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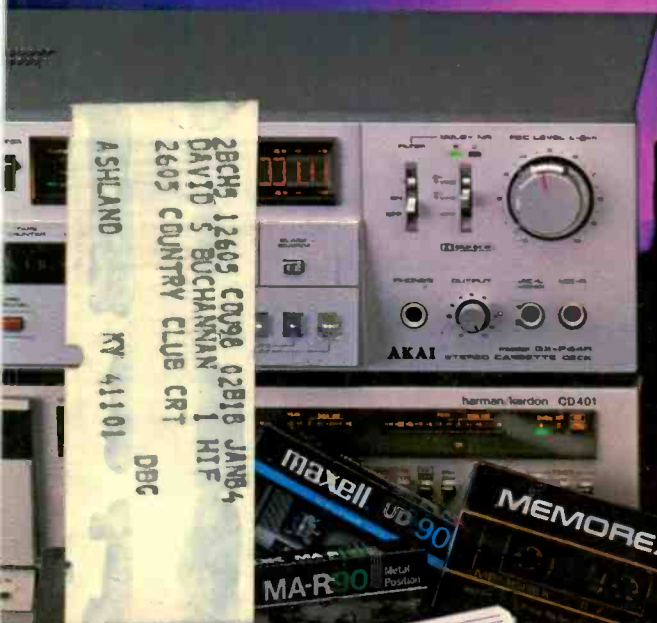
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## Field Test!

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## On Location!

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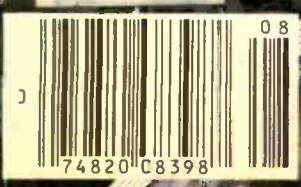


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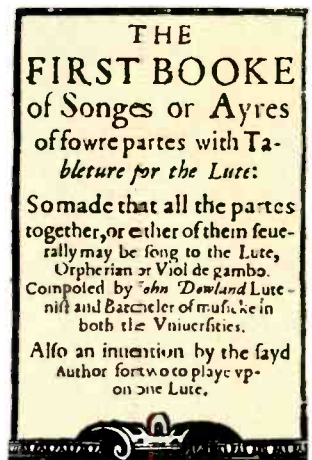
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# Letters

## Series Speakers

It was a pleasure to read your glowing review of the Sony STR-VX6 receiver [December 1981]. I believe, however, that you have done your readers a disservice by omitting any mention of the VX6's peculiar speaker switching arrangement.

According to the owner's manual, when two sets of speakers are in use at the same time, they are connected in series. Unless the speakers are identical models, such an arrangement can cause serious variations in frequency response, depending on the impedance curves. Also, the damping will suffer.

I believe that your readers should be warned that this otherwise excellent receiver is suitable for use with only one set of speakers at a time. It would also be interesting to know why (considering the hefty 4-ohm output recorded by DSL) Sony recommends the use of only 8- or 16-ohm speakers.

Byron M. Roscoe  
Acton, Mass.

**Ikuo Kanayama of Sony replies:** As *HIGH FIDELITY's* review demonstrates, the STR-VX6 delivers impressive performance into 4-ohm loads. If all 4-ohm speakers behaved like the 4-ohm resistor used in the test, Sony would naturally recommend the use of such speakers with the VX6. In reality, though, speaker impedance ratings are only nominal. Actual impedance rises and falls according to the frequency, and impedance can dip far below the nominal rating for wide portions of the frequency range. Such low impedance can undermine the reliability of a receiver, which is why most manufacturers use some form of protection to shut down the amplifier when it encounters dangerous low-impedance loads.

Although the VX6 performs well with many 4-ohm speakers, the conservatism of Sony's engineers prevents them from making a blanket recommendation of 4-ohm capability. It is this conservatism that limits our formal recommendation to 8- and 16-ohm speakers.

In the case of the simultaneous use of two pairs of speakers, the manufacturer must choose between series connection (for higher impedance and therefore higher reliability) and parallel connection (for better sound, but at the risk of low impedance). People typically use four speakers simultaneously for listening to background music, with speaker pairs placed in separate rooms. Such a listening situation imposes its own limits on sound quality.

That's why Sony opts for the higher impedance and improved reliability of series connection for two speaker pairs. Although Mr. Roscoe finds this "peculiar," a number of other receiver manufacturers are making the same decision. For the majority of four-speaker applications, series connection, with its emphasis on reliability, is a sensible choice.

## Misremembering Bayreuth

The confusingly worded editorial note appended to David Hamilton's piece, "Misremembering Bayreuth" [April], implies that we at Discocorp knew all about Hamilton's revelations, that we agreed with them, and that we had informed you

that statements to that effect were inserted into the albums containing the questionable records. Not so! We were as shocked by the allegations contained in Hamilton's piece as your readers must have been upon discovering what evil lurks in the rusty razor blade of a bearded old man wearing an eyepatch. Whoever he may be, he certainly is not one of us, because:

1. The entire contents of the *Parsifal* record (Discocorp IGI 379) derive from a 1976 broadcast devoted to rare Bayreuth recordings that aired over radio station Sender Freies Berlin. In a long and detailed introduction, Einhard Luther, a highly respected German authority on historic recordings, hailed the fragments as great discoveries drawn in part from the personal collection of Max Lorenz and in part from German radio transcriptions. We followed Luther's attributions in our issue, except that our inquiries revealed that the opening selection had been augmented by the 1927 Polydor commercial discs, and that the selection attributed to Karl Muck came from a 1931 Funkstunde Berlin studio performance rather than from a live Bayreuth performance. (Information about the latter came from a music producer at Sender Freies Berlin.) We included these corrections in an errata sheet inserted into each album. Until the appearance of Hamilton's review, then, we were unaware of any other discrepancies. We had no reason to be suspicious because all of the major singers on the selections are who we say they are (Hamilton doesn't dispute that) and because we were supplied with a free tape of the selections and Luther's spoken continuity by a longtime well-wisher who had recorded the material off the air.

2. We had no reason whatsoever to doubt the authenticity of the *Götterdämmerung* selection (on Discocorp RR 540) prior to the Hamilton piece, because the entire contents of that record appeared more than a year before our release on a disc issued in France by the Société Wilhelm Furtwängler (SWF 7802) as part of a three LP set, "Furtwängler à Bayreuth." The French recording circulated widely in Europe and complimentary copies were given to—among others—Frau Furtwängler and the German, Swiss, and American Furtwängler Societies. According to the French Furtwängler Society, no one seriously questioned the authenticity of the material. Again, as was the case with the *Parsifal* disc, the identity of the major singers was not at issue. And again we received a tape of the material without charge from a collector long known to us. In short, we took all the material on faith.

Whether we were duped and whether all the material on both discs is a complete fake are quite different matters. While Hamilton is certainly correct in his identification of Frida Leider's Immolation Scene, he may well be mistaken in several other instances. In his piece, Hamilton makes the unwarranted assumption that the attributions on various pirate labels and in the old BASF Bayreuth commemorative set (for which the broadcast tapes were supplied by Jürgen Grundheber, a German private collector and dealer, and not by radio stations) are necessarily correct, and that our attributions for the same material are necessarily false. Note also that Hamilton has failed to identify much of the Lorenz material on the *Parsifal* disc, and he has not been able to trace some of the *Götterdämmerung* material.

These details aside, though, Hamilton has certainly amassed sufficient evidence to support his claim that these records are not what they purport to be. Alas, we were undoubtedly had—

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From the Driving Force:

**Only Panasonic has  
Ambience circuitry  
to create a stereo  
image beyond  
the capability of  
conventional car stereo.**

Only the Panasonic Supreme Series has Ambience to take your music where it's never been. With the push of a button, conventional car stereo ceases to be. Your music seems to wrap itself around you, surround you. You don't just hear it, you live it.

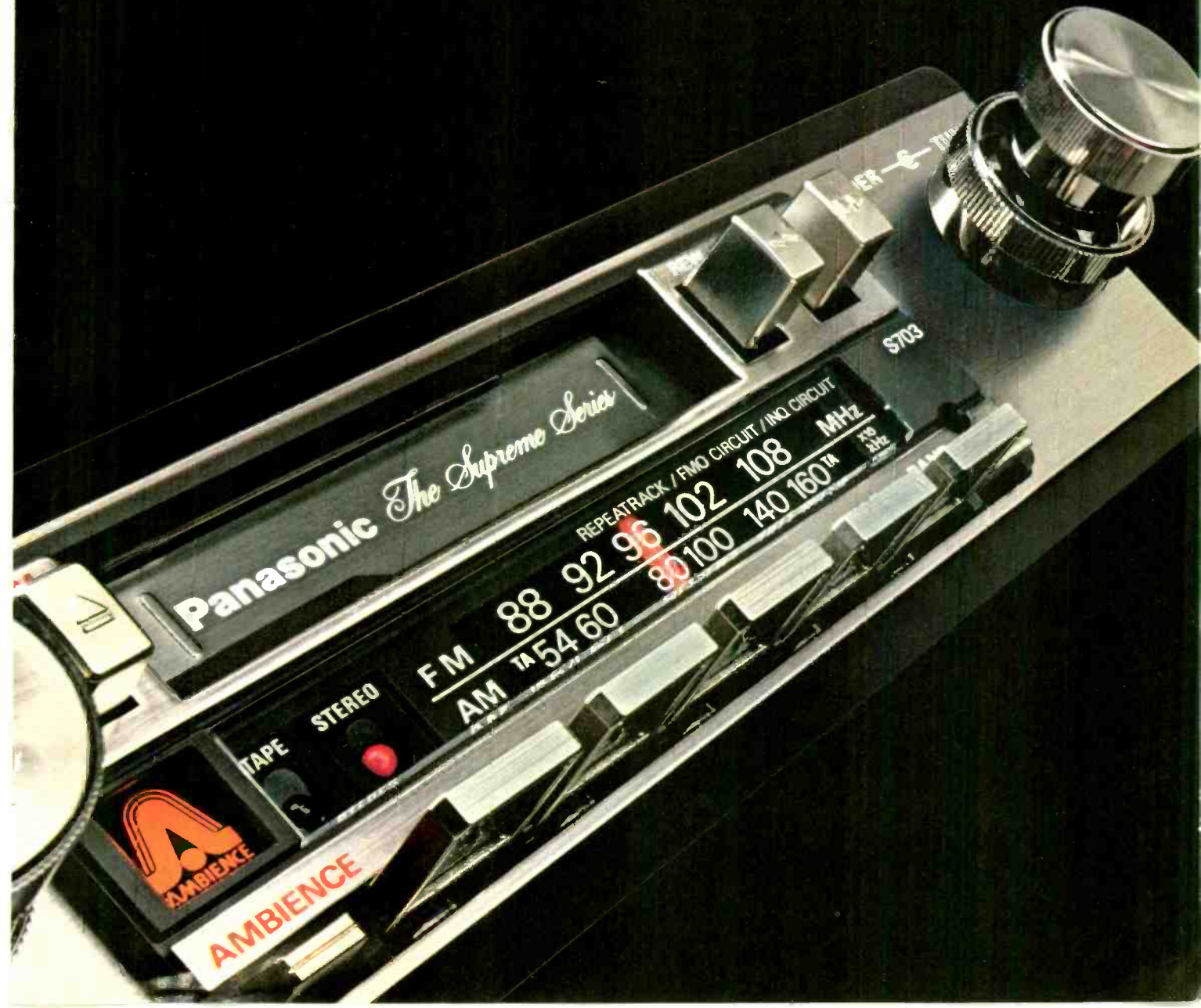
But the Panasonic Supreme Series with Ambience doesn't stop there. There's pushbutton tuning. There's FM Optimizer for improved fringe area reception. INQ circuitry reduces noise and interference caused by passing traffic. The adaptive front end reduces FM fade and drift. There's Radio Monitor that lets you listen to the radio without ejecting the cassette. There's locking fast forward/rewind and more.

And nothing enhances the sound of Ambience like Panasonic high performance car speakers.

Experience the magic of Ambience. Only from Panasonic.



**Panasonic car audio**  
*The driving force*





## WHAT TYPE ARE YOU?

Power has its price. Unfortunately, with many receivers, you usually end up paying for a lot of power you may not necessarily need in order to get the computerized features you want.

At Kenwood, we don't think that's playing fair.

Which is why every one of our new Hi-Speed™ receivers offers a host of very intelligent engineering advances.

Like Direct Coupled, Hi-Speed amplifier circuitry for absolutely brilliant musical clarity, down to OHZ.

And microprocessor controlled Quartz PLL Synthesizer tuning to give you perfect, drift-free FM reception.

We've even included the convenience of our computerized AutoScan tuning. And instant, automatic computer-memory tuning of 6 AM and 6 of your favorite FM stations.

But best of all, we didn't restrict all this intelligence to just our new KR-850 Hi-Speed receiver.

You can also find it on our new KR-830.

And our new KR-820.

And even our new Slimline KR-90.

Examine all the possibilities at your Kenwood dealer. With all the choices we offer, you'll find the computerized receiver that's exactly your type.

At your type of price.

 **KENWOOD®**  
The audio company that listens.

P.O. Box 6213, Carson, CA 90749

## Letters

as were, before us, the Soci t  Wilhelm Furtw ngler and the highly respected German vocal authority Einhard Luther.

Over the years, Discocorp has established a high reputation among collectors and critics for the artistic and technical quality of our historical recordings, a reputation we are eager to preserve. We are therefore offering a reward of \$500 for information exposing the culprit(s) responsible for these pranks.

**Eric Maisel**

Vice President, Marketing  
Discocorp, Inc.  
Berkeley, Calif.

**Mr. Hamilton replies:** *I'm sorry that, like Klingsor's spear flying over the head of Parsifal, the point of my Wagnerian allusion to the bearded old man seems to have missed Mr. Maisel. In any case, I quite carefully avoided imputing culpability in this affair to anyone, least of all Discocorp; my principal purpose was to alert prospective purchasers of what we may politely call "unauthorized recordings" to the possibility of misrepresentation.*

*However, a good deal of Mr. Maisel's attempt at exculpation is, at the least, disingenuous. On the G tterd mmerung disc, he suggests, "the identity of the major singers was not at issue." Well, if that mellow baritone who sings both Amfortas and Gunther is Herbert Janssen in the first case, he can hardly be Jaro Prohaska (the unmellowest baritone this side of Gian Giacomo Guelfi) in the second. It may be true that "Hamilton has failed to identify much of the Lorenz material on the Parsifal disc"—to wit, the Good Friday Scene excerpts. But if Lorenz' part of that scene really did come from the 1933 Bayreuth Festival, why was it necessary to replace Kipnis' 1933 singing of Gurnemanz' lines with his 1928 commercial recording, instead of letting the 1933 version run right on? In short, the case does not hinge on whether the source of every snippet can be positively identified, but on the fact that the majority of the sequences on these discs are composites of recordings that audibly stem from disparate sources. Somebody has not been listening very carefully.*

*In connection with these discs, I received an interesting letter from Peter Morse, compiler of an admirable discography of Richard Strauss as conductor. He and his British colleague Alan Jefferson believe that the BASF recording of the Parsifal finale with Lorenz is not conducted by Strauss; it is very slow (slower than Knappertsbusch, even), contrary to all verbal descriptions of Strauss's Parsifal. This would also account for the sound quality, which is remarkably good for vintage 1933. Morse and Jefferson suggest that it might well stem from the only other season Lorenz sang Parsifal at Bayreuth—1937 under Furtw ngler, which is where Discocorp assigns it! (But even if it does, the early part of that Discocorp track, with Herbert Janssen, cannot come from Bayreuth 1937, for in its original form it is a coherent part of a much longer sequence in which Torsten Ralf and Ludwig Weber, who did not sing at Bayreuth that year, are also heard.) The suggestion is plausible, but remains to be proved; after all, Lorenz may have broadcast Parsifal from other theaters than Bayreuth.*

*Letters should be addressed to The Editor, HIGH FIDELITY, 825 7th Ave., New York, N.Y. 10019. All letters are subject to editing for brevity and clarity.*



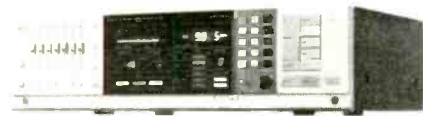
# '83 Audio & Video Component Preview

SPECIAL REPORT

Exciting trends and features emerge as the first of next year's models are unveiled.

Before long, new audio and video components will be appearing on dealers' shelves. The majority of the 1983 models were being introduced in Chicago at the Summer Consumer Electronics Show (one of the industry's two major annual trade shows) as this issue went to press. But several companies held special press briefings prior to the event, and their new products—some of which are displayed here—gave a good indication of what was to come in Chicago. Over the next few months, many of the models introduced at the CES will be discussed in our "High Fidelity News" and "Video-Fronts" columns.

## AUDIO



More than a dozen new components, two rack systems, and six models in the Intelligent Super Compo Series will soon be available from Sansui. Among the highlights is the company's flagship \$950 Z-9000 receiver, which incorporates Super FeedForward, a design approach previously confined to the company's integrated amps. Rated at 120 watts (or 20 $\frac{3}{4}$  dBW) per channel, the Z-9000 features presets for sixteen stations, a seven-band graphic equalizer, a reverb amp with adjustable decay (from 0 to 3 seconds), and a three-program memory timer.



It takes only five seconds for the Compu-Trec circuit in Sansui's D-970 cassette deck to set tape bias, equalization, and sensitivity. Other features of the \$650 recorder include Dolby B and C, a Hold-Back-Tension Servo for lower wow and flutter, a dual memory that can store start- and end-address signals, and an automatic four-second RECORD MUTE. There's also a device that automatically advances the tape past the leader.



All controls and functions of Sansui's new P-L50 linear-tracking turntable are on the front panel. Features of this fully automatic \$360 unit include random programming of as many as seven cuts and Compu Edit, which enables the P-L50 to operate automatically in tandem with certain Sansui cassette decks when taping from discs. (For example, the deck goes into PAUSE when the tonearm is shifting to a nonsequential cut that you have programmed.)



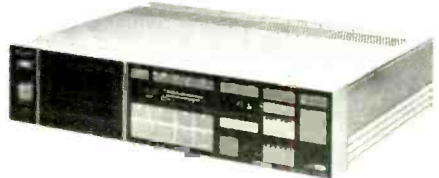
Luxman will be introducing its first tangential-tracking turntable this year. The company's two new cassette decks—with DBX and Dolby B noise reduction—and three new receivers all share an adjustable faceplate design called ServoFace: The controls are flush with the front panel (for a streamlined look) when the power is off and protrude for ease of operation when it is on. The top-of-the-line RX-103 receiver (\$1,000) incorporates Computer Analyzed Tuning that automatically optimizes FM reception under a variety of conditions. There's also a twenty-four station memory, a built-in moving-coil head amp, and a wireless remote control. The RX-103 is rated at 90 watts (19 $\frac{1}{2}$  dBW) per channel.

Luxman's three-head cassette deck, the \$500 KX-102, automatically adjusts equalization and bias, but also has provision for manually trimming bias  $\pm 15\%$ . Dolby B and DBX circuits are included.



Noise reduction is central to Onkyo's latest components. Two of the company's six new receivers incorporate CX decoders; Dolby B and C circuits are found in the TA-2035 cassette deck. Other introductions include integrated amplifiers, tuners, a second-generation dubbing cassette deck, loudspeakers, an equalizer, and Onkyo's Radion Series—matched components for assembling an integrated system. The \$300 TA-2035 cassette deck has an Auto Music Search System that operates in both fast forward and rewind and enables you to sample sequentially the first ten seconds of each recorded selection. The unit has peak-level meters and variable bias adjustment; remote control is optional.

The TX-61 (\$540) and TX-51 (\$420) receivers have separate selector switches for their tape outputs, to enable listening to one source while recording from another. Other shared features include presets for sixteen stations, automatic scan tuning, and a built-in moving-coil head amp. The TX-61, which can retain volume settings in its memory, is rated at 60 watts (17 $\frac{3}{4}$  dBW) per channel, the TX-51 at 40 watts (16 dBW) per channel.



Among the most unusual aspects of Sony's new TC-FX1010 cassette deck (\$650) is a self-monitoring circuit that constantly compares the tape and source signals

### IN SEPTEMBER'S ISSUE :

Complete coverage of the Summer Consumer Electronics Show, with details on the new tape decks, receivers, loudspeakers, phono cartridges, turntables, and other components introduced there—as well as analysis of important new trends

during recording. If the circuit senses distortion due to too high an input signal, it lowers the recording levels in 1-dB steps until distortion stops. There's also an Audio Signal Processor that automatically calibrates tape bias, sensitivity, and recording levels; these settings can then be entered into memory. Sony's Independent Suspension three-head design is said to overcome many of the azimuth and tape-contact problems associated with conventional heads.



In the belief that remote control will play an increasingly important role in audio, the company has introduced the \$150 RM-44, an outboard system designed to work with several of Sony's turntables and cassette decks as well as with the new, similarly styled ST-JX44 tuner and TA-AX44 amplifier. Sony will be offering more than two dozen new models in all, including receivers, front-loading turntables, low-mass moving-coil cartridges, equalizers, and two Music Lab prepackaged audio systems.



Highlighting Akai's new components are three receivers, the AA-R22, AA-R32, and AA-R42. Each uses a front-panel fluorescent screen to display the status of all elements in the signal path, including preset tone-control settings for each input. Bass, treble, tuning, balance, volume, and fade are all adjusted via continuous-level touchpads. Power ratings range from 30 watts (14 $\frac{3}{4}$  dBW) per channel for the R22 to 60 watts (17 $\frac{3}{4}$  dBW) for the R42. Respective prices are \$250 to \$450.



The GX-F91 three-head cassette deck (\$750) with Dolby B and C incorporates an unusual feature: a motor-driven flip-down front panel that covers all controls except the transport buttons. This top-of-the-line deck automatically sets equalization, bias, and sensitivity levels and will store four groups of settings in memory. Correct tape type is also selected automatically. Other features include Intro Scan, which samples

ten seconds of each selection and then moves on to the next; Instant Program Location, which finds the beginning of selections in either rewind or fast forward; Auto Mute, which places a four-second gap between selections; and an automatic fader control. In addition to gold-plated input and output terminals, the GX-F91 has adjustable output- and headphone-level controls and a real-time counter.



While Kenwood's New Life series is designed for those who prefer prepackaged stereo systems, its XL series (above) offers the opportunity to assemble your own. The XL comprises ten components—including amplifiers, tuners, cassette decks, turntables, and an equalizer—all of which can be housed in either of two custom-designed cabinets. The \$450 KD-9XG turntable is Kenwood's first linear tracker; it is designed to operate vertically. The XL series also includes the \$400 KA-9XG integrated amplifier, rated at 120 watts (20 $\frac{3}{4}$  dBW) per channel, and the \$425 KX-7XGC cassette deck. The latter offers Kenwood's Direct Program Search, Dolby B and C, automatic five-second recording mute, and optional remote control capability. Kenwood has also added an amplifier and tuner to its high-end Audio Purist line and some lightweight in-the-ear headphones for use with personal portables.

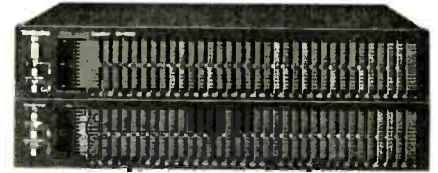


Almost two dozen components (and eight prepackaged Concert Systems) have been added to Yamaha's extensive audio line. Among the many models are an audio timer, a graphic equalizer, a line of cassette tapes, cassette decks, loudspeakers, power amplifiers, and preamps. The top-of-the-line C-70 preamp (\$780) has solenoid switching with gold-plated contacts, a flip-down front panel that conceals a parametric equalizer, a Varigain volume control said to reduce residual noise, and a choice of three phono-input capacitances.

Complementing the C-70 is the \$950 M-7 power amplifier (above) rated at 200 watts (23 dBW) per channel. In addition to Yamaha's X power supply, the amp incorporates Zero Distortion Rule circuitry, designed to cancel distortion inherent in the

amplification process while leaving the input signal intact. Dual switchable ranges and a peak-hold function are features of the C-70's twenty-segment LED peak-power output meters.

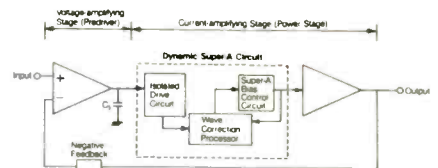
Yamaha's \$350 K-500 cassette deck offers Dolby B and C noise reduction, automatic tape-type selection, and an optional remote control.



A versatile equalizer with one-third-octave bands is part of a new line from Technics that encompasses speaker systems, cassette decks, turntables, receivers, and an audio timer. The \$500 SH-8065 graphic equalizer has a total of thirty-three bands for each channel, with additional controls at 16 Hz and 25 Hz. A reversible frequency-response function is said to enable you to flatten overall response from a speaker system: Determine the speaker/room curve with a spectrum analyzer, set up the equalizer's controls to correspond to the curve, and press CHARACTERISTICS. The 8065 inverts the curve, thereby flattening speaker response.

Twin ring coils in the new \$300 EPC-305MC Mk.2 moving-coil cartridge substantially lower moving mass, which Technics says results in greatly extended high-frequency response. Other features include a tapered boron-pipe cantilever with a single-point suspension to provide improved imaging.

The company has outfitted its three new cassette decks—the RS-M275X (\$600), the RS-M255X (\$380), and the RS-M228X (\$250)—with both Dolby B and DBX noise reduction. The M275X adds Dolby C, three-motor direct-drive operation, wide range (-40 to +18 dB) eighteen-segment bar meters with peak hold, a bias fine-adjustment control, and an electronic time-remaining counter.



An improved amplifier circuit called Dynamic Super-A is incorporated in two of JVC's new amplifiers. (The basic Super-A design, introduced several years ago, is aimed at reducing switching distortion.) The new circuit is said to offer clearer sound under typical operating conditions by reducing the open-loop distortion of the power output stage by 20 to 40 dB. Dynamic Super-A comprises three subcircuits: an isolated-drive circuit, a wave-correction

processor, and a new Super-A integrated circuit.

A microcoil with just 1% of the weight of a conventional coil is the heart of JVC's MC-L10 moving-coil phono cartridge. According to the company, the coil's smaller size makes it possible to move it closer to the stylus end of the cantilever, thereby eliminating such problems as phase shift and transmission loss.

Also new from JVC is the T-X55 top-of-the-line AM/FM tuner. A built-in microcomputer automatically determines the optimum sensitivity, bandwidth, FM mode, and quieting-slope characteristic for each



station; all of these parameters can be retained in Automemory. The tuner has a digital frequency readout that you can convert to a digital display of signal strength (in decibels per microvolt) by pressing **FREQ/DB**.

JVC's 1983 lineup includes receivers, equalizers, tonearms, preamps, speakers, minisystems, cassette decks, and turntables (including a linear tracker). Among its new cassette recorders are a double-transport dubbing unit; a microcassette-format deck; a slim-design deck with the transport in a slide-out drawer; and the top-of-the-line DD-99, which incorporates JVC's B.E.S.T. automatic tape-tuning system.

## VIDEO

The first look at 1983's video wares shows clearly that the field has progressed through its adolescence. Exciting new twists are appearing in every area, particularly that of the video cassette recorder. JVC, the company that introduced the VHS format some six years ago, will break new ground this year with its HR-C3U, a revolutionary 4½ pound VHS-C (the "C" is for compact) recorder. Using standard half-inch tape with a twenty-minute recording time, the cassette (called TC-20) for this deck is the size of a king-size cigarette pack. TC-20 tapes can also be played on a standard VHS deck via an adapter.

According to JVC, the C3U is a true portable deck and can be used as an adjunct to a total home video system, which might include a sophisticated programmable home deck, for example. The compact design was arrived at by placing the head motor within the head drum and by switching the reel motor's traditional belt drive to direct drive. JVC plans to offer the HR-3CU for about \$700 late this fall.

Blank tape for the new format will be available from JVC, as well as from TDK and Fuji; JVC says that for the moment only

**HR-C3U System**

VHS Compact Video Cassette

Regular VHS Video Cassette Recorder

VHS Cassette Adapter

TDK TC-20 VHS-C Video Cassette

JVC Cassette Adapter

Fuji TC-20 VHS-C Video Cassette

**JVC Compact VHS VCR System**

Weighing about 4½ pounds, this new recorder is designed primarily for portable use. The small tape cassette uses standard ½-inch tape; maximum recording time is twenty minutes.

it will offer the special compact/standard-format tape adapter. To use the adapter—which looks like an empty VHS shell—you place a TC-20 cassette into it and then flip up the back panel and move a lever to one side. This partially extracts the tape from the compact cassette and stretches it across the front of the adapter's shell so that it can be withdrawn and loaded by standard VHS

decks for playback. At this point, the HR-C3U offers only one speed, SP, and the tape comes in only one length.

TDK, JVC, and Fuji all seem to feel that TC-20 recordings will be dubbed onto standard cassettes at some point, so they are using high-performance tape to help offset the 3-dB audio and video loss inherent in the dubbing process. TDK is using its Super

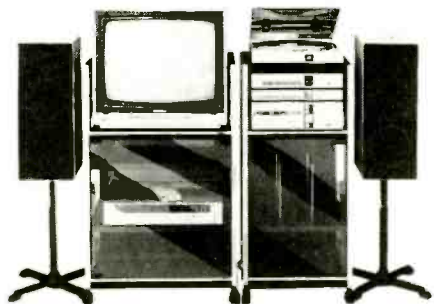
Avilyn tape; Fuji and JVC both are using Super HG, which is said to offer a 4-dB better signal-to-noise ratio (for both audio and video) than standard formulations.

At the other end of the time spectrum, many manufacturers are offering longer VHS tapes. The new length, called T-160, provides a maximum recording time of eight hours at the slowest speed (SLP or EP, depending on the manufacturer's designation). The old maximum was six hours. This new length is bound to cause some confusion, as many VHS VCRs have been referred to as having two-, four-, or six-hour recording/playback capability using T-120 tape. For this reason, we will hereafter refer to recorder speeds rather than recording times: SP for fast, LP for medium, and SLP or EP for slow speed.



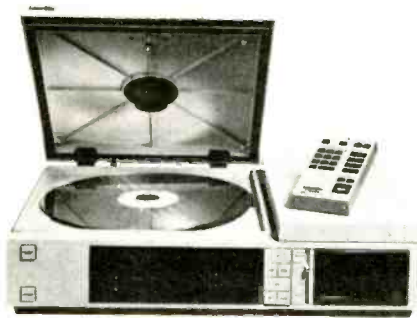
Whether the format is VHS or Beta, many hardware manufacturers will be offering top-of-the-line VCRs whose numerous features will usually include remote control and, the latest design twist, front-panel loading. Typical of these new units is Toshiba's V-9500. Priced at \$1,390, this Beta deck uses a four-head design and offers double-speed review, variable fast forward and rewind at five to twenty times normal speed, and slow-motion at one-third to one-thirtieth normal speed. Other features include 117-channel tuning capability, memory rewind, and an eighteen-function wireless remote control.

Another trend seems to be the inclusion of Dolby noise reduction and stereo recording and playback capabilities. RCA's new VGT-650 deck incorporates both features, as does JVC's HR-7650U (see Hands-On Report, p. 42).

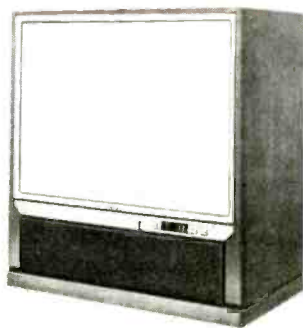


You can also expect to hear more about audio/video systems, also referred to as component television. Sony's Profeel, for instance, has been available for several months now. Typical of even newer models

is Sanyo's Pro-Ponent, a system that includes a high-resolution color TV monitor (without a built-in tuner); a separate video controller for switching and routing signals to and from various components; and a complete audio system, including separate amp, tuner, turntable, and speakers. The TV monitor utilizes a signal drawn either from a separate video tuner or from the tuner section of a VCR. All components, including the equipment rack, are available separately. RCA, Zenith, Kenwood, and Pioneer have also introduced their own versions of these audio/video systems.



On the video disc front, the biggest news is improved audio quality. Pioneer will be offering, for about \$800, its LD-1100 laser-disc player with CX noise reduction. RCA is expanding its line of CED players to four models, and the top unit will include stereo capability (a first for CED), remote control random-access and search functions, and a video output jack for connection to a video monitor. The yet-to-be-marketed VHD format will continue to attract attention; one source tells us that its often-delayed introduction has been bumped "for the last time" to the summer of 1983.

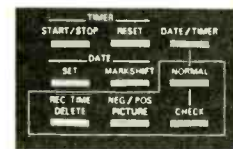


Projection television this year seems to be packing more into less space. Improvements in image-path design allow such models as Sony's 45-inch screen KPR-4600 to occupy approximately the same floor space as a conventional 26-inch console model.

Finally, video cameras are evolving in two directions: low-cost, basic point-and-shoot units and high-end videophile designs. RCA's new CC-015 (about \$1,400) is typical of the latter. Featuring a Newvicon imaging tube, this model has a f/1.4 zoom



RCA CC-015 (above) with remote VCR transport controls.



Character Generator Panel

lens and a new sonar automatic-focusing system, which is said to lock onto a subject faster and to be less prone to searching than other designs. It is also typical of the growing number of cameras that provide for remote operation of VCR transport functions. Camera-mounted controls give you greater flexibility by enabling you to operate the camera at a distance from the VCR.

Functions such as focus (in/out) and light (OK/low) are displayed in the electronic viewfinder. The viewfinder can also be used in conjunction with the built-in character generator to create pictures with subtitles.

This and similar devices we've seen function in much the same way: You move a small, visible cursor to a specific place on the screen and then push the appropriate button to select date, time, number, or letter. Numbers advance from zero through nine as you hold the button down; letters from a to z. Once you've filled the first slot, you move the cursor and insert the correct letter or number in the next space. RCA's camera also has a timer mode that enables you, for example, to record the running time of a race as you are taping it.

Although these rudimentary systems are somewhat slow to set up and are not as flexible as postproduction superimposition might be, they are useful, and it is likely that more sophisticated devices will be available before long.

W.T.

For more information on new video products, see VideoFronts on page 41.

# Five of the music world's finest instruments are made by TDK.



Like any fine musical instrument, TDK Professional Reference audio cassettes and open reel tapes are products of genius. In TDK's case, it's the genius of constantly-advancing audio technology. And now, TDK technology has advanced again in the reformulation of our MA-R metal, SA-X high bias, and AD-X normal bias cassettes.

MA-R, SA-X and AD-X are formulated to an incredibly strict, new set of audio tape standards based on measurements and values no audio cassette manufacturer has ever attempted to meet. TDK cassettes deliver clarity, fidelity and quality unmatched by any other cassettes on the market today. MA-R, with its unique unibody metal

alloy frame and Reference Standard Mechanism is the first metal reference tape in the industry. SA-X pushes high bias to its limits. AD-X normal bias is extraordinary in its wider dynamic range and its freedom from saturation at high frequency. SA-X and AD-X both feature TDK's specially engineered Laboratory Standard Mechanism. Each cassette comes with a Lifetime Warranty.

TDK's superior technology is just as evident in our SA/EE (Extra Efficiency) and GX open reel tapes. TDK SA/EE is the first open reel tape to use TDK's famous Super Avilyn particle. This gives SA/EE almost double the coercivity and high frequency MOL of conventional open reel tapes. GX

mastering tape offers a wide dynamic range, high MOL and low noise. Both SA/EE and GX feature low distortion and extended frequency response.

MA-R, SA-X, AD-X, SA/EE and GX—they're five of the music world's finest instruments for all of the music and instruments you record. One final note. TDK's new Professional Reference Series of audio cassettes now comes in bold, new packaging. So they stand out in sight just as they stand out in sound.

**TDK**  
THE MACHINE FOR YOUR MACHINE

Practical answers to your audio questions by Robert Long

## Experts, Schmexperts

*I share your fascination with how different experts choose to assemble a system [December 1981]. However, I've never fully agreed with any of them. One expert spends over half his \$1,500 budget on a separate turntable, tonearm, and cartridge, while another spends most on recording accessories. Either way, there isn't enough left to buy adequate electronics.—Mark Munyon, Lafayette, Colo.*

Anyone who buys what our experts choose, verbatim, is missing the point of such an article. If we got you thinking about your priorities and how to manage them, then we've accomplished exactly what we had hoped.

## Arm Wrestling

*In reading a report on the \$300 SME 3009 Series III tonearm I find the following: "The instructions call for adjusting the azimuth until the stylus lines up with its image when it is resting on a mirror placed on the turntable; in the lab, we found it easier to use test equipment and adjust for best channel separation." Why did the lab find it easier to use test equipment? Most audiophiles do not have such equipment, so what should we do?*

*I tried using a level on the flat shaft behind the cartridge on my turntable. This procedure worked fairly well, but not well enough for real accuracy. What bugs me more is that none of the manuals I have had over the years have even mentioned azimuth, which is such a critical adjustment. And when the report on the SME said to twist the headshell until the azimuth is adjusted, I couldn't believe it. Why can't the arm be made sufficiently rigid and accurate that any cartridge you mount in it would automatically be correct in azimuth?—Carlos Johnson, Philadelphia, Pa.*

Azimuth—the extent to which the stylus, viewed from the front, deviates from true perpendicularity to the record surface—has become a critical setup element only relatively recently, since the introduction of Shibata and other multiradial stylus designs. The contact surfaces of such styli are short segments of long-radius curves that meet in a relatively sharp point toward the

bottom of the groove. Serious misalignment of such a stylus tip can lead to record damage. (Alignment-induced record damage is not much of a concern with a spherical tip, which presents a constant curvature to the groove within a huge azimuth "window.")

Azimuth error will reduce channel separation regardless of the stylus shape, but only negligibly for the first few degrees of misalignment and, if it is the only misalignment, will introduce no significant distortion. Presumably the reason the lab used instruments (a simple oscilloscope, which some home users do have, will do) for the adjustment was to ensure that the other measurements involved would not be compromised.

You can't expect azimuth to be necessarily spot-on when you mount a pickup in an arm, no matter how carefully the geometry was worked out in advance. This is partly because tonearms must move vertically, which changes the various geometrical relationships slightly. More significant, however, are slight, random imprecisions in the mounting of cartridge styli and coils, over which the consumer has no control.

The SME tonearm is certainly not all things to all record-playing equipment, but it is a carefully engineered device that doesn't deserve the animus you seem to harbor toward it.

## How Loud?

*The NAD 7020 receiver has been praised by HIGH FIDELITY and others, but many stereo magazines say to purchase as much power as you can afford and the 7020 has just 20 watts [13 dBW] per channel. Will the NAD's headroom be adequate for peaks in symphonic music at efficiency speakers help to avoid clipping in a low-powered receiver?—Lorne Wood, Peterborough, Ont., Canada.*

I'd give you a qualified "yes" to both questions. The most important variable here is the listening level. At what I would call "moderate" volume, maximum sustained levels draw no more than a few watts, though instantaneous requirements can run ten times as high. For the sake of argument, let's assume speakers of average efficiency and 3 dBW (2 watts) on sustained fortissimos. Allowing 10 dB for instantaneous peaks would give you 13 dBW (20 watts) as your maximum requirement.

But if you increase the sound level

until, subjectively, it sounds "twice as loud," all requirements would increase by about 10 dB—to 13 dBW (20 watts) continuous and 23 dBW (200 watts) instantaneous! If, on the other hand, you were to maintain the original sound level but trade the original speakers for a pair that are "only half as efficient," you would need a 3-dB increase in power—to 6 dBW (4 watts) continuous and 16 dBW (40 watts) instantaneous—to compensate.

## Rumblings

*Regarding Tim Deirek's rumble problem with an Omnisonix Image Enhancer ["CrossTalk," December 1981], I suspect that it would be essentially cured by a circuit that blends the two stereo channels in the low bass region (below about 150 Hz). Some Audio Control equalizers have such a feature. It has an uncanny ability to eliminate most turntable and record rumble and reduce substantially the system's sensitivity to acoustic feedback, while leaving intact the amplitude of the bass response.—Peter Schaff, Port Angeles, Wash.*

Good point. A similar low-bass blend often is applied during record mastering to prevent excessive vertical excursion. Huge low-frequency swings in the out-of-phase component of the composite signal could lift the cutting stylus right out of the lacquer into which it is cutting the groove. Thus, many records already have little or no channel separation to preserve in this region.

## Fancy Turn-On

*I have a very good German timer that can be programmed to switch up to three devices on or off as many as twenty times over a seven-day period. Mine has a backup battery in case of a power failure; otherwise, it works from 220-volt 50-Hz AC. If I move back to the U.S., will I be able to find such a timer for American use?—Sumner Northcutt, Munich, Germany*

If I knew of such a device, I'd buy one for myself. Maybe another reader can help us both.

*We regret that the volume of reader mail is too great for us to answer all questions individually.*

# MAXELL IS PLEASED TO PRESENT AN EVEN HIGHER PERFORMANCE TAPE.



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# Retsoff's Remedies

Simple solutions to common stereo system problems by Alexander N. Retsoff

## Phono System Hum—Finding the Cause and Fixing It

WHEN SOMETHING GOES WRONG with your stereo system, the source of the problem often lies somewhere in the phono circuit. Because a phono cartridge's signal level is much lower than those from other input sources, the entire link between cartridge and amplifier is susceptible to hum and noise—especially with moving-coil cartridges, whose signal levels typically run to millionths of a volt.

A very common source of hum (and of intermittent sound) is a faulty connection. If you experience either problem when playing a disc, first check the cables between the turntable and preamp or receiver. Be sure to turn your system off (to protect your speakers) before disconnecting the cables. Check the center pin and surrounding sleeve as well as the jacks on the amplifier for corrosion. As long as the connectors are not gold-plated, you can use fine steel wool to polish them: Only a slight bit of pressure is necessary. Be sure not to leave any metal fibers in the plug or jack.

Gold-plated connectors and jacks require a different treatment: Steel wool would probably remove the precious metal. Gold connectors shouldn't tarnish, but if they do, use pure isopropyl alcohol to clean them. (Don't use rubbing alcohol, which

can leave a residue from the aromatic ingredients that it contains.) Most electronics stores carry special sprays for cleaning contacts, but many of these products contain lubricants. I prefer the type that does not.

Connectors should fit tightly, because a loose connection can result in intermittent sound, hum, or noise. You should feel some resistance as you insert the plug's center pin and even more as the surrounding sleeve mates with the outer rim of the jack. If the split outer ring of the plug is loose, squeeze it slightly with pliers and see if that solves the problem. If the center pin is not gripped securely, try another cable.

Your problem may also lie in the cables themselves. With the system on and the volume set at a low level, wiggle the cables where they enter the molded-on connectors. This is a prime area for an internal short or open circuit, which can produce the same symptoms as a corroded connection. If the sound comes and goes or gets noisy or hummy, replace the cable. Also, check the cable along its length to be sure it hasn't been accidentally flattened at some point and damaged internally. If you suspect a cable is defective, replace it. It's a good idea to have a spare test cable handy so you can easily substitute it for a questionable one.

If the hum persists, the wire that grounds the turntable frame to the amplifier chassis may be at fault. Usually, this connection minimizes hum, but some cartridges have the ground side of one channel connected to the cartridge body. If the cartridge body is metal and it touches the arm, two ground paths may be established—one

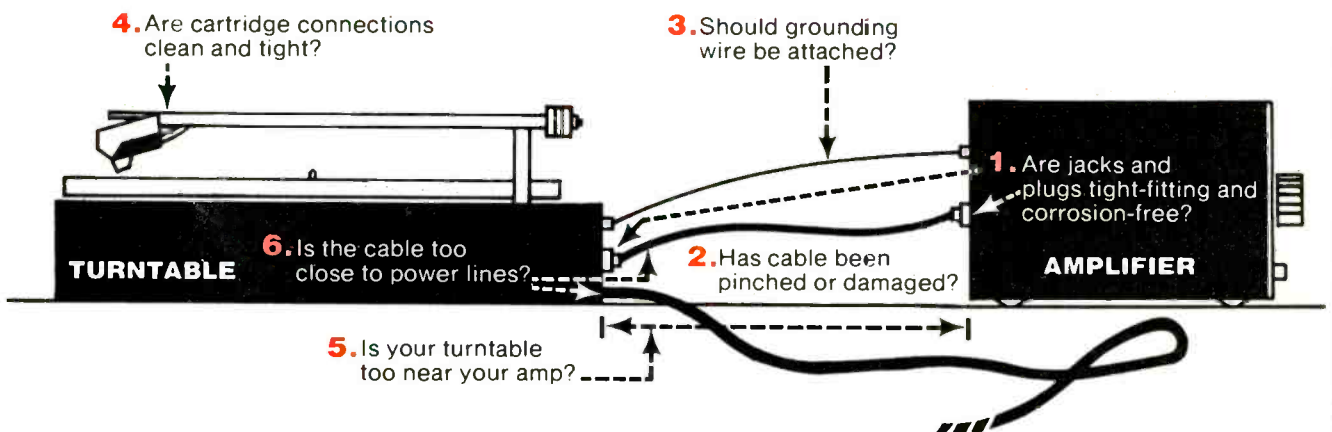
from the cartridge coil to its case, through the arm to the turntable frame, and then through the grounding wire to the amplifier; the other, the normal direct connection through the signal cables. The result of this double path is a ground loop that can pick up hum. If you suspect this is the problem, disconnect the grounding wire. Alternatively, you can insulate the cartridge body from the arm with a thin plastic shield and nylon mounting hardware.

It's time to check the cartridge/turntable connections if hum, noise, or intermittent sound persists at this point. With cartridges that are mounted in a removable headshell, flip down the stylus guard (or put on the protective plastic cage) and remove the headshell, cartridge and all, from the tonearm. (Usually this is done by unscrewing a knurled ring.) Check the connections between the headshell and tonearm for corrosion. (They should be okay, because the connection is almost invariably gold-plated.) Invert the headshell on a flat surface, and with tweezers or needle-nose pliers, gently tug on each sleeve that connects the tonearm wiring to the cartridge. Don't pull on the wires: They're fragile. Just verify that each wire is firmly soldered to its connecting sleeve. Sleeves should fit tightly on the cartridge pins. (This doesn't always happen, because there's more than one "standard" diameter for cartridge pins.) Squeeze any loose sleeves gently with pliers.

Some headshell wiring terminates in sleeves on both ends, and the shell's connector portion has four pins to mate with the sleeves. In this case you can replace the

(Continued on page 80)

### SIX COMMON CAUSES OF PHONO SYSTEM HUM





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## AUDIO

# Sound Views

Comment on the changing audio scene by Edward J. Foster

## More Highlights of the New Tape-Deck Standard

MANY OF THE SALIENT POINTS of the new EIA tape-recorder standard were covered in last month's column. The remaining ones—including test tapes, flutter, speed accuracy, erasure, maximum input level, distortion, and meter response characteristics—I'll elaborate on here. As before, the new procedures differ in detail, but not philosophy, from our past practices.

Test tapes have always been a problem for equipment reviewers. A number of companies (including BASF, Philips, TDK, and Teac) make cassette test tapes, and at least two produce open-reel test tapes—Magnetic Research Laboratories (MRL) and Standard Tape Labs (STL). Unfortunately, none of these agrees with the others, and frequently a company will issue a new version of a test tape that differs from its previous one. Compounding the problem, frequency-response test tones are usually recorded across the entire tape width. This leads to an artificial rise in low-frequency response (due to what is known as the fringing effect) that does not, in fact, occur when a typical quarter-track stereo tape is played. And no test tapes are available that have been encoded with conventional noise reduction systems (e.g., Dolby B). The EIA has gone to great lengths to specify test tapes that should solve these problems, but they are not yet available.

Measuring flutter accurately has always been a problem. Strict adherence to the ANSI/IEEE/DIN flutter standard would require reporting the maximum flutter observed during the period of the measurement, but the duration of the test has never been specified. Furthermore, a momentary dropout might cause an atypically high maximum flutter value. In the past, HF has reported both average and maximum readings to compensate for this possible anomaly in the data.

The new standard has a neater approach: It specifies a 30-second measurement, commencing a few seconds after tape motion has begun. Maximum flutter is measured, but peaks that occur less frequently than twice in the 30 seconds (such as those caused by dropouts) can be ignored. The measurement is repeated three times, and results are averaged. Flutter is measured at three points in the tape: with a full supply

reel, with an empty supply reel, and in mid-pack. The worst of the three averages is the one reported. We adopted the new methodology with the Teac X-1000R open-reel deck evaluated in our July issue and will continue reporting only a single flutter reading. We anticipate that for most decks it will lie between the average and maximum readings we have been reporting.

Speed accuracy is defined by the EIA standard with reference to a line voltage of 120 volts and at 10% above and below that figure. We believe that the line voltage you normally encounter will never reach 132 volts (+10%), but that it is likely to drop below 108 volts (-10%), so we intend to stay with the range from 105 to 127 volts that we have used in the past.

We have measured erasure until now by recording a 333-Hz (cassette) or 400-Hz (open-reel) signal at reference level, recording over it without an input signal, and then comparing the remaining signal at the original frequency with the reference level. We are adopting the new standard, which calls for a 100-Hz test frequency recorded at tape saturation (defined as the level that produces 5% third-harmonic distortion). After erasure, the residual 100-Hz component will be checked against the reference level for that format (which for open reel is now 6 dB higher than the level we used in the past).

Theoretically, a 100-Hz signal should be more difficult to erase than a higher-frequency signal. Furthermore, the original recording will be made at a higher-level than we used previously. As a result, from now on erasure figures will be somewhat worse than in the past—especially on cassette decks, which are the subject of this month's equipment reviews.

Recognizing that the microphone inputs of many recorders overload prematurely, resulting in distorted live recordings, the EIA has made input-overload level a primary specification. We have supplied this figure for some years now and will continue to do so.

The new standard treats distortion in two ways and ties both of them to the deck's recording-level indicator—an excellent idea, in our opinion. First, distortion at the reference recording-level will be measured at the standard test frequencies—315 Hz for cassette, 500 Hz for open-reel equipment operating at speeds less than 7½ ips, 1 kHz for open-reel decks operated at 7½ ips or faster. We will also report the meter reading at this recording level and the brand of tape used for the test. (On a three-head

deck, the meter reading will be taken in the source position to make the data comparable with those for a two-head deck.)

These figures let you make direct comparisons of distortion in competing decks at a fixed recording level. They also tell you the meter reading that corresponds to a reference-level recording, giving you a handle on meter calibration. Compared with our past practice, there is no substantial change for the cassette format, but because the new open-reel reference level is 6 dB greater than the one we used to use, distortion figures for open-reel decks will be substantially higher than you've been seeing.

The recorded level that corresponds to 3% distortion, or maximum recorded level (MRL), will be measured for each tape, and the meter reading that corresponds to that point will be given. These figures tell you how much headroom the recorder has, how headroom varies with the type of tape used, and how far you can push the meters into the red before unacceptable midrange distortion begins. Again, this closely follows our past practice for the cassette format, but the 6-dB increase in open-reel reference level will reduce the new MRL figures by the same amount.

HF will report these data, but because they apply only to the midrange we will continue to measure maximum distortion (at a reduced recording level) over the band

from 50 Hz to 5 kHz (for cassette and slow-speed open-reel) and over the band from 50 Hz to 10 kHz (for higher open-reel speeds). We are, however, changing our open-reel test level to reflect recent improvements in tape formulations. Cassette equipment will continue to be tested at 10 dB below the DIN (and now EIA) reference level of 250 nanowebers per meter (nWb/m). Open-reel decks will be tested at 10 dB below the new EIA reference point of 400 nWb/m, independent of tape speed. This is a more stringent test than we have conducted in the past, especially at 3 $\frac{3}{4}$  ips, so expect higher distortion figures—probably comparable to those for cassette decks.

Knowing how the meter responds to the dynamics of music is equally important, and the EIA addresses this point, too. The standard specifies test signals to be used to characterize meters by their response times, overshoot (if any), and decay times. Response time is the time required for the meter to come within 2 dB of its steady-state indication when handling a transient. (In the past, we have used 3 dB as our allowable error, so expect now to see slightly longer response times.) Decay time tells you how long it takes the meter indication to fall 20 dB after the signal has stopped; overshoot indicates the extent to which the pointer goes past the actual reading when responding to transients of medium duration.

What I've covered here are only highlights of the tests contained in the new EIA tape recorder standard, which divides ratings into primary specifications, secondary specifications, and those of even less significance. Primary ratings for a tape recorder/reproducer—those required by the standard—include (in decreasing order of importance): record/playback response (with and without noise reduction); playback response; CCIR/ARM-weighted signal-to-noise ratio (S/N), both record and playback; distortion at reference level; meter indicator reading at reference level; maximum recorded level (MRL); meter indicator reading at MRL; weighted peak flutter, (record/playback); line-input sensitivity; microphone-input sensitivity; maximum microphone-input level, and line-output level.

HF will, of course, perform all of the primary measurements and a number of the secondary ones as well. However, we will continue to measure the frequency responses of cassette decks at -20 dB re 250 nWb/m, rather than at the less stringent -25 dB level sanctioned by the EIA. The changes from our past procedures that will result from adopting the new standards are generally minor, and what differences there are you can easily decipher by referring to this month's and last month's "Sound Views." **HF**

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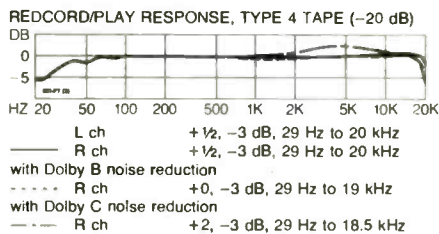
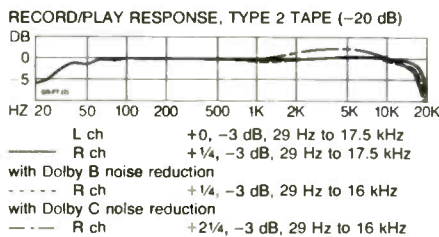
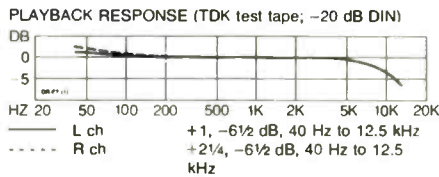
# New Equipment Reports

Preparation supervised by Michael Riggs, Robert Long, and Edward J. Foster.  
 Laboratory data (unless otherwise noted) supplied by Diversified Science Laboratories.

## Performance and a Touch of Class from Denon



Denon DR-F7 cassette deck, with Flat Tuning System, Dolby B and C noise reduction. Dimensions: 17½ by 4¾ inches (front panel), 13 inches deep plus clearance for controls and connections. Price: \$500. Warranty: "limited," two years parts and labor. Manufacturer: Nippon Columbia Co., Ltd., Japan; U.S. distributor: Denon American, Inc., P.O. Box 1139, West Caldwell, N.J. 07006.



IN AT LEAST TWO RESPECTS, Denon's DR-F7 cassette deck represents a significant advance from the DR-330 we reported on in January. One is that it incorporates the now nearly ubiquitous Dolby C noise reduction system, which is almost twice as effective as the standard Dolby B system in suppressing tape hiss. The other is what Denon calls FTS, for Flat Tuning System. At the touch of a button, the DR-F7 automatically fine tunes its own bias Dolby recording-level calibration settings for flattest response with the particular tape you are using at the time. Pressing another button, labeled PRESET, memorizes those settings, so that the deck returns to them automatically any time the TAPE SELECT is switched to the position for that tape type.

The DR-F7 retains an improved version of the Tape Tension Servo transport mechanism introduced in the DR-330. It works by continuously monitoring the tape tension between the erase head and the recording and playback heads (which share a common housing). Based on that information, it alters the force with which the erase head pushes the tape against the pressure post in the cassette, so as to eliminate variations in tape tension. According to Denon, this results in unusually good tape-to-head contact, which is in turn responsible for fewer tape dropouts, lower noise, better separation, and more extended high-fre-

quency response than would otherwise be possible.

Of the DR-F7's three other relatively uncommon features, two are clearly visible and one isn't. The "invisible" one is Denon's use of direct-coupled (DC) circuitry throughout the record and playback electronics. More obvious are the transport controls and the metering system.

Unconventionally arrayed as three rows of two pushpads each, the transport controls are an unexpected pleasure. The top row comprises the record and play buttons, the middle row the "pause/mute" and stop buttons, and the bottom row the fast-forward and rewind keys. Although not what we're used to, it turns out to be an exceedingly logical and foolproof arrangement, especially when teamed with Denon's simplified recording-interlock scheme. When you press RECORDING, the deck automatically goes into PAUSE; then to commence actual recording, you just press PLAY. (The RECORDING, PLAY, and PAUSE/MUTE have small, square pilot lamps in their upper left-hand corners that light when the controls are activated.) A particularly clever and handy characteristic of the PAUSE/MUTE is that it's a dual-function control: So long as you hold the key in, the deck will continue in record, but with its inputs shorted, so that a blank is recorded; when you release the key, tape motion is halted.

## SOUND

HANS FANTEL

# Sony Cooks Up a Top Tape

**T**ape makers literally can't leave well enough alone. Just as tape development had reached the well-enough level, with the better brands sounding very good indeed, some manufacturers seem eager to outdo their own — and anyone else's — achievements.

Competition, innovation, and sheer cussed perfectionism aside, the question arises whether such compulsive pushing of limits really brings practical benefits to the listener. In the case of Sony's new UCX-S cassettes — the latest champion in the international tape derby — the answer is a decided yes.

The nature of these benefits is best understood by way of analogy. Tape is to a recorder what film is to a camera. Even the best camera can't take good pictures with poor film. Similarly, no tape recorder can sound better than the tape running in it. Just as the grain and pigments of a film determine the quality of a photograph (other factors being equal), so the frequency response, dynamic range

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**'Formulating a tape is like flavoring a sauce. Not just the ingredients count, but also their proportion.'**

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and noise characteristics of a tape determine the quality of a recording.

In Sony's UCX-S, these factors have been slightly but perceptibly improved over previous norms, and the ear readily and gratefully registers the difference. In critical listening comparisons with other ferricobalt cassettes (i.e., cassettes made with cobalt-treated iron oxide), the treble not merely seemed extended in range but also more natural in character. Credit for this goes to the greater treble capacity of this tape, which obviates any need for false emphasis in the upper range. As a result, timbres and textures of orchestral music assume a very pleasing, lifelike vividness. By the same token, the so-called transient response — the ability to render short, sharp sounds with appropriate clarity — is also enhanced, for this essential aspect of sound also requires smoothness of treble.

Yet the exceptional merit of this tape is not confined to the upper range. The bass also comes through with genuine depth and solidity not usually attained in cassettes, and the noise level remains happily unobtrusive.

No single technical advance can be credited for all these virtues. After all, formulating a tape is rather like flavoring a sauce. Not just the ingredients count, but also their proportion, blend and texture — plus what the chef

calls *je ne sais quoi*. The sauce analogy applies even to attitudes. Tape manufacturers typically are as mum about their concoctions as any professional cook might be about his hollandaise. When interviewed in his laboratory, Mr. T. Hirano, Sony's top tape wizard, declined in fluent English to divulge particulars. But he confided that the exceptional attributes of his UCX-S formulation arise from a combination of three factors:

First, the magnetic particles forming the working parts of the tape have been shrunk in size by nearly 30 percent, making a finer and more uniform dispersion on the tape. This may be likened to grain in photographic film. The finer the grain the sharper the image. Or, to invoke the proper explanatory concept, the smoother surface can "resolve" more image detail, just as finer lines can be drawn on smooth paper than on rough surfaces. Similarly, smoother grain structure in a recording tape can resolve smaller waveforms, thereby permitting higher frequencies and finer sonic detail to be captured.

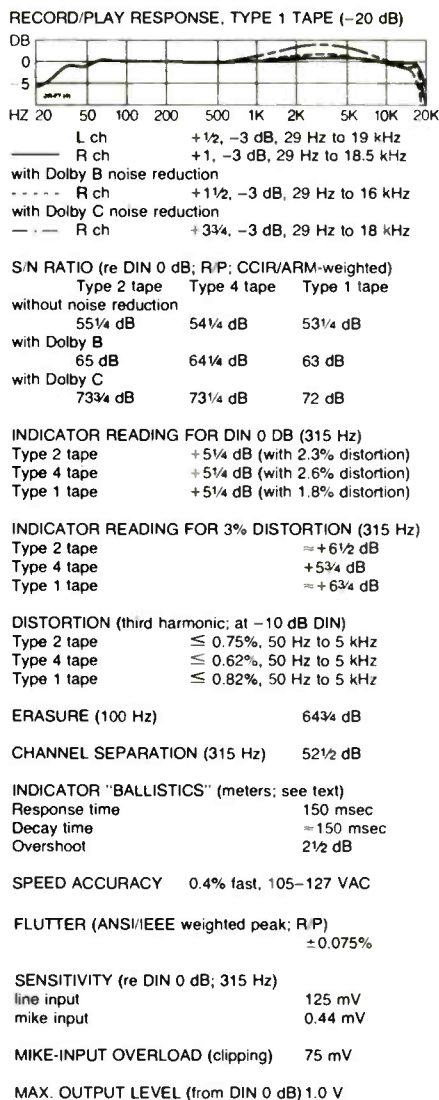
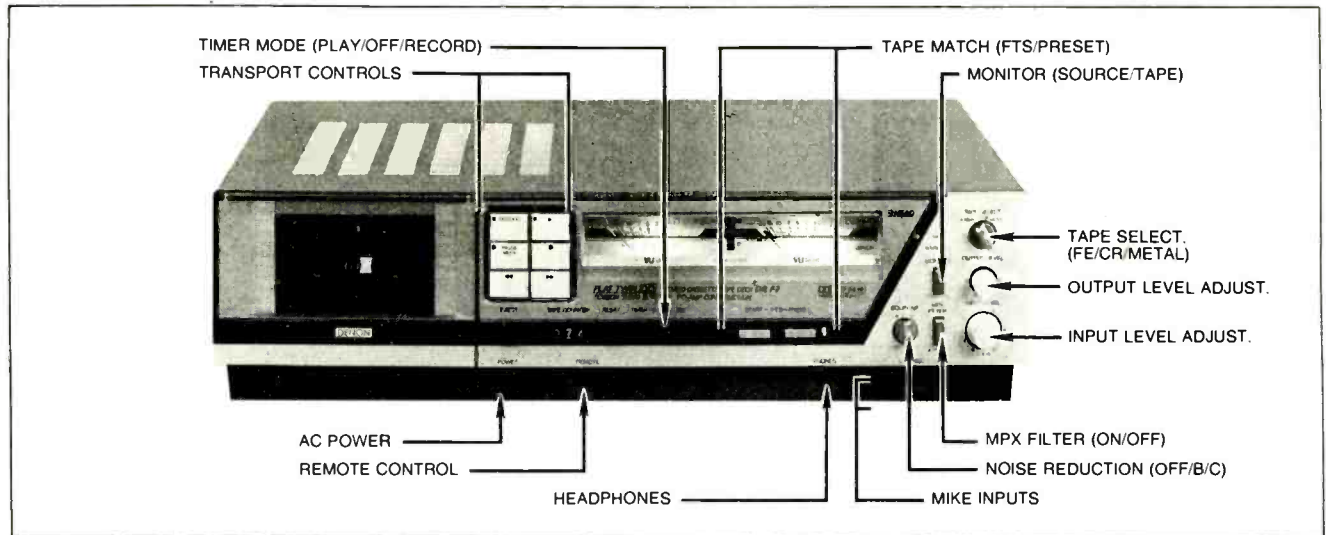
Secondly, ways have been found to arrange the particles so they don't stick to the tape in a crisscross pattern like trees in a logjam. The new process allows more of the rod-shaped particles to be packed in parallel, like tree-trunks in a raft. This yields multiple benefits: It provides a smoother — and hence more receptive — surface on which the magnetic signal can be inscribed. The greater density of the tightly packed particles concentrates more magnetic force into a given area (about 500 billion particles in each millimeter of tape) so that greater loudness peaks can be accommodated with less distortion. What's more, hiss is reduced by the regularity of the particles.

Thirdly, the basic material itself has been improved by new methods of spiking each iron particle with molecules of cobalt, so as to heighten such magnetic properties as coercivity and retentivity. These determine how faithfully the tape "remembers" the music entrusted to it, and how much sonic detail it recalls on command. To be less metaphoric and more precise about it, retentivity is 1800 Gauss and coercivity is 650 Oersted — uncommonly high values assuring that this tape will be on its very best molecular behavior when jolted by the impact of the musical signal.

Although developed at Sony's laboratories at Sendai, in northern Japan, the new tape is to be domestically produced in Alabama and Texas. With a list price of \$5 for a one-hour cassette, it is much less expensive than the so-called metal tapes, yet in most practical uses virtually equivalent to their performance.

Talking to the originators of the new tape, one gains the impression that they were inspired, at least in part, by friendly rivalries within Sony's corporate empire. Traditionally, Sony tape has stood in the shadow of the company's more eye-catching developments, such as Trinitron TV, the Betamax, and its excellent stereo components. The new tape represents a bid for a bit of the limelight and is — to borrow a phrase from my college yearbook — most likely to succeed. © 1982 The New York Times Co. Reprinted by permission. ■

WE THOUGHT THIS NEW YORK TIMES REVIEW WAS FIT TO PRINT.



We're less happy with the metering system, which consists of two large averaging meters supplemented by a single column of three peak-reading LEDs. The LEDs are considerably more useful than the meters, which are too slow to give a true indication of what's going onto the tape. We would have preferred full-scale peak-reading meters. Our only other gripe is with the recording-level control: It is so small as to make smooth, simultaneous rotation of the independent, unclutched sections for the two channels a real challenge. This makes setting levels more difficult than necessary, and it makes creating smooth fades without loss of channel balance almost impossible.

For its tests, Diversified Science Laboratories used tapes recommended by the manufacturer: Maxell XL-IIS as the Type 2 ferricobalt, Denon DXM as the Type 4 metal, and Denon DX-3 as the Type 1 ferric. However, the Flat Tuning System (which DSL used before taking its measurements) makes tape selection relatively uncritical.

The playback response curves droop somewhat at the high end, apparently because of an azimuth disagreement between the Denon's playback head and the TDK test tape. Record/play curves without noise reduction or with Dolby B are consistently flat, however—no doubt at least partly because of the FTS tape-matching system. The Dolby C curves are equally consistent but show a bump of a few dB centered on 4 kHz that suggests a level-matching error. As we have noted before, our response curves are run at an almost worst-case level for Dolby tracking. Whether because of that, or because the

error is not present in our audition sample, the mistracking does not seem to be audible. Indeed, with Dolby C engaged, we have been able to make recordings that are virtually indistinguishable from the originals.

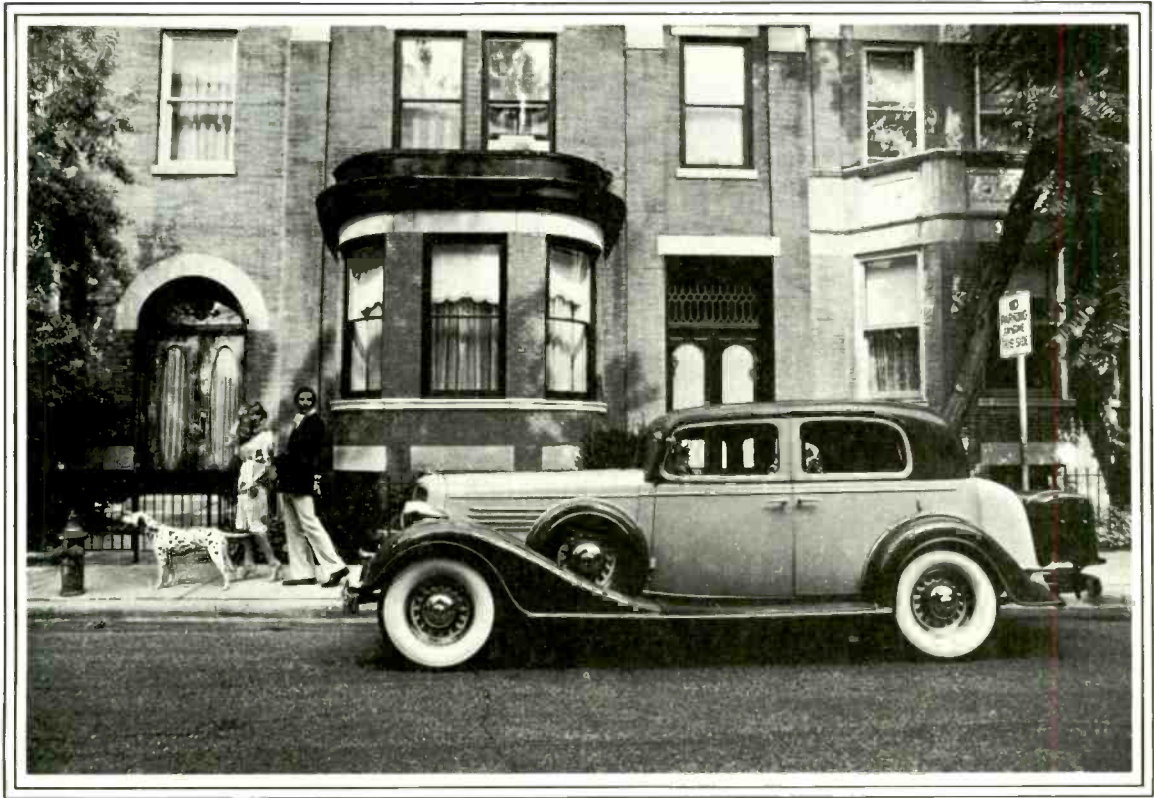
Curiously, the erasure figures for Type II and Type IV tape are identical—perhaps a bit below average for the former and a bit above for the latter. The noise data are consistently good and clearly show the benefits of Dolby C. (A-weighted figures, such as we have used in past reports, are about a dB better without noise reduction, about the same with Dolby B, and about 2 dB worse with Dolby C than the comparable CCIR/ARM-weighted figures in our table.) And not surprisingly, given the design emphasis on stable tape transport, DSL's flutter reading turned out to be particularly fine.

All in all, the DR-F7 is an attractively styled, conservatively designed deck that performs well in all important respects. It does not have as many convenience features as some other recent machines, but that comes across more as an absence of clutter than as a loss of functionality. There are provisions for an optional wired remote-control unit and for unattended recording or timed playback with an optional external timer—probably the most frequently desired conveniences. And apart from some awkwardness in setting recording levels, find the DR-F7 delightfully easy to operate: The transport controls are perhaps the best thought out we have encountered, and the FTS tape-matching system takes only a scant few seconds to do its job (less time, in fact, than any other such system we can recall having encountered).

Circle 94 on Reader-Service Card

**Report Policy:** Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by Diversified Science Laboratories. The choice of equipment to be tested rests with the editors of HIGH FIDELITY. Samples normally are supplied on loan from the manufacturer. Manufacturers are not permitted to read

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Feather touch push

buttons on the RE518 control refinements like equalization for normal or metal and chrome tape playback. And conveniences such as electronic pre-set tuning, seek, scan, and digital readouts.

The RE518 has a universal sized chassis that fits most American and European

cars, as well as many other imports. So even if you don't own a 1934 Buick Club Sedan, with a Jensen RE518 you can have a classic.

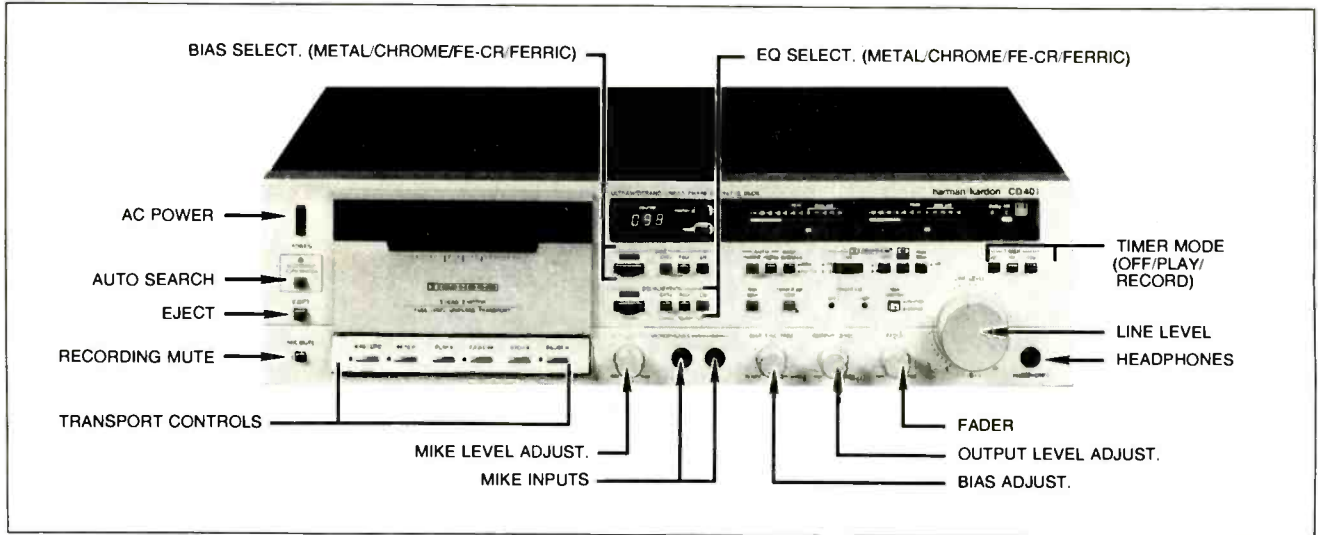


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CAR AUDIO

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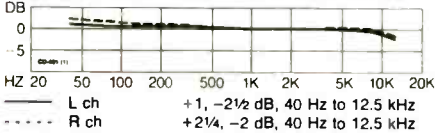
Circle 49 on Reader-Service Card



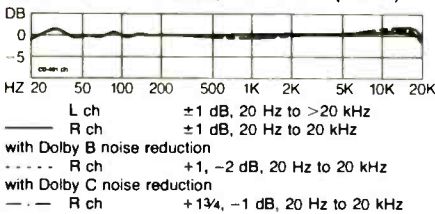
## Harman Kardon Vindicates HX

Harman Kardon CD-401 cassette deck, with Dolby B and C noise reduction and HX Professional headroom extension. Dimensions: 17½ by 4½ inches (front panel), 12½ inches deep plus clearance for controls and connections. Price: \$750. Warranty: "limited," one year parts and labor. Manufacturer: made in Japan for Harman Kardon, Inc., 240 Crossways Park West, Woodbury, N.Y. 11797.

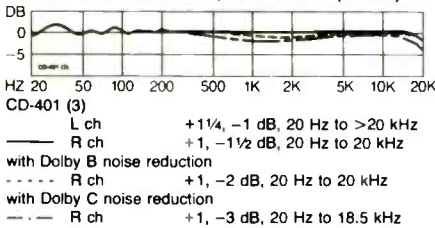
PLAYBACK RESPONSE (TDK test tape; -20 dB DIN)



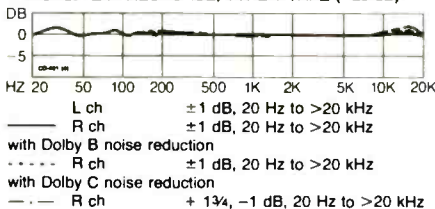
RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)\*



RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)\*



RECORD/PLAY RESPONSE, TYPE 1 TAPE (-20 dB)\*



THE LAST TIME WE TESTED a Harman Kardon deck (August 1980), it was the hk-705, whose premiere feature was Dolby Laboratories' then-new HX circuit for extending high-frequency headroom. We were, however, disappointed by the performance of HX in its appointed role. Depending on how you looked at the results, it could be said to make high-frequency headroom worse, rather than better—a finding that tests of other HX decks consistently bore out. We are, then, very happy to report that the CD-401 is a big improvement and that the new HX Pro circuit (actually developed by Bang & Olufsen in conjunction with Dolby Labs) succeeds brilliantly where its predecessor didn't.

Before getting into that, however, let's take a broader look. The CD-401 is at the top of Harman Kardon's new line of wide-band cassette decks, even the humblest of which boasts response to or beyond 20 kHz (thanks in part to playback equalization that reaches well beyond 20 kHz and to an unusually high bias frequency). In addition, the 401 has separate recording and playback head elements that enable more extended high-frequency response and monitoring from the tape while you record. The latter, in turn, simplifies the tape-matching "fine-tuning" adjustments on the 401. In addition to separate bias and equalization selectors for the four standard tape groups (Types 1 through 4), there are separate screwdriver adjustments for sensitivity (Dolby tracking) in each channel and a bias knob with a center detent at the "normal" position. There are two spring-loaded oscillator buttons. The one for the sensitivity adjustment delivers a Dolby-level tone to both channels, while the bias-adjustment oscillator puts a midrange tone into the left channel and a high-frequency tone into the right. The bias adjustment is correct when the meters for both channels read the same while you're monitoring the bias tones from the tape.

The LED signal displays ("meters") are calibrated from -40 to +8 dB, with

LEDs at 2-dB intervals from -5 to +5, plus one at the 0-dB point. The marked Dolby reference level at 0 dB is, in reality, more than 2 dB above the actual Dolby reference level (250 nanowebers per meter, as opposed to the correct 200). Because the displays for the two channels are strung out in one long line, rather than stacked in parallel, stereo balance is somewhat harder to read than average, but the metering is otherwise quite good. It includes one unusual feature: two response-speed options, slow and normal. (The panel labeling refers to meter "ballistics," though in a system with no moving mass the word is metaphoric.) This evidently is a response to the occasional complaint (not ours, incidentally) that the lighted displays "flicker too fast for you to see properly." The difference between the two modes is, subjectively, only marginal. The display's behavior in SLOW can hardly be called sluggish, though the DSL data show it to be twice as slow to decay and more than three times as slow to illuminate, as compared to NORMAL.

There are a number of other front-panel features, all of them reasonably representative of their respective types: recording mute, an electronic selection search, memory-stop and memory-play rewind, and timer recording and play functions. A nice touch is the FADER—a second recording-level control that normally is left at MAX to enable fade-out and fade-in without disturbing the setting of the main control. On the back panel is a jack for remote control. Harman Kardon offers no model of its own, but tells us that many remotes from Japanese manufacturers (all of those from Nakamichi, for instance) can be used with this socket. And the back panel has two pairs of line inputs: LOW, which is compatible with normal component "line levels," and HIGH, which the manual suggests for dubbing from equipment, such as portable radio/recorder units, with relatively high output.

For the record, the lab measured the



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EXTRAORDINARY**  
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many benefits.

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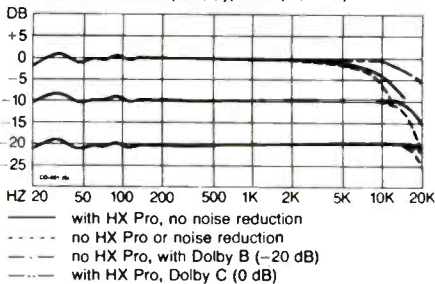
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# AUDIO New Equipment Reports

HX PRO RESPONSE (R/P; Type 2 tape; R ch)



S/N RATIO (re DIN 0 dB; R/P; CCIR/ARM-weighted)	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	55¼ dB	54½ dB	52½ dB
with Dolby B	65½ dB	64¼ dB	62¼ dB
with Dolby C	73¼ dB	72½ dB	70½ dB

INDICATOR READING FOR DIN 0 DB (315 Hz)*	Type 2 tape	Type 4 tape	Type 1 tape
	0 dB (with 1.1% distortion)	0 dB (with 0.82% distortion)	0 dB (with 0.92% distortion)

INDICATOR READING FOR 3% DISTORTION (315 Hz)*	Type 2 or 1 tapes	Type 4 tape
		+3 dB
		+5 dB

DISTORTION (third harmonic; at -10 dB DIN)*	Type 2 tape	Type 4 tape	Type 1 tape
	≤ 1.1%, 50 Hz to 5 kHz	≤ 0.69%, 50 Hz to 5 kHz	≤ 0.85%, 50 Hz to 5 kHz

ERASURE (100 Hz)	Type 2 tape	Type 4 tape
	74 dB	61¾ dB

CHANNEL SEPARATION (315 Hz)	Type 2 or 1 tapes	Type 4 tape
		+3 dB
		+5 dB

INDICATOR "BALLISTICS"	"normal"	"slow"
Response time	12 msec	41 msec
Decay time	350 msec	700 msec
Overshoot	0 dB	0 dB

SPEED ACCURACY	1.2% fast, 105-127 VAC
----------------	------------------------

FLUTTER (ANSI/IEEE weighted peak; R/P)	±0.11%
--	--------

SENSITIVITY (re DIN 0 dB; 315 Hz)	"low" line input	"high" line input	mike input
	76 mV	300 mV	0.90 mV

MIKE INPUT OVERLOAD (clipping)	29 mV
--------------------------------	-------

MAX. OUTPUT (from DIN 0 dB)	2.1 V
-----------------------------	-------

\*Data with HX Pro engaged; see text.

deck with three tape formulations suggested by Harman Kardon: TDK SA ferricobalt for Type 2, TDK MA metal for Type 4, and Maxell UDXL-1 ferric for Type 1. Since both bias and sensitivity can be optimized on the 401, however, the tape choice is not nearly as critical as it would be on a non-adjustable deck. And DSL did perform the matching adjustments before taking its readings.

None of the data from Diversified Science Laboratories falls below the "good" level, but the frequency response curves are both particularly fine and particularly interesting. Though our usual practice is to look for the "-3-dB frequencies" in deriving our numerical characterizations of the lab's curves, these plots are too flat for that. In other words, with the CD-401 the real point of interest is not how far the curves reach, but the remarkable narrowness of their variation, in dB, over the audible band. This is most important in a deck equipped with a noise reduction system (especially one as potent as Dolby C) because the circuit's expander action in playback exaggerates whatever deviations already exist (particularly in the presence of sweep tones, such as are used to generate our response curves). The 401's Dolby C curves may not seem especially noteworthy when compared with those for Dolby B or no noise reduction, but they are in fact excellent—among the smoothest we have obtained to date.

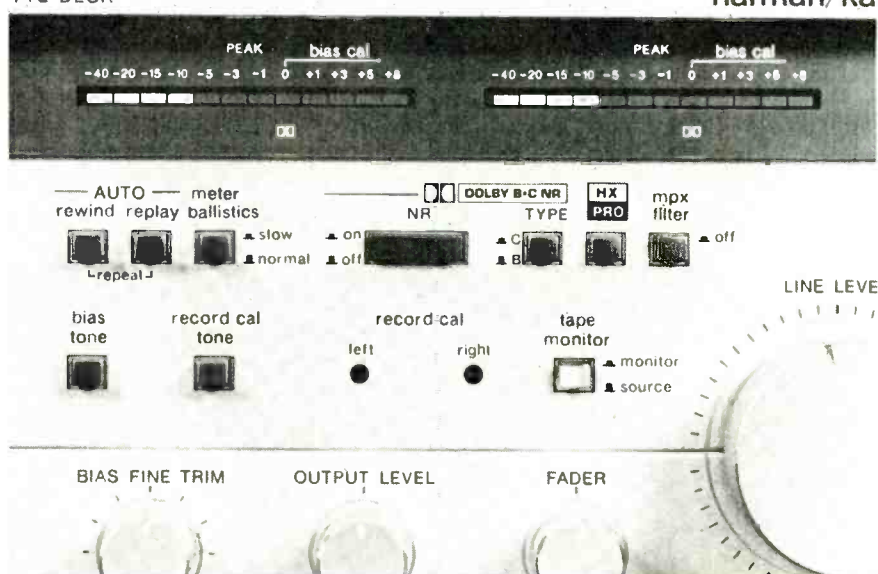
Partly, this is a result of the HX Pro circuit, and we have added a special graph to demonstrate the point. The solid lines represent record/play response with HX Pro at three recording levels: DIN 0, -10, and -20 dB. (This last is the level used for our regular record/play response curves; only the calibration is different.) The dotted curves were made at the same three levels without HX Pro and represent better-than-average results for such a "family of

curves." But those made with HX Pro are outstanding—and would have been utterly incredible before the headroom-extension idea came along. Remember that these high-level curves can't be "read" in quite the same way as normal response curves. The downturn at high frequencies, where response is influenced by tape saturation, represents not only a weakening of the perceptible signal at these frequencies, but usually audible compression and other forms of distortion as well. (This is why we normally show tape response only at the lower level.) If you compare the Dolby B curve at -20 dB, which droops quickly above 15 kHz without HX Pro in this graph, with that in the second graph (Type 2 tape, with HX Pro), you can see what is lost by not using the HX feature, even at this low a recording level. And when you look at the high-level Dolby C curve (dash double-dot, in the last graph), you can appreciate what is accomplished by this winning combination: The freedom from compression is really remarkable.

Consequently, we think owners of the 401 would be ill-advised ever to record without HX Pro. We've therefore chosen to show the data with the switch on for the most part, though DSL measured key parameters both ways. With the switch off, measurements for distortion were very similar, but averaged a hair poorer than they did with the switch on.

We are not as enthusiastic about a few other aspects of the CD-401 (unrelated to performance), but they are far less important. The owner's manual, in particular, is well below Harman Kardon's usual standard. The front panel, too, is not as well thought-out as we would have expected. The Dolby-function pilot LEDs, for example, are not near their associated switches, but right above the timer-switch buttons; we kept reaching for the latter when we wanted

TTE DECK



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intimidation out of high-performance hi-fi. And put a whole lot more human engineering in. While adding 15 superbly crafted new components that give you just a little more for your money.

But if you're an adult, you're not about to settle for less.

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For example, take the all-new AKAI GX-F71 cassette deck. Just for openers, you get Dolby\* B and C noise reduction and AKAI's famous Super GX Combo Heads. Plus the convenience of a built-in microcomputer that automatically calibrates bias, equalization and sensitivity for any tape used, Auto-Fade, Instant Program Locating System and Intro-Scan that plays a 10-second preview of every program selection.

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With the AKAI AP-L95 you can always count on a well-rounded performance. And for obvious reasons. A built-in micro-computer makes it fully

programmable. A linear-tracking tone arm virtually eliminates normal tracking error. And a superb quartz lock, direct drive motor keeps wow & flutter to an inaudible minimum.

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AKAI's magnificent GX-747 represents that latest breakthrough in open-reel technology. Because it's one of the world's first decks designed to handle the new "EE" (Extra Efficient) tapes.

And that means you get the equiva-

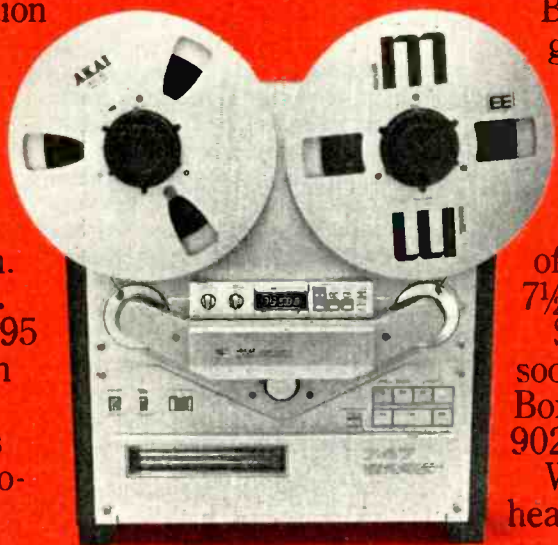


lent of 7½-ips performance at a much more economical speed of just 3¾ ips.

But that's not all. You also get: four Super GX Heads, two erase heads, Auto-Reverse Playback/Record, Auto-Mute and an unheard of frequency response of 25-33,000 Hz ± 3dB at 7½-ips.

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# AKAI

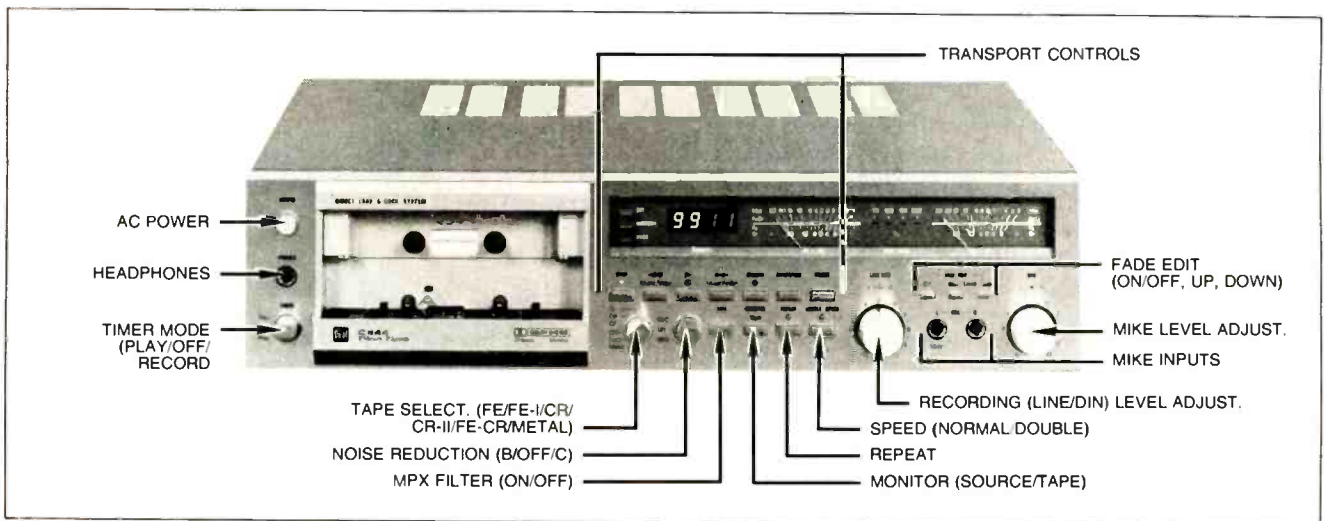
Hi-Fi & Video. // // //

to switch the noise reduction. The tape-selector switches (however welcome their unusual versatility) add an element of clutter by presenting an oversize button, separated from the rest, for each metal-tape choice. Since there are separate bias and EQ buttons, those for ferrichrome (if that tape group must be allowed for at all, now that its star seems to be falling) could have been omitted: One could simply switch the bias to LN (ferric) and the EQ to CrO<sub>2</sub> (chrome). Finally, the sensitivity adjustment is rather fussy. You must use a jeweler's screwdriver (whose tiny blade easily misses its target) to reach the adjustment slot, which is a good 1/4-inch behind the panel surface.

The special front-panel emphasis on metal tape is curious, since the CD-401 largely renders metal tape obsolete. It can make ferric tapes recorded with HX Pro and

Dolby C that run rings around metal tapes recorded with Dolby B (which sound considerably noisier) and that are not perceptibly inferior to metal tapes also recorded with HX Pro and Dolby C. Of course, you can't get best results with bargain ferrics, but even the best of the Type 1 group are no more than about half the price of the metals. At the present state of the art, in our opinion, metal tape is a sensible choice only when you want to make the very best of moderately good equipment (bearing in mind that a deck should be better than moderately good if it is to make the most of Dolby C). That the CD-401 is "better than moderately good" is beyond question. It is a strikingly fine performer that demonstrates once again Harman Kardon's uncanny knack for coming up with ideas that are well out ahead of the pack.

Circle 99 on Reader-Service Card

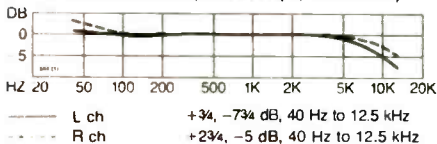


## Dual-Speed Convenience from Dual

Dual Model 844 two-speed (1 7/8 and 3 3/4 ips) cassette deck, with Dolby B and C noise reduction. Dimensions: 17 1/4 by 4 1/2 inches (front panel), 13 1/4 inches deep plus clearance for controls and connections. Price: \$700; optional wireless remote control, \$130. Warranty: "limited," one year parts and service. Manufacturer: Made in Japan for Dual of West Germany; U.S. distributor: United Audio Products, 120 S. Columbus Ave., Mount Vernon, N.Y. 10553.

At 1 7/8 ips

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



THAT ALL THE C-844'S CAPABILITIES could be packed into so uncluttered and unimposing a package is a tribute to the ingenuity of Dual's design team. But then, Dual's products have always reflected a strong commitment to ease of use for the customer, whether seasoned audiophile or neophyte. Judging from the C-844's particular features, however, we'd say that this deck is intended more for serious recordists than for those interested solely in convenience.

Chief among the "audiophile" features are Dolby C noise reduction (in addition to the usual Dolby B) and a double-speed button for switching from the standard speed of 1 7/8 ips to 3 3/4 ips for improved high-frequency response and headroom. Separate recording-level controls are provided for the mike and line inputs. Mixing of signals from these inputs is possible simply by adjusting the controls to the desired level. The manual also gives instructions on how to add echo to microphone recordings by connecting the line outputs directly to the line inputs and adjusting the line input level for the desired amount of echo. This set-up simply sends the signal from the

playback head back through the record electronics to the record head, so that it is rerecorded slightly later and at a lower level. The C-844's built-in mike preamp accepts either stereo or mono input. The mono connection is made by using only the left mike-input jack.

Another useful feature is what Dual calls fade edit, which operates in playback and is controlled by three pushbuttons above the mike-input jacks. With it you can create smooth fades (to remove unwanted noises or announcers' voices, for example) in recordings you have already made. Fade-outs are introduced by holding down the "on" button (far left) and pressing the first "level" button (center). The fade takes place smoothly and automatically over a few seconds, and the tape continues to be erased until you release ON or until you press the second LEVEL (right), which will generate a smooth fade-in. However, since there is nothing left on the tape to monitor before a fade-in, you must decide in advance where you want to start running the level back up and then use the tape counter as a guide.



## Because Sony redesigned the car stereo, the auto makers don't have to redesign the car.

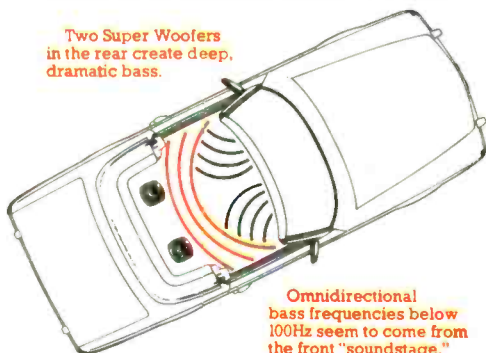
The interior of an automobile is designed with a lot of purposes in mind. Unfortunately, great stereo sound reproduction isn't one of them.

Fortunately, Sony did more than just tackle this problem. They actually solved it. By designing a stereo system that meets the acoustical challenges inherent in a car.

### INTRODUCING THE SONY SOUNDFIELD™ SYSTEM.

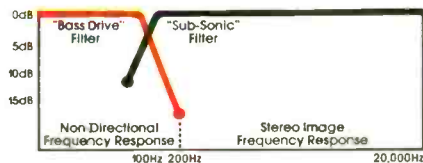
As the very name of our system indicates, we started with the acoustical sound field itself by treating the entire front of the car as a stage. The very directional high-end and mid-range frequencies emanate from this stage in an accurate stereo image.

Two Super Woofers in the rear create deep, dramatic bass.



Omnidirectional bass frequencies below 100Hz seem to come from the front "soundstage."

So the highs come across clear and soaring. The midrange, natural and accurate.



The bass frequencies below 100Hz actually are directed from the rear of the car, where the Super Woofers are placed. However, since these frequencies are omnidirectional, they seem to be coming from the proper "stage" location.

The result is richer, fuller, and more dramatic bass.

### CONVERT WITH COMPONENTS.

The optimum SoundField System consists of a powerful amplifier (XM-120) driving a pair of 8" Super Woofers (XS-L20), along with a medium-powered amplifier driving the front speakers. This means full-range speakers can be used without risk of modulation distortion.

But you can begin to enjoy the

SoundField System simply by adding one of our lower powered amplifiers and the Super Woofers to the car stereo you already have. Then you can slowly build up your system, adding a higher powered amplifier, more speakers, and an equalizer.

### A SOUND THAT TAKES A BACKSEAT TO NONE.

Although the technology of the Sony SoundField System is complex, the reason for it is simple.

It will give you high dB levels with very low distortion, extremely precise stereo imaging, and an amazingly broad frequency response. In addition, you'll be pleasantly surprised at just how easily a SoundField System can be installed in your car.

So come into your local Sony dealer and ask to hear the next generation in autosound systems.

One listen and you'll know why the auto makers don't have to redesign the car.

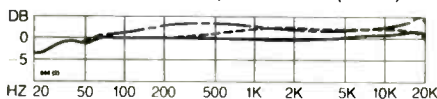
**SONY**  
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© 1982 Sony Corporation of America. Sony and SoundField are trademarks of Sony Corporation. Models shown: XS-L20 Super Woofers, XS-301 Front Speakers, XR-55 In-dash Cassette/Receiver, XM-E7 Graphic Equalizer/Amplifier and XM-120 Amplifier.



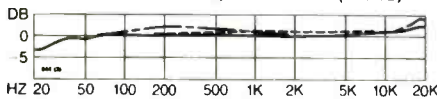
# AUDIO New Equipment Reports

## RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)



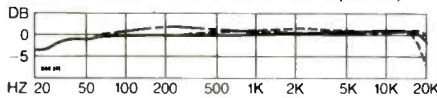
L ch +1, -3 dB, 27 Hz to >20 kHz  
 R ch +1½, -3 dB, 25 Hz to >20 kHz  
 with Dolby B noise reduction  
 R ch +2, -3 dB, 25 Hz to >20 kHz  
 with Dolby C noise reduction  
 R ch +5, -3 dB, 25 Hz to >20 kHz

## RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)



L ch +2, -3 dB, 27 Hz to >20 kHz  
 R ch +2, -3 dB, 25 Hz to >20 kHz  
 with Dolby B noise reduction  
 R ch +3¼, -3 dB, 25 Hz to >20 kHz  
 with Dolby C noise reduction  
 R ch +3¾, -3 dB, 25 Hz to >20 kHz

## RECORD/PLAY RESPONSE, TYPE 1 TAPE (-20 dB)



L ch +3¼, -3 dB, 27 Hz to >20 kHz  
 R ch +1, -3 dB, 26 Hz to >20 kHz  
 with Dolby B noise reduction  
 R ch +1¼, -3 dB, 26 Hz to 17.5 kHz  
 with Dolby C noise reduction  
 R ch +1½, -3 dB, 26 Hz to >20 kHz

## S/N RATIO (re DIN 0 dB; R/P; CCIR/ARM-weighted)

	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	55 dB	53¼ dB	52 dB
with Dolby B	64½ dB	63 dB	62 dB
with Dolby C	71¾ dB	71 dB	70¼ dB

## INDICATOR READING FOR DIN 0 DB (315 Hz)

Type 2 tape	-½ dB (with 1.5% distortion)
Type 4 tape	+1½ dB (with 1.3% distortion)
Type 1 tape	+1¾ dB (with 0.90% distortion)

## INDICATOR READING FOR 3% DISTORTION (315 Hz)

Type 2 tape	+2 dB
Type 4 or 1 tape	+5½ dB

## DISTORTION (third harmonic; at -10 dB DIN)

Type 2 tape	≤ 0.95%, 50 Hz to 5 kHz
Type 4 tape	≤ 0.53%, 50 Hz to 5 kHz
Type 1 tape	≤ 0.89%, 50 Hz to 5 kHz

ERASURE (100 Hz) ≥ 66½ dB

CHANNEL SEPARATION (315 Hz) 47½ dB

## INDICATOR "BALLISTICS"

Response time	180 msec
Decay time	180 msec
Overshoot	2½-3 dB

## SPEED ACCURACY

no measurable error, 105-127 VAC

## FLUTTER (ANSI/IEEE weighted peak; R/P)

±0.10%

## SENSITIVITY (re DIN 0 dB; 315 Hz)

line input	72 mV
mike input	0.40 mV

MIKE INPUT OVERLOAD (clipping) 190 mV

OUTPUT (from DIN 0 dB) 0.48 V



Among the C-844's unconventional features are a six-position tape-selector switch, a double-speed (3¾ ips) option, and an elaborate program-search system called Music Finder.

Like other Dual decks of recent vintage, the C-844 includes the company's Direct Load and Lock system. When power is turned on, a plastic shield that protects the heads and drive mechanism swings back, leaving the shallow cassette well completely open and ready to receive a cassette. So, whenever you insert a cassette with the mechanism preset for play, the transport will start automatically when you withdraw your hand. You can remove a tape while the deck is in any mode: A photoelectric system disengages the transport as your hand reaches the cassette.

If the C-844 is in PLAY when you remove a cassette, it will return to PLAY immediately after you insert another. This convenience does not extend to the recording mode, however: The deck goes to STOP when the tape is removed (to prevent accidental erasure of anything that might be on the next cassette you insert), requiring that you restart recording manually every time you change tapes. The procedure is still faster than average, however, especially with Dual's unusual recording-interlock system: Pressing RECORD automatically engages both the transport and the PAUSE. The latter is released when you press play, reducing what normally is a three-step operation to only two steps.

The transport controls perform some other neat tricks, as well. When REPEAT is engaged in the play mode, the deck automatically rewinds the tape when it ends and replays it from the beginning. If the memory switch next to the tape counter has been depressed, replay is from the point where the counter reads zero or from a point previously marked by pressing the "set" button, which is just above the MEMORY. MEMORY and SET also play a role in the C-844's Music Finder system: With the deck in STOP and MEMORY engaged, pressing FAST FORWARD or REWIND causes the tape to wind

either to counter zero or to a point flagged by the SET. If the deck is in the playback mode, pressing REWIND or FAST FORWARD causes the tape to wind in the selected direction to the next gap in the music, at which point the deck switches itself back into PLAY. And if the deck is in RECORD, pressing REWIND will cause the deck to wind back to the last gap in the music and stop. Should you desire a gap in the program where none naturally exists, you can add a four-second blank by pressing AUTO-SPACE.

The C-844 also has a headphone jack (of limited utility, since there is no output-level control) for monitoring and a switch that can be used to set the deck for automatic recording or playback in conjunction with an external timer. And there is a jack on the rear panel for connection to the receiver of an optional wireless remote-control system.

We were surprised by the C-844's metering system, which is something of a throwback, incorporating mechanical averaging meters (which are calibrated from -30 to +8 dB) and a single set of four equalized, peak-indicating LEDs. The meters, which read either the output from the tape or the input signal, depending on the setting of the monitor switch, are rather sluggish and therefore not very useful. The LEDs (which always read the input signal) are quite fast, however. The equalization applied to the LED circuit varies—as it should—according to the tape speed, the setting of the noise reduction switch, and the position of the tape-selector switch. We find the C-844's LEDs much more informative than its meters and wish that Dual had seen fit to incorporate the complete equalized peak-reading bar-meter system used in the C-828 (test report, August 1981).

Although the C-844's tape-selector switch has six positions (one Type 4 metal,

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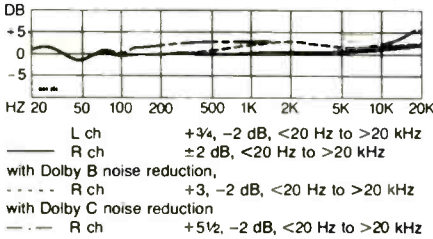
ADDRESS \_\_\_\_\_ APT. \_\_\_\_\_

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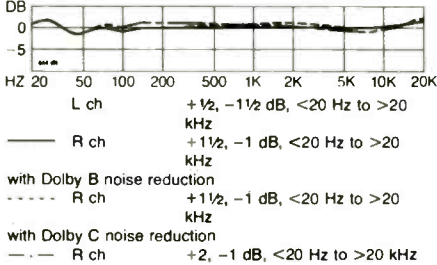
# AUDIO New Equipment Reports

At 3¾ ips

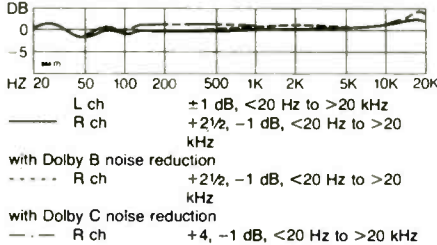
RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)



RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)



RECORD/PLAY RESPONSE, TYPE 1 TAPE (-20 dB)



one Type 3 ferrichrome, two Type 1 ferric, and two Type 2 chrome or chrome-equivalent), Diversified Science Laboratories used only three for its tests: Cr II with TDK SA-X, Metal with TDK MA, and Fe I with TDK OD. Overall performance proved very good, especially at the high speed, which yielded exceptionally low flutter and extended high-frequency response. The rolloff at the high end of the playback response curve (taken at 1 7/8 ips) probably results from azimuth disagreement between the Dual's playback head and the TDK test tape. At both speeds, the record/play curves are generally quite flat without noise reduction. With Dolby noise reduction (especially Dolby C) engaged, they show evidence of mistracking induced by Dolby recording-level calibration errors. This, however, could be corrected by a service technician (or a user with suitable test equipment). In

any case, the mistracking is far less audible than our almost-worst-case curves would suggest.

Two other things about the C-844 stand out. One is the erasure figure for metal tape, which is unusually good—better, oddly enough, than that for Type 2 tape, which is a bit lower than average. The other is the mike input's admirably high 190-mV overload ceiling.

But mainly, the C-844 is notable for being a rather self-effacing unit—which is to say, it doesn't get in the way of a good recording. We routinely found it easy to make recordings nearly indistinguishable from the source. Moreover, the convenience features seem well thought out—especially the Music Finder system, which greatly simplifies recueing from a false start or a botched take in recording.

**Circle 95 on Reader-Service Card**

S/N RATIO (re DIN 0 dB; R/P; CCIR/ARM-weighted)

	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	57¼ dB	55½ dB	57¼ dB
with Dolby B	66½ dB	65 dB	66¾ dB
with Dolby C	73¼ dB	72¾ dB	73¾ dB

INDICATOR READING FOR DIN 0 DB (630 Hz)

Type 2 tape	0 dB (with 1.6% distortion)
Type 4 tape	+2 dB (with 1.2% distortion)
Type 1 tape	+2 dB (with 0.76% distortion)

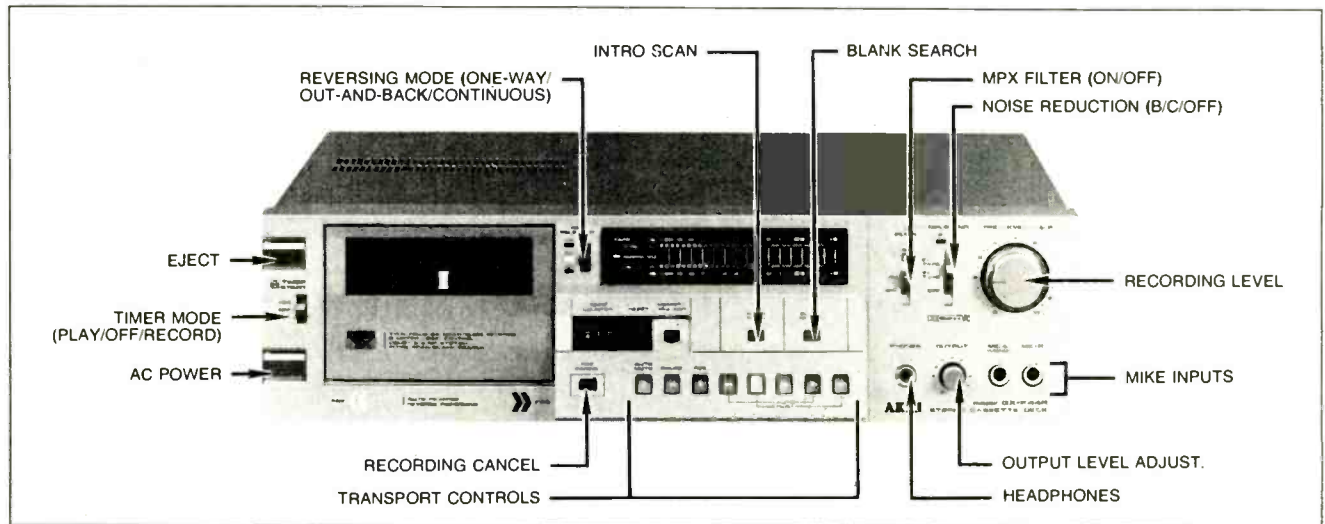
INDICATOR READING FOR 3% DISTORTION (630 Hz)

Type 2 tape	+2 dB
Type 4 or 1 tape	+5¾ dB

ERASURE (100 Hz) ≥ 62 dB

SPEED ACCURACY 0.5% slow, 105-127 VAC

FLUTTER (ANSI/IEEC weighted peak; R/P) ±0.049%



## Akai's Quick-Change Bidirectional

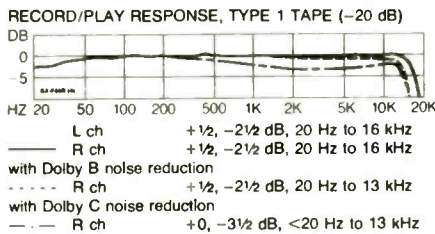
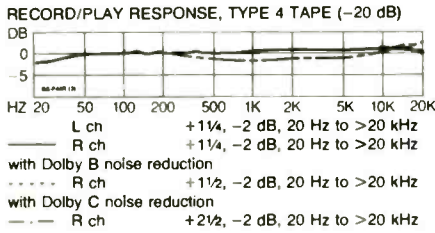
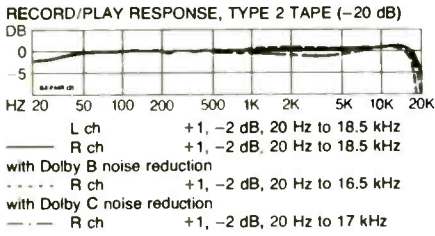
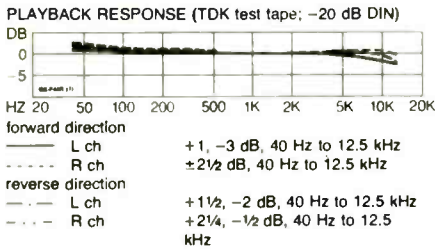
Akai GX-F44R cassette deck, with bidirectional record/play, Dolby B and C noise reduction. Dimensions: 14¼ by 4½ inches (front panel), 11¾ inches deep plus clearance for controls and connections. Price: \$475; optional Model RC-21 remote control, \$40. Warranty: "Unlimited," one year parts and labor. Manufacturer: Akai Electric Co., Ltd., Japan; U.S. distributor: Akai America, Ltd., 800 W. Artesia Blvd., Compton, Calif. 90224.

NO COMPANY HAS BEEN MORE single-minded about creating bidirectional cassette equipment than Akai. During the developmental years, it often pursued more than one route toward this goal simultaneously and in any given year might display as many as a half-dozen bidirectional prototypes of one sort or another. The GX-44R version takes an elegantly simple approach. A single combination (record/play) head is flanked by two erase heads, one for each direction of tape travel. The record/play head is shifted from one pair of tracks to the other, without rotation, when direction is

changed. This method also requires an electrical switching of channels (because the left-channel headgap in one direction becomes the right-channel headgap in the opposite direction), but the simple lateral shift of the head minimizes the possibility of head misalignment as the positioning parts begin to wear. At the same time, of course, you are spared the cost of multiple fixed heads or an elaborate four-channel fixed head—the common alternatives to a movable head.

The design depends on headgaps engineered to double for both recording and





**S/N RATIO (re DIN 0 dB; R/P; CCIR/ARM-weighted)**

	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	54 1/4 dB	53 1/4 dB	54 dB
with Dolby B	64 dB	63 dB	63 3/4 dB
with Dolby C	72 1/4 dB	71 1/4 dB	71 3/4 dB

**INDICATOR READING FOR DIN 0 DB (315 Hz)**

Type 2 tape	+4 dB (with 1.3% distortion)
Type 4 tape	+4 dB (with 2.0% distortion)
Type 1 tape	+4 dB (with 0.61% distortion)

**INDICATOR READING FOR 3% DISTORTION (315 Hz)**

Type 2, 4, & 1 tapes	+6 dB
----------------------	-------

**DISTORTION (third harmonic; at -10 dB DIN)**

Type 2 tape	≤ 0.65%, 50 Hz to 5 kHz
Type 4 tape	≤ 0.64%, 50 Hz to 5 kHz
Type 1 tape	≤ 0.38%, 50 Hz to 5 kHz

**ERASURE (100 Hz)**

Type 2 tape	70 3/4 dB
Type 4 tape	56 1/2 dB

**CHANNEL SEPARATION (315 Hz)**

	32 dB
--	-------

**INDICATOR "BALLISTICS"**

Response time	83 msec
Decay time	350 msec
Overshoot	0 dB

**SPEED ACCURACY**

forward	0.2% slow at 105 VAC; 0.1% slow at 120 and 127 VAC
reverse	0.5% fast at 105, 0.6% fast at 120, 0.7% fast at 127 VAC

**FLUTTER (ANSI/IEEE weighted peak; R/P)**

	±0.09%
--	--------

playback use. (Had there been separate gaps for the two functions, a rotating-head design would have been required to keep the recording elements "upstream" of those for playback in both transport directions.) Thus, no monitoring is possible during recording (it is the source signal that appears at the output terminals), but a monitoring feature might be out of place in what is very frankly conceived as a convenience deck. There is no tape-type selector, for example; tape switching is entirely automatic, in response to the keywells in the cassette shell. The choice is indicated by one of three LEDs next to the meters: CR0<sub>2</sub>, NORMAL, or METAL—for Type 2, Type 1, and Type 4 tapes, respectively. Ferrichrome cassettes are treated as Type 1 ferrics, and some Type 4 cassettes (particularly those of early manufacture) are biased as Type 2 tapes. Such metal cassettes, however, are fast being replaced by Type 4 tapes with the full complement of keywells, and the ferrichromes, which have never struck us as one of tape technology's finer inspirations, have largely fallen from favor.

There are some other convenience features that should be noted. What Akai calls INTRO SCAN samples the first ten seconds of each selection on the tape (assuming the presence of the usual four-second-minimum interselection spacing). The nice thing about such a feature is that if it stumbles (because there is a quiet passage that the mechanism mistakes for a space, for example), it doesn't make much difference; in the older systems that require you to punch up the number of the selection you want, a mistake in entering the digits (or in your list of the tape's contents) can leave you floundering. There is also a BLANK SEARCH, which finds an unrecorded portion of the tape and switches to the recording mode, restrained by the PAUSE. If you've begun recording and goof it up, simply press RECORDING CANCEL and the transport will cue back to the last starting point, ready to rerecord over the mistake.

The AUTO MUTE (one of the transport-control buttons) is unusual in that its four-second programmed duration (for creating interselection blanks) cannot be overridden by holding the button in for longer periods. Other features are fairly conventional. The reversing-mode switch, for example, permits recording one way or out-and-back, but continuous reversing is possible only in playback.

One touch we wish were more common is the automatic mono switching of the left mike input when there is no plug in the right input. A convenience for some users with European equipment is the DIN input/

output socket on the back panel. Another multipin socket accepts an optional remote-control unit (which we did not test).

The manual, which is better than average (particularly for one in six languages), lists C-60s of TDK SA ferricobalt, TDK MA metal, and Maxell UD ferric as the reference tapes in, respectively, Type 2, Type 4, and Type 1. We have made C-90s our standard of comparison because of their overwhelming popularity with recordists, but otherwise Diversified Science Laboratories followed Akai's recommendation in making the measurements.

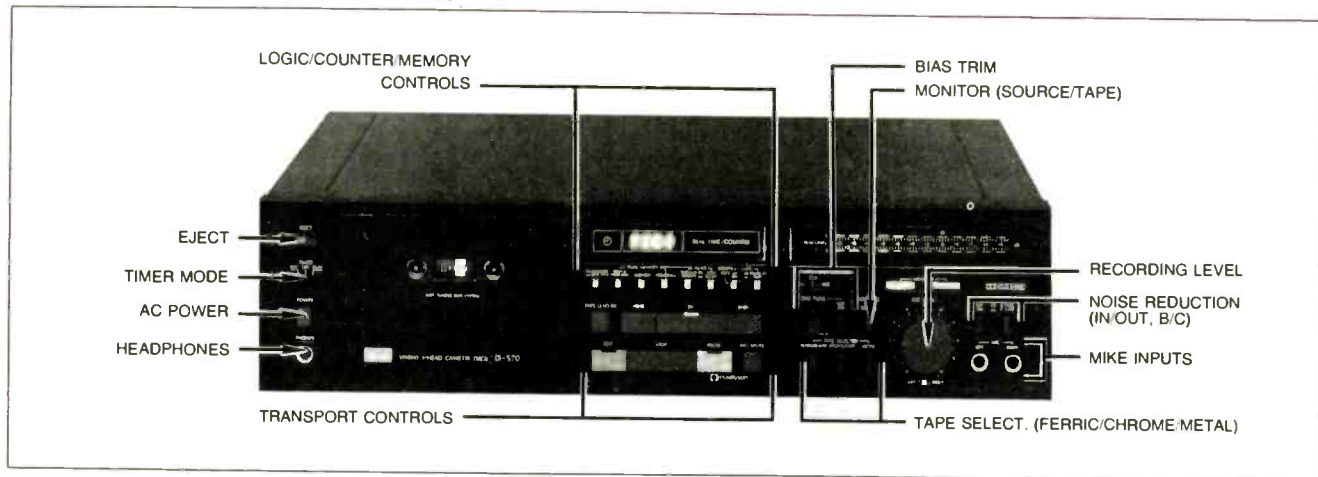
The downturn at the top end of the playback response curves presumably should be attributed to a minor difference in azimuth between the TDK test tape and the Akai's record/playback head. In any event, it is quite mild, and the response elsewhere is very even—particularly for a reversing deck, in which some compromise is the general rule. The record/play curves strike us much the same way: We wouldn't consider them state of the art in a unidirectional model, but they're unusually good for a reversing deck. Signal-to-noise figures are quite good—certainly typical of modern cassette equipment. (A-weighted values, incidentally, are almost identical with Dolby B, slightly "better" than the CCIR/ARM values shown here with no noise reduction, and slightly "worse" with Dolby C. The noise itself obviously is the same no matter how it is measured; we offer these specifics only for comparison with past reports, which used A-weighting.) Erasure, though excellent with the Type 2 tape, is merely acceptable with metal; if you're very fussy, you should bulk-erase metal tapes for reuse, just in case.

We consider the mechanical planning that went into the GX-F44R generally excellent. The automatic reverse is almost instantaneous and occurs just before the leader reaches the record/play head (so you scarcely miss a note). As such, it is a fine model for users who want a maximum of continuous recording time with a minimum of fuss and thought necessary to make the recording. Consistent with this objective, the meters—which indicate from -20 to +8 dB, with 1-dB steps in the range between -4 and +4—are calibrated for a fairly low zero reference. As a result, careless recordists can run into the red without causing untoward distortion (though at some cost in dynamic range), while astute recordists who have studied DSL's data can go for a maximum indication of +6 dB and thus cajole the last ounce of headroom from the GX-F44R.

**Circle 98 on Reader-Service Card**

<b>SENSITIVITY (re DIN 0 dB; 315 Hz)</b>		<b>MAX. OUTPUT (from DIN 0 dB)</b>	0.60 V
line input	130 mV		
mike input	0.37 mV		
<b>MIKE INPUT OVERLOAD (clipping)</b>	60 mV		

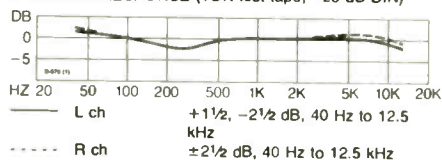
All data measured in the forward transport direction unless otherwise indicated.



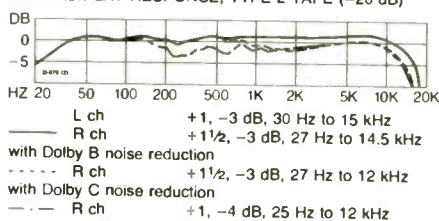
## Sansui Goes Modern—With Some Surprises

Sansui D-570 cassette deck, with Dolby B and C noise reduction. Dimensions: 17 by 4½ inches (front panel), 12 inches deep plus clearance for controls and connections. Price: \$525. Warranty: "limited," one year parts and labor (including purchase in one country and service in another). Manufacturer: Sansui Electric Co., Ltd., Japan; U.S. distributor: Sansui Electronics Corp., 1250 Valley Brook Ave., Lyndhurst, N.J. 07071.

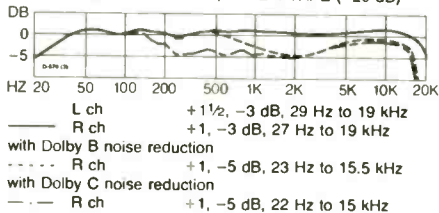
PLAYBACK RESPONSE (TDK test tape; -20 dB DIN)



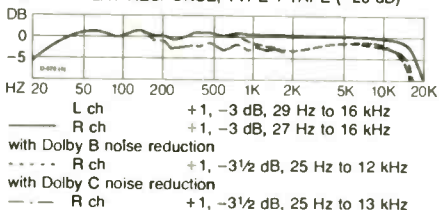
RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)



RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)



RECORD/PLAY RESPONSE, TYPE 1 TAPE (-20 dB)



THOUGH IT CAN HARDLY BE CALLED a "new-comer" among cassette-deck manufacturers, Sansui has come to the genre relatively recently. But enough time has gone by since the first Sansui decks were introduced that the D-570 sets itself apart from its predecessors as a distinctly modern model. Not only is the styling contemporary, with its flat rectangular touchplates (some with narrow pilot-LED inserts) in the transport-control section, but the array of features—particularly those depending on microprocessor logic—makes it quite plain that this is a 1982 model, and one that is in the vanguard. It is with some astonishment that we note that this is actually the first Sansui deck we've tested, despite the admitted (if fairly conventional, in contrast to the D-570) attractions of the line.

Among the most commonplace of its front-panel features, the bias "tuning" works like that on some FM tuners: A pair of triangular LEDs point the direction in which the knob should be turned, and both light simultaneously when the adjustment is right. We found this a little more efficient than many manual bias-trim systems—though, like most, it affects all of the tape-selector settings and thus cannot be left at an oddball Type 1 setting, say, when you put in a Type 2 or Type 4 tape, unless the new tape just happens to be oddball in an exactly comparable way for its type group. MUTE will introduce a silence lasting approximately four seconds if you punch the button while you're recording; if you hold the button in, the silence will last as long as your finger pressure. The PAUSE LED flashes throughout the mute recording cycle, doubling its flash rate at the end of the initial four-second period. Of all the approaches to mute recording we've seen, this is as comprehensive and as easy to use as any. Timer play and timer recording are entirely standard.

The row of selectors for memory and similar functions (they are very tiny and—like the small black buttons for the noise reduction options—without pilots to help you tell what position they're in) goes well beyond the usual range for such features.

First, there's a choice of counter or elapsed-time readout. There are separately programmed start and stop addresses (with a recall feature so you can check an address on the counter without physically winding the tape to it); in conjunction with an automatic rewind and a memory play, this makes possible automatic repeat playback of any chosen section of a tape lasting longer than 30 seconds, as well as less elaborate memory functions. There is a search mode (which Sansui calls AMPS) based on the four-second mute. When this function is engaged and the transport is in PLAY, touching FAST FORWARD will cause the tape to wind to the beginning of the next selection, where it will either stop or automatically commence playback, depending on yet another option. And, finally, there is what Sansui calls Compu Edit: an interconnect system (for which the necessary cable is supplied with the deck) by means of which the transport can be controlled from certain Sansui turntables, simplifying dubbing from discs.

One of the nicest of the unusual features, in our opinion, is what Sansui calls a tape lead-in switch, nestled among the transport controls. When you press it, the tape fast-forwards by some fifteen seconds worth of tape to get well beyond the leader and the potentially damaged area of the magnetic tape in the neighborhood of the splice. We also found the feature a quick and effective way of leaving longer-than-normal interselection spaces—say, between acts or scenes in opera recordings—on new or thoroughly erased tapes. (This fast-wind feature doesn't erase, of course.)

The peak-reading meters are calibrated from -20 to +8 dB, in 2-dB steps from -8 up. The fast response and slow decay makes reading signal values easy and positive. Surprisingly, the calibration varies somewhat with the tape-type setting, but not according to the headroom to be expected in each group. With Type 4 tapes, for example, the zero reading comes at a lower recorded level than with the other two groups, though its midrange headroom

**S/N RATIO (re DIN 0 dB; R/P; CCIR/ARM-weighted)**

	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	53½ dB	52½ dB	52¾ dB
with Dolby B	63½ dB	62½ dB	62¾ dB
with Dolby C	71 dB	70½ dB	70¾ dB

**INDICATOR READING FOR DIN 0 DB (315 Hz)**

Type 2 tape	+2 dB (with 1.7% distortion)
Type 4 tape	+4 dB (with 1.8% distortion)
Type 1 tape	+2 dB (with 3.7% distortion)

**INDICATOR READING FOR 3% DISTORTION (315 Hz)**

Type 2 and 4 tapes	+4 dB
Type 1 tape	+2 dB

**DISTORTION (third harmonic; at -10 dB DIN)**

Type 2 tape	≤0.72%, 50 Hz to 5 kHz
Type 4 tape	≤0.66%, 50 Hz to 5 kHz
Type 1 tape	≤0.63%, 50 Hz to 5 kHz

**ERASURE (100 Hz)**

Type 2 tape	72½ dB
Type 4 tape	67½ dB

**CHANNEL SEPARATION (315 Hz)**

37 dB

**INDICATOR "BALLISTICS"**

Response Time	0.4 msec
Decay time	=1,600 msec
Overshoot	0 dB

should be the greatest by a small margin and its high-frequency headroom the greatest by a larger margin when typical tapes in the three groups are compared.

The actual tapes suggested by Sansui for DSL's test are all from TDK: SA ferricobalt for Type 2, MA metal for Type 4, and D ferric for Type 1. Having considered the results good in our listening tests, we were somewhat dismayed by the relative roughness of the lab's response curves—particularly those with Dolby C noise reduction, which dramatizes response anomalies, of course. Evidently they are the result of head contour effects (a second

sample gives us substantially identical results) and the various "bumps" are sufficiently narrow to influence the ear far less than the eye. And replication is more exact judged aurally than graphically.

The emphasis, however, is squarely on the extra features that Sansui has managed to cram in at this middle-range price and, to some extent, on their organization into a handsome and very modern ensemble. (The case is available either in the black of our test samples or in a brightwork finish.) In sum, it looks good, it sounds good, and it does a lot very well.

**Circle 96 on Reader-Service Card**

**SPEED ACCURACY** 0.8% fast, 105-127 VAC

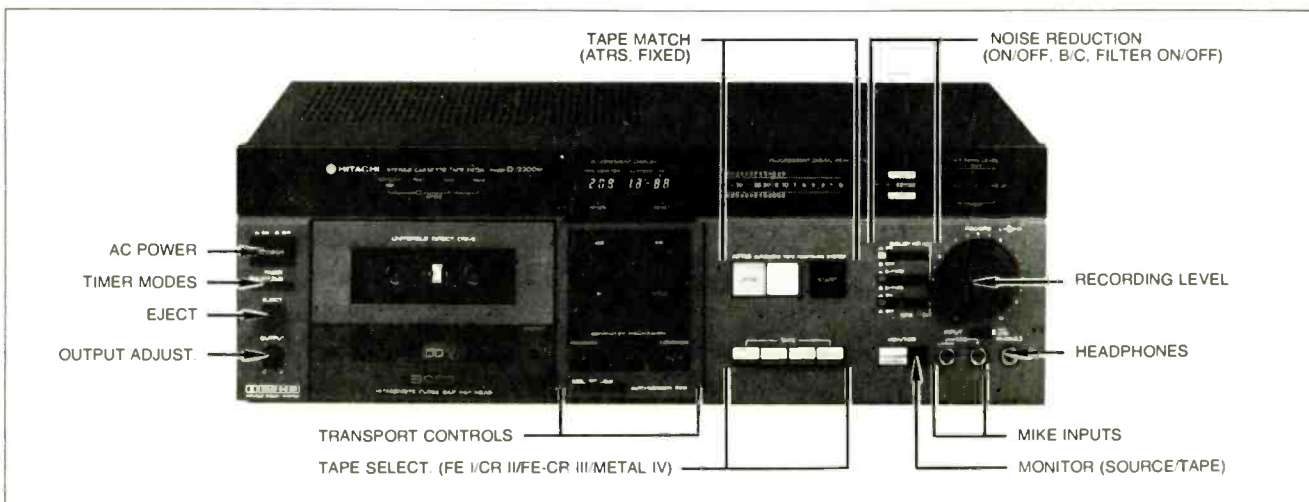
**MIKE INPUT OVERLOAD (3% dft.)** 17 mV

**FLUTTER (ANSI/IEEE weighted peak; R/P)** ±0.10%

**OUTPUT (from DIN 0 dB)** 0.42 V

**SENSITIVITY (re DIN 0 dB; 315 Hz)**

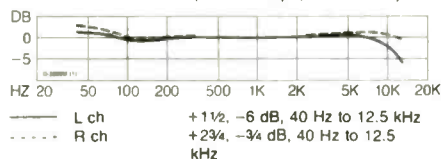
line input	160 mV
mike input	0.76 mV



## Hitachi's High-Tech Cassette Deck

Hitachi D-2200M cassette deck, with Automatic Tape Response System, Dolby B and C noise reduction. Dimensions: 17 by 6 inches (front panel), 11 inches deep plus clearance for controls and connections. Price: \$750. Warranty: "limited," two years parts and labor. Manufacturer: Hitachi, Ltd., Japan; U.S. distributor: Hitachi Sales Corp. of America, Audio Component Division, 401 W. Artesia Blvd., Compton, Calif. 90220.

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



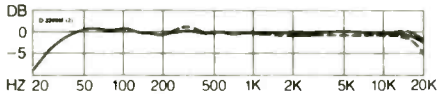
THE FIRST THING THAT STRUCK US about Hitachi's D-2200M cassette deck was its colorfulness; the second was how logically its controls and displays are laid out on the front panel. The primary indicator lights and displays are arrayed across the top of the panel, while the operating controls are grouped together by function in columns below. At the far left, above the cassette well, are four indicator lamps for what Hitachi calls ATRS (Automatic Tape Response System), which automatically sets the correct bias, recording equalization, and sensitivity for whatever tape you are using. A red lamp at the left glows when the batteries (which maintain the ATRS-derived settings when the AC power is switched off) are adequately charged; it flashes when the batteries are dead or weak. The next lamp comes on when ATRS is activated and flashes rapidly if the system is unable to arrive at proper settings (as it would, for example, if a Type 4 tape were inserted with the tape-selector switches set

for Type 1 tape). The other two lamps are green and light according to which test tone—1 kHz or 14 kHz—the system is using at the moment.

Further to the right, above the transport controls, are two fluorescent tape counters, each with its own reset bar. One is a standard three-digit counter, while the other shows elapsed time in the recording and playback modes (though not in fast forward or rewind, which is why the standard counter, which does work in those modes, is necessary). Next over, above the ATRS and tape-selector controls and the noise reduction and monitor switching, are the fluorescent peak-hold recording-level indicators, calibrated from -30 to +8 dB, with 1-dB steps from -3 to +3. And still further over, to the far right above the recording-level control, is an unusual, but very useful feature: a high-frequency peak-level indicator with lights at -10, 0, and +6 dB. Thus, with the Hitachi you know far better than with most other decks how much signal is

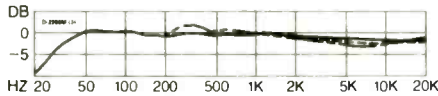
# AUDIO New Equipment Reports

## RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)



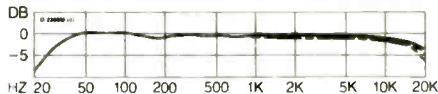
L ch +1/2, -3 dB, 31 Hz to 19 kHz  
 R ch +1/2, -3 dB, 30 Hz to 20 kHz  
 with Dolby B noise reduction  
 R ch +1/2, -3 dB, 30 Hz to 12.5 kHz  
 with Dolby C noise reduction  
 R ch +1, -3 dB, 30 Hz to 20 kHz

## RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)



L ch +1/2, -3 dB, 31 Hz to 20 kHz  
 R ch +1/2, -3 dB, 30 Hz to 20 kHz  
 with Dolby B noise reduction  
 R ch +1/2, -3 dB, 30 Hz to 20 kHz  
 with Dolby C noise reduction  
 R ch +2, -3 dB, 30 Hz to 20 kHz

## RECORD/PLAY RESPONSE, TYPE 1 TAPE (-20 dB)



L ch +1/2, -3 dB, 31 Hz to 14 kHz  
 R ch +1/2, -3 dB, 30 Hz to 19 kHz  
 with Dolby B noise reduction  
 R ch +1/2, -3 dB, 30 Hz to 15 kHz  
 with Dolby C noise reduction  
 R ch +1 1/4, -3 dB, 30 Hz to 16.5 kHz

## S/N RATIO (re DIN 0 dB; R/P; CCIR/ARM-weighted)

	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	55 1/4 dB	54 dB	54 1/2 dB
with Dolby B	67 3/4 dB	64 1/4 dB	65 dB
with Dolby C	74 dB	71 1/4 dB	71 1/2 dB

## INDICATOR READING FOR DIN 0 dB (315 Hz)

Type 2 tape	+1 dB (with 2.3% distortion)
Type 4 tape	+1 dB (with 1.5% distortion)
Type 1 tape	0 dB (with 0.96% distortion)

## INDICATOR READING FOR 3% DISTORTION (315 Hz)

Type 2 tape	+2 dB
Type 4 and 1 tapes	+3 dB

## DISTORTION (third harmonic; at -10 dB DIN)

Type 2 tape	≤0.68%, 50 Hz to 5 kHz
Type 4 tape	≤0.48%, 50 Hz to 5 kHz
Type 1 tape	≤0.34%, 50 Hz to 5 kHz

## ERASURE (100 Hz)

Type 2 tape	68 dB
Type 4 tape	62 dB

## CHANNEL SEPARATION (315 Hz)

	38 1/2 dB
--	-----------

## INDICATOR "BALLISTICS"

Response time	61/4 msec
Decay time	≈550 msec
Overshoot	0 dB

## SPEED ACCURACY 0.1% fast, 105-127 VAC

FLUTTER (ANSI/IEEC weighted peak; R/P) ±0.044%

going on the tape at the high end, where there is the least headroom.

Among the other features we particularly like is a flip-down door at the base of the cassette well, which provides excellent and convenient access to the heads, capstans, and pinch rollers for inspection and cleaning. The transport controls include a MUTE key. When tapped lightly, it mutes the signal going onto the tape for four seconds. You can create a longer blank simply by holding the button down. When the MUTE releases, the deck automatically goes into PAUSE. Slightly separated from the rest of the transport controls is a three-position slide switch for automatic rewind. In its center position, the switch defeats this function. In either of the other two, it causes the transport to go directly from RECORDING or PLAY into REWIND when the end of the tape is reached. Once the tape is fully rewound, the transport goes into either STOP or PLAY, depending on which switch setting has been selected.

Operation of the ATRS is straightforward: All you do is put the machine into RECORDING and press the ATRS START. When the D-2200M is through with its test and adjustment sequence, the tape will automatically rewind and a pushpad to the far left of the START, labeled ATRS, will light. Until you run the ATRS again for that tape type, you can instantly retrieve the computed settings from memory simply by pressing ATRS. You can revert at any time to the deck's preset adjustments for a particular tape type (metal, ferric, etc.) by pressing the pad labeled FIXED.

There's also a switch for unattended recording or timed playback by means of an optional external timer. The D-2200M uses a dual-capstan transport for optimum tape-to-head contact and minimum tape instability and scrape flutter. Its recording head (made of sendust and ferrite) and playback head (made of ferrite) are mounted in the same housing for precise, permanent alignment. Both Dolby B and Dolby C noise reduction are included.

Conforming to the manufacturer's rec-

ommendation, Diversified Science Laboratories used Maxell XL-IIS as the Type 2 ferricobalt tape, Maxell MX as the Type 4 metal, and Maxell UD as the Type 1 ferric. (However, since DSL also used the ATRS before making its measurements, the exact tapes used are far less critical than they would be without the adjustment.) The record/play curves DSL obtained are all at least reasonably flat—and very flat for the Type 2 tape. Moreover, Dolby tracking proved excellent, even with the C circuit (which is less tolerant of sensitivity-matching errors than B) engaged. Signal-to-noise figures are also very good, though a trifle puzzling: Dolby B improves them by 10 1/4 to 12 1/2 dB (more than the expected 10 dB), while the Dolby C figures are only 6 1/4 to 7 dB better than those with Dolby B (a few dB less than expected). (A-weighted noise figures, such as we used to report, are about 2 dB better without noise reduction than the CCIR/ARM readings shown in our data column. With Dolby B, they are about the same, and with Dolby C, they are just a shade worse.) The D-2200M's distortion and (especially) flutter are exceptionally low—the latter owing most probably to Hitachi's use of a dual-capstan transport.

Hitachi has used high technology to good effect in the D-2200M, wedding performance to convenience. We wish that the battery back-up for the ATRS memory were fully internal and rechargeable, instead of requiring periodic replacement of dry cells—but this is a minor point. All the controls fall easily to hand, and we like the recording-level display very much. The meters' fast attack and slow decay times, combined with the special high-frequency level indicators, make level-setting as close to a snap as it can get. In conjunction with ATRS, Dolby C, and the D-2200M's high level of basic performance, they have enabled us to make tapes that are almost invariably difficult to distinguish from the original sources. And that, in our opinion, is just about the nicest thing you can say about a tape deck.

Circle 94 on Reader-Service Card

## SENSITIVITY (re DIN 0 dB; 315 Hz)

line input	133 mV
mike input	0.51 mV

## MIKE INPUT OVERLOAD (clipping)

	14.9 mV
--	---------

## MAX. OUTPUT (from DIN 0 dB)

	0.60 V
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## A Quick Guide to Tape Types

Our tape classifications, Type 0 through 4, are based primarily on the International Electrotechnical Commission measurement standards.

**Type 0** tapes represent "ground zero" in that they follow the original Philips-based DIN spec. They are ferric tapes, called LN (low-noise) by some manufacturers, requiring minimum (nominal 100%) bias and the original, "standard" 120-microsecond playback equalization. Though they include the "garden variety" formulations, the best are capable of excellent performance at moderate cost in decks that are well matched to them.

**Type 1** (IEC Type I) tapes are ferrics requiring the same 120-microsecond playback EQ but somewhat high-

er bias. They sometimes are styled LH (low-noise, high-output) formulations or "premium ferrics."

**Type 2** (IEC Type II) tapes are intended for use with 70-microsecond playback EQ and higher recording bias still (nominal 150%). The first formulations of this sort used chromium dioxide; today they also include chrome-compatible coatings such as the ferricobalts.

**Type 3** (IEC Type III) tapes are dual-layered ferrichromes, implying the 70-microsecond ("chrome") playback EQ. Approaches to their biasing and recording EQ vary somewhat from one deck manufacturer to another.

**Type 4** (IEC Type IV) are the metal-particle, or "alloy" tapes, requiring the highest bias of all and retaining the 70-microsecond EQ of Type 2.

# Today's Ten Hottest Cassette Deck Features

Which ones you'll find most useful—and why  
by Robert Long

Consulting Technical Editor

EVEN BEFORE THE MICROPROCESSOR won its place as king of the cassette-deck-feature hill, shopping for a recorder could be nightmarishly complicated—especially for the neophyte. Aside from the fancy and unfamiliar names cloaking simple (and sometimes quite familiar) features, there always have been questions about which capabilities would *really* pay off once you got the deck home to your listening room.

To shed a little light into the dark places, let's examine one by one a list of what, in my opinion, are the ten "hottest" features in cassette hardware today to see what they do and why they may be of use to you. As usual, let me caution that the emphasis here must be on *you*; your priorities as a music listener and as a recordist must take precedence over mine in determining which features are important, and my recommendations must be read with that in mind.

## 1. "Three-Head" Design



This is a fundamental feature—one of the first design elements on which you should base a buying decision—and understanding the options is very important. So let's begin with some definitions.

The least expensive recorders all employ a strict two-head format: one for erase and one that doubles as both a record-

ing and a playback head. That's the key point. This head can be switched to operate as *either* a recording or a playback element, but both cannot be managed simultaneously. With good design such a head will perform on a par with some of the more advanced designs (though *potential* performance is intrinsically limited by the dual-purpose approach). So, in terms of sound quality, you may not have to sacrifice anything by choosing a two-head model over one with three heads.

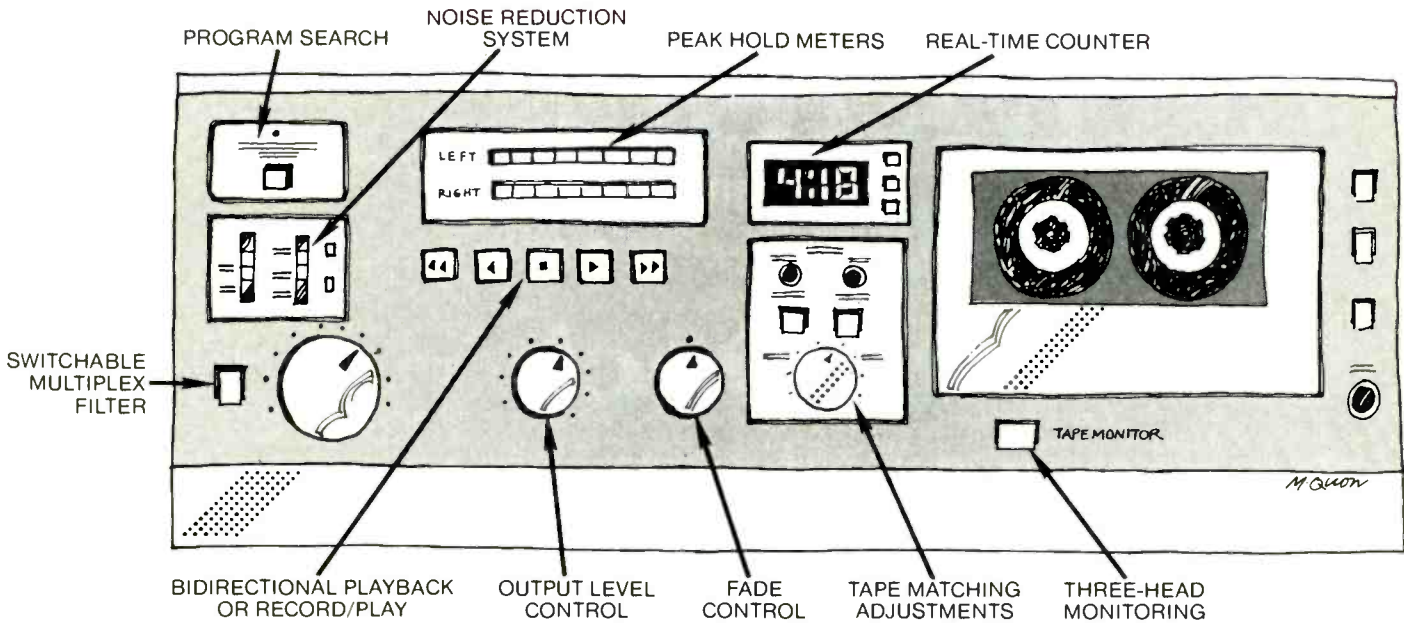
What you may be sacrificing, however, is what's known as monitoring, along with some capabilities that go with it. This feature lets you listen to the newly recorded tape (via a playback head or playback headgap). Essentially, it's reassuring to be able to hear what has been recorded on the tape an instant before and to know that you can correct any problems before the recording goes any farther. And if the deck provides a tape-matching "fine-tune" feature (see feature two, below), particularly if the adjustment is manual rather than automatic, the monitoring capability lets you assess the effect of your adjustment while you're making it, instead of requiring you to rewind and play back the tape first.

But simply because a deck has a separate playback head or headgap doesn't mean it offers monitoring. Some models—including some very fine ones—have separate gaps, each custom engineered for its particular task, but they don't permit playback while a recording is in progress. Often this happens because the designer judged the cost of dual noise reduction (for simultaneous recording and playback) unwarranted for the intended market, or because

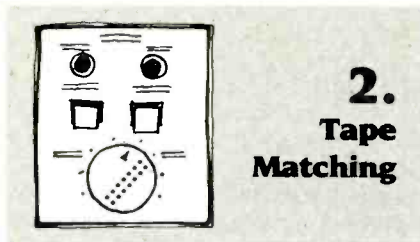
he wanted to avoid the possibility of potential interference between the two headgaps. Interference can arise when (as often is the case) separate recording and playback elements are built into a single case to create, essentially, two heads in one. You can't always tell how many heads there are, functionally, just by looking. (That's why I keep saying "heads or headgaps"; some appear to be one head with two sets of headgaps.)

Combining two heads in one case solves one set of problems but creates others. The relatively high current in the recording element can induce an output in the playback element, creating the aforementioned interference. Also, the cramped dimensions of such a head can exacerbate what is known as the "contour effect" (or "head bumps," in the vernacular), which introduces roughness into the response. Finally, though the elements are very close together, minimizing the possibility that the tape will skew (changing its effective azimuth and thus compromising response at very high frequencies) between the two, the physical relationship between the elements usually is fixed during manufacture. This makes permanent any azimuth mismatch that has been created. In contrast, totally separate heads are easier to fit with some form of azimuth correction. (Combination heads need no correction because they use the same gap for both purposes.)

In sum, a monitoring-head scheme is very useful, but it raises the cost of comparable performance. It is, however, a necessity if you're going for ultimate performance and a near-necessity if you're doing live recording in the field. Otherwise, you



may want to let your choice be determined more by a deck's tape-matching system.



Like the variety of head configurations available, tape-matching options extend from a comfortable, inexpensive, somewhat compromised plateau of good performance right on up to the ultrafussy stratosphere of perfectionism. If you consider yourself a music listener rather than an audiophile (it is possible to be both, after all), a combination head and a simple selector switch for, at minimum, Type 1 and Type 2 (ferric and "chrome," respectively) tapes should be fine. Type 3 (ferrichrome) tapes tend to be fairly expensive and sometimes don't perform as well as the other two types; Type 4 (metal) is generally expensive and offers an inconsequential margin of improvement for all but the most ardent audiophile.

I can state that with confidence now—where I couldn't have done so a couple of years ago—because tapes within the various groups recently have become very much alike in performance, making them reasonably interchangeable. But differences do exist—even between one batch and another of a given brand, as formulations are progressively improved—and the only way to squeeze top performance out of any given tape is to match the recorder's behavior to its particular characteristics.

Most fine-tuning adjustments for tape-matching control bias, if nothing else. The influence of the high-frequency AC bias

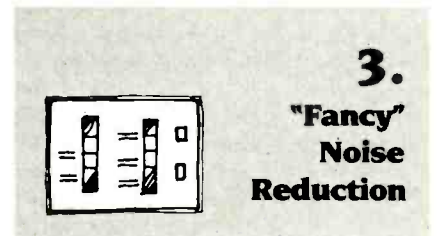
current that makes possible modern low-noise, low-distortion recording is not the same at all audio frequencies. When the bias is too high, response remains good in the midrange and bass but droops badly at the top end; if it's too low, midrange and bass response may be somewhat depressed and the top end will tend to develop a nasty peak. Thus bias current can materially influence the tonal balance you hear in playback. But to accurately or repeatably influence the tonal balance you hear in playback. But to accurately or repeatably fine-tune bias requires that the deck have some built-in calibration system, usually a dual-tone oscillator whose upper tone must be matched in volume to the lower on playback for correct bias.

Though less audible than a severe bias mismatch, a mismatch of sensitivity, combined with Dolby noise reduction, can be an irritating problem. What occurs is "mistracking" of the Dolby playback decoding relative to the encoding that took place during recording. Adjustment normally is via a reference-level midrange tone, which must be recorded at a setting appropriate to produce the reference level once again on playback. If the deck is adjusted for a tape that is markedly (say, at least 2 dB) less sensitive than the one you are using, the result will be an apparent diminution of bass with Dolby C, an increase in apparent brightness with Dolby B, and negligible with no Dolby noise reduction. A tape less sensitive than the one for which the deck is adjusted produces the opposite results.

Some fine-tuning systems use micro-processors to program the operation automatically. These generally are excellent, and can address fine points, such as juggling recording equalization and bias for lowest distortion consistent with flat response, that must be passed over in manual systems. One automatic system even adjusts meter sensitivity to the 3% distortion point of the tape in use—an excellent idea

that surely will be copied.

If you want the best possible quality in your recordings and are willing to pay the price, go for the automatic systems. If you have the will but not the means, choose manual adjustment that can be set accurately; an adjustment that can't be calibrated on its own is little use unless you have test instruments on hand. And if you're likely to forget to readjust the bias when you change tapes, a nonadjustable deck is probably all you need.



Any deck with pretensions to even medium-fi status includes Dolby B noise reduction, but what about the newer options, like Dolby C and DBX—to say nothing of Super-D and High Com?

Despite the millions who seem to enjoy Walkman and similar cassette portables that have no noise reduction at all, Dolby B is certainly a minimum requirement for high fidelity status because it reduces tape hiss to whisper proportions. But it does make demands on the deck; reproduction flat enough to be acceptable without noise reduction can become audibly colored by mistracking Dolby B. To get best results, you probably should expect to spend at least \$250 for a deck. Dolby C (which literally reduces hiss to inaudibility under most practical circumstances) and DBX (which keeps it inaudible under virtually all practical circumstances) put a still greater premium on deck performance. Response anomalies and dropouts are exaggerated by the

expander action of these systems in playback, and both probably are better avoided at price points below \$500.

If you can afford better and are fussy about the quality of the tapes you make from FM, LPs, or other tapes, Dolby C will give you excellent results at minimum extra cost; if you make live recordings, DBX will give you still more dynamic range, but it sometimes costs more. Both are common enough that the growing number of prerecorded tapes employing each (as well as the number of other recordists with whom you can swap appropriately encoded tapes) should grow rapidly. The same cannot be said for systems such as Super D and High Com, but if you record only for your own use it makes no difference how popular your noise reduction system is.

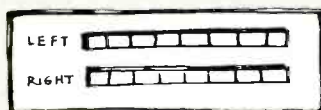
Incidentally, don't confuse the HX and HX Pro circuits with noise reduction just because both carry the Dolby name. HX stands (more or less) for "headroom extension" and it is intended to permit higher recording levels than high-frequency compression effects will allow without it. The newer HX Pro circuit, which is available now on only a few decks, is very successful in this effort.



#### 4. Switchable MPX Filter

There's a genuine controversy here. Dolby Laboratories says the filter must be engaged when you're recording from FM to prevent undue influence from the 19-kHz pilot, though most tuners and receivers suppress the signal enough to prevent such influence. Since sharp filtration is anathema to those who subscribe to the broadband ultrafidelity theory, filter-defeat switches are added to many (but not all) of the best decks. Particularly with Dolby C, though, ultrasonic distortion products can adversely affect Dolby tracking even when you're not recording from FM. Unless you're a passionate ultrafidelitarian, therefore, leave the multiplex filter turned on full time, even if it *can* be turned off in your deck. In other words, defeatability is not necessarily desirable.

#### 5. Peak-Hold Metering



To my mind, this is one of the more

beneficent by-products of the logic-microchip revolution, although it most often appears at higher price levels. Peak-hold works in the upper range of the meter scale, where it continues to display maximum values even after the peak has passed. If you're casual about your recordings and don't constantly monitor the meters while you're taping, a peak-hold circuit can warn you of level problems you might otherwise overlook; some can even be set so that they retain a maximum indefinitely.



#### 6. Fade Control

This is a feature I like, but you may never need it. Some program material simply doesn't need a fade at the beginning or the end; the PAUSE, used with or without a recording mute, can yield professional-sounding results if there's no background ambience before or after whatever you're recording. But if there's applause, for example, an abrupt silence can sound exceedingly ungraceful.

A fade control allows you to fade out the applause without disturbing your main recording-level and balance settings, to which you can return at a touch of the FADE itself. Some are automatic: Generally, there's a button that you press to start a preordained level-change sequence. But the manual version (usually, though not always, a rotary knob) is easy to use, more versatile, and less expensive.

Some equipment lets you create a fade *after* the recording has been made—a sort of progressive erasure of the recorded signal. Controls of this sort I've tried generally work quite well and the results sound a lot more graceful than when an erased portion begins abruptly. And this ex-post-facto fade has the advantage that you can use it at relative leisure, whereas the more common "live" fade requires close attention while the recording is in progress.



#### 7. Output-Level Control

Since the better decks have this feature, it has become associated with quality hardware, but it's not a very big deal. In some circumstances it can help to match levels for making valid A/B comparisons.

But levels in modern components are generally quite well matched to begin with, making this feature a minor footnote to the design.

With one exception: If we're talking about a *headphone* output-level control, and you plan on doing any live recording, go for it. During live recording you probably will do all your monitoring with the control turned up all the way. The preset headphone levels in decks without a headphone-amplification stage tend to be inadequate for live work.



#### 8. Bidirectionality

Whether you like Bruckner or background music, the long continuous-playing times of automatic-reverse decks can be an advantage. If you make off-the-air recordings, particularly of operas, a deck that will reverse in the recording mode can be a godsend. But there is a price to be paid. Transports, heads, and electronics all must be much more complex—and expensive—if they are to offer the same performance as an otherwise comparable monodirectional model. Most manufacturers evidently figure that purchasers who are interested in convenience won't be willing to pay the price for fully comparable performance, and they make compromises accordingly. I'd go for the manual high-performance alternative myself, but I can see valid reasons why you may choose the automatic reverse option.



#### 9. Program Search

This is another triumph of the microprocessor chip, and it can take several forms (and innumerable proprietary names). The simplest scheme "looks" for pauses of 4 seconds or more on the tape and stops wherever it finds one. Some can be set to stop at specific spots—say, the third and seventh recorded items on the tape—and may even accept random-order programming. Some of the newer ones will play a few (usually ten) seconds of each selection before going on to the next interselection space.

Only the systems that encode the selection number right on the tape (and they *(Continued on page 80)*



# On Location With a Digital Deck

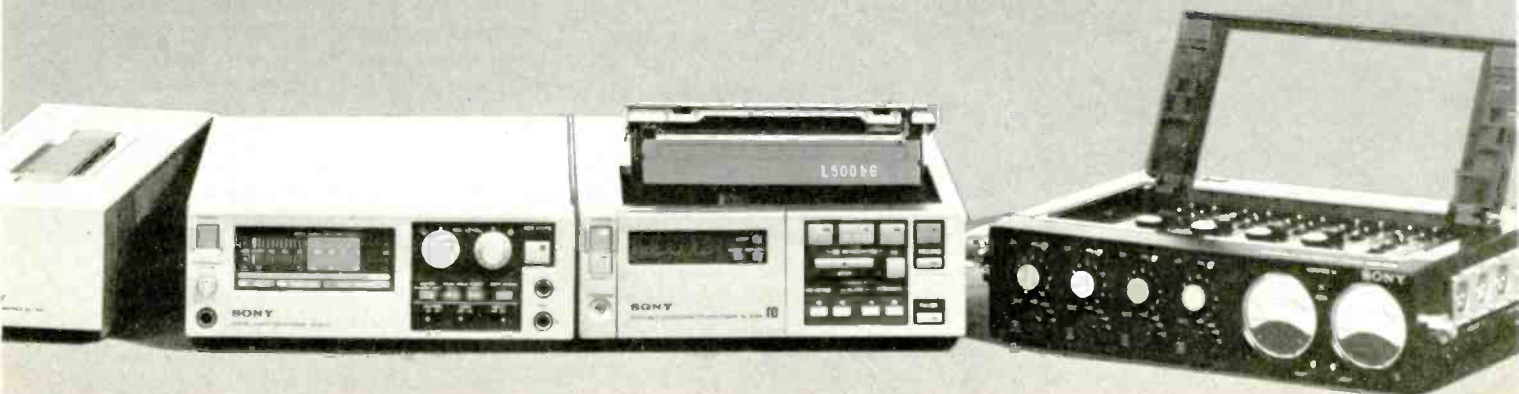
How a Sony PCM-F1/SL-2000 digital tape system fared in extensive field use.  
by Richard Warren

SLIDING A CASSETTE into my Betamax, I kick off my shoes, put up my feet, and relax to the sound of Sir Georg Solti conducting the Chicago Symphony Orchestra.

*Richard Warren, a producer at WFMT in Chicago, writes an audio column for the Chicago Sun-Times, and is the audio editor of Chicago magazine.*

tra in a performance of Beethoven's Fifth Symphony. I've never before heard Beethoven quite like this outside of the concert hall. Like a live performance, the recording is free of clicks and pops, tape hiss, wow and flutter, compression and limiting, and audible distortion. Unfortunately, you can't buy this recording.

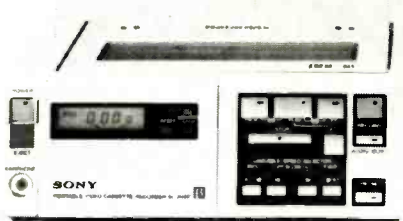
My associates at WFMT in Chicago taped it, using Sony's PCM-F1 digital audio processor and SL-2000 video cassette deck while recording the CSO for broadcast syndication. (Because of the extended bandwidth required by digital signals, ordinary tapes and tape decks are unable to record digital audio. Video







PCM-F1  
Digital Audio Processor



SL-2000 Videocassette Recorder/Timer Unit



AC-700  
AC Power  
Adapter

## Sony's PCM-F1 Digital Audio Processor

SONY'S PCM-F1 DIGITAL AUDIO processor ideally suits both amateurs and professionals. The first compact, lightweight, and relatively inexpensive digital adapter, it is smaller than most cassette decks and about the size of a Nagra IV-S, the "professional standard" portable recorder.

Though designed for use with any video cassette recorder format (Beta, VHS, or U-Matic), the PCM-F1 mates perfectly with Sony's SL-2000 portable Beta deck (which can double as a complete home VCR when used with its companion TT-2000 tuner/timer). They're the same size and design, and the top of the PCM-F1 case has special provisions for stacking the SL-2000. Both units are available with optional internal rechargeable battery packs. Another option, is external AC power supplies—the AC-700 for the F1 and the AC-220 for the SL-2000—which together nearly equal the PCM-F1 in size and weight. Yet this four-piece package isn't any larger or heavier than WFMT's Nagra IV-S with its QGB 10½-inch-reel adapter, Dolby A adapter, and massive power supply. And when it is properly packed together in a suitcase, the entire system is only moderately larger and more cumbersome than a Revox B-77. (Since the processor and deck require the same voltage, it would be an improvement if Sony were to offer a single AC power supply for both.)

If you already own a VCR, the F1 system is even more affordable. I've achieved great results using the processor with a \$500 Sanyo unit, and our engineers have used it with a professional U-Matic, placing a SMPTE synchronization code on the regular analog audio track to allow future synchronization with TV video. (I've been told you can accomplish the same feat using the audio track on a home VCR.) On domestic units, best results are obtained by using the fastest speeds—Beta II or VHS SP.

It's been my experience that the full potential of the PCM-F1, both in portability and flex-

ibility, is most evident when it is used with the SL-2000. This petite Betamax enables the digital equivalent of cueing and of high-speed monitoring in fast forward and rewind, provides the ability to jump edit from one VCR to another, and has a real-time digital tape counter. Its pin (or RCA) jacks and supplied connecting cables are gold-plated to resist corrosion and to ensure perfect contact.

The face of the PCM-F1 combines form and function in a way that is considerably less intimidating than the escutcheons of many audio cassette decks. All switches are recessed, preventing accidental operation. On the left are the power switch, a rotary volume control for headphones, and a headphone jack. On the right are a rotary level control for each channel, an illuminated amber record-mute button, and four feather-touch push switches for meter functions—tracking/level, peak-hold/automatic, manual reset, and battery check. Beneath, three tiny toggle switches control muting, copy function, and line/mike input. Alongside are two low-impedance, unbalanced phone-jack mike inputs.

Between the controls are large, easy-to-read level displays that have a red overload area with flashing warning lights on the right. The battery-check scale is above the display, the tracking scale below, and at the bottom are indicator lights for muting, emphasis (not all digital formats use preemphasis), and copy-prohibiting. This last glows when a copy-guard code is on a tape.

The rear panel has a slide switch that selects 14- or 16-bit encoding. It is used only for recording, since in playback the PCM-F1 detects the bit rate and switches to it automatically. Both formats conform to the Electronic Industry Association of Japan (EIAJ) standard, meaning that the Sony can play back tapes made with any other digital audio processor conforming to that standard. And tapes made with the PCM-F1 can, of

course, be played back through other EIAJ-standard processors. Greater dynamic range and slightly less distortion are achieved with 16-bit encoding, but the 14-bit mode yields improved error correction.

We've selected the 16-bit format almost exclusively and find that using high-grade tape is important. Sony Dynamicron HG, is exceptionally low in dropouts, the primary nemesis of digital recording. Dropouts trigger errors, which sometime cause complete signal loss accompanied by noise bursts. (The F1's muting automatically detects such problems and squelches the audio to protect amplifiers and speakers.)

L-250 ("one-hour") and L-500 ("two-hour") Beta cassettes have proven the most convenient. (A conventional 2,500-foot 10½-inch reel of 1½-mil tape runs one hour at 7½ ips and 30 minutes at 15 ips.) An L-250 is perfect for an average symphony, while a single L-500 can often record a complete CSO program or an entire folk or jazz show. Using an L-500 also eliminates the need to run multiple machines while recording extended works such as Beethoven's Ninth. (Nothing is more frustrating or embarrassing than having to change reels during a live on-location recording. Even if you should have to change a video cassette, it's still faster and easier than threading reels. Thinner tape, such as used in the L-750s, is not recommended because of its higher dropout rate.)

The Sony PCM-F1/SL-2000 package withstands abuse as well as any analog machine we've used. It has made repeated trips from Chicago to Milwaukee and back, as well as between WFMT's studios and Orchestra Hall; it has survived a round trip flight as baggage between Washington, D.C., and Chicago; and it has been dropped and banged about while packed in a Starcase. The worst problem that has developed so far is a soft mechanical buzz in the SL-2000, which has not affected its recording capability.

cassette recorders and tapes, however, can accommodate a much wider bandwidth than their audio cousins, and as such are perfectly suited for making high quality digital audio recordings. (For details on how digital recording works, see "The Whys and Hows of Digital Recording.") We've filled dozens of video tapes with the Chicago and Milwaukee Symphonies, with WFMT in-studio concerts, and with folk music performances at local cabarets. One of the lessons we've learned from using the PCM-F1 is that once you've recorded digitally, it's difficult to return to analog.

Digital recording with Sony's system is blissfully easy, providing you discard some analog habits. For example, "0 dB"

doesn't mean the same on the F1's display as it does on the meter of an ordinary deck or open-reel recorder. Recording at too high a level (with the peaks "into the red" on the meters) causes "soft" (or progressive) saturation on analog machines, with the result that distortion on peaks often isn't noticeable. The case is very different in digital recording, however. When the Sony meter reads 0 dB, lights flash and the signal is either hard-limited or muted to prevent the burst of painful distortion characteristic of digital overload. Because the onset of overloading is so sharp in digital recording, you shouldn't match 0 dB on your mixer to 0 dB on the Sony processor when you're presetting levels.

For our purposes, we calibrate 0 dB on our mixing console to about -17 dB on the F-1's level indicators, roughly where the latter's dark gray area meets the light gray zone. When you're setting your recording levels, you should, for safety's sake, have the signals peak at a few dB below 0, not at a few dB above 0, as you might with an analog setup.

Once you've set the levels on the PCM-F1, you can (and should) leave them alone. It's always a temptation on analog equipment to ride gain (adjusting levels during recording) in order to optimize the signal-to-noise ratio. But in 16-bit digital recording, with an available dynamic range of better than 90 dB, the need to ride gain is

# The Whys and Hows of Digital Recording

IT HAS LONG BEEN KNOWN that, at least in principle, there are digital techniques capable of replacing the relatively blurry and distorted "magnetic movies" of analog recording with virtually perfect replicas of the original signal. Such recordings would have perfectly flat frequency response from below the lowest audible frequencies to beyond the highest, independent of tape formulation; vanishingly low distortion; dynamic range wide enough to encompass any anticipated input signal without audible corruption; and for all intents and purposes, no wow and flutter at all. The trick is to stop trying to record a perfect image (or analog) of the input signal: What a digital tape deck would record would be precise instructions, down to the finest detail, for reconstructing the original signal—flawlessly. The only stumbling blocks were technology and expense. The first obstacle has now been fully brushed aside: It is possible today to make digital recordings of extraordinary fidelity. As for the second, the PCM-F1 is perhaps the most aggressive attempt to date to overcome the price barrier.

Like all other presently available digital recorders, the PCM-F1 uses an encoding system called pulse-code modulation (PCM). At precisely timed intervals, it measures the voltage of the incoming signal (a process called sampling). A device called an analog-to-digital converter (ADC) then determines which of a predefined set of numerical values, expressed in binary notation, most nearly approximates the value of that signal's voltage. That binary number is then formatted as a standard NTSC color video signal and recorded on video tape. Because binary numbers consist entirely of ones and zeroes, it is very simple to encode them on tape as blanks (for zeroes) and pulses (for ones). As long as the pulses stand out above the tape noise, the recorder will be able to read them accurately on playback. Thus, the quality of a recording no longer depends primarily on the accuracy of the signal on the tape (as in analog recording), but on the resolution of the analog-to-digital (A/D) and digital-to-analog (D/A) conversions.

Resolution is determined by two things: the length of the digital "word" used to express the value of the signal voltage and how frequently the signal is sampled. The more bits (binary digits) in the word, the more possible values there will be to assign to the measured voltage, and therefore the more accurate the digital approximation. The number of possible values is equal to  $2^n$ , where  $n$  is the number of bits in the word. In the illustration, we have used a hypothetical four-bit word capable of expressing only sixteen val-

ues. However, digital systems designed for high fidelity music reproduction, such as the PCM-F1, use 14- or 16-bit words capable of expressing more than 16,000 and more than 65,000 values, respectively.

Obviously, those are big numbers, but no matter how many discrete intervals are available, the match between actual measured voltages and digitally expressible values will never be perfect. This disparity creates what is called quantization noise. However, by using enough bits, it is possible to make the quantization noise so low as to be inaudible. In other words, the approximation can be made so accurate that a digitally reconstructed signal will be audibly indistinguishable from the original. Each bit adds about 6 dB to the signal-to-noise ratio (S/N), which can reach more than 80 dB for a 14-bit system and more than 90 dB for a 16-bit system.

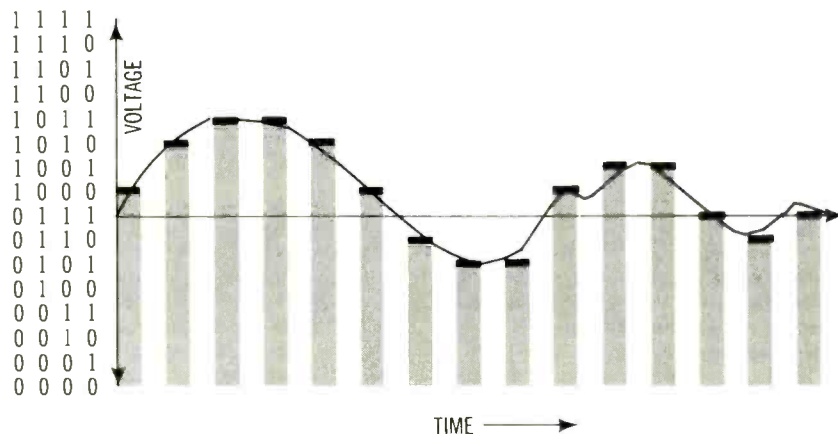
The other factor affecting the resolution of a digital system is how often it samples the input signal. It can be shown mathematically that so long as the sampling rate is at least twice as high as the highest audio frequency to be recorded, enough information will be collected to enable essentially perfect reconstruction of the original waveform. For that reason, the Sony PCM-F1 samples the audio signal at the EIAJ-standard rate of 44,056 times per second, or 44.056 kHz. To prevent any signals at frequencies greater than half the sampling rate from getting into the ADC (where they would cause distortion), the audio signal is cut off sharply above 20 kHz with a steep filter. The resulting bandwidth is more than

adequate for music reproduction.

A little arithmetic quickly reveals why video recorders, rather than standard audio tape recorders, are used to capture the digital signal. Every second, fourteen (or sixteen) digits must be put on tape more than 44,000 times. That works out to more than 600,000 digits per second. When you add in the extra bits necessary for error correction codes and the like, you're getting up to bandwidths in the vicinity of a megahertz. Video recorders are designed to have that kind of frequency response to accommodate complex color signals; an audio tape recorder is doing well to get to 20 kHz.

When the time comes to play back a PCM recording, the binary numbers are read from the tape and passed to a digital-to-analog converter (DAC). The DAC translates the stream of digital bits into an electrical waveform whose voltage at any given instant corresponds to the value specified by one of the recorded digital words. This analog signal very closely resembles the original analog input signal from which the digital recording was made, but with some rough edges (resulting from its having been assembled from a large number of discrete voltages). However, because of the 44-kHz sampling rate, the discontinuities (the "joins" between the samples) are entirely ultrasonic and can be shaved off with a sharp low-pass filter, normally set to remove frequencies above 20 kHz. The final result is a smooth, virtually perfect replica of the original signal, free of noise, distortion, and deviations from flat response.

MICHAEL RIGGS



*Simplified representation of the PCM sampling process: The height of each bar corresponds to the nearest four bit digital approximation (given in binary notation) of the signal voltage at that instant. The sampling rate is determined by the time interval between samples, here indicated by the spacing between the bars.*

virtually nonexistent. This doesn't mean you should ignore levels, however. Noise can become a problem if you set levels too low. The trick is to get the input signal up as high as possible without letting it peak above 0 dB. This will ensure that both noise and distortion remain inaudibly low. Fortunately, the F1's fast peak-reading display makes correct level setting virtually a cinch.

Even so, recording with the PCM-F1 requires faith. VCRs don't have separate recording and playback heads, so monitoring off the tape during recording is impos-

sible. All you can do is to check everything out carefully before you start and then keep your fingers crossed until you're through.

In other respects, however, recording with the Sony PCM-F1/SL-2000 system is no more difficult than recording with any semipro machine and actually somewhat less difficult than using some home cassette decks or expensive studio open-reel recorders. You don't need to make bias and equalization adjustments, noise reduction is superfluous, and interconnecting the two units and their power supplies takes less

than five minutes.

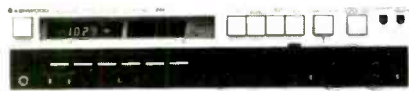
All tape action originates on the SL-2000 (or whatever other VCR you choose to use). The PCM-F1 automatically detects whether the VCR is in the recording or playback mode and switches itself accordingly. To listen to the source before rolling the tape, you just press RECORD on the SL-2000. RECORD and PAUSE are interlocked, so you must remember to release PAUSE manually to commence recording, allowing sufficient time for the tape to roll.

(Continued on page 80)

# VIDEO TODAY & TOMORROW™

## VideoFronts

Latest video news and products by the Editors



A combination audio-video receiver is Kenwood's follow-up to its audio-video amplifier [Hands-On/Lab Test, May]. The VR-510 has an amplifier section rated at 30 watts (14¾ dBW) per channel, a digital frequency-synthesis AM/FM tuner with twelve presets and automatic scan tuning, and the standard complement of controls. Also included is switching among broadcast television, VCRs (two, or one VCR and a video disc player), video games, or computer. All these features are housed in a single chassis, along with such extras as video dubbing capability and an Audio Enhancer circuit that transforms mono TV sound into pseudostereo. Price of Kenwood's VR-510 is \$420.



Operating on the theory that sound is as important as sight, JVC has developed a three-piece component video system (recorder, tuner/timer, and camera) that includes stereo recording and playback capability with two-way Dolby B noise reduction. The 10-pound (including battery) HR-2650 VHS recorder is a four-head design with built-in insert- and assemble-edit functions, frame-by-frame advance, and fast viewing—in standard play (SP) at seven times normal and in extended play (EP) at twenty-one times normal speed. The HR-2650 can record simulcast signals through its stereo audio inputs.

The companion TU-26U tuner/timer/adaptor unit has 105-channel tuning capability (including the unscrambled midband and superband cable channels); two-week, eight-event programmability; and fourteen preset channels. The tuner also recharges the recorder's batteries.

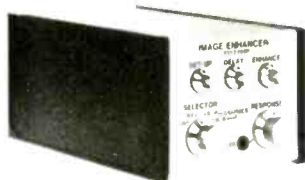
The GX-S9U color video camera, with an f/1.6 lens and 6:1 two-speed power zoom, is geared toward the serious videophile. Special features include fade (to black and—highly unusual—also to

white), a seven-mode function indicator in the electronic viewfinder, and an Automatic Beam Optimizing circuit that enables its Saticon imaging tube to shoot bright scenes without image retention. Price of the HR-2650/TU-26U pair is \$1,500; the camera sells for \$1,100.



A VHS-camera/Beta-VCR adapter from Marshall Electronics lets you mate VHS-standard 10-pin video camera outputs to 14-pin Beta-standard deck inputs. The Camera Mate CM-1014, as it is called, is enclosed in a waterproof housing; its microcircuitry translates VHS trigger pulse, pause, record light, and playback functions to Beta standards. Battery life of VHS cameras using the low-current-drain Camera Mate interface is said to be as great as that of Beta cameras of equal wattage. Price of the CM-1014 is \$130.

Circle 89 on Reader-Service Card



Ghosts fade into obscurity with the Model VV-2700P Video Enhancer, according to Showtime Video Ventures. The unit is also said to eliminate noise, washout, and picture distortion. Computer owners will appreciate the two enhancement modes for video graphics (one improves light graphics on a dark background, the other lightens dark graphics on a light background); a third enhancer circuit is said to increase picture sharpness. You can monitor the effects generated by the \$312 Video Enhancer via a built-in bypass circuit.

Circle 90 on Reader-Service Card

For a preview of new video equipment featured at the June Consumer Electronics Show, see page 9.



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## HANDS-ON REPORT



# JVC HR-7650U Video Deck

Stereo recording capability and Dolby noise reduction highlight this feature-packed VHS recorder.

This Hands-On Report was conducted under the supervision of Edward J. Foster, Consulting Audio-Video Editor of HIGH FIDELITY and Director of Diversified Science Laboratories

JVC WAS A PRINCIPAL FORCE in launching the VHS video cassette recorder, and, as evidenced by the Vidstar HR-7650U, it continues to be one of the format's most innovative proponents. Not only is this the most feature-laden VCR we've tested to date, it is also among the most reliable.

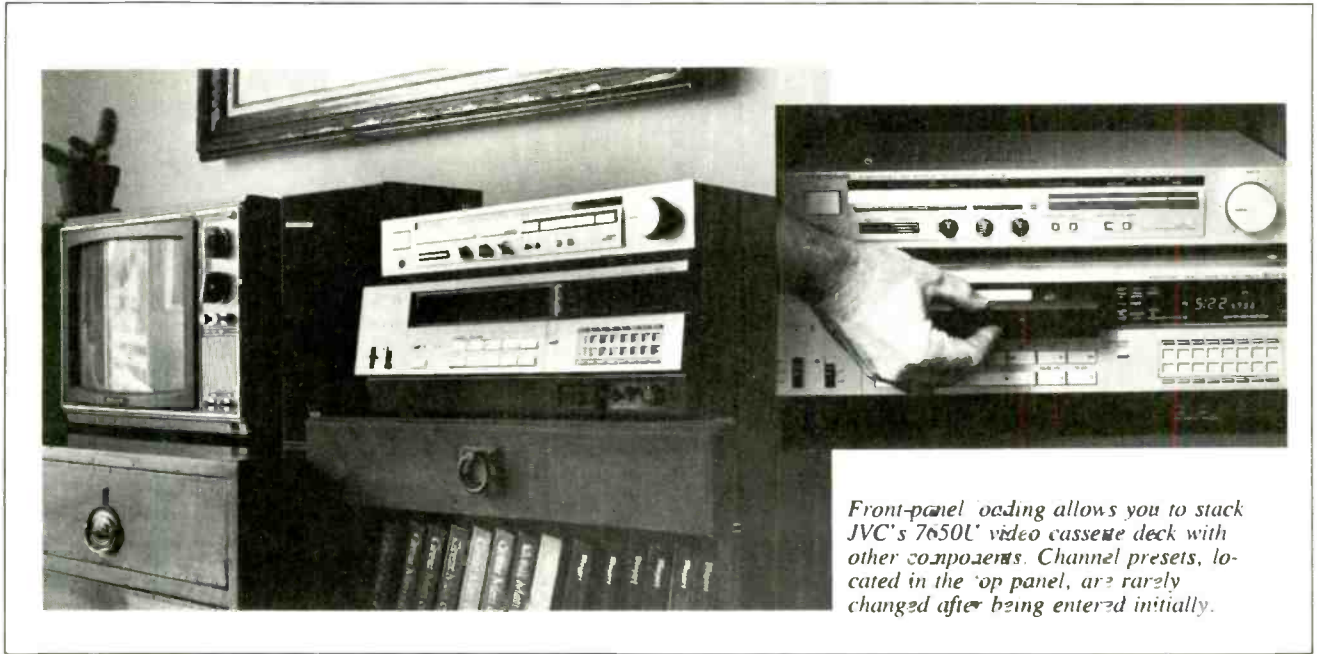
The 7650 incorporates two audio tracks (also available on some other VHS, but not Beta, decks), enabling you to record and play in stereo or to use the two channels independently for bilingual recording. The tracks share the section of tape normally used for mono audio, so stereo recordings made on the 7650 can be played back on mono-only VCRs and vice versa. Despite the close spacing of the two tracks, we heard no crosstalk. (We recorded music on one track and voice on the other, and then

switched between them via the AUDIO MONITOR.) Theoretically, the narrow audio tracks should shave about 3 dB from the typical S/N ratio of a mono VCR. Indeed, hiss was quite apparent on our wideband stereo system unless we took advantage of the deck's Dolby B noise reduction, another of its highly useful features.

Tapes made with Dolby on the 7650 are substantially quieter than unprocessed recordings, even mono ones, made on other machines. But an unencoded tape played on the 7650 and linked to a good system sounds quite noisy, though not much more so than recordings made and played on a good mono machine. Generally, we found it best to leave the AUDIO MONITOR at STEREO and to use our amplifier's mode switch to combine the two channels into mono. This ensures that the signals for the two channels are added directly, which effectively restores most of the 3 dB that otherwise would have been lost.

Although the 7650 records only in the standard-play (SP) and extended-play (EP) modes, it will play back long-play (LP) tapes. Separate pairs of heads with optimized gap-widths are used for the two recording modes to attain best results at each speed. Even if the VCR is switched off, as long as it is connected to a power line, the video drum remains heated to prevent condensation. Consequently, there is no dew-warning lamp.

Like other VCRs, this deck senses the proper playback speed and automatically switches to it. Lights indicate the LP and EP modes, but not SP. A TAPE RUN indicator blinks at a rate proportional to tape speed and operates in all modes, including FAST FORWARD and REWIND. Approximately ten minutes before the end of the tape, TAPE END lights; five minutes before tape end, it begins blinking. The deck automatically rewinds at the end of the tape, unless you are using a timed-recording mode.



The variety of timing options is quite impressive. In addition to programmability for eight-event, fourteen-day unattended recording, there is a "sleep timer," which enables you to continue a recording you've begun manually even after you've turned in for the night. Set the VCR for the amount of time needed (up to 395 minutes, in 5 minute increments), and the machine will shut off automatically.

The tuner section is exceptionally quiet and sensitive, even in our fringe reception area. The deck receives all normal low- and high-band VHF stations (Channels 2 through 13), the UHF band (Channels 14 through 83), and midband and superband cable channels A through W. (With some cable setups, the HR-7650U may not be able to record one channel while you're viewing another, nor can it record more than two preprogrammed channels from some CATV converters.) Separate VHF and UHF inputs and outputs are provided. VHF uses 75-ohm F connectors; UHF uses 300-ohm screw terminals. Only one 300-ohm to 75-ohm balun transformer is supplied with the VCR, because most modern TV sets already have 75-ohm coaxial F inputs.

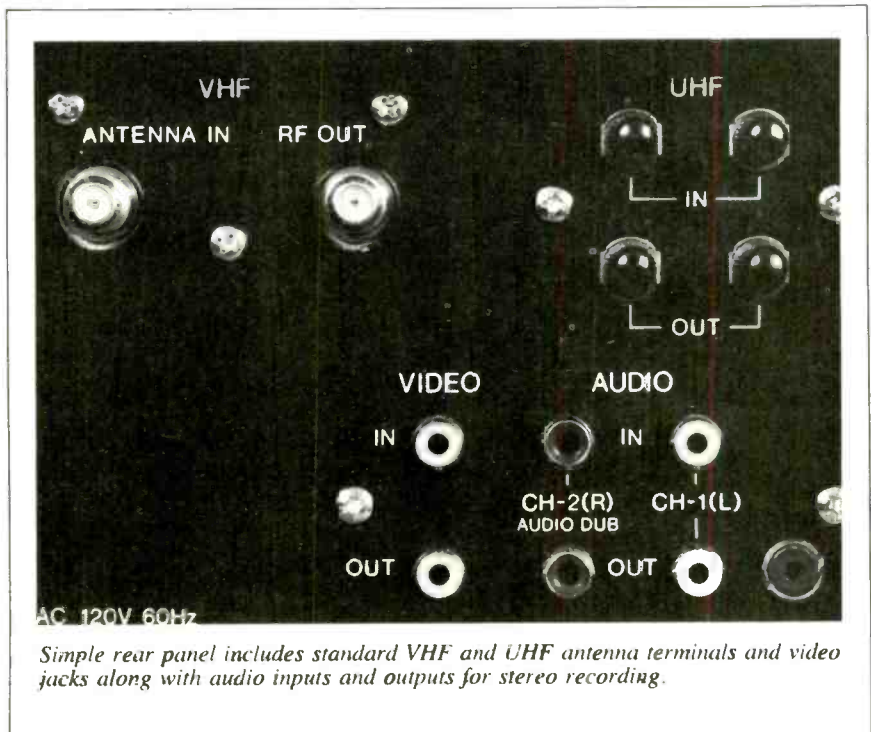
The critical video drum is directly driven by a brushless, quartz-lock servo motor; four additional motors drive the capstan, the reels, the tape-threading system, and the handy cassette-loading mechanism. Unlike earlier VCRs, which were top-loading, this one loads from the front. When you insert the cassette, the motor takes over and pulls it the rest of the way into the deck, loading the tape properly. EJECT is power assisted, too. The front-loading design has a distinct advantage: The deck can be stacked with other components as long as some space is provided for heat dissipation. The only time you might ever need to gain

access to the top after setting up the unit would be to change the channel presets.

For playback, the 7650 provides a number of special effects in both the SP and EP modes. PAUSE freezes a single frame (the deck goes into STOP after about six minutes to protect the tape); FRAME ADVANCE advances the tape frame-by-frame; and SLOW produces a slow-motion effect that can be adjusted from 1/5 to 1/30 of normal speed via a control behind the flip-down door on the front panel. When the machine is in PLAY, pressing FF or REW gives you high-speed cueing in either direction as long as you hold the button down.

When you release it, normal playback resumes. (Shuttle speed is seven times normal in the SP mode and twenty-one times normal in EP.) From STOP, the same buttons give you normal fast forward and rewind (both without pictures). Of course, audio is squelched during all special effects.

Once recording has started, an automatic channel lock prevents accidental changes in program source. The lock is also engaged when the recorder is turned off, in the program-setting mode, in playback, and whenever you are recording from the auxiliary or camera inputs. In all cases, the lock



Simple rear panel includes standard VHF and UHF antenna terminals and video jacks along with audio inputs and outputs for stereo recording.

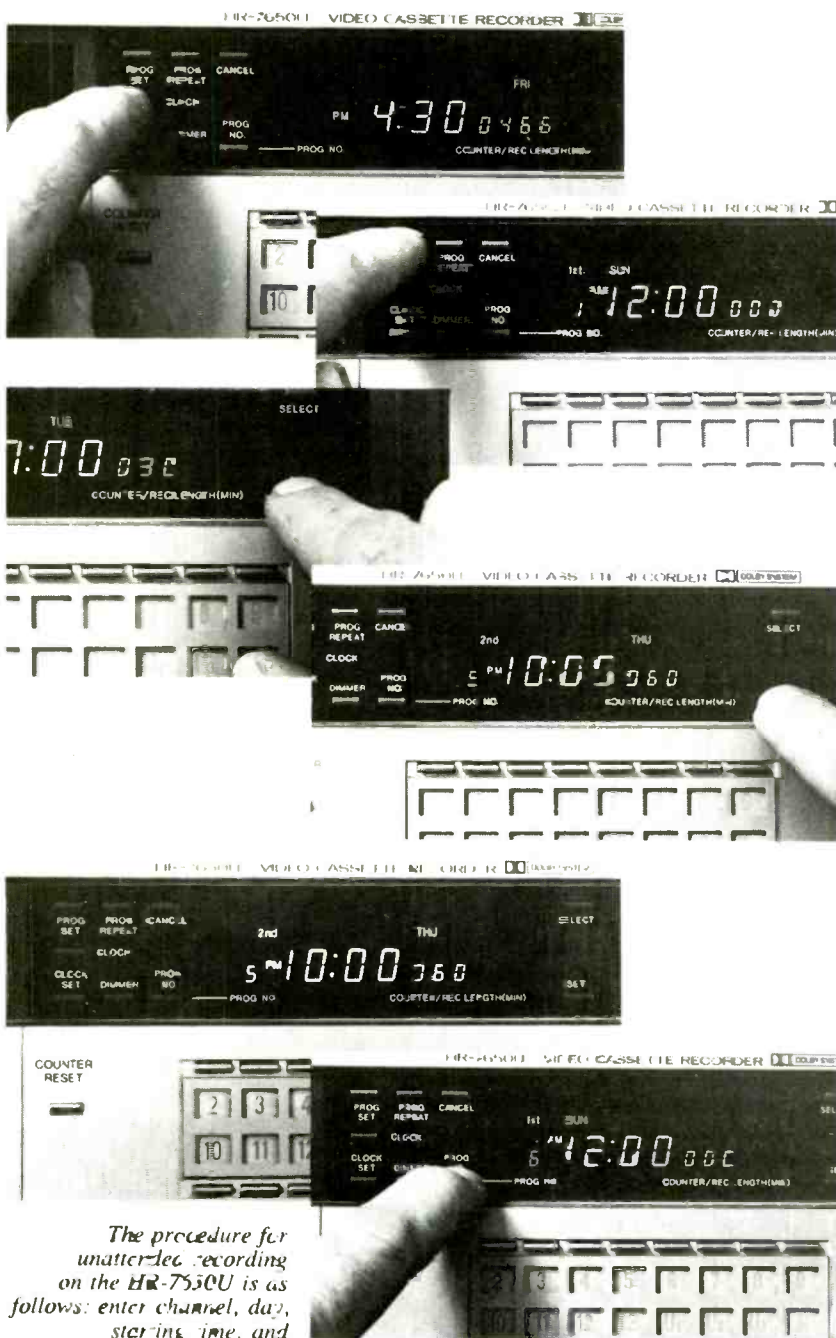
## A Close-Up Look at the HR-7650U's Controls

Programming the HR-7650U for unattended recording is fairly simple. PROG SET converts the display from time of day to the programming mode and automatically sets up the timer for the first entry. Pressing SET consecutively advances the electronic tuner through the channels until you get to the one you wish to record for Program 1. SELECT switches you to the days of the week, Sunday first. Consecutively pressing SET advances the display through the days of the first week and into the next (indicated by the legend "2nd"). When you've chosen the day, you press SELECT, which switches the timer to the hour mode, and SET, which advances the hour. The next press of SELECT switches the display to minutes; with SET you advance to the desired starting time. (The HR-7650U comes on about 10 seconds prior to the programmed starting time to give the tape a chance to load.) A final press of SELECT enters the REC LENGTH mode. The electronic tape-counter display now indicates the length of time you wish to record. Each press of SET adds 5 minutes to the count, up to a 395 minutes maximum. Once the first program has been entered, you can begin a second one by pressing PROG NO. When you've finished programming, CLOCK returns the display to the time.

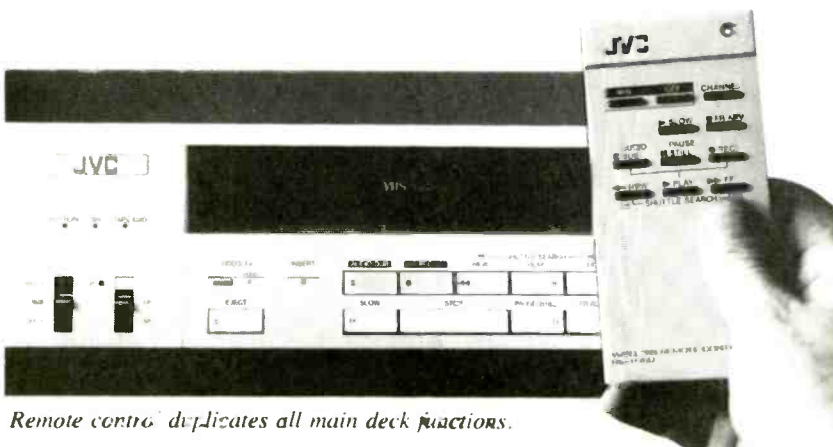
You can check the programmed starting time, the day, and the recording length of any event you've placed in memory by entering PROG SET and pressing PROG NO until you get to the one you want. If you wish to change the entry, pressing CANCEL will clear the program slot. Any or all programs can be repeated weekly by pressing REPEAT. (The week starts from the day you program. Thus, if you set up at 10:00 a.m. on a Wednesday, the first week goes through 9:59 a.m. the following Wednesday; at 10:00 a.m., the 2nd week starts.)

The quartz-controlled clock is set by pressing CLOCK SET and then using the same SELECT SET buttons employed to program the timer. A capacitor stores sufficient energy to keep the clock running and the programs stored in memory during power outages of up to 10 minutes. For longer power failures, the clock resets to 12:00 a.m. Sunday and blinks to advise you that the programming has been erased.

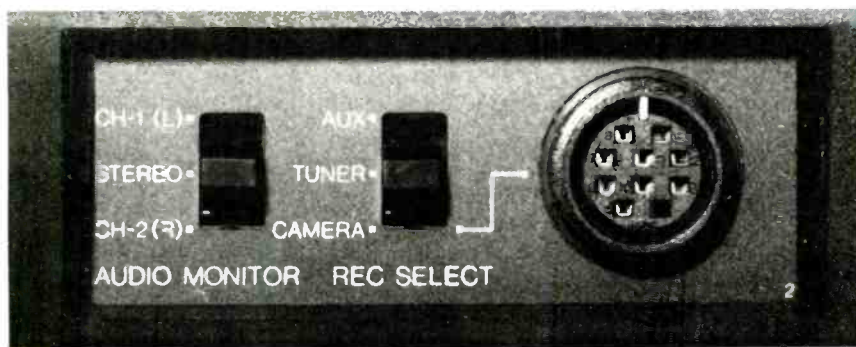
An infrared wireless remote control—the RM-P76U—is supplied with the HR-7650U. This small, battery-powered transmitter controls every major function on the VCR, including REC. PLAY, STOP, PAUSE/STILL, AUDIO DUB, FRAME ADVANCE, SLOW (with the actual speed set on a front-panel control), FF, REW, (and via the last two, the SHUTTLE SEARCH modes). Pressing CHANNEL advances the tuner through the sixteen preset stations, skipping those that you have programmed it to bypass. By using the VCR's tuner to feed the TV receiver, you can add remote channel selection to sets that lack that feature. A pair of buttons turn the VCR on and off. Whenever the VCR is turned off, the feed to the TV set switches automatically to ANTENNA. A manual VIDEO/TV button selects the picture source; with the setting on TV, you can watch one program while recording another. In our tests, the RM-P73U worked flawlessly, even from 30 feet away.



*The procedure for unattended recording on the HR-7650U is as follows: enter channel, day, starting time, and program length.*



*Remote control duplicates all main deck functions.*



You can choose from three video input sources and three audio output modes.

A THREE-POSITION AUDIO MONITOR selects STEREO CHANNEL 1 (normally the left channel fed through both outputs), or CHANNEL 2 (the right channel through both outputs) for playback. Of course, if you're listening to a typical TV set, both outputs are combined into mono. (The purpose of the selector switch is to delete the unwanted channel on a bilingual tape. Normally, the switch is left in STEREO.) To listen in stereo, you connect the rear-panel audio-output jacks to a normal stereo amplifier attached to a pair of loudspeakers and then turn down the TV sound. Or you can plug a pair of stereo headphones into the VCR's front-panel jack. (There's no volume control, but the level was well matched to the headsets we used.)

A three-position REC SELECT chooses the recording source: AUX, TUNER, or CAMERA. When using the VCR's tuner, a mono audio signal is recorded on both tracks; if two microphones are plugged in, the output from each is assigned to a separate track. (Because there are no input-level controls for the mikes, there is no way to control the relative levels of the mix except through initial mike placement.)

In AUX, the rear-panel video- and audio-input jacks feed the recorder, so you can record in stereo. In CAMERA, the camera's built-in microphone is recorded on Track 1 (the left channel). If you plug an external mike into the Channel 1 mike input, the camera mike is automatically disconnected. In either case, you can record in stereo by plugging a mike into the Channel 2 input.

When TUNER is selected, the auxiliary audio-input jacks are not live, and mono signals from the tuner are fed to the tape. This creates a problem: You can't record video from the VCR's tuner and stereo audio from an FM tuner at the same time. To take full advantage of a simulcast broadcast, you would need a second TV tuner connected to the rear-panel VIDEO IN jack. Then you would select AUX and feed the stereo FM signals to the AUDIO IN. The HR-7650U does provide audio dubbing facilities, but not in stereo. The signal to be dubbed is recorded on Track 2 (normally the right channel) either from the Channel 2 auxiliary input, the Channel 2 microphone input, or monaurally as a composite of the two.

ensures that the VCR will always go back to the channel last chosen when you turn it on or stop playback.

An automatic edit feature backsapes the tape slightly to provide smooth transitions between sequentially taped scenes. It also facilitates insert editing, from such inputs as camera, aux, or tuner, with a minimum of picture distortion at the edit points.

There are two convenient cueing functions. Each time you begin recording, a cue signal is placed on the tape. When SEARCH (a switch behind the flip-down door) is set to CUE and then FF or REW is pressed, the tape shuttles to the next cue signal and stops. For tapes that have been recorded on other decks and lack the cue signal, placing SEARCH in the COUNTER position stops the tape at counter zero in either fastwind mode.

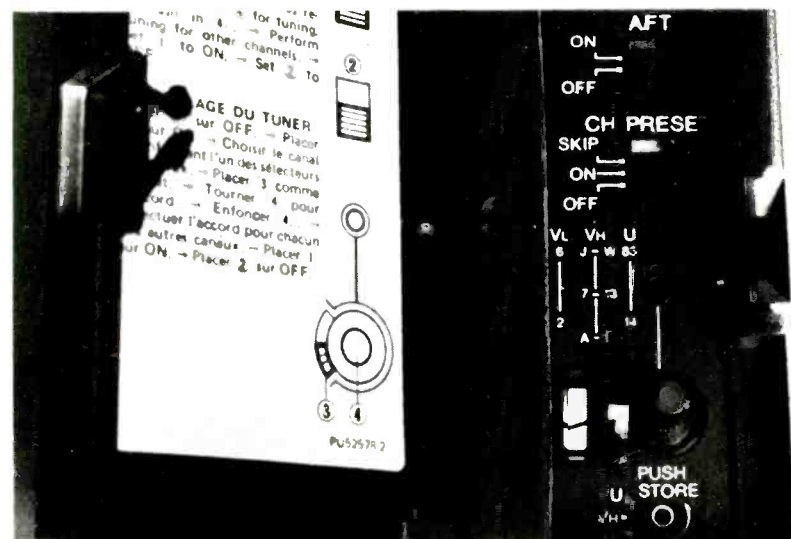
With this wide an array of features, a good owner's manual is essential. JVC's is more than adequate, providing detailed instructions on the full range of operations, from basic to advanced.

If you haven't heard stereo video sound, you're in for a pleasant surprise. Among other sources, we used Paramount's *The Jazz Singer*, which, in the VHS version, is recorded in Dolby-encoded stereo. Although we'd hesitate to stack it up against the Capitol soundtrack, it was acceptably quiet on our wide-range stereo system and was reproduced by the 7650 with adequate bandwidth. True, this is not "audiophile-quality" sound, but it is immensely more enjoyable than what you get from typical unencoded mono tape.

Video performance, both on prerecorded tapes and on those made on the 7650, was excellent. Compared to the superb SP performance, EP's definition was a bit softer and experienced more chroma (color-signal) noise, but the picture was still well above average. The deck did tend to produce one slow-moving color noise bar when it began playing, but the circuits stabilized almost immediately.

Special effects are quite good and operate equally well at either recording speed. A noise bar was likely to appear in FREEZE, but it was relatively narrow and generally near the edge of the screen. More noise bars occur in the SEARCH modes, but did not interfere with locating a particular program segment. With our TV receiver, FF SEARCH produced a stable image. REW SEARCH caused the picture to roll slowly, a problem the 7650's VERTICAL HOLD seemed unable to correct. We consider that a very minor flaw, however.

Obviously, you can buy a VHS deck for much less than this \$1,600 JVC unit. But if you want one of the most feature-filled VCRs available, one whose overall performance we have yet to see surpassed, and one that can bring Dolby-encoded stereo to your video system, the 7650 should be at the top of your list.



Up to 16 VHF and UHF channels can be preset using a single control.

A single knob serves to assign the sixteen channel presets. First, switch CH PRESET ON, and select either the UHF, low VHF, or high VHF band via a three-position switch. Press the desired button for the channel and tune for the best picture. Then push the shaft of the control inward to enter the setting into memory. If you have fewer than sixteen stations in your area,

you can set the tuner to skip over unused ones automatically by selecting the unwanted channel, setting CH PRESET to SKIP, and pressing the control shaft. Only Channel 2 cannot be bypassed. We found that the presets on the HR-7650U were quite easy to set up, although it took a deft hand when tuning the upper VHF channels to get the best results.

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## August Arts Cable

### OPERA and ITS PERFORMERS

**ABC Arts:** *Call Me Flicka*, a profile of Federica von Stade. *Peter Grimes* with Jon Vickers, conducted by Colin Davis (Covent Garden). *Lotte Lenya*.

**Bravo:** *The Mikado* with Valerie Masterson, Philip Potter, and Donald Adams (D'Oyly Carte). *Daughter of the Regiment* with Hania Kovitz and Ugo Benelli, conducted by Arturo Basile (Orchestra Filarmonica Trieste; Ballet Ensemble of the Dresden State Opera).

**CBS Cable:** *The Ring of the Fetuccines*; music by Verdi, Bizet, Mozart (Broque [sic] Opera Co.).

### SYMPHONIC and CHAMBER MUSIC

**ABC Arts:** *Brahms Double Concerto* with violinist Isaac Stern and cellist Leonard Rose, conducted by Zubin Mehta (Israel Philharmonic). *Respighi's Roman Festivals*, conducted by Lorin Maazel (National Orchestra of France). *James Galway: The Man with the Golden Flute* (Rodrigo's *Concierto Pastoral*). *Arts Visits with Lorin Maazel*.

**Bravo:** *St. Louis Symphony, Chopin to Dvořák* with pianist Emanuel Ax, conducted by Leonard Slatkin. *The Aspen Chamber Symphony* with pianist Claude Frank and cellist Ronald Leonard, conducted by Jorge Mester (Mozart, Poulenc, Barber). Pianist *Martha Argerich Plays Schumann*, conducted by Bernhard Klee (Southwest German Radio Symphony). *Lazar Berman, Piano Virtuoso* (Liszt, Schubert, Scriabin).

**CBS Cable:** *The Chamber Music Society of Lincoln Center* with soprano Judith Blegen, trumpet soloist Stephen Burns (Ravel, Scarlatti, Benedict, Strauss). *Dvořák's Symphony from the New World*, conducted by Karl Böhm (Vienna Philharmonic). *R. Strauss's Burleske for Piano and Orchestra in D minor* with pianist Rudolf Buchbinder, conducted by Christoph von Dohnányi; *Don Juan*, conducted by Karl Böhm (Vienna Philharmonic). *Handel's Royal Fireworks*, conducted by Karl Richter; *Bartók's Miraculous Mandarin* conducted by Dohnányi (Vienna Philharmonic).

### DANCE

**ABC Arts:** *Assoluta*, a profile of Natalia Makarova. *Ailey Dances (Night Creature, Cry, Revelations)*. *Maurice Béjart: The Love for Dance* (choreographer pro-

file). *A Portrait of Giselle*.

**Bravo:** *Karen Kain, Prima Ballerina* (Roland Petit's Ballets de Marseilles).

**CBS Cable:** *Song and Dance*—Britten's *Friday Afternoons* (Royal Ballet Lower School). *La Fille Mal Gardée* with Lesley Collier and Michael Coleman (Royal Ballet). *Tapdancin'* (documentary).

### JAZZ and POPULAR SONG

**ABC Arts:** *I Am the Blues* with Willie Dixon (documentary). *Women in Jazz: The Creative Force* with Marian McPartland, Carla Bley, Mary Lou Williams.

**Bravo:** *The Bravo Jazz Festival: Dave Brubeck (Koto Song, Out of the Way of the People, Tritonis)*.

**CBS Cable:** *Singin'* with Karen Morrow and Nancy Dussault performing songs from Broadway. *The Songwriters: Arthur Schwartz* with Dussault, Ed Evanko, Judy Kaye; *Burton Lane* with Larry Kert, Bobbi Baird, Martha Wright; *Sheldon Harnick. Cabaret Times Three* with Bobby Short, Hugh Shannon, Mabel Mercer (Sondheim). *Gershwin, Rodgers & Hart, Porter*.

### Pay Service Premieres

**Bravo:** *Picnic at Hanging Rock; Getting of Wisdom; Journey Among Women; Caddie; The Irishman; Chant of Jimmy Blacksmith; Stevie*.

**Showtime:** *Tarzan, the Ape Man; Eye of the Needle; Victory; Under the Rainbow; Friday the 13th, Part 2; High Risk; This Is Elvis; Breaking Glass; The Man with Bogart's Face; Stardust Memories; Foul Play; Soldier of Orange; Tim; Lost Horizon; The Stratton Story; The Trouble with Girls; Country Goes to England* (Mel Tillis, Kris Kristofferson); *Jane Fonda's Celebrity Fashion Show* (Fonda, Chevy Chase, Sally Field).

**Home Box Office:** *Clash of the Titans; Tarzan, the Ape Man; Victory; Eye of the Needle; Friday the 13th, Part 2; Under the Rainbow*.

**Cinemax:** *All the Fine Young Cannibals; A Global Affair; The Great Bank Hoax; The Fixer; Women in Love*.

**The Movie Channel:** *Tarzan, the Ape Man; Eye of the Needle; Victory; Clash of the Titans; Friday the 13th, Part 2; Under the Rainbow; Heartbeeps; Knightriders; Saturday the 14th; Pictures; The Street Fighter; Zoot Suit; Student Bodies; Sitting Ducks; J.D. and the Salt Flat Kid; Three Warriors; Separate Ways; Delta Fox; Tim; Never, Never Land; Looking for Mr. Goodbar; Birth of the Beatles*.



# The Collectors' *Gioconda*

Wherein the new London entry  
does not figure prominently  
Reviewed by Conrad L. Osborne

THIS RECORDING OF *La Gioconda* is the opera's eighth, No. 5 in stereo. The interpretation does nothing to supplement or revise our vision of the piece, and apart from its engineering its strengths and weaknesses are not sufficiently out of the way to make it an oddity in the field. So perhaps the most useful perspective on it will be that afforded by at least a skimming of The Collectors' *Gioconda*.

*Gioconda* is a great singing piece in the same sense that Meyerbeer's operas are. Like the best of them, it is written to electrify through exploitation of grand-opera voices of all categories, as fairly commonly heard in the late nineteenth and early twentieth centuries. Also like the finest of Meyerbeer's work (I think especially of *Les Huguenots*), it has some very real dramatic strengths. These strengths are those of rhetorical Romantic melodrama, but that does not make them unreal—only difficult to refashion. *Gioconda* has outlasted its genre for three reasons: 1) The title role offers tremendous vocal and theatrical temptations to prima donnas—temptations that are compatible enough to modern singing and acting styles to work for a gifted few of each generation; 2) the score is fashioned with far shrewder proportion, and far fewer signs of torturous labor, than even the best of Meyerbeer's; and 3) the melodic invention just doesn't stop. Among all Italian operas, there are not more than fifteen or sixteen (six or eight by Verdi, three or four by Puccini, two by Donizetti, and one each by Rossini and Mascavallo) that are comparable in this respect. I count some twenty-two to twenty-four tunes in the solo sections alone (excluding those contained in the choral writing and Dance of the Hours) that have a quality of (to borrow a term that has become a pretentious cliché—perhaps we can devalue it a bit) numinosity. That's equivalent to roughly half the lifetime production of Richard Rodgers, numinous tune-wise. This may not seem a sophisticated claim, but melodic inspiration continues to do well in the polls, despite all its bad press.

So: an opera of, among other things, great singing tunes, written in closed-form numbers, the wealth distributed among six major roles representing all the standard modern "dramatic" vocal categories. An opera which, to do its writing full justice in

a single performance, would require the sort of one-time casting coup achieved in the justly famed 1962 Scala *Ugoretta*, and which is therefore in many ways best experienced through an assemblage of excerpts or by hopping around among individual performances on the complete recordings.

Ironically, very little of the title role gets onto excerpts discs except for "*Suicidio!*"—the rest of *Gioconda*'s great moments occur in little spurts that spring directly from turns in developing scenes—a strength of the role, but not when it comes to creating highlights. Among recordings of the aria, the benchmark is Ponselle's, a good late acoustical (1925)—though with a respectful over-the-shoulder glance at that of Nordica, whose grandeur of style and solidity of voice can at least be glimpsed in her second (1911) recording. The meaty thrust of Ponselle's opening phrases, the magnificently connected *piano* A natural at "*Volavan l'ore*," the smoky tension of her dips into a strong but never raw chest register—virtually every phrase sets a standard. Musically, too, she makes dramatic points, mostly by taking the time to allow for moments usually beat through or at least held short by conductors in more recent performances, e.g., her suddenly slowed tempo for the hushed descending F sharp scale at "*di dormir queta dentro l'avel*," or the well-milked C sharp on the second syllable of "*dentro*" in the final phrase.

Nearly as good is the 1953 Milanov version, similar in general outline but with just a trace a whoopiness here and there and a less open-throated chest—though the float of that same turn through "*Volavan l'ore*" is alone worth the listen. The other major modern voicing belongs to Crespin. I miss some true chest strength in her rendition, but for sheer vocal beauty and regality of style she's unmatched, and her full-voice top B is the most thrilling on records, so far as one can be sure through the cavalike reverb that booms about it.

When it comes to the lower female roles, two sets of excerpts should be mentioned. One is the old Cetra *Gioconda* highlights album, pulled together from late-'40s recordings, whereon Ebe Stignani, in splendid voice despite the late date, offers the finest of all postwar "*Voce di donna*"s, and Laura's romance and duet with Gioconda (Gina Cigna a full-out if sometimes edgy

*Gioconda*) give us one of the few samples of the brief, exciting prime of Cloé Elmo.

The other is the grouping of extracts from the parts of La Cieca ("*Voce*" and "*Figlia che reggi*") and Laura ("*Laggiù nelle nebbie*" and "*L'amo come il fulgor*"), recorded in 1930 by Irene Minghini-Cattaneo, the superb Amneris and Azucena of the old Victor complete sets. I have them all together on a fine Club 99 disc, and have seen the same grouping on Preiser. This singer, with her round, rich mezzo voice and forceful but unforced native style, is exemplary in all these passages, and fortunate in her partners: the marvelous baritone Apollo Granforte, the surprisingly firm and ringing English tenor Lionel Cecil, and the soprano De Martis, vocally less imposing but a solid pro. Among many excellent versions of "*Voce di donna*" made by contraltos when we had contraltos, I especially recommend that of Karin Branzell. It is a little placid and slow, but incomparably deep-settled and polished; along with the same artist's "*O mio Fernando*," I consider it a model of true vocal legato.

Tenor excerpts mean principally "*Cielo e mar*," and though there have been hundreds of recordings, they can be rapidly winnowed out, for it is a challenging piece that many good singers fail to realize. There are several fascinating early versions (the first Caruso and Gigli ones, Anselmi, De Lucia) which should be heard by anyone interested in technique or history of style, but which are limited not only by sound but by reduction to one verse, or rather two half-verses. Among later recordings through the '30s, there are three that are essential: the 1910 Caruso, for smooth power of voice, the 1929 Gigli, for golden silkiness of tone, and the 1937 Bjoerling, for cleanliness of phrasing and perfection of technical balance (awful simplifications—*ecce* thumbnail).

The modern versions illustrate primarily the technical shortcomings of even our better large-voiced tenors, particularly when it comes to an aria that repeatedly twists just above or below the break at controlled dynamics. The estimable singers who for one reason or another don't really succeed with it range from Kónya and Ilosfalvy to Vickers and Corelli. Domingo's rendition is presentable but rather cau-

tious—he would probably do better with it now. I have not heard Tucker's recording, but Enzo was one of his finest parts and he must offer at least the basic satisfactions. That can also be said for the singing of Flaviano Labò. It is not as poetic or as technically sophisticated as some of the early versions, but is stylistically sound, and at least has all the vocal groundwork in place. This tenor didn't have quite the touch of class of some stars or the shameless panache of some others; but for a few years he sang quite a lot better than those who did.

Gigli's was a perfect Enzo voice, with its luxuriant lyric quality backed by plenty of proclamatory ring, and steered by a temperament that was exuberant and ardent though sometimes in atrocious taste. He recorded the Act I duet with Barnaba three times (with Dani, De Luca, and Ruffo). All three are cut and all three are good, but the Ruffo version is a great disc—Gigli at his freshest, sending the great melody at "*O grido di quest'anima*" bounding out with an almost impudent impetus, and Ruffo, though a bit past his prime, still offering plenty of vocal color and an awesome climax to the scene. Also very worthwhile is Gigli's acoustical of "*Deh, non tremar*"—he makes this page-and-a-half from the scene with Laura into a centerpiece of a moment. (Corelli, who in the house was a great Enzo, also was memorable in this passage.) The continuation into the duet, with a good Laura named Casazza, is also splendid, though I have yet to find a decent LP transfer of it.

Ruffo, De Luca, Amato, and Straciacri all recorded several excerpts apiece from the role of Barnaba. Except for a soaring "*Pescator*," Amato's discs are not among his best-sounding, at least in the transfers I have caught up with. The others are all representative of their originators, which is to say very fine. Ruffo, in both the monologue and the barcarole, is unmatched for easy plenitude of tone, and he is dramatically alert as well.

The role of Alvisé has seldom been championed on records, but I know of two outstanding performances of his oft-underrated scena, with its vehement recitative and proudly flowing aria. One belongs to the young Siepi, heard to much greater effect on the above-mentioned Cetra highlights disc than in his complete recording—the voice had more of a bedrock base and a more generous tone in those early seasons. The second is by the always imposing Tancredi Pasero, who also offers far and away the finest singing I have heard of the scene with Laura in a 1927 disc with Stignani. (I should also mention the Pinza/Stevens version of this scene, which I haven't yet heard but which notwithstanding a late-ish date for Pinza has to be of considerable interest.)

**Before getting to the new** complete recording, I shall very quickly characterize the



*Ponselle as Gioconda: a benchmark aria*

older ones. The only one I have not heard is the long-deleted Urania. It does not look glamorous on paper, but to judge from a *Forza* made with more or less the same forces around the same time, and from my knowledge of the principals, it shouldn't be too quickly dismissed. Among its women, at least Miriam Pirazzini was a solid mezzo, and the men (Giuseppe Campora, Anselmo Colzani, and Fernando Corena, all young and fresh) were of some stature.

The other two mono recordings are both notable for their female leads. The earliest—originally one of the Columbia 78 sets under Molajoli, offers the *Gioconda* of Giannina Arrangi-Lombardi. She had a true Italian dramatic soprano and a thorough technique, and though there is no great individuality of insight in her performance, it is still, note for note, the best-sung *Gioconda* on records. Stignani, here heard as Laura, doesn't make quite the impact one might expect. The late '30s and early '40s seems to have been her time; here she sounds a trifle unsettled and nondescript. The tenor, Alessandro Granda, has his moments, but then he has his other moments. The baritone Viviani appears to have imitated Straciacri and Ruffo—on three or four isolated high notes, successfully. Several of Arrangi-Lombardi's and Stignani's excerpts have appeared separately on LP, and that's where the interest lies.

The Cetra set was Callas' first recording of a complete role. There is tremendous intensity to the singing, and already a

remarkable specificity of intent. Some technical problems are present, but she overpowers them with youthful energy and resilience. She is well matched with Fedora Barbieri, a young and reckless Laura of no great precision, but at least a genuine dramatic mezzo instrument. Among the others, the Barnaba of Paolo Silveri achieves some distinction. Gianni Poggi is at least doing honest battle with Enzo and sounding somewhat more appealing than his later norm, and the whole performance has sufficient vitality (Votto, cond.) to seem more than the sum of its sometimes mediocre parts.

Just the reverse is true of London's first attempt, wherein what looks like something close to a true *Gioconda* cast produces only one performance of true stature—Simionato's fine Laura, the only one to combine the right caliber and quality of voice with an emotionally full but dignified approach to the music. Perhaps one should also not complain of Bastianini as Barnaba, since he is so firm, strong, and right in general sound and feel. But the richness in his voice is monochrome, and the lock he puts on the break imparts a stiffness, so that after a few minutes we realize we have heard the full inflectional range of a good but predictable and unimaginative singer. Siepi is competent but below his best form as Alvisé, and while Del Monaco gives us some exciting moments, his efforts to deal with the lyric aspects of Enzo range from the foursquare to the weird. As *Gioconda*, Anita Cerquetti is concerned exclusively with the vocal mechanics of the role. She sings some handsome phrases, but nothing much gets said beyond "I made it!" Orchestra and chorus (Gavazzeni, I'm sorry to say—a good man trying to hold things together) are really stopped around on this set, and the engineering is the worst of all the *Giocondas*.

Angel's remake for Callas is quite decently recorded, played, and chorally sung (Votto again, more polished but a little less spunky than for Cetra). The soprano's work mixes the incandescent and the painful. Some parts of the Laura scene and of Act IV are even better than before. But the throat has closed in, thinning and unbalancing the sound. Most of the first act is dismaying, and I cannot imagine anyone preferring this as a whole to her earlier version. Cossotto and Vinco are solid as Laura and Alvisé: from the standpoint of pure professional capability, their scene is the recording's best passage. Piero Cappuccilli, on an early outing, is a genial-sounding, prosaic Barnaba, Pier-Miranda Ferraro a decent, routine Enzo.

Victor's recording, under Previtali, has some spirit, but was made several years too late for its principals. Milanov, Di Stefano, and Warren all pull themselves together at points; too much of the time, though, the soprano sounds pale and thin, the tenor spread wide-open, and the bari-

tone shuddery. Rosalind Elias is an efficient, lightweight Laura, Plinio Clabassi a short-ranged Alvisé. But Belen Amparan is satisfying as La Cieca, a role usually undercast on records.

London's second attempt features Renata Tebaldi in the role with which she had the greatest success of her "come-back" years. There is no denying that the voice as a whole inclines too much to chestiness, and that many of the high phrases have a driven edge as a result. But there is also no denying the thrust of an authentic grand-opera instrument, still warm and beautiful in the less stressful passages, or the kind of temperament that digs in a little deeper after the knockdown pitch. Tebaldi was not an accomplished actress, but there was something in her that connected to the Badly Treated Heroine Faces the End scenario, so that she gave full measure in the final acts of pieces like *Gioconda* and *Adriana*. It is so here.

Robert Merrill was also past his best for this performance—the voice a little slower and drier than in its prime years. Still, it's a major sound and his technique is secure. Bergonzi's Enzo has fine things in it—he controls the aria very well, and sings with admirable line and evenness in the second-act duet and the last-act trio. But the voice is too punchless for me, the style too careful. If only he and Del Monaco had been properly crossbred—aren't they even *working* on these husbandry problems? Horne has no problem with Laura's music, but neither does she make much effect with it—the tone is narrow in the middle, its distribution of timbres doesn't really sit well on the music, and she seems emotionally perfunctory. Nicolai Ghiuselev has a hefty bass sound for Alvisé; his technique is sometimes clumsy, but at least he has the weight. Oralia Dominguez is another reasonably right La Cieca. The performance is in general bright and quick. Lamberto Gardelli pulls from the Santa Cecilia choral and orchestral forces a level of snap that is well above their recorded average.

Which brings us down to the new London *Gioconda*, an intelligently led, well-recorded one whose casting strengths unfortunately don't really fill in any chinks, and which once again proffers several important singers at noticeably less than their best. Its two most considerable pieces of work are by Baltsa and Milnes. In truth, Baltsa's voice has no place in the Italian dramatic repertory. She owns a quick, light mezzo of modest amplitude—a fine Dora-bella voice, no more intended for an Amneris than those of Léopold Simoneau and Ernst Häfliger, say, were meant for Radamès. I can see why, though, in this time of impoverishment, she is being chosen for such assignments: She sings securely, and with some commitment and intensity. She is a "hotter" singer than Horne, a more individual one than Elias. And since Laura isn't necessarily quite an Azucena, it

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## *Gioconda* has outlasted its genre partly because its melodic invention just doesn't stop.

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all works out OK, at least for records.

Milnes gives his cleanest recorded performance in a number of years. He is particularly good in the "*Figlia che reggi*" trio, where his phrasing really makes music, and in the last scene, which is straightforward and strong. I do not and never will care for the marked and distorted vowel mutation by means of which he handles the *passaggio*, but the segments just below and above are here well matched and in tune, and though this is at points a very laid-back Barnaba, with both voice and music very conservatively handled, it is certainly competitive with the best we have on the complete recordings. For some reason, he sings in his monologue of a "*voce occulta*" rather than a "*vece occulta*"—a first, though so far as I can determine an unauthorized one. (I do note that in the orchestral score, just a couple of lines later, the Doge is a "*muto*" [not "*vecchio*"] *scheletro*; I have yet to hear that sung.)

As for the rest of the casting skirmishes, the battlefield is a sobering site, littered with the carcasses of heroes past. It may be that Caballé is not so much past as simply squashed by the assignment. Looking back over my reviews of her earliest recordings (very favorable, on the whole) I find that my reservations had to do with a certain lack of real dash and thrust; with some temperamental placidity; and with a habitual glottal cluck on more forceful attacks in the lower-middle part of the voice. And casting memory back to her first appearances at the Metropolitan, in roles like Marguerite and Desdemona (roles correct for the calibration of her voice, then as now), I recall marveling that singing could be at once so lovely and so dull—she seemed a performer lacking in spark, genuinely unsuited to the theater. I was later to discover that life did emerge in certain kinds of writing, namely those in which emotional expression is somewhat distanced and abstracted by a greater degree of formalization, and in which the theatrical realities are more highly stylized.

We now have this same voice and personality, fifteen years down the pike, thrown into a dramatic-soprano role fashioned of true melodramatic excess. The beauty of her voice shows through at times, and she organizes a fairly good shot at "*Suicidio!*" But much else is ruinous. Her primary resource in passages too big and

violent for her is a detached chest register, slammed well above the break, where it creates a vacuum for the head voice large enough to swallow three Broadway belt comediennes and two lyric sopranos—not to mention several dozen notes from the score of *La Gioconda*, missing in action. There is surely some good singing left in the voice—no more, please.

Both Pavarotti and Ghiaurov do the worst singing I've yet heard from them, and though in both cases the difficulties are simply exaggerations of troubles that have been a-brewing, I'm still a bit surprised: Neither singer seemed this close to the brink in the Met season preceding the recording, and certainly Pavarotti was in better shape for the preposterous San Francisco *Gioconda* telecast. He is competent in Acts III and IV. But in I (which means chiefly the "*Assassini!*" declaration and the scene with Barnaba) the voice is thin and quite weak toward the bottom. Act II, the crucial one for Enzo, again sounds thin and shallow, and he resorts to exaggerating open vowels and to the old hack trick of exploding the release of final consonants, so that the performance becomes provincial in style as well as out of sorts vocally. If you want a shocker, compare his "*Cielo e mar!*" with his early recital version—not a model in itself, mind you, but at least enjoyable. Only a decade separates the two.

Ghiaurov's troubles are even more saddening, for this was an honestly great high-bass voice that has not worn well. The imbalance between his gutturally weak low range and that gorgeously overblown top has been worsening perceptibly for some years now, and here he barely squirms his way through a brief and opportunistically written role. There is still splendid sound from about F below middle C to D above, but at least on this occasion, all else is chancy.

The La Cieca, Alfreda Hodgson, has a nice, relaxed contralto-ish sound in the lower middle range, and this serves well enough for the trio. For her first big test in the aria (at "*A te questo rosario*," where a deep connection must remain behind a floated *piano* in upper-middle tessitura) she detaches the sound, and at her second (the expansive climactic turn over the G), she produces a lyric-soprano timbre unrelated to the rest of the voice.

And that, I guess, is *La Gioconda*, circa 1980. All this is presided over by Bruno Bartoletti. He secures excellent, refined playing from his orchestra—there is a delicacy and sweetness in many passages that is most enjoyable. His tempos, while often on the slow side (except, I feel, for "*Stella del marinar*"—but then that *always* sounds rushed to me), are usually just and steady, and I appreciate his unforced, unfussed way with the music.

For me, two things are missing in his reading. One is what we might loosely call (*Continued on page 81*)

# The Complete Dowland, More and Less

A composer famous in his time but now needing revival gets a considerable boost from Oiseau-Lyre.  
Reviewed by Allan Kozinn

IN 1976, BRITISH LUTENIST Anthony Rooley and his Consort of Musicke marked the 350th anniversary of John Dowland's death with the initial installment of a series that would encompass the composer's entire output in an organized and integral fashion for the first time on disc. Now, five years and twenty-odd discs later (depending how one counts the peripheral issues), the project is complete. Or rather, a bit more than complete, and a bit less: On one hand, it includes such Dowland-related items as contemporary keyboard variations on his themes, and consort settings from manuscripts and printed collections other than his own. On the other hand, for certain of the ninety-two lute works that fill the five discs devoted to that side of his oeuvre, choices had to be made from among many existing versions, some presumed more authentic than others, although few pieces exist either in his own hand or in publications he authorized.

In most respects, the collection is a success in both concept and execution, and perhaps its greatest value lies in the extraordinarily broad overview it affords—not only of Dowland's development and creative scope, but of the performance conventions and shifting musical tastes of Elizabethan and Jacobean England. The peripheral recordings nominally part of the series—the keyboard transcriptions, Robert Dowland's *Musicall Banquet*, and other sets containing works by Dowland amid those of his contemporaries—further establish the musical context within which he worked, and his place therein.

In his lifetime, a characteristic insecurity about this last point caused Dowland considerable frustration, all duly conveyed in the introductions to his songbooks. He could not have been more famous. References to his songs and to his command of the lute are plentiful in English poetry and plays of the period, and the frequency with which his works appeared in Continental collections (with and without his permission) attests to his renown in Europe—rare for an English composer at that time. During his European travels, he found favor at several courts and was offered posts, one of which he eventually accepted, in Denmark. Yet his most fervent desire, an appointment at the English court, was denied him until

he was fifty—by which time he was complaining bitterly about the young upstarts who denigrated both his compositions and his lute playing as old-fashioned.

When Dowland was seventeen, in 1580, he traveled to France in the employ of Sir Henry Cobham, England's ambassador to the French court. He evidently perfected his lute technique and perhaps began composing during his years there, and he made the politically unwise decision to convert to Catholicism. He most likely returned to England in 1584 or 1586, and in 1588 he received a Bachelor of Music from Oxford. The same year, at twenty-five, he was listed in Dr. John Case's *Apologia musices* as one of the most famous musicians of the day. Yet though his name crops up in records of court festivities over the next few years, he failed in his bid to replace a deceased John Johnson as one of the queen's lutenists in 1594. Blaming official prejudice against Catholics, he again left England, intent on visiting various European courts and studying with Luca Marenzio in Rome.

Apparently, Dowland missed Marenzio, but he probably met some other rising Italian composers, among them Giulio Caccini; and in all other respects, the voyage was a success—as Dowland noted in a lengthy letter from Nuremberg to Sir Robert Cecil in 1595. The following year, Dowland's friend and patron Sir Henry Noel wrote to him, suggesting that he return to England and that he might yet obtain the court post he sought. Upon his return, Dowland discovered that some of his lute works were being pirated in William Barley's *New Booke of Tabliture* (1596)—and worse, that the editions were "false and unperfect." He went about preparing his *First Book of Songs* (1597), which proved immensely popular and was reprinted five times by 1613.

But this, the first publishing venture Dowland personally oversaw, was not the first authorized publication of his music. In 1592, he contributed six Psalm settings to Thomas East's *Whole Booke of Psalmes*, intended as practical music—simple four-part harmonizations for use in private worship. Rooley presents these in varied settings—four voices unaccompanied; tenor with organ; baritone or countertenor with viols and organ; and finally, in *O God of*

*power omnipotent*, "A Prayer for the Queens most Excellent Majestie," four voices, viols, and organ. Dowland addressed himself to devotional music later in life, and with a much freer hand, in *A Pilgrimes Solace*; but for the most part, sacred music was not his forte, and these early settings, performed along with a second, later setting of Psalm 100 (1621), are of marginal interest.

Yet the disc of "Lamentations, Psalms, and Sacred Songs" does offer intriguing items, including a curious adaptation of the song "Sorrow stay," retitled "Sorrow come," its amorous lyric replaced by a religious one, and two songs contributed to Sir William Leighton's *Teares or Lamentacions of a Sorrowfull Soule* (1614), both far more characteristic of Dowland's later chromatic, polyphonic style, gorgeously sung here. So, too, is the disc's centerpiece, the seven *Lamentations* composed for Noel's funeral in 1597. These serene, brief works, written for the professional choir of Westminster Abbey, are far more affecting than those contributed to East's collection.

**By the time the *First Book* was published, the thirty-four-year-old Dowland had become so well-known, both in England and abroad, that it was to some extent the equivalent of today's "greatest hits" anthologies. One song, "His golden locks," dates as far back as 1590, and Dowland, in his revealing introductory note, modestly tells his "courteous" reader that, "were it not for that love I beare to the true lovers of musicke, I had conceald these my first fruits, which how they wil thrive with your taste I know not, howsoever the greater part of them might have been ripe inough by their age." Even today, many of these youthful pieces remain perhaps the most frequently heard lute songs, among them, "Can she excuse," "If my complaints," "Come againe," and "Wilt thou unkind thus reave me." This set, which launched the Rooley series, proves the easiest to return to. The songs have everything we associate with Dowland and his age—from affections of dolefulness, often associated with unrequited passion, to a lively eroticism (if not quite the bawdiness so blatant in the songs of some of his colleagues) rooted in**



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Elizabethan double entendre and, particularly, the use of death as a sexual image.

Music publishing was a fairly new business in Dowland's day, and his *First Book* was actually the first song collection printed in England. It established a format adhered to in the thirty English songbooks published over the following twenty-five years—each containing about twenty-one songs in a modified choir-book layout, with the cantus and the lute accompaniment printed together on the left-hand page, and the three lower voices on the right, aligned upside-down, sideways, and normally, so that singers gathered around could read their parts unhindered.

All of which has led to some speculative argument about how Dowland's songs are best performed. His instructions on this book's title page [see reproduction—Ed.] are flexible, describing the works as "Songes or Ayres of fowre parts with Tablature for the Lute: So made that all the partes together, or either of them severally may be song to the Lute, Orpherian or Viol de gambo." But Ian Spink, in *English Song, Dowland to Purcell*, argues that these are lute songs, not consort songs, and therefore most appropriately rendered by a solo singer. "It is clear," he writes after pointing out what he considers the awkward verbal underlay of the lower voices, "that we are frequently dealing with lute texture rather than true polyphony."

Rooley, however, keeps his options open, and his scoring decisions—not only in the *First Book*, but in succeeding volumes—are well considered and often quite clever. Spink is contradicted in the very first piece, the sweetly melancholy "Unquiet thoughts." Dowland's lower voices may be merely alternative versions, but often, as here, they work wonders. The first line of each verse is transformed from the simple tune of the solo version to an arresting four-chord figure, followed by appealing imitative interplay. Even where the transformations are less striking, the four-voice versions bring a freshness to works normally performed as solos.

Rooley does have the distinct advantage of a vocal consort with voices closely matched and easily blended and with expression and tone ideal for this music. The standout is Emma Kirkby, whose soprano possesses such uncommon purity that, for me at least, she virtually owns the early vocal repertory. Wisely, Rooley deploys his forces, both vocal and instrumental, to allow for maximum textural variety within each songbook, at the same time keeping an ear out for the treatment (solo or consort, male or female soloist) that suits each text best.

Basically, his options are: to distribute the solo songs among soprano, tenor, and bass—rarely to countertenor, and not until the fourth book, of 1612—and to accompa-

ny them with lute alone, lute and bass viol, or lute and a viol consort; or to render them as four-part songs, with or without accompaniment. Occasionally, he illustrates the music's adaptability by mixing media: In "Go christall teares," in the *First Book*, the first verse falls to tenor and lute, followed by a setting for four viols, and then a second verse for four voices. Rooley continues such experimentation in later books as well.

Early in 1598, Dowland apparently rejected the offer of a post at the court of the Landgrave of Hesse, but later that year he became lutenist at the Danish court of Christian IV. In Denmark, he completed the *Second Book of Songs*, and sent it to England for publication in June 1600.

Here Dowland made a few changes in presentation, setting the first eight pieces for two voices, the last two for five voices, and the rest, as in the *First Book*, as solo songs with four-part alternative versions. The two-part songs are normally performed solo, since the second (bass) part, despite its full text, merely follows the lute; for the most part, Rooley follows suit. But to show how the two-part settings work, he gives the first two songs—"I saw my lady weepe" and "Flow my teares," among Dowland's most frequently performed although rarely by two voices—to soprano and bass, with lute. Perhaps it's just the novelty, but David Thomas' bass provides a magnificent underpinning to Kirkby's melody, with the lute filling out the midrange nicely. The next three work well enough, here as elsewhere, as tenor songs, and the "Times eldest sonne" trilogy, with its old-man's text, proves a natural place to switch to the bass; these solos are accompanied by lute and bass viol. After all this, the four-part setting of "Praise blindnesse eies" provides a startling rush of vocal color. Even more than in the *First Book*, Rooley tinkers with scoring possibilities, and his approach works particularly well in "O sweet woods," where the tenor takes the verses and the full vocal consort the refrains.

This book, like the first, begins on a melancholy note, but Dowland broadens his scope in the more downcast section to lament over mortality—not just the comparatively trivial denial of amorous favors. Still, the latter concern does crop up again in the book's second half, in a few songs that are positively sprightly.

Soon after this book was published, Dowland encountered trouble in Denmark, apparently running up debts and needing advances on his salary. In 1603, he took leave with pay to see to personal business matters in England—among them, publication of the *Third and Last Book of Songs*, which he had prepared in Denmark and delivered to the printer immediately upon arrival.

Here the range of concerns is again broadened, and the downcast mood that

pervades several songs reflects sadness more than grief. The first four songs are scored for solo voice; the dark mood of the first two, Dowland's typical opening stance, makes way for the jaunty "Behold a wonder here" and the even lighter "Daphne was not so chaste." Tenor Martyn Hill delivers all four sensitively, with an unassuming touch of ornamentation in the repeated sections of the slower songs, an approach he takes consistently throughout the songbooks. His moment to really shine, though, comes later in this set, in the extraordinarily lengthy and moody centerpiece, "Love stood amaz'd." From the fifth song on, vocal duties are split between soloists and consort; since Dowland repeats certain of his rhythmic effects in several songs, one can almost hear how well the consort approach might work in a solo song, and vice versa. Curiously, Rooley abandons his alternative-scoring experimentation here but takes it up again in *A Pilgrimes Solace*.

Danish court payment records show no trace of Dowland for seventeen months, and in the preface to his next publication, *Lachrimae, or Seaven Teares* (1604), he tells why in his dedication to England's Queen Anne, his Danish employer's sister: "Since I had accesse to your Highnesse at Winchester (most gracious Queen), I have been twice under sail for Denmarke, hastning my return to my most royall King and Master, your deare Brother; but by contrary winds and frost, I was forst backe againe and of necessitie compeld to winter here in your most happie Kingdome." Dowland apparently made it back to Denmark that summer and settled into his old pattern of running up debts and overdrawing on his salary. In early 1606, Christian IV finally dismissed him.

*Lachrimae* is a unique publication, Dowland's only fully instrumental collection; moreover, it was unusual for its day in that it presents a cycle of seven works based on a metamorphosis of a single theme and its scoring is for once specific, calling for five viols and lute. The cycle does not stand alone, but is rounded out by a collection of pavans, galliards, and almains, many of which are retitled consort settings of songs already familiar.

The *Lachrimae* tune itself was one of Dowland's earliest, clearly his most successful composition. Apparently first a lute solo, one of those pirated by Barley in 1596, it turns up again in song form as "Flow my teares" (*Second Book*). After the four-note opening theme, each of the seven settings here goes off on a different track, representing different kinds of tears. A competing 1962 recording by the Schola Cantorum Basiliensis (German Harmonia Mundi 1C 065-99604), though it presents the set in a smooth, lush manner that now seems old-fashioned for early music, is not without merit; the new edition, by comparison, is starker and more hard-edged, the

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## Unlike the songbooks, the lute works contain few notable rarities.

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recorded sound brighter.

A peripheral disc in the Rooley series (DSLO 533) pulls together twenty-one consort arrangements of Dowland's music from various English and German printed and manuscript sources. As with the dances that fill out *Lachrimae*, many are based on song tunes, and not surprisingly, a couple more are *Lachrimae* settings. Here the scoring is more diverse, but the performances are often disappointingly bland. In the works taken from Morley's *Consort Lessons* (1600), for example, the playing lacks the brio of a treasured 1963 recording by the Julian Bream Consort (RCA LSC 3195), achieved despite "inauthentic" instruments and performance techniques.

Returning to England in 1606, Dowland found a musical world that was changing. Foreign musicians had become more prominent at court, and a generation of young lutenists, viol players, and singers was establishing new fashions in London. In 1612, he was finally granted a court post, and the day he was appointed, his fourth songbook, *A Pilgrimes Solace*, was published. He took the younger players to task in his preface for their ignorance and arrogance and went on to present the most ambitious and brilliantly conceived song collection of his career.

Rooley, in his notes, sets out a five-section scheme to cover the succession of subjects: 1) wordly love; 2) platonie love; 3) wordly misery; 4) devotionall contemplation; and 5) worldly love once again, now in the form of a wedding masque—which Rooley, stretching somewhat, suggests may symbolize the marriage of Man and his Creator. If the texts are by turns earthy and spiritual, the music vacillates between a conservative, tuneful polyphony, in the old consort style, and various newer approaches, from more elaborate settings influenced by Italian monody to several of a simpler, declamatory nature. In an odd scoring twist, Dowland prescribes solo voice, treble and bass viols, and lute for the ninth through eleventh songs.

Dowland has come a long way here from the easier and less intensely passionate *First Book*, and this is, perhaps, the least immediately accessible of his collections. His most adventurous set, however, it ultimately proves his most rewarding. Rooley's singers convey its inherent passion magnificently.

**If songs make up the greater part of Dow-**

land's output, equally important is the solo music for his own instrument, the lute. This diverse gathering includes free contrapuntal fantasies, variations on song themes (his own and others'), and sundry dances. Some, possibly written for amateur patrons, are short and easy; others, more akin to the reflective solos that established his reputation as the premier lutenist of the age, are lengthy and complex. How closely any of these reflect the way he actually played is, of course, impossible to say, since the lute music captured in print was not always set down by the composer himself and often represents a distillation of an extemporaneous performance.

Eliminating versions he considers either inauthentic or poor copies but including several he finds questionable, Rooley narrows Dowland's total to ninety-two pieces. Rather than present them by genre, he divvies up five full-disc recitals, each played by a different lutenist.

The album has been out for some time in England, but London has opted to release it only through the new Polygram Special Imports division. At first this seemed an eccentric move: The "complete" Dowland minus the lute music is rather like the "complete" Beethoven sans piano works. Commercially, of course, the label must have reasoned that the market for a five-disc collection of lute music was specialized, at best.

It turns out, however, that the market may be even more limited than London suspected, for the playing here is not what lute aficionados are used to. Until now, the most widely heard lute discs were by concert guitarists who switch-hit—Bream, most prominently. Although some would argue the point, the contemporary guitar is best played with a combination of fingernail and fingertip, an approach that has been transferred to guitarists' lute playing, naturally enough. Purists currently hold, however, that the lute was played with fingertips only. Obviously, this manicurial curiosity is crucial, for it is the fingertip, with or without nail, that directly produces the sound.

Predictably, notes played with nails are sharply defined, those produced only with fingertips more softly focused. As with any performance, the success of a nail-less one (authentic though it may be) depends on the lutenist's technique. Unfortunately, the five players here are not equals, and a few leave much to be desired.

Anthony Bailes adopts a free approach to rhythm, ranging from the oddly halting to the square and dull, with little between, and his tempos are often sleepy. Things perk up toward the end, but the familiar *First Fantasia* is perversely overornamented—sometimes cleverly, except that Bailes has to drag tempos irritatingly to accommodate his florid additions.

(Continued on page 81)

# CLASSICAL Reviews



Andras Schiff: Mozart interpretations that express joy as well as sorrow—See page 58.

## BACH (arr. Reger): Orchestral Suites (4).

Martin Berkofsky and David Hagan, piano. [Wesley Horner, prod.] MUSICAL HERITAGE SOCIETY MHS 824464. \$15.50 (\$9.90 to members) (two discs, manual sequence) (add \$1.60 for shipping; Musical Heritage Society, 14 Park Rd., Tinton Falls, N.J. 07724).

Suites: No. 1, in C, S. 1066; No. 2, in B minor, S. 1067; No. 3, in D, S. 1068; No. 4, in D, S. 1069.

Here's a bit of fun. Reger's piano-duet versions of Bach's *Brandenburgs* are not unfamiliar, but I'd never heard his arrangements of the suites before this complete recording. Reger keeps almost all the notes, doubles bass (and sometimes treble) lines, and adds copious performance instructions. The result should, I'm sure, be a late-nineteenth-century wash of piano sound; *sempre legato* is often indicated. But Martin Berkofsky and David Hagan, viewing this nineteenth-century view of the eighteenth century resolutely through the eyes of the twentieth, proceed to de-Regerize Reger in the most enjoyable manner. Their playing is sharp and spiky, full of staccato sixteenth notes in the *Ouvertüren*, and always crisply articulated. The dances dance as they might for Marriner and Leppard, not as they would

for Mengelberg or Furtwängler. Dots, however, are single, and trills are few.

The laser-beam insistence of the playing becomes a little wearying in this close recording; otherwise the set is very enjoyable, though it is "authentic" neither from Bach's point of view nor from Reger's. Teri Noel Towe provides good liner notes. N.K.

## BEETHOVEN: Fidelio, Op. 72.

### CAST:

Leonore	Jeannine Altmeyer (s)
Marzelline	Carola Nossek (s)
Florestan	Siegfried Jerusalem (t)
Jaquino	Rüdiger Wohlers (t)
First Prisoner	Klaus König (t)
Don Pizarro	Siegmund Nimsgern (b)
Second Prisoner	Frank-Peter Späthe (b)
Don Fernando	Theo Adam (bs-b)
Rocco	Peter Meven (bs)

Men of the Berlin Radio Chorus, Leipzig Radio Chorus, Leipzig Gewandhaus Orchestra. Kurt Masur, cond. [Bernd Runge and Oskar Waldeck, prod.] EURODISC 300 712. \$35.94 (digital recording; three discs, manual sequence.)

### COMPARISONS:

Dernesch, Vickers, Karajan Ang. SCL 3773  
Nilsson, McCracken, Maazel Lon. OSA 1259

In a reasonably competitive field, this recording deserves a serious hearing—for

### Reviewed by:

John Canarina  
Scott Cantrell  
Kenneth Cooper  
R. D. Darrell  
Peter G. Davis  
Kenneth Furie  
Harris Goldsmith  
Matthew Gurewitsch  
David Hamilton  
Dale S. Harris  
R. Derrick Henry  
Joseph Horowitz

Nicholas Kenyon  
Allan Kozinn  
Paul Henry Lang  
Irving Lowens  
Karen Monson  
Robert P. Morgan  
James R. Oestreich  
Conrad L. Osborne  
Andrew Porter  
Patrick J. Smith  
Paul A. Snook  
Susan T. Sommer

the overall strength of its cast, for the dramatic coherence of its conducting, and for the quality of the sound produced by its chorus, orchestra, and engineers.

Because Masur has in recent years churned out so many symphonic recordings, we're apt to forget how much theater there is in his background, including four years as music director of Walter Felsenstein's Berlin Komische Oper. And because there is in circulation so much music-appreciation piffle to the effect that *Fidelio* is more "symphonic" than "operatic," whatever this might mean, I might establish straightaway my bias that it *is* an opera, and a great *opera* by reason of the potency of its musicodramatic conflicts and the overwhelming personal stakes of the parties to those conflicts.

What distinguishes this recording and those I've listed as comparisons—to which group I would add the currently unavailable Böhm/DG version—is the general subordination of interpretive theories to the subsuit of character needs. Masur gets his performance off to a rousing start with a powerful and unfussy Overture, which like many other portions of the performance reminds me of the still vivid 1944 Toscanini broadcast. Throughout the opera, the Gewandhaus Orchestra plays with classically textured strength and delicacy that are wonderfully captured by the recording, which is equally remarkable for breadth, immediacy, detail, and color.

The honesty of the recording has its potential drawbacks. Delighted as you're likely to be by the bassoon playing, you may be put off by the astringent oboe tone (given the purposefulness of the playing, I can accept it as part of the experience), and the Gewandhaus string tone is less lustrous than that of Karajan's Berlin Philharmonic (at least in the German edition; the Angel edition somewhat flattens and congests the sound), or of Maazel's Vienna Philharmonic—cf. the accompaniment to "*Ha! Welch ein Augenblick*." The Maazel recording, however, is less spacious and texturally transparent, while the Karajan, excellent as it is, was made in a more reverberant setting. In addition, the voices and orchestra

## Critics' Choice

The most noteworthy releases reviewed recently

**ALKAN:** Piano Works. Smith. ARABESQUE 8127-3 (3), July.

**CAVALLI:** *Ercole amante*. Palmer, Cold, Corboz. ERATO STU 71328 (3), May.

**DELIUS:** *The Fenby Legacy*. Royal Philharmonic, Fenby. UNICORN-KANCHANA DKP 9008/9 (2), Feb.

**DEL TREDICI:** *Final Alice*. Hendricks, Solti. LONDON LDR 71018, April.

**FALLA:** *The Three-Cornered Hat*. Bätz. VARÈSE SARABANDE VCDM 1000.170, June.

**HAYDN:** *Keyboard Sonatas (5)*. Marlowe. GASPARO GS 218, June.

**HENZE:** *Tristan*. Francesch, Henze. DG 2530 834, July.

**MARTINŮ:** *The Greek Passion*. Mitchinson, Tomlinson, Mackerras. SUPRAPHON 1116 3611/2 (2), April.

**MOSZKOWSKI:** *Piano Concerto in E, Op. 59*. Bar-Illan, Antonini. AUDIOFON 2003, May.

**PURCELL:** *Dido and Aeneas*. Kirkby, Thomas, Parrott. CHANDOS ABRD 1034, May.

**RAMEAU:** *Hippolyte et Aricie: Suite*. Petite Bande, Kuijken. HARMONIA MUNDI GERMANY 1C 065-99837, June.

**RODRIGO:** *Concierto de Aranjuez; Fantasia para un gentilhombre*. Bonell, Dutoit. LONDON LDR 71027, May.

**SCHUBERT:** *Lazarus; Mass, D. 167*. Armstrong, Johnson, Guschlbaauer. ERATO STU 71442 (2), May.

**SCHUBERT:** *Piano Works*. Goode. DESMAR SRB 6001/2 (2, tape only), May.

**SCHUBERT:** *Song Cycles and Songs*. Hüscher. ARABESQUE 8107-3L (3), March.

**SCHUMANN:** *Orchestral Works*. Dresden State, Sawallisch. ARABESQUE 8102-3 (3), July.

**SHOSTAKOVICH:** *Symphonies Nos. 1, 9*. London Philharmonic, Haitink. LONDON LDR 71017, May.

**STENHAMMAR:** *Symphony No. 2, Op. 34*.

Stockholm Philharmonic, Westerberg. CAPRICE CAP 1151, June.

**TANEYEV:** *Piano Quartet*. Cantilena Chamber Players. PRO ARTE PAD 107, April.

**TCHAIKOVSKY:** *Orchestral Works*. London Symphony, Simon. CHANDOS DBRD 2003 (2), June.

**TELEMANN:** *St. Luke Passion*. Banchetto Musicale, Pearlman. TITANIC TI 88/9 (2), July.

**TIPPETT:** *King Priam*. Harper, Tear, Bailey, Atherton. LONDON LDR 73006 (3), March.

**WAGNER:** *Tristan und Isolde*. Gray, Mitchinson, Goodall. LONDON LDR 75001 (5), July.

**WEINBERGER:** *Schwanda*. Popp, Jerusalem, Nimsgern, Wallberg. CBS M3 36926 (3), July.

**CENTENARY EDITION OF BARTÓK'S RECORDINGS, VOL. 1**. HUNGAROTON LPX 12326/33 (8), June.

**THE LEGENDARY HOLLYWOOD STRING QUARTET**. EMI RLS 765 (3), June.

**VIENNESE SONATAS FOR VIOLIN AND PIANO**. Brainin, Crowson, Kraus. BBC 22313 (2), July.

are in fine balance.

Masur gets beautiful results in such places as the introductions to the opening-scene quartet and Florestan's monologue, but these are the obvious challenges. More significantly, note the urgency of the opening scene, too often sloughed off as that folksy stuff that holds up the action forever. If there have been vocally better-endowed Marzellines and Jaquinos than Nossek (whose light lyric soprano sometimes falters in the passagework) and Wohlers (a sweet-voiced tenor who puts some belief into his spoken dialogue), it's hard to think of many who created livelier characters.

Completing the domestic trio is the happiest surprise of the recording. From Meven's solidly sung but uninteresting Caspar in the Kubelik *Freischütz* (London OSA 13136), I wouldn't have expected a Rocco of such vitality and vocal command—as good as any on records except perhaps Kipnis' (in the 1941 Met broadcast issued as MET 6, July 1979) and the best moments of Ridderbusch's (with Karajan). I'm startled to discover that Meven is fifty-two; where has he been hiding? Or is he only just coming into his own? In which case there are any number of roles in which the record companies could put him to good use.

Altmeyer is a very good Leonore, disappointing mostly in that her lovely Sieglinde, much the most interesting contribution to the Boulez *Ring*, raised higher hopes. That this is much more active writing may explain why she hasn't gotten it quite settled in her voice, which tends to a shallower, brighter-edged sound here, especially on top. Still, the basic size and lyric quality of the voice are conspicuous, and these are prime ingredients for my kind of Leonore, as is Altmeyer's interpretive directness. It seems to me neither necessary nor desirable that a singer constantly show

off the character's Nobility and Devotion. Set her in action, and her actions will speak ever so much more effectively.

Fortunately we have an outstanding Leonore of this sort: the still radiant-voiced Dernesch (with Karajan). Otherwise, there's Nilsson (with Maazel) for those portions of the score where there's no substitute for raw power, and Jurinac (in the tortoise-powered Knappertsbusch set, once again unavailable, for which I retain a possibly perverse affection), and not a lot else in the discography that I couldn't do without.

From Jerusalem's Florestan, one might guess that the principal effect of incarceration in Pizarro's secret dungeon is atrophy of the head register. Since so little of the role goes above the high G, which Jerusalem has, if not under really solid control, the desperate quality of his A's and B flats in the hallucinatory climax of the monologue and the A's in "*O namenlose Freude*" might pass as representations of Florestan's physical debility, but how then would you explain the sweetness and firmness of his midrange?

Well, there are enough full-voiced yet more convincingly harrowed Florestans—Vickers (with Karajan), McCracken (with Maazel), King (in the Böhm/DG set), Ralf (in the wartime Böhm broadcast; see below)—to make it possible for me to appreciate the dignity and expressive clarity of this performance, in particular the "*In des Lebens Frühlingstagen*" section of the monologue, so important to the character's view of his situation. In "*O namenlose Freude*," Altmeyer sounds plausibly rapturous rather than gladiatorial.

There's no use pretending that Nimsgern more than gets through Pizarro, but getting through this torture test is no mean feat. The duet with Rocco goes well enough, and there are solid phrases scat-

tered about, though without any consistency. Of course what we want to hear is a *Heldenbariton* with the agility to make all those leaps from midvoice up near the break. What we actually get is something else. For example, listen to Nimsgern—like many Pizarros—lunge unsuccessfully at the D of the first "*Nun ist es mir geworden*" in the aria. A problematic role, to say the least; the Pizarros who give me the most satisfaction are Karajan's Kélémen, who attacks the role with the most cutting freedom, and Maazel's Krause, who lacks precisely this force of attack but in terms of pure sustained singing tone probably manages the music better than anyone else on records.

Adam is a dry-voiced and mildly wobbly Minister, and though you could make a case that Don Fernando isn't such a font of wisdom and benevolence (what the heck has he been doing these last two years since his warm close personal friend Florestan disappeared?), singing like, say, Van Dam's (with Karajan) falls more gratefully on the ear. The two Prisoners are just fine.

Finally, two textual notes: (1) Assuming you accept the necessity for substantial pruning of the spoken text, the editing—including some tactful rewriting—has been managed with more than usual intelligence, and the dialogue included is rather well performed. (2) A good performance of *Leonore* No. 3 is included on side 6, after the final scene. (That's a new one on me.)

One unscholarly but useful way I can distinguish among multiple recordings of repertory staples is to ask which one(s) I'm most likely to pull off the shelf. For *Fidelio*, this has meant for some years the Karajan set, and it would probably still be my first choice—the cast is pretty formidable. Already, though, I'm finding myself drawn back to the Masur, and I expect I'd favor it



still more if comparison were made with the domestic Karajan edition. The Maazel set, a pleasant rediscovery for me, is sufficiently different in temperament, casting, and tone (having to do with the particular qualities of the Vienna Philharmonic and State Opera Chorus) as to be less a rival to the others than a supplement.

Of continuing interest are two wartime broadcasts, the 1944 Toscanini/NBC (available in German RCA's Toscanini Edition, AT 204) and a compelling 1943 Vienna State Opera performance conducted by Böhm (available now as Acanta 23 116, which I hope sounds a bit better than the old Vox edition). **K.F.**

### BEETHOVEN: Variations on a Waltz by Diabelli, Op. 120.

Peter Serkin, piano. [Max Wilcox and Peter Serkin, prod.] RCA RED SEAL ARL 1-4276. \$9.98. Tape: ARK 1-4276. \$9.98 (cassette).

Peter Serkin has made this pithy and absorbing work just as thoroughly his own as did his illustrious father a generation ago (Columbia mono, still available on CBS Special Products AML 5246). His recording is full of humor, gentle warmth, patient detail, and pianistic mastery. One could say as much for Rudolf Serkin's rendition, but how different in emphases—and total effect—these splendid performances are!

The playing here focuses more on detail, on supremely well-voiced pianissimos, on an introspective vision based on magical tone colors and the like. The father's recording, without exactly slighting detail, was generally tougher, more extroverted, less sensual, and in the main, more concerned with cumulative impact. In several concert performances, Peter Serkin's interpretation also achieved that end-to-end tautness, but here he tends to lavish more energy on the niceties of individual variations than on binding them into a single taut organism. Interestingly, though I had always thought of the elder Serkin's reading as being broad and majestic, he actually takes a relatively brisk, slashing approach in many sections (e.g., the double-dotted "French overture" Var. 14) where the son is far more ruminative.

In certain details, Peter Serkin's approach—deliberate and intellectual—has much in common with Leonard Shure's recent version (Audiofon 2001, May). In addition, both recordings have a spacious sonic frame (slightly distant microphone placement veils some articulation but pays handsome dividends in a dynamic range wider than usual) and share certain peculiarities of balance (the left-hand staccatos in the second half of the "Notte e giorno faticar" Var. 22 are not heard clearly; they are crystal-clear in Rudolf Serkin's version, played piano rather than the specified pianissimo). Like Shure's, Peter Serkin's interpretation of Var. 21 minimizes the dichotomy between the fortissimo 4/4 *Alle-*

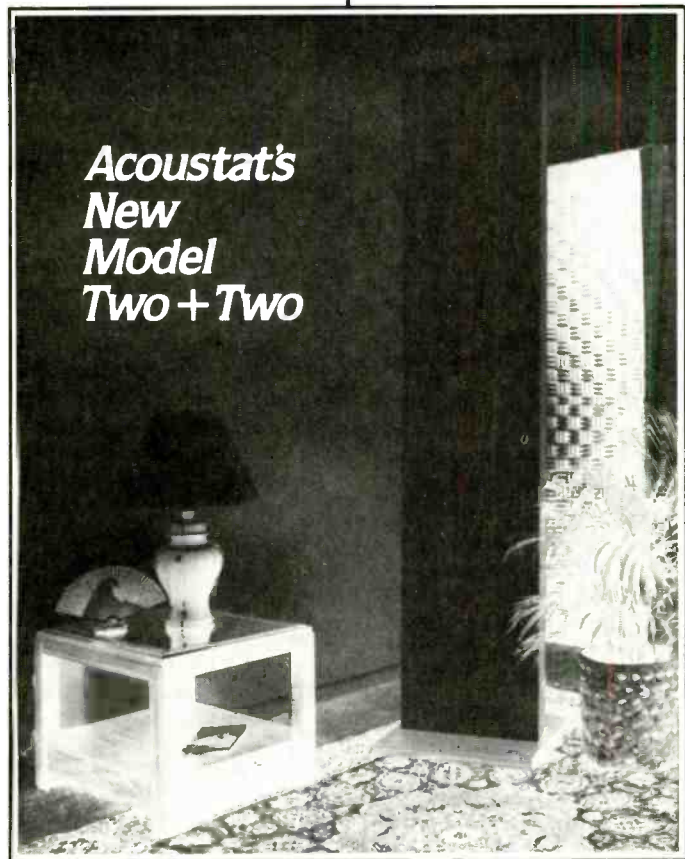
*gro con brio* and the piano 3/4 *Meno allegro*. In Var. 16 and its mirror image, Var. 17, with their trills and rotary broken octaves, both these fine pianists initially seem a bit tame, lacking wildness and momentum, but provide an unusual, interesting lyricism as well as arresting subtleties of voicing.

Serkin's rewarding Var. 9 (*Allegro pesante e risoluto*), which begins with understatement and builds to a superb fortissimo ending flourish, is followed by a Var. 10 not quite *Presto*, but incredibly fleet and effective. Similarly, the *Presto scherzando* Var. 15, though not particularly fast, is outstanding in its wistfulness and

poise. (Here Shure is heavy and humorless). Serkin's trills in the second half of Var. 6, tremendously ferocious, show some of his father's characteristic demonic energy in their jolting, thrusting vehemence. And the finely controlled hairpin dynamics in the second half of Var. 8 are noteworthy.

Variation 20, taken broadly, demonstrates mesmerizing patience; the clarity and voicing rivet the attention, surpassing even Shure's memorable effort in a similar style. And the Bachian Var. 24, given a rarefied, crystalline purity, is followed by an ebullient Var. 25 (such well-articulated sixteenth-note phrases in the left hand!).

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But it's in the three *minore* Variations, 29 through 31, that Serkin reaches wondrous heights: The prominence of the left hand in Var. 29; the magical, sensuous beauty of the canonic Var. 30; the aerial filigree of Var. 31, with its momentary reference to the Op. 110 Sonata—none of these has ever been more sensitively rendered.

There are, however, a few disappointments: The biggest comes in Var. 13, where in concert Serkin showed a marvelous acuity of timing and contrast; here he tends to sit too long on the piano retorts to the fortes, and the rests lack the fraught precision of the concerts. Also, Var. 4, *Un poco più vivace*, remaining sedate too long, fails to generate the requisite momentum. (That detail the elder Serkin realized to perfection.) Both the whirlwind Var. 23 and the climactic Vars. 27 and 28 are too small-scaled to generate the needed slashing energy. (The sforzandos of Var. 28 are seen in the context of a piano dynamic—a viewpoint that might have seemed more valid had the nonaccented resolutions not been swallowed in the resonant sound.) The fugal Var. 32, for all its brilliant color and detailed voice-leading, seems a little slack and amorphous. And aren't the thirty-second-note groups in Var. 33's second half uncomfortably anticipated? (At least that's the way I heard them in several listenings.) I also question the length of certain pauses; in concert these might have been effective, but on disc they allow concentration to wander.

I have discussed these details, pro and con, at considerable length, because the very high stature of the interpretation merits such painstaking attention. The perfect performance will probably never be given, but this one often touches on spiritual and pianistic greatness. Michael Steinberg's excellent annotations deal convincingly with the work itself, its genesis, and—interestingly—with some of the variations on the same waltz penned by other composers.

H.G.

**DEBUSSY, FAURÉ: Songs.**

Elly Ameling, soprano; Dalton Baldwin, piano. [Klaas Posthuma, prod.] CBS MASTERWORKS M 37210. Tape: MT 37210 (cassette). [Price at dealer's option.]

DEBUSSY: Ariettes oubliées; Chansons de Bilitis. FAURÉ: La bonne chanson.

Unlike Ameling's recent CBS-recorded Mendelssohn recital (IM 36678), but like the Wolf *Italian Songbook* with Tom Krause issued by Nonesuch (NB 78014), this recital was produced and licensed by Klaas Posthuma in the Netherlands. And as in those recordings, there is audible thinning out of the soprano's top—the Wolf set was really of interest more for Krause's contribution. This program, however, strikes me as considerably more successful, all in all one of Ameling's most attractive recordings.

I wish I could explain the record's



DOROTHEA V. HAEFTEN

*Peter Serkin: a performance that often touches on spiritual and pianistic greatness*

appeal, explain why it captured and has subsequently held my attention from the opening bars of Debussy's "*C'est l'extase*." There's no Impressionist murk here, or any of the other clichés of French art-song performance. Perhaps the very wholesomeness of Ameling's approach has something to do with its appeal. There's something refreshing in the notion that there's nothing inherently neurotic about languorous ecstasy and the assorted other passions and pains of Verlaine. (All these songs are settings of Verlaine poems except the three *Chansons de Bilitis*, from Pierre Louÿs.)

Dalton Baldwin's accompaniments are predictably accomplished and supportive, and CBS provides a note by Ned Rorem and complete texts. K.F.

**DELIUS: Appalachia; Sea Drift.**

John Shirley-Quirk, baritone; London Symphony Chorus, Royal Philharmonic Orchestra, Richard Hickox, cond. [Chris Hazell, prod.] ARGO ZRG 934, \$10.98.

Things are looking up for Delius: first the premiere recording of *The Magic Fountain* (Arabesque 8121-2L, July 1981), then Eric Fenby's outstanding album (Unicorn-Kanchana DKP 9008/9, February), and now this release of two of the composer's greatest works. One of his gentlest and most touching compositions, *Sea Drift* is a setting of Walt Whitman's famous poem that begins, "Out of the cradle endlessly rocking." Delius, however, does not include those lines, or the final section, but sets only the middle portion dealing with two seagulls, one of which disappears, leaving the other to mourn its mate. *Appalachia*, a long set of "Variations on an Old Slave Song with Final Chorus," was inspired by Delius' youthful stay in Florida. Of

unknown origin, the song bears a passing resemblance to the quartet from *Rigoletto!* ("Appalachia," as used here, is the early American Indian name for the entire North American continent.)

On one level, Richard Hickox directs beautiful, lovingly shaped performances, sensitive almost to a fault. The music obviously means a great deal to him, and he imparts his feeling to the orchestra and singers. Yet as with Verdi and Arturo Toscanini, Mahler and Bruno Walter, performers of Delius must conjure with the spirit of Sir Thomas Beecham; they must find it tiresome always to have that worthy name invoked. The difference is that, had Toscanini and Walter never lived, Verdi and Mahler would still be performed today, but Delius would not exist at all if not for Beecham, whose second version of *Appalachia* is still available (Odyssey Y 33283). Dully recorded in mono though it is, enough can be gleaned to appreciate the great character Beecham brought to this music. As a small example, at the start of the 12/8 *poco più vivo* section shortly after the opening, it's amazing how Beecham makes the orchestra sound like one huge banjo. With Hickox, all we get are harps, violas, bassoons, English horn, etc.

The best English conductors, when performing their native music, know instinctively when to linger and when to get on with it. So it is with Beecham and *Appalachia*, and with Fenby in his recent collection. Hickox simply lingers; this *Appalachia* seems to go on forever. It does, in fact, last nearly forty minutes, as compared with Beecham's thirty-six-and-a-half. If there's one thing Delius doesn't need, it's to be made slower.

Hickox is more successful with *Sea*

*Drift*. Though he is again more leisurely than Beecham, this piece stands up to such an approach better. In both works, John Shirley-Quirk is an expressive and sensitive soloist if occasionally mannered—the result of trying to be *too* expressive. I prefer the greater simplicity of Beecham's Bruce Boyce. (His *Sea Drift*, unfortunately, is out of print.)

I don't mean to dwell on the defects of the Hickox readings. This is, after all, the only domestically available stereo version of *Appalachia* and the only coupling of these works, and they *are* sensitively done. The orchestra is appropriately the Royal Philharmonic, which knows the Delius style as does no other. The London Symphony Chorus sings ravishly, which Beecham's chorus did not. The recording, sponsored by Canon Business Machines (a printed commercial is included) is beautifully atmospheric. It's just that Beecham gave us Delius with backbone; these versions are a bit spineless.

A muted welcome, then, pending the possible appearance of versions by Fenby. J.C.

**DOWLAND: Songs; Lute Works; Instrumental and Vocal Works**—See page 50.

**FAURÉ: Songs**—See Debussy.

**HANDEL: Concerti grossi, Op. 3 (7); Concerto for Oboe and Strings, in G minor\***.

Jürg Schaefflein, oboe\*; Vienna Concentus Musicus, Nikolaus Harnoncourt, dir. TELEFUNKEN 26.35545, \$21.96 (two discs, manual sequence).

Op. 3: No. 1, in B flat; No. 2, in B flat; No. 3, in G; No. 4, in F; No. 4 (orig.), in F (attrib.); No. 5, in D minor; No. 6, in D.

A group of new recordings of Handel's Op. 3 Concertos was discussed here last February; this Harnoncourt set sweeps the field. Strongly characterized and vividly played, as one would expect, it has few of the irritating features of rhythmic style and articulation that have marred his recent Bach recordings, and little of the calculated eccentricity of his *Water Music*. Everything here is sturdy, sharp, and magnificently incisive. Performance problems are thought out anew: The opening of the Third Concerto, whose bare chords other versions elaborate, is here left stark and savage, to splendid effect. In this concerto, too, flute is replaced by oboe; Jürg Schaefflein plays brilliantly in the first Allegro. There are a couple of examples of underdotting, but the French-overture opening sections remain crisply overdotted. The acoustic is close and excitingly bright; the playing style has more sophistication than that of the Smithsonian Players (Smithsonian N 1023), and more vigor than that of the English Baroque Soloists (Erato STU 71367). Both versions of the Fourth Concerto are included, with

the G minor Oboe Concerto as a bonus. Invigorating. N.K.

**HAYDN: Die Jahreszeiten.**

Hanne Edith Mathis (s)  
Lukas Siegfried Jerusalem (t)  
Simon Dietrich Fischer-Dieskau (b)  
Chorus and Academy of St. Martin-in-the-Fields, Neville Marriner, cond. PHILIPS 6769 068, \$38.84 (digital recording; three discs, manual sequence). Tape: 7654 068, \$38.84 (three cassettes).

**COMPARISONS:**

Böhm/Vienna Sym. DG 2709 026  
Karajan/Berlin Phil. Ang. SC 3792  
Davis/BBC Sym. Phi. Fest. 6770 035  
Gönnenwein/Ludwigsberg Fest. Vox QSVBX 5215

Dorati/Royal Phil.

Lon. OSA 13128

If this were the only available recording of *The Seasons*, it would have to do. But shouldn't we be concerned that even as we become ever so much more sophisticated in our knowledge of Haydn and his music, we are getting and apparently swallowing performances progressively lower in human responsiveness? I'm sure there are people who will tell you what a wonderful thing it is that the continuo complement of this performance includes a fortepiano. I can't tell you much of anything about the recitatives, though. Near as I can recall, there isn't anything going on in them.

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you find yourself wondering whether the piece itself isn't maybe a bit of a bore after all. And then you go back to the Böhm and Karajan recordings, so innocent of "authentic" niceties but so rich in personal connection, and you're struck once again by the resonance of Haydn's exploration of the relationship between us and our physical environment, a relationship that is potentially *more* dramatic than the more obviously theatrical *Creation*.

By way of review: Mathis sings Hanne's music with an efficiency that might be remarkable if it included even a suggestion of warmth or believability. Jerusalem musters some of these qualities simply through the tonal juice of his midrange, which counts for a good deal in this not-terribly-high-lying writing. But the writing does go above the break, and when even a G becomes an adventure, what might have been a significant discographic contribution is compromised.

It's beyond me what Fischer-Dieskau is doing in this music at this stage of his career. While the low tessitura, more bass than baritone, generally spares him the need to resort to his imitation-tenor croon, it doesn't spare *us* the barking and slithering that pass here for "interpretation." Finally, the orchestra plays okay, but the choral tone is woolly and hollow, a condition exacerbated by the antiseptic recording.

As between Böhm and Karajan, the choice is between a more pointed and lithe approach (Böhm) and a larger-scaled, more reflective one (Karajan). Gundula Janowitz is the attractive soprano for both, perhaps somewhat fresher-sounding with Böhm. Karajan's Werner Hollweg, in startlingly strong voice way back then, is a more colorful tenor than Böhm's Peter Schreier. Martti Talvela (Böhm) and Walter Berry (Karajan) pretty well balance out plus-and-minus-wise.

Philips' earlier *Seasons*—conducted by Colin Davis and featuring a solid trio of Heather Harper, Ryland Davies, and (in his better days) John Shirley-Quirk—isn't far behind, especially at Festivo price and especially if you're attracted by a performance in English. Even the humble but honest Vox set is a plausible bargain, with Helen Donath possibly the most affecting of the soprano soloists. The principal interest of the Dorati recording, which has more orchestral bite than the Marriner but is also chorally woolly, is Hans Sotin's handsome, well-focused bass, even though it's not used with much imagination. K.F.

**HINDEMITH: Concert Music: for Piano, Brass, and Harps, Op. 49\*;** **for Strings and Brass, Op. 50. Plöner Musiktag: Morgenmusik.**

Paul Crossley, piano\*; Philip Jones Brass Ensemble, Elgar Howarth, cond. [Chris Hazell, prod.] LONDON LDR 71052. \$12.98 (digital recording).

Two of these three works were composed

## Though perhaps not the performance Hindemith wanted, this is the one to have.

for American commissions. Hindemith wrote the *Concert Music for Piano, Brass, and Harps* in 1930 for a Chicago performance and dedicated it to that great patroness of chamber music Elizabeth Sprague Coolidge. Conceived in the spirit (but not the idiom) of Bach and Vivaldi concertos, this miniature piano concerto allots one movement to piano and brass ensemble, another to piano and harps, and the third to all three. The *Concert Music for Strings and Brass* was written for the Boston Symphony's golden (or "brass"?) anniversary in 1931. One of Hindemith's best-known obscure works, it has been recorded twice by Ormandy and the Philadelphians (Columbia mono; Angel stereo, SZ 37536), by Steinberg and the Boston Symphony (Deutsche Grammophon 2530 246), by Bernstein and the New York Philharmonic (Columbia), and by Hindemith himself with the Philharmonia Orchestra (Seraphim S 60005). (There was also an "unofficial" aircheck of a Cantelli/NBC Symphony performance on the defunct Toscanini Society label; and since Giulini has repeatedly shown fondness for the work, one expects that sooner or later, he too will record it.)

"Morning Music" was penned in 1932 as a wake-up chorale, reviving the seventeenth-century town-musician tradition, and first played from the top of a tower as the opening of *A Day of Music at Plön*. (Hindemith composed material for an entire day's celebration for the festival held in this small North German town.)

The present performance of Op. 50 differs from the recordings cited above, all of which present the work symphonically, and the reduced, chamber orchestra forces make the music more palatable than I would have thought possible. In place of the accustomed blatty, opaque, clotted sounds (one especially horrendous moment occurs in the second movement, where the brass clumsily anticipate the dancing melody of the third; another in that third movement, where Hindemith's contrivance suggests a dyspeptic, Kapellmeisterish view of Gershwin's *Rhapsody in Blue*), the Philip Jones Ensemble presents animatedly sprung rhythms, pure string and brass tone, and even a goodly measure of felicitous grace. It may not be exactly what Hindemith—or his commissioning musicians—wanted (it would be hard to imagine such an airborne, animated performance coming from the

flatulent hand of Koussevitzky and the equally flatulent acoustics of Boston's Symphony Hall), but questions of authenticity aside, the improvement is impressive. This is the version to have.

There are also three alternative recordings of Op. 49 currently available, but this one is impeccably well played and easily the best recorded. The same can be said of the "Morning Music," which emerges with clarion refinement in London's flawlessly processed digital sound. H.G.

### MOZART: Piano Works.

Andras Schiff, piano. [Michael Haas, prod.] LONDON CS 7240, \$10.98.

Sonatas: in B flat, K. 333; in C minor, K. 457; in C, K. 545. Fantasy in C minor, K. 475.

Artur Schnabel once commented that, while many musicians are capable of expressing sorrow, only a few can express joy. The aptness of his observation echoes across the years and seems timelier than ever today, now that quick study has produced a profusion of "Profound" and "Important" interpreters whose fondness for posturing *Luftpausen* and slow-motion tempos (not to say "original" instruments) has become synonymous with "Truth."

Andras Schiff, the young Hungarian-born virtuoso who here begins his recorded traversal of the standard Mozart sonatas (all six discs have been released in England), is a happy exception. His interpretations are all the more thoughtful and effective because he allows melodic lines to sing uninhibitedly, gives coloristic possibilities full play, and projects rhythms with bracing élan rather than straitjacketed rigidity. Nor does he show any remorse for preferring the modern grand piano over a wheezy old fossil; let's face it, Mozart sounds better on a Steinway than on a Stein.

For all his seeming impulsiveness and Romantic predilections, Schiff has the acutely precise fingers and penetrating mind required in classical and baroque music. For all his imaginative voicing and pedaling, his marvelous ear for counterpoint invigorates these performances. Moreover, he subtly varies his general style to fit the specific needs of each composition. Thus, though both K. 333 and K. 545 are played with a lot of *detaché* fingerwork (particularly in left-hand basses), the former is spacious and sophisticated, almost operatic in its last two movements, while the little *Kindersonate* evokes the *clavécin* style in its more symmetrical, conventional decorum. (But even there, judicious, highly cultivated touches of rubato triumphantly avoid potential squareness and banality in the central, sectional *Andante*.) In the great C minor double bill, Schiff immediately darkens color and solidifies texture. At the start of the Fantasy, he stresses the harmonic content with some telling agogic accents, giving the passage a jabbing assertiveness. At the end of the

Fantasy, he plunges into the sonata with almost no breathing space—a wonderful bit of effective timing. And throughout, the spontaneity and improvisational freedom—which never extend to anarchy—are invigorating to hear. Sometimes, his treatment of music and instrument recalls that old master Edwin Fischer.

Interestingly, Schiff approaches embellishment much more conservatively in Mozart than in Bach or Scarlatti. In his recent New York concert performance of the *Goldberg Variations*, he added flourishes and changed registers in repeats, as he does in Scarlatti sonatas (Hungaroton SLPX 11806); but here he adds little more than a low C in K. 333's Rondo (measure 133). It will be interesting to see what he does in such works as K. 332, for which several versions of Mozart's text exist.

All in all, this is superbly elegant, supple, and warmly *musical* playing; I eagerly await the rest of the series. London's sound is agreeably resonant yet intimate. H.G.

**PONCHIELLI:** *La Gioconda*—See page 47.

**ROSSINI: Péchés de vieillesse (excerpts).**

Los Angeles Vocal Arts Ensemble; Armen Guzelimian and Raul Herrera, piano. [Shirley Walker, prod.] NONESUCH D 79027, \$11.98 (digital recording). Tape: DI 79027, \$11.98 (cassette).

Vol. 1: No. 1, *I Gondolieri*; No. 5, *La Fiorata fiorentina*; No. 12, *La Passeggiata*. Vol. 2: No. 1, *Toast pour le nouvel an*; No. 4, *Un Sou*; No. 7, *Le Dodo des enfants*. Vol. 3: No. 3, *Les Amants de Séville*; No. 9, *Le Sylvain*; No. 10, *Cantemus Domino*. Vol. 11: No. 6, *Aragonese*. WEYSE-BERTHOLD: *Duetto buffo di due gatti*.

The *Sins of My Old Age*, those heaps of oddly assorted miniatures Rossini piled up in his later years in Paris, have received so little recorded attention that it's a relief to find this engagingly performed selection duplicating only four numbers from the French Cynus disc that Nonesuch has had in its catalog for years (H 71089).

Two of the duplicated numbers, the spirited quartets "*La Passeggiata*" and "*I Gondolieri*," are among the large number of *Sins* that originated as settings of the Metastasio poem "*Mi lagnerò tacendo*" ("I will complain in silence"), a lament that Philip Gossett tells us in his liner note Rossini set obsessively in those later years, when he began composing again after the dramatic improvement in his health. To many of these settings he subsequently fit new texts, often strikingly different in content, as in the case of these rather jolly quartets, concerning a planned day trip and the splendid life of gondoliers. I'd be surprised if any listener could resist the rollicking swagger of Armen Guzelimian's playing of the long piano introduction to "*La Passeggiata*," which begins Side 2 of the new

disc.

Gossett notes that it was with a set of six "*Mi lagnerò*" settings that Rossini signaled the recovery of his health in 1857, and that set, *Musique anodine*, is on the Cynus disc. The new disc contains only one "pure" "*Mi lagnerò*" setting, the "*Aragonese*." Among the known or guessed "*Mi lagnerò*" recyclings are two charming, bittersweet, strangely comic begging songs: "A Sou" (the story of a professedly blind father and son reduced, they claim, to selling the leash of their lamented dog) and "The Florentine Flower Girl."

The other duplicated numbers are

"The Lovers of Seville," a stunning duet in which the mezzo and tenor shift focus in alternating stanzas from a sort of collective choral function to solo roles as the hesitating maiden and her pressing swain, and "Toast for the New Year," an unaccompanied octet that in less than three minutes covers just about every imaginable angle on the event.

One number, incidentally, Gossett informs us is a fraud. The familiar meowing "Comic Duet of Two Cats" is a hybrid concoction whose only connection to Rossini is the use of music from *Otello*. Interestingly, it really does sound out of place here.

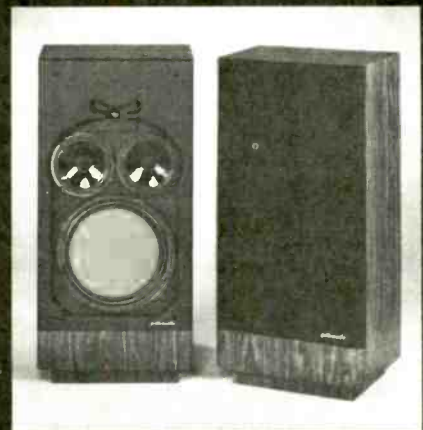
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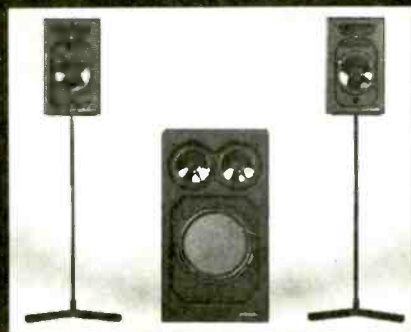
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A couple of other selections, notably the more serious "Le Sylvain" and "Le Dodo des enfants," both solos, sound as if they might be more interesting in better performances. One problem with the performances is that, while these eight singers form pleasing ensembles, only soprano Delcina Stevenson, who sings "La Fioraia fiorentina," appears to have a voice of solo quality. At any rate, the others certainly aren't flattered by the ultraclose recording. The Cynus performances are somewhat better in this regard, and the Franco-Swiss performers are also markedly more communicative singing in both French and Italian.

Which is not to deny the vitality and personal charm of the Los Angeles performances, or the involving immediacy of Nonesuch's engineering. In addition, both pianists—the group's artistic directors—are first-rate, and Gossett's notes are informative, though they could occasionally be clearer or fuller. (Why, for example, isn't there even a ballpark figure for the number of "Mi lagnerò" settings, of which such a point is made? And since an issue is made of surviving vs. lost versions, why not tell us a bit about the form in which this material in fact survives? Etc.) There are texts and translations, the latter containing some surprising garbles of verbal moods, subjects and objects, and the like.

But enough nit-picking. I think you're going to enjoy this one. K.F.

**SALIERI: Sinfonia "Il Giorno onomastico"; Variations on "La Folia di Spagna"; Sinfonia veneziana.**

London Symphony Orchestra, Zoltán Peskó, cond. CBS MASTERWORKS M 37229. Tape: MT 37229 (cassette). [Price at dealer's option.]

The music of Antonio Salieri has been enjoying a minirevival these days, in large part due to the success of Peter Shaffer's play *Amadeus* (though the late Thomas Schippers programmed a Salieri work with the New York Philharmonic in 1965). Listening to these attractive pieces, one can easily infer why Salieri held such an indisputedly high place in the Vienna of the late-eighteenth and early-nineteenth centuries, a time when Haydn, Mozart, Beethoven, and Schubert were also holding forth.

The festive and engaging *Sinfonia veneziana* takes the form of a three-movement Italian overture, meant to precede the opera *La Scuola dei gelosi* (*The School for Jealousy*). Both Mozartian and Rossinian in spirit, it adds a touch of Cimarosa for good measure. The four-movement *Sinfonia "Il Giorno onomastico"* ("The Name Day") is remindful of Cherubini and the Mozart of the divertimentos but without either composer's melodic invention. Salieri here savors running triplet string passages, writes well for woodwinds, and begins the finale similarly to that of Mozart's little Divertimento, K. 136. The pauses near the

**Salieri may have written his music first, but others did the same thing more effectively.**

end bring to mind many such moments in Haydn's music.

That's the trouble with Salieri—his music, pleasant as it is, so often reminds the listener of someone else. While he may have written his first, others did the same thing better and more distinctively. Mozart's divertimentos, intended as background music for dinner and conversation, only later came to be recognized as great music to be listened to attentively. Salieri's symphonies, on the other hand, while meant to be attended to, make ideal background music. There is nothing in them to make an audience think or to upset it in any way. Surely, this accounted for his great popularity in his day. In that respect, audiences haven't changed much over the centuries.

The *Variations on "La Folia di Spagna"* (a theme employed by Corelli, Liszt, Rachmaninoff, and others) is more serious stuff, an introspective, somewhat overlong work in which the theme is never far away—as opposed, say, to the Brahms *Haydn* Variations, where, once heard, the theme doesn't really reappear until the very end.

Zoltán Peskó, new to me, directs the London Symphony with a heavy hand (and some curious bumping and thumping noises suggest that he may be heavy-footed as well). The readings, while adequate, I suppose, lack grace and rhythmic vitality and stop just short of imprecision. They certainly fail to penetrate to the elusive heart of this music. If Salieri is to make his mark today, he has to be played more stylishly and effervescently than this.

The works are performed in the editions ("revision," we are told) of Pietro Spada, who supplies informative annotations. J.C.

**SCHUBERT: Latin Masses (6).**

Eva Csapó (1,2,4), Kari Lövaas (5,6), and Yasko Nagata (1), sopranos; Cornelia Berger (1,2), Sylvia Anderson (4,6), and Hilke Helling (5), altos; Peter Maus (1,2), Karl-Ernst Merker (1,6), Alejandro Ramirez (4), and Richard Greager (5,6), tenors; Gerhard Faulstich (1,2,4,5) and Bruce Abel (6), basses; Christian Schlicke, organ; Spandauer Kantorei, Hamburg Cappella Vocale, Berlin Bach Collegium, Martin Behrmann, cond. [Heinz Jansen, prod.] VOX CUM LAUDE VCL 9016X, \$29.98 (four discs, manual sequence). Tape: VCL 9016X, \$29.98 (three cassettes).

Masses: No. 1, in F, D. 105; No. 2, in G, D. 167; No. 3, in B flat, D. 324; No. 4, in C, D. 452; No. 5, in A flat, D. 678; No. 6, in E flat, D. 950.

The orchestrally accompanied Mass was, together with opera, the focal point of music in the eighteenth century and the first quarter of the nineteenth. All the Viennese masters composed such Masses, but—along with Beethoven's *Missa solemnis*, an acknowledged "concert" Mass—they came to be considered "theatrical" and "unliturgic." As the nineteenth century advanced, these Masses were used less and less in divine services—except in Central Europe, especially Bavaria and the Austrian lands, where they were dearly loved, and defended by the bishops against both emperors and popes.

Schubert's six Latin Masses, with their glorious melodies, were found particularly objectionable; liturgic purists rejected their warm and beguiling tunes, their glowing deep-seated emotion and passion, and their folksonglike directness, all of which go straight to the heart. The penultimate *Grove Dictionary* (1954) still dismissed the earlier Masses as "inferior" music, though it acknowledged some merits in the last two. (I don't know whether the *New Grove* is more enlightened; retired musicologists cannot afford reference works that sell in four figures. [Not that retired editors are that much better off, but I can report that *NG* distinguishes even the first two Masses from "choral music of secondary value."—Ed.]) Yet musicians were never put off. Bruckner and Brahms in particular admired these works, and it was Brahms who introduced them to the public.

Among the most serious obstacles to liturgic use was Schubert's curious, consistent avoidance of the words "Et unam, sanctam, catholicam et apostolicam Ecclesiam." This consistency, which couldn't have been accidental, to this day remains puzzling; these Masses were not commissioned, but composed from an inner urge, evoking all Schubert's musical ardor. Though this is not the place to discuss his private theological views (he was a professing Catholic, of course), we must say a few words about the reasons for the misjudgment of these lovely works, for they remain generally misunderstood, their beauty tainted with unjustified apprehensions.

The stylistic and conceptional crux of the classical instrumental Mass rests in the use of counterpoint. The Western church was the original domain of polyphony, the great "invention" that differentiated Western music from any other. The medieval church wanted for its rites a kind of music that does not impinge on the sacred words, but only accompanies and supports them. This meant pure, objective construction, learned counterpoint that does not exert affective/expressive influence on the worshippers—a concept almost impossible for

us to relate to, which explains the difficulty of restoring such medieval music even for the concert hall. Yet this counterpoint, not an end in itself, expressed the universality and collectivity of the church and of its liturgical celebration. Nor did it altogether disappear in subsequent centuries, remaining alive in Bach (the "Gothic Bach") and others.

The Enlightenment changed this concept radically; henceforth this churchly polyphony was seen as abstract, "mathematical," dogmatic, and full of scholastic sophistry. Indeed, that counterpoint no longer corresponded to the life style of Western humanity. To be sure, every composer learned it as a basic discipline to master the art of part-writing; nearly all, certainly in the classic period, studied Fux's great guidebook *Gradus ad Parnassum* (1725). But the individualistic melodists—and Schubert was the greatest—no longer understood and felt the organic life of polyphony, its causality, and its manifestation of a collective spirit; they just set "point against point." Mozart, Haydn, and some of their contemporaries still succeeded gloriously in blending polyphony with their largely homophonic style; not so Schubert and his confreres. The traditional fugues on "Cum Sancto Spiritu" or "Osanna" they merely composed à la Fux; most, however correct, are uninteresting, schematic, and indistinguishable from each other.

Yet it is a grievous mistake, often repeated, to consider Schubert deficient in counterpoint, and to suppose that he himself recognized this deficiency by seeking instruction in the last year of his short life from the great theorist-teacher Simon Sechter (later Bruckner's teacher) but died before he could commence his studies. No, Schubert knew conventional postbaroque counterpoint well; what he hoped to learn from Sechter was the missing *spirit* of counterpoint. Yet by that time he had actually found this spirit—though in a form altogether different from scholastic polyphony, a highly expressive, free, and purely melodic counterpoint.

The first four of these Masses, all completed by age nineteen, provide the most astonishing examples of Schubert's incredible precocity; those in B flat and G are comparable only to similar works by the young Mozart. In all four, the vocal writing is sheer perfection, the orchestral accompaniment brilliant yet always finely dovetailed with the voices. And there is melody, bewitching melody everywhere, here simple as folksong, there vaulted to overwhelming heights. Some movements are syllabic choral songs, others, like the solo quartet for two sopranos and two tenors in the Benedictus of the First Mass, contemplative outpourings of pure musicality.

But in the last two Masses, we leave the youthful master to ascend to the summit. No one who does not know them can

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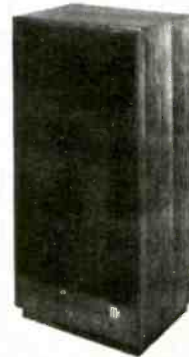
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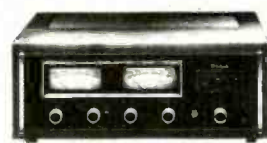
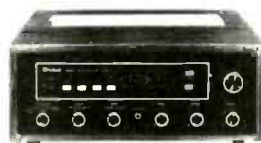
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grasp the full significance of Schubert's art. The Kyrie of the A flat Mass (1822) is simple and very Schubertian, its tone trusting and confident, though the second Kyrie does take a turn to the plaintive. The Gloria is energetic and impetuous, but in the "Gratias" section the melody becomes fragrant and devotional. The "Qui tollis" and "Quoniam" continue in this vein with marvelously original harmonic turns, and the section ends with a powerful "Cum Sancto Spiritu," one of the great moments in the literature of the Mass. The closing fugue gives the lie to those who deny Schubert's ability to use conventional counterpoint. The Credo affirms the profession of faith despite dark passages: both the "Et incarnatus est" and "Crucifixus" are simple but very solemn in a curiously "Palestrinian" way. The Sanctus fascinates with its fluttering rhythms, while the "Osanna," quite unconventionally, offers a delicate greeting. The Benedictus is also quietly moving, and the Agnus Dei is a soothing song, though at the "miserere" Schubert seems to be kneeling.

The E flat Mass (1828) is highly personal, agitated, passionate, though at times gentle. The orchestra has much to say: A tendency to let the instruments introduce and express the essential musical thoughts, already present in the previous Mass, here seems a basic tenet. In the Kyrie the wind instruments establish and carry a mood of serenity, yet the vocal parts can hardly conceal the agitation expressed by the almost feverishly changing chromatic harmonies. Once more, the Gloria provides the weightiest movement. The passages of praise and jubilation are set to extraordinarily energetic music, but there is also a modicum of hesitation and sadness: the altered-sixth chords and diminished sevenths see to that. In the "Gratias" and "Qui tollis" the instruments again take the lead. The melodic tone in the first part of the Credo never quite yields to the intermittently hardened accents, and in the "Et incarnatus est" the melodies simply sweep everything into the background, though the "Crucifixus" casts a dark shadow on their sweetness. The exclamation on "crucifixus" is reminiscent of "Barrabam!" in Bach's *St. Matthew Passion*. The Sanctus recalls its mysterious counterpart in the A flat Mass, and the "Osanna" is a fairly conventional fugue. The *Agnus Dei* is again passionately agitated. Its principal theme has a liturgic quality, but the mood is one of distress; the "Dona nobis pacem," even if interrupted by the brief return of the turbulent beginning, is reassuring in its naive innocence.

Regrettably, this richly promising album is something of a disappointment—largely the engineers' fault; it takes a lot of fiddling with the controls to get a fair aural picture. The sound is tubby, the double-bass pizzicatos are like muffled cannon shots, and when full orchestra is engaged, balances are unsatisfactory, the brasses

## In Schubert's last two Masses, we leave the youthful master to ascend to the summit.

notably dominating everywhere. One would think that by now a literate conductor would be informed about the old anomalous *colla parte* use of trombones and eliminate them from such obvious places as the choral fugues. Aside from the fact that these trombonists are not very good, they thoroughly mess up the choral sound as well as the part-writing. Furthermore, Martin Behrmann, though competent, is not a poetic conductor; elegant phrasing and the sensitive bending of a melody are not among his gifts. The chorus is good, the orchestra fair, the soloists (with tenors particularly dry-throated) average. Still, the wonderful music is there, and one is thankful for the opportunity to hear these sadly neglected works. P.H.L.

### SHOSTAKOVICH: Symphony No. 13, Op. 113 (*Babi Yar*).

John Shirley-Quirk, bass-baritone; Bavarian Radio Men's Chorus and Symphony Orchestra, Kiril Kondrashin, cond. PHILIPS 6514 120, \$10.98. Tape: 7337 120, \$10.98 (cassette). [Recorded in performance.]

This live recording, presumably made not long before Kondrashin died, doesn't entirely replace his deleted Melodiya/Angel version with Artur Eizen and the Moscow Philharmonic, but it will do. The Philips recording is certainly more detailed and richer-textured, though I do miss the atmospheric prominence of such effects in the Soviet recording as the eerie tolling bell of "Babi Yar" and the wood block of "At the Store."

Kondrashin has done a remarkable job of transplanting his performance into non-Russian soil, and he gets more involved playing and singing from his Munich forces than Ormandy (RCA, deleted) and Previn (Angel SZ 37661) got in the other Western recordings. In the process, however, his conception seems to have become a bit more generalized. Of course the German musicians can't be expected to respond as personally as the Russian ones did, and commendably as Shirley-Quirk handles the bass solos (again, more satisfactorily than his Ormandy and Previn counterparts), he can't match the tonal beauty and weight or Russian soulfulness of Eizen.

On the plus side, the expatriate Kondrashin was free to revert to the un-watered-down original text for the two problem quadrains in "Babi Yar." All in all, quite a satisfying performance of this remarkable

work—a sonic match for the Previn, and its musical superior. The one jarring note, and a serious one, is the absence of printed texts. K.F.

### STRAUSS, R.: An Alpine Symphony, Op. 64.

Berlin Philharmonic Orchestra, Herbert von Karajan, cond. [Michel Glotz and Günther Breest, prod.] DEUTSCHE GRAMMOPHON 2532 015, \$12.98 (digital recording). Tape: 3302 015, \$12.98 (cassette).

COMPARISON:  
Solti/Bavarian Radio Sym. Lon. CS 7189

Praising the "sonic strengths and splendors" of Solti's analog *Alpine Symphony* (January 1981 HF), I doubted they were likely to be matched until and "unless digital techniques can bring greater lucidity to the [score's] nearly impenetrable tonal textures." But judging by this first digitally recorded version, the new technology is scarcely more successful than the old in that respect. Where the DG engineer and producer exploit digitalism to superior effect is in a wider dynamic range and more striking sonic "ring," impact, and breadth. And while the Bavarian performance remains the more Romantically warm and mellifluous, the Berlin reading is more expansive, tautly controlled, and dramatically convincing. Karajan (unusually for him) seems quite personally involved, even eloquently fervent at times, whereas Solti (unusually for him, too) is more briskly impersonal. In Karajan's now nearly complete discography of Strauss orchestral works, this latest entry must surely rank as the most all-round successful.

Its special sonic attraction may well provoke non-Straussians into revising their low opinion of this gargantuan tone poem's worth. Aesthetically, of course, the work remains incorrigibly weak. And it's prevented from ever becoming as popular as the Strauss favorites by its lack of distinctively memorable themes—that, and by casual listeners' difficulties in matching orchestral and programmatic "action," determining whether one is "in flowery meadows" or "in the mountain pasture" or "on the wrong track through thickets and underbrush." But technically, for its prescient anticipations of tone clusters—maybe even a twelve-tone row—and for its extension of instrumental potentials to or beyond their limits, this extraordinary score (its orchestration alone took 100 days) is a unique *tour de force*. Moreover, in the present bravura performance, the work's usual seemingly interminable longueurs are enlivened with thrilling excitement in the climaxes and heart-twisting poignance in the lingering coda. R.D.D.

### STRAUSS, R.: Concertos for Horn and Orchestra: No. 1, in E flat, Op. 11; No. 2, in E flat.

Zdeněk Tylšar, horn; Prague Symphony Orchestra, Jiří Bělohlávek, cond. [Jaroslav



Rybář, prod.] SUPRAPHON 1110 2808, \$9.98.  
 COMPARISONS:  
 Damm, Kempe/Dresden St. Ang. S 37004  
 Brain, Sawallisch/Philharmonia Ang. 35496

It's good to be reminded that the Czechs, pioneers in the development and mastery of horn playing, are still producing distinguished performers on that notoriously most difficult of orchestral instruments. Witness Zdeněk Tylšar (b. 1945), who was accepted into the Czech Philharmonic when only eighteen. As a member of the Collegium Musicum Pragense, he has participated in numerous recordings of works by old Czech masters, but in this bid for a wider audience, he has chosen two of the most demanding test pieces of the modern horn repertoire, Richard Strauss's markedly contrasting concertos. The First, written when the composer was himself an eighteen-year-old student, is an audacious outburst of youthful fervency; the Second, composed

in the sunset glow of his last creative years, provides a fascinating, poignantly nostalgic expression, in the most intricate craftsmanship, of an old wizard's remembered *joie de vivre*.

Tylšar, who commands a remarkably assured technique and mellow tonal qualities, is exuberantly Romantic in the First Concerto, expansively eloquent in the Second; but the robustly recorded orchestra, under Jiří Bělohlávek, is often overenthusiastic—even coarse-toned and heavy-handed. And Tylšar himself, talented though still maturing, cannot yet challenge the more magisterial and subtler artistry of Peter Damm, whose 1976 coupling of these works in the late Rudolf Kempe's incomparable Dresden Strauss series for EMI/Angel remains the easy first choice—although of course no horn aficionado can do without the *sui generis* 1954 Brain/Sawallisch mono versions, still in print. R.D.D.

## Recitals and Miscellany

### MAGGIE COLE: Harpsichord Recital.

Maggie Cole, harpsichord. [Mark Sutton, prod.] HYPERION A 66020. \$13.98 (distributed by Brilly Imports, 155 N. San Vicente Blvd., Beverly Hills, Calif. 90211).

ARNE: Sonata No. 1, in F. BACH: French Suite No. 3, in B minor, S. 814. FROBERGER: Suite in G minor. RAMEAU: Pièces de clavecin: L'Entretien des Muses; Le Lardon. Nouvelles suites de pièces de clavecin: La Triomphante. D. SCARLATTI: Sonatas: in G, K. 144; in A, K. 212. L. 135.

One objection to the "authenticity" movement is that a logical conclusion of the back-to-the-past fetish is to use a different instrument for every work on a concert program. Well, so it is, and why not? Here, beyond the practical confines of a public concert, is a group of baroque harpsichord pieces, each played on the sort of instrument with which the composer would have been familiar. The music is brought to life with remarkable precision; the contrasts between the music of Bach, Rameau, Scarlatti, and Froberger are strongly characterized.

All the copies are by the same maker, Goble of Oxford, and may not be impeccably faithful: The Dulcken copy seems tighter than the expressive original in the Smithsonian, Washington, and the Taskin copy may well be more resonant than its original in Edinburgh. But Maggie Cole draws out the qualities of each harpsichord admirably. The sustaining power of each note in the Rameau and the attack of each chord in the Scarlatti are both exploited very well. The Zell copy used for the Bach is solid and a bit noisy; a lovely, rich Ruckers one-manual copy is used for a Froberger suite at the end.

What is more, the recorded acoustic is natural and beautiful; it, too, is "authentic." The recording was made in the Holywell Music Room, Oxford, of 1748, the first public room in England designed for chamber music. A most successful experiment; now, please, a disc with original instruments in place of copies. N.K.

### ELISABETH SCHWARZKOPF: The Early Years.

Elisabeth Schwarzkopf, soprano; Philharmonia and Vienna Philharmonic Orchestras. Otto Ackermann, Herbert von Karajan, Josef Krips, John Pritchard, Alceo Galliera, Issay Dobrowen, and Karl Böhm, cond.; Gerald Moore and Karl Hudez, piano. [Walter Legge, prod.] ANGEI ZDX 3915, \$40.92 (mono; four discs, manual sequence). [From various originals, recorded 1946-55.]

ARNE: When daisies pied; Where the bee sucks. BACH: Notebook for Anna Magdalena Bach: *Bist du bei mir*. BRAHMS: *Vergebliches Ständchen*, Op. 84, No. 4. *Deutsche Volkslieder*: *Da unten im Tale*; *Och, Mod'r, ich well an Ding han!* CHARPENTIER: *Louise*: *Depuis le jour*. GLUCK: *La Rencontre imprévue*: *C'est un torrent impétueux* (in German). HUMPERDINCK: *Hänsel und Gretel*: *Suse, liebe Suse . . . Brüderchen, komm, tanz mit mir* (with Irmgard Seefried, soprano); *Der kleine Sandmann bin ich*; *Abends will ich schlafen gehn* (with Seefried). LEHAR: *Die lustige Wittwe*: *Hanna's Entrance*; *Viljalied*; *Heia, Madel, aufgeschaut* (with Erich Kunz, baritone). *Das Land des Lächelns*: *Lisa's Entrance* (with Kunz); *Guten Abend, Hoheit . . . Bei einem Tee en deux* (with Nicolai Gedda, tenor). MOZART: *Il Rè pastore*: *L'amorè, sarò costante*. *Die Entführung aus dem Serail*: *Welcher Kummer . . . Traurigkeit; Martern aller Arten*. *Le Nozze di Figaro*: *Porgi amor; E Susanna non vien . . . Dove sono; Giunse alfin il momento . . . Deh vieni, non tar-*

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After sampling most of the rest of this set without very happy results, I got a jolt near the end of the first of two sides devoted to operetta. Listening casually, I needed a few moments to identify the *Fledermaus* Csardas, but only a moment or two more to guess why it had grabbed (and subsequently held) my attention. In Rosalinde's attempt to prove she's a Hungarian countess, which we all know she isn't, Schwarzkopf's system of vocal and interpretive masquerade for once rings true.

It's not just that the singing is so rigorously controlled, or that the control seems always to aim for an emotional effect rather than the human reality that would generate a genuine response; after all, plenty of singers have worked in just as contrived a fashion. Well, maybe not *just* as contrived, considering the famous "perfection" toward which Schwarzkopf worked under the guidance of her husband, Walter Legge. What's so irritating—or perhaps captivating, depending on how you respond—is the kind of emotional effect she worked for.

How to describe that effect? The best I can suggest is what we might call First Lady's Smile. (Imagine any First Lady of the last twenty years—except Betty Ford, I think.) It's the attitudinal veneer of charm, graciousness, and poise, assumed for the purpose—or at any rate with the result—of walling us off from whatever real and possibly interesting human activity is going on underneath. Even in tragic material, Schwarzkopf manages to keep her vocal FLS in place, and one value of this collection is to demonstrate that it has been in place at least as far back as the Schubert songs ("Seligkeit" and "Die Forelle") and Mozart arias (the *Rè pastore* and *Entführung* numbers) recorded in the fall of 1946.

The major difference between the period represented here and the later work that dominates Schwarzkopf's otherwise current discography is that the voice of course



William Schimmel recording tangos: tart flourishes and plush bands of harmonies

worked a good deal more freely. The top never exactly soared, as we can hear in the labored rising phrases of "Addio del passato," where she tries to pull the stops out, and yet there was quite a usable top, as long as she kept her demands within limits—and few singers have ever been better at that.

The album is sensibly planned—the first three discs following Legge's suggestion, according to an album-box credit. There is first a disc of Mozart arias, followed by a disc of other operatic material—most of this pre-LP. (The *Hänsel* excerpts are 78s conducted by Krips in 1947, not from the later complete recording conducted by Karajan.) The third disc is piano-accompanied material, mostly Lieder and mostly from 1954. The fourth disc contains excerpts from the 1953–55 recordings of Strauss and Lehár operettas.

There are some oddities in the selection. Five Puccini arias? And only two Wolf songs, and pretty lightweight stuff at that? (This is fine by me. Hers is the kind of Wolf singing that drives me up the wall.) Still, if this is what Legge suggested—. The faithful can console themselves with the opportunity to hear Schwarzkopf as both Anna and Elvira in *Don Giovanni*, and as both the Countess and Susanna in *Figaro*, and as—gasp—Louise. All sounds the same to me.

Interestingly, the piece you'd most expect to hear treated in this cutesy way, "O mio babbino caro," gets a rather different treatment—sort of slow and dreamy, or maybe make-believe-dreamy. This is a useful reminder that, artificial as Schwarzkopf's artistry may have been, it wasn't simply a matter of applying formulas. She worked mighty hard achieving these results, for better or worse. K.F.

#### THE TANGO PROJECT.

William Schimmel, accordion; Michael

Sahl, piano; Stan Kurtis, violin. (Eric Salzman and Susan Herl-Conroy, prod.) NONESUCH D 79030, \$11.98 (digital recording). Tape: DI 79030, \$11.98 (cassette).

#### PLACIDO DOMINGO SINGS TANGOS.

Placido Domingo, tenor; orchestra, Roberto Pansera, cond. DEUTSCHE GRAMMOPHON 2536 416, \$10.98. Tape: 3336 416, \$10.98 (cassette).

The prosaic name "Tango Project" unfolds, like plain brown wrapping, a rainbow cabinet of winged poetic essences. The prospect of thirteen dances in identical meter—and so marked a meter as the tango's—all played in sequence may seem an invitation to hypnotic tedium, but this album tells a different story. Drop a needle anywhere, and you will hear, as distinct, strange, various, and circean as the ocean in a shell, the gallantry, melancholy, and panache of a form as protean and infinitely renewable as the sonnet, laurel-crowned.

From low-life origins at the close of the nineteenth century in the brothels of Buenos Aires and other ports along the Rio de la Plata, the tango soon swept the smart set in Paris and never looked back, except to return home in triumph. The Project's selections, mostly Argentinian originals from the classic age of the Twenties and Thirties, with a few palm-court European copies thrown in for spice, are sounded in arrangements "after Julio de Caro and other master tangueros" by the Project pianist, Michael Sahl. His dreamy playfulness, lofty sorrow, murmured confidences, and proud accents of command are all equally authentic, equally precise. From the accordion (instead of the historic *bandoneón*, as the liner notes candidly point out), William Schimmel draws forth tart flourishes and plush bands of swaying harmonies, against which Stan Kurtis' violin sings its glinting, sighing cantilenas in vinous timbres. Richard Henrickson, superb on second violin, and Russell Savakus, equally so on bass, join the core trio on eight cuts, weaving seamlessly into the shifting moods. On the entire enchanting disc, there is not one false note of counterfeit emotion.

In Domingo's recording, conversely, everything is straight out of a can. Recorded in the wee hours after Teatro Colón performances of *Otello*, the ten numbers find him in robust and ruddy vocal health, but the overfed band and the prize vocalist throb endlessly on a single swollen note of all-purpose Latin nightclub passion. As chance would have it, two titles ("*Caminito*" and "*Vida mia*") appear in both sets. Without benefit of lyrics, the Project's *orquesta típica* speaks its soul in the articulate eloquence of distilled expressivity. Domingo, wringing his heart out, utters bloated commonplaces that mean nothing. Across the yawning gulf between the Project's poetic concentration and Domingo's exhibition dreck, it's next to impossible to recognize the "same" material. M.G.

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# The Tape Deck

Critiques of new cassette and open-reel releases by R. D. Darrell

## Divertimentos

Call them serenades, "occasional" music, *Tafelmusik*, or what you will—light tonal divertissements always have stimulated the imagination of even the most serious composers and titillated the funny bones of even the most sophisticated listeners. But such sonic manifestations of *Homo Ludens* (Man at Play) probably flowered most richly in eighteenth-century Austria. And although various kinds of divertimentos called for variously constituted ensembles, many of this repertory's aficionados relish best the examples for wind instruments (alone or in mixed consorts) that are especially suitable for *al fresco* performance. The modest size, appetizing variety of timbre, and immediate appeal of the genre make it ideally suited for recording and casual home listening—thus giving everyone the once exclusive privilege of royal and wealthy patrons.

Since Mozart's incomparable divertimentos and serenades are becoming generally well-known, it's refreshing to meet, via current musicassettes, completely or relatively unfamiliar examples by composers Mozart himself admired. Brand-new to me, and I'm sure most Americans, is Ignaz Holzbauer (1711–1783), a foremost composer in Mannheim when Mozart visited that innovative center in 1777. The first recordings of the older master's three *Nocturni*, for a sextet of winds and strings, and a Quintet in G, for winds, strings, and concertante harpsichord, reveal a real, often very witty personality, whose irresistibly engaging music-making is given spicily piquant life by Winterthur Baroque players in a vivid Swiss recording (Spectrum SC 208, \$4.50, plus \$1.50 shipping, from Spectrum, Harriman, N. Y. 10926).

Under the same bargain-price label are the six Haydn *Feldparthien* (outdoor suites), H. II: 41–46, usually known only for the *St. Antoni* Chorale tune that Haydn—or maybe his pupil Pleyel—borrowed from the public domain for the second movement of H. II: 46, and Brahms later reused. This set, too, receives a delectable, even poetic, performance in a vivid if lighter-weight Swiss recording by Zurich Tonhalle wind players, including a contrabassoonist (Spectrum SC 249). And by lucky happenstance, the first three *Feldparthien* also appear (together with four other Haydn wind divertimentos) in a 1974 Seon recording by Dieter Klöcker's Consortium Classicum (Arabesque 9083-2, \$15.96).

But since this is Vol. 1 of an American series for which I had the privilege of writing the annotations, I'm restricted here to a factual mention—plus a reminder that this should not be confused with the same group's four-disc Telefunken series (unavailable here on tape in any case).

Mozart's onetime pupil Hummel is represented by the same Consortium Classicum's exhumations of two serenades for winds, guitar, and clavier—fascinating exemplars of that era's vogue of playing around with operatic hit tunes. You will recognize the Mozart quotes easily enough but may well be baffled by those from Rossini, Spontini, Cherubini, and Lindpaintner (who?) (Musical Heritage Society MHC 6195, \$7.75, \$4.95 to members, plus \$1.60 shipping, from MHS, 14 Park Rd., Tinton Falls, N. J. 07724). Then, from still earlier master entertainers, we have further delights featuring modern approaches in technology and (less suitably) style. For Telemann's 300th birthday, Musical Offering, a West-Coast ensemble of winds, strings, and harpsichord, presents three characteristic trio sonatas and a quartet in gleamingly recorded performances that are great fun (Nonesuch digital/ferric D1 79022, \$11.98). And Aesthetic Audio (P. O. Box 478, Carlin, Nev. 89822) offers a real-time BASF chrome cassette edition of a 1978 British Merlin direct-to-stereo recording of four deliciously variegated Vivaldi Flute Concertos, R. 436, 438, 440, and 441 (originally for recorder), all radiantly played by Christopher Taylor with the London Philomusica under Carl Pini (MFC 781, now \$12.98, plus \$2.00 shipping).

Even that putative late-nineteenth-century academic Saint-Saëns had playful moments in his *Carnival of the Animals*; for its full humor and charm, one must forget its usual symphonic inflations, with or without Ogdon Nash's verses, and go back to the incomparably more divertising original Mardi-Gras scoring for only eleven instruments. That's electrifyingly demonstrated in the belated American release of the superbly transparent 1978 Pathé Marconi chamber version by pianists Michel Béroff and Jean-Philippe Collard with the Trio à Cordes Français and other French instrumentalists (Angel 4XS 37874, \$9.98). And for good measure, this includes Saint-Saëns's no less bright and jaunty Op. 65 Septet, for piano (Collard), trumpet (Maurice André), and strings.

**Big symphonic showpieces**, especially

those in HiTech panoply, inevitably continue to dominate musicassette releases. Most impressive, at least technically, is Mobile Fidelity's real-time chrome taping (MFSL C 510, price at dealer's option) of the Solti/London Philharmonic account of Holst's *Planets*; yet as in my earlier reviews (HF, December 1979, November 1981) of the original London and remastered Mobile Fidelity disc versions, I still find only scant Holstian empathy here.

There's better sonic/artistic equilibrium in Carlos Kleiber's powerfully dramatic Brahms Fourth Symphony with the Vienna Philharmonic (DG digital/chrome 3302 003, \$12.98) and the Perlman/Previn/Pittsburgh revivals of those favorites of fiddlers and cultists, the Conus and Korngold violin concertos (Angel digital/ferric 4XS 37770, \$9.98).

And of course "serious" music doesn't have to be solemn. Some of the sheer fun of the divertimento genre enlivens the latest Gershwin, Strauss family, and Offenbach tapings. Eduardo Mata and the Dallas Symphony offer the most brilliant Gershwin *Cuban Overture* and *Porgy and Bess Suite* (arr. Bennett) yet, together with an *American in Paris* that lacks only completely spontaneous jauntiness (RCA digital/chrome box ATK 1-4149, \$15.98). Willi Boskovsky and his Vienna Strauss Orchestra are as idiomatic as ever, if just a bit routine, in a program of four unhackneyed waltzes, five polkas (including Johann II's *Im Sturmschritt*, Op. 348, and Josef's *Feuerfest*), and the *Banditen Galop* (Angel digital/ferric 4XS 37814, \$9.98). And whatever Gallic insouciance Karajan and the Berlin Philharmonic may miss in their Offenbach *Barcarolle* and overture program, topped by the best reading yet of the *Vert-Vert (Kakadu)* Overture, there is no lack of high-voltage executant and sonic bravura (DG digital/chrome 3302 006, \$12.98).

**HiTech rejuvenations.** The latest additions to the invaluable RCA Red Seal 0.5 series of boxed chrome cassette reissues (\$15.98 each) feature three ageless early-stereo triumphs that have often been ranked as near-definitive interpretations: the 1955 Heifetz/Reiner/Chicago Brahms violin concerto (ATK 1-4200); the 1956 Munch/Boston Ibert *Escales*, coupled with a more idiosyncratic Debussy *La Mer* (ATK 1-4167); and the particularly memorable 1961 Monteux/Chicago Franck Symphony in D minor (ATK 1-4156). **HF**

# BACKBEAT

## The Indies Are Coming!

While their corporate counterparts play it safe, today's independent labels carry forth a time-honored tradition of exploring the unusual.  
by Sam Sutherland



IMAGINE A TYPICAL RECORD promotion executive at a major label, grappling with the high stakes and even higher failure rate of mass-appeal pop, rock, and soul in the current climate of tight consumer dollars. Envision his disappointment—and probable career anxiety—at the failure of the company's latest attempt at commercial alchemy. A fat six-figure promotion outlay, along with all the polish a name producer could apply to the tracks, have yielded a finished product that sounds like *Son Of Styx Meets Foreigner And Toto In Kansas*. Yet the album failed to trigger the hoped-for Platinum or Gold breakthrough.

Now picture that long-suffering promo warrior receiving the news that this month, instead of the usual array of recycled heavy metal, reheated soul, and reconstituted pop romance, the push projects don't sound remotely like anything currently on the Hot 100. There's an album of Vivaldi and Couperin pieces arranged for the five-string banjo, an anthology of Cajun fiddle music recorded in the late '40s, high-tech stereo waxings of authentic clog dancing, an ambitious jazz suite derived from court orchestral traditions in Bali and Java, and Duke Ellington played on dobro and pedal steel guitars. Topping off the list is a collection of parodies that features Lou Reed songs rewritten as middle-aged Jewish shtick and Chicago blues reinvented in Beverly Hills by such stalwarts as Perrier Waters and Big Mama Thornberg.

Our imaginary promotion rep might blink in disbelief, but all of those recordings have been released on small, independently distributed record labels during the

past few years. While the companies' musical differences are obvious, all are part of a sector in the recording trade too often overlooked in discussions of popular music. (Such is the genre on which we are focusing here, and all of the labels under consideration have been founded within the past two decades.) And while none of these records is likely to cash in as the Next Big Thing, together they provide heartening evidence that there really are musical alternatives to the least common denominators that pace the big leagues.

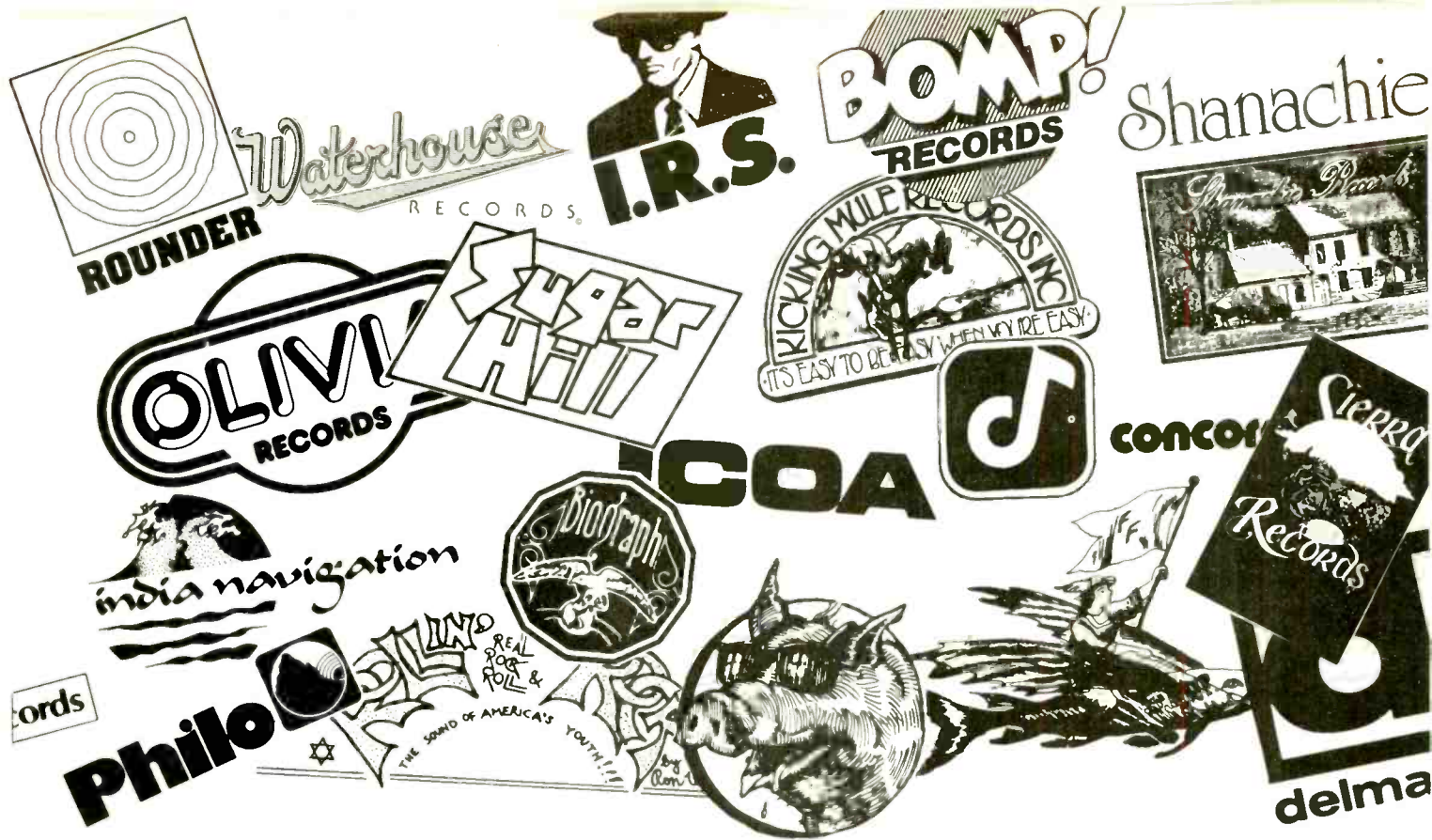
Among record buyers, those alternatives are not going unnoticed. The more specialized independents—those that record and market performers with minimal hopes for mass exposure or six-figure sales—are in most cases sustaining their market while big-time marketers continue to fret over lost buyers. Despite the majors' internal belt tightening and tougher credit policies that compel dealers to buy fewer titles in smaller quantities, many indies have sidestepped cutbacks and layoffs and, in some instances, are even expanding their sales bases.

"Our sales as a distributor have remained remarkably constant during the past year," says Rounder Records' Bill Nowlin. "We haven't grown significantly, but we haven't seen a dip in sales or had to lay anybody off, either." Rounder qualifies as something of a giant among indies, as well as a closer approximation of the diversified, conglomerate-type majors. Based in Somerville, Mass., it was founded in the late '60s as a communal enterprise for Nowlin (now sales manager) and partners

Marian Leighton (now president) and Ken Irwin, who oversees a&r. From its original base of folk, bluegrass, and blues, Rounder grew during the '70s to become a regional distributor of scores of even smaller labels, while expanding its own musical base.

Among the more recently founded indies are such feisty English labels as Stiff, Virgin, Rough Trade, and Editions EG, as well as younger U.S. counterparts like Slash, 415, Posh Boy, and ZE. All have been lauded as a new alternative to the increasingly safe output of the majors, yet these companies actually continue a tradition that suggests that independents are one of the industry's fixed constants. Since the years before World War II, the indies have, to paraphrase *Star Trek's* Captain Kirk, boldly gone where no major labels have gone: Country, rock, and r&b may now be staple commodities for the big branch-distributed companies, but all three were first nurtured by tiny local and regional labels. Indeed, a number of today's big leaguers first carved their niches as small specialized independents. Atlantic Records began in the late '40s as a rhythm & blues and jazz line, Elektra made its reputation in the '50s with folk and ethnic music, and Motown started out in the '60s with a regional black pop style that became the template for crossover soul.

The '70s generation of small indies cohered around labels like Rounder, Flying Fish, Arhoolie, Alligator, and Adelphi. Like their predecessors from the '30s, '40s, and '50s, each was shaped by an entrepreneurial vision rather than corporate plan-



ning, with genuine musical enthusiasm taking an upper hand to the profit motive. But against the booming mainstream trade of the mid-'70s, the indies' modest sales, absence of celebrities, and lack of business expertise invited scorn from some dealers and distributors, who found it easier to confine themselves to the majors' output. Amplifying their conception of independent as amateur were the many brief and checkered careers of hobbyists who bravely launched their own labels around hopelessly obscure or mediocre music.

Now, however, most dealers and distributors can't afford to dismiss the market potential for independent product. There's also ample evidence that the small labels have developed a sound business sense. (The recession has weeded out those that have not.) They have learned how to supply dealers with the right merchandising tools, what quantities of product to expect on a given order, and how to reach consumers to generate sufficient demand.

"I like to think we were pioneers in applying the smart thinking of the major labels," says Bruce Iglauer, who founded Alligator Records in 1971 while still working for another Chicago-based independent, Bob Koester's Delmark Records. Delmark specialized in avant-garde regional jazz and contemporary blues, but Iglauer wanted to concentrate on the latter, despite the prevailing belief that the electric blues revival of the late '60s had already been absorbed into the fabric of rock.

Time proved Iglauer wiser than majority opinion, and his tiny catalog has grown gradually but steadily. The production val-

ues of his LPs have improved markedly since his first self-produced sides were recorded on comparatively primitive equipment in after-hours Chicago blues clubs. Now, Alligator's inhouse recordings are cut in modern multitrack studios, as are the outside masters Iglauer has begun purchasing and releasing, concurrent with an expansion into reggae. "Some of the small label distributors have really grown up, as well as the labels," says Iglauer, citing Rounder, St. Louis' House Distributors, and California Record Distributors as examples. "And the larger independent distributors who carry a Motown or a Chrysalis have learned that they can make solid, if small, dollars on more specialized labels like us."

Higher technical quality—particularly relative to mass-market discs—is part of the reason for the indies' growing visibility. Even as the audiophile business was moving beyond novelty repertoire geared more to knob-twisters than music lovers, many independents had already recognized that their much smaller production runs gave them an advantage in monitoring pressing quality. Without shareholders to answer to, it became easier to increase their cost per record for better grades of vinyl, plastic inner sleeves, and other high-tech improvements.

Countless specialty jazz labels have used higher master tape recording speeds and virgin or imported-vinyl pressings. The tiny Windham Hill Records of Palo Alto, Calif., whose unlikely sleeper hit by pianist George Winston has yielded dramatic sales growth over the past eighteen months, has experimented with separate audiophile ver-

sions of recent albums, including both half-speed mastered and digitally recorded titles. Founder Will Ackerman—himself an archetype in that he is a musician who started his company more on a whim than to make money—confides that he only learned about half-speed techniques after discovering that his cutting engineer, Mobile Fidelity's Stan Ricker, had already used that more exacting approach on several Windham Hill masters because he wanted to preserve the impressive clarity of the recordings.

**The other side** of the independents' story is their involvement in musical scholarship. Many have functioned as curators of ethnic and traditional music as mass market titans have been busy—until recently, that is—deleting older titles. Apart from new recordings of traditional and ethnic artists, the new indies have actively sought old masters and created impressive anthologies within even the most esoteric fields. Los Angeles' Rhino Records, which began as a screwball comedy label spun off from Rhino's Westwood record store, has been purchasing '60s rock album masters and releasing its own loving tributes to early psychedelia, surf music, and proto-punk.

San Francisco's Solid Smoke has excelled at anthologies spotlighting forgotten early rock and r&b. Last year it issued a James Brown hits package with carefully remastered sonics and a garish jacket that echoed King Records' gaudy original sleeves for Brown's '60s LPs. That set prompted PolyGram, which had leased Solid Smoke the masters, to issue its own

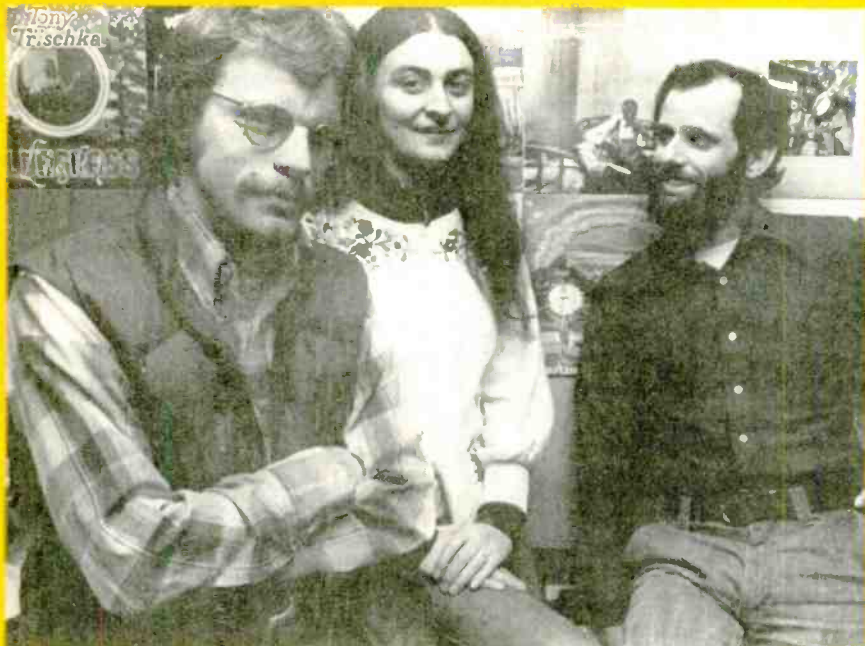
## Directory of Independents

A comprehensive listing of independent labels even in a single genre could easily swallow more space than the preceding overview and the following list combined. As such, this directory is to be interpreted only as a representative sampling. Among the companies excluded are classical indies; labels concentrating on foreign language ethnic repertoire; older jazz independents, since that genre has long been an independent domain; and "vanity" labels confined to the output of a single performer/entrepreneur. Readers should also be alerted to frequent shifts in address for the smaller firms.

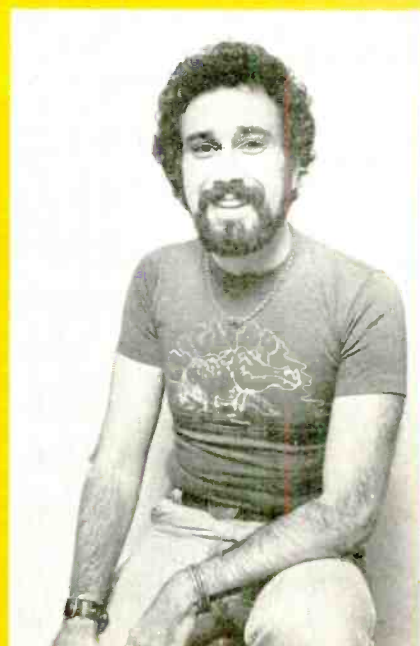
- Adelphi Records**, Box 288, Silver Spring, Md. 20907. *Folk, blues and, more recently, acoustic jazz.*
- Alligator Records**, Box 60234, Chicago, Ill. 60660. *Contemporary blues and reggae.*
- Arhoolie Productions**, 10341 San Pablo Ave., El Cerrito, Calif. 94530. *Contemporary and historical blues, folk and ethnic music including Tex-Mex, Cajun, and country. Also distributes Blues Classics, Folklyric, and Old Timey labels.*
- Artists House, Inc.**, 40 W. 37th St., New York, N.Y. 10018. *Acoustic and avant-garde jazz. Distributed through MCA last year, but newly returned to the independent ranks.*
- Bay Records**, 1516 Oak St., Suite 320, Alameda, Calif. 94501. *Contemporary folk.*
- Bee Hive Jazz Records**, 1130 Colfax St., Evanston, Ill. 60201. *Jazz.*
- Biograph Records**, P.O. Box 109, Canaan, N.Y. 12029. *Older indie specializing in historical reissues from an array of genres. Subsidiary labels include Center, Dawn, Melodeon, and Waterfall.*
- Blind Pig Records**, 208 S. First St., Ann Arbor, Mich. 48103. *Blues and folk line, distributed by Flying Fish.*
- Bomp Records**, 2702 San Fernando Rd., Los Angeles, Calif. 90065. *Regional rock and new wave, with ties to Sire and PolyGram on specific projects.*
- Boston International**, 419 Boylston St., Boston, Mass. 02116. *Eclectic rock, dancelidisco, and chamber music. Regional base.*
- Clean Cuts, Inc.**, Box 16264, Baltimore, Md. 21210. *Eclectic acoustic jazz label initially partnered with Adelphi and now on its own. Stresses audiophile-quality pressings.*
- Concord Jazz, Inc.**, P.O. Box 845, Concord, Calif. 94522. *Mainstream acoustic jazz.*
- Deli Platters**, 445 Park Ave., 6th floor, New York, N.Y. 10022. *New wave rock.*
- Delmark Records**, 4243 N. Lincoln, Chicago, Ill. 60618. *Jazz and blues label, tied to an expanded retail store operation.*
- Flying Fish Records**, 1304 W. Schubert, Chicago, Ill. 60614. *Folk and blues label since expanded into folk/jazz and r&b. Also distributes Blind Pig, Greenhays, and Kaleidoscope.*
- Gramavision, Inc.**, 260 West Broadway, New York, N.Y. 10013. *Soundtracks, avant-garde jazz, sacred music, new music, pop/reggae. Also moving into distribution of other lines, including Living Music.*
- Green Linnet Records**, 70 Turner Hill Rd., New Canaan, Conn. 06840. *Folk from the British Isles.*
- Improvising Artists, Inc.**, 26 Jane St., New York, N.Y. 10014. *Avant-garde jazz.*
- India Navigation Co.**, 60 Hudson St., Rm. 205, New York, N.Y. 10013. *Jazz.*
- Jazz Composers Orchestra Association, Inc. (JCOA)/New Music Distribution Service (NMDS)**, 500 Broadway, New York, N.Y. 10012. *Founded as an artists' collective through eclectic recording projects initially sold through direct mail, JCOA has become perhaps more vital in recent years as distributor for other small indies in new music, avant-garde jazz, and adjacent genres.*
- Kicking Mule Records**, P.O. Box 158, Alderpoint, Calif. 95411. *Instrumental folk, with subsidiaries including Sierra Wave, Sonet USA, and Transatlantic USA. Also distributes Larrikin Folkways.*
- Mountain Railroad Records**, 3602 Atwood Ave., Madison, Wis. 53714. *Folk.*
- Olivia Records**, 4400 Market, Oakland, Calif. 94608. *Feminist label and distributor, with catalog of folk and rock. Lines handled included Bloodleaf, Deep River, Dream Machine, Thunderbird, Trish Nugent.*
- Philo Records**, The Barn, North Ferrisburg, Vt. 05473. *Folk-based label with recent forays into pop folk and fusion.*
- Posh Boy Records & Tapes**, P.O. Box 38861, Los Angeles, Calif. 90038. *Regional new wave and rock.*
- Ralph Records**, 444 Grove St., San Francisco, Calif. 94102. *Self-described as "a division of The Cryptic Corp.," which gives a clue to its offbeat avant-rock, much of which has anticipated electronic and synthesizer rock from abroad.*
- Rhino Records**, 11609 W. Pico Blvd., Los Angeles, Calif. 90064. *Comedy and regional rock; new wave, novelty rock, and rock reissues.*
- Rollin' Rock Records**, 6918 Peach Ave., Van Nuys, Calif. 91406. *Rockabilly.*
- Rough Trade, Inc.**, 1042 Murray St., Berkeley, Calif. 94710. *New Wave and experimental rock line, spun off from British parent. Also distributes other British imports on Crass, Factory, Smash Trade, etc.*
- Rounder Records**, 186 Willow Ave., Somerville, Mass. 02144. *Folk and blues base since expanded to include chamber jazz, rock & roll, and folk/rock, with regional distribution of other labels extending catalog's reach into avant-garde jazz and historical rock. Represents approximately 3,000 different LPs on labels including Bet-Car, Black Saint, Esca, Fiddler, Red, Solid Smoke, Soul Note, String, Tara, and Topic.*
- Shanachie Records**, Dalebrook Park, Ho-Ho-Kus, N.J. 07423. *Founded to specialize in British Isles folk, but since successfully moving into reggae. Own labels include Herwin, Morning Star, and Rockers; distributes Boot, Dreamstreet, Flyright, Gael-Linn, Trojan, Topic, Tara, and other lines.*
- Sierra Records**, P.O. Box 5853, Pasadena, Calif. 91107. *Folk and country rock label, which also offered some L.A. comedy sets while still doing business as Sierra-Briar. Recently reactivated after a long hiatus.*
- Sugar Hill Records**, P.O. Box 4040, Duke Station, Durham, N.C. 27706. *Not to be confused with the New Jersey-based dance/r&b label, this southern indie specializes in bluegrass and country instrumental projects.*
- Waterhouse Records**, 100 N. Seventh St., Suite 415, Minneapolis, Minn. 55403. *Midwest indie covering folk, blues, rock, and jazz.*
- Windham Hill Records**, P.O. Box 9388, Stanford, Calif. 94305. *Dealers, especially in the West, often stock under label's name, owing to problems in classifying its folk, jazz, and classically influenced instrumental works. Also operates a reissue line, Lost Lake Arts, and has distributed at least one artist-financed outside LP.*

s.s.





*Rounder's founding triumvirate (left to right): Nowlin, Leighton, and Irwin*



STEVE KAGAN

*Alligator's Iglauer: enterprising vision*

Brown hits anthology. Theirs was inferior in every respect, from sound quality and song selection to cover design.

More typical is Arhoolie, a Bay Area operation run by founder Chris Strachwitz that suggests a mini-Smithsonian of regional and ethnic music. Strachwitz, an Austrian who fell in love with American folk mores after moving to the States as a youth, launched the label with his own field recordings of surviving country blues musicians. He has since gone on to Tex-Mex, Cajun, and even Yiddish-American music, and Arhoolie has grown to become a distributor of subsidiary lines like Folklyric and Old Timey, whose anthologies include early country & western and blues.

Though the musical fare of the new indies is practically limitless, all share the understanding that survival rests with a scale of economy (and operation) specific to their areas of specialization. In that sense, they could be harbingers of the recording industry's future. With the number of Platinum album certifications declining during the past two years and rock's dominance being eroded by the increased sales of country, black music, and other genres, the same narrow-market principles practiced by parts of the cable television and magazine publishing industries loom as increasingly likely in music.

One of the newer entrepreneurs, thirty-year-old Jonathan Rose of Granavision, Inc., is quick to agree. His own adventurous three-year-old company has expanded from eclectic soundtracks into sacred music, new music, avant-garde jazz, and, most recently, pop/reggae. Each is marketed separately. "Narrowcasting is so efficient," says Rose. "One thing about any narrow musical genre is that you can easily find its

market: There are only a certain number of writers who will write about it, only a few radio stations—if any—that will play it, and only a certain group of dealers who will sell it well. So there's always an appropriate circle to be completed."

Alligator's Iglauer, Windham Hill's Ackerman, the founding triumvirate at Rounder, and the legion of brethren at other labels purveying everything from electronic music to ethnic, folk, comedy, and renegade rock, would all agree with Rose. For it is that "narrowcast" philosophy that has enabled them to turn a profit with far fewer sales than the typical major label project.

The breakeven point for a new rock or pop album is conservatively estimated at 100,000 units. (One 1979 estimate was closer to 150,000). But the small-fry companies say they can manufacture and market their well-recorded, well-packaged albums and turn a profit after selling only a few thousand discs. And as the majors find their available dollars for new artists shrinking, and their ability to sustain recognized but specialized artists likewise hampered, the small labels are inheriting an increasing number of active performers with existing constituencies.

The majors themselves haven't entirely missed the wisdom of this "small is beautiful" philosophy. Warner Bros. has made ECM, an entrepreneurial jazz line, a prestigious complement to its jazz division. Rock indies are also being taken more seriously, as witnessed by big-league ties for Slash (with Warner) and 415 (with CBS), both coming in the wake of A&M's success with Miles Copeland's I.R.S. Meanwhile, numerous mass marketers are following previously untouched areas like exercise and gospel LPs into new types of retail

stores, a mission that ironically makes them Johnnies-come-lately compared to their smaller cousins. Windham Hill started out by distributing its albums to health food and alternative book stores, simply because it was having problems securing satisfactory national distribution.

There's even evidence that some indies are sitting on respectable growth areas. Chamber folk/jazz has reaped Windham Hill whopping monthly sales increases of as much as 600% during the first half of '82. A folk revival could spell paydirt for Rounder and Flying Fish and a soul revival would enrich Solid Smoke.

Less obviously, the conservative financial orientation of these maverick companies offers a timely lesson to the majors. Alligator's Iglauer speaks for many of his peers when he asserts his accounting books would be the envy of the mainstream labels. Even in the wake of an admittedly disappointing '81, due to what he now feels was too rapid expansion, he states, "We're always in the black, so we don't have to count on our next release to make our money. And because we've chosen to market conservatively and stress catalog sales, we're still selling records that broke even eight or nine years ago, with our only returns being defectives."

The horizon isn't without threats—indies evince anxiety over their distributors' long-range survival, particularly in the wake of current retail bankruptcies. But these labels are clearly offering better music, better packaging, and better business sense than they did a decade ago. For the music enthusiast who isn't satisfied by the knee-jerk confections of the contemporary mainstream, these are gourmet trademarks worth looking for. **HF**

## Reviews



Linda & Richard Thompson: passionate songs of beauty and terror—See page 82.

**Eric Clapton: Time Pieces/  
The Best of Eric Clapton**  
Various producers  
RSO RX 1-3099

When Eric Clapton and Duane Allman's twin guitars ring off that familiar flurry of crisp, cascading notes on *Layla* at the end of this disc's first side, it's like being jolted awake by a sudden clap of thunder. Following four of Clapton's sleepy-time tunes—with their loping bass and drums, simple (lazy, perhaps?) guitar lines, and mumbling Clapton vocals—Derek and the Dominoes' early '70s classic jumps out of the speakers in wailing splendor.

Which is not to denigrate the laidback, slow-motion approach that Clapton has taken through most of the last decade. When the former Yardbird and Cream superstar decided to become England's answer to J. J. Cale, the world lost a flashy, technically astounding rock guitarist. But it gained a succession of kicked-back hits in *After Midnight* and *Cocaine* (both penned by Cale), some mellow reggae rockers like Bob Marley's *I Shot the Sheriff* and Bob Dylan's *Knockin' on Heaven's Door*, and a score of other easy going tunes. "Time Pieces" includes all of the above along with some semi-hits, and as such it is one "best of" package that actually lives up to its claim.

The disc is culled from seven Clapton LPs, among them his self-named solo debut, 1974's "461 Ocean Boulevard" (easily his most satisfying studio effort),

"Derek and the Dominoes," and a trio of somnambulistic, m.o.r.-tinged albums—"Backless," "There's One in Every Crowd," and "Slowhand." Listeners probably could have done without the seven-minute-plus live reprise of *Cocaine* (although it does boast some sprightly lead guitar lines by Albert Lee), but the rest of the selections here bounce off of each other nicely. From the sweet Okie ditty *Promises* to the shuffling reading of Johnny Otis' *Willie and the Hand Jive*, "Time Pieces" offers a solid retrospective of an enigmatic, reclusive pop star who also happens to be a major musical talent. STEVEN X. REA

**The Clash: Combat Rock**  
"Made by the Clash"  
Epic FE 37689

Combativeness is so integral to the Clash that the title of the band's fifth album is almost redundant. Without its propensity for making songs that sound like leaflets (the LP's opening, and accurate, sally is "This is a public service announcement, with guitars!") and its absorption of non-Anglo musical forms, the Clash would be on the basic bash-'em-out, rough-hewn British blues/rock level of the Pretty Things, or the Sect, or any of a dozen other c. '65 U.K. outfits. It's as easy to imagine Joe Strummer's hoarse, mush-mouthed voice belting out some obscure Bo Diddley song as it is to hear his position papers on life and smack in the ghetto, or the Asian children of Ho Chi Minh City.

If that sounds like disapproval, be assured that it isn't. It's precisely the melding of fervent commitment to issue-oriented rock, Third World influences, and energetic bluster that makes the Clash so rousing. Its impact was diffused over the course of "Sandinista!," a sprawling three-record set with a large dose of instrumental, reggae-dub numbness. But "Combat Rock," its first single-disc album since "Give 'Em Enough Rope," is more compact and hits harder.

Except for *Should I Stay or Should I Go?*, which approximates the mainstream style and pop content that gave the band its only U.S. hit, *Train in Vain (Stand by Me)*, "Combat Rock" always has its dukes up. The aptly titled *Overpowered by Funk*, a razor-sharp swipe from The Book of (Rick) James, and the reggae *Red Angel Dragnet*—which tosses in readings from the film *Taxi Driver*—cover aspects of the New York City transit system. The first contains a rap defending graffiti, the second is about the Guardian Angels, and they're both among the LP's best performances, with particularly hot drumming by Topper Headon. *Rock the Casbah* is the Clash's middle-eastern equivalent of "Storm the Bastille!" and *Car Jamming* somehow manages to take on Agent Orange and Lauren Bacall. How can you resist a combination like that?

The group still brings out the polemic sledgehammer too often: The ironies of *Know Your Rights* are thuddingly obvious; *Straight to Hell* contains yet another bitter reference to Coca-Cola (every Clash album seems to have one) as a symbol of callous Americanization; and special guest Allen Ginsberg recites laughable lines ("slam-dance cosmopolis/enlighten the populace") on *Ghetto Defendant*. Once you get past the lyrical missteps, however, "Combat Rock" has an impressive share of walloping rock, reggae, and funk. There is a lot of utter foolishness on the album—including a commercial for toilet bowl cleanser and the murky *Death Is a Star*—but when it cuts out the crap and cuts loose, the Clash justifies everything its most generous fans claim for it. MITCHELL COHEN

**Marshall Crenshaw**  
Richard Gottehrer & Marshall  
Crenshaw, producers  
Warner Bros. BSK 3673

Certain films that use period rock for their soundtracks—*Diner*, *Who's That Knocking at My Door*, *American Graffiti*—make it seem as though radios used to blast out one memorable song after another with no let up. Marshall Crenshaw's debut is a similar experience: He rarely misses his target, scoring with a series of brief, breezily melodic, and emotionally pinpointed tracks. *Not for Me*, *The Usual Thing*, *There She Goes Again*, and a number of other

Crenshaw compositions are reminiscent of the buoyant pop songs that Johnny & Dorsey Burnette wrote for Ricky Nelson, the Bryants for the Everly Brothers, and Buddy Holly for himself.

The LP sometimes sounds like a stylistic homage to those and other artists. The nonoriginal *Soldier of Love* is arranged as a dead-ringer tribute to the 1963 sound of the Beatles—right down to the “sha-la-la” background voices, klutzy drumming, and Liverpudlian lead vocal. (Crenshaw played Lennon in *Beatlemania*, but you won’t hold that against him for long.) There are familiar traces and touches all over “Marshall Crenshaw.” Yet he is no copying machine; his unassuming charm is his own, and his three-piece band, consisting of guitar, bass, and drums, is as lively as his songs are tuneful.

Crenshaw’s music hops, skips, and jumps. In a way, it’s an ’80s male equivalent of early ’60s girl-group rock, the musical genre that pinned its hopes on finding and holding that shy boy over in the corner. This album is mostly about his search for compatibility, for a girl as quirky as he is, who hates TV and anything commonplace, who’ll go rockin’ around N.Y.C. and lay down her arms in surrender at the appropriate moment. His hymn to femininity in general (*Girls . . .*) is one of the album’s least successful cuts, but *Someday, Someway* (earlier recorded by Robert Gordon), *Brand New Lover* (also on Lou Ann Barton’s debut album), and *There She Goes Again* are all wonderful songs about romantic entanglements.

The instrumentation remains spare and basic throughout, with flourishes added when called for, such as Phil Spector-ish percussion on *Cynical Girl* and a multi-tracked twang on *The Usual Thing*. Coproducer Richard Gottehrer’s pop roots go deep (from the McCoys and the Strange-loves to Blondie and the Go-Go’s), and like Crenshaw he’s unabashed about digging into other people’s music for effects, or into his own past (the guitar lick on one song recalls the nearly forgotten Dirty Angels).

The message of “Marshall Crenshaw” is a hopeful one, perhaps most upbeat on *She Can’t Dance*, a number that both celebrates and captures the elemental rock spirit. So does most of the album, and considering the excellent songs that *didn’t* get on this album (*But, But, Something’s Gonna Happen*), there’re bound to be equally good things ahead from Crenshaw.

MITCHELL COHEN

**Dreamgirls:**  
**Original Cast Recording**  
David Foster, producer  
Geffen GHSP 2007

The Broadway musical *Dreamgirls* is about the meteoric rise of a black female vocal trio, the Dreams, to pop music superstar-

dom in the ’60s and early ’70s. Though the fictional story loosely resembles that of Diana Ross and the Supremes, it deals first and foremost with the rigors and perils of show business, in this case in an era when black pop musicians were striving to connect with a larger, white audience. Director/choreographer Michael Bennett of *A Chorus Line* fame has once again put the inner workings of the entertainment trade in the spotlight and succeeded. Tom Eyrn’s book and lyrics are caustic and probing. Henry Krieger’s music, far from sounding like watered-down Motown, draws on all forms of black music—including gospel, blues, and jazz—and casts them within the formal conventions of the Broadway score.

Most original cast albums are recorded live in one long session; this one was done over a period of more than a month, with all the advantages of multiple takes, multi-tracking, and overdubbing. Still “Dreamgirls” does not sound like a collection of r&b singles, and one never loses the story’s thread. Harold Wheeler’s sassy orchestrations and Cleavant Derricks’ stunning vocal arrangements are faithfully reproduced, sounding particularly effective on *Hard to Say Goodbye*, *My Love* and *One Night Only*. Producer David Foster has even managed to capture the essence of the splashiest stage numbers. On *Steppin’ to the Bad Side*, for instance, where the businessmen behind the Dreams decide to use whatever corrupt tactics they must to succeed, the music and singing project a panoramic sleaziness. The show’s emotional blockbuster is *And I’m Telling You I’m Not Going*, sung by Jennifer Holliday as Effie Melody White, the trio’s original lead vocalist who is ousted in favor of a slimmer, sexier singer. Holliday’s heart-stopping gospel-meets-Broadway delivery carries all the force and presence of a real star to be.

While most of the songs here are closely associated with the show and aren’t necessarily designed to become pop standards, they are all consistently witty, engaging, and heartfelt. And ultimately it’s the merging of Broadway with r&b that distinguishes “Dreamgirls,” and makes it a potential classic of the modern American musical stage.

CRISPIN CIOE

**Queen: Hot Space**  
Queen & Mack, producers  
Elektra E 1-60128

Its first album arrived nearly a decade ago, trumpeting a quartet that surely was doomed at birth by rock evolution. Certain to sag under the weight of its Wagnerian guitar fanfares and searing cymbal flashes, Queen was dismissed then as perhaps the last of its breed.

Well, it’s no secret who’s laughing now. Even had Queen stayed closer to those incendiary stomping grounds, it might still

be marketable, given the recent resurgence of hard rock. For this shrewd bunch, however, the secret to success has been a chameleon progression from power chords to pop and more recently to lean and surprisingly funky dance-rock. As a result, its huge constituency bridges black, pop, and rock audiences.

“Hot Space” continues that steady revisionism away from the once-dominant weight of guitarist Brian May’s textured guitar effects and even more toward the band’s rhythm section than on the crossover grooves of “The Game.” Most of Side 1 is propelled by the slippery synthesized bass of John Deacon and the drumming of Roger Taylor, whose hit-every-thing-in-sight technique of yore has given way to a leaner attack. On the opening *Staying Power*, Arif Mardin’s furious horn charts sizzle behind the band’s taut rhythms and Freddie Mercury’s typically leering vocal.

Queen’s enviably thick vocal harmonies are grafted seamlessly into this kinetic brew, almost obscuring the noxious mix of sexual manipulation and mean-spiritedness that pops up on *Body Language* and *Back Chat*. Elsewhere, May’s brassy guitar fusillades make a brief, restrained appearance on *Put Out the Fire*, and Mercury flexes his sense of cabaret melodrama on *Life Is Real (Song for Lennon)* and the choral-harmony showstopper *La Palabras de Amor*.

The sense of craft throughout is evident, the compositional range impressive. Why, then, does Queen’s test-tube rock seem so chilly and calculated? The clue here is the trite *Life Is Real*, a eulogy for John Lennon cheapened by the precision with which Queen apes the vocal and keyboard timbres of *Imagine*. The song only underscores how little Mercury and friends have in common with the late Beatle and how insubstantial their concerns seem by comparison. Indeed, the gesture seems closer to grave-robbing than it does to sincere tribute.

At the other extreme is *Under Pressure*, a collaboration with David Bowie. Mercury’s vocal is as treacherously facile as ever, but his soul mannerisms seem more natural alongside the equally mannered readings Bowie offers. The song’s unveiling of a wearily old issue beneath its modern imagery—the risks of genuine care (“Love dares you to change our way of caring about ourselves”) and compassion—is closer to the heart of the matter than anything Queen has done. But then you can probably thank Bowie for that.

SAM SUTHERLAND

**Otis Redding: Recorded Live**  
Nesuhi Ertegun & Ed Michel,  
producers. Atlantic SD 19346

If “Recorded Live,” subtitled “Previously Unreleased Performances,” were the only document of the late Otis Redding in con-

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New York	June 25-July 4
Minneapolis/ St. Paul	July 12-18
Cincinnati	July 12-17
Seattle	July 30-Aug. 6
Milwaukee	Aug. 11-15
Newport, R.I.	Aug. 21-22
Chicago	Aug. 30-Sept. 5
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cert, one could forgive its numerous sins. Any opportunity to hear one of soul music's greatest emoters work an audience, with his expressive combination of Little Richard's fervor and Sam Cooke's tenderness, is better than no opportunity at all. But as long as "Live in Europe" (also on Atlantic) exists, these tapes could have stayed in the vaults. We really didn't need new live versions of *I've Been Loving You Too Long* or *I Can't Turn You Loose*—a cliché by now, especially since Elwood and Jake Blues made the song's vamp their introductory theme.

A lesser force would have been completely torpedoed by the backup band on this album, the second posthumous set culled from a series of 1966 dates at the Whisky A Go Go. Redding pushes, but there's no pushing back; the six-piece horn section is consistently sour, and the rhythm section's laziness is in sharp contrast to the snap and efficiency of the MG's, who played on his studio sessions. All these musicians really needed to do was stay on a steady course while Redding went into his mountain-climbing improvisations, but they couldn't even manage that.

Redding wrings dramatic vocals out of two lesser-known originals, *Chained and Bound* and *Good to Me*, and socks out an effective *Security* (a sort of companion piece to *Respect*). What he does to *A Hard Day's Night*, however, is excruciating, and it can't be blamed solely on the band. Fans familiar with his dynamic reworkings of *Day Tripper* and *Satisfaction* will be especially disappointed. He simply repeats the verse over and over, with minimal variation and growing desperation, trapped in the song with no idea how to get out.

Redding never sounded false in the studio, where he had the support of Memphis' finest: Booker T. Jones, the late Al Jackson, Steve Cropper, Duck Dunn. But on stage, he sometimes fell back on mannerisms, nervous patter, and exhortations. (The "got-ta got-ta" could get out of hand.) "Recorded Live" is filled with those overworked Redding-isms, and at one point he tells the crowd, "We do a little gimmick right here, and it goes something like this." Working too hard to win over the house, puffing against an incompetent band, Redding was not at his best at the Whisky engagement, and this album does no great service to his memory.

MITCHELL COHEN

**Roxy Music: Avalon**  
Rhett Davies & Roxy Music,  
producers  
E.G./Warner Bros. 23686-1

"Avalon" is mood music for ultramoderns, a lush, richly textured, glossy bit of aural eiderdown. In spite of that—or because of it—Roxy Music's ninth album is also one of its best. Bryan Ferry, dapper crooner and pop aesthete, has fashioned a subtle, sublime collection of tunes, rife with anguished

cool and supersentimental notions, couched in oblique metaphors and half-twisted clichés that smack of diehard romanticism.

At one time, British singer/songwriter Ferry was so caught up in his Mr. Suave image that the music seemed secondary. But what has become more apparent with each successive Roxy Music LP is that he has managed to transcend that: Now the image has become the music. Ferry's astute synthesizer colorations, his dandy, dour lyrics and seductively melancholy vocals

(Continued on page 82)

## Jazz

**Woody Herman Presents  
Four Others, Vol. 2**  
Carl E. Jefferson, producer  
Concord Jazz CJ 180

Few, if any ensemble jazz sounds have lasted as well as that of the Four Brothers, a three-tenor, one-baritone saxophone quartet that Woody Herman used in his 1947 Second Herd. The original, pre-Herman group was composed of four tenor players and came out of a band led by Gene Roland in Los Angeles. They took their name from *Four Brothers*, composed by Jimmy Giuffrè—also one of the members. When three of the four joined Woody's band, baritone player Serge Chaloff—a holdover from the original Herman Herd—filled out the configuration. The three-plus-one blend has since become the quintessential Herman sound.

On "Four Others," Woody returns to the original concept of four tenors, played here by Flip Phillips of the original Herd, Al Cohn of the Second Herd, Bill Perkins of the early '50s Herd, and Sal Nistico of the '60s Herd. The tunes, which include *Not Really the Blues*, *Four Others*, and *The Goof and I*, are all out of Woody's copious repertory. The combination of Cohn's arrangements and Woody's sense of timing make them vivid settings for the four horns. Herman, modest as ever, appears only once, taking an alto solo on *Tenderly*. Cohn's introduction allows each player to make a brief and gracious bow to the Old Man.

No small part of the success of this set is due to its swinging rhythm section: drummer Don Lamond of the First Herd; George Duvivier, a non-Hermanite but a nonetheless ideal bassist; and John Bunch, a Herman pianist of the mid-'50s who gets a solo opportunity on *The Goof and I* and takes off like a rocket.

JOHN S. WILSON

**Indiana Ragtime**  
John Edward Hasse & Frank J.  
Gillis, producers. Indiana  
Historical Society IHS 1001  
(two discs)

## BACKBEAT Reviews

(315 West Ohio St., Indianapolis, Ind. 46202) \$14 by mail only

This two-disc set is most unusual. It focuses on Indiana as a center and source of ragtime. Indiana is normally little more than a ragtime footnote in comparison to such places as St. Louis, Chicago, or Sedalia, Mo. But with works here by Original Dixieland Jazz Band pianist J. Russel Robinson, Abe Olman, Jesse Crump, May Aufferheide, Julia Niebergall, and even Hoagy Carmichael (in a post-ragtime rag), it's clear that the area had plenty to offer.

The recordings are of four types: piano solos, both current and old; performances by the Indiana University Ragtime Orchestra; recordings made from piano rolls; and old records by Arthur Pryor's band, Vic Meyers' 1920s dance orchestra, the New Orleans Rhythm Kings, Max Morath's Ragtime Quintet, Tony Parenti's Ragtime Gang, and the Bunk Johnson and Turk Murphy bands. The most interesting selections are the piano solos and the old band records. The piano rolls, by nature, don't allow for much shading, and the University orchestra sounds somewhat tentative.

"Indiana Ragtime" is accompanied by an exceptionally attractive and informative booklet, filled with pictures, background on ragtime in Indiana, brief biographies of the composers, and detailed notes on the selections and the performers. Apparently many of the era's successful rag composers were in their teens and early '20s; popular music was a young person's game even at the turn of the century. Also gleaned from the notes is the fact that there were many black rag composers in Indiana, but since their work was rarely notated or published, most of it has disappeared. Only two pieces in this collection were written by blacks—Russell Smith's *That Demon Rag* and Crump's *Mr. Crump Rag*. The former was preserved because it was issued on a piano roll; the latter, which shows a ragtime musician moving into the Harlem stride style, because it was recorded by its composer in 1923. This beautifully prepared project should stir other historical and jazz societies to give their own local composers and performers proper due.

JOHN S. WILSON

### **Bud Powell: Inner Five**

Bill Potts, producer

Musician E 1-60030

### **The Thelonious Monk**

#### **Memorial Album**

Orrin Keepnews, producer

Milestone M 47064

Bud Powell and Thelonious Monk were arguably the two most dominant influences on post-World War II jazz piano. In Powell's case, it was obvious. He was the incredible, fiery genius—as much a determiner of bebop piano as Charlie Parker was

of the saxophone. Today, it is virtually impossible to hear a jazz pianist who does not reveal a trace of Powell in his playing style.

This previously unreleased collection represents Powell in 1953, playing with the rhythm team of Roy Haynes and Charlie Mingus. "Inner Five" is a generous assortment of ten approximately three-minute pieces. (*Lullabye of Birdland* is heard in alternate takes.) It ranges from such standards as *I Want to Be Happy* and *Nice Work if You Can Get It* to bebop specials like Miles Davis' *Little Willie Leaps* and Dizzy Gillespie's *Salt Peanuts*.

Powell is at the top of his form, which, given the erratic quality of his performances in later years, is no small blessing. He plays in pristine bebop fashion, his improvisations unaffected by the somewhat grander pianistics that occasionally crept into his later work. What that means, of course, is that pieces like *Little Willie Leaps* and *Woody n' You* are played with fleet, highly imaginative left-hand figures. At this stage, Powell used his right hand mostly as a percussive device.

Also here are two brief interviews conducted in 1963 in a French hospital, where Powell was confined for tuberculosis. I'm not sure *why* they're included. His articulateness was musical, not verbal. And in any case, his epigrammatic remarks from 1963 have nothing to do with music recorded a decade earlier.

The Monk disc was assembled, appropriately, by Orrin Keepnews, the producer associated with Monk's finest recordings. Keepnews is accurate in noting that this collection is not the "best" of Monk nor does it "come close to exhausting my own list of his most meaningful recorded performances." It is, however, an extremely representative selection from what was one of the most creative periods in Monk's life. For the uninitiated—or the misinformed—it should serve nicely as an introduction to one of the most eccentric geniuses in jazz history.

Among the highlights are Monk's solo version of his now-standard *'Round Midnight*; a wonderful collaboration with Sonny Rollins on *I Want to Be Happy* (especially interesting since, in his later years, Monk rarely played anything except originals); Monk and Gerry Mulligan on *I Mean You*; Monk and Coltrane on the marvelous *Ruby, My Dear*; and Monk and Johnny Griffin on *Nutty*.

Perhaps most fascinating are the two versions of *Little Rootie Tootie*. The first was recorded by a Monk trio in 1952. Nearly seven years later, his solo from that first date was orchestrated for a ten-piece orchestra by Hall Overton. Incredibly, Overton managed to retain all the sheer, ingenuous joy of Monk's playing. And the band, which featured such stalwarts as Donald Byrd, Phil Woods, Pepper Adams, and Charlie Rouse, managed to stay within

the Monk idiom (which is much more difficult than it seems).

The last date here is *I'm Getting Sentimental Over You*, recorded in 1960. It's a curious choice for Monk and not one of his better outings. Shortly thereafter he signed with Columbia and embarked on a recording career that consisted mostly of repetitions of his past glories. The best and the brightest Monk took place on Prestige and Riverside, from whose catalogs this collection is drawn.

DON HECKMAN

### **Sippie Wallace: Sippie** Ron Harwood, producer Atlantic SD 19350

When Bonnie Raitt was playing coffeehouses and folk venues at the start of her career, Sippie Wallace's bawdy, teasing songs of loves and lovers were at the heart of her repertoire. Three of the tunes on "Sippie"—*Women Be Wise, You Got to Know How*, and *Mighty Tight Woman*—have been recorded by Raitt, who encouraged the blues singer to come out of retirement back in the Seventies, nursed her to good health when she was sick, and directed a documentary film on the life and times of the eighty-three-year-old, Houston-born singer/songwriter.

One listen through this funky, frolicsome LP is enough to show why Raitt (who guests on vocals and slide guitar) and a host of other American aficionados are ga-ga for this grande dame of the blues. On her first major label recording in decades, Wallace sounds forever young. She sings with sass and smarts, her scratchy voice laden with wry nuances, booming with power, and marked by a quirky, personable sense of phrasing.

"Sippie" also boasts the ample, impassioned talents of Jim Dapogny's Chicago Jazz Band, whose rousing ragtime arrangements (by pianist Dapogny) frame Wallace's jazzed-up blues in an authentic Roaring Twenties spirit, replete with warbling trombones, cool cornets, snakey saxes, honky-tonk piano runs, earth-pounding bass and tuba lines, and plucky banjo. The musicianship is consistently lively and inventive, in particular Peter Ferran's loopy, lilting clarinet on Irving Berlin's *Say It Isn't So*.

Wallace offers a few other interpretations here—*Everybody Loves My Baby* and a "separation blues" titled *Mama's Gone, Goodbye*—but the bulk of material has been wrought by her own wicked, winsome hand. She can be upfront and provocative (*Won't You Come Over to My House*) or downcast and insecure (*Suitcase Blues, A Man That Don't Want Me*). In either case her words and melodies ring true with an emotional verve seldom heard nowadays. As Raitt has been saying all these years, Sippie Wallace is indeed a national treasure.

STEVEN X. REA

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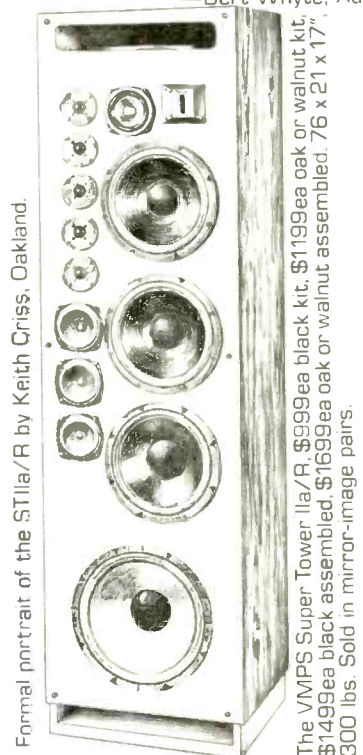
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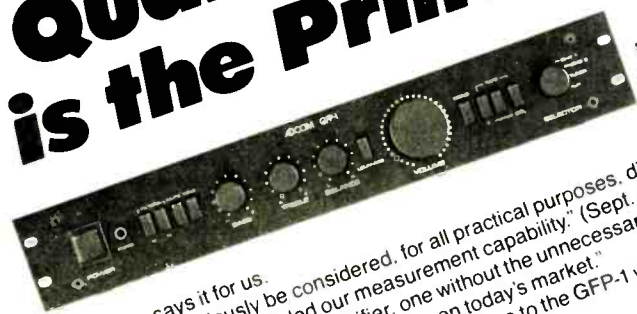
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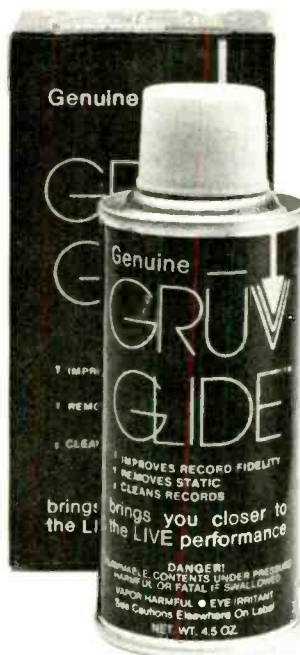
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(Continued from page 14)

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One final possibility: If you've recently rearranged the components in your system and now have hum in the phono mode, the problem may be with the new setup. Most phono cartridges work on a magnetic principle and, to a greater or lesser extent, are prone to hum that's picked up from the magnetic fields that surround transformers, motors, or other electromagnetic devices found in a power amp or receiver. If your turntable is directly above or beneath one of these components, move it farther away or rotate it to a different orientation. If the hum level changes, you've found the culprit. Of course, cables from the tonearm to the preamp can also pick up hum if they're routed too close to power lines. **HF**

## SONY PCM-F1/SL-2000

(Continued from page 40)

At home or in a studio, the two Sony units remain coupled and are as easy to use as any conventional tape machine. With Y connectors, the PCM-F1 can feed a video-formatted digital signal to several VCRs (to make multiple copies) or to your TV set (so you can watch the rows of digital pulses going by). And dubbing is as easy as it is with two ordinary audio cassette decks, unless the original cassette is copy-guarded, as most prerecorded digital software will be.

The advent of digital recording has stirred controversy in some circles, but not at WFMT. Our production staff repeatedly compared analog tapes (recorded at 15 ips on either a Studer A-80 or B-67 two-track studio recorder using Dolby A noise reduction and Ampex 456 Grand Master tape) to digital tapes of the same event made on the PCM-F1/SL-2000 system. With synchronized playback and carefully matched levels, the digital received thumbs up every time. As James Unrath, WFMT production director and producer of the Milwaukee Symphony recordings, mused over a comparison of MSO tapes: "The analog tape sounds like a terrifically good recording, but obviously a recording. The digital tape doesn't sound like a recording."

This is not to say that digital recording is invariably flawless. On very rare occasions, error concealment is audible, and we are a little uncertain about the system's reproduction of ambience. A PCM-F1 recording may sound slightly drier than an analog version (an effect that can help clean up recordings made in a muddy-sounding concert hall). Whether the PCM-F1 sub-

tracts a little ambience or whether analog recorders add a little extra is not yet clear.

Although obviously not what one would call a shortcoming, it is also true that flaws in the recording environment become painfully evident on these Sony digital tapes. We recorded a folk music concert at Holsteins, a local folk club, and broadcast it the next day. Both our chief engineer and our acoustician phoned in to marvel at the sound quality, but also to offer condolences for the hum on the recording. When we checked, the hum turned out to be the sound of the club's ventilating system, which was normally masked by tape noise in the analog recordings we made there. The other side of the coin is that recordings made in truly quiet environments become all the more impressive when the recording system adds no noise of its own. All digital recording formats have rock-solid speed stability, and the PCM-F1 seems to do as well as digital machines costing ten times as much when it comes to wow and flutter, which are below the measurement limits of virtually all test equipment. In fact, I think it is more this absence of wow and flutter than the wide dynamic range and lack of noise that makes PCM-F1 recordings sound unlike their conventional counterparts. Since the advent of recorded music, our ears have become accustomed to pitch variations caused by flutter. I suspect that the sudden total absence of flutter is the reason digital recordings sound different to us.

As with all other present-day digital cassette tapes, those made on this system cannot be edited physically, a disadvantage compared to the ease of editing analog open-reel tapes. Editing must be done by dubbing from one video cassette deck to another, which in turn requires a low dropout rate. This form of editing, though sufficient for most home recordists, does limit precision.

All things considered, the \$3,000 PCM-F1/SL-2000 digital recording system is a bargain compared with an equivalent analog setup. High-end cassette decks sell for as much as \$4,000, and a good semipro open-reel machine may list for as much as \$2,000. (One of WFMT's Nagra/Dolby or Studer/Dolby open-reel combinations costs almost \$10,000.) It's amazing that a self-contained digital system not much larger than an unabridged dictionary sounds better than a studio system the size of a washing machine—and does so at less than a third of the price.

The economies don't stop with the hardware: Tape expenses are also lower with the PCM-F1. A boxed reel of Ampex 456 audio tape (2,500 feet) costs about the same as a Sony L-500HG video cassette, except that you get twice the recording time (two hours) on the cassette. If you typically operate an open-reel recorder at 15 ips rather than 7½, the digital format becomes even more economical. And video cassettes are

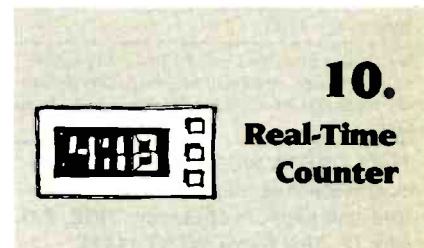
better protected and smaller and easier to carry (Beta cassettes especially) than 10½-inch reels.

Many well-known producers and engineers claim that analog tapes made at 30 ips with Dolby A on a two-track system sound as good as, if not better than, digital recordings. But this approach raises analog costs even further and is totally impractical for home or semipro use. Although Sony's home digital system deliberately lacks such professional niceties as XLR connectors and balanced inputs and outputs, it sounds better than any consumer or semipro analog recording system on the market. And in the end, that's what really matters. **HF**

## TEN HOT CASSETTE DECK FEATURES

(Continued from page 37)

can be found only in some very expensive decks) are truly foolproof. The kind we are speaking of here need a brief absence of signal as a cue, but they often can be erroneously triggered by both very low signal levels and by high noise levels between selections. They are most reliable, therefore, in music of relatively restricted dynamic range that has been well recorded. And the utility of the feature depends in large part on your recording/listening habits: How often do you want to play just individual parts of your tapes?



Would that every deck had one of these! If you've ever indexed your tapes and then bought a new recorder whose counter didn't read the same way—or if you've ever wondered just how many minutes you've already recorded on your cassette side (and therefore how many are left)—you know why I say that. Real-time displays don't all work identically, and some are more useful than others. But all are a huge improvement over the arbitrary numbers of old-fashioned "turns counters," which don't even run at the same speed at the two ends of the tape.

The poshest real-time devices keep track of playing times even in the fast-wind modes. I believe most will in the near future. In the meantime, any calibration in true time values is welcome.

In your hunt for a cassette deck, you'll undoubtedly encounter many features that I haven't mentioned. Still, if you use the ten basic ones listed here as a guide, you should be well on your way to finding the cassette deck that is ideally suited to your recording needs. **HF**

## COMPLETE DOWLAND

(Continued from page 52)

The other discs, though somewhat better, also have their problems. Nigel North plays well enough, yet the soft focus of the sound and his exceedingly gentle approach give an impression of cool restraint in the face of the competition; again, it is Bream who supplies warmth and excitement. Much the same can be said of Rooley's disc. The two that stand out are those by Jakob Lindberg and Christopher Wilson; both share the others' basically easygoing and reflective approach but produce a crisper sound, better-regulated voicing, and fewer rhythmic eccentricities. If the set is ever broken down into single discs, these will be the ones to get.

As the set stands, it is certainly convenient having all the works together; but unlike the songbooks, which turn up some rarely performed gems, the lute works contain few notable rarities. And given the fine recordings available of the truly major works, these will not likely be the readings one will choose first.

The rest of the releases in the series are more or less peripheral, though often enlightening. In the keyboard transcriptions (DSLO 552), one sees how Dowland's music was perceived by contemporaries whose improvisatory vision was not tied to the limitations of the lute. "A Miscellany" (DSLO 556) presents more alternative arrangements, including four more views of *Lachrimae* (to join another four among the keyboard works), and other arrangements for solo bandora, lyra viol, and recorder, and lute duets and trios. *A Muscicall Banquet* (DSLO 555), published by Dowland's son Robert in 1610, offers three of Dowland's finest songs, not included in any of the songbooks, along with works by Holborne, Martin, Hales, Batchelar, Guédron, Megli, and Caccini; this excellent set is made all the more interesting by the surmise of several scholars that the selection of works was Dowland's own, not his son's. There is a competing *Banquet* recording, well played by Bailes (who, like Rooley, proves a better accompanist than soloist), Nigel Rogers, and Jordi Savall (Peters, deleted); but the new version's vocal variety gives it the edge.

One can quibble over a few aspects of the series' presentation. The lute solos and duets contained in the songbooks and *Banquet* have been lifted onto discs deemed more appropriate; it would have been nice to have them in their original settings, and given the number of lutenists involved in the project, straight duplication could have been avoided. Also, though Rooley's notes are often enlightening, particularly about the layouts of publications and his own scoring decisions, they sometimes skimp on pertinent information. For example, lists of sources would have been welcome for both the lute music and the *Lamentations*

recording.

Rooley does, however, refer his reader to Diana Poulton's *John Dowland* (University of California Press, 1972) for such specifics, thereby acknowledging a debt to a musicologist whose research helped pave the way for a revival of Dowland's music. Her book, indeed a valuable companion to the record collection, not only contains a thorough biography and a work-by-work analysis, but reproduces a fascinating array of documents that brings Dowland and his age to life. **HF**

### DOWLAND: Henry Noell Lamentations (7); Psalms (7); Sacred Songs (3).

Consort of Musicke (Emma Kirkby, soprano; Glenda Simpson, mezzo-soprano; John York Skinner, countertenor; Martyn Hill, tenor; David Thomas, bass), Anthony Rooley, lute and dir. [Peter Wadland, prod.] OISEAU-LYRE DSLO 551, \$10.98. Tape: KDSLCL 551, \$10.98 (cassette).

Psalms: All people that on earth do dwell (2); Put mee not to rebuke, O Lord; Lord, to thee I make my mone; My soule praise the Lord; Behold and have regard; O God of power omnipotent. Songs: I shame at mine unworthiness; An heart thats broken. DOWLAND-WIGTHORPE: Sorrow come.

### DOWLAND: Songbooks (4).

Consort of Musicke, Anthony Rooley, lute and dir. [Peter Wadland, prod.] OISEAU-LYRE DSLO 508/9 (*First*), 528/9 (*Second*), 531/2 (*Third*), 585/6 (*Pilgrimes*), \$21.96 each (two discs, manual sequence).

*First Book*: Unquiet thoughts; Who ever thinks or hopes; My thoughts are wingde with hopes; If my complaints; Can she excuse my wrongs; Now, O now I needs must part; Deare if you change; Burst forth my teares; Go christall teares; Thinkst thou then; Come away, come sweet love; Rest awhile you cruell cares; Sleepe wayward thoughts; All ye whom love or fortune; Wilt thou unkind; Would my conceit; Come againe; His golden locks; Awake sweet love; Come heavy sleepe; Away with these selfe loving lads.

*Second Book*: I saw my lady weepe; Flow my teares; Sorrow sorrow stay; Dye not before thy day; Mourne, mourne, day is with darknesse fled; Times oldest sonne. Then sit thee down, When others sing Venite; Praise blindnesse eies; O sweet woods; If fluds of teares; Fine knacks for ladies; Now cease my wandring eyes; Come ye heavy states of night; White as lillies was hir face; Wofull heart; A shepherd in a shade; Faction that ever dwells; Shall I sue; Tosse not my soule; Cleare or cloudie; Humor say what makst thou heere.

*Third Book*: Farewell too faire; Time stands still; Behold a wonder here; Daphne was not so chaste; Me, me, and none but me; When Phoebus first did Daphne love; Say love if ever thou didst find; Flow not so fast yee fountaines; What if I never speede; Love stood amaz'd; Lend your eares to my sorrow; By a fountaine where I lay; O what hath overwrought; Farewell unkind; Weepe you no more, sad fountaines; Fie on this faining; I must complaine; It was a time when silly bees; The lowest trees have tops; What poore astronomers are they; Come when I cal.

*A Pilgrimes Solace*: Disdaine me still; Sweet stay a while; To aske for all thy love; Love those beames that breede; Shall I strive with

wordes to move; Were every thought an eye; Stay time a while thy flying; Tell me, true Love; Goe nightly cares; From silent night; Lasso vita mia; In this trembling, trembling shadow; If that a sinners sighes; Thou mightie God, When David's life, When the poore criple; Where sinne sore wounding; My heart and tongue were twinnes; Up merry mates; Welcome blacke night; Cease these false sports.

### DOWLAND: Lachrimae (7); Pavans, Almains, and Galliards (14).

Consort of Musicke, Anthony Rooley, lute and dir. [Peter Wadland, prod.] OISEAU-LYRE DSLO 547, \$10.98.

### DOWLAND: Lute Works (complete).

Anthony Bailes, Jakob Lindberg, Nigel North, Anthony Rooley, and Christopher Wilson, lute. [Peter Wadland, prod.] OISEAU-LYRE D 187D5, \$54.90 (five discs, manual sequence) (distributed by PSI/Polygram Classics, Inc., 137 W. 55th St., New York, N.Y. 10019).

## COLLECTOR'S GIOCONDA

(Continued from page 49)

dramatic color in much of the playing. The woodwind commentary that winds through much of Act I, for example, is amply playful but not a touch ironic; brass chords are full and round but have no menace; the delicious strand of viola *con sordino* under the beginning of the second verse of the tenor aria is beautifully played but not at all mysterious or expectant. The second is a willingness to stir things up within a tempo, to create moments. There is a rhythmic literalness to the reading that is, to me, quite against the nature of the piece, and when the singer shares the literal attitude (as Milnes, for one, tends to do), you can sure count on the forecast.

That, too, is *Gioconda* '80. This album is awfully well engineered: The sound has space and a much more natural balance than most recent recordings I've heard. The surfaces on my copy were perfect. Six manual-sequence sides of perfection! Can we stand it?

For the essential *Gioconda*, I heartily recommend runmaging about with historical excerpts and giving early Callas a spin. For an all-round performance in good sound that is at least superior to this one, you will do all right with the Tebaldi/London. **HF**

## PONCHIELLI: La Gioconda.

CAST:

Gioconda	Montserrat Caballé (s)
Laura	Agnes Baltsa (ms)
La Cieca	Alfreda Hodgson (a)
Enzo Grimaldo	Luciano Pavarotti (t)
Isepo	Regolo Romani (t)
A Pilot/First Voice	Neil Jenkins (t)
Barnaba	Sherrill Milnes (b)
Zuane	John del Carlo (b)
Barnabotto	Rodney Macann (b)
Second Voice	Geoffrey Shaw (b)
A Singer	Stephen Varcoe (b)
Alvise Badoero	Nicolai Ghiaurov (bs)

London Opera Chorus, Finchley Children's Music Group, National Philharmonic Orchestra, Bruno Bartoletti, cond. [Ray Minshull, prod.] LONDON LDR 73005, \$38.94 (digital recording; three discs, manual sequence).

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## BACKBEAT Reviews

(Continued from page 75)

complement the equally aloof, eloquent playing of reed man Andy Mackay and guitarist Phil Manzanera. Working in tandem with them are such ace rhythm augmenters as drummer Andy Newmark and bassists Neil Jason and Alan Spenner. In toto, Roxy Music has attained a level of such high style that "Avalon" sounds substantial, even if it isn't.

The disc is a smooth cruise from beginning to end. *More Than This* is awash in Ferry's ardent keyboard motifs and spurred on by a beat-happy Newmark and Spenner; *The Space Between*—an Anglo-ized Boz Scaggs disco strut—takes on an eerie sheen from Manzanera's twangy guitar; the title track sounds like it was concocted in some opiated haze; *Take a Chance with Me*, the album's bounciest cut, sports a resilient guitar/oboe/harpsichord-like combo that is so dreamy that the song could be a dance anthem for sleepwalkers. Throughout, Ferry's vocals are deep, quavery, and tinged with that inimitable edge of insouciant flair.

In Arthurian legend, Avalon is the mythical paradise where Knights of the Round Table journey after death. Roxy Music's "Avalon" does indeed sound like paradise—a drippy, mildly decadent twentieth-century vision of it, but paradise nonetheless. STEVEN X. REA

### Steel Pulse: True Democracy

Karl Pitterson, producer  
Elektra E 1-60113

Steel Pulse hails from the Handsworth section of Birmingham, England, where its first two albums were hard-edged, rock/reggae affairs that showcased a potentially powerful unit that hadn't yet found itself. The missing ingredient was consistently strong material, which "True Democracy," its first U.S. release, contains in abundance.

The sextet started out playing songs by such groups as the Isley Bros. and War, and the experience has had a noticeable influence. Lead singer David Hinds's expressive, smokey tenor floats alongside the band's bouncing grooves with precise conviction. The songs are beautifully constructed, with interesting chord progressions, fine instrumental counter-melodies, and captivating vocal harmonies. Production is clean throughout. In fact, for listeners who have always liked reggae but felt it all tended to sound the same, this album will be a revelation.

The band brings its stylistic fluency to a variety of topics. *Ravers*, with its surging beat and call-and-response vocals, is dedicated to the mobile sound systems used for West Indian neighborhood dance parties. On *Chant a Psalm*, the group expounds upon its Rastafarian beliefs above Steve Nesbitt's sprightly drumming, merging

music and religious doctrine with conviction and vigor. Predictably, "True Democracy" is quite preachy, from the anti-alcohol *Man No Sober* to the grim chronicle of a police party bust on *Blues Dance Raid*. But Steel Pulse's musical approach is such that these messages sound fresh and immediate. Certainly "True Democracy" is its finest album to date. CRISPIN CIOE

### Richard & Linda Thompson:

#### Shoot Out the Lights

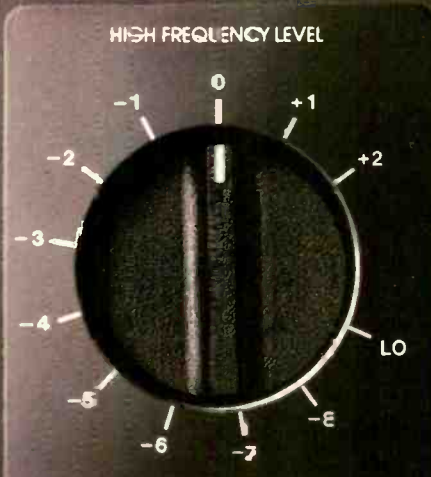
Joe Boyd, producer  
Hannibal HNBL 1303

"Shoot Out the Lights" is filled with the threat of violence, with death, with conubial tension, but the music is played and sung with an affirming passion that brings to mind a James Cain statement from *Serenade*: "True beauty has terror in it." This beauty/terror is in the way Linda Thompson sings about a young woman's questionable suicide on *Did She Jump or Was She Pushed* without stressing the melodrama; all the details are there—the glass, the blood, the fingerprints on the throat—but the song isn't ghoulish or flip. And it's in almost every one of Richard Thompson's guitar solos, which contain more logical force than entire songs by most composers.

The music on "Shoot Out the Lights" retains many of the traits that have been a part of Richard's work since his years with Fairport Convention. His melodic directness, the tonal purity of Linda's singing, and the stark contrast of their voices in harmony are anchored in folk tradition. For all that, this album has the jagged edges of rock & roll, often right alongside the folk elements. The title track, with its menacing lyrics and guitar slashings, is like some hybrid of Gordon Lightfoot and Warren Zevon; *The Backstreet Slide* couples a jaunty accordion with warnings about women who'll "stab you in the back with a kitchen knife"; and *Don't Renege on Our Love* is a plea for marital reconciliation set to a tempo that fairly gallops along.

All this may disconcert fans of such Thompsons albums as 1976's shimmering "Pour Down like Silver." And one might wish for more songs in which the couple truly sang together rather than supporting one another in what are essentially solo vehicles. (*The Wall of Death*, a true duet, is one of the LP's most vibrant cuts.) But there are songs here that have a rare piercing accuracy. *Walking on a Wire*, about the woman's side of a marriage's pain, is not only hauntingly sung by Linda, but concludes with a guitar solo so vivid with anger and, finally, resignation (with one last, isolated note), as to act as a second voice. "Shoot Out the Lights" is a pessimistic album, but even its darkest moments are lit by musical clarity and integrity.

MITCHELL COHEN



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