this work is the most colorful and strongly individual one I know. Since Fischer is generous with repeats in both the first movement and the scherzo, his five movements are spread over three sides. The overall approach is poetic rather than virtuosic, as befits a performance including the sweetly nostalgic *Blumine* with its extended trumpet solo. Even so, I am among those who agree that Mahler was right in exciting this movement.

The sonics are unusually fine. I suspect that the recording locale was the Vigadó, the lovely ballroom in which this music was first heard. Mahler's orchestral heavy artillery in the finale sounds much less congested than usual, and the stereo imaging and localization are superb.

This disc was my first exposure to mezzo-soprano Klára Takács, and she seems to be a singer of formidable artistry. Largely through subtle control of her vibrato, which ranges from none to a considerable amount, she brings to Mahler's youthful *Wayfarer* Songs a special degree of aching poignance while avoiding mawkishness. That these songs have thematic material in common with the D Major Symphony makes their inclusion here very appropriate. D.H.

MESSIAEN: *Les Corps Glorieux*. Jennifer Bate (organ). UNICORN-KANCHANA ① DKP 9004 \$15 (from Euroclass Record Distributors, 548 Warren Street, Hudson, N.Y. 12534).

MESSIAEN: *La Nativité du Seigneur*. Jennifer Bate (organ). UNICORN-KANCHANA ① DKP 9005 \$15.

Performances: **Crystalline**

Recordings: **Reverberant but clear**

There is really nothing in the world quite like the organ music of Olivier Messiaen. I wish I liked it.

These discs are Volumes I and II of what looks like a project devoted to the complete organ music of Messiaen—complete so far, that is. Messiaen, who was born in Avignon in 1910, is not only still very active as a composer, he still holds the position (since 1931!) of organist at the Sainte-Trinité in Paris. Jennifer Bate is an excellent organist. She comes from England, and so do these records, which were, however, recorded on the organ of the Cathedral of Saint Pierre of Beauvais, a sixteenth-century instrument that was essentially rebuilt in 1979 after being severely damaged in World War II.

English interest in Messiaen is a notable phenomenon dating back to his earliest work. Until recent years, it could be said that Messiaen was more appreciated abroad, especially in England, than at home. Messiaen was the spiritual and technical godfather of the post-World War II avant-garde in Europe. He was the teacher of both Boulez and Stockhausen, among others, and his highly original music has been well regarded in its own right.

"Original" is a key word here. Beginning in the late Twenties, Messiaen wrote and published a series of organ works that would have to be ranked among the most original and startling compositions of the century, their fame only somewhat limited by their being written for a particular and rather special medium. *La Nativité du Seigneur* of 1935 and *Les Corps Glorieux*

of 1939 are long, introspective, mystical meditations on matters theological employing the most radical and modernistic sonorities imaginable. Perhaps if Scriabin had lived and taken up the organ, he might have ended up writing music like this, but I doubt it. Messiaen seems to come from nowhere, and, despite his undoubted influence on the post-war generation, he really leads to nothing.

Messiaen's style has a great deal to do with his intimate knowledge of the organ. His unique harmonic sound comes from the nature of the organ's pipes and stops and the subtle ways in which he registers them. His other instrumental music, though highly regarded in some circles, lacks the mystery, the soft veil of floating harmony, that penetrates and suffuses the organ music. The use here of a modern organ and the relatively clear acoustic of the Beauvais cathedral have certain advantages. One often hears Messiaen played or recorded on nineteenth-century organs that muddy the mystical waters considerably. In these performances the organ, the cathedral acoustics, and the superb digital recording combine to create a jewel-like sound.

But when all is said and done, I still don't care for this music. Others do. I find its supposed references to Indian music, plainchant, and bird song lacking in the very qualities that endear Indian music, plainchant, and bird song to me. Messiaen's music seems to float along in a free fantasy world. As an offering from the composer to his creator, it is personal and acceptable. As an offering to me, in this world, it is just too thin and rootless. *E.S.*

MUSSORGSKY: Boris Godounov (Highlights). Nicolai Ghiaurov (bass), Boris; Neli Bozkhova (soprano), Feodor; Nadya Dobriyanova (soprano), Xenia; Milen Paounov (tenor), Prince Shuiski. Svetoslav Obretenov Bulgarian National Chorus; Sofia Philharmonic Orchestra, Emil Chakarov cond. **TURNABOUT TV 34781 \$5.98, © CT 4781 \$5.98.**

Performance: **Fine singing**
Recording: **Fairly good**

Judging by the rather muted and distant sonics, this recording, a transfer from a Balkanton (Bulgarian) master, goes back some years. On the other hand, Nicolai Ghiaurov's voice is in far healthier state here than it is in his more recent recordings. Here he offers, with his familiar authority, moving, eloquent, and forthright singing without excessive histrionics.

The Rimsky-Korsakov edition of the opera seems to have been used. Boris's four extended scenes are given uncut: the Coronation, the Monologue from Act II, the Hallucination Scene from Act II, and the Farewell and Death. The supporting singers, chorus, and orchestra are all adequate, but Ghiaurov is the show. *G.J.*

PARRY: Ode on the Nativity (see VAUGHAN WILLIAMS)

PURCELL: The Fairy Queen (see Best of the Month, page 82)

SCHUBERT: Symphony No. 9, in C Major (D. 944, "The Great"). Staatskapelle Dresden, Karl Böhm cond. **DEUTSCHE GRAMMO-**

PHON 2531 352 \$10.98. © 3301 352 \$10.98.

Performance: **Rugged**
Recording: **Good concert pickup**

The late Karl Böhm's 1961 recording of Schubert's Ninth Symphony with the Berlin Philharmonic has over the years remained one of the more distinguished recorded interpretations. This 1979 concert performance follows much the same lines, with perhaps even more pronounced but still subtle fluctuations in tempo within individual movements, particularly the first. Böhm responds strongly to the drama implicit in this music, and the Dresden orchestra with which he was associated for so many

years is with him all the way. The drama comes to the fore in the wonderful "walking tune" slow movement. His pacing in the scherzo is solid without being stolid, and the demonic drive of the finale is relentless. The sound is not as refined as it would be in a studio-made recording, but it is excellent for a live concert disc. *D.H.*

SCHUMANN: Symphony No. 3, in E-flat Major, Op. 97; Manfred Overture, Op. 115 (see Best of the Month, page 79)

RECORDING OF SPECIAL MERIT

STRAVINSKY: Symphony in C; Symphony in Three Movements. Orchestre de la Suisse

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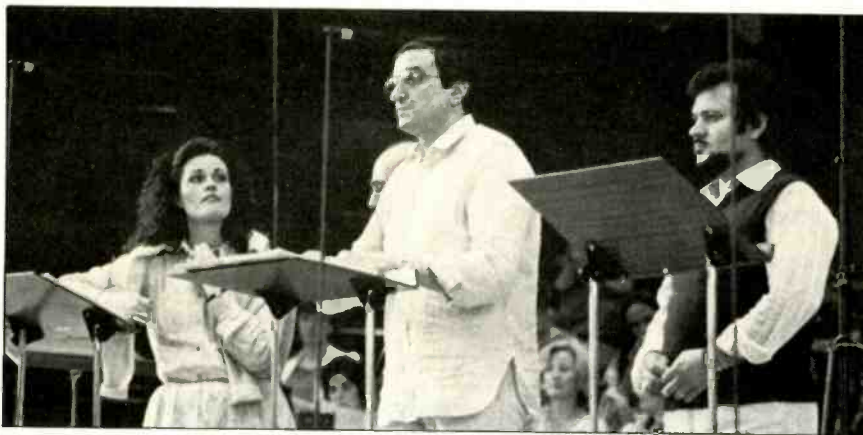


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CIRCLE NO. 15 ON READER SERVICE CARD



June Anderson (Elcia), Ruggiero Raimondi (Mosè), and Salvatore Fisichella (Aronne)

Rossini's *Mosè in Egitto*

POSSIBLY the most intriguing discovery in the Rossini revival that has been taking place on records is *Mosè*, a powerful and affecting Biblical drama that was first recorded (in mono) by Philips back in the Sixties, with Nicola Rossi-Lemeni in the title role and Tullio Serafin conducting, and was brought out in stereo only last year by Hungaroton, with Jozsef Gregor as Mosès and Lamberto Gardelli conducting (SLPX 12290/92). Now Philips has come forth with a digital *Mosè*, conducted by Claudio Scimone, with Ruggiero Raimondi in the title role. It is utterly different from its two predecessors, and, I think, more valuable than either of them. In a very real sense, it is simply not the same opera.

Mosè is one of several operas that exist in more than a single version. Rossini originally presented it in Naples in 1818 as *Mosè in Egitto*, a three-act "azione tragico-sacra." The failure of the stage machinery involved in the parting of the Red Sea at the end provoked unsought laughter, but the following year Rossini presented the work again, with a totally new final act, and it enjoyed a stunning success. Eight years later, for the Paris Opéra, he produced still another version, in four acts instead of the original three and in French instead of Italian. In the new Philips set Scimone uses his own new edition of the 1819 Naples version. Scimone has heretofore been associated primarily with the Baroque repertoire of his chamber orchestra, I Solisti Veneti, but neither the scholarship nor the theatrical insight evident in the new set could have been

assumed from any of his earlier undertakings. The biggest surprise here is that this slightly revised work by the twenty-seven-year-old Rossini is so effective and convincing as musical theater.

As Mosès, Raimondi is very persuasive dramatically, if not always right on the mark musically. A lapse or two might be noted, but nothing can take away from the essential grandeur of his characterization. Siegmund Nimsgern, as Pharaoh, actually has a bit more singing to do, and he does it splendidly; he and June Anderson, the American soprano cast as Elcia, are probably the standouts in this cast. The duet between Anderson and Sandra Browne, as Amnensi, near the end of Act I is perhaps the single loveliest moment in the entire performance—and all the more cherishable for the way it fits into the dramatic flow. The recording is all one could ask in terms of sonic realism, and the booklet includes an illuminating essay by Rossini authority Philip Gossett.

—Richard Freed

ROSSINI: *Mosè in Egitto*. Ruggiero Raimondi (bass), Mosè; June Anderson (soprano), Elcia; Sandra Browne (mezzo-soprano), Amnensi; Zhava Gal (mezzo-soprano), Amaltea; Siegmund Nimsgern (bass), Faraone; Ernesto Palacio (tenor), Osiride; Salvatore Fisichella (tenor), Aronne; Keith Lewis (tenor), Mambre. Ambrosian Opera Chorus; Philharmonia Orchestra, Claudio Scimone cond. PHILIPS 6769 081 three discs \$38.94, © 7654 081 \$38.94.

Romande, Charles Dutoit cond. LONDON 6769 081 three discs \$38.94, © 7654 081 \$38.94.

Performance: **Razor-sharp**
Recording: **Topnotch**

This is the second time around for the Suisse Romande Orchestra with this particular coupling. Indeed, Ernest Ansermet's 1960 recording is still available on London's Stereo Treasury label. Meanwhile, we can

take an unusual measure of satisfaction in this new recording under Charles Dutoit, who steers the orchestra with razor-sharp precision in the exacting and tricky Symphony in C. Not even under Stravinsky himself, whose two recordings of it are among his better ones, has this score been heard with more litheness and clarity, for which we can also thank London's digital mastering.

If the Symphony in C may be described

as abstract gesture-music *par excellence*, one must agree with Stravinsky's own remarks concerning cinematic elements in the Symphony in Three Movements of 1945, a work rather more rich in dynamic event and variety of timbre. The piece is a study in contrasts between the energy of the end movements and the stasis of the middle movement. In this case I feel that Stravinsky's own reading has a slight interpretive edge over Dutoit's, at least in its realization of the music's contrasting elements, but Dutoit has the advantage of superb sonics. All things considered, this is a most satisfactory disc from every standpoint. D.H.

RECORDING OF SPECIAL MERIT

SZYMANOWSKI: *Concert Overture in E Major, Op. 12; Symphony No. 2, in B-flat Major, Op. 19.* Polish Radio National Symphony Orchestra, Jacek Kasprzyk cond. **Symphony No. 3, Op. 27** ("Song of the Night"); **Symphonie Concertante for Piano and Orchestra, Op. 60.** Wiesław Ochman (tenor, in Op. 27); Polish Radio Choir of Cracow (in Op. 27); Piotr Paleczny (piano, in Op. 60); Polish Radio National Symphony Orchestra, Jerzy Semkow cond. **Mandragora (Ballet-Grotesque), Op. 43; Harnasie (Ballet Pantomime), Op. 55.** Kazimierz Pustelak (tenor, in Op. 43); Jan Harazim (speaker, in Op. 43); Zdzisław Lapiński (cello, in Op. 43); Andrzej Bachleda (tenor, in Op. 55); Wiesław Kwaśny (violin, in Op. 55); Polish Radio Choir of Cracow (in Op. 55); Polish Radio Symphony Orchestra of Cracow, Antoni Wit cond. EMI ELECTROLA IC 165-43 210/12 three discs \$38.94 (from International Book and Record Distributors, 40-11 24th Street, Long Island City, N.Y. 11101).

Performance: **Dedicated**
Recording: **Very fine**

Last year was not only the centennial of Igor Stravinsky's birth but also that of two other nationalists who, like Stravinsky, though somewhat later in their careers, achieved full integration with the classical mainstream of Western music. They were Bartók's Hungarian compatriot and friend Zoltán Kodály and Poland's Karol Szymanowski, who in his person and work symbolized a fresh and full identity for post-Chopin art music in his country.

Szymanowski arrived at his creative self-realization late in a career cut short by tuberculosis in his mid-fifties. From the very beginning, however, he was a master of his craft, as is proved by the exuberant Concert Overture of 1904-1905 and the elaborate Second Symphony of 1909-1910. Richard Strauss and Max Reger are the most obvious influences in these works. By the time of the Third Symphony—scored for tenor solo, chorus, and orchestra and based on a mystical Persian Sufi text—Szymanowski had come under the spell of the French Impressionists and had toured Sicily and Algiers. One also senses in this music something of Delius and Scriabin. The apogee of this phase in Szymanowski's work was reached in his opera *King Roger*, begun in 1918, two years after completion of the Third Symphony.

By 1920, the first elements of "modernism" were creeping into Szymanowski's work, for example in his incidental music,

under the title *Mandragora*, for a production of Moliere's *Le Bourgeois Gentilhomme*. This amusing oddity recalls Prokofiev. Only in 1922, when Szymanowski went to the Polish mountain resort of Zakopane for reasons of health, did he discover the musical folklore of the Polish highlands. If the richly colorful *Harnasie* ballet pantomime may be said to represent Szymanowski's extroverted reaction to this stimulus, the Op. 60 *Symphonie Concertante* and the Second Violin Concerto may be considered his definitive statements.

Certainly, among the works in the three-disc commemorative album under review here, the *Symphonie Concertante* and *Harnasie* provide the most fascinating and rewarding listening. *Harnasie*, based on Polish mountaineer folk legend, is imbued with something of the sensuous quality of Ravel's *Daphnis et Chloé*, plus a good bit of Bartókian gutsiness. In the *Symphonie Concertante*, on the other hand, we find a full synthesis of nationalism and classicism within the framework of what amounts to a brilliant piano concerto. Mazurka rhythms haunt the two end movements. In the opening the atmosphere is Chopinesque, and in the finale the music echoes the wild Mazurka of the mountains that also found its way to Sweden as the *polska*. These are separated by an exquisite nocturne in which the solo violin plays a key role.

The performances in this album, as might be expected, are totally dedicated. Although Antal Dorati's digitally mastered London recording of the Symphony No. 2 (LDR 71026) offers a crisper rendering of the fugue, the Polish performers here arrive at more winning results through a more expansive treatment of the whole. For me the *Symphonie Concertante* performance, with its brilliant solo piano work, is the most successful in the set. *Harnasie* too comes off well, but it is a little constricted in sound. The recorded sound is generally very good, however, and this is a splendidly realized commemorative project. *D.H.*

VAUGHAN WILLIAMS: *The Sons of Light*. PARRY: *Ode on the Nativity*. Teresa Cahill (soprano, in the Parry); Bach Choir; Royal College of Music Chorus; London Philharmonic Orchestra, Sir David Willcocks cond. LYRITA SRCS.125 \$13.98 (from International Book and Record Distributors, 40-11 24th Street, Long Island City, N.Y. 11101).

Performance: **Mostly very good**
Recording: **Parry better balanced**

The post-*Messiah* English choir tradition has reached these shores through the good offices of the Episcopal Church but has hardly penetrated general musical life here. Sir Hubert Parry wrote his *Ode on the Nativity* in 1912 for the Hereford Three Choirs Festival, and it is surely quintessential of its time and place: polite, well-behaved, Mendelssohnian harmony and scoring surrounding a melodic style that constantly threatens to break out into good humor, even jollity. British restraint being what it is, though, it never does.

The Vaughan Williams is a bit different. It was written in 1950 for a large student chorus and is based on poems by the composer's wife, Ursula Vaughan Williams, that draw on the creation legends of the

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The Bartered Bride

Peter Dvorsky:
an ideal Jeník



At last, after a number of excellent German editions, we can savor Smetana's delightful *The Bartered Bride* in its original language. Replacing an acceptable but internationally non-competitive Czech version, Supraphon has now given us a new one, digitally recorded and excellently cast. The music, zestfully conducted by Zdeněk Košler, bubbles in its irresistible way. The redoubtable Czech Philharmonic revels in Smetana's bright and inventive orchestration. And for once I don't have to say that the singers' high spirits and dramatic involvement compensate for vocal deficiencies. The singing is good.

To detail specifics: Peter Dvorsky is an ideal Jeník, bright and youthful in sound, radiating charm and humor, singing with dashing ease. (He sings regularly in Vienna these days, and the Met could certainly use him.) There is a slight metallic edge to the timbre of Gabriela Běnačková-Čápková's Mařenka, but it tends to enhance the character's individuality. The soprano displays a lively temperament, and her fresh tone is devoid of any unwelcome "Slavic" vibrato. Basso Richard Novák is less appealing, but he is obviously a seasoned performer with

all the comic skill and self-importance the part of Kecal requires. The engagingly stuttering Vašek of tenor Miroslav Kopp is just right.

In the capable supporting cast only the chief of the Comedians falls below an acceptable level. The chorus could not be better, while the recorded sound, if unspectacular, is entirely satisfactory. I happen to like the current German version (Eurodisc 89036), but *this* is the way to hear this joyous opera, with libretto in hand. Supraphon provides one in four languages in its illustrated booklet.

—George Jellinek

SMETANA: *The Bartered Bride*. Jindřich Jindrák (baritone), Krušina; Marie Vesela (soprano), Ludmila; Gabriela Běnačková-Čápková (soprano), Marenka; Jaňoslav Horáček (bass), Micha; Marie Mrázová (contralto), Háta; Miroslav Kopp (tenor), Vašek; Peter Dvorsky (tenor), Jeník; Richard Novák (bass), Kecal; Alfréd Hampel (tenor), Principal of the Comedians; Jana Jonášová (soprano), Esmeralda. Czech Philharmonic Chorus and Orchestra, Zdeněk Košler cond. SUPRAPHON 1116 3511 three discs \$29.94.

Greeks and Jews. It is a colorful and inspired contemplation of subjects mythical and celestial. I thought the choirs were a bit overwhelmed by the gorgeous orchestral sonorities in the Vaughan Williams piece, and I didn't care for the soprano in the Parry. But otherwise these are good performances and warm, lyric recordings of some very English music.

E.S.

RECORDINGS OF SPECIAL MERIT

VIVALDI: *The Four Seasons*. Simon Standage (violin); the English Concert, Trevor

Pinnock cond. DG ARCHIVE 2534 003 \$10.98, © 3311 003 \$10.98.

Performance: **Miraculous**
Recording: **Excellent**

VIVALDI: *Concerto in D Major for Two Trumpets (RV 537); Bassoon Concerto in E Minor (RV 484); Concerto in F Major for Two Horns (RV 539); Concerto in D Major for Two Violins and Two Cellos (RV 564); Lute Concerto in D Major (RV 93)*. Guy Touvron, Serge Boisson (trumpets); Maurice Allard (bassoon); Jürgen Hübscher (lute); I Solisti Veneti, Claudio Scimone

cond. ERATO/RCA 1 NUM 75009 \$10.98.

Performance: **Festive**
Recording: **Bright**

If you missed the English Concert's earlier recording of *The Four Seasons* on the English CRD label, be sure to catch this new digital one on DG Archive. Vivaldi's pictorial effects sound naïve on modern instruments, but here, on early instruments, they are hair-raisingly effective. The storms are frightening, teeth chatter painfully, hounds yelp, and drunkards meet their just demise. Violinist Simon Standage is a remarkable soloist, and the performance as a whole is breathtaking.

The Erato/RCA collection of Vivaldi concertos recorded by I Solisti Veneti on modern instruments is an excellent demonstration of the composer's bravura treatment of various instrumental combinations, the effects in the Concerto for Two Violins and Two Cellos being particularly striking. Although the Bassoon Concerto is a predominantly somber piece, the performances under the direction of Claudio Scimone generally have a festive quality that is appropriate for this extroverted music—sparkling, rhythmic, and vital. The digital recording is exemplary.

S.L.

WAGNER: *Die Walküre*. Siegfried Jerusalem (tenor), Siegmund; Kurt Moll (bass), Hunding; Theo Adam (bass-baritone), Wotan; Jessye Norman (soprano), Sieglinde; Jeannine Altmeyer (soprano), Brünnhilde; Yvonne Minton (mezzo-soprano), Fricka; Eva-Maria Bundschuh, Cheryl Studer, Ruth Falcon, Christel Borchers, Uta Prew, Ortrun Wenkel, Kathleen Kuhlmann, Anne Gjevang, Valkyries. Dresden State Orchestra, Marek Janowski cond. EURODISC 143-465 five discs \$59.90.

Performance: **Mostly okay**
Recording: **Good enough**

Eurodisc's digital *Ring* is now half complete. A decent but unexciting *Das Rheingold* (reviewed here in January 1982) has been followed by an acceptable but not really distinguished *Die Walküre*. Given the current state of Wagnerian singing, we can hardly expect more nowadays. But then why should anybody bother with such a costly and duplicative enterprise?

Marek Janowski's propulsive leadership lacks neither power nor vigor. What it lacks is the inspiration that can make the grand moments in the drama really soar. Let me cite only two episodes, both in the third act: one, the Brünnhilde-Sieglinde scene in which Siegfried's birth is foretold with the glorious emerging "Redemption" motive, and two, the opening of the Wotan-Brünnhilde dialogue, with the god's admonition "*Nicht send' ich dich mehr aus Walhall...*" In both instances, the music moves on without conveying the momentous grandeur written into it. In short, this is an orderly but uneventful performance. The orchestral playing is certainly good but not always outstanding. The brasses in the Hunding motive, for example, are not precisely chorded.

The singing has its satisfying moments. Certainly Kurt Moll is most impressive. Hunding is nobody's favorite operatic character, but when he is interpreted by such a

formidable singer, one cannot help regretting that gruff warrior's early departure from the scene. I find much to praise in Siegfried Jerusalem's singing as well. He brings true lyricism and model legato phrasing to both the love episode in the first act and the "Zauberfest" scene (Act II, Scene 5). Unfortunately, his basically lyric tones were not meant to sustain Wagnerian burdens. Persistent tightness and lapses of intonation are the results.

Sieglinde's music poses no real problems for Jessye Norman's plush voice. Her singing is nearly always admirable, but there are dramatic nuances still to be filled in. The character's vulnerability, in particular, is not conveyed. The real surprise, for me, is Jeannine Altmeyer's Brünnhilde. It would not be fair to compare her effort with those of her great predecessors. This is a more modestly scaled war maiden, very feminine and convincingly communicative, and she is especially moving when Wotan commands her to commit the unwanted deed.

Theo Adam projects Wotan's agony with an authority matured by many years of association with the role. The long narrative in Act Two is redeemed by Adam's sensitive and thoughtful handling, but he cannot take much pressure without serious losses in tonal beauty. His voice lacks weight, richness, and steadiness. Wotan's greatest scene, the Farewell, finds the artist in dry voice, lacking the majesty needed. There may not be a better Wotan anywhere today, but that painful admission will not make this one more acceptable.

I cannot find much to praise in the recorded sound, which appears compressed in dynamic range and rather limited in transparency. Frequent comparisons with the opera's first stereo recording (London OSA 1509), far more excitingly conducted by Sir Georg Solti, invariably favored the earlier (1965) production. *G.J.*

COLLECTIONS

RECORDING OF SPECIAL MERIT

MARIA CALLAS: *Casta Diva*. Rossini: *The Barber of Seville: Una voce poco fa*.

Bellini: *Norma: Casta diva*. Donizetti: *Lucia di Lammermoor: Mad Scene*. Ponchielli: *La Gioconda: Suicidio*. Puccini: *Tosca: Vissi d'arte*. Bizet: *Carmen: Habanera*. Saint-Saëns: *Samson et Dalila: Mon coeur s'ouvre à ta voix*. Maria Callas (soprano); various orchestras, Alceo Galliera, Tullio Serafin, Antonino Votto, Georges Prêtre cond. EMI PATHÉ-MARCONI C 059-43263 \$10.98 (from International Book and Record Distributors, 40-11 24th Street, Long Island City, N.Y. 11101).

Performance: **Engrossing**
Recording: **Good**

All but one of these seven selections come from readily available complete recordings, and some have even been previously "highlighted." The exception is the familiar "Mon coeur s'ouvre à ta voix." It was recorded in Paris in 1961 but for some reason not included in Maria Callas's French album (Angel S-35882), which contains Dalila's other two arias from the same opera. For Callas fans, at least, that justifies the current release. I suspect, however, that Callas herself prevented its original appearance, for it is certainly not on the level of her deeply moving "Printemps qui commence." While by no means poorly done, the rendition is uninvolved, partly because of Georges Prêtre's blasé conducting.

A fairly good sampling of the Callas artistry is provided by the rest of the collection. Interpreters of Lucia should carefully study the way Callas fills the recitative passages with expressive meaning. What she does with the all-too-familiar lines "Presso la fonte meco t'assidi alquanto" and "Alfin son tua, alfi sei mio" is a dramatic revelation. Of course, the scene benefits from the leadership of Tullio Serafin, who not only knew how the music should go but also knew the kind of artist he was working with. Two rather painful exposed top notes are the price we pay for such a rare dramatic experience.

A thoughtful, nicely detailed "Casta diva," a large-scaled, intense "Suicidio," and a deeply felt "Vissi d'arte" are also notable, along with a light and playful *Habanera* and an "Una voce poco fa" in which

Rosina emerges more like a romantic heroine than a sparkling minx. Vocal colors abound, and Callas's agility, when that is called for, is always impressive. The recorded sound suggests some audio tampering, but it is more than acceptable. I do object to the sequencing of the arias, however: the transition from "Vissi d'arte" to the *Habanera* is rather disconcerting. *G.J.*

JULIA HAMARI: *Nausikaa*. Schubert: *Der Musensohn; An den Mond; Erbkönig*. Brahms: *Dein Blaues Auge; Ständchen*. R. Strauss: *Du Meines Herzens Krönelein; Alerseelen; Wie Sollten Wir Geheim Sie Halten*. Debussy: *Trois Chansons de Bilitis*. Kodály: *Nausikaa; Mónár Anna*. Julia Hamari (mezzo-soprano); Emmi Varasdy (piano). HUNGAROTON SLPX 12406 \$9.98 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Performance: **Mostly good**
Recording: **Good**

Although the interpretive results are somewhat uneven, this recital taped at a Budapest concert in 1979 deserves praise for its unhackneyed program. The second half (Debussy and Kodály) comes off more successfully than the first. Julia Hamari's sensuous tone is an ideal vehicle for the sultry poems of the Bilitis songs, though her interpretation lacks the degree of idiomatic rightness we find in the renditions of Régine Crespin or Victoria de los Angeles. It was a happy thought to follow this Debussy cycle with Kodály's *Nausikaa*, which bears Debussy's influences. It and the bizarre folk ballad *Mónár Anna* (in the composer's *Háry János* idiom) are both done to near perfection.

Where sensitivity and tonal beauty can succeed alone (the first of the two Brahms songs and all three songs by Strauss), the performances leave little room for criticism. *Erbkönig* is dramatically understated but creditable. Both *Ständchen* and *Der Musensohn*, however, are rushed, and the latter suffers from a bumpy accompaniment. The recorded sound is good, the applause only mildly intrusive. *G.J.*

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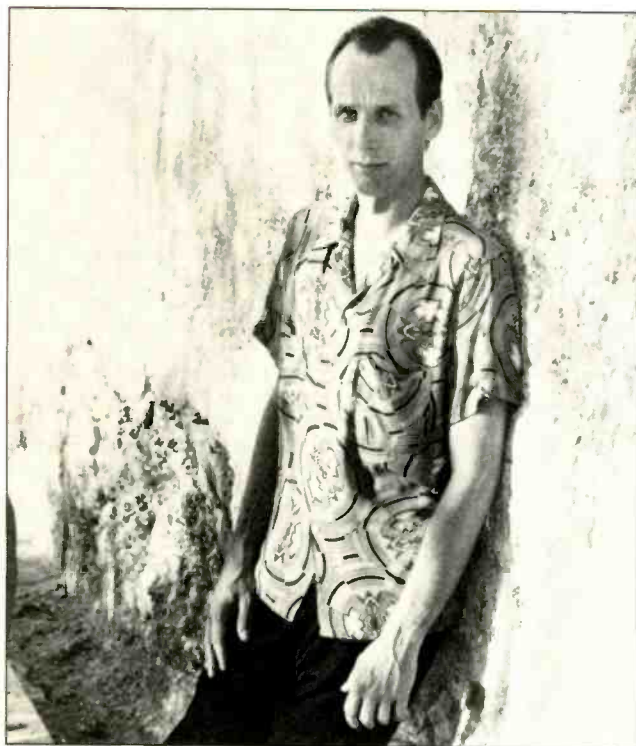
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News Briefs



Christine Rodin/Island Records

EIGHTIES guitar hero **Adrian Belew**, who has worked with Frank Zappa, King Crimson, and Talking Heads, among others, is composing the music for what promises to be a most intriguing film. Titled *Return Engagement*, the flick is a documentary about the recent lecture tour pairing two of America's best-known ex-jailbirds: Dr. Timothy Leary, the former LSD guru, and G. Gordon Liddy, of

Watergate fame. Apart from Belew's own music, the soundtrack (on Island Records) will include a twenty-four-guitar orchestra playing *America the Beautiful*, conducted by Belew. Apparently he invited guitarists from his hometown (Champaign, Illinois) to a local club and asked them to perform the song together—each musician using his favorite guitar sound. Eat your heart out, Les Paul! **S.S.**

THIS season's big rock-and-roll coffee-table book is *The Ballad of John and Yoko* (Rolling Stone Press, \$10.95). Put together by the editors of *Rolling Stone* (of course), it purports to be the definitive critical study of the pair and their work, and some of it is useful, particularly the reprints of their *RS* interviews dating back to 1968 and a nice autobiographical sketch of Yoko's childhood and early career, which should be un-

familiar territory for most readers. On the whole, however, the book is fawningly uncritical. Too many of the essays, particularly Robert Christgau's tasteless meditation on the Lennon's sex lives, are fatally marred by an acceptance of the "their life was their art" line. In general, they range from the pointless (a piece by Jan Morris, whose Beatlemania has not previously been documented) to the obsequious.

Far better (and less expensive) is *John Lennon and Yoko Ono: The Final Testament* (Berkeley, \$3.50), an expanded version of the *Playboy* interviews the couple did just prior to Lennon's murder. Apart from containing his recollections of every song of his career, which are fascinating, there are some touching reminiscences of Lennon's childhood and liberal doses of his wit and cynicism that act as a very neat corrective to the near mystical bushwah of the *Rolling Stone* collection. I don't think it farfetched to say that Lennon would have preferred it. I certainly do. **S.S.**

SAY what you will about the British, these days they seem to make more interesting records than we do. Cases in point are two eccentric new releases, one available domestically and one available only at your local import bin. The first, on A&M, is the soundtrack to the movie *Party Party*, a collection of unlikely present-day artists performing classic rock tunes from the Fifties, Sixties, and Seventies. Among the participants: **Elvis Costello, Madness, Bananarama, Altered Images, Dave Edmunds, and Sting** (who

warbles Little Richard's venerable *Tutti Frutti*). As of this writing, there is no word on when the accompanying film will be released, but the album is vastly entertaining.

Meanwhile, for those of you with leases to break, may we recommend "Burning Ambitions: A History of Punk." Brought to you by the thoughtful folks at Cherry Red Records, this one more than lives up to its title. Its two discs enshrine the likes of everybody from Joe Strummer's pre-Clash pub band, the **101'ers**, to such colorful aggregations as the **Dead Kennedys, Attila the Stockbroker, Slaughter and the Dogs**, and, of course, the never to be forgotten **Eater**. **S.S.**

GRACENOTES: Despite the commercial failure of Carly Simon's "Torch" album, **Linda Ronstadt** is apparently going to have another go at her own similar recording of pre-rock standards (an earlier version, without orchestra, was shelved last year). Nelson Riddle is arranging the new attempt, which is tentatively scheduled for release in April. Ronstadt, meanwhile, is considering future stage work, and she's philosophizing. Says

Sting (left) at the Great Pyramid



Miles Copeland/A&M Records

Linda, "I consider myself really fortunate in that I'm not waiting tables for a living." . . . Sixties thrush Lesley Gore is contributing a song to the new album by punk standard bearers the Ramones. Before we learned the title was *One, Two, Three, Four*, we expected something along the lines of *It's Sheena's Turn to Cry* . . . Skyy, the Brooklyn-based r-&-b band on Salsoul Records, recently shot a beer commercial (subtle hint: the beer's logo is a large bull) in the company of venerable soul balladeers the Drifters (*Up on the Roof*). Before they shot the ad, however, Skyy subjected the beverage to some careful scientific product testing. According to member Denise Dunning-Crawford, "We bought a six-pack, and, you know, we actually liked it." . . . Billy Joel announced recently that his motorcycle injury will not interfere with future tour plans. On the road in Denver, Joel declared: "The first few days of the tour were the real test—it was my first chance to see if I could play the piano

Gary Garahof



Lesley Gore (center) with Johnny and Joey Ramone (standing) and Ritchie Cordell (left) and Glen Kolotkin (right) of Screaming Skulls Productions

when the adrenalin is flowing and when I'm hitting the keys with all my might. I snapped a few bass strings the other night, and despite the fact that I've taped up my thumb [which was shattered in the

accident] it hurts like hell. But the pain just means the thumb's beginning to function again." . . . Elvis Costello's ex-mentor Jake Riviera has big plans for the followup to EC's recent (expensively produced)

album "Imperial Bedroom." Said Riviera: "We thought Elvis could just do the whole thing in his bedroom, with just a synthesizer, an acoustic guitar, and a harmonica. We'll call it 'Wembley.'" S.S.

Disc and Tape Reviews

By CHRIS ALBERTSON • NOEL COPPAGE • PHYL GARLAND • MARK PEEL
PETER REILLY • STEVE SIMELS • JOEL VANCE

PAT BENATAR: *Get Nervous*. Pat Benatar (vocals); instrumental accompaniment. *Shadows of the Night*; *Looking for a Stranger*; *Anxiety (Get Nervous)*; *Fight It Out*; *The Victim*; and five others. CHRYSALIS CHR 1396 \$8.98, © CCH 1396 \$8.98, © 8CH 1396 \$8.98.

Performance: **Tough as nails**
Recording: **Good**

With "Get Nervous" Pat Benatar again proves what has been obvious since her first album: that she can belt out a song over the loudest, hardest metallic thrashing better than just about any woman, man, or beast in rock, that the song will probably never be written that she can't outmuscle, and that

no one else has more ways to say goodbye, get out, get lost, get . . . whatever. What she has yet to prove is that she can do anything else.

"Get Nervous" is just too much of a good thing. While it certainly reinforces Benatar's reputation as a woman you don't mess with, musically it adds up to little more than a mess of clichés—most of them heavy-metal, a few assembly-line synthetic, all hard, heavy, unrelenting. There is simply no *variety* here: not in dynamics, not in tempo, not in attitude. Benatar's the tough little cookie all the way through this album just as she has been through three others. All right, nobody does it better. Now it's time she tried that big voice out on something—anything—different. M.P.

THE BLASTERS: *Over There*. The Blasters (vocals and instrumentals); Lee Allen, Steve Berlin (saxophones). *High School Confidential*; *Rock Boppin' Baby*; *Keep a Knockin'*; and three others. SLASH/WARNER BROS. EP 23735-1 \$5.99, © 23735-4 \$5.99.

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

The British have long been fascinated with American rockabilly and Fifties rhythm-and-blues, and recently there has been yet

another revival of rockabilly in England. Native British groups and American expatriates are both finding a welcome response there. The Blasters are Americans from Los Angeles who stopped in at the Venue, a club next to Victoria Station, in May 1982, and this live EP is taken from the guest set they played there. They're a hot band, all right, and a lot of fun. To augment their own fine, high-spirited playing, the Blasters had the good sense to call upon the great tenor saxophonist Lee Allen, top horn of the original Little Richard band. His solo here on *Roll 'Em, Pete* is not only exciting and graced with a beautiful, thick tone, but spiced with joking quotes from *The Breeze and I* and *Across the Alley from the Alamo*, two war-horse items from the Forties. Talk about elder statesmanship! J.V.

KURTIS BLOW: *Tough*. Kurtis Blow (vocals, timbales); instrumental accompaniment. *Tough*; *Daydreamin'*; *The Boogie Blues*; and two others. MERCURY MX-1-505 \$8.98, © M4X-1-505 \$8.98.

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

This is a "rap" record, meaning that the lyrics are slightly longer than a paragraph of Proust and that the performer, in this case Kurtis Blow, is supposed to whip him-

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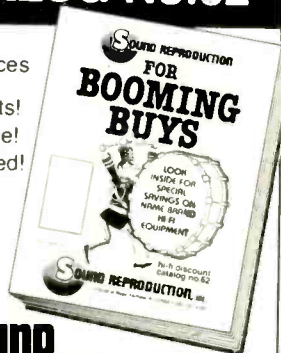
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self and his listeners into a near trance state with syncopated words and percussion. If whirling dervishes were singers, the result would be something like this. Blow does reasonably well performing these rambling monologues, some of them gems: "Tough/Try to get some cash, when you're looking for a raise and they give you trash/Rough/When you got it like that and your woman's running 'round with a baseball bat..." "Rap" is probably fun to dance to, but listening passively is hardly an energizing experience. *P.R.*

GLEN CAMPBELL: *Old Home Town.* Glen Campbell (vocals, guitar); Caldonia (vocals and instrumentals). *Old Home Town; I Love How You Love Me; Hang On Baby (Ease My Mind); Blues My Naughty Sweetie Gives to Me; A Few Good Men; On the Wings of My Victory;* and four others. ATLANTIC AMERICA 90016-1 \$8.98, © CS 90016-1 \$8.98.

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

One of the nasty little truths about pop music is that we've come to expect the people with the best voices to make the most boring records. Glen Campbell, who has one of the better voices, has been trying to stop making boring records for a couple of years now. He has largely succeeded this time, keeping the backing mostly in the hands of a small band (away from Hollywood strings) and finding at least a few songs that don't sound like attempted rewrites of *Tenderly*.

Campbell and producer Jerry Fuller do slip up a few times, though. *I Love How You Love Me* is fit only for a voice with no personality in it, specifically that of one of the late-Fifties Bobbies (Bobby Vinton, Bobby Vee, et al.), and *I Was Too Busy Loving You* and *Hang On Baby* have very little happening in them. But the rest are kind of interesting, especially Bob Corbin's *On the Wings of My Victory* (picked up earlier by Jessi Colter) and Jud Strunk's *Ruth*. And Campbell does a little serious guitar picking on a couple of others (that way, incidentally, lies his surest escape from blandness, in my view; he plays a mean guitar, but never enough of it in any one album). He also has a return engagement with the bagpipes on *Mull of Kintyre*, the Paul McCartney/Denny Laine song about another old home town. His voice is silky smooth, as always, although the program doesn't really challenge it. If Campbell keeps moving in this direction, however, things figure to become more challenging—and more interesting. *N.C.*

AL DI MEOLA: *Tour de Force—Live.* Al Di Meola (guitar); Jan Hammer, Victor Godsey (keyboards); Steve Gadd (drums); Anthony Jackson (bass); Mingo Lewis (percussion). *Elegant Gypsy Suite; Advantage; Egyptian Danza; Race with Devil on Spanish Highway;* and two others. COLUMBIA FC 38373, © FCT 38373, no list price.

Performance: **Finger busting**
Recording: **Good**

Al Di Meola's dextrous fingers have plucked out a space for modern guitar ranging from rock to jazz and Spanish-influenced music, with a nod to his own musical apprenticeship with Chick Corea's Re-

turn to Forever. As a leader he has recorded mostly in the studio, but this album captures him live, proving that he really can do all those astounding things with just his hands. The problem is that his execution is so dazzling and he produces so many special effects that musicality is sacrificed to fireworks. He has also moved away from jazz and fusion and closer to rock, a trend apparent in his last recording.

Despite the overkill, this is an interesting set. *Elegant Gypsy Suite* is vintage Di Meola, and there is an ear-catching introduction of reggae on *Race with Devil on Spanish Highway*, which is full of finger-busting passages. I also like his composition *Nena*, the most melodic offering here, and Jan Hammer's *Cruisin'*, a rakish rock foot-stomper. Although this is not one of Di Meola's best albums, it is an honest statement of his present musical direction. *P.G.*

RECORDING OF SPECIAL MERIT

DOCTOR ROCKIT AND THE SISTERS OF MERCY: *Great Big Fun.* Doctor Rockit and the Sisters of Mercy (vocals and instrumentals). *Almost Grown; Dirty, Dirty; Route 66; You Know My Love; One More Chance with You; I'd Rather Be Blind; Talk to Me;* and five others. PERFECT CIRCLE ● PC-821 \$7.99 (plus \$1 postage and handling from Perfect Circle Records, 2001 Kirby Drive, Suite 1001, Houston, Tex. 77019).

Performance: **Big fun**
Recording: **Very good**

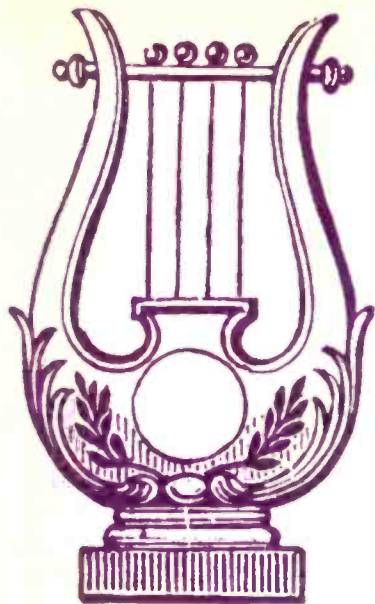
Doctor Rockit is a red-hot Houston bar band and a favorite at Rockefeller's, a local dance club. This live digital recording was made at a series of Monday night gigs. The sound is crisp and penetrating, and the program is notable for its tasty mixture of material and topflight playing. I especially like Mike Sumler's piano solo on Ray Charles's *But on the Other Hand Baby*; it gets a round of well-deserved whoops and hollers. Bass guitarist Kip Millwee's original *Talk to Me* has a very catchy guitar riff, and the band has a rollicking good time with Chuck Berry's *Almost Grown*, Leon Russell's *I'd Rather Be Blind*, and Bobby Troupe's *Route 66*. I had a good time too. *J.V.*

DONALD FAGEN: *The Nightfly* (see Best of the Month, page 81)

JANIE FRICKE: *It Ain't Easy.* Janie Fricke (vocals); vocal and instrumental accompaniment. *He's a Heartache (Looking for a Place to Happen); Who Better Than an Angel; It Ain't Easy Being Easy; Too Hard on My Heart; A Little More Love; Love Have Mercy;* and four others. COLUMBIA FC 38214, © FCT 38214, © FCA 38214, no list price.

Performance: **Easy**
Recording: **Good**

All Janie Fricke needs is a song with some honest emotion in it. That should have been clear from the way the old country standard *Please Help Me, I'm Falling* stood out on her first album. Producers, however, keep loading her albums up with tossed-off gimmick songs. This one, with Bob Montgomery in charge, is distinguished from the others mainly by the fact that the tempos are



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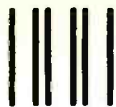
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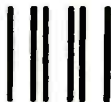
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generally faster—but there are three songs with which a pure singer like Fricke can shine, and she does. All three, the hit *It Ain't Easy Bein' Easy, Tell Me a Lie*, and *You Don't Know Love*, have a certain soulfulness about them. And in them Fricke hits some hair-raising notes without sounding like a disinterested technician, as she sometimes does with those throwaways. She seems to be holding back less than in the past, which, paradoxically, makes one appreciate the sense of restraint she still has. Still, for the most part, you have a lot more singer here than you have song—too much more. **N.C.**

JERRY GARCIA: *Run for the Roses*. Jerry Garcia (vocals, guitar); instrumental accompaniment. *Run for the Roses; I Saw Her Standing There; Without Love; Midnight Getaway*; and three others. ARISTA AL 9603 \$8.98, © ACT 9603 \$8.98, © A&T 9603 \$8.98.

Performance: **Variable**
Recording: **Good**

What Jerry Garcia and some big-band-style horns do to Clyde McPhatter's *Without Love* gets my vote as Mess of the Year. Yet there's some fine guitar work and interesting ensemble playing scattered through this album, which does have its ups and downs. All the ups come in songs Garcia has written with his long-time partner, Robert Hunter, the highest one being in *Valerie* and the title song. The treatments of the well-known songs—*I Saw Her Standing There* and Dylan's *Knockin' on Heaven's Door* in addition to McPhatter's elegant weeper—are all disasters. The arrangements go completely bananas, and McPhatter's tune, which calls for a little range and a little pitch-holding, is totally beyond Garcia's vocal capabilities. This is painfully evident in the first few bars, and then it gets worse. Those other parts of the album, still and all, do have a quiet, musicianly charm about them, although the ups aren't as high as the downs are low. **N.C.**

LARRY GATLIN AND THE GATLIN BROTHERS BAND: *Sure Feels Like Love*. The Gatlin Brothers (vocals, guitar, mandolin); instrumental accompaniment. *Sure Feels Like Love; Almost Called Her Baby by Mistake; Anything but Leavin'; Easy on the Eye; The Luau; Only Been Wounded*; and four others. COLUMBIA FC 38135, © FCT 38135, © FCA 38135, no list price.

Performance: **Marking time**
Recording: **Good**

For the last three years Larry Gatlin's songwriting has been haunted by the spectre of *All the Gold in California*. It's as if hitting that peak took a lot out of him. On this album he seems to be playing with the English language rather than working with it (the line that repeats the title of *Some-thing Like Each Other's Arms* is preceded by, "Why don't we slip into something more comfortable"). The tunes don't quite have the old Gatlin sheen either. I think part of the problem is that he's writing too many love songs. Or the boys may simply be playing Las Vegas too much; that *can't* be healthy. Anyway, the vocal harmonies still seem willing and able, and the program does stretch out the Gatlin sound a bit, with

some new beats and some almost falsetto harmonizing. I'm still waiting for another really powerful tune, though, and I'm sure Larry is too. **N.C.**

MARVIN GAYE: *Midnight Love*. Marvin Gaye (vocals, drums, synthesizers, piano, bongos, organ, vibraphone, percussion); instrumental accompaniment. *Midnight Lady; Sexual Healing; 'Til Tomorrow; Turn On Some Music; Third World Girl*; and three others. COLUMBIA FC 38197, © FCT 38197, no list price.

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

With the release of his first album on Columbia, Marvin Gaye has moved full speed ahead in a "comeback" aimed at re-establishing his position as a top popular performer. This effort comes after a period of tumultuous personal and professional change: disappointing response to his albums of the past few years, two divorce proceedings that depleted his financial resources, and retreat from the United States to residence in Belgium. Nevertheless, Gaye remains one of the most talented and innovative artists to have emerged from the old Motown stable and one of the established greats of black popular music. His "What's Goin' On" album, released in 1971, is an all-time landmark in this genre.

On his new album Gaye concentrates on music that, he admits, is intended to be superficial and commercial. The lyrics are obviously trite and at times downright abominable; all of the worn-out sexual references are expressed in the unimaginative terms that have branded commercial funk as an aggressively anti-intellectual medium. But Gaye as an artist could not fail to produce an album that tingles with musical excitement. *Sexual Healing*, the first single released from this set, engagingly fuses reggae rhythms with soul references. *Midnight Lady* has contrived, campy lyrics yet reverberates to offbeat rhythm patterns and unexpected chord changes. Some tracks have no redeeming qualities—*Rockin' After Midnight* and *Joy* are so thuddingly banal as to be take-offs on the usual funk fare—but Gaye's artistry shines through. He plays most of the instruments and does all the singing, and, if the content isn't all that we would like to hear from him after a prolonged silence, it is enough to reassure us that he has not lost his basic appeal. After all, it hasn't been just *what* Marvin Gaye has said that has drawn us to him, it's also been the way he says it. **P.G.**

MERLE HAGGARD: *Going Where the Lonely Go*. Merle Haggard (vocals, guitar); the Strangers (instrumentals); other musicians. *Going Where the Lonely Go; Why Am I Drinkin'; If I Left It Up to You; I Won't Give Up My Train; Half a Man; For All I Know*; and four others. EPIC FE 38092, © FET 38092, no list price.

Performance: **Sweet pickin'**
Recording: **Very good**

Only truck drivers seem to appreciate it fully, but Merle Haggard has put together a string of truly fine albums going back over three or four years. This one isn't quite up to that standard because its songs aren't, al-

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Arthur Blythe Elaborates

THE fifth Columbia album by alto saxophonist and musical conceptualist Arthur Blythe, "Elaborations," further confirms Blythe's stature as one of the most significant jazz artists to emerge in the past fifteen years. He moved to New York in 1974—from Los Angeles, where he had established a strong underground reputation—and, although he has often been called an innovator, what may be more important is the way he has revitalized existing jazz idioms. Blythe gives new shape and substance to a variety of styles, integrating them all into his own fresh approach. The result is music that is comfortably accessible even while it seems startlingly new.

Not the least of Blythe's innovations has

been in the area of instrumentation, starting with the way he handles his own horn. His vibrato is exceptionally broad, bordering on the sound preferred by jazz classicists, yet his playing is straight-ahead, always firm and pungent, following in the tradition of the alto's most glorious champions, from Johnny Hodges to Charlie Parker. Bob Stewart's tuba is the bass voice in Blythe's quintet, and Abdul Wadud's cello is a tenor one, complementing the tuba and, with its greater flexibility, enhancing the sense of swing. Both these artists have elevated the status of their instruments in jazz. The quintet is rounded out by guitarist Kelvyn Bell and drummer Bobby Battle, who supply power to the ensemble. The live men—accompanied here by Mohammed Abdullah on conga and Wilbur Morris on bass—create a sound that is rich, flexible, and totally compatible with leader Blythe's ideas.

The selections on the new album are marvelously diverse, from the Mingus-like melodic permutations of *Elaboration* to the hard-driving bop improvisations of *Sister Daisy*, from the old-style, Earl Bostic-influenced r-&-b of *One Mint Julep* to the murky, clustered tonal colorings of *Shadows*. The standout is the final track, *The Lower Nile*, where Blythe's playing truly recalls that of the late John Coltrane. There is a bold assertiveness to Blythe's playing as he builds a sound structure on a melody shaded with Arabic tonalities. The pulse is a fascinating 9/4 beat that is hypnotic in its effect—this *must* be the magic of the ancient lower Nile. Arthur Blythe's music is magic of the Eighties too, and I can't think of many others who are making jazz this magical now.

—Phyl Garland

ARTHUR BLYTHE QUINTET: *Elaborations*. Arthur Blythe (alto saxophone); Bobby Battle (drums); Kelvyn Bell (guitar); Bob Stewart (tuba); Abdul Wadud (cello); other musicians. *Elaboration; Metamorphosis; Sister Daisy; One Mint Julep; Shadows; The Lower Nile*. COLUMBIA FC 38163, © FCT 38163, no list price.

though the picking is. Over a sort of groaning undertone laid down by steel guitarist Norman Hamlet, Roy Nichols on (mostly acoustic) guitar picks out some of the tastiest fills and brief solos anyone has recorded lately, and they are miked and mixed perfectly. The twin fiddles of Tiny Moore and Jim Belkin are every bit as sweet as those in Haggard's Western swing roots. The songs are fleshy enough to draw out this fine ensemble performance, but, compared with Haggard's recent output, they are a bit stale in the melody and now and then a bit corny in the lyric. Still, I'd probably buy it for the picking. *N.C.*

RECORDING OF SPECIAL MERIT

EMMYLOU HARRIS: *Last Date*. Emmylou Harris (vocals, guitar); the Hot Band (instrumentals, vocals). *I'm Movin' On; It's Not Love (But It's Not Bad); Grievous An-*

gel; Restless; Racing in the Streets; Juanita; Devil in Disguise; and four others. WARNER BROS. 23740-1 \$8.98, © 23740-4 \$8.98, © 23740-8 \$8.98.

Performance: **High-energy**
Recording: **Fairly good remote**

It is clear that I'm going to run out of ways of saying "Emmylou Harris does it again" before Emmylou Harris runs out of ways of doing it again. This, her first live album, holds the musicianship up to the standards of the studio—that is, *her* standards—without sacrificing spontaneity and gives you plenty of material she hasn't recorded before besides. The Hot Band is featured almost as much as she is, with rhythm guitarist Barry Tashian prominent as a duet singer, but it seems appropriate. Harris, like most good singers, likes to sing harmony, which she does, as she does everything, with great style.

The picking, particularly of lead guitarist Frank Reckard, does a lot to keep the energy level high. Reckard's sputtering licks on such uptempo numbers as *Restless* (written by Carl Perkins) are reminiscent of the electric period of the great Clarence White, and they are balanced by lyrical, delicate work on the slower pieces. Reckard is one of the most tasteful electric-guitar players this side of Red Shea, and hearing him in this live setting—which tends to persuade most instrumentalists to overplay—is instructive. The rest of the band is not far behind. The songs, ranging in style from rockabilly to hard country to Bruce Springsteen's *Racing in the Streets* (whose tempo, contrasting a bit self-consciously with its subject, is dirge speed), are all good. Harris's singing is at least as good as it is in the studio, and she even picks, on what sounds like a Stratocaster, a few seconds of lead guitar. Emmylou Harris does it again, again. *N.C.*

GEORGE HARRISON: *Gone Troppo*. George Harrison (vocals, guitars, synthesizer); vocal and instrumental accompaniment. *Wake Up My Love; That's the Way It Goes; I Really Love You; Greece; Gone Troppo; and five others.* DARK HORSE 23734-1 \$8.98, © 23734-4 \$8.98.

Performance: **Mixed**
Recording: **Good**

Yin and Yang, as George Harrison would say. His continuing drawbacks are his voice, which sometimes sounds like an unconscious parody of Dylan's circa 1966, and his cautious guitar phrasing, which seldom extends beyond slide riffs. As a songwriter he only occasionally produces successful material. Thus, even with good will, a listener has to plough through a lot of so-so stuff on Harrison's albums with the infrequent reward of a song or performance that's worth the wait.

This album is meant to be relaxed and not preachy, but Harrison's familiar sanctimony creeps in on *That's the Way It Goes, Mystical One, and Circles*. The title tune and *I Really Love You*, an oldie from the late Fifties, are done as jokes and are mildly amusing. *Dream Away* is from his score for the movie *Time Bandits*, and you can tell from the busy arrangement that *Wake Up My Love* is meant to be the hit single. *Greece* is a flimsy instrumental shared between Harrison and Billy Preston on keyboards. Now the good news: *Unknown Delight* is worth the wait. The lyrics are fuzzy, but the chord sequence is gorgeous. Score one for yin—or maybe it's yang. *J.V.*

WAYLON JENNINGS AND WILLIE NELSON: *WWII*. Waylon Jennings (vocals, guitar); Willie Nelson (vocals, guitar); vocal and instrumental accompaniment. *Mr. Shuck and Jive; Roman Candles; Dock of the Bay; Last Cowboy Song; and seven others.* RCA AHL1-4455 \$8.98, © AHK1-4455 \$8.98, © AHS1-4455 \$8.98.

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

Since the back-up Chips Moman produced here has a certain neutrality-through-amorphousness to it, this album seems to stress the difference between the singing styles of Waylon Jennings and Willie Nelson. Jennings's voice is huge and softly outlined and

bowls over whatever it comes to—itsself giving a bit on impact—where Nelson's is lean and hard and knives through material. I think this is why Nelson's is a little more appreciated here in the Eighties, a time characterized by a lot of stuff that has to be cut through to get our real attention. Also it is a time when people probably don't want to dwell on vulnerability any more than they have to, and vulnerability is an inherent part of Jennings's sound.

Myself, I still like it, and I regard an album that can make me think about such things as worth having around—but, once again, "WWII" is a far cry from what it could be. It is mostly Jennings's album, with Nelson in a duet role on five songs and not heard at all on the others. The song selection is, for a Jennings album, typically off-the-wall, which is not necessarily good. Guy Clark's *The Old Mother's Locket Trick* is a goof that might work live occasionally. *May I Borrow Some Sugar from You*, from Waylon's last album, is inexplicably done again, and Waylon applying himself to the old junky *Teddy Bear Song* is incongruous enough to be unsettling but not incongruous enough to be funny.

The back-up is quite bland compared with what you would have if you turned either Jennings's or Nelson's band loose on the same program. Yet there is some fine singing here on a few songs that are interesting enough to take it; Jimmy Webb's *Mr. Shuck and Jive* (by Waylon solo) and Tom T. Hall's *The Year That Clayton Delaney Died* lead that bunch, but you'll say, "Ah,

yes," when you hear how comfortable Willie is with *Dock of the Bay*. An interesting album, but it needs more bite. N.C.

LITTLE STEVEN AND THE DISCIPLES OF SOUL: *Men Without Women* (see Best of the Month, page 82)

RECORDING OF SPECIAL MERIT

CLIVE LYTHGOE: *Gershwin's Fascinating Rhythms*. Clive Lythgoe (piano). *Clap Yo' Hands; Liza; Do Do Do; I Got Rhythm; Who Cares?; S'Wonderful; Somebody Loves Me; Fascinating Rhythm;* and six others. TIOCH • TD 1006 \$8.98.

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

George Gershwin's transcriptions for piano of his popular songs have all the rhapsodic stylishness and inventive verve of the man himself. Pianist Clive Lythgoe notes that Gershwin wrote them "to begin where the words leave off." That they certainly do as they swirl and sidestep through variation upon variation. Gershwin's music is so natural, so spontaneous, and so amiable that one's immediate response is to cheer him on to even greater excess, like urging an acrobat to make that final, triumphant flourish. Lythgoe's playing is beautifully responsive to the material, and the digital recording sparkles like dry champagne. P.R.

JONI MITCHELL: *Wild Things Run Fast*. Joni Mitchell (vocals, guitar, piano); instru-

mental accompaniment. *Chinese Cafe (Unchained Melody); Wild Things Run Fast; Ladies Man; Man at the Window; Solid Love; Be Cool;* and four others. GEFFEN GHS 2019 \$8.98, © M5 2019 \$8.98.

Performance: **Cool period continues**
Recording: **Very good**

A singer on the folkie circuit who was supposed to have "inside information" told me some months ago that this was in the can, and that it was "a return to the folk style" and "on the order of 'Court and Spark.'" No such luck. Joni Mitchell obviously sees herself as working in some sort of jazz style. She does have a unique approach, and she's getting better at it; this isn't nearly as muddled as "Mingus" was. But she has sacrificed something she is certifiably good at—call it insight-chasing—to pursue this. Instead of self-analysis we now get counsel to *Be Cool*. And she doesn't seem to mean it ironically. On the other hand, as one approaches middle age, which Mitchell touches on the opening cut, *Chinese Cafe*, one does tend to value coolness more and self-analysis less. *Chinese Cafe* is integrated with the old pop song *Unchained Melody* and is the most impressive piece on the album. But then Mitchell drifts on to near-mindlessness with such things as (*You're So Square*) *Baby I Don't Care* and *Ladies Man*, and it must be at least partly the tug of the musical settings that causes that.

The sound here is electronic, with synthesizers doing something akin to what Tom Scott used to do for her with reeds. It is

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Johnny Cash: Still Free



Marty Stuart/Columbia Records

THE Adventures of Johnny Cash" on Columbia is the first whole Johnny Cash album produced by Jack Clement since the two were with Sun Records, launching the heyday of rockabilly, twenty years ago. Cash's bass-baritone voice has been exposed enough in the intervening years that it no longer seems startling, and Clement has become semi-civilized, but the collaboration suggests that old hands can still have fun making a record and that free spirits don't easily fade away. This one and 1980's "Rockabilly Blues" are Cash's best albums in recent years.

Cash was something else when we first heard him—that was the phrase we used: "The man is something else." Neither country nor rock-and-roll listening had prepared us for the spartan, primitive records he and Clement fashioned for Sam Phillips. Here he and Clement have achieved a kind of freshness that has little dependency upon nostalgia. There is a similar kind of simplicity, possibly born out of their going with what they've got: not an electric tick-tack guitar but an acoustic guitar/mandolin wizard in young Marty Stuart; not the classic spare, bare-bones rockabilly song but some fine new ones by the likes of Billy Joe Shaver, John Prine, Roger Cook, Merle Haggard, Allen Reynolds, and Bob McDill. So the backing is mostly acoustic (with an appearance by a real string quartet), the in-

strumentation is just dense enough to cover the ground around the vocals, and Cash—as sometimes happens to low voices when they age—is a more accurate singer now than he was back when this all started.

Clement can still be rough. If you recall his production of Waylon Jennings's "Dreamin' My Dreams" a few years ago, you'll remember it hardly seemed mixed at all. Here he has Cash on top of the mike in a seemingly well-padded room on one cut and well away from it in what sounds like a hard-walled closet on the next cut. But if you listen closely to the one you're listening to at the moment, you'll more than likely find that the mix is exquisite and that it wouldn't quite have worked otherwise. Clement and Cash have changed the way they do things but not, fortunately, the spirit in which they do them. —Noel Coppage

JOHNNY CASH: *The Adventures of Johnny Cash*. Johnny Cash (vocals, guitar); Marty Stuart (guitar, mandolin); John Hartford (fiddle, banjo); Joe Allen (bass); W. S. Holland (drums); other musicians. *George on a Fast Train; John's; Fair Weather Friends; Paradise; We Must Believe in Magic; Only Love; Good Old American Guest; I'll Cross Over Jordan Someday; Sing a Song; Ain't Gonna Hobo No More.* COLUMBIA FC 38094, © FCT 38094 © FCA 38094, no list price.

Moon; Cry No More; High Sierra; Special Love; and four others. ATLANTIC 80008-1 \$8.98, © CS 80008-1 \$8.98.

Performance: **Mild**
Recording: **Good**

If all bands add the same kind of sweeteners (a lyrical kind of sax and electronic keyboards are in vogue now) then all bands will sound more or less the same. That seems obvious, and it seems equally obvious that such a state of affairs is not good—but not

getting one's stuff on the radio is apparently worse. Here's Poco, once a picking band, opting to sound like everybody else. An occasional song with a title like *Ghost Town* or *High Sierra* (an instrumental) is thrown in to suggest that its Western identity is still intact, but Rusty Young's idea-prone steel-guitar playing is not nearly as prominent as it once was, and sweeteners and slick production have filed off or obscured most of Poco's other edges. You can get an occasional hit doing it this way, and there is a certain pop craftsmanship evident here, but nobody will really care. N.C.

RECORDING OF SPECIAL MERIT

RICKY SKAGGS: *Highways & Heartaches*. Ricky Skaggs (vocals, guitar, mandolin, fiddle); Bobby Hicks (fiddle); Jerry Douglas (dobro); Joe Osborn (bass); other musicians. *Heartbroke; You've Got a Lover; Don't Think I'll Cry; Don't Let Your Sweet Love Die; Nothing Can Hurt You; Highway 40 Blues;* and four others. EPIC FE 37996, © FET 37996, © FEA 37996, no list price.

Performance: **Back to basics**
Recording: **Excellent**

Ricky Skaggs's albums (this is his third) have stirred up some excitement around Nashville and out West partly because of what they *don't* do. Skaggs uses the basics of country music, bluegrass, Western swing, honky-tonk, and the like, but he doesn't water them down much. And it sells! This is in part because so few others are doing it that way.

These days Skaggs is best known for his multiple instrumental work for Emmylou Harris, but his credentials are hard-country ones. A native of Kentucky, he was a child prodigy on the mandolin and before he was twenty-five had played with such bluegrass luminaries as Ralph Stanley and J. D. Crowe and served a hitch in the Country Gentlemen. He has a sort of crystalline nasal vocal sound (he's a good tenor harmony singer, particularly in bluegrass) and a delivery that could not be made to sound pretentious. Here he uses excellent back-up musicians, Bobby Hicks's hot, swing-oriented fiddle being especially impressive, on a good though not remarkable cross-section of country songs. Guy Clark's *Heartbroke*, the hit, actually is one of the least remarkable among them; Bill Monroe's *Can't You Hear Me Callin'* is the best. There is something cleansing, though, about the straightforward, unapologetic way they're all rendered. I think that's largely what the multitudes are coming to Ricky Skaggs for—to be cleansed. N.C.

DUSTY SPRINGFIELD: *White Heat*. Dusty Springfield (vocals); instrumental accompaniment. *Donnez Moi (Give It to Me); Blind Sheep; Don't Call It Love; Time and Time Again; I Am Curious; Soft Core;* and four others. CASABLANCA NBLP-7271 \$8.98, © NBL5-7271 \$8.98, © NBL8-7271 \$8.98.

Performance: **Gimmicky**
Recording: **Likewise**

Holy mackerel! They've got ol' Dusty singing punk-minimalist ditties through filters and I don't know what all. An image change

done with some taste, and it is almost exotic sometimes. But it seems to me the songs have to adjust to it more than it adjusts to them. Consciously or not, Mitchell seems to be fooling around with the style-is-content concept. A good learning experience for her, perhaps, but not that terrific an album for the rest of us. N.C.

POCO: *Ghost Town*. Poco (vocals and instrumentals); other musicians. *Ghost Town; How Will You Feel Tonight; Shoot for the*

must be the point of it, since there's no apparent point to the music itself. Springfield has usually been presented as a bit to the right of straight, and I guess she wanted to get, as they say, "with it." She is her old breathy self in *Time and Time Again*, backed by strings and piano, and that's about it; the rest is her new sound. Vocally, she handles the changeover quite well, but the material is mostly the worst sort of tuneless dreck. Exceptions include Elvis Costello's *Losing You* and the aforementioned *Time*. Besides the gimmicky vocal miking, the production uses the synthesizer as an all-purpose crutch. The results are rather dire, all in all, although this does do something to her image. N.C.

ROD STEWART: *Absolutely Live*. Rod Stewart (vocals); vocal and instrumental accompaniment. *Sweet Little Rock and Roller; Hot Legs; The Great Pretender; Young Turks; Guess I'll Always Love You; Gasoline Alley; Maggie May; Passion; Rock My Plimsoul; Do Ya Think I'm Sexy; Sailing*; and eight others. WARNER BROS. 23743-1 G two discs \$13.98, © 23743-4 \$13.98, © 23743-8 \$13.98.

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

This is one of the rare live albums I have fully enjoyed. Rod Stewart had the good sense to leave in all the endearing vocal and instrumental flubs, and the audience, mostly girls, is a wonder. On several selections—*Hot Legs, You're in My Heart, Sailing*—

they spontaneously sing along with gusto. The program, a retrospective of Stewart's career from *Gasoline Alley* to *Young Turks*, includes two new selections, *Guess I'll Always Love You* and the Platters' classic *The Great Pretender*. Two quibbles: the guest vocals by Tina Turner and Kim Carnes on *Stay with Me* are recorded too low, and *Rock My Plimsoul*, credited to Stewart, is an amalgam of the familiar *Rock Me, Baby* mixed with the riff from Howling Wolf's *I Ain't Superstitious*. Otherwise it's a hell of a show. J.V.

JAMES BLOOD ULMER: *Black Rock*. James Blood Ulmer (vocals, guitar); vocal and instrumental accompaniment. *Open House; Moon Beam; Love Have Two Faces; Overnight; Fun House*; and two others. COLUMBIA ARC 38285, © ACT 38285, no list price.

Performance: **Mumbo jumbo**
Recording: **Very good**

I have heard guitarist James Blood Ulmer perform live, so I know that he is capable of generating sounds that please me immensely. He does not do so on "Black Rock," a jumbled heap of chords, cymbal clashes, and mournful guitar notes. I didn't find it all repugnant, but such tracks as *Black Rock* and *Family Affair* could easily upset my stomach. While I love rural blues, I have a very low tolerance for grunts and deliberately unintelligible mockery of country blues singers. Ulmer has been seen by many writers as some sort of reincarnation of Jimi

Hendrix, perhaps because they are intimidated by the sounds of a culture they do not understand. Lesser musicians will often take advantage of critics (and producers) who accept blindly what they hear. But Ulmer does not need to hide behind a wall of cacophony. His talent is real, and he should display it more often. C.A.

JERRY JEFF WALKER: *Cowjazz*. Jerry Jeff Walker (vocals, guitar); Ron Cobb (bass); Bobby Rambo (guitar); Michael Clark (drums); Mike Hardwick (guitar, steel guitar); other musicians. *Dealing with the Devil; Don't Think Twice, It's Alright; Old '59; Green Back Dollar; Lovin' of the Game; Still Around*; and four others. MCA/SOUTH COAST MCA-5355 \$7.98, © MCAC-5355 \$7.98.

Performance: **Offhand**
Recording: **Likewise**

This is Jerry Jeff Walker's first album in a while, but some things remain unchanged. Like his last several efforts, it suggests that Walker and his band sooner or later will make a record without bothering to tune up first, since they bother with so little as it is. This casual approach works in concert sometimes, but here you repeatedly sense that someone simply won't make the effort to sing a note, play a fill, or whatever. The best song in "Cowjazz" is Pat and Victoria Garvey's *Lovin' of the Game*. It does draw some nice Mexican-style fills from guitarist Bobby Rambo, but Walker sings his way around the best part of its melody, flatten-

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Thelonious Monk

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WHEN pianist/composer Thelonious Monk died in February 1981, he had not made a public appearance in over five years, but his name was far from forgotten. Monk had long been regarded as an eccentric whose appearance at his own engagements could never be taken for granted (once, outside the old Five Spot in New York, he joined a line of people who had queued up to hear him play). When he disappeared from the limelight, therefore, many attributed his long absence to his erratic behavior pattern, although there was talk of his being ill.

I recall a time when we were both under obligation to Riverside Records, a time when Monk seemed strangely reluctant to record. In fact, persuading him to enter a studio would have been considered a major feat in those days. But he still paid visits to the office, and one day he entered mine, sat down, and for almost half an hour stared silently at the ceiling. "I wrote a nice little Christmas tune for the kiddies," he finally said. "Perhaps you would like to record it for us," I suggested. "Maybe," he replied, teasingly, as he walked out the door.

There were several instances of strange behavior on Monk's part in the Sixties, and I always felt that he was expressing a sense of humor and timing that was reflected—and generally overlooked—in his music. Monk's piano style was certainly unique. I never found it inaccessible or lacking in musical sense, but twenty-five years ago there

were those who regarded Thelonious Monk as a technically limited player, glossing over his inadequacies with an eccentric style. Today, of course, Monk is almost universally regarded as the musical giant he clearly was; that his music has endured and worn so well over the years is ample proof of its validity.

It was inevitable that Monk's death would renew interest in his music, and 1982 saw the release of many of his recordings, including some excellent takes and some rejected ones better left in the vaults. Two recent sets are cases in point.

"Round Midnight" (there's an original title for you) is a two-disc Milestone set of recordings made for Riverside during the first half of 1957, when Monk was in full flower. The first three sides include tracks that originally appeared in an album entitled "Mulligan Meets Monk." Some critics and fans felt at the time that these two major forces in jazz simply did not blend well. The years, we are told in the notes, have proved such contentions wrong, but I disagree: the sounds have not changed, and what sounded like bad casting in 1957 still does. If Monk had left us a skimpy legacy of recordings, there would be some justification for issuing these selections now, but with so much really great stuff around, he is being done a disservice. To compound the error, producer Orrin Keepnews fills sides one and three with alternate takes that can delight only the most dedicated fan who

must have every last note that Monk ever recorded.

I nevertheless strongly recommend this album for the contents of side four, a fascinating, nearly half-hour-long study of Monk at work on his most celebrated composition, "Round Midnight." He had written the tune several years before, and this was by no means the first time he had recorded it. But that only makes this sculpting of the piece all the more interesting. We hear Monk, unaccompanied, take the music down various paths, stopping occasionally in mid-stride to make a verbal comment and start a new take, and finally playing the composition through on the almost seven-minute take that appeared on the album "Thelonious Himself." How fortunate that these solo performances were preserved.

"Live at the Jazz Workshop" is a Columbia double album consisting of previously unreleased 1964 solo and quartet material recorded during a Thelonious Monk engagement at San Francisco's Jazz Workshop. I wonder why these recordings were not released before; Monk could surely have benefited from the income they would have provided during those last years. The quartet—with Charlie Rouse on tenor, Larry Gales on bass, and Ben Riley on drums—was a working unit; it is not always as exciting here as it was on other occasions, but this is worthwhile Monk and altogether a welcome release.

Some of the tunes in the Milestone set are duplicated in the Columbia one, reflecting a creative stagnation that plagued Monk toward the end of his career. There were many of us who tired of hearing the same repertoire every time Monk appeared, and, if the well had indeed run dry, perhaps it was wise of him to withdraw in the mid-Seventies. But even when he repeated himself, Monk remained one of the most original expressionists in jazz history. His death robbed us of the hope of seeing him re-emerge with a mind full of new ideas. Let us all the more cherish his old ones, but let us also show our respect by keeping out of earshot recordings that Monk might have himself regretted making. —Chris Albertson

THELONIOUS MONK/GERRY MULLIGAN: *'Round Midnight*. Gerry Mulligan (baritone saxophone); Thelonious Monk (piano); Wilbur Ware (bass); Shadow Wilson (drums). *Straight, No Chaser (two takes)*; *Decidedly (two takes)*; *I Mean You (three takes)*; *'Round Midnight (in progress and accepted take)*; *Rhythm-a-Ning*; *Sweet and Lovely*. MILESTONE M-47067 two discs \$9.98.

THELONIOUS MONK: *Live at the Jazz Workshop*. Thelonious Monk (piano); Charlie Rouse (tenor saxophone); Larry Gales (bass); Ben Riley (drums). *Don't Blame Me*; *Epistrophy*; *Ba-Lue Bolivar Ba-Lues-Are*; *Well You Needn't*; *Evidence (Justice)*; *Rhythm-a-Ning*; *'Round About Midnight*; *I'm Gettin' Sentimental over You*; *Bemsha Swing*; *Memories of You/Just You, Just Me*; *Blue Monk*; *Mysterious*; *Hackensack*; *Bright Mississippi*. COLUMBIA C2 38269 two discs, no list price.

ing what I consider its hook into a standard country pattern. I do like the simplified, mostly acoustic complement of instruments he has assembled this time, but the mix seems sloppy and the playing, like the singing, is more laid-back than is good for some of the material. He could do the same album over again with a little more energy, though, and he'd have a good one. *N.C.*

JAMES WHITE AND THE BLACKS: Sax Maniac. James White (vocals, alto saxophone, keyboards); vocal and instrumental accompaniment. *Irresistible Impulse; That Old Black Magic; Disco Jaded; Money to Burn;* and three others. ANIMAL APE 6002 \$8.98.

Performance: **Frantic**
Recording: **Good**

James White would probably like to be thought of as the thinking man's James Brown. On "Sax Maniac" he adapts the Godfather's white-hot sex-machine vocal style to a frantic, no-wave jazz that's much closer to James Blood Ulmer than to His Bad Self. White's alto playing is a torrent of clipped phrases and splintered chords, punctuated with squawks and gasps—about an equal mix of hot blowing and hot air. His raw-throated vocals are delivered with punk matter of factness, as though screaming were the most natural way to communicate. There is virtually no variation from one song to the next, and by the end of side one, anybody with conventional ears will be ready to raise the white flag. *M.P.*



RECORDING OF SPECIAL MERIT

CHICK COREA: Trio Music. Chick Corea (piano); Miroslav Vitous (bass); Roy Haynes (drums). *Slippery When Wet; Eronel; Hackensack; Little Rootie Tootie; Reflections; Rhythm-a-Ning; Think of One;* and eight others. ECM ECM-2-1232 two discs \$14.98, © 2E5-1232 \$14.98.

Performance: **Superb**
Recording: **Excellent**

Chick Corea has not always played to my liking, but after hearing this new ECM album it is much easier to forgive him for having originated the souped-up Return to Forever group and for other occasional lapses in taste. "Trio Music" is a double album almost half of which is devoted to free-form improvisations, the rest to seven Theonious Monk compositions and a Corea original. Some of the tracks actually feature a piano and bass duo with Miroslav Vitous playing bass, but mostly this is a set of trio

performances reuniting Corea and Vitous with the estimable Roy Haynes. The three originally made a joint appearance on "Now He Sings, Now He Sobs," recorded fifteen years ago for the short-lived Solid State label, but the result was not nearly as satisfying as it is on these 1981 sessions.

The seven nameless but numbered duet and trio improvisations may be a bit too abstract for some tastes, though there are limits to how far piano, bass, and drums can be taken beyond the norm. I happen to find this part of the set just as appealing as the Monk selections, and I strongly recommend the album to anyone with an ear for unadulterated, imaginative, and thoroughly tasteful music. *C.A.*

JIMMY DORSEY AND HIS ORCHESTRA, 1939-1940. Bob Eberly, Helen O'Connell (vocals); Jimmy Dorsey and His Orchestra (instrumentals). *On the Trail; Cherokee; Do It Again; The Breeze and I; John Silver; I Can't Resist You;* and six others. CIRCLE ® CLP-30 \$7.98.

Performance: **Good**
Recording: **Fair**

This is a nice breeze of nostalgia from the days of the big bands. After splitting with his brother Tommy in 1935, Jimmy Dorsey went on to form his own very popular band, and his recordings with it steadily placed on the charts of the time. These cuts from 1939 and 1940 were made with his two most commercially successful vocalists, Bob Eberly and Helen O'Connell. Eberly's big

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Al Jarreau



Randy Crawford

"Casino Lights"

ALBUMS recorded in concert and intended to showcase an assortment of performers often suffer from uneven quality. That, happily, is not the case with the Warner Brothers album "Casino Lights," recorded in Switzerland last July during the Montreux Jazz Festival. It is a rich sampling of topflight singers and instrumentalists whose work is commonly classified as "jazz" in the marketplace. Progressive rhythm-and-blues fusion might be a more accurate designation for much of what is presented here, but the important thing is that musical excellence permeates the performances of Randy Crawford, Al Jarreau, David Sanborn, Neil Larsen, Buzz Feiten, and other members of this crew.

The peaks come quite early in this session, when the stage is occupied by Crawford and Jarreau, who are captured at the top of their form. They are a likely combination. Although Crawford started out as a jazz singer, she is equally at home with middle-of-the-road pop, show tunes, and r-&b. Furthermore, she has a very special voice that vibrates to the emotion she is projecting. Jarreau also is adept at ranging through the less frequently traversed portions of the vocal spectrum. Although he is known as the man "who has a whole orchestra in his throat," he can sing straight while demonstrating the imagination and easy grace that mark him as one of the best male vocalists of the day.

In this initial meeting, Crawford and Jarreau blend their talents as though they had been made for each other. Their rendition of Ashford and Simpson's *Your Precious Love* (not to be confused with the old Jerry Butler classic *For Your Precious Love*) is given a sizzling intimate working over, and in all three of their collaborations it is clear that this is a meeting not only of superb voices but also of equal musical intellects. And the artists anticipate each other's moves as though they were mind readers.

As marvelous as they are together, it is Crawford who elevates this album to the sublime with her interpretation of John Lennon's *Imagine*, a poignant hymn of peace and undoubtedly one of the most remarkable songs to flow from the prolific pen of the late Beatle. Crawford conveys, in a profoundly moving manner, a sense of the song's real message. Popular music simply does not come any finer than this.

Instrumentally, saxophonist David Sanborn anchors an impressive supportive group on the first side and then steps into the spotlight on side two to offer lively readings of *Love Is Not Enough* and *Hideaway*. These are tuneful, catchy ditties, easily dismissed except for Sanborn's ability to generate excitement with his vigorously aggressive attack and his talent for building solid sound structures. The album closes with the title selection, *Casino Lights*, a low-keyed but mellow mood piece in which Neil Larsen on keyboards and Buzz Feiten on guitar weave a delicate instrumental web.

There is only one clinker, a raucous number called the *Monmouth College Fight Song*, performed by the Yellowjackets, which confirms suspicions that fusion is sometimes more sound and fury than music (it also made me vow never to go near Monmouth College), but even this is not sufficient to detract from the special moments created here by those who made the scene that summer's day in Switzerland.

—Phyl Garland

CASINO LIGHTS. Al Jarreau and Randy Crawford: *Your Precious Love*; *Who's Right, Who's Wrong*; *Sure Enough*. Randy Crawford and the Yellowjackets: *Imagine*. Neil Larsen and Buzz Feiten: *Casino Lights*. The Yellowjackets: *Monmouth College Fight Song*. David Sanborn: *Theme from "Love Is Not Enough"*; *Hideaway*. WARNER BROS. 23718-1 \$8.98, © 23718-4 \$8.98.

hit *The Breeze and I* is included here, though his vocal style and mannerisms sound fairly dated today. O'Connell, still very much around and not looking or sounding much different than she did forty years ago, is a perky pleasure as she runs through such items as *Boog It!* and *You're a Lucky Guy*. While the Dorsey Orchestra sounds pleasing enough, it doesn't have enough vitality or true style to bridge the years and provide real entertainment for listeners too young to enjoy looking backward. P.R.

KENNY DREW: *Your Soft Eyes*. Kenny Drew (piano); Mads Vinding (bass); Ben Thigpen (drums). *Alone Together*; *Forgotten but Not Gone*; *Evening in the Park*; and three others. SOUL NOTE SN 1031 \$9.98 (from PolyGram Special Imports, 137 West 55th Street, N.Y. 10019).

Performance: **Effortless**

Recording: **Very good**

Kenny Drew has been living in Denmark since the early Sixties, drummer Ed Thigpen since the early Seventies. On "Your Soft Eyes," an Italian import, they team up with bassist Mads Vinding, an extraordinarily gifted Danish player. It is the same trio that accompanies singer Kim Parker on her recent Soul Note album, "Havin' Myself a Time," but what a difference. Here there is no vocal interference, just plenty of room for stretching out, and that is exactly what these fine players do. There are wonderful individual statements all through, but also impressive ensemble work, especially—as Nat Hentoff points out in his liner notes—on *Mads' Blues*. As a former Dane, I was of course amused to hear Vinding's injection of a well-known local ditty (*Det Var en Lordag Aften*) into Ernie Wilkins's *Forgotten but Not Gone*. This import makes sense. C.A.

RECORDING OF SPECIAL MERIT

CHICO FREEMAN: *Tradition in Transition*. Chico Freeman (tenor saxophone, bass clarinet, flute); Wallace Roney (trumpet); Clyde Criner (piano); Cecil McBee (bass); Jack DeJohnette (drums, piano); Billy Hart (drums). *The Trespasser*; *Jackie-ing*; *Talkin' Trash*; *A Prayer*; *Mys-story*; and four others. ELEKTRA/MUSICIAN 60163-1 \$8.98, © 60163-4 \$8.98.

Performance: **Meaty**

Recording: **Very good**

Listening to this brilliant young saxophone player's latest release, I was struck by the pervasive purity of sound and wonderfully logical structuring. While many of Chico Freeman's contemporaries settle for so-called blowing dates, Freeman continues to explore his music in depth and to develop not only his own playing but entire scenarios as well. This set of small-group tracks is programmed with such grace that even the complexities seem simple, but to listen again and again is to discover just how intricate each plot really is. This is "abstract" jazz, but even the most conservative ear will recognize its substance, and I am glad to see that Chico Freeman is living up to my great expectations.

"Tradition in Transition" is indeed that, a superb album that not only confirms the talents of its leader, of bassist Cecil McBee,



Buskirk Productions

Mike Lipskin's Stride Piano

ONLY a handful of contemporary pianists play in the Harlem "stride" style, and few of them play stride consistently. Only Mike Lipskin, so far as I know, is writing new stride material. Half of the dozen selections on his first solo album, "Harlem Stride Piano" on his own Buskirk label, are originals, and so is Lipskin himself. Both in person and at the keyboard, he displays an acerbic sense of humor that feasts on the ludicrous. In Lipskin's lyrics, Cupid is a bookie whose clients are always welshing on their bets. Yet his melodies are finely crafted and often wistful. The clash between his sometimes quirky vocals and his fluent instrumentals is part of what makes him so interesting—and so much fun—to listen to.

Lipskin began studying stride at the age of twelve with Willie "The Lion" Smith, one of the three giants of stride, the others being James P. Johnson, the dean of the form, and Johnson's protégé Fats Waller. From Johnson, whom he idolizes, Lipskin derives his attention to compositional detail; Waller's bequest is a rowdy humor and sturdy professionalism. Now happily settled as resident pianist of the Washington Square Bar and Grill in San Francisco, Lipskin spent most of his career in New York as executive, engineer, and producer in the commercial record business. His previous appearances on records have been guest shots on other artists' albums. But "Harlem Stride Piano" is all his, right down to the delightfully sardonic liner notes.

A listener who's never heard Lipskin before may be puzzled by his deliberately awkward vocals. Lipskin goes for notes he can't hit and misses notes that are comfortably within his limited baritone range. The intention is to produce a comic effect, rather like Fats Waller's mocking hijinks when he recorded Tin Pan Alley junk.

Some of Lipskin's lyrics, which are always literate and occasionally tricky, require a singer able to make fast changes to accommodate barrages of words that may crowd the melody and need very precise breath control to put across. The earlier material here (some dating back to 1976) almost needs a spoken delivery à la Noël Coward or Danny Kaye for full effect. This

is not to say that Lipskin's songs don't "translate"; any other qualified singer with a sense of humor, true style, and an appreciation of first-class melody should be able to handle them. But one of the things I like about hearing Lipskin do them is the way he takes chances and trusts the intelligent listener to follow him.

You may, after listening to this album, find yourself whistling *Nothing Holds a Candle to a Night with You* or *Am I Blue*, both wonderful tunes with lyrics about people who are stuck on a particular sexual partner. And you will probably agree with Lipskin's cheerful contempt for the overblown language used in singles bars (*There's No Need to Say "I Love You"*). I also think you'll be impressed with the relaxed simplicity of his most recent song, *1923*, in which the melody, sentiments, and vocal performance are entirely complementary. The purely instrumental selections feature an exquisite version of Johnson's *Snowy Morning Blues*, a muscular and subtly passionate *What Is This Thing Called Love*, a stride adaptation of the Beatles' *Yesterday*, and a fond remembrance of Willie "The Lion" Smith in his *Echo of Spring*.

Mike Lipskin may well be the last of the true striders, working exclusively in the form yet putting no limits on the range of material he performs. In this he follows Johnson, Waller, and Smith, all of whom justifiably believed that stride could tolerate, encompass, and enhance any aspect of popular music while still retaining its distinctive identity. There's no doubt that Mike Lipskin, like his predecessors a highly individual artist, is a worthy continuer of a great tradition. —Joel Vance

MIKE LIPSKIN: *Harlem Stride Piano*. Mike Lipskin (piano, vocals); Sam Schaffer (drums). *Nothing Missing Now; Am I Blue; What Is This Thing Called Love; Snowy Morning Blues; If Dreams Come True; Yesterday; Echo of Spring; Down on the Tropical Isle; There's No Need to Say "I Love You"; S'Wonderful; 1923.* BUSKIRK 001 \$8.98 (plus \$1 postage and handling charge from Buskirk Productions, P.O. Box 503, Nicasio, Calif. 94946).

er/bandleaders who could be relied on to come up with bouncy charts that sounded ever so *au courant*. "What's New" is an album of original Paich tunes dating back to that period—1957, to be exact—and it features a veritable Who's Who of the day's white West Coast studio stars: Buddy Childers, Jack Sheldon, Bob Enevoldsen, Herb Geller, Bob Cooper, Mel Lewis, Joe Mondragon, Pete Candoli, *et al.* It is technically flawless, perhaps too clean and too pat, but pleasant. C.A.

RECORDING OF SPECIAL MERIT

SPHERE: *Four in One*. Charlie Rouse (tenor saxophone); Kenny Barron (piano); Buster Williams (bass); Ben Riley (drums). *Monk's Dream; Light Blue; Eronel; Reflections*; and two others. ELEKTRA/MUSICIAN 60166-1 \$8.98, © 60166-4 \$8.98.

Performance: **Meaningful**
Recording: **Excellent**

Ironically, the recording session for "Four in One," a tribute to Thelonious Monk, began only two hours after his death a year ago. Tucked away in the remote New Jersey studio of Rudy Van Gelder, the four distinguished members of Sphere—Charlie Rouse, Kenny Barron, Ben Riley, and Buster Williams—did not even hear of Monk's passing until five hours later.

Sphere (which was Monk's middle name) was set up to give its members "both business and artistic control" over such related ventures as publishing and recording. A wise move, and one that has certainly paid off in artistic terms on this premiere album. Thelonious Monk composed many well-known tunes, but the group deliberately chose a program of six lesser-known selections and performs them with characteristically excellent musicianship. A finer tribute could hardly be imagined. C.A.

COLLECTION

BASIE REUNIONS. Buck Clayton, Shad Collins (trumpets); Paul Quinichette (tenor saxophone); Jack Washington (baritone saxophone); Nat Pierce (piano); Freddie Greene (guitar); Eddie Jones, Walter Page (bass); Jo Jones (drums). *Rock-a-Bye Basie; Texas Shuffle; Blues I Like to Hear; John's Idea; Jive at Five*; and five others. PRESTIGE © P-24109 two discs \$15.96.

Performance: **Essential**
Recording: **Excellent mono**

If you like the bouncy swing of Count Basie's small groups, don't pass up "Basie Reunions," a reissue of two superb Prestige albums from the late Fifties. No, the Count himself is not present, but Nat Pierce slipped easily into the Basie mode even then, and his piano is hard to tell from the real thing. The rhythm sections are the real thing, one being the so-called All-American Rhythm Section (Freddie Greene, Walter Page, Jo Jones), the other the same except with Eddie Jones in place of Page, whom he also replaced in the actual band. Buck Clayton, Shad Collins, Paul Quinichette, and Jack Washington give added Basie flavor. All in all, a delicious swing meal with all-natural ingredients. C.A.

(Continued on page 114)

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The John Renbourn Group

The Second Urban Folk Revival

THE second urban folk-music revival of modern times is upon us, and it is a condition of unexpected ironies and, as Pogo would say, puzzlements. There is much talk about it in New York's Greenwich Village, for example, yet some of the acts playing the folk spas there seem more like punks than folkies. It is not a big, taking-the-country-by-storm movement according to the way most people are measuring it; the stars—Stan Rogers, David Mallett, Bill Staines, and the like—are playing comparatively small clubs and recording for small or independent record labels, and there is no hint of a forthcoming *Hootenanny*-type TV show or the like. Yet, if you include Dan Fogelberg and all his platinum albums in it, or if you claim Gordon Lightfoot has stayed in it all along, it *does* look pretty big.

This revival doesn't seem to be doing big-name holdovers from the first revival much good: the new, young audiences, perhaps, are unfamiliar with such names as Joan Baez and Eric Andersen. Yet Staines, Michael Cooney, Paul Geremia, and a few other second-revival stalwarts have been around almost as long. Maybe they are being rewarded for having remained more nearly pure.

There does seem to be a thirst for the traditional, albeit juiced up a bit. Lorraine Lee of Solomon's Seal, which plays a pretty traditional Celtic repertoire, has a pick-up in her dulcimer so she can run it through a

guitar amp and is considering getting a volume pedal. The Battlefield Band from Scotland combines a similarly traditional repertoire and bagpipes and fiddle with an array of electronic keyboards. The John Renbourn Group, which includes two members of the original "progressive" folk group, Pentangle (1967-1973), is being relatively conservative then, when it combines, in the new two-disc Flying Fish album "Live in America," a fairly traditional repertoire with a jazz tune and a dulcimer run through a phase shifter. But Renbourn makes up for it by using an Indian tabla as the main "rhythm" instrument.

I put the word in quotes because Renbourn has returned to the traditional spirit, if not instrumentation, of underplaying rhythm. It was not until British Isles "country" music migrated to America, where the black man got involved, that a real beat came to this stuff. This and the fact that this is a live American tour album underscore another observation I've made out on the folk-circuit hustings. There seem to be developing two branches of audience interest, one in the troubadour, who writes and sings and plays guitar and may be backed by as many as two persons, and the other in tradition-oriented but quirky bands, such as the three I've mentioned so far and another called Silly Wizard. Although these use phase shifters and electronic keyboards, they play with at least some of the instruments taking the traditional British Isles

approach; again, rhythm is not stressed, and pipes, fiddles, or whistles tend to play in unison with the singer, and so forth.

Renbourn and Jacqui McShee, the Pentangle alumni, are joined by Tony Roberts on flute, krumphorn, and the small Northumberland pipes, John Molineux on dulcimer, mandolin, and fiddle, and Keshav Sathe on the tabla. McShee, who deals in vocals only and has the kind of voice that must have inspired the invention of the flute, is an unknown factor in the traditional progressive yin-yang of the group. Renbourn, a lacy, clean finger-picker, has in previous solo albums shown considerable interest in American blues as well as jazz, but only the latter carries over here and that not much. It is pretty well taken care of in *Sidi Brahim*, an original instrumental that knocks off eleven minutes at the start of side three. Interesting, but too long. The rest, aside from the incongruous droning percussion of the tabla, is pretty traditional. The phase-shifted dulcimer doesn't sound very radical.

There are a few missed notes here and there, serving, in part, to make the thing seem more live, but the performances are pretty good. McShee strikes some lovely tones in *The Trees They Grow High* and *High Germany*. Renbourn's voice is large and nasal (he and Bert Jansch gave Pentangle a decidedly nasal sound), but it seems to go with the songs. There are some excellent four-part harmonies in *Ye Mariners All*, an old drinking song, and *John Barleycorn Is Dead*. This version of the latter is faster and lighter and less dramatic than the old Traffic one, by the way, and, I suspect, more nearly mainstream. It keeps you from overestimating how weighty the lyrics are meant to be—but the Traffic version is, I'll concede, prettier. There's a fair amount of pretty stuff here, though, and Renbourn apparently is serious about getting back to his Renaissance roots.

I suppose getting back to some kind of roots is what the second urban folk-music revival is all about. In 1969, the young white people flocked to the blues when pop alternatives were similarly unappealing. This second revival doesn't seem likely to dominate the pop culture temporarily in the manner of disco, but it does seem to be elbowing its way to reclaiming turf, to getting itself reinstated as a kind of music that has a claim on a certain segment of the market. The John Renbourn Group may remain a small frog in a small pond, but, from the sound of it and from the look of what's going on around us, it could be a *surviving* frog. That's something, in the Eighties.

—Noel Coppage

THE JOHN RENBOURN GROUP: *Live in America*. The John Renbourn Group (vocals and instrumentals). *Lindsay*; *Ye Mariners All*; *English Dance*; *The Cruel Mother*; *Breton Dances*; *The Trees They Grow High*; *Farewell Nancy*; *Van Dielman's Land*; *High Germany*; *Sidi Brahim*; *The Month of May Is Past/Night Orgies*; *John Dory*; *So Early in the Spring*; *Fair Fisher*; *John Barleycorn Is Dead*. FLYING FISH/FINE CATCH FF 27103 two discs \$9.98.

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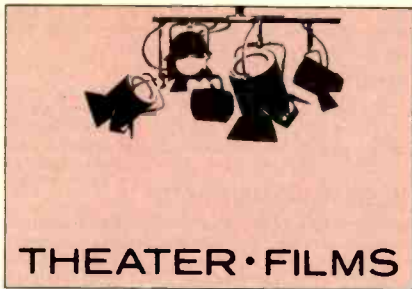
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Performance: **Variable**
Recording: **Good**

I haven't seen the movie whence this soundtrack derives (the reviews indicate a vaguely Pinteresque plot line), but apparently its star—Sting, of the Police—is quite impressive, with genuine screen presence. Although I can't comment on how the music here integrates with the action, on record it's about as exciting as having a front-row seat for a Jerry Vale farewell tour. Sting's contributions range from a thoroughly tedious music-hall number, reminiscent of Paul McCartney indulging a megaphone fetish, to some muddled jazzbo instrumentals. The rest of the new stuff, done in conjunction with Sting's fellow Police, is equally snooze-inducing. In such company, the two excellent previously released songs here

by Squeeze and the Go-Go's seem completely inappropriate. **S.S.**

ONE FROM THE HEART (Tom Waits). Original-soundtrack recording. Tom Waits (vocals, piano); Crystal Gayle (vocals); orchestra, Bob Alcivar cond. COLUMBIA FC 37703, © FCT 37703, no list price.

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

Noël Coward characterized Lionel Bart's stage musical *Blitz* as "louder and longer than the original." Tom Waits's score for *One from the Heart* is as soft and slow as the movie itself, which was released last year to mixed reviews and a short run. Nearly all the items in the score are jazz ballads—skillfully written, well played by West Coast jazzmen (including Jack Sheldon, Victor Feldman, and Teddy Edwards), and carefully produced and engineered by Bones Howe. Taken individually, many of the songs could stand on their own, but their tempos are so uniformly vaporous that collectively they induce coma. Not that Waits is to blame; any film composer must tailor his music to the pace of the film, and that is imposed by the director.

There are, however, three surprises here. The first is the gentleness and sentimentality of the material—this from a composer who specializes in portraits of grungy street folk. The second is that Waits has, for this project at least, tempered his guttural, abrasive vocals to a breathy croon. The third surprise is from Crystal Gayle, better known as a country performer, who turns in several fine jazz vocals. Her technical prowess is matched by feeling; her combination of agility and restraint plus an emotional understanding of the characters she's singing about is most impressive. **J.V.**



Annette Swann

**NOEL COPPAGE
(1938 -1982)**

THIS issue contains the last reviews by our contributing editor Noel Coppage, who died of a heart ailment last December. Born in Ohio County, Kentucky, February 19, 1938, he studied journalism at West-

ern Kentucky University, from which he graduated in 1959. He worked for small-town newspapers in various parts of the country before settling in New England. At the time of his death he resided in Keene, New Hampshire.

Involved in music in many ways, Noel wrote songs, played the harmonica and guitar, and occasionally performed as a singer. But we knew him as an astute critic of popular music, particularly folk and country music. He began contributing to *STEREO REVIEW* in 1968 and became one of our regular record reviewers in 1970. Writing about such performers as Linda Ronstadt, Gordon Lightfoot, Joni Mitchell, Waylon Jennings, and Tom T. Hall, he produced some of the finest articles this magazine has ever published.

Noel always prized what is best in rural American life. Although he wrote of country people and their music with humor, his wit was always tempered with appreciation and affection. He was a kind and gentle man, and we will all miss him terribly. **W.L.**

ADVERTISERS' INDEX

READER SERVICE NO	ADVERTISER	PAGE NUMBER
9	Acoustic Research	29
59	Advent	15
	Akai America, Ltd.	59
5	American Typewriter Co., Inc.	98
	Audio Spot	105
4	Audio-Technica U.S., Inc.	93
8	Carver Corporation	10
6	Consumers Company	101
	DAK	21,23,57,83
	Delco Electronics	47
23	Denon America, Inc.	45
10	Discount Music Club	25
15	Discwasher	89
	Fuji	37
12	Fujitsu Ten	54
	The Goodyear Tire & Rubber Co.	42,43
	David Hafler Co.	22
	Harman Kardon, Inc.	74
	Illinois Audio	107
19	International HIFI Distributors, Inc.	99
14	J & R Music World	55
13	Jensen Car Audio	87
20	Jensen Sound Laboratories	7
21	Koss Corporation	Cover 4
7	Kyocera	73
27	Magnepan	20
	Marlboro	12
58	Maxell Corp. of America	17
32	McIntosh Laboratory, Inc.	27
	Memorex Corp.	11
	Merit	68,69
28	Mitsubishi	78
38	Mura Corp.	22
	Nakamichi	Cover 3
39	Pioneer Video, Inc.	41
41	Polk Audio	64
40	P.R.I.C.E.	91
	Radio Shack	2
	R. J. Reynolds/Camel	38
	R. J. Reynolds/Salem	80
	R. J. Reynolds/Vantage	30
	R. J. Reynolds/Winston	48,49
43	Sansui Electronics Corp.	77
46	Sennheiser Electronic Corp.	19
45	The Sharper Image	27
35	Sherwood Electronics Labs, Inc.	Cover 2, 1
52	Shure Brothers	35
	Smirnoff	51
44	Sony Corp.	8,9
47	Sony Corp.	32,33
49	Sound Reproduction, Inc.	96
53	Stanton Magnetics	58
50	Stereo Corp. of America	99
48	TDK Electronics	4
51	Technics	70
56	Wisconsin Discount Stereo	103



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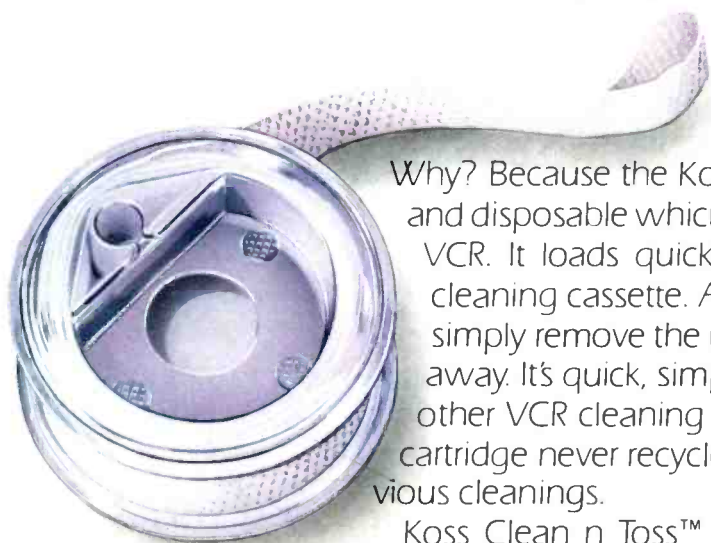
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