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FEBRUARY 1989

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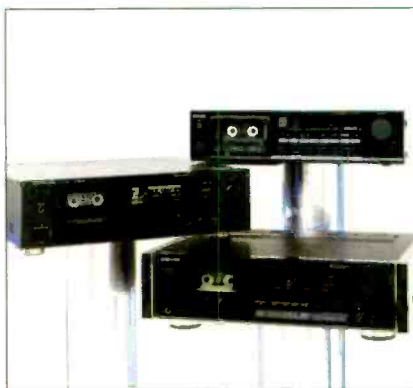
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On the cover: From the top, the Philips FC-566 bidirectional cassette deck; the Onkyo TA-2600 cassette deck; and the Pioneer CT-91 cassette deck.



Cover design: Joanne Goodfellow
Cover photo: Tony Pettinato

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FrontLines

The Future Of Tape

By Michael Riggs

Looking through some back issues, I find that we've been talking about the introduction of DAT (digital audio tape) in a very concrete way for more than two years. We even tested one deck, thinking it was on the verge of actual introduction, only to be disappointed and a little embarrassed. It's a nice bit of technology, DAT, and with Copy Code now safely out of the way, you'd think the stores would be full of machines.

Well, no such luck. We're still waiting. Professional DAT decks are available here—at a stiff price—and you can find consumer machines that have arrived on these shores via “alternative” distribution channels (the so-called gray market), but of genuine U.S. models with official U.S. warranties, there are none. Nakamichi has announced a beautiful and exceedingly sophisticated unit that is supposed to be available this spring. But the Model 1000 (named after the company's first illustrious and equally breathtaking cassette deck) has a list price of \$10,000, and having lived through a number of false starts, I am of a mind to believe it when I see it. A persistent rumor that Sony will soon introduce consumer DAT decks in this country is vigorously denied by a company spokesman. And that's all there is right now: one apparently solid announcement and one dubious rumor. Nobody else is even talking about DAT anymore.

I don't know whether we will ever have DAT in this country, at least in any serious way. It has been something of a flop in Japan—usually a very receptive market for new technology. It is more costly than analog cassette technology and always will be. And there is little indication that most people are significantly dissatisfied with the now extremely well entrenched analog cassette, despite its shortcomings. This is in marked contrast to the feelings consumers harbor for the LP, which they have abandoned in droves for DAT's play-only counterpart, the Compact Disc.

So where does that leave those of us who do want a better home recording medium? Not completely out in the cold, I'm happy to say. For one thing, DAT is not dead yet. If Nakamichi is at all successful with its deck, and if other manufacturers follow it in, and if the RIAA (Recording Industry Association of America) fails in any last-ditch attempt to ban the sale of uncrippled recorders, there is still hope for it. More immediately, DAT's very slow start seems to be inspiring a renewed emphasis on the development of analog decks—a process that, if product introductions are any guide, had been on the back burner in anticipation of the new medium. There is talk of a new Dolby noise-reduction system for cassettes (see this month's “Currents”). And we recently have seen a rash of new cassette tape introductions, most notably from TDK.

The dark horse in the race is recordable CD. Tandy has announced THOR CD, which is supposed to be recordable and erasable on specially designed (but affordable) machines now under development and playable on any CD player. This system is supposed to be ready in a year or two, but its success hinges partly on Tandy's ability to attract licensees for the technology from among the big audio electronics manufacturers of the Orient. So far, we haven't heard any news on that front. But even if THOR CD doesn't make it as an audio medium, we know that other companies are working on their own recordable CD formats. Time will tell. The big appeal, naturally, is that you could have it all in one machine. One can even imagine a unit capable of playing laser videodiscs and CD-Vs and of both recording and playing audio-only CDs.

DAT still would enjoy certain advantages over recordable CD—maximum recording time, for example—but they might not be compelling enough for both formats to survive. If DAT doesn't establish a foothold soon, before recordable CD becomes available, it probably is doomed. Squeezed from the top by recordable CD and from the bottom by the popular and economical analog cassette, it may find its only role as a tool for pro and semipro recordists. □

CAMBRIDGE AUDIO RESPONDS

I understand that it probably is not the norm to respond to test reports printed in **HIGH FIDELITY** (a shame that manufacturers do not enjoy the privilege of responding in the same issue as the review, as some other publications permit). I am not going to disagree with your findings in the review of the Cambridge CD-2 Compact Disc player [October 1988] or harp on "sour grapes." What is of considerable concern to me is that from the second paragraph onward, the review has several inaccuracies that are very fundamental and really rather inexcusable. I will go through them one at a time.

Contrary to what is said in the second paragraph, the CD-2 is not based on an existing chassis from Philips. It uses a Philips high-end transport and one or two ICs made by Philips, but the rest is a complete Cambridge design. If the top had been taken off the machine, this would have been immediately apparent to anyone who has dealt with CD players.

The fifth paragraph errs in stating that the CD-2 can be programmed from its remote handset. Had the reviewer picked it up, this would have been fairly obvious.

The final error is in the seventh paragraph. The play button on the front panel can, in fact, be used to close the transport door and start playback. A reading of the owner's manual was called for here.

There are several, though lesser, points of concern that I would like to share with you. First, there is the matter of communication between magazine and manufacturer to eliminate gross errors—such as those mentioned above—before going to print. This would prevent the manufacturer from looking unnecessarily foolish after a poor review and the magazine from looking unnecessarily foolish in the eyes of dealers and consumers who are familiar with the product.

Not only would a proof of the text be willingly corrected for factual errors by this office, but a little more communication would have led to explanations for various condemnations within the review (it obviously would be at the discretion of the magazine whether to print the manufacturer's comment or not). For instance, there are two explanations for the standby switch's operation. First, it turns on the display and logic functions. (Yes, the machine is on all the time. You could argue, if you wish, that having a "warmed up" machine makes no audible difference, but an explanation to your readers is warranted.) Second, if the standby switch is operated in the play mode, it does exactly what the reviewer indicates: lowers distortion by

turning off the display. It also has the added benefit of removing what many people consider a distraction when listening to music: flashing lights.

Another observation that might have been explained is the behavior of the display. Several machines were produced that exhibit the problems you describe. The reason is that in between preproduction and final production of this player, Philips decided to change the specification of the driving chip without telling anyone. Recent players do not have these problems, and older ones can be modified very simply to stop them.

All in all, the review was not, I feel, up to your usual high standards and was fair to neither consumer nor manufacturer.

Barry Fox
Marketing Manager
Cambridge Audio
Holliston, Mass.

We do not normally open up products being tested. However, we are sorry if we overstated Philips's contributions to the design of the CD-2. This undoubtedly reflects an interpretation (or misinterpretation) of an explanation by your office or your literature of how the machine was designed. It is perhaps worth noting, however, that a typical CD player these days consists of a transport, a handful of ICs on a circuit board, a power supply, a control and display panel, and a metal box to hold it all together. And the review does detail the proprietary circuits that distinguish the CD-2 from other players built around Philips components.

The statement that programming (as well as program review) can be accomplished from the CD-2's remote control appears to have arisen from an editing error. Again, our apologies. However, the play button on the front panel of our sample would not close the disc drawer. We tried it numerous times.

Certainly you are correct that supplying proofs of reviews to manufacturers ahead of publication would reduce the likelihood of mistakes or misunderstandings on our part. On the other hand, it would result in a lot of pressure from manufacturers to kill or modify unflattering reviews. It also would open opportunities for spurious claims of sample defects or just-in-hand improvements, resulting in an increased number of expensive and time-consuming retests. Although there is no perfect resolution to this issue, we feel that our approach of inviting response after publication is the best compromise. We do contact the manufacturer when something about the operation of a unit under test is unclear or if it appears that the sample actually is defec-

tive (that is, not operating according to design).

As for the function of the standby switch, our explanation appears to be substantially the same as yours. We merely noted that the way it works is a little odd—which it indeed is. Calling it a display on/off switch might be more to the point. Also, we did not say that turning off the display lowers distortion (we didn't test for that), only that some users apparently feel that the unit sounds better with the display off. If distortion really is higher with the display on, this is a design flaw.

Finally, you knew which player you had sent to us. If changes were made in later production, why didn't you notify us of them before now? We didn't call you about the peculiarities of the CD-2's operation because, by and large, the user's manual led us to expect them.—Ed.

BLAUPUNKT CLARIFIES

We were quite pleased to read your generally favorable review ["The Autophile," November 1988] of a Mercury Sable with a Blaupunkt tuner/CD player and Parametric Sound Amplifier (PSA). However, when we saw that Mr. Esse thought the tonal quality was not as good as in other PSA-equipped cars he had heard, we realized something was wrong.

As you surmised, the large rear headrests adjacent to the back speakers do have a big effect on the tone of the system. The recommended PSA module for the Mercury Sable is not equalized for cars equipped with rear headrests. It seems that we overlooked the fact that some Sables do come with rear headrests. In fact, several other cars on our PSA list have different modules for cars with and without this feature. We have now alerted our dealers not to install PSA in Mercury Sables or Ford Tauruses with rear headrests. On those cars without the headrests, the system works great.

Thank you for bringing this problem to our attention. Your magazine has always been notable for its outstanding service to its readers.

Glenn E. Schrader
Director of Sales
Blaupunkt Div.
Robert Bosch Corp.
North Suburban, Ill.

OPEN-REEL SQUEAL

In his October 1988 "Tape Tracks" column, Robert Long discusses the problem of tape squeal. In my dealings with reel-to-reel tape, I've encountered similar problems with Ampex, BASF, and Sony tape. The Ampex tapes were a total disaster,

and the BASF did not fare much better. The Sony tape lasted a bit longer but eventually started to squeal also. I would like to thank you for shedding light on this major problem that some of us have encountered. Keep up the good work.

Roger Albert
Moncton, N.B.
Canada

INFO ON IDTV

In his article "Clearing the Picture" [November 1988], Carleton Sarver says that Philips is introducing Improved-Definition Television (IDTV) receivers in the United States. Where can I write for information on these sets? Also, where can I write for information on Tera's IDTV sets?

Archie B. Wood
Pasadena, Calif.

For information on the Philips products, write Philips Consumer Electronics Co., P.O. Box 14810, Knoxville, Tenn. 37914. Although Tera does make high-performance television receivers (one is reviewed in this issue), they are not IDTV designs. Tera's address is 209 W. Central St., Natick, Mass. 01766.—Ed.

UNRECORDED WORKS, OVERDUE REISSUES

Your September 1988 issue contained a preview of forthcoming releases by many major and independent labels. Good—as far as it goes. Let's assume that it is 100-percent accurate; that is, when a particular company provides you with a list of planned issues, it will release every recording on the list and only the recordings on the list. You still miss something, and I do not mean the labels you leave out.

Buyers of classical-music recordings collect releases of works and not of artists: The few exceptions—Caruso, Furtwängler, Callas, for example—prove the rule. There will always be people waiting for composer X's symphonies to be recorded complete by conductor Y. But are people waiting for somebody—anybody—to record the standard 1871 version of Tchaikovsky's *Festival Overture 1812*? Certainly not. Are people waiting for the earlier 1869 version? Not if they really hunt, because they will discover that it was brought out not long ago on Chandos and Musical Heritage Society. Are they waiting for the 1893 Tchaikovsky/Taneyev version with the vocal duet? Yes, because it was recorded only once, on a long-deleted Capitol album with Franz Waxman conducting, and has never been reissued.

What I would like is for someone to prepare a list of works that everybody

talks about but that cannot be found on a major, or even not-so-major, record label. Then delete works recorded but recently withdrawn, like the Haydn symphony cycle conducted by Antal Dorati, and some ongoing cycles not yet completed, like the Bach cantata series on Teldec—on the assumption that enterprising collectors can, in the former case, search them out or, in the latter, wait until they are available. Then publish an article entitled "Works Talked About but Never Recorded," with the following caveat: "It is possible that one can get recordings of the following works from a mail-order house, an import service, or a pirate record producer, but to our knowledge they are not in the catalog of any major label."

Charles N. Hubbell
Kenmore, N.Y.

Classical Music Editor Ted Libbey replies: We have long shared your opinion that there are significant gaps in the catalog and have often called attention to deleted recordings that we feel are worthy candidates for reissue. We disagree, however, that collectors are interested solely in works, not artists. Evidence suggests that most classical-record buyers are interested in both. Surely this is one of the factors that has led labels to undertake so many integral cycles of works in the standard repertory—works readily available and, some might argue, already overrecorded.

Now that the Compact Disc is established as the preferred sound carrier for classical music, we don't take quite so dim

a view of things as we once did. Although enormous numbers of LPs have been deleted in recent years—causing quite a few works to disappear from the catalog—it seems clear that the process of reissuing items from the back catalog will continue. Moreover, the success of the CD has stimulated new recording activity, so that many of the old gaps are likely to be filled, sooner rather than later.

LET THE READER BE THE JUDGE

I am writing to support Classical Music Editor Ted Libbey's statement ["Letters," June 1988] regarding questions that were raised by several readers who were dissatisfied by Thomas Hathaway's review of two solo recordings by pianist Barry Douglas [February 1988]. I would think it difficult to define "a serious record collector." I have accumulated some 5,000 recordings and an encumbering number of tapes and cassettes; consequently, I would consider myself representative of many of your readers. Of necessity, I have had to rely on reviews, applying to them my own judgment of the artist in question and the reputation of the publication. I look for something more reliable than the polite approval, to varying degrees, offered by many record reviewers. Therefore, I hope you will continue to publish frank opinions from your collaborators. It's for the readers to assess what weight to put on the critics' remarks: Let us be the final judge. I feel that most readers do not want an editorial policy that reduces everything to the

(Continued on page 12)



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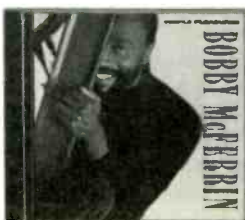
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Big speaker performance with an efficient use of space.

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The RTA 11t is the finest conventional (non-SDA) speaker that Polk Audio manufactures. Its extremely high power handling (250 watts) and high efficiency (90dB) provide remarkable dynamic range from both large and small amplifiers. The RTA 11t utilizes the same technologically advanced fluid-coupled subwoofer design found in Polk’s flagship model. Dual 8” sub-bass radiators are coupled to two 6½” mid-bass drivers, resulting in a fast, powerful, deep, and ultra-accurate bass response, without the boomy, undetailed sound of large woofer systems.

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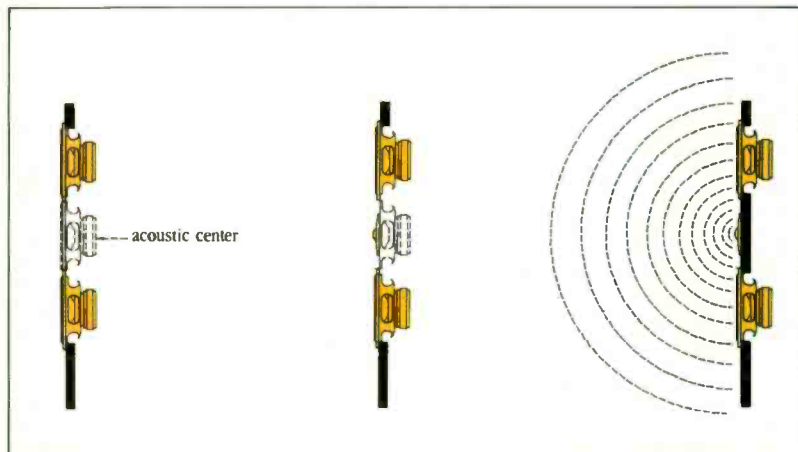
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(Continued from page 7)
lowest common denominator.

In addition to saying "Bravo!" to Mr. Libbey, as a subscriber of many years I'd like to comment upon a marked and welcome improvement in HIGH FIDELITY in the past year or so. I realize that you have to cater to a wide spectrum of those interested in high-quality music reproduction, but the return to an extensive and more se-

rious coverage of classical music and of equipment has brought the magazine back to its original eminence.

Ewen Rankin
Quebec, Canada

MYSTERY MUSIC FROM ZAIRE: CASE SOLVED?
In your September 1988 "Letters," Mr. Newell E. Cox, Jr., asks if other readers could help him identify some "street

music from Zaire" he heard on the radio. If one of the four collections noted in the editorial response does not have the material, perhaps the Compact Disc he is looking for is *Zaire: Kinshasa City Music* (Ocora C 559007; distributed by Harmonia Mundi, U.S.A.).

Matthew B. Tepper
Los Angeles, Calif.

SAVE THE PAGE: DONATIONS ACCEPTED

I had to write to thank Ken Richardson for the first true review of Jimmy Page's *Outrider* [December 1988]. The intelligent criticisms and praises are a welcome change: All other reviewers were so busy bashing Page for not making the New Led Zeppelin record, they forgot to notice that *Outrider* was the first genuine rock album we heard all year. Robert Plant may want to follow the Mick Jagger road of pandering to Top 40 tripe, but thank god Page gives us the true guitar rock that made us love Led Zeppelin in the first place.

Incidentally, I saw Page's performance here in Austin, and John Miles's vocals sounded much better than they do on the album. Fantastic show, too.

Michelle Krueger
Austin, Texas

TOM PETTY & MEAT LOAF: TWINS? NO, CD'S!

As an avid fan of Tom Petty and the Heartbreakers, I was disappointed to discover that MCA's first reissues of the band on Compact Disc did not include *You're Gonna Get It*. Are there plans to release this album on CD? Also, which Meat Loaf records are currently available on the digital format?

Michael L. Hayden
APO San Francisco, Calif.

In the time since you wrote to us, you're Gonna Get It has indeed appeared on CD (MCA MCAD 31171). As for Mr. Loaf (as The New York Times likes to call him), CDs are available of 1977's Bat Out of Hell (Epic EK 34974) and 1986's Blind Before I Stop (Atlantic 81698-2).—Ed.

VANGELIS, ANYONE?

As your readers may be aware, it has been extremely difficult—if not impossible—to find the Vangelis recording of *Antarctica* on Compact Disc. Anyone wishing to obtain a copy may write to me at the address given below.

Joseph Kasim
P.O. Box 360
Bronx, N.Y. 10461

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

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CT Avon: Hi Fi Stereo House • Danbury: Carlston's • Fairfield: Audio Design • Greenwich: Al Franklin's • Hartford: Al Franklin's • New Haven: Audio Etc. • Newington: Hi Fi Stereo House • New London: Robert's • Norwalk: Audiotronics • Waterbury: Zimmo Music
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New Dolby System?

Ever since Dolby Laboratories introduced Dolby SR—an extremely capable and complex analog-tape noise reduction (NR) system for professional applications—rumors have been circulating through the audio press concerning the use of it, or some less complex SR derivative, in home cassette decks. From conversations with persons at Dolby Labs who are in positions to know about such things, it seems that the rumors have some basis in fact: Dolby is working hard at perfecting an advanced home NR system. Neither the state of the research nor a date of introduction has been released, but the basic design objectives for such a system have been long established. There are some unexpected twists to those goals.

One would think that cassette-deck manufacturers—befuddled by the anti-digital-tape posturing of the record industry—would have provided the initial impetus for a new NR system. Since product innovation is ultimately what keeps the audio industry profitable, if the hardware folks are stymied in attempts to sell DAT, then they might as well develop another generation of analog cassette decks using a new NR system. Nevertheless, while logical, this is not the scenario that has been followed.

The demand for a new NR system has instead come primarily from the record industry! Record companies are now enjoying record-setting sales and earnings because of the success (and profitable overpricing) of Compact Discs and, even more important, by the enormous worldwide consumption of music on cassette—which is by far the dominant medium for the distribution of recordings. The record industry would like nothing better than to increase the popularity of cassettes, if only because that would further hasten the demise of the LP and thereby reduce the number of media a company has to produce and distribute. But, thanks to the success of the CD, the record industry is now also feeling pressure from consumers for better cassette sound quality. Better-sounding prerecorded cassettes will also reduce pressures for home taping, through which the music lover presently can obtain superior-sounding tapes. Knowing these few facts, the basic properties of an advanced Dolby system can be surmised.

• Since a primary goal is to firmly cement the cassette's hold on consumers, a tape encoded via the new system will be compatible with nondecoded playback. This has been tried, to minimal commercial success, with CBS's "compatible" CX sys-

tem for LPs. But a more complex encoding system, possibly using a multiband approach similar to that in Dolby SR, stands a much better chance at sonic success. A multiband system would help prevent such telltale effects as noise modulation or "pumping" of the music signal.

• In order not to disenfranchise the millions of cassette decks, car stereo units, boom boxes, and portable tape players that already contain Dolby B decoders, the consumer will obtain some noise-reduction benefit from a newly encoded tape by playing it back through Dolby B. It is even possible that the "sliding band" that forms the core of the Dolby B technique will be an integral part of the new system

car, personal-portable, and background-music playback). My only reservations with these engineering objectives are possible incompatibilities with Dolby C recordings and, unless adapters are manufactured, that you will have to replace your cassette deck to get the new system. Then again, hardware companies—and audio magazines—do keep in business through product innovations. Let's hope that the new Dolby system will be as universally applicable as the record industry wants, as stimulating to the marketplace as cassette-deck manufacturers desire, and good-sounding enough to at least partially satisfy those of us still waiting for DAT.

David Ranada



Sony made its new SLV-70HF videocassette recorder "Camcorder Friendly."

(filters with sliding frequency bands are also used in Dolby SR).

• Full noise-reduction benefit will come to those willing to pay for the new encoder/decoder circuits in their cassette machines. When completely decoded, the amount of noise reduction from the new system will at least equal that obtained with present-day Dolby C. The added cost of the new system should be kept down by its being immediately available in full integrated-circuit form, unlike early Dolby B and C realizations.

This is a rather utopian list of design goals, but they are not mutually incompatible, and I see no reason why they cannot all be met simultaneously. The biggest "fudge factor" is, of course, just how "compatible" nondecoded playback will be. I wouldn't mind if nondecoded playback sounded just slightly better than nondecoded CX playback—which did not sound nearly as bad undecoded as some critics made it out to be. Besides, some degree of relatively benign compression is desirable in many applications (such as

"Camcorder Friendly" VCR

Making a big production out of it is what Sony's new SLV-70HF VHS videocassette recorder (\$1,100) is all about. Recognizing that home video has progressed from the point-and-shoot of Junior's first steps to full-blown home video productions, Sony designed the SLV-70HF to operate with a VHS camcorder to make a mini editing system. This "Camcorder Friendly" design features input terminals for a camcorder's audio and video signals on the front of the VCR.

Highlighting the SLV-70HF is "Edit Monitor." Using picture-in-picture (PIP) technology, you can watch footage from the camcorder and VCR simultaneously on a single TV set. Both pictures appear as inserts against a blue background. VCR recording status and all editing information can be seen on the screen. The digital PIP feature can also be used to watch a tape and a TV program at the same time.

The SLV-70HF has a flying erase head and special control terminals for "Synchro

Edit," which synchronizes record/playback and pause with compatible Sony camcorders, Beta and 8mm decks, and editing controllers. The unit also features VHS HQ picture circuitry, a stereo-TV tuner, Hi-Fi sound, and Sony's Dual Azimuth four-head design. There is also 2X fast play with sound for a quick review of recordings.

A remote control with LCD display window can be used to program the SLV-70HF's timer. The remote also has ten-key direct-access channel selection as well as the usual complement of VCR function controls, including picture search, slow motion, frame-by-frame advance, and freeze frame. Edit Monitor and other editing functions can also be controlled remotely. *Sony Corp., Sony Dr., Park Ridge, N.J. 07656.*

Heath Offers Hi-Fi Kits

It's cold outside, so heat up your soldering iron and stay warm indoors with Heath's new line of Heathkit build-it-yourself stereo components, designed for Heath by Harman Kardon. Available in kit form—



With Heathkit, you can build or buy hi-fi.

for the "intermediate hobbyist"—or fully assembled are: a 100-watt (20-dBW) power amp (\$449 kit, \$499 assembled); pre-amp (\$349 kit, \$399 assembled); and AM/FM tuner (\$229 kit, \$249 assembled). A cassette player (\$349), compact disc player (\$349), and JBL-built speakers (three-way floor-standing \$399, two-way bookshelf \$160) are sold assembled. The stereo tuner, Kit AJ-2520, features digital frequency synthesis, quartz-locked tuning, 16-station AM or FM memory, a three-segment LED signal-strength meter, and manual tuning. The power amp, Kit AA-2500, uses wide bandwidth and low negative feedback for transient accuracy and phase linearity and features four dual-polarity power supplies.

All kits and assembled components are available through Heath's catalog or through Heath/Zenith stores throughout the United States and Canada. Catalogs can be ordered by telephoning 1-800-44-HEATH. After-sale support is available from Heath/Zenith stores or direct from the factory. *Heath Co., Hilltop Rd., St. Joseph, Mich., 49085.*

The Eyes Have It

Now that your ears know the advantages of a digital sound source, Philips wants you to treat your eyes as well—and all from one player. The company's new CDV488 (\$1,300) plays 3- and 5-inch audio CDs, plus videodisc formats including 5-inch CD-V gold discs, 8-inch and 12-inch Laserdiscs, and the new 8-inch LD single. (The LD single is a thinner version of the standard 8-inch disc and can hold as much as 20 minutes of audio and video.) The CDV488 uses a Philips 16-bit, four-times oversampling digital filter and dual 16-bit high-linearity digital-to-analog (D/A) converters. Additionally, the unit

incorporates a Philips-developed high-resolution video circuitry with special chrominance and luminance (Y/C) processing and an "S"-type output for monitors with "S" inputs. The CDV488 also features Philips's FTS (favorite track selection) system, audio-track or video-chapter programming for 20 selections, and CX noise reduction for playback of Laserdiscs having only CX-encoded analog soundtracks.

Accompanying the player is a universal programmable remote with an LCD display and the ability to control ten different types of equipment. Remote player functions include jog dial for still-picture and slow-motion control. Fast motion and high-speed scan can also be performed with the shuttle dial; the angle and direction in which the dial is turned controls the speed and direction of the picture playback. Special effects include picture memory, mosaic picture effect, strobe, and freeze. *Philips Consumer Electronics Co., One Philips Dr., P.O. Box 14810, Knoxville, Tenn. 37914-1810.*



Pentax's PV-C880A has time-lapse capabilities

Hours Pass Like Minutes

Remember high school biology, when, through the wonder of time-lapse photography, you watched in mere seconds the daylong journey of a plant bending to follow the sun's light? (That biological phenomenon, we learned, is phototropism.) Now you can achieve these time-lapse special effects with Pentax's new PV-C880A 8mm camcorder (\$1,899). The unit's interval recording mode lets you record subtle movements over a period of up to 12 hours. Follow the action with one-second recordings every 30 seconds, every minute, or at two- or five-minute intervals. Additionally, the PV-C880A has a manual setting that records four frames at the push of a button—useful for creating animation. Weighing in at 2.8 pounds with the PV-BT 810 battery pack and P6-30

(Continued on page 80)

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Answers to Readers' Questions

By Larry Klein

Fading Performance

After I play cassettes on my portable cassette machine, the music fades in and out when I play them again, either on my portable or on other machines. This has only started to happen recently. Is the problem caused by a magnetized tape head? If not, what else might be the problem?

Sydney Greenspan
El Segundo, Calif.

Even a badly magnetized tape head (or guide) would erase only the very highest frequencies and, possibly, add a slight and constant overlay of hiss to your tapes, so that's probably not the source of your problem. My best guess is that your portable player is causing some intermittent mechanical damage to your cassette tapes. Once damaged, the tape can no longer make consistently good contact with a playback head, and the playback level of the damaged sections will therefore tend to vary irregularly.

This kind of edge damage is likely to be visible in the form of either creases, ripples, or other roughening of the tape surface. When you start to hear a damaged passage, immediately stop the tape and remove the cassette from the machine. Look at the tape visible through the central opening, in front of the pressure pad. Particularly check the bottom edge (referred to the side of the cassette you are playing), since this is where the head gaps make contact in the cassette format. If you find damage, and if your tapes play okay until passing through your portable, then *it* is the guilty party. One final note: Given the high cost of repairing anything these days, it may be cheaper in the long (and even short) run to replace your portable player than to have it repaired.

Woofers Flap

I am hoping that you can settle an argument for me. I've been told that when a woofer cone is seen moving violently, it is due to some flaw in the recording or playback system. But a friend says that woofers are supposed to do that. Who is right?

Terence Pominek
Barryton, Mich.

Woofers, like all other speaker drivers, create sound by moving air. And, all other factors being equal, the lower the frequency involved, the further the driver diaphragm must travel to create the same volume of sound. In fact, each time the bass response goes down an octave, a woofer cone travels four times the distance—assuming that it can—to reproduce it. You can see how cone movement might well be visible at the very lowest frequencies if high sound levels are to be generated. However, you certainly shouldn't see wild fluctuations on most program material,

and any movement you do see should produce and coincide with audible bass notes.

The amount of *spurious* woofer-cone movement primarily relates to its enclosure's internal acoustic damping, but other factors certainly have a contributory effect. A turntable with severe very low frequency (infrasonic) rumble, warped records, bouncy floors, low-frequency acoustic feedback, and even misbehaving tapes and FM stations have been known to cause excessive woofer-cone movement. Some recordings—particularly classical Compact Discs—have built-in infrasonics from the recording studio (such as traffic and subway noise, or even air-conditioner rumble).

To a great degree, what actually reaches a speaker system at infrasonic frequencies depends on the engineering of the accompanying preamp and power amp. If either unit has a built-in low-frequency rolloff below 10 Hz—or even slightly higher—then, obviously, the woofer won't have to contend with excessive excursions and the distortions probably engendered by them. For this reason, many amplifier designers feel that extending an amp's response down to DC (0 Hz), or close to it, buys nothing but trouble.

I once came across an article in a British technical journal suggesting that the extended low-frequency performance of CDs would be extremely troublesome for conventional vented (bass-reflex) enclosures. Unlike acoustic-suspension systems, whose sealed boxes "load" the rear of the woofer cone down to infrasonic frequencies, vented designs usually provide little or no cone control below the system's resonance frequency. However, given the sophisticated speaker-design computer programs that are now available, I suspect that a knowledgeable designer can adopt any woofer enclosure scheme he wants without running into infrasonic troubles.

Adequate Power

Even after reading several articles on the subject, I am still not sure what effect inadequate amplifier power has on the sound of an amp. I own speakers with a suggested minimum amplifier power of 45 watts per channel, and an integrated amplifier rated at 60 watts per channel—all set up in a medium-to-large, fairly "dead" room. Although my system sounds great to me, I suspect something may be missing. Some friends rate my power as "anemic" for my speakers. Yet, when I considered investing in a trade up to approximately 110 watts per channel, I was told that such an increase is almost inconsequential! I would step up the power if I were sure I'd be sonically justified in doing so.

K. J. Hartman
Washington, Kans.

When there isn't adequate power available for a specific pair of speakers playing specific kinds of music at a desired

loudness in a given acoustic environment, then, depending upon the precise combination of these variables, you might hear a loss of openness or clarity, a raspiness in the highs or a mushiness in the bass, or possibly only some loss of dynamic range. Your friends are correct in stating that an increase in power from 60 to 110 watts would provide a trivial improvement: Assuming similar amplifier design and rating techniques, your speakers will be able to play 2.63 dB louder before the amplifier runs out of gas. This is an audible but not very substantial change. Raising your available power to 200 watts per channel could be more audibly significant: a maximum of 5.22 dB louder, to be specific. With all the variables, and the fact that sonic problems can arise from reasons other than a lack of amplifier power, the best way to determine whether you really need more power is to compare the sound of your existing amplifier in your present circumstances to one of substantially higher dynamic headroom or continuous power.

If you can borrow a 200-watt amplifier, for example, check to see if it sounds better than your present unit when it's playing your music at your normal levels—don't turn things louder for the purposes of the test. My article "Blazing Tweeters" in the June 1988 issue goes into some detail on the sonic relationships between the power output of amplifiers and the power requirements of speakers.

Four-ohm Power

Since most amplifiers can provide greater output at 4 ohms than at 8 ohms, can I get increased power by connecting 8-ohm resistors across the terminals of my 8-ohm speakers and thereby provide 4-ohm loads to the amplifier?

Charles K. Saeger
Little Rock, Ark.

Yes, but half the new, higher power will do nothing but heat up the added 8-ohm resistors. The net result would be less total power delivered to your loudspeakers.

Receiver Repairs

I own a secondhand receiver that is probably 15 years old. It has worked fine since I bought it about two years ago, but it recently developed a bad hiss problem and distorts at low volumes. I took it to my local repair shop, where they told me that the circuit board needed to be resoldered. When I got it back, most of the problems still remained. Where do I go from here?

Mike Maynes
Moses Lake, Wash.

Where you should have gone in the first place. When you own an audio product that needs repair, always check with its manufacturer (assuming it is still in business and can be located) for suggestions. You may be referred to a local warranty station or advised to return your unit to the manufacturer's in-house repair service. If you are lucky enough to have bought the unit from a local dealer with good service facilities, he should be a viable alternative to the manufacturer since he may have access to the manufacturer's parts and service data on your specific unit. A "local repair shop" is a risky choice, because its repair people are not likely to have the expertise—or the instrumentation

or circuit diagrams—needed to handle audio repairs adequately.

But there's another aspect of your repair problem that should be discussed. Ask yourself whether your 15-year-old receiver is really worth further investment. Even a nominal repair bill is likely to run at least \$50 or so ("just to look at it"), and any service shop can guarantee performance only in the specific problem area in which the repair was made. Your receiver could well be harboring additional disasters waiting to happen. Today's receivers, aside from their multiplicity of controls and flashing lights, will outperform their older counterparts in almost every respect. For that reason, I suggest that you consider saving up for a new receiver, rather than investing in (probably) an ongoing series of expensive nonrepairs.

Amplifier/Speaker Output

I often see ratings of power amplifiers that read: "x watts into 8-ohm loads." Why is it that the power rating increases when 4-ohm loads are used? Also, the rear panel of the 80-watt-per-channel amplifier I'm about to buy has terminals (and front-panel switching) for two pairs of speakers. Can you tell me whether the 80 watts will be divided between the two speakers in each channel, or what?

Moses Jacobson
Alexandria, La.

Ohm's Law can be applied to answer both of the above questions. A transistor power amplifier is what is called a "constant-voltage" device—meaning that a given signal voltage applied to its input will result in a certain signal voltage across its output terminals, according to the gain of the amplifier. The output terminals usually have a "load" (such as a test resistor or loudspeaker) connected across them. Ideally, the amplifier's output voltage will be independent of the characteristics of the load.

The relevant version of Ohm's Law is: Output power in watts equals the output voltage squared, divided by the load impedance in ohms. For example: Take an amplifier with a gain of 20, which generates a 20-volt output from a 1-volt input. An 8-ohm load across 20 volts, according to the formula, dissipates (as heat or sound or both) a power of 50 watts. However, if we substitute a 4-ohm load, the amplifier would then be putting out 100 watts, assuming it had the ability to do so. (Power-supply and output-transistor limitations usually limit the 4-ohm output to something like 150 percent of the full rated 8-ohm output.)

As far as the division of power between speakers is concerned, if the two sets of connected speakers had identical impedance characteristics over their frequency ranges, then whatever current the amplifier is putting out would be divided equally between them. However, no two 8-ohm speakers of different make or model are likely to have impedance curves that match at all frequencies. If the two speakers in each channel are connected in parallel (the usual switching arrangement), then the voltage across the pair will be the same from moment to moment, although the current through each (because of their different impedances) will vary with frequency. And as a result, so will the wattage. □

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



Au revoir, Akai!

By Robert Long

Remember Akai? Yes, *that* Akai. By the time you read this column, it will be a name in history for U.S. tapeophiles. And what a history! I've often considered it a little weird, but it's a brand that has given us a lot to think about over the years.

Yet, as of the end of 1988, marketing of all Akai products ceased in this country—though it continues to serve both the domestic Japanese market and that in Europe, where recordists have always been, if anything, even more attracted to Akai products than they have here. Mitsubishi, Akai's parent company, says that it will continue to honor all Akai warranties and supply parts, so don't despair if you recently bought an Akai component. And if you encounter a good deal on leftover models, don't pass them up lightly. (Akai is a separate subsidiary within the Mitsubishi group and until only a few years ago was run as a totally independent company.)

The underlying problem seems to be the falling value of the dollar relative to the yen. Akai's basic product line has always been somewhere between budget and premium. It has had so-called rack systems but, not being a large company, didn't find it easy to achieve the economies of scale that create profitability in such wares. Manufacturers who concentrate on premium models can essentially charge whatever they choose; however, that approach doesn't work in the medium and medium-high ranges where Akai found its calling.

Caught in this squeeze, the company sold off some production facilities to make ends meet, I'm told. When the dollar didn't recover, the reduced factory capacity actually made matters worse: The most popular cassette decks and receivers became back-ordered. Mitsubishi took, I suppose, the logical step when it eliminated the market that was causing at least a part of the problem. Despite sales of more than \$40 million, the United States still fell several million dollars short of target for 1988 and was gobbling up product that could profitably be sold in Europe and Japan. So, *sayonara!*

I will miss Akai. I'll miss, above all, its experimentalism. Not all the new things it tried worked, but it kept me on my toes as a reporter trying to understand what it was up to. The most mysterious moment actually came on the eve of Akai's entry into the U.S. market under its own name. Then, many Japanese components were sold here under names dictated by the American companies that imported them. Following that pattern, Akai decks were known as Roberts tape recorders. Sony had led the way in bypassing the middleman (or middlecompany—in this case, Superscope) by establishing Sony Corporation of America. Matsushita had stopped supplying Concord and brought the Panasonic brand to these shores.

Somewhere in the midst of this revolution in high fidelity marketing, I received my first trans-Pacific phone call, from an executive at Akai's advertising agency.

After some twenty minutes of struggling with a bad connection, I hung up still wondering what the purpose of the call had been. I think it was intended to establish Akai's precedence over Rheem-Caliphone (the owner of the Roberts name at the time) in the coming introduction of the Akai brand name to the American market. But Japanese business ways were then so unfamiliar as to be quite inscrutable.

More scrutible was the company's subsequent habit of showing a massive lineup of new decks at the Consumer Electronics Show each June. One year there were more than 50 of them, if memory serves, and three different types of cassette-reversing mechanisms were involved. Nobody had made a bidirectional transport that really worked, though Philips had come up with a delightfully Rube-Goldbergian device that ejected the cassette into a chute to flip it over. But rotating heads or ones with multiple gaps to accommodate the reverse tape direction without flipping the tape itself had been tried in open-reel equipment, and this appeared to be the route to the ultimate in hands-off cassette tape-playing efficiency.

Akai, evidently determined to see the concept through, showed every design it could think of. Showgoers were polled, in effect, for their reactions. Only the entries that got the most favorable response went into production; I don't believe its earliest attempts were even claimed to be marketable. But ultimately it achieved acceptable ergonomics and recorded quality and was, I believe, the first to do so. Akai certainly left no stone (or head) unturned in the attempt.

Its forays into video recorders were, perhaps, even more remarkable. Akai made the only recorder I can remember that was designed for both audio-only or video use. Its reels of 1/4-inch tape were driven at much higher speeds for video, of course. (Today, VHS Hi-Fi sometimes is used for audio-only recordings, as well as video, but that wasn't an integral part of the design goal.)

Among its many unusual designs, the crossfield head (delivering bias independent of the separate recording head and from the "wrong" side of the tape) is one that stands out in memory. Only Akai and Tandberg ever used it in consumer equipment, although it achieved a remarkable improvement in recorded quality at slow transport speeds. The technology's shortcomings were cost and, frequently, added awkwardness in threading the open-reel tapes of the time. Eventually the crossfield head disappeared from open-reel decks and, unfortunately, the design didn't work with cassettes. But it was a major technical achievement while it lasted.

In case you didn't notice, the head for this column bid Akai an *au revoir*, rather than a goodbye. Brand names with this kind of history usually don't go away forever. One day, I suspect, we'll be welcoming Akai back again. □



Chipping In With 18-Bit DACs

By David Ranada

Regardless of wherever else in technology the United States may be faltering, thanks to Burr-Brown of Tucson, Arizona, this country has led the world in the production of 18-bit digital-to-analog converter (DAC) integrated circuit chips for audio applications. That lead has now been widened by the entry of the country's other leading high-end analog-IC manufacturer into the wild and woolly consumer-product marketplace: Analog Devices of Norwood, Massachusetts—arch-rival to Burr-Brown—has introduced its first 18-bit audio DAC, the AD1860. The company is now shipping “large volumes,” it says, of both the AD1860 and its new 16-bit audio DAC (the AD1856) “to a company who must remain nameless at this time [mid-November 1988].” It is instructive to examine the data sheets and promotional literature for the 18-bit chip, because they are published for digital-audio designers, not consumers, and illustrate what engineers actually look for in a DAC.

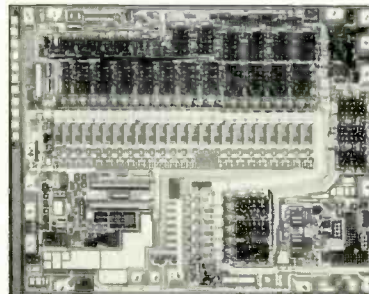
Listed under the heading “Features,” the very first line on the AD1860’s preliminary data sheet proudly states that the device has 0.001-percent total harmonic distortion (THD). This spec is excellent, since any audio component with so little THD can safely be said to have inaudible distortion (0.001 percent is below HIGH FIDELITY’s reporting threshold for THD). However, the THD spec given does not indicate full 18-bit behavior, which has yet to be achieved with an 18-bit audio DAC from any manufacturer.

Loosely speaking, a full-level THD specification for a DAC, as given above, can also be derived by calculation from a measurement of “differential nonlinearity error,” which itself is sometimes stated in “bits.” For example, a top-quality DAC should have a differential nonlinearity error of $\pm\frac{1}{2}$ the size of the smallest bit (the least significant bit, or LSB). This guarantees that the DAC’s output voltage will always increase or decrease as the input numbers respectively increase or decrease. In a 16-bit DAC, $\pm\frac{1}{2}$ LSB means an error of 1 in 65,536, or about 0.00152-percent THD. For an 18-bit, $\pm\frac{1}{2}$ -LSB converter, the error is 1 in 262,144, or 0.000381-percent THD. As you can see, the Analog Devices DAC, while it may have 18-bit resolution (it should be able to put out 262,144 different voltages), is not accurate to a full 18 bits (not all the voltage steps are where they should be) because its THD spec exceeds the theoretical ideal. My calculations show that the AD1860 is accurate to a little better than $16\frac{1}{2}$ bits (1 in 92,681.9, or 0.00101-percent THD).

Should one worry about this? Absolutely not. The Compact Disc system is, after all, a 16-bit medium and, provided everything else in a CD player is done right, DAC performance exceeding 16 bits is simply frosting on the cake. The AD1860’s performance is actually typical of all present-day 18-bit audio DACs. However, better-than-16-bit performance with these devices is usually

available only with the most expensive grade of chip—here, the AD1860N-K. The less expensive AD1860N-J and AD1860N grades both have THD higher than that expected from a “perfect” 16-bit DAC (0.002 and 0.004 percent, respectively, compared to the theoretical 0.00156 percent), though both figures still represent good audio performance. Interestingly, the best version of the 16-bit chip, the AD1856N-K, costs less than the lowest-grade 18-bit unit—\$20.85 vs. \$23.00 each, in quantities of 100 or more—yet the THD spec for the 16-bit chip is lower (0.0025 percent) than that for 18-bit unit (0.004 percent).

Why would any designer want to use the lowest-grade 18-bit DAC when Analog Devices’ own best 16-bit chip is measurably superior (at least in THD) and costs less. Although there are some theoretical advantages to picking the 18-bit DAC, it will be chosen probably because the marketing department of the manufacturer the de-



The AD1860 chip out of its protective package. In its center is a laser-trimmed resistor network.

signer works for wants to sell “18-bit” CD players, preferably ones having two-, four-, or eight-times oversampling digital filters—all this in order to bring the “benefits” of this technology to lower “price points.” A designer will further cut costs and save space by taking advantage of the AD1860’s incorporation on-chip of several components that have to be supplied separately with competing Burr-Brown devices. In all, the price structure for the Analog Devices chips concretely illustrates a point I made in my last “Bits and Pieces” (December 1988): Simply having 18-bit converters in a CD player guarantees neither superior measured performance nor better sound quality.

Your best guide when seeking a superior CD player, in addition to sound quality, remains the measured audio performance, specifically the results of various tests for linearity. A mere counting of bits (or oversampling rate, for that matter) will not necessarily help you find a better player. Besides, any obsessive bit counting will lead you astray when it comes to the latest technology being readied for introduction: 1-bit (!), highly oversampled DACs. I hope to discuss this important development in a future column. □

Report preparation supervised by Michael Riggs, David Ranada, Robert Long, and Edward J. Foster. Laboratory data (unless otherwise indicated) is supplied by Diversified Science Laboratories.

Test Reports

Onkyo has pulled out most of the stops in creating the TA-2600, its next-to-top deck and a sort of semiapotheosis of the company's concepts in the field. For the record, the remaining stops that the top-of-the-line TA-2800 pulls are automatic rather than manual bias-trim (Accubias) adjustment, the inclusion of a tape-sensitivity

time remaining on the cassette, a blank-seeking intro-sample feature (called AMCS, for Automatic Music Control System), an auto-space function to insert five-second or longer blanks (needed, for instance, for the AMCS), repeat functions that can be set to replay a user-designated segment anywhere in the tape, automatic tape matching on the basis of

Onkyo TA-2600 Cassette Deck



TONY PETTINATO

adjustment, dual-capstan drive, and a dedicated wireless remote. Except for the remote (a function that can be supplied for the TA-2600 via other Onkyo gear sharing its Remote Interactive hookup feature), all of the convenience functions are held over from the top model, which costs \$170 more.

Among the features retained are a "real time" counter (it actually works from the tape transport, although it reads in minutes and seconds) that can be switched between elapsed time and

the shell's keyways, and (of course) the obligatory timer modes.

The performance features include Dolby B and C noise reduction plus HX Pro recording-headroom extension (the indicator for which always remains lit), a switchable multiplex filter, and the Accubias control. This last is more carefully documented in the above-average owner's manual than it has been for most past models containing it: A diagram indicates where to set Accubias for a variety of specific formulations. The list even

Dimensions: 17¼ by 5 inches (front), 13¾ inches deep plus clearance for controls and connections.

Price: \$480.

Warranty: "Limited," one year parts and labor.

Manufacturer: Onkyo Corp., Japan.

U.S. Distributor: Onkyo U.S.A. Corp., 200 Williams Dr., Ramsey, N.J. 07446.

Until now, separates this good had to be inconvenient.

Since time immemorial, dedicated audio buffs have been forced to choose between all-out performance or all-out convenience.

Such a decision is no longer necessary.

Introducing seriously sophisticated separates that not only offer performance designed to bring tears to your eyes, but also uncompromising remote control capabilities, as well.

The heart of this remarkable new stack is the CX-1000U digital preamp.

You'll find audio and video switching with 10 audio and 4 video inputs. 5 audio and 2 video record outputs.

Even optical and coax digital audio inputs and outputs.

And Yamaha's Hi-Bit, 8 times oversampling digital filter moves unwanted digital noise so inaudibly far above your music, it can't possibly interfere.

While our Hi-Bit twin D/A converters ensure even the lowest level signals are reproduced with excellent linearity.

Anchoring the power portion of the trio is the new MX-1000U power amp.

Featuring specs nothing short of sensational, with a rather awesome 260 watts RMS per channel. (Both channels driven into 8 ohms, 20-20,000 Hz at no more than 0.003% THD.)

And dynamic power capable of delivering a phenomenal 1000 watts per channel into 1 ohm.

All made possible by Yamaha's exclusive Hyperbolic Conversion Amplification (HCA) circuitry that eliminates crossover and switching distortion and provides extremely high



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Drop by your Yamaha dealer for a demonstration today.

The experience may be a bit unnerving at first.

All that uncompromised power and performance. *Plus* the convenience of a full-function remote control.

But we have a feeling you'll get used to it.

YAMAHA®

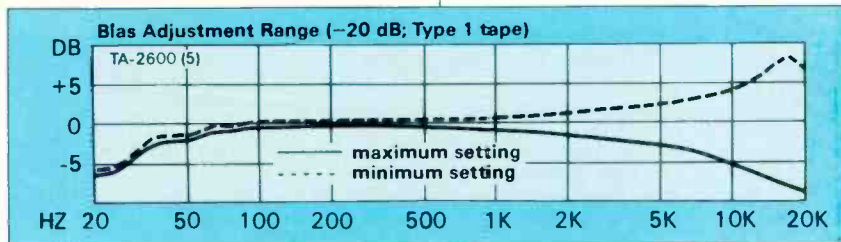
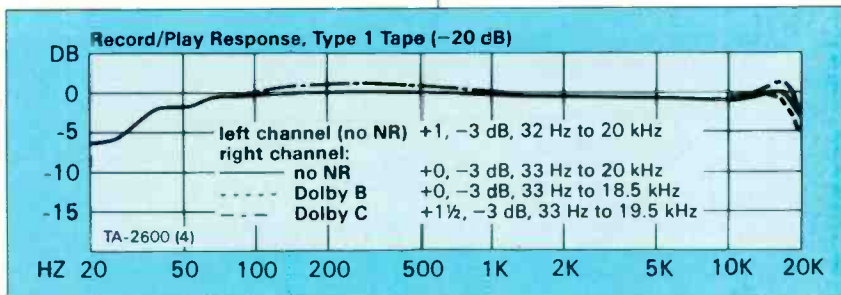
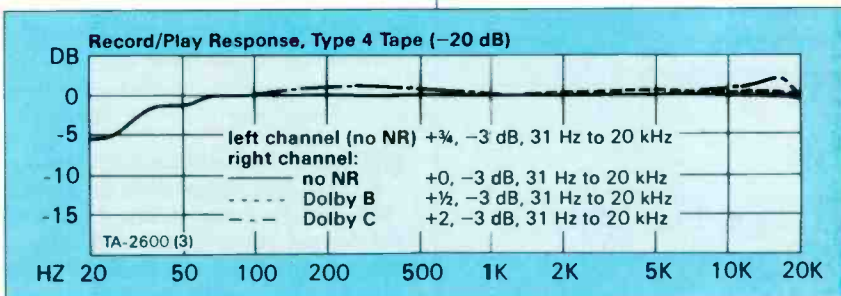
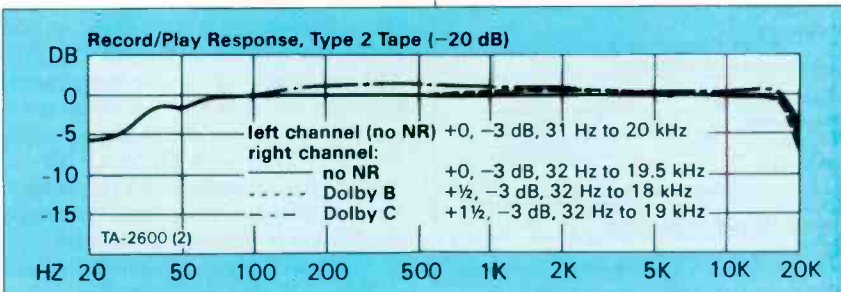
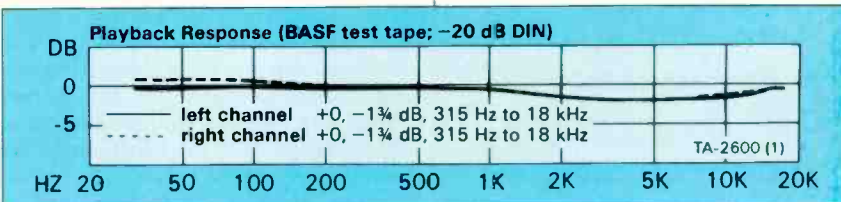
includes settings for brands like Memorex, Realistic, and Agfa—which we've seldom, if ever, encountered in a manual for a Japanese deck.

Due to unannounced improvements and discontinuations in tape formulations, such lists eventually become obsolete, and none can list every tape you might want to use on the deck. But since this is a three-head model, you can also set the bias by ear by listening—while you're recording a signal rich in highs, such as FM interstation hiss—for equal highs in a source/tape comparison. The process is slightly compromised by a brief (less than a second) hiatus in output when you switch between the source and tape (even though the tape gets correctly recorded) and, with some tapes, by the lack of a sensitivity adjustment to match levels. Nevertheless, in comparison with manual adjustment on a two-head design—where real-time source/tape switching is impossible—the system is a marvel.

The number of features included puts a burden on the display-panel design because so many of the options require indicators. Onkyo has kept the arrangement relatively neat, with counter-related displays located in the upper left, on/off mode indicators in the upper right, and level metering positioned along the bottom.

For accurate time-remaining calculation, the length of the cassette in use must be entered by the user, stepping through the options: C-90, C-120 (use of this length is discouraged by the manual), C-60, and C-46. For the new in-between lengths, Onkyo tells you to choose the nearest option and be aware that the readout won't be quite correct. As recording or playback progresses, you can fine-tune the calculation by stepping through the length options and back to the correct one; the deck automatically does its own recalculation when the display shows six minutes remaining.

The meter is calibrated in 10-dB steps from -30 dB to -10 dB, 2-dB steps to -3, 1-dB steps between there and +3, 2-dB steps again to +7, and a final 3-dB hop to +10 dB. Depending in part on tape type, the deck's 0-dB level lies between 0 and -1 dB on the DIN scale, meaning that for all practical purposes the metering conforms to the DIN standard. This is quite unusual. There is no specific indication for the range in which overload can be expected; the manual says to keep maxima within +3 dB for Type 4 tapes, +1 dB for the other two types. Diversified Science Laboratories' measurements show these values to be 2 dB below 3 percent distortion (4 dB be-



low for Type 1), which is an appropriate margin for error if you monitor levels fairly carefully.

For the record/play data the lab used three Maxell formulations suggested by Onkyo: XL-II as the Type 2 ferrichrome, MX as the Type 4 metal, and XL-I (the only one of the three for which Onkyo specifies an Accubias setting away from the center detent) as the Type 1 ferric. The results overall are very gratifying,

Multiplex Filter (defeatable)

0 dB at 15 kHz, -33 ½ dB at 19 kHz

S/N Ratio (re DIN 0 dB; R/P; A-weighted)

	Type 2 tape	Type 4 tape	Type 1 tape
no NR	57 dB	56 ¾ dB	53 dB
Dolby B	66 ¾ dB	66 dB	62 ¾ dB
Dolby C	72 ¾ dB	71 ¼ dB	69 dB

Indicator Reading for DIN 0 dB (315 Hz)

Type 2 tape	0 dB (with 1.4% THD)
Type 4 tape	+1 dB (with 3.7% THD)
Type 1 tape	+1 dB (with 0.33% THD)

Indicator Reading for 3% Distortion (315 Hz)	
Type 2 tape	+3 dB (for +2.7 dB DIN)
Type 4 tape	+5 dB (for +3.7 dB DIN)
Type 1 tape	+5 dB (for +5.0 dB DIN)
Distortion (THD at -10 dB DIN; 50 Hz to 5 kHz)	
Type 2 tape	≤ 0.62%
Type 4 tape	≤ 0.47%
Type 1 tape	≤ 0.49%
Erasure (at 100 Hz)	≥ 65 1/4 dB
Channel Separation (at 315 Hz)	50 dB
Indicator "Ballistics"	
response time	6.2 msec
decay time	≈ 800 msec
overshoot	0 dB
Speed Accuracy (105 to 127 VAC)	0.7% fast
Flutter (ANSI weighted peak; R/P)	± 0.10%
Sensitivity (re DIN 0 dB; 315 Hz)	65 mV
Input Overload (at 1 kHz)	7.2 volts
Input Impedance	56k ohms
Output Impedance	870 ohms
Output Level (from DIN 0 dB)	0.62 volt

with exceptionally flat response for both the Type 2 and Type 4 formulations. The Dolby C response has a tendency to emphasize the midbass a bit, but aberrations this small go almost unnoticed when compared to the hillier curves for many other models.

The headroom curves (measured as "response" at DIN 0 dB) are generally good, though not quite as good as you might expect for a deck with HX Pro. The headroom curves for metal tape, however, are exemplary. With no noise reduction, the metal trace stays virtually flat to 10 kHz; with Dolby C, it's extremely flat to beyond 18 kHz, outperforming in this respect most deck/tape combinations measured at -20 dB!

Playback response is not as flat and suffers at the high end from what the lab characterizes as a "poor" azimuth match to the BASF test tape. The resulting response droop starts quite low, al-

though other factors pull it up again somewhat at the top end.

Speed accuracy and flutter are within the ballpark for a good deck, and the remaining specifics are typical of component-grade decks. I would question the inclusion of two features, however: the always-on HX Pro indicator and the headphone jack with no level control. Both increase the cost of manufacture, without adding anything significant.

Otherwise, Onkyo has displayed canny sense in choosing features. There is all sorts of glitz on some competing models these days, and though the control panel may look a little busy, this definitely is not an overburdened design. Best of all is the TA-2600's emphasis on performance, which, in most respects, is better than usual for its price class. In the very popular medium-price range, Onkyo's new cassette deck is a model to take seriously.

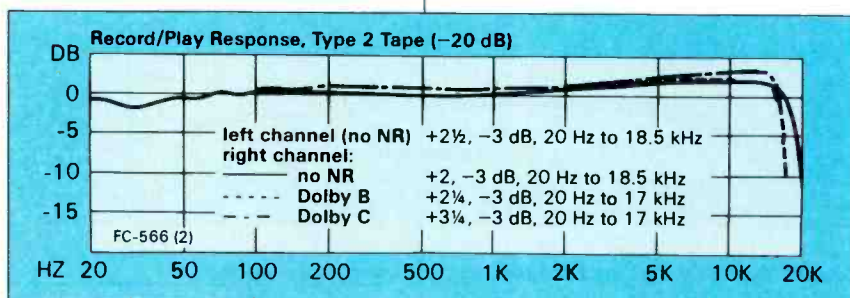
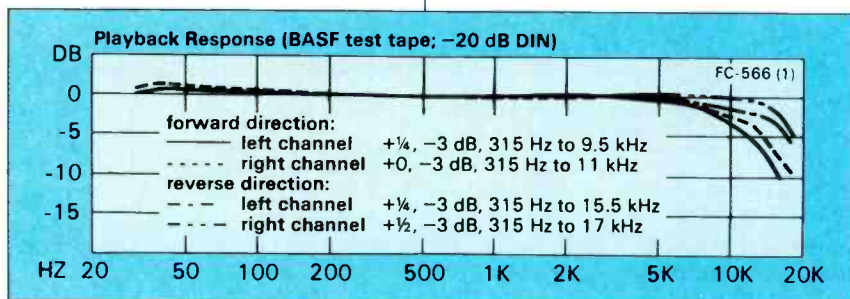
Robert Long

Philips FC-566 Bidirectional Cassette Deck

There's no doubt about it: A reversing deck makes life a lot simpler for the casual recordist. Among the designs aimed at the high fidelity component market, the Philips FC-566 is fairly typical of its genre in features and, as you will see, in performance.

control. Located below the latter are three phone jacks—a pair for microphones (unusual at this price level) and one for a headphone.

The bottom row of buttons contains the controls for QMS (Quick Music Search, which will skip in either direction over a number of interselection blanks equal to the number of times you have pressed the button—up to 15); Index Scan (ten-second samplings of each selection); blank skip (in playback, of unrecorded sections lasting longer than ten seconds); reverse mode (continuous playback, out-and-back recording or playback, and unidirectional operation); and Dolby B and C. Additional controls offer timer operation and memory re-



The front-panel layout puts the tape-counter controls, the counter itself, the level display, and various function indicators across the top. Beneath these are the transport controls, and across the bottom are the electronic-function controls. All of these fill an area between the cassette well and the recording-level

A QUICK GUIDE TO TAPE TYPES

Our tape classifications, Types 1 through 4, are based on the International Electrotechnical Commission measurement standards.

TYPE 1 (IEC Type I) tapes are ferrics requiring "normal" bias and 120-microsecond playback equalization.

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

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, when they are accommodated at all. Formulations of this type are no longer being made.

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

wind. If you press the rewind button while a recording is in progress, the deck automatically returns to the point at which recording began. In order to facilitate the QMS and intro-scan functions, a recording mute button inserts a four-second blank during recording and leaves the deck in recording/pause. You can extend the muting interval for as long as you want by keeping your finger on the button.

ended, and then reverses.

With practice, you can reverse the transport direction manually during recording by pressing STOP, the opposite direction of PLAY, STOP once again, and then REC in rapid succession—but it's tricky. I could do it when I didn't need to, but invariably flubbed the job in trying to change directions in the few seconds between movements of classical compositions.



TONY PETTINATO

Recording can be started in two ways. If you simply press the recording button itself, taping begins immediately in whichever transport direction was previously selected. If you want to adjust levels first or wait for the beginning of a selection, you can press PAUSE and, while you hold it in, then press REC to place the deck into the recording/pause mode.

The quick-reverse mechanism takes just under one second to change direction, during which recording and output are muted. If you use cassettes with transparent leader (though some with translucent leader work equally well), this takes place automatically at the beginning of the leader. Otherwise, the transport continues until the leader runs out, pauses for a few seconds while it mechanically senses that the side has

The metering is calibrated in 1-dB steps between -3 and +3 dB and in 2-dB steps beyond this range to -7 and +7 dB; the steps grow progressively coarser below -7 dB (the lowest calibration is -30 dB). The meters' 0-dB is about 2 dB below DIN standard, reminding us that this cassette deck didn't originate in Europe. The metering is equalized: Its sensitivity complements the overload curve of a typical tape so that as signals approach overload level, they read equally high regardless of what frequencies are involved. This is usually a good idea because it saves you from having to "allow a little extra" on sounds (like cymbals) that may overload the highs even when the midrange is not reading very high—as would be necessary on most other models.

The manual says to let passages of

Dimensions: 16½ by 4¼ inches (front), 10½ inches deep plus clearance for controls and connections.

Price: \$379.

Warranty: "Limited," two years parts and labor.

Manufacturer: Made in Japan for Philips Consumer Electronics Corp., P.O. Box 14810, Knoxville, Tenn. 37914-1810

DENON PRECISION MATCH COMPONENT INTEGRATED STEREO AMPLIFIER MODEL 1020



WHAT MAKES ONE AUDIO BRAND SOUND BETTER.

RECEIVERS actually combine a separate amplifier and tuner onto a single chassis. So one clue to a receiver's sound quality is the quality of the separates technology it incorporates.

At Denon, the new DRA-1025 and DRA-825 Receivers have the same Optical Class A circuitry that graces Denon separate amplifiers. Developed through statistical research into the playback requirements of CDs, this circuit makes the legendary sound of true Class A mode a practical reality. These receivers also benefit from the same Pure Current power supply that gives our separates superb transient response.

Every Denon receiver features thick, anodized aluminum front panels and discrete output transistors. Selected models offer Denon's Integral System (IS) remote control.

DRA-1025



This unwavering consistency is a prime example of Design Integrity, the Denon philosophy that encompasses our eight decades of mastery in every link of the music reproduction chain.

It's simply easier to make audio components sound more like music when you know what music sounds like.

DENON

DESIGN INTEGRITY



"average volume" reach 0 dB on the meters and expect that some peaks will reach +3 dB. With compressed rock, particularly that which is arriving via FM, this advice may not be unreasonable, though most CDs should require much more peak headroom, and live music can be vastly more demanding still. Furthermore, of the tapes used by Diversified Science Laboratories for measurement, only the Type 1 formulation had even this much headroom. It's perhaps beside the point to say that a careful, knowledgeable recordist will want to be considerably more cautious about recording levels than the manual suggests.

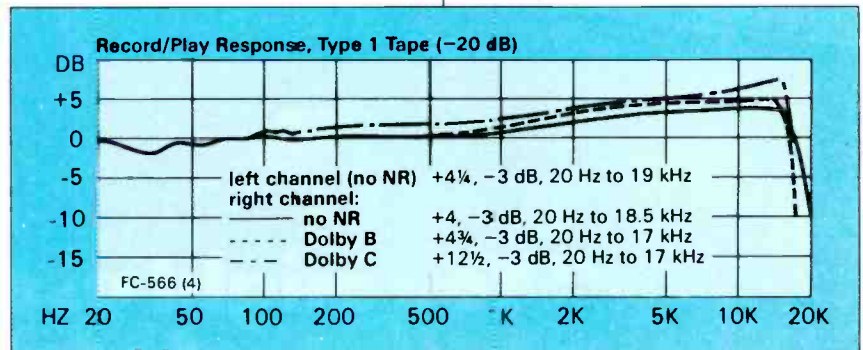
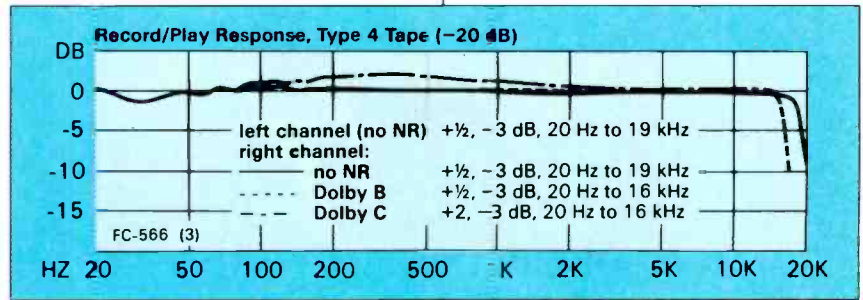
Although, in theory, it should be possible to build reversing decks that are substantially the equal of their unidirectional counterparts (at least one company has a solution to the problem that involves throwing great wads of expensive motorized technology at it), this has never been true in our experience of moderately priced decks. Azimuth alignment is one factor that regularly suffers, at least in one playback direction. Our sample of the FC-566 is a poor match to the azimuth of our BASF test tape in both directions, but is worse in the forward direction than in reverse.

Of course, this consideration does not affect tapes you both record and play on the FC-566. The lab record/playback curves were made with three TDK formulations: SA for the Type 2 ferricobalt, MA for the Type 4 metal, and AD for the Type 1 ferric. The Type 4 curves are especially admirable, with high-frequency headroom equal to what you might expect with many nonreversing HX Pro decks. The Type 2 setting appears to be a little underbiased for SA, judging from the rising high end. This is even more true of the Type 1 curves, where a less sensitive tape (as well as one requiring less bias) might have yielded flatter Dolby curves. The FC-566 does tend to sound bright with premium ferrics, but these curves are not at all extreme for a reversing model.

Another problem area is flutter. The worst-case figure here (0.26 percent) was measured in the reverse direction, although the forward direction (at 0.19 percent) wasn't radically better. These figures are about par for reversing decks, but are not as good as what you'd expect in a top nonreversing model.

Outside of this, the data require little comment. Whether the sensitivity and headroom of the mike inputs will be satisfactory depends on the mikes you plan to use. The headphone jack is compromised by the lack of a level control, but

unfortunately this arrangement is now the rule in all but the best home models. Again, the salient fact about the FC-566 is that it is thoroughly representative of



its type. If you want a bidirectional model, particularly one with mike inputs, for the relatively casual approach to recording that the format presumes, you'll find it hard to do better than this at the price—and not at all difficult to do worse.

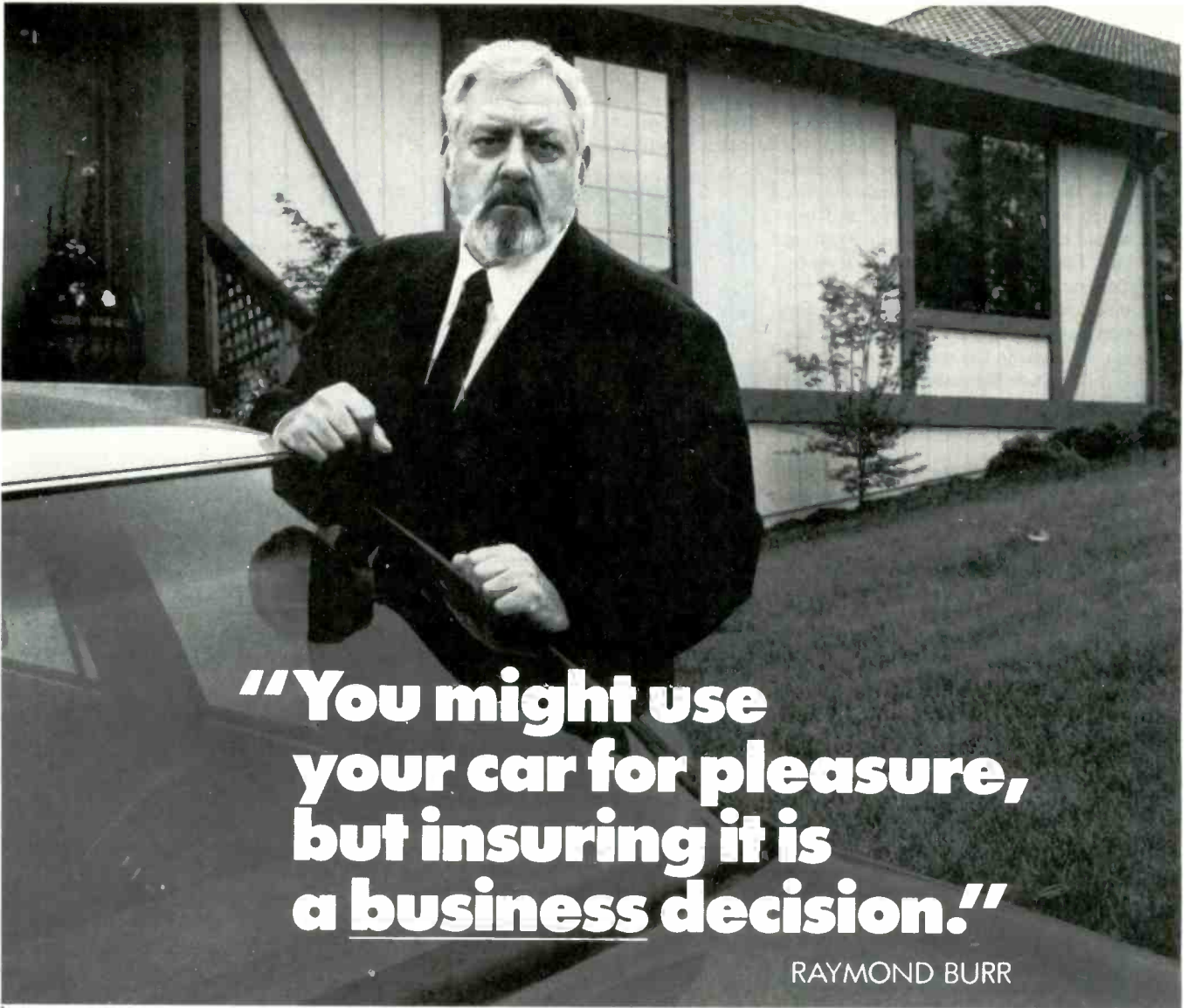
Robert Long ▶

ABOUT THE dBW

We currently are expressing power in terms of dBW—meaning power in dB with a reference (0 dBW) of 1 watt. The conversion table will enable you to use the advantages of dBW in comparing these products to others for which you have no dBW figures.

WATTS	dBW	WATTS	dBW
1.0	0	32	15
1.25	1	40	16
1.6	2	50	17
2.0	3	63	18
2.5	4	80	19
3.2	5	100	20
4.0	6	125	21
5.0	7	160	22
6.3	8	200	23
8.0	9	250	24
10.0	10	320	25
12.5	11	400	26
16.0	12	500	27
20.0	13	630	28
25.0	14	800	29

S/N Ratio (re DIN 0 dB; R/P; A-weighted)			
	Type 2 tape	Type 4 tape	Type 1 tape
no NR	57 dB	56 dB	53 dB
Dolby B	64 ¾ dB	64 dB	62 dB
Dolby C	70 ½ dB	70 dB	67 ¼ dB
Indicator Reading for DIN 0 dB (315 Hz)			
Type 2 tape	+3 dB (with 4.6% THD)		
Type 4 tape	+2 dB (with 3.2% THD)		
Type 1 tape	+2 dB (with 2.3% THD)		
Indicator Reading for 3% Distortion (315 Hz)			
Type 2 tape	+2 dB (for -1.4 dB DIN)		
Type 4 tape	+1 dB (for -0.3 dB DIN)		
Type 1 tape	+3 dB (for +0.6 dB DIN)		
Distortion (THD at -10 dB DIN; 50 Hz to 5 kHz)			
Type 2 tape	≤ 0.79%		
Type 4 tape	≤ 1.08%		
Type 1 tape	≤ 0.57%		
Erasure (at 100 Hz)	≥ 64 dB		
Channel Separation (at 315 Hz)	56 ½ dB		
Indicator "Ballistics"			
response time	2.0 msec		
decay time	≈ 150 msec		
overshoot	0 dB		
Speed Accuracy (105 to 127 VAC)	≤ 0.9% fast		
Flutter (ANSI weighted peak; R/P)	≤ ±0.26%		
Sensitivity (re DIN 0 dB; 315 Hz)			
line input	120 mV		
mike input	1.00 mV		
Input Overload (at 1 kHz)			
line input	> 10 volts		
mike input	27 mV		
Input Impedance			
line input	52k ohms		
mike input	6.0k ohms		
Output Impedance			
	2,100 ohms		
Output Level (from DIN 0 dB)			
	0.54 volt		



**"You might use
your car for pleasure,
but insuring it is
a business decision."**

RAYMOND BURR

Here's why... With the cost of auto insurance, particularly with two or more cars, you must make informed decisions. The right insurance company with the right coverages, with the proper limits at appropriate rates. Those are *business* decisions that require the advice and counsel of an Independent Insurance Agent. We represent several fine companies...not just one...so you choose the right policy at the right price, with the right service. An Independent Agent — always a good *business* decision.



INDEPENDENT INSURANCE AGENTS OF AMERICA
...and the insurance companies they represent

INCORPORATED

In 1984, following a period of reorganization and retrenchment that was, well, not Pioneer's finest hour, we tested its CT-A9 tape deck and found it to be an exceptional unit—"a Corvette among dune buggies," as we put it. The new CT-91 sits quite squarely in that tradition of excellence.

As an Elite Series model, the CT-91 is fitted with luxuriantly glossy, laminated end panels, and the high-luster black faceplate is picked out with gold detail. It also impresses with its sheer mass. For

the cassette well and, when the motorized well door is closed (by pushing a front-panel button, any transport-control button, or simply the door itself), the cassette housing is pressed against the pad by fixtures in the door. The dual-capstan drive is carefully "detuned": Resonances of important parts in each capstan's mechanism are different so that they will not act cumulatively to accentuate flutter. Both Pioneer's technical data and Diversified Science Laboratories' findings confirm that the trans-

Pioneer CT-91 Cassette Deck



TONY PETTINATO

the most part, this is attributable to the construction standards applied to all current Elite Series products: rigid, honeycomb, copper-coated metal chassis elements, including compartmentalization of circuit elements to minimize mutual interference.

This monumentality of design also applies to the casting that holds the heads and to the dual-capstan closed-loop drive assembly. The CT-91 incorporates a "cassette stabilizer" system that evidently is intended to damp vibration in the cassette, just as vibration is prevented or suppressed in the honeycomb chassis and its shock-damping feet. There is a rubbery pad in the back of

port design offers significant performance advantages over conventional drives, although the sonic implications of these and other innovations in the CT-91 aren't always easy to assess.

In basic description, the CT-91 is a three-head (erase/record/play) model equipped with Dolby B and C, HX Pro headroom extension, and a switchable multiplex filter. The recording and play heads are mounted in the same housing. There is no dedicated remote, but back-panel connections permit use of the CT-91 with appropriate components in a Pioneer SR remote-control system. The usual timer switch is present. And—a touch as welcome as it is rare—the front-

Dimensions: 18 by 5¼ inches (front), 14 inches deep plus clearance for controls and connections.

Price: \$950.

Warranty: "Limited," one year parts and labor.

Manufacturer: Pioneer Electronics Corp., Japan.

U.S. Distributor: Pioneer Electronics (USA), Inc., P.O. Box 1720, Long Beach, Calif. 90810.

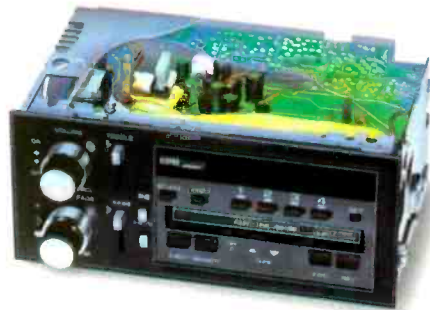


Introducing the Delco/Bose Gold Series Music System.

By now you know that the Delco/Bose music system is the most widely reviewed, and highly acclaimed, automotive music system available. For those who can truly appreciate the quality of Cadillac and the experience of superb music, we invite you to audition the new *Delco/Bose Gold Series Music System*.

The first Delco/Bose music systems earned their acclaim because they represented a bold new approach to automotive musical reproduction, made possible by the most intensive research effort ever made in this field. The new Gold Series Music System builds upon this technological foundation by incorporating the results of six years of additional research and development.

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Better sound through research.



Every critical system component is completely new: amplifiers, equalization circuitry, speakers, digital sound source—even the wire that harnesses them together. In developing them, we made full use of the latest advances in electronic and acoustical technology, materials and design. The result: an automotive music system with even more clarity, power and accuracy—one capable of

bringing you even closer to the realism of live music while sitting inside your car.

We submit that you simply must experience this new music system to believe it. The Delco/Bose Gold Series is an available option in Sevilles, Eldorados, Fleetwoods and DeVilles at your Cadillac dealer.

Delco Electronics
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It's who we are.



Delco **BOSE**
GOLD SERIES



panel headphone jack comes equipped with its own level control.

There are three modes on the tape counter: arbitrary numbers (like those of a mechanical "turns counter"), elapsed time (not operative during the fast wind modes), and time remaining. For the last function, you can step through four tape-length settings: C-90, C-80L, C-60, and C-46L (the letter "L" stands for large-hub). There is a music-peek function for skipping to interselection blanks (activated by pressing FAST FORWARD or REWIND while in play) and a mute-pause for creating appropriate four-second blanks (or longer ones, if you hold down the control button) during recording. The music-search function cannot be turned off; if you go directly from PLAY to a fast-wind mode in cueing up a tape with frequent soft passages, the system will misinterpret those passages as pauses and lurch into playback. To keep the tape fast-winding, it is necessary to press STOP before pressing a fast-wind button.

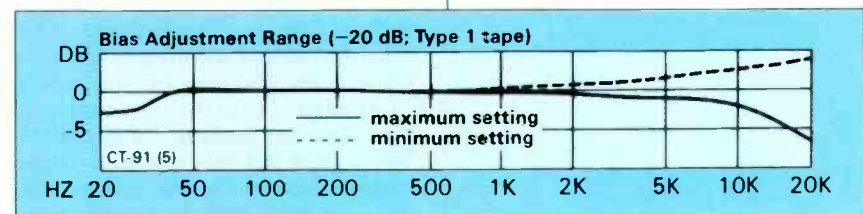
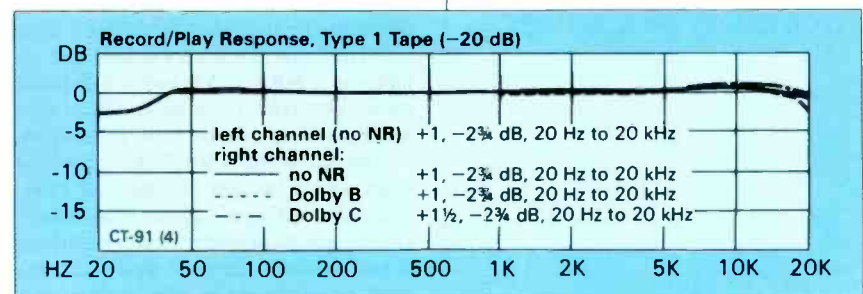
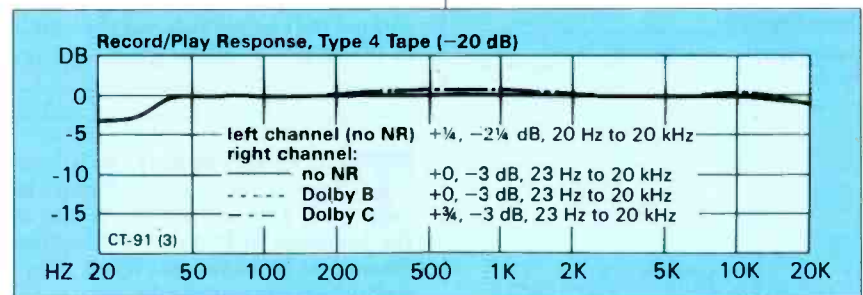
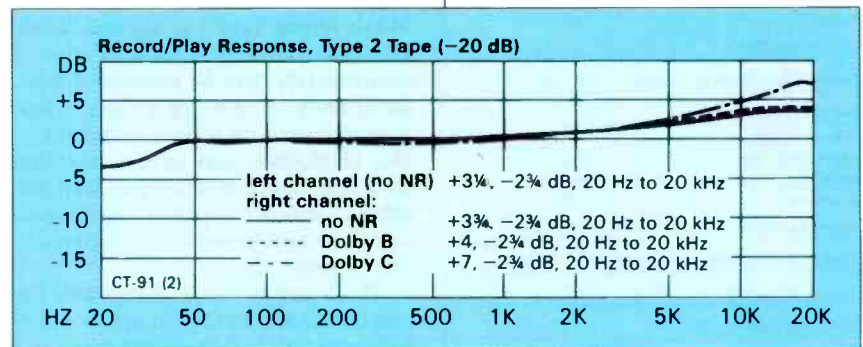
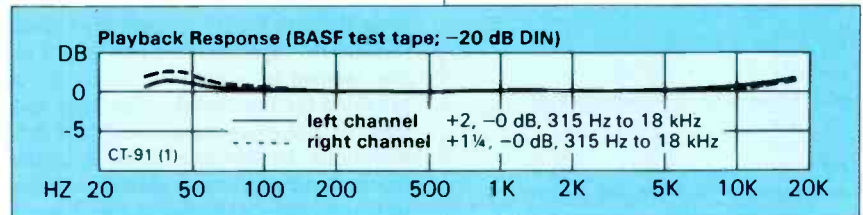
Switching to off-the-tape monitoring during recording is automatic, but the monitor mode can be changed with a tiny pushbutton to the right of the transport controls. It seems almost an afterthought, as does the similar meter-mode button above it. They are almost flush with the front panel, which quickly becomes finger-marked when you use these two buttons, undercutting the model's elegant appearance. Some owners may never use either button, but I expect that the sort of serious user to whom the CT-91's technical excellence should appeal will use both switches frequently.

The meters' peak-hold cursors remain a little longer than usual, which perhaps makes them a little easier to read, though the behavior is otherwise substantially like that of typical meters. The meter-mode switch converts the level-meter scale from a broad, slightly coarse "wide range" (spanning a calibrated -35 to +12 dB, with minimum steps of 2 dB from -6 to +12 dB) to a finer, "expanded range" scale (showing -4 to +16 dB). The latter is calibrated in 1-dB steps from -4 to +4 dB and in 2-dB steps from there to +16 dB. The wide-range scale thus gives you an overview of the signal's dynamics, while the expanded range acts like a magnifier that zeroes in on the critical levels around the tape-overload point.

For general use, I much prefer the wide-range mode because signals with any dynamic range, including much of the classical music I tried, simply drop off the bottom of the expanded scale much of the time—which is a bit discon-

certing. But the expanded scale is valuable in that it permits a more precise fine-tuning of levels for best possible recorded dynamic range, and this capability, if taken advantage of, can contribute to the quality of the tapes made on the deck.

Another contributor is the bias-tuning knob. There are no calibrations or built-in oscillator assists for it, however. ▶



Test Reports

Multiplex Filter (defeatable)

- 1/2 dB at 15 kHz; -3 1/2 dB at 19 kHz

S/N Ratio (re DIN 0 dB; R/P; A-weighted)

	Type 2 tape	Type 4 tape	Type 1 tape
no NR	56 3/4 dB	56 3/4 dB	53 3/4 dB
Dolby B	66 dB	65 1/4 dB	63 1/4 dB
Dolby C	71 1/2 dB	71 dB	69 dB

Indicator Reading for DIN 0 dB (315 Hz; see text)

Type 2 tape	+4 dB (with 1.17% THD)
Type 4 tape	+2 dB (with 0.76% THD)
Type 1 tape	+4 dB (with 0.51% THD)

Indicator Reading for 3% Distortion (315 Hz)*

Type 2 tape	+6 dB (for +3.4 dB DIN)
Type 4 tape	+8 dB (for +6.2 dB DIN)
Type 1 tape	+8 dB (for +4.2 dB DIN)

Distortion (THD at -10 dB DIN; 50 Hz to 5 kHz)

Type 2 tape	≤ 0.82%
Type 4 tape	≤ 0.32%
Type 1 tape	≤ 0.38%

Erasure (at 100 Hz)

	≥ 64 3/4 dB
--	-------------

Channel Separation (at 315 Hz)

	47 1/2 dB
--	-----------

Indicator "Ballistics"

response time	1.6 msec
decay time, main cursor	≈ 320 msec
decay time, peak hold	≈ 1.3 sec
overshoot	0 dB

Speed Accuracy (105 to 127 VAC)

	0.2% fast
--	-----------

Flutter (ANSI weighted peak; R/P)

	± 0.042%
--	----------

Sensitivity (re DIN 0 dB; 315 Hz)

	100 mV
--	--------

Input Overload (at 1 kHz)

	> 10 volts
--	------------

Input Impedance

	49k ohms
--	----------

Output Impedance

	1,350 ohms
--	------------

Output Level (line; from DIN 0 dB)

	0.50 volt
--	-----------

* See text.

Tera 629C Video Monitor/Receiver

You are instructed simply to record on your selected tapes and monitor source and tape alternately, adjusting the bias-level knob for most precise replication of the highs. The switching between source and tape is very fast and, although what sounds like a relay click tends to distract your attention, the sonic comparison is not hampered by a break in output, as it is in some other models.

The lab always leaves bias controls at their detents for its record/play tests (unless an objective routine—such as one assisted by a built-in oscillator—is provided for the model under test) and uses the factory-recommended tape formulations. In this case, samples of the recommendations came packed with the test unit: Sony UX-Pro as the Type 2 ("chrome-bias") formulation, TDK MA-X for the Type 4 metal, and Maxell UD-IS as the Type 1 ferric. Pioneer's ecumenicism is to be applauded here, particularly in choosing a Type 2 tape manufactured by a rival deck maker. Our blank-tape tests have shown that Sony is no slouch in this department, but other hardware companies seldom mention the brand, presumably for competitive reasons.

But it seems that UX-Pro isn't the best choice for the CT-91, unless you're willing to reset bias by ear. By doing so, I was able to get excellent reproduction, without the audible high-end rise visible in the Type 2 response graph. Brands

more representative of typical Type 2 behavior (TDK SA, for instance) produced excellent recordings with the bias control at the detent.

The results with the other two tapes involve no caveats at all: They are top-notch. The lab's 0-dB traces with the Type 4 tape are just as flat as the -20-dB trace shown, right out to 10 kHz. There, the trace without noise reduction starts to drop off, but that with Dolby C is virtually undisturbed even out to 20 kHz—that is, it is flatter than the response at -20 dB! Presumably HX Pro is to be congratulated for this phenomenon. The Type 1 traces are excellent in this respect, too; those with the Type 2 tape are afflicted by the deck/tape mismatch, but also appear to confirm the helpful contribution of HX Pro.

The remaining data all are typical where being average is desirable (as in impedances) and excellent where "typical" usually translates to "mediocre." Even when overloading, the CT-91's distortion consists essentially of the third harmonic alone, confirming that it is the tape and not the deck that is running out of steam—which isn't always the case. Any way you look at it, the CT-91 is a very fine deck and one that concentrates on the interests of the very careful recordist. Pioneer evidently has spared no technology in obtaining performance worthy of a taping perfectionist.

Robert Long

Tera, a new company, hails from Taiwan, the home of Proton. In fact, Tera was started by one of the founders of Proton—a situation flaunted in Tera's product flyers. There is no connection between the two companies now, but the lineage is obvious, right down to the inclusion in the new Tera 629C monitor of a simple video noise reduction (VNR) circuit and a defeatable color-subcarrier (3.58-MHz) filter that we first met up with on Proton monitors.

But the 629C is no Proton clone. It steps out on its own in a number of respects, including a "dynamic aperture" circuit said to provide "vastly improved detail" without the snow and other artifacts produced by conventional detail-enhancement circuits; a "double differential contour correction" system for "sharper outlines and crisper edge definition"; and a system for sharpening color edges. A further innovation is Tera's two-way wireless remote control. The handset not only transmits to and controls the monitor, the monitor also transmits stereo audio *back to the remote*

so that two people can listen privately over earphones plugged into it.

The 629C is the largest and, arguably, the most fully equipped direct-view monitor/receiver we've tested. Thanks to its use of a Hitachi wide-deflection picture tube, the 629C provides a 27-inch, square-corner screen in a package less than 20 inches deep. In addition to its cable-ready stereo-TV tuner, it has three sets of pin-jack composite-video/stereo-audio inputs—two on the back panel and one behind the flip-down front panel. One of the back-panel video inputs is also fitted with an S-VHS input connector; plugging the appropriate cable into it overrides the pin-jack input. For displaying computer outputs, there's an analog RGB input featuring automatic polarity detection.

For outputs, the 629C has fixed and variable video and stereo-audio pin jacks on the back and a set of fixed output jacks on the front below the input jacks. As to what "variable" means when applied to a composite-video signal, I'm not sure. I certainly couldn't discern any

Are you hearing only 4/5ths of Beethoven's Fifth?

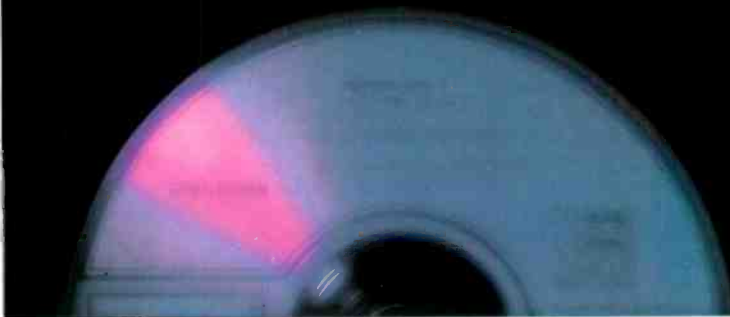


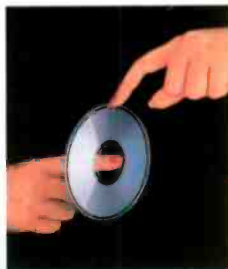
Photo represents sound without Monster Cable's CD SoundRing™



Photo represents sound with Monster Cable's CD SoundRing™

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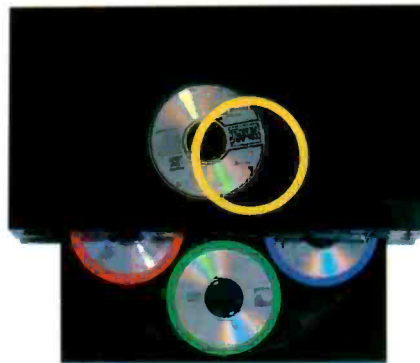
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difference between the rear-panel fixed and variable video outputs, and the manual was of no help in this regard. The front-panel output jacks are always fed from the built-in TV tuner, so it is possible to use the 629C to record a broadcast on a VCR connected to these jacks while viewing another source. To me, this arrangement is a mixed blessing because it means those convenient front-panel outputs cannot be used to temporarily hook up another VCR for dubbing tapes. Recording with the 629C is done on a VCR connected to the rear-panel outputs, which are not affected by the monitor's audio or video controls. An external

can be used as an additional permanently connected input from your CATV converter box."

The remaining back-panel connectors are a third F unit for 75-ohm coax from a VHF antenna and a pair of screw terminals for 300-ohm twinlead from a UHF antenna. Push-to-insert cable connectors are provided for the miniature satellite speakers that come with the monitor and latch to its sides. An internal 10 watt (10-dBW) per channel am-



power amp can be connected to the variable audio outputs and be controlled by the 629C's audio controls.

The poor grades that I give the manual stem less from its incredible number of typos (these I can work around) than from its failure to address clearly a number of important points. These include the purpose of the variable video outputs and the proper use of the TO CONVERTER F connector on the back panel. I assume the latter is to be used in conjunction with the AUX F connector to loop through a pay-TV decoder; that is, connect the TO CONVERTER output to the decoder input, connect the decoder output up to the Tera's AUX F connector, and then switch from the monitor's antenna input to its auxiliary input in order to watch a descrambled picture. You would be hard-pressed to tell this (if, indeed, I'm correct) from the explanation in the manual: "By selecting ANT or AUX input the selected input is available from TO CONVERTER connector for use with your VCR or with another VIDEO component. [The] TO CONVERTER connector

plifier is provided to drive these.

The most commonly used front-panel controls (power, channel selection, volume, input) lie flush with the door to the lower right of the screen. These, together with most other common operations, can be worked from the wireless remote as well. Certain rarely used or setup-only functions are accessible solely through switches located behind the front-panel door. These include the master power, VNR, and 3.58-MHz-trap switches and switches that choose between the RGB and normal inputs, manual and automatic fine-tuning (MFT/AFT), TV- and cable-frequency reception (TV/CATV), and standard and HRC cable broadcasts. Also behind the door are controls that enable you to log into the tuner's memory whatever channels are active in your area. The tuner itself is cable-ready and capable of receiving 139 channels. ▶



Dimensions: 28 inches by 25 inches (front), 19¼ inches deep.

Price: \$1,650.

Warranty: "Limited," one year parts and labor (picture tube, two years).

Manufacturer: Made in Taiwan for Tera, Inc., 209 W. Central St., Natick, Mass. 01766.

Test Reports

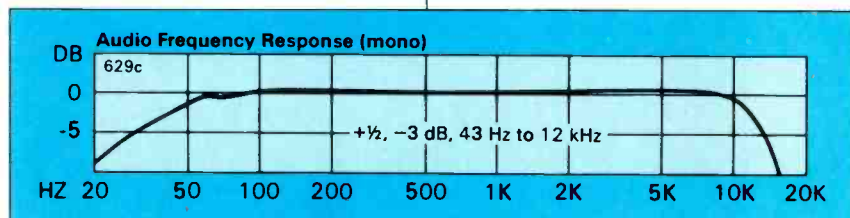
Video Monitor Section

All measurements were made through the composite (direct) video inputs.

Horizontal Resolution	> 335 lines
Interlace	perfect
Overscan	
horizontal	≈ 6%
vertical	≈ 4%
Centering	
horizontal	left ≈ 0.6%
vertical	up ≈ 0.2%
Blooming	none

TV Tuner Section

All measurements were taken at the direct audio and video outputs.



Audio S/N Ratio (mono; A-weighted)

best case (no color or luminance)	54 1/2 dB
worst case (multiburst signal)	25 1/2 dB

Residual Horizontal-Scan Component (15.7 kHz)	-39 dB
---	--------

Maximum Audio Output (100% modulation)	0.36 volt
--	-----------

Audio Output Impedance	725 ohms
------------------------	----------

Video Frequency Response

	AFT	MFT
at 500 kHz	-1/2 dB	-1/2 dB
at 1.5 MHz	-4 1/4 dB	-1 1/2 dB
at 2.0 MHz	-5 3/4 dB	-3 dB
at 3.0 MHz	-9 1/4 dB	-6 dB
at 3.58 MHz	-11 dB	-7 3/4 dB
at 4.2 MHz	-23 1/4 dB	-13 3/4 dB

Luminance Level	40% high
-----------------	----------

Gray-Scale Nonlinearity (worst case)	≈ 5%
--------------------------------------	------

Chroma Differential Gain	≈ 20%
--------------------------	-------

Chroma Differential Phase	≈ ± 3°
---------------------------	--------

Up/down buttons near the MFT/AFT switch control the manual fine-tuning circuit. The last control accessible only behind the panel is the vertical hold.

The buttons for activating on-screen display of the received channel, for MTS (which cycles the audio program from main-channel stereo to SAP reception to simultaneous reception of both), and for CNR (which activates a color noise-reduction circuit), are replicated on the remote, as are the picture- and audio-adjustment controls (black level, detail, color, tint, bass, treble, and balance). A reset function is available for returning the unit to its factory settings.

With the exception of the setup functions, the handset controls all of the viewing/listening functions that are available on the front panel and even includes a few functions not found on the monitor itself. The latter include REVERT (which returns to the previous channel viewed), SLEEP (a "sleep timer" adjustable in ten-minute increments up to 90 minutes), audio muting, speakers on/off, and headphone on/off. The headphone amplifier in the handset is automatically activated when you insert a mini-phone plug. Switching the headphone off with the button saves battery

over the entire screen—but overall, the picture was tilted at a slight angle suggesting a small (less than 1-degree) misalignment of the picture tube's deflection yoke. The picture was quite well centered along both axes, being displaced by about 0.6 percent to the left and 0.2 percent toward the top. Horizontal and vertical overscan were well controlled, and "blooming" was virtually nonexistent even at maximum picture (brightness) and black-level (contrast) settings—a situation that testifies to excellent power-supply regulation. The three full-screen primary-color rasters were pure, and color accuracy ranged from very good on red and green to excellent on blue. I found the green raster slightly pale and the red just slightly orangish, but less so than on most sets. The most disappointing raster was the washed-out yellow.

With the VNR and 3.58-MHz trap switched off, horizontal resolution was greater than 335 lines (the limit of the NTSC system) even at normal viewing brightness. The detail control had a rather modest effect and only at the highest video frequencies. Although activating the VNR often produced a useful reduction in graininess, it also resulted in a noticeable decrease in resolution, and additionally switching in the trap (which is there mainly to improve performance when using the monitor with a computer) essentially eliminated the video frequencies around the 3.58 MHz burst. Black retention and vertical interlace were both excellent.

Diversified Science Laboratories rated the video frequency response as very good in that it produces a slight emphasis of sharp edges but very little ringing (which can cause a fringing effect around vertical edges). Presumably this is the very effect Tera sought to obtain with its special video circuits, all of which attempt to provide sharper outlines and crisper edge definition. DSL also noted some distortion in gray-scale linearity and in its color equivalent (chroma differential gain). Again, these discrepancies may be by design, since Tera employs measures to produce "blacker" blacks and to manipulate the gray scale in a manner that the company believes "brings out the subtle shadings that would otherwise be lost."

In our sample at least, the tuner's AFT reference frequency apparently was poorly aligned, because performance was much more accurate in the MFT mode than in the AFT. With the AFT on, the tuner's video response was down almost 6 dB at 2 MHz, implying a horizontal resolution of perhaps 170

power while leaving the headphone connected. A ten-key pad on the remote permits direct access to any channel. (Warning: The numerical-key layout can be confusing to use.)

As a large-screen direct-view monitor, the Tera 629C acquitted itself very well in Diversified Science Laboratories' tests. As received, it was somewhat misaligned in the corners of the screen, but a quick visit by a Tera engineer set matters right. I'm not too concerned about the original misalignment because the set was delivered, without carton, in the backseat of a station wagon and probably had taken a good beating on the way from Massachusetts to the lab in Connecticut. After the technician's touch-up, the convergence was essentially perfect over most of the screen and off by approximately 1/10 inch in the corners. Considering the size of the screen, this is very good performance.

Geometric linearity was essentially perfect—straight lines remain straight

lines—far less than the screen's potential. With the AFT switched off, the -6-dB point occurred at 3 MHz for a much improved resolution of 240 lines. Chroma level was several decibels higher and substantially more uniform with the AFT off, although there was no difference in chroma phase accuracy between the two modes. Luminance level was elevated in both modes, but gray-scale linearity and chroma differential-phase error were excellent whether the AFT was on or off. The chroma differential-gain error (which is relatively modest, in any event) occurs entirely at the highest brightness level and so can pretty much be ignored.

The tuner's audio performance is reasonably good. Response rolls off at 6 dB per octave below 42 Hz and, more sharply, above 12.2 kHz. The horizontal-scan whistle is reasonably well suppressed, and the best-case noise level is very good. With the highly repetitive multiburst pattern, the audio noise increases quite noticeably, but this is unlikely to occur on broadcasts of typical signals. Output level and impedance are adequate, but THD (total harmonic distortion) is somewhat higher than we have mea-

sured on other monitor/receivers. Audio mute, when engaged, provides an 18-dB drop in signal level—a useful amount.

When I hooked up the Tera 629C to a videodisc player in my viewing room, I was impressed. Although I found the factory settings produced a darker, "richer" picture with browner flesh tones than I prefer, the effect was impressive and likely to be immediately appealing to a wide viewing audience. I could easily correct the picture to my taste by touching up the black-level, tint, and color controls. In my admittedly poor reception area, I found the 629C somewhat more adept at receiving the lower VHF stations (Channels 2-5) than the higher ones (Channels 6-13), but it was reasonably proficient at all of them. Perhaps because of the reception conditions, the tuner's somewhat limited resolution was not as apparent on actual broadcasts as it was in the laboratory tests. With the right source material, the Tera 629C delivers an eye-pleasing picture. With a few touch-ups to the tuner section and a thoroughly revised owner's manual, the 629C could be a real winner. Even as it is, it's a propitious start.

Edward J. Foster

Chroma Error (automatic fine tuning)

	level	phase
red	-7 1/2 dB	+3°
magenta	-7 1/2 dB	+3°
blue	-7 1/4 dB	+2°
cyan	-8 dB	+6°
green	-8 dB	+5°
yellow	-9 dB	+4°
median error	-7 5/8 dB	+4°
uncorrectable error	± 1 3/8 dB	± 2°

Chroma Error (manual fine tuning)

	level	phase
red	-5 1/4 dB	+3°
magenta	-5 1/4 dB	+3°
blue	-5 dB	+2°
cyan	-5 1/4 dB	+6°
green	-5 1/4 dB	+5°
yellow	-5 1/4 dB	+4°
median error	-5 1/8 dB	+4°
uncorrectable error	± 1/8 dB	± 2°

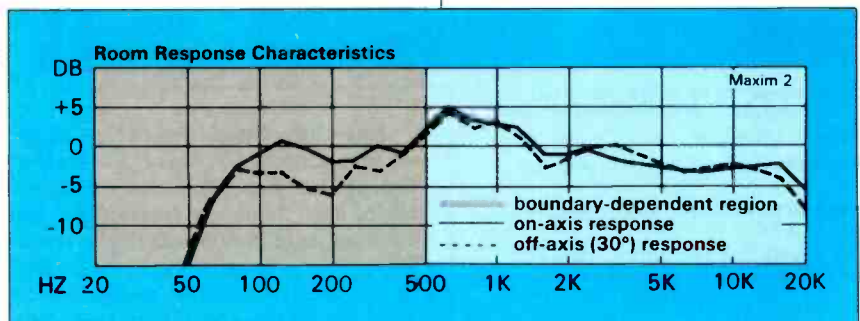
Out of curiosity, I checked our records and confirmed that we haven't reviewed a Goodmans loudspeaker in a long time—not since 1965, as a matter of fact. Chances are, you have never heard of the company, which has only reopened distribution in the United States, but the brand is well known in its native England. And if the rest of the line lives up to the little Maxim 2, it should develop a following here as well.

The Maxim 2 represents a class of loudspeakers in which British manufacturers have traditionally excelled, perhaps simply because they work hard at them. It is a very compact and reasonably priced two-way model with a 4 1/2-inch woofer and a 1/2-inch dome tweeter. Diversified Science Laboratories' data suggest that the crossover is in the vicinity of 3.5 kHz. The woofer is reflex-loaded by a small rear-firing port located just above a pair of color-coded five-way binding posts (a real surprise on such an unassuming product). The posts are inset and angled down in such a way that you can attach even banana plugs without requiring much clearance behind the speaker. Bared wires and spade lugs will work equally well.

Goodmans suggests that the Maxim 2 be placed approximately at ear level

and anywhere between 1 and 20 inches from the wall behind it (12 inches is said to be ideal). Following these instructions, DSL obtained the one-third-octave room-corrected response curves shown here. As you can see, the output holds up down to about 80 Hz, falling off rapidly below that point. Response bumps up a couple of dB in the octave above the cutoff—a common strategy in speakers of this size to give a sense of

Goodmans Maxim 2 Loudspeaker



body that the absence of true low bass would otherwise take away.

Treble response is smooth, with a slight dip in the two octaves between 4 and 16 kHz. Overall response is more ragged off-axis than on-, but both are more than respectable and the latter remarkably good, save for the hump be-

Sensitivity (at 1 meter; 2.8-volt pink noise)

89 1/2 dB SPL

Average Impedance (250 Hz to 6 kHz)

14.9 ohms

tween 400 Hz and 1.6 kHz (evident in the off-axis curve as well). This rise is much more apparent on paper than it is in listening, however, and it may be the result of constructive interference from a reflection off the floor.

sound-pressure level (SPL) of 113 dB at one meter. At our lowest test level of 85 dB SPL, the Maxim 2's total harmonic distortion (THD) averaged slightly less than 1/2 percent between the 80-Hz low-frequency cutoff and the 10-kHz upper limit of our testing. But at 95 and 100 dB, where THD averaged 1 percent or more over the same range, it clearly was pushing its limits, particularly at very low frequencies.

This is about what you'd expect from a speaker of the Maxim 2's size. There are physical limitations that no amount of technology or design ingenuity can circumvent (at least, not at such a low price). If you want strong deep bass or high volume in a large room, a speaker like this one is not for you.

If, on the other hand, you don't need that kind of performance, and particularly if you are tight on space and money, the Maxim has a definite appeal. Its basic sound is pleasingly neutral over the range covered. Although the absence of the very bottom end is clearly evident on comparison with larger speakers, it is much less apparent when the little Goodmans are heard on their own. The small bump in the midbass and the complementary dip in the treble give the sound warmth and forestall any tendency for the speakers to sound overly bright or shrill. I did notice a hint of chestiness, and when compared directly with our far more costly reference speakers, the Maxims sounded less open and detailed. Stereo imaging is convincingly good, though it lacks the sharpness of focus that can be obtained from some other systems.

In fact, there probably is not any single respect in which you can't find a speaker that will outpace the Maxim 2. Finding a speaker of its size and price that betters it overall will be a challenge, though. For the rear channels of surround systems, for secondary systems, and for main systems of modest aspirations, the Maxim 2 is an excellent choice.

Michael Riggs

REPORT POLICY

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TONY PETTINATO

Dimensions: 6¾ by 10¼ inches (front), 8 inches deep plus clearance for connections.

Price: \$229 per pair.

Warranty: "Limited," five years parts and labor.

Manufacturer: Goodmans Loudspeakers, Ltd., England.

U.S. Distributor: Teamco, Inc., 1225 17th Street, Suite 1430, Denver, Colo. 80202.

Impedance is consistently high, ranging from a low of 7.3 ohms at 350 Hz to a high of 21.5 ohms at 2.1 kHz. Even paralleled pairs should pose no problem for a normal amplifier. Sensitivity is about average for a modern loudspeaker, but that is greater than one would expect given the Maxim's high impedance and small enclosure.

The format's limitations show up mainly in the power-handling and distortion data, where the Maxim 2 cannot compete with larger, more robust systems. Nonetheless, in our 300-Hz pulse test its pint-size woofer accepted the equivalent of 23.5 dBW (226 watts) peak into 8 ohms, delivering a calculated peak

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Julian Hirsch — Stereo Review, Sept. '88

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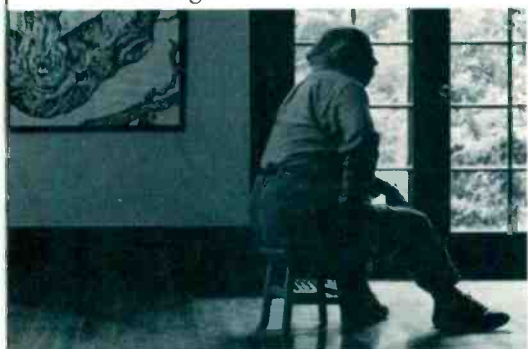
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Ensemble consists of four speaker units. Two compact low-frequency speakers reproduce the deep bass, while two small satellite units reproduce the rest of the music, making it possible to reproduce just the right amount of energy in each part of the musical range without turning your listening room into a stereo showroom.

Your listening room works with Ensemble, not against it.

No matter how well a speaker performs, at home the listening room takes over. If you put a conventional speaker where the room can help the low bass, it may hinder the upper ranges, or vice-versa.

What Henry Kloss tells his friends:

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READING BETW



Interpreting the data in *High Fidelity's* tape-deck tests

In a statisticians' utopia it would be possible to come up with a single figure of merit for tape decks, so you could simply pick the model with the highest rating and know you had the best available design. In the real world, however, it's not nearly that simple. A host of considerations can be more important to one user than another. The source of the signal to be recorded, the nature of that signal, the tape used, and the taste and technical expectations of the intended auditors are all variables in exceedingly complex equations that, accordingly, can yield radically varying solutions. Throw into the mix a tape deck's features and price, as well as the price and availability of the tape you prefer to use, and the equations approach the difficulty of those for general relativity.

HIGH FIDELITY's job, therefore, is to simplify matters and focus on those areas where we can expect some sort of reader consensus—for instance, that the signal to be re-

corded will be music of some kind, as opposed to, say, speech or bird calls—and then allow for the areas where objectives will diverge. A tape-deck test report's text interprets the lab data allowing for such a divergence, but it can't expound every nuance of all the data for all possible combinations of variables. There is simply no space for a complete analysis in every tape-deck test report. Nonetheless, the data you need for a very complete evaluation of a deck appears in our pages, and by knowing how to read that data you can add materially to the explicit, pertinent information available to you.

The first thing any of us tends to look at in a cassette-deck report is the collection of frequency-response traces. This is only proper, since such curves can reveal the most about those properties that audibly distinguish one model from another. As you will see, the design and adjustment of the recorder's circuitry and the quality of its heads and their alignment all can have an effect on the response

BETWEEN THE LINES



curves, making them the most important items of tape-deck lab-test data we publish. Figure 1 shows what the record/play curves look like when we get them from the lab. The lab records the responses of the various noise-reduction options using pens of different colors; for clarity, we translate them into solid and broken curves.

The top lines represent output with a 0-dB input; the sets below show response at -10 and -20 dB, the top set having curves with and without Dolby C, the middle one without noise reduction. The top curves don't represent frequency response in the accepted sense and therefore are not represented in our published curves (which are also redrawn for clarity). Rather, the behavior at 0 dB, in particular, indicates the deck's headroom with the specific tape in use. When the curve droops excessively at high frequencies, you're more likely to hear that effect as squashed high-frequency transients than as a simple absence of highs—which is what would be implied by a droop in response for an amplifier. The text of our report, rather than a graph, addresses the significance of such high-frequency anomalies when found.

For the -20 -dB curves, however, the audible consequences of high-frequency response anomalies do follow the usual rules: A peak here can make the sound bright, pinched, edgy, or whatever, depending on the nature of the peak and its relationship to any aberrations elsewhere in the frequency range. In the curve made with no noise reduction—and translated as the solid-line curve in Figure 2 (note the relabeling of the -20 -dB actual level as 0 dB)—you can expect the graph to mean precisely what it would if this were, say, a phono cartridge or loudspeaker: A rolloff means dulled highs, a rise means the reverse.

You must be a little more careful interpreting curves made with noise reduction turned on, because test signals aren't music, and noise-reduction systems as well as your ears react differently to them. At any instant, the swept sine wave used to create the curves we show is monotonal; music isn't. Even a single note played on an acoustic instrument will comprise a series of overtones as well as the fundamental pitch and will excite various parts of the audible frequency range simultaneously. For this reason, when noise reduction is functioning, certain types of narrow-band response anomalies can have a greater effect on the published curves than on music, much of the energy of which normally will fall outside the range of the response error.

Here, the response falls off much more sharply at the top end as the degree of noise reduction is increased, from none to Dolby B to Dolby C to DBX (the solid, dotted, dash-dot, and dash/double-dot curves for Figure 2, respectively). This is, at least in part, attributable to the fact that all of the test signal is in the region of the rolloff, and this is "misinforming" the noise reduction. Were most of the signal unaffected by the rolloff, as it would be in music, the attenuation would not be so severe. (Actually, Dolby C is less aggressive than Dolby B at extremely high frequencies

and therefore often exhibits less rolloff with swept test tones above 15 kHz. With the results shown in Figure 2, the rolloff is intrinsically severe enough to obscure this detail.)

The broader the frequency range over which a peak or dip is visible, the less likely it is to be exaggerated by a noise-reduction system. The midtreble rise in these curves, for example, probably is due to a less-than-ideal choice of recording EQ and bias for the tape used. Since HIGH FIDELITY's test lab uses the specific tape brands suggested by the deck's manual (or by the manufacturer directly, if that vital information isn't printed), you'd expect a perfect match of deck to tape. Nowadays, we're getting ever closer to that ideal, but in some cases the adjustments on the production line are less careful than they should be, in others the tape formulation has been changed since the factory's sample of it was made.



ILLUSTRATIONS BY BARBARA FRIEDMAN

If the change in formulation has involved a significant change in sensitivity, the Dolby curves can "shelve" (reach an elevated or depressed plateau) by as much as a dB or more—in the treble for Dolby B, and well down into the midrange for Dolby C. Tape sensitivity is now changing less rapidly than it was a few years ago, but these effects are still definitely something to keep an eye out for. When the "recommended" premium formulation is used, if the Dolby B trace begins to rise just below 1 kHz and then stays flat (though elevated) through the treble, you may be able to get flatter response simply by choosing a less premium (which usually means less sensitive) formulation from the same company.

The curves in Figures 1 and 2 don't suffer from this syndrome, however, as you can see in three ways. First, the curve with no noise reduction (solid trace in Figure 2) also rises equally in the 2-kHz range. If Dolby tracking were the only problem, response would be flat with the Dolby circuit off. Second, the Dolby C curve doesn't remain on the "shelf" into the midrange; it actually droops below 500 Hz. Third, the rolloff in

READING BETWEEN THE LINES

the highs clearly suggests overbiasing (or, if there are separate record and playback heads, azimuth misalignment) as a contributing factor.

The no-noise-reduction curve and those for the two Dolby modes converge below 200 Hz, which is normally the case, but the DBX curve doesn't follow them. Actually, the placement of the DBX curve is arbitrary. Because that system works rather differently from the Dolbys, the overall level through it may not be perfectly matched to them. As long as it's not many dB away, the disparity will not have much practical significance, and we sometimes relocate the DBX

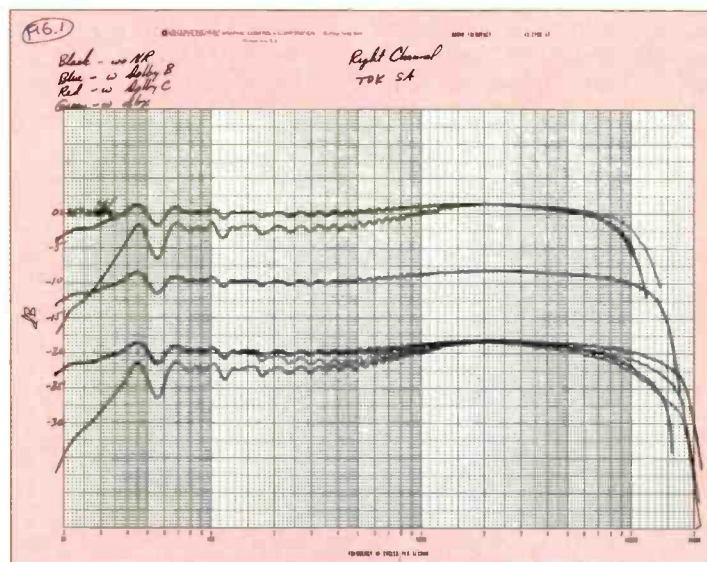


Fig. 1. Raw data: record-playback responses direct from the lab

curve from its position in the lab trace when we redraw it for publication. Otherwise, we could have cases in which it never rose as high as the 0-dB line, making numerical characterization of its frequency response rather awkward.

Among the narrowband response anomalies that can be emphasized by noise reduction are the so-called "head bumps" in the low-end frequency response—which in some models extend well up into the midrange. They are a form of interference caused by interaction between the wavelengths recorded on the tape and the dimensions and geometrical contour of the heads. Like standing waves in a listening room, they reinforce some frequencies while partially canceling others and often show up as a regular wavy appearance to the trace, beginning with large up/down response excursions in the extreme bass and disappearing gradually with rising frequency.

A typically, this recorder seems to emphasize alternate "cycles" of this pattern (the downward dips) and, further, has very small, tight ripples (too small to be followed accurately in the redrawn trace) continuing well up through the midrange. Though the bumps are exaggerated in the DBX trace, this is, again, more an artifact of the measurement technique than something you would hear as such with music. If, as a

result of this "contour effect," you can hear any response roughness in this range with music, which isn't likely, I can almost guarantee that it won't sound any more pronounced with DBX than with the other options in this deck.

The head bumps pose proportionately more of a problem when it comes to measuring playback response alone (Fig. 3). The most precise method for doing this is to use a carefully made test tape that contains spot frequencies. In the deep bass, the BASF tape used by the lab has test signals recorded at only 31.5, 40, 63, and 125 Hz. From the record/play response we can guess how the bumps may alter response at one or more of these frequencies—or between them, leaving the impression of flat response if only these points are considered. But these considerations go undocumented by the test technique.

So our playback-response curves recognize only the measured points and our numerical characterization of them extends only down to 315 Hz (the reference frequency on these tapes, above which contour effect generally is negligible). But you should be aware that the head bumps you see in the record/play curves probably would apply equally (or nearly so) to the playback response, were it to be measured with a swept tone—which would, however, reduce the precision of the playback-only measurements at higher frequencies. Another low-end anomaly to look out for is less a failing than an unfortunate design practice: Most decks, to reduce the possibility of tape overload from very low frequency signals (such as disc rumble or recorded studio noises), deliberately roll off the low-end response.

Rolloff at the top end of the playback-response curve, which is visible only slightly and only at the very top of Figure 3, is likely to be due to one of three factors. A slope that begins gradually (say, at around 2 kHz) and becomes progressively more severe as frequency ascends is probably caused by an azimuth disparity between the deck and the test tape. While the BASF test tape used by the lab is very carefully made, not all test tapes from major suppliers match its azimuth, which is a very tricky parameter to pin down. So, while we consider the BASF tape as definitive for our tests, we hesitate to say that the deck is wrong when we encounter this problem—which we do less and less in home equipment (car decks are another matter).

When the playback-only curve remains flat to somewhere above 10 kHz and then starts falling quite rapidly, the cause may be that the playback head gap simply is too wide to resolve shorter wavelengths—that is, higher frequencies. That is probably what we're seeing in this curve. Since it uses the playback circuitry only, the signal isn't passing through the filter needed to prevent ultrasonics and residual FM pilot tones (at 19 kHz) from confusing the noise-reduction systems during recording. Electrical filtering of the high end really is something to watch for in the record/play curves, rather than in those for playback.

In all these curves—playback-only as well as record/playback—you want response that is as flat and smooth as you can get. Particularly if you're over thirty years old, don't get very excited about the difference between a model that stays flat to 13 kHz and one that makes it "all the way" to 18 kHz. You're seldom likely to hear any difference. But



you can hear peaks or dips in the lower treble, which color the sound by altering the relative loudness of the fundamentals and their overtones. That is why smoothness is important. Flatness (or "horizontal") affects the overall balance: the brightness or richness of the sound. You can assess these factors only from the curves themselves; identical numerical characterizations (such as $\pm X$ dB from Y Hz to Z kHz) may sometimes hide radical differences in sonic properties.



If frequency response is significant, the measurements we print that deal with noise, distortion, and relative meter readings are almost equally important. Taken together, these three factors determine the dynamic range you will be able to achieve with the deck—but only if you understand their meaning.

Of the three measurements, noise is the most "absolute." It is measured with A-weighting, for a rough approximation of the ear's spectral sensitivity at low sound levels, and is stated as so many dB below the standard DIN reference level (a magnetic flux level of 250 nanowebers per meter; DIN is from Deutsche Industrie Normen, or "German Industry Standards"). For instance, if the signal-to-noise ratio (S/N) is listed as 50 dB (without noise reduction), it

means that the noise is 50 dB below DIN 0 dB and should sound as loud as noise from any other deck with a 50-dB S/N once they are adjusted for equal output at a 0-dB recorded level.

But these two decks' dynamic range won't necessarily be identical. The total dynamic range also depends on the amount of available headroom. In much music, the most important place to examine headroom is in the midrange, where most musical energy lies. The lab uses the 315-Hz reference frequency (near the fundamental of the E flat above middle C on the piano) for this purpose, and the figures will tell you both how good or bad the deck is if you keep peak levels to 0-dB DIN at this frequency (look for the distortion figures) and how high above 0-dB DIN you can go before distortion reaches 3 percent, the accepted criterion for the onset of significant overload in analog tape systems.



Usually the 3-percent overload point is somewhere between 1 and 5 dB above DIN 0 dB. That is, there is a midrange headroom of 1 to 5 dB. There always will be less headroom at, say, 5 kHz, and it will further diminish rapidly above 10 kHz (to negative values, which simply mean that the maximum recordable level at these frequencies is below the DIN ref-

READING BETWEEN THE LINES

erence level). Depending on the high-frequency properties of the signal you want to record, this high-frequency overload point may be the limiting factor. Cymbals, bells, and trumpet solos—to say nothing of synthesizers, which can create waveform properties unknown with acoustic instruments—are notoriously demanding, and careful monitoring is indicated if you want to capture them without high-frequency overload. Otherwise, the midrange figure is a good index of the likely overload threshold.

But how do you know when you've reached it? This is trickier than you might expect, because meter calibration isn't at all standardized. So we give you not only the absolute (DIN) values of the overload points but the deck's equivalent meter readings as well. On one recorder, the threshold of overload may be at an absolute flux level of +2-dB DIN and read +10 on the meters, while another reaches +4-dB DIN but registers only +6 dB. Given a 50-

percent accuracy of the meter readings is a nonissue in typical current models.

Of vanishingly small importance much of the time are the figures for speed accuracy and flutter. In typical cassette equipment, the flutter is not very far below the threshold of audibility when the deck is new, and it tends to grow worse with time, as drive parts wear. So do look for the best flutter figure you can get, but don't expect to hear anything amiss even if the measurement isn't among the best.



And few listeners will hear anything wrong if speed accuracy is off by as much as 1 or 2 percent, though component-grade decks regularly run less than 1-percent error—almost invariably on the fast side. This is not nearly enough to cause you to run out of tape prematurely, because all major cassette brands add enough extra tape to allow for this contingency. Remember also that a speed difference of around 6 percent is needed to alter pitch by a musical half-tone. Smaller differences can disturb those rare individuals afflicted with perfect pitch and certainly will annoy anyone trying to play along with a tape that is "out of tune" as a result of a speed anomaly. Otherwise, this too is largely a nonissue today.

Erase may not be. The figures in our reports represent the degree of attenuation imposed on an existing signal by a single pass over the erase head. The actual value will depend on the frequency of the "erased" signal, but the single-tone test we use is a good relative indicator. If the measured value is only 40 dB or so, the residual tone could be audible over the background noise and therefore intrude into pauses or soft passages in the music.

Almost all decks will do better than 40-dB erasure, though most decks don't erase Type 4 metal tapes as thoroughly as they will the lower-coercivity chrome (Type 2), ferricobalt (Type 2 and Type 1), and ferric (Type 1) formulations. Therefore, our lab measures with both the Type 4 and the Type 2 tapes. If both figures are better than 60 dB (which is good), we report only the poorer of the two (invariably, it's the Type 4) as better than or equal to the value of that tape. Where at least one figure is poorer than 60 dB, we specify both values so that you can see how much more protection against unwanted residual signals you will gain by switching from the Type 4 tape to the Type 2.

The importance of the figures for input and output levels and impedances depends on the equipment with which the deck will be interconnected. In general, these parameters are well standardized today, and we comment on the values only when we perceive a potential problem due to an oddball value. Again, these values are largely a nonissue unless your ancillary equipment itself is oddball.

In sum, if you haven't looked carefully at the response curves and haven't studied the S/N and 3-percent-distortion data, you haven't fully read our equipment report. And if you then buy a model on which we've reported, you will know less than you might about its operation and how to get the best performance it can yield. The owner's manual usually won't tell you much about these things and sometimes can seem to go out of its way to obscure important considerations in tape choice and level setting. But the salient data you need to know are right there in our test reports. Read on, and enjoy! □

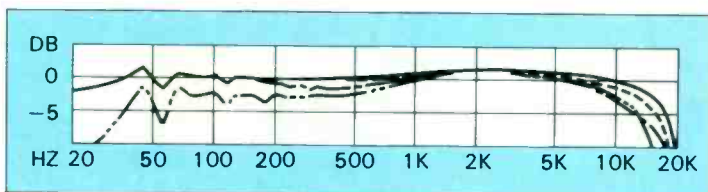


Fig. 2. In these redrawn record-playback curves, 0-dB corresponds to -20 dB DIN.

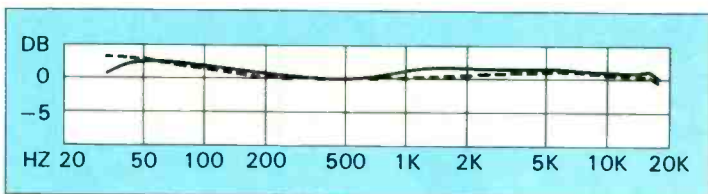


Fig. 3. Playback-only response, plotted from readings of discrete frequencies on a standard test tape

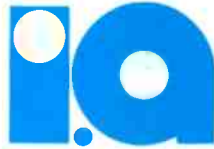
dB noise floor for each, the dynamic range of these two machines would then be 52 and 54 dB, respectively, but the maximum desirable meter reading would be 4 dB lower on the meters of the latter.



At one time, the next point to examine would have been meter ballistics, since they influence the accuracy of the displayed level. With mechanical, moving-needle meters, the levels of transients are very difficult to assess. The needle tends to overshoot at the onset of a sustained tone. Increase the needle damping to reduce the overshoot, and it won't respond to brief transients. So, depending on the meter's damping and the peak's duration, mechanical meters can read both too high and too low in trying to follow typical musical waveforms.

With today's peak metering systems—whether the actual display is a fluorescent one or is made up of LEDs or whatever—this no longer is a problem. Unless you're buying one of the rare (usually portable) models that affect "professional" mechanical meters, you can pass right over the ballistics figures. Any unusual behavior (say, a peak-hold option of some sort) will be discussed in the text. But, aside from their 0-dB calibration discussed above, the rela-

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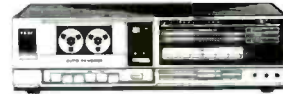
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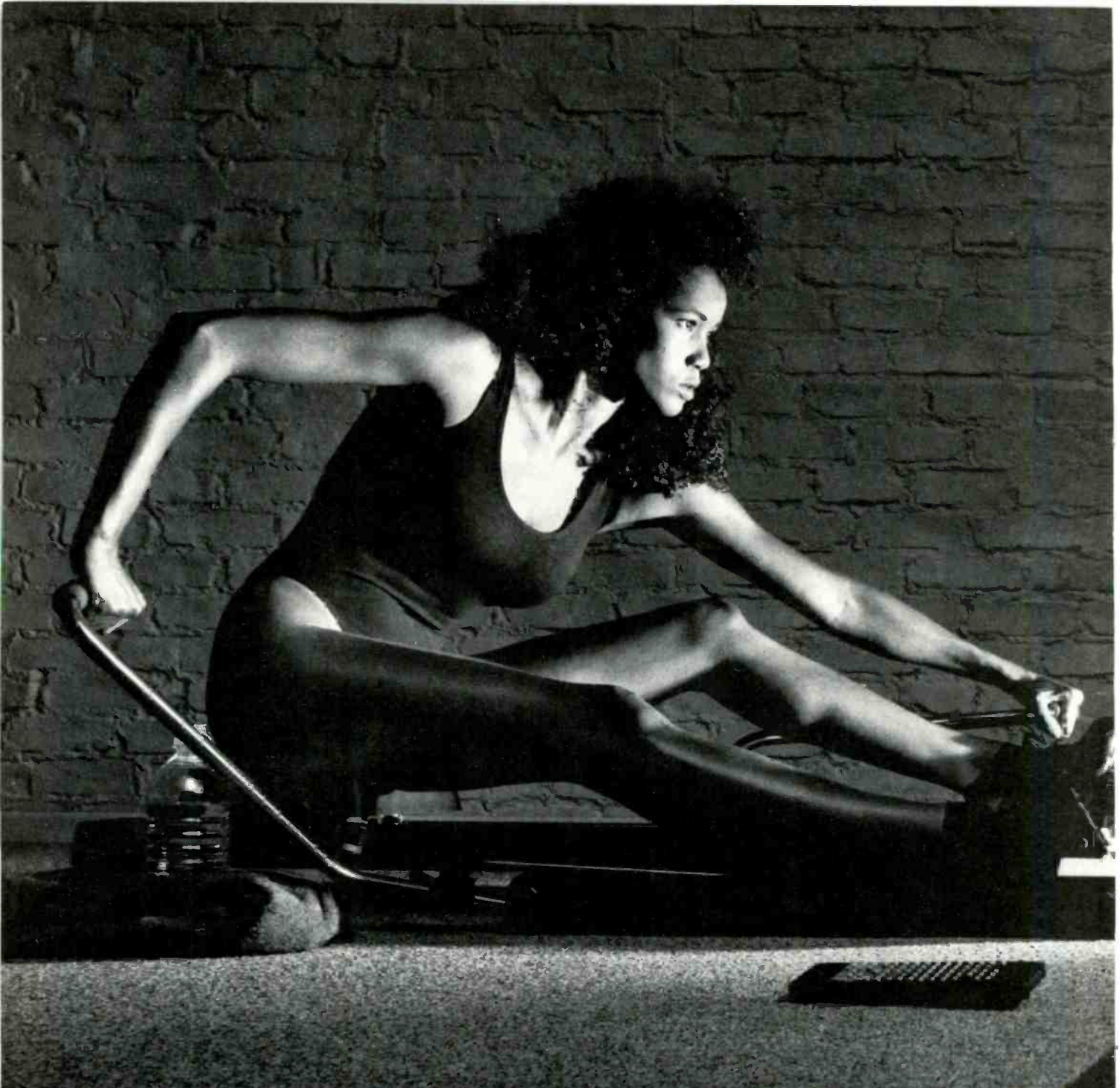
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Maria Callas



*F*ew legends have had such a tangible effect on the way we hear opera, and on what we expect from its interpreters, as the legend of Maria Callas. Few singers have made as many recordings that have subsequently gone on to be branded—deservedly or not—as classics. Yet few divas have had so short a prime, barely eight years. And few were chronicled so often in their times of trouble, and so rarely in their prime, as she.

Callas came into her own at what can rightfully be called a fateful time—the advent of the long-playing record—and had the particular good fortune to become associated with producer/perfectionist Walter Legge of EMI. Legge obviously had the goods to work with: Callas was not playing Anna Sten to his Sam Goldwyn. She had already established her claim to stardom, basing it on a rare blend of musical integrity, theatrical fire, and astuteness in the portrayal of character. She possessed an utterly unique timbre fused with a volatile, seeking-the-good-life personality. Together these things made her at once an opera star of the first magnitude and a dream subject for the gossip columnists and paparazzi.

Now that Angel EMI has remastered and reissued on Compact Disc all but three of Callas's 24 complete opera recordings, along with various recital collections, an entire new generation of collectors and voice mavens has access to what she did in the studio—to dissect, scrutinize, and memorize it, inflection for inflection, phrase for phrase, flaw for flaw. Seen from the vantage point of 25 to 35 years later—the recordings span the period from *I puritani*, taped in March 1953, to Callas's penultimate complete opera recording, of *Carmen*, taped in the summer of 1964—these reissues show that Callas was rarely at her best in the studio, particularly as many of her live performances are also available on record for direct comparison. Yet the studio efforts are the vehicles by which Callas's artistry, her voice, and her entire persona and legacy (or is it Legge-acy?) have

become established in the ears of countless music lovers.

For a good share of one or even two opera-loving generations—those who came into their taste-forming years as the LP evolved into an indispensable item on the home-music scene—Callas's recordings were the first and, in many cases, the only performances of the operas in question these listeners ever bought (unless, of course, they had already been converted to the cause of Renata Tebaldi). As with any recordings, the more they were listened to, the more tolerant one became of the imperfections, the more one acclaimed the strong points and excused the weak, until finally, the wobbles, squawks, and acidulous tones became expected, anticipated, and even praised as part of the remarkable vocal arsenal of expressive effects.

This embracing of the dark side of Callas's singing has been particularly evident in British publications, which continue to have a major impact on the way English-speaking peoples listen to and assess recordings and performances in general. British critics often evince a reluctance to appreciate a purely *beautiful* voice, and this shortcoming has long undermined their ability to comprehend opera in its

Latin, voice-oriented aspects.

Ironically, Callas always maintained that opera was, after all, a Latin art form. Even when her voice, as chronicled on these recordings, became increasingly unable to sustain those intentions, she stuck with her instincts. But since the tone was rarely, if ever, truly beautiful and thrilling (as was so clearly the case with Tebaldi in her prime, whom Londoners tended to denigrate with such clever phrases as "A Tebaldi comes about once a generation, a Callas once a century . . ."), it created just the sort of intellectual conundrum the British feed on when it comes to experiencing opera. Because it was not always possible to bask in richness of tone with Callas, it was not necessary to surrender to vocal beauty, but rather to intellectualize the artistic effect through the

*Generations to come
will know the diva
through her studio
recordings, most of
which—the good, the
bad, and the ugly—
are now on CD.*



Callas in one of the roles for which she is best remembered, from Act II of the La Scala production of Bellini's "Norma"



Maria Callas



The Callas operas show us a singer of genuine imagination.



thorns and barbs, and thereby distill a peculiar controlled reaction that would be translated as an “operatic experience.”

Although Legge was British through and through, he could at least appreciate a wide variety of performance styles and approaches, which is why the conspicuously long list of records he personally supervised remains one of the towering achievements in the history of the medium. I believe that in Callas he found the ideal operatic diva: a multifaceted singer who could appeal to the prickly sensibilities of the British while at the same time being the idol of the fierce and voluble La Scala public, not to mention one of the few hurricane-force personalities accepted, tantrums and all, on the American operatic scene.

As the vocal flaws began mounting, the miking became closer, the manner of singing more in the Legge style of whispered declamation—though it never became as irritatingly hushed, cooed, and gurgled as on some of the later recordings of Elisabeth Schwarzkopf, where whole phrases would pass by with nary a genuinely vocalized tone to be heard. This becomes painfully apparent when comparing the first Callas *Norma*, which has been reissued on CD, with the second, which has not. The first one catches the soprano pretty much in her prime; the second, on the second terrifying dip of her decline. The earlier one finds Callas in magisterial form, flooding a line with voice and meaning; the second is more intimate, more psychologically nuanced, as it were, and quite terrible vocally. Predictably, *Gramophone* magazine lamented that the earlier recording was chosen for remastering over the later. But this fawning over faults is not just a British phenomenon. Callas at her vocally most wretched is widely treasured. Unfortunately, much of what has been exhumed for the fanatics to pore over—from the EMI-originated studio recordings and the live material—is suitable only for the necrophiliac study that opera fans too often devote to aging or dead idols.

Just what do the Callas operas tell us? They reveal a singer of unusual perspicacity, with an innate gift for understanding texts and why the composers set each word and phrase the way they did. They show us a singer of genuine imagination, one who had a complete affinity with the vocal idiom of each opera she sang, and who struggled to make an increasingly recalcitrant instrument obey her intentions. They reveal to us an artist of remarkable intellectual insight trying to cast a new light on roles she was familiar with from theatrical performances, and even on those she would perform only in the recording studio. We hear a singer fully aware that the basic instrument was not always meant for the role she was recording, so in her brainy way she would strive to make up for that lack.

Thus, we have a singer doing Manon Lescaut in a lightened voice, trying to suggest a manner of approaching Puccini by way of Massenet. We have, near the end of her vocal tether, a singer who tries to show us the truth in Lucia di Lammermoor’s plight while evading every possible high note save those few she knows must be attempted because tradition insists. We have a singer who can throw herself fully into Tosca’s dilemma while—as she later confessed—never really caring for the composer’s music for this opera in the first place. We have a seemingly serious diva having a delectable romp as Rosina in Rossini’s *Il barbiere di Siviglia*, showing us that almost without question, the larger the voice in this role (as long as it retains legitimate coloratura flexibility), the better the vocal and interpretive payoff.

Even when Callas is rather far afield from her ideal repertoire—as Cio-Cio-San in *Madama Butterfly*, for instance—the interpretation is so compelling that it demands to be listened to and accepted on its own terms. That Callas is so successful in this opera has as much to do with Herbert von Karajan’s conducting as with Callas’s insights. Indeed—although the voice sounds unwieldy, although she cannot attack the D flat of the entrance without a huge wobble, although in consistent attempts to lighten her timbre, to keep it girlish, she thins it out to the point of anemia—Callas is so alert a projector of phrase and text, so attuned to the drama of this fragile yet strong heroine that it becomes quite easy to put aside one’s resistance. A fresh-sounding Nicolai Gedda, though equally wrong for the part of Pinkerton, particularly then, is nevertheless a splendid partner for Callas, and he fits into this recording with ease (Angel EMI CDCB 47959).

It also becomes clear that Legge’s casting choices often left much to be desired. For instance, in *La Bohème* (CDCB 47475), Callas sounds as if she is seated in the middle of an otherwise routine operatic run-through, trying to point and inflect and illuminate among colleagues who are much happier merely singing out, and with a conductor, Antonino Votto, delighted not to have to do much more than keep singers happy by beating to their time. And if colleagues are a problem on that *Bohème*, they are a disaster in *Turandot*, where Callas was herself not in the most gratifying voice (CDCB 47971). I have always thought that casting Schwarzkopf as Liù was Legge’s perverse joke on Italian operatic traditions and a complete misrepresentation of the quintessentially Puccinian slave girl. Moreover, Eugenio Fernandi makes a bel-lowy, ugly-voiced Calaf, and Tullio Serafin is unable to weld these disparate elements into a coherent whole.

And what about those roles with which Callas is inextricably associated: Lucia, Gioconda, Violetta, Tosca, Amina, and Norma? The stereo *Lucia di Lammermoor* (CDCB 47440) is possibly the worst of Callas’s studio efforts in terms of her sheer inability



Above: Coffee and a role? Callas studies a score over espresso, with husband and manager Giovanni Battista Meneghini (left) and colleagues Elisabeth Schwarzkopf and Walter Legge, also husband and wife. Facing page: as Fiorilla in Rossini's "Il turco in Italia."

to get the role to fit the pitiful estate of her voice, and she has an impressive lineup of off-form colleagues, including Ferruccio Tagliavini and Piero Cappuccilli, whose involvement lends a drabness to the venture that Serafin can only occasionally shake off. The stereo *La gioconda* (CDCC 49518) also came too late. The voice had lost the weighty throb heard on the Cetra recording of a 1952 performance (Fonit Cetra CDC 9), and while it is amazing that Callas was able to suggest all the elements of a grand-scale account, and was in at least passable form by 1959 standards, the entire production is swathed in hollow calculation. Pier Miranda Ferraro's gruff Enzo is suitably stentorian, Cappuccilli gives a rote Barnaba, Fiorenza Cossotto is only on the verge of characterizing Laura, and Votto, the conductor of so many Callas recordings, is utterly blank interpretively.

The reasons why Callas never got to record Violetta in the studio are known to many by now, and EMI has tried to compensate with its release of a 1958 live-from-Lisbon performance that had circulated for years as a pirate tape. The sound is mediocre—although the CD has a presence that was lacking on the initial vinyl issue—and at times the prompter is the loudest performer on the set. This *La traviata* (CDCB 49187) represents a good, routine house standard—which is to say, normal for its time, unusually accomplished and idiomatic for today. Franco Ghione conducts a fine, supportive performance. The Germont is Mario Sereni: solid, unimaginative stuff. Alfredo Kraus is a better-than-usual Alfredo, sounding very much in 1958 as he would 20 years later. But this is Callas's show, and it represents—as so many of her live recordings do—the singer in all her glory, and with only a few of her troubles. Given that this is only nine months after her uneven *Manon Lescaut* studio recording and only a year before her painful second *Lucia*, it is astounding what good form she is in overall.

And if her reading of the role does not supplant the celebrated La Scala opening-night performance (now out on a Foyer CD in

unexpectedly acceptable mono sound), it is still a study in the Callas art in all its aspects, demonstrating why the Italians loved her, and why she and Riccardo Muti could never have performed together had their careers overlapped. Everything she incorporates here he would find anathema: She accepts standard cuts; she interpolates high notes; she honors traditional tempo fluctuations; she dares to make a huge (and hair-raising) moment out of the crescendo on the G in "*Grand dio, morir si giovine.*" In fact, she gives us a traditional Violetta in all its thrilling array, only really failing on the diminuendo at the end of "*Addio del passato.*"

The Victor de Sabata *Tosca* needs no comment; it has earned its niche in record history. But I must note that the CD remastering has taken the edge off all the voices and rounded the tone out so completely that there is no bite to any of the singing, no sense of free ringing, but rather a smooth, muffled cloaking of those timbres. This may be considered an improvement over the old Angel LP issue, but it is *not* the classic Callas *Tosca* in all its glory—which has been stunningly transferred to vinyl by Toshiba EMI.

Moving to the soprano's Bellini rereleases . . . The remastering of the first *Norma* (CDCC 47303) is handled very shrewdly. It gives the mono sound a real presence, almost a perspective, and Callas's voice sounds quite large throughout. And *such* a performance: She is able to make all her points using the voice as the medium, without the tricks and evasions she had to resort to in the as-yet-unreleased second (stereo) reading. Ebe Stignani is remarkable for a singer well into her sixties, though her Adalgisa is rather matronly for all the admirable solidity of her sound. Mario Filipeschi fills the role of Pollione adequately, and Serafin is his usual supportive self. *La sonnambula* (CDCB 47377; with Cossotto, Nicola Monti, and Nicola Zaccaria) has moments of greatness, though Callas was in tetchy voice for the sessions, and her supporting cast was uneven. Callas's *I puritani* (CDCB 47308; with Giuseppe di Stefano, Rolando Panerai, and Nicola Rossi-Lemeni, conducted by Serafin) became an instant classic, and her contributions to it remain provocative in the best sense. ►

Maria Callas



MARIO TURSI

Callas in 1969 as Medea (the Medea of legend, not Cherubini's heroine) from the film by Pier Paolo Pasolini

I have never liked the recording of *Cavalleria rusticana* and *Pagliacci* (CDCC 47981). Callas's timbre is not my ideal for Santuzza, and her dramatic insights sound too controlled for the role. Nedda she finds difficult to manage, as do most sopranos, and she adds an odd archness. Worse still, the transfer to CD is wretched.

Un ballo in maschera is Callas's finest Verdi performance, and probably still the best studio *Ballo* available (CDCB 47498). Votto rises from his normal lethargy, and the cast performs thrillingly. This is one of Di Stefano's very finest recorded efforts; Callas potently re-creates Amelia's haunted anguish; Tito Gobbi is a powerful Renato; and Fedora Barbieri's Ulrica is practically a force of nature. The *Barbieri* (CDCB 47634) is equally splendid, sparked by Alceo Galliera's conducting, by Gobbi's uproarious, inimitable Figaro, and Luigi Alva's fluent Almaviva. Callas is scintillating, and is a refreshingly larger-than-life Rosina. Gobbi is also the galvanizing force on the recording of Verdi's *Rigoletto*—not exactly prettily sung by him or by Callas, but gut-wrenchingly vivid nonetheless (CDCB 47469). This is also one of the few recordings that gives one a sense of Callas's upper extension in full cry, as we know it from the celebrated pirate recordings made in Mexico City in the early 1950s, which, Gobbi once noted, found Callas at the very peak of her vocal and interpretive powers. Serafin gives one of his most exciting performances on disc, and Di Stefano also seems able to present a real character rather than simply a great voice as the Duke.

Despite the thrills in these performances of *Ballo* and *Rigoletto*, Callas the Verdi soprano was always more of an intellectual than vocal artist. She adhered to all the right rules, and made her points scrupulously, but the voice almost never sounded pretty enough to make *Aida*, or either of the Leonoras (in *La forza del destino* and *Il trovatore*), more than curiosities. Oddly enough, the voice had thinned out just enough by the time of the studio *Aida* (CDCC 49030) to rob Callas's singing of the visceral impact of the Mexico City performances, particularly the one with Mario Del Monaco from 1952. This *Trovatore* (CDCB 49347; with Panerai, Barbieri, and Di Stefano, and conducted by Karajan) gave many people their first hearing of Leonora's Act IV cabaletta, and Callas does make many interesting points. But no matter how

you slice it, *Trovatore* is not about psychological insights; it is about great, opulently beautiful singing, and there is not all that much of it on this set, or in the *Forza* (CDCC 47581), notwithstanding Richard Tucker's very fine Alvaro.

The *Carmen* (CDCC 47312) is a love or hate affair, with little middle ground. To these ears, Callas's hard-bitten approach is at all times interesting, though rarely seductive. She is a hellcat from the gutters, and as such uses her force of personality to grab and ruin her men. Gedda, superlative musician that he is, makes José an elegant, eloquent foil, and Georges Prêtre's erratic, propulsive way with the score is well matched with Callas's reading.

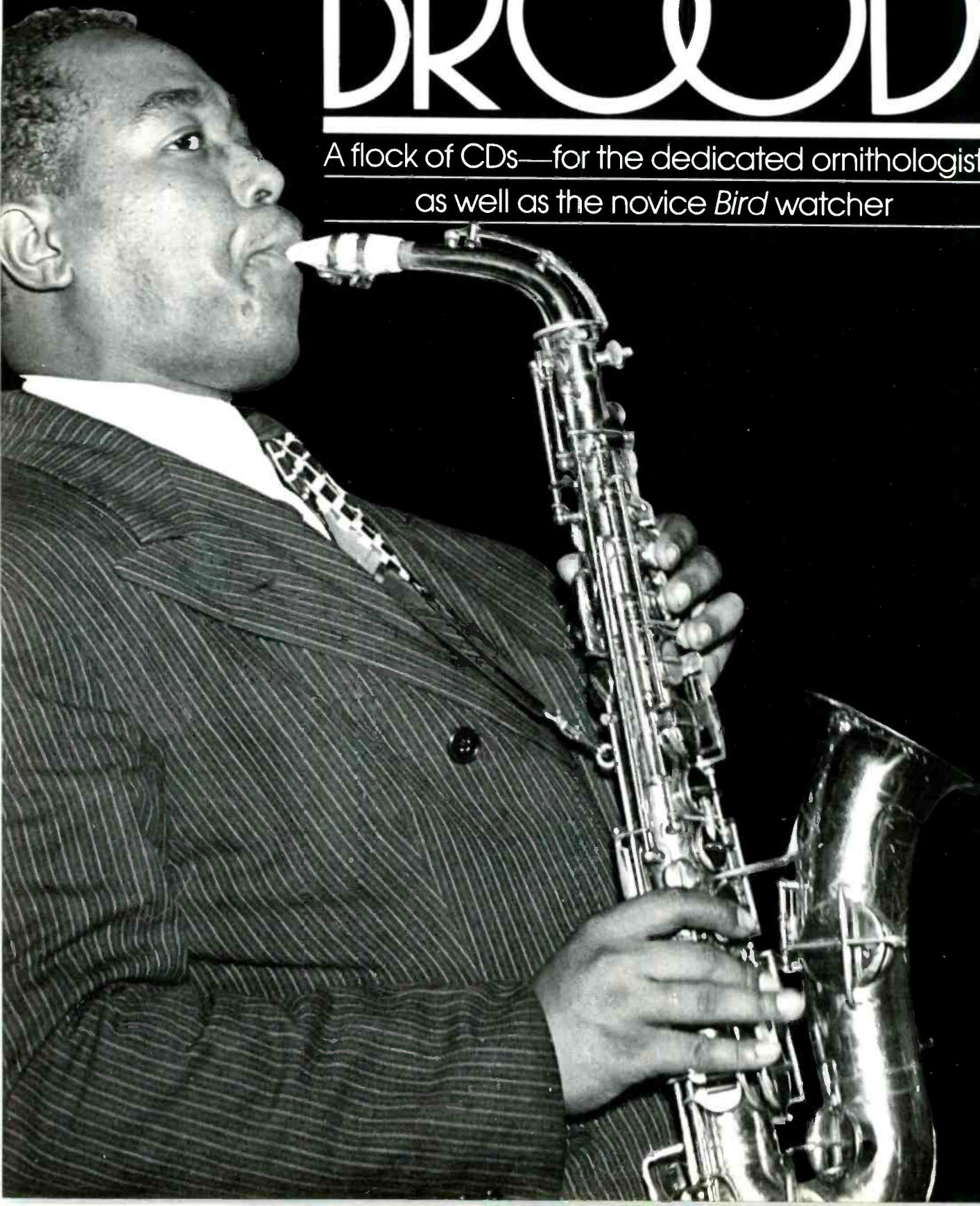
Finally, a few words on the entire enterprise of rereleasing Callas on CD. I have always felt that the CD releases would be the best possible incarnation of the LP versions, which after all is what the original production team had worked toward. Nevertheless, to remove tape hiss is a dreadful idea because it usually removes room acoustic and the buzzy overtones of the voices as well. This is what ruins the *Tosca* in particular. Some of the reissues sound thrilling (especially *Madama Butterfly* and *Ballo*), some sound different but effective (*Norma* and *Rigoletto*), some are disappointingly blunted (*Carmen*), and some are downright unacceptable (the *Cav* and *Pag*).

More problematic is what all this costs the prospective purchaser. Though some of these operas have been put onto two CDs, most of them were last available in Seraphim pressings, so they have now gone from true-blue budget to premium items—which puts some of them out of competition altogether. In fact, the only releases I can recommend wholeheartedly—as performances of particular merit from an entire cast—are *Tosca*, *Ballo*, *Barbieri*, *Rigoletto*, and *Puritani*, with the arguable addition of *Butterfly*, *Traviata*, and *Carmen*. Of course, if the Callas bug has bitten you, you'll get them all. But if you limit yourself to the above recommendations, as well as the recital CDs devoted to multifarious Italian arias (CDC 47282) and to arias by Puccini and Bellini (CDC 47283), you will get a comprehensive and representative view of this remarkable artist who was controversial in her time and will always remain so. □

PARKER'S

BROOD

A flock of CDs—for the dedicated ornithologist
as well as the novice *Bird* watcher



Clint Eastwood's *Bird*, the film biography of Charlie "Yardbird" Parker, may precipitate a wide interest in the legendary jazz innovator despite itself: The musical sequences are that compelling, and record companies, hoping to take advantage of the publicity surrounding the film, have just made huge chunks of the Bird catalog more readily available than ever. Still, it's hard to imagine this dank and dolorous depiction of the alto saxophonist's latter years encouraging large numbers of people to seek out the music they've managed to ignore for so long.

In truth, it's not quite accurate to call the film a biography, as it deals mainly with those last horrendous years of Parker's life: from the late 1940s to his death, at age thirty-four, in 1955. This story-joined-in-progress feeling is abetted by a tricky nonlinear narrative that sometimes makes it difficult for even aficionados to tell just where or when events are taking place. There is, though, an admirable fealty to the known facts, and many of the oft-told incidents that constitute Bird lore are faithfully presented. The film's only really craven bit of fictionalizing comes when it resorts to that hoary biopic convention, the composite character—in this case, one "Buster Franklin," who just happens to be on the scene each time our beleaguered hero reaches another Life Landmark.

More bothersome than the content of the film is its foreboding texture, the way it proceeds from dark to darker to darkest. By the time Bird expires in the flat of Baroness Nica de Koenigswarter, his death seems redundant: Sitting in this sinister woman's gothic digs, with mysterious movie-lamps casting deep shadows but little light, he's already entombed. Bird's life did have its film noir aspects: the drugs and booze and bouts of madness, the racism, the incredible talent ignored/neglected/squandered. But these horrors were real and complicated—which is to say at times mitigated, ambiguous—and to have your Art Direction serve as an unrelenting metaphor for your protagonist's worst feelings is to paint monochromatically. This may be apt for one of Eastwood's urban crime thrillers (which also tend to be depressing), but it's an unsatisfying slant for an actual man's actual life.

Forest Whitaker's Bird is definitely an Oscar-caliber performance, which is not wholly a compliment: There's nothing subtle about his immersion in the role, and the Academy tends to like a showy display, one where the character's turmoil and the actor's effort merge. This Bird is a sometimes appealing, sometimes appalling, mercurial man-child, and Whitaker convinces as a committed artist, though one misses any trace of the poise that would certainly accrue to a living legend. (Greeting some hipsters on the street, Whitaker comes on like a boyish junior member of the bop counterculture; there's no indication that this Bird is even a little aware that he practically *invented* these guys.) Bird's wife Chan and trumpeters Dizzy Gillespie and Red Rodney are well enacted, though there have been complaints that the white Rodney is featured

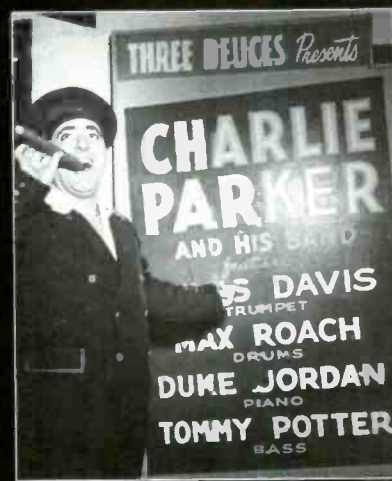
while the black Gillespie is downplayed. But Diz is presented as the philosophical, responsible counter to the hapless Bird, whereas Red is a well-meaning patsy. The one prolonged "lighter" sequence of the film involves a Southern tour where, to circumvent segregationist policies, the red-haired trumpeter poses as an albino blues singer.

However one feels about the dramatic structure and content of this two-hour-and-40-minute film, director Eastwood's handling of the musical sequences, his realization of his stated desire to show that bebop was and is "hot," is superb. If only he had put the music into some kind of context, one that would have made clear just what the nature of Parker's revolution was, a scene of Bird jamming with his predecessors in a Jazz at the Philharmonic setting might have made the point. To Eastwood and scenarist Joel Oliansky's credit, there is a well-handled moment where Parker tries to explain to Rodney how improvising on the chords to "Cherokee" led to his musical breakthrough.

The music of the film, heard on the CD release of *Bird: Original Motion Picture Soundtrack* (Columbia CK 44299), also arouses ambivalent feelings. Having decided to go with the original Parker recordings—and therefore faced with quality of sound ranging from so-so to execrable—Eastwood decided that Bird's playing should be

extracted. The process, according to Columbia, entailed "the use of selective EQing, a dynamic noise filter, and other devices" that "took out all the unwanted frequencies, leaving only the sound of Bird." The newly freed Parker could then be placed in a freshly recorded stereo setting, surrounded by contemporary but sympathetic musicians.

This process has been compared with the colorization of classic movies, but it's not that bad, not the least because the new players here are, generally, musicians of substance, and their contributions aren't really a parallel to Ted Turner's sickly castles. Also unlike colorization, a few of the original tapes unquestionably benefit from the process, particularly the



Back in 1948, the real-life Mayor of 52nd St. hawks the saxophonist and band at the Three Deuces.

By Richard C. Walls

PARKER'S BROOD

three cuts ("Lester Leaps In," "This Time the Dream's In Me," "Cool Blues") recorded at the Rockland Palace in Harlem in late 1952. Past issues of this date have been almost unlistenable (though there's a certain collector's macho that makes it bad taste to point this out) because the band is poorly recorded and the crowd noises sound like a riot in a train station. For the soundtrack recording, the babble has been toned down to a tamer blur of continual chatter, while Bird's solos are slightly slowed and brought to the front of the mix. Because the altoist was in an exultant mood during this set, the rescue effort here is a success.



Parker and Rodney, 1948, watching Gillespie. Clyde Lombardi (reflection)

Elsewhere, the whole project seems more a novelty effort. And though only pianist Monty Alexander's anachronistic string of funk clichés on "I Can't Believe That You're in Love with Me" (evidencing a very '60s kind of glibness) and the addition of strings on "Parker's Mocc" seem ill-judged, the following question arises: Why not, especially in light of the many Compact Disc collections released in time for the film, take your Bird straight?

You could start, for example, with the three-CD boxed set **The Complete Savoy Studio Sessions** (Savoy Jazz ZDS 5500). First issued as a five-LP boxed set a decade ago and running just over three hours and 20 minutes, this collection of master and alternate takes, as well as incomplete takes and false starts, chronologically covers 1944-48 and gathers more great Parker in one place than any other current collection. The packaging is exemplary, and the information on the box manages to improve on the original LP issue by listing times and types of takes. The accompanying 24-page booklet contains a musically knowledgeable blow-by-blow of the sessions, making the whole package the ultimate Bird documentary.

This is bop at its most succinct—tight quintets

working hard to get that nearly perfect three-minute master take. Bird is at his peak here, alternately and overlappingly the virtuoso formalist, the cry-from-the-heart bluesmaster, the harmonic adventurer, the iron-c abstractionist. Most often, his co-horn is a very young Miles Davis, already working on his antflash aesthetic. Though many of the retakes are due to Miles's difficulties with Bird's fiendishly clever melody lines, the trumpeter's persistence in honing his own vision and voice is one of the fascinations of the collection.

Understandably, this may all be a bit much for the beginner: It does take a well-developed appreciation of Parker to fully savor the pleasures offered by 12 consecutive takes (including four false starts) of "Marmaduke." And so neophytes are directed to the two-CD set **The Complete Original Master Takes: The Savoy Recordings** (ZDS 8801), which contains the boxed set's 30 "official" versions. The sound here, as on all of these Savoy studio CDs, is an improvement over that of the LPs, but one must still adjust expectations: This is, after all, the work of a low-budget studio from the bad old mono days. And if you'd prefer to be even more cautious, or frugal, there's a single-CD collection called **Original Bird: The Best of Bird on Savoy** (ZDS 1208), which whittles the tally down to 14 nonchronological takes, including all the acknowledged classics. Playing time, though, is a rather skimpy 39:02.

Savoy also has reissued its complete catalog of live recordings made by Bird at New York's Royal Roost jazz club. These four separate single-CD releases share the title **Bird at the Roost: The Savoy Years** (Vols. 1-4: ZDS 4411-14), and they collect in chronological order performances that were originally segments of deejay Symphony Sid's late-night radio remotes from the club between September 1948 and March 1949. The gigs are a different breed of cat from the studio sets: Not only is the sound rougher (but not too bad, as these things go), but the whole ambience is changed, and wonderfully quaint. There's Sid, the self-proclaimed "all-night, all-frantic one," with his real-gone bop talk and periodic reminders that you can come down to the club and hear six hours of music for 95 cents (!); the hyper but attentive crowds and the responding quintets, eschewing studio perfection for one-take bop bravura; and even a few commercials (Snow White face powder—25 cents a box).

Of the 15 dates here, Bird has nary an off night (except for the 1/29/49 oddity where only one song is played and he doesn't solo), though after a while you begin to notice that he arrives on the bandstand in one of two distinct moods: either smooth and mellow, effortlessly unraveling his complex inventions, or more agitated, given to breaking the spell of his flow with disjunctive cries. It's all very good (start with Vol. 2, which has a credible bop version of "White Christmas" and a raucous New Year's Eve date), with consistently fine contributions from trumpeters Miles

Davis and Kenny Dorham, drummer Max Roach, and the always underrated pianist Al Haig.

Aside from his years at Savoy, Bird's most productive associations were with the Dial and Verve labels. The Dials are likely to show up in the most unlikely places (though Warner Bros. has many of them), while the Verves have just been released on CD as **Bird: The Complete Charlie Parker on Verve** (Verve 837 141-2), a ten-disc boxed set running more than 11 hours and including more than 1½ hours of previously unissued material. (This set, minus the new material, was released on LP a few years back: See "Parker's Elegant Insouciance," by Francis Davis, in the March 1985 issue of this magazine.) This is a very different affair from the Savoy box, covering as it does a period (1946-54) when producer Norman Granz and a willing Bird were constantly casting about for alternatives to the conventional bop quintet format. In retrospect, these matches—Bird with Machito's Latin band, with strings, with voices, with strings and big band—seem forced. Time has been harsh to the pop garnishings of that era, and one has to tolerate a lot to dig out the timeless Parkerisms.

That said, the extremely popular-in-their-day string sessions, though unimaginatively arranged, do display Parker's amazing melodic facility, his ability to play "pretty" without becoming goopy. Likewise, the Latin-percussion sides, while something of a rhythmic straitjacket, show the altoist modifying the bop concept in a wholly coherent way. Even on a flat-out disaster like the session with Gil Evans and voices (the inane material partially redeemed by a remastering that brings out the rhythm section), Bird plays with concentration and feeling, integrity intact.

There is plenty here that one can enjoy unambiguously: the Bird/Diz and Bird/Miles quintet sides (much of the previously unissued stuff is small-group outtakes), as well as several long and jolly Jazz at the Philharmonic jams, featuring giants like Lester Young, Coleman Hawkins, and Johnny Hodges—primers in prebop and bebop sax styles (just as Bird's solo on the JATP "Oh, Lady Be Good" is a primer on developing an improvisation). The sound throughout is somewhat better than that of the Savoy, and the packaging is exceptionally attractive—though the 36-page booklet, despite some very striking photographs, is a disappointment, taking as it does an anecdotal approach to the sessions when some specific musical guideposts would have been more helpful.

Like Savoy, Verve has anticipated its boxed set overwhelming both the newcomer and the budget-conscious and has therefore issued a single-CD distillation of this material, running almost 50 minutes, called **Bird: The Original Recordings of Charlie Parker** (837 176-2). Wisely concentrating on the small-group sides, supplemented by three tracks from the strings sessions (including "Just Friends," Bird's biggest-selling single) and one JATP jam ("Lester

Leaps In"), this is highly recommended.

Because Parker was so often recorded on the job by amateur enthusiasts, a significant portion of his discography remains a sort of free-floating underground phenomenon, emerging periodically on obscure labels, disappearing, reemerging. . . . The quality of this material is variable, the sound often abysmal. One can expect, during the coming months, much of it to emerge yet again. Meanwhile, already out are two separate single-CD releases dubbed **Bebop & Bird** (Vols. 1 and 2: Hipville/Rhino R2 70197 and 70198), which present a hodgepodge of live and Dial ses-



"Just Friends," 1949: Buddy Rich, Ray Brown, Bird, Mita Miller, strings

sions—including, on Vcl. 2, the infamous Rockland Palace set, with its headache-inducing low-fi crowd noises. You also get a grotesque example of Bird at his worst, "The Gypsy" (Vol. 2), recorded just hours before the breakdown that landed him in a California mental hospital; a good but poorly recorded Birdland date with trumpeter Fats Navarro and some excellent Bud Powell on piano (Vol. 1); and a sampling of one of Bird's most felicitous collaborations, that with pianist Erroll Garner (Vol. 2). But there's no rhyme or reason to these two collections—except the hope of cashing in on the event of *Bird*—and though there are points of interest, this is certainly no place to start.

Nor is **The Bird You Never Heard** (Stash STCD 10), an hour-long collector's miscellany of live sessions. Much of this sounds perfunctory (i.e., only mildly inspired), and pluses and minuses tend to balance each other out: A good Birdland session with Powell and bassist Charles Mingus amply features Candido's annoying conga, and an intriguing University of Oregon set with trumpeter Chet Baker has all the non-Bird solos edited out. For the hardcore only. Would-be Bird fans who go from Eastwood's melodrama straight to this mess are liable to quit before they begin. □



Edited by Ted Libbey
and Ken Richardson

Barber Down Under

While our heads were turned in an easterly direction—the better to keep an eye on such recent developments in the classical recording field as the launching of Virgin Classics and the separation of Günther Breest from Deutsche Grammophon—important things were going on right under our noses . . . and down under as well. Specifically, New Jersey's own Stradivari Classics, with Michael Fine in charge, was in New Zealand in mid-October for a lightning round of recording sessions devoted to Samuel Barber's long-suppressed Symphony No. 2.

The Second Symphony was a product of Barber's World War II stint in the U.S. Army Air Force, most of which he spent in Fort Worth composing music of a suitably patriotic and optimistic cast for wartime performance. The symphony was completed in 1944 and received its premieres in Boston and New York with Serge Koussevitzky conducting the Boston Symphony Orchestra. Barber revised the score in 1947, and later made a recording of it, but he remained dissatisfied with the work—as, by and large, did its audiences. In 1971, Barber withdrew the score, destroying the manuscript and asking his publisher, G. Schirmer, to see that the performance materials were likewise destroyed. One of Schirmer's European associates failed to carry out the instruction and thus the work survived unbeknownst to the composer, who died in 1981.

Quite recently, conductor Andrew Schenck obtained permission from the Barber estate to record the symphony, and Fine and Stradivari jumped at the opportunity. The issue of whether the estate will permit future public performances is unresolved. Fine, who describes the symphony as "a patriotic gesture comparable to Shostakovich's *Leningrad* Symphony," says his label will make additional Barber recordings in the near future, of the opera *The Lovers* and the choral work *Prayers of Kierkegaard*.

In other news, the piano duo of David Bradshaw and Cosmo Buono has been tapped by Connoisseur Society to record the complete four-hand and two-piano works of Franz Liszt—the first time an integral recording of this repertory has been attempted, and the largest recording project in the history of duo piano playing. Bradshaw and Buono already have two releases to their credit on Connoisseur Society, one devoted to opera paraphrases of Liszt, the other to works by Debussy and Ravel. The upcoming Liszt project is expected to span ten years.

Meanwhile, another partnership that has spanned a decade—that of BMG Classics (RCA) and Erato—will be terminated at the end of the year because of divergent interests. But the French label continues to produce winning releases. More on that next month. *Ted Libbey*

It's Zouk to Me

Joe Blum's article in the November 1988 issue of this mag was interesting and informative, but I can't help believing this world-pop fad is getting silly. Blame the Ugly American guilt complex, but given high ticket prices and cosmopolitan condescension, there's something dilettantishly nose-in-the-air about the context of appreciation, now more noticeable than the music itself.

This is, let's remember, a cyclical event: We had calypso and Astrud Gilberto at the turn of the '60s, Ravi Shankar at the turn of the '70s, reggae (via punk) and salsa (via disco) at the turn of the '80s. Today we've got soukous, mbaqanga, rai, and whatnot as supposed escapes from what *Newsweek* calls "the paint-by-numbers predictability of most hit records," but said predictability is a lazy, jaded myth: Madonna and Poison have as much life and surprise in them as anyone presented by Shanachie, Elektra/Nonesuch, or Earthworks/Virgin in 1988.

I've heard ten or twenty '88 American dance LPs funnier, wilder, and sexier than *Hurricane Zouk*, and most Western fans of Ofra Haza's *Shaday* would blanch at the new Olivia Newton-John set, which succeeds on the same ingratiatingly schlock-ridden level. I'd be wrong to guess the effect this exotica has on Algerians, black South Africans, or Yemenites, but for this college-educated Midwestern white guy, there's something missing (loathing, maybe, or pronounced lust). Most of the music has words, but not words I understand; I'll never get the full impact of Francky Vincent's allegedly pornographic raps. So my favorite recent globalism is instrumental (Black Uhuru dub) or sung in English (*Shaday*, Shinehead).

To me, Kassav' sounds tepid, João Gilberto schmaltzy, Rubén Blades pompous, David Rudder pedestrian, Ziggy Marley parched. Theoretically, I appreciate the boundless possibility of this glut; already, I like the everything-up-for-grabs subjectivity it makes inevitable in "rock" criticism. And when the mailman brings a new zouk record, I'm more likely to spin it than a new metal one. Problem is, the novelty still wears off, fast.

Though world rhythms may well be pop's "future" (planet replaces nations, just like nation previously replaced regions), that makes them only "important," not "good." And history often confounds wagers on future heavens, and rock 'n' roll has never been about submitting to the inevitable anyway. In the end, I'm convinced that most eager cultural-relativist prognosticators care less about rhythms than about some vague agenda: We are the world, it's a small world after all, we've got the whole world in our hands. Swell ideas. So how come the only American city where global pop has made real headway is New York, the one place whose population acts as if the rest of the country doesn't exist? *Chuck Eddy*

KERN and HAMMERSTEIN: Show Boat.

① *Von Stade, Hadley, Stratas, Hubbard, various artists; Ambrosian Chorus, London Sinfonietta, McGlinn. John Fraser, prod. Angel EMI CDS 49108 (D, 3).*

⊙ (3). ⊞ (3).

Angel EMI's new recording of Jerome Kern's *Show Boat*, featuring Frederica von Stade, Jerry Hadley, and Teresa Stratas, is a direct descendant of Leonard Bernstein's star-studded 1985 recording of *West Side Story* for Deutsche Grammophon. That recording, which sold by the truckload, convinced other labels to start cranking out their own versions of classic Broadway musicals as sung by opera stars—a practice which, as the DG *West*

bers and recorded them in an hour-long appendix that also contains new material subsequently inserted by Kern and Hammerstein into the 1936 film version and 1946 Broadway revival of *Show Boat*.

Unfortunately, McGlinn has chosen to disregard the fact that the material deleted during *Show Boat* tryouts was cut not by Florenz Ziegfeld, the producer, but by Kern and Hammerstein, who felt that the work had to be shortened in order to hold an audience. By opening up their cuts, McGlinn has produced a version of *Show Boat* with a musical running time of well over two and a half hours. Although the Kern and Hammerstein estates have allowed this version to be recorded, they ap-

proved controversial with some of the artists EMI had engaged to make the recording, including the all-black chorus that sang in the recent Glyndebourne production of *Porgy and Bess*; together with them, solo baritone Willard White withdrew from the recording when McGlinn refused to delete the word "nigger" from Hammerstein's libretto. Their sensitivity is understandable, but it would be no more appropriate to cut the word "nigger" from the libretto of *Show Boat* than to cut it out of *Huckleberry Finn*. "'Nigger' is a hateful word," McGlinn admits, "but it's there for shock value, to stun an audience and make them think about what conditions were like in those

NEW COURSE CHARTED FOR SHOWBOAT



From left to right:
Frederica von Stade,
Bruce Hubbard, and
Teresa Stratas

Side Story proved, frequently makes more sense on paper than in the studio.

That this recording of *Show Boat* is more than just another glossy celebrity showcase is due in large part to the efforts of John McGlinn. McGlinn served last year as conductor for two albums of songs and overtures by George Gershwin. EMI subsequently engaged him to reconstruct and record authentic versions of Broadway musicals, beginning with *Show Boat*. A smart move, that. McGlinn is deadly serious about musical comedy, and the real star of this superlative recording is the performing edition of *Show Boat* that he has painstakingly assembled.

"The aim of this recording," McGlinn explains in a detailed essay accompanying the libretto, "is to present, to the fullest extent possible, all the surviving music written by Jerome Kern with Oscar Hammerstein 2nd for *Show Boat*. This means not only recording the complete score as it opened on Broadway in 1927, but also reinstating those sections of the score deleted during the tryout period on the road." In addition, McGlinn has collated all surviving variants of the original num-

bers and recorded them in an hour-long appendix that also contains new material subsequently inserted by Kern and Hammerstein into the 1936 film version and 1946 Broadway revival of *Show Boat*. Unfortunately, McGlinn has chosen to disregard the fact that the material deleted during *Show Boat* tryouts was cut not by Florenz Ziegfeld, the producer, but by Kern and Hammerstein, who felt that the work had to be shortened in order to hold an audience. By opening up their cuts, McGlinn has produced a version of *Show Boat* with a musical running time of well over two and a half hours. Although the Kern and Hammerstein estates have allowed this version to be recorded, they ap-

parently do not intend to allow it to be performed in public. Nor should they. To perform McGlinn's version instead of the one heard at the work's Broadway premiere would be like performing, say, the original four-act *Billy Budd* instead of Benjamin Britten's later, definitive two-act version. In justice to McGlinn, it should be noted that two of the "lost" numbers—the choral *scena* "Mis'ry's Comin' Around" and the original overture—are of the highest musical quality. Moreover, McGlinn's editing involved not merely the opening of composer-sanctioned cuts but the restoration of Robert Russell Bennett's original orchestrations. Bennett's 1927 instrumentation, with its prominent parts for banjo and tuba, gives *Show Boat* a distinctive period flavor that was lost in his 1946 rescoring for a more "modern" pit band, and one hopes that future productions of *Show Boat* will use the original orchestral parts.

The authenticity of this recording extends to the original, uncensored libretto, a copy of which was given to musical-comedy scholar Miles Kreuger by Hammerstein shortly before the librettist's death in

days." So it does—and so it should.

What about the performance? In a word, it's fabulous. John McGlinn is not a great conductor, but he is a highly competent one, and he has brought together the cream of London's musical crop for this recording. The London Sinfonietta, which has already recorded to brilliant effect the music of Gershwin, Kurt Weill, and Paul Whiteman, is no less impressive here, and while the English accents of the members of the Ambrosian Chorus are noticeable, their singing is in every other way highly satisfactory.

For once, the use of opera singers in a musical comedy recording poses no problems. Indeed, it seems altogether likely that Kern, whose musical style was rooted in European operetta, would have been delighted by Frederica von Stade's warmhearted portrayal of Magnolia Hawks. As usual, Von Stade's diction is fuzzy, but her singing is consistently beautiful and deeply affecting. (Is there a more *sincere* singer than Von Stade? Dame Janet Baker is the only other artist currently performing who comes to mind.) Jerry Hadley, by contrast, enunciates elegantly, and he

brings off the role of Gaylord Ravenal with considerable flair. If Hadley ever decides to move over to Broadway, he will doubtless be welcomed with open arms.

The matchless Teresa Stratas is every bit as effective as Julie LaVerne as she was on the two Kurt Weill albums she recorded for Nonesuch a few years back. Stratas sings "Bill" and "Can't Help Lovin' Dat Man" with the same high seriousness and intelligence that she once brought to *Lulu* and *La traviata*. Bruce Hubbard, who stepped in at the last minute to play Joe, sings "Ol' Man River" with firm, rich tone and without a trace of hamminess. All of the smaller parts are more than respectably cast. Two performers deserve special mention: Nancy Kulp, Mr. Drysdale's secretary in *The Beverly Hillbillies*, is Parthy Ann Hawks, Magnolia's mother, and Lillian Gish is heard in a small but crucial speaking part at the very end of the work.

Whether you should invest in this three-CD set probably depends on how interested you are in musical comedy as a theatrical genre. The historical significance of *Show Boat* is, of course, undeniable. In it, Kern and Hammerstein brought an unprecedented degree of dramatic intensity to the Broadway musical stage. (Miscegenation and alcoholism were not exactly the stuff of your typical P. G. Wodehouse libretto, of which Kern set a dozen in the decade prior to *Show Boat*.) This was the work that opened the door to *Porgy and Bess*, to Rodgers and Hart, to Bernstein and Sondheim, and it will retain a permanent place in the annals of musical comedy for that reason alone.

But how has *Show Boat* held up as a work of musical theater? Surprisingly well, all things considered. The book, which was adapted by Hammerstein from the best-selling novel by Edna Ferber, a long-forgotten member of the Algonquin Round Table, is by now a quaint period piece. Kern's music and Hammerstein's lyrics, on the other hand, remain fresh and vital to this day. Though the work is no *Porgy and Bess*, it is full of marvelous tunes, excellent choral writing, and utterly engaging period orchestrations. *Show Boat*, in short, is as good as traditional musical comedy gets—which is very good indeed.

In any case, this is not merely a big-budget recording but also a scholarly edition of a key work in the history of American music, and McGlinn has carried off his duties in both areas with exceptional

skill and aplomb. Suffice it to say that EMI has backed him up with a first-rate production by John Fraser and a lengthy libretto booklet containing fascinating essays by McGlinn and Miles Kreuger. Suffice it also to say that EMI and McGlinn will be back. Their next project is Cole Porter's *Anything Goes*. And after that? Nobody is saying, but it's easy to think of other shows that deserve this treatment—starting with Leonard Bernstein's *On the Town*. Playing time: 3:41:31.

Terry Teachout

BEETHOVEN: Sonatas for Piano: No. 13, in E flat, Op. 27, No. 1 ("Quasi una fantasia"); No. 14, in C sharp minor, Op. 27, No. 2 ("Moonlight"); No. 23, in F minor, Op. 57 ("Appassionata").

Watts. Marc Aubort and Joanna Nickrenz, prods. Angel EMI CDC 49264 (D). □ □ □

Like so many young American pianists who initially knock their audiences cold with flashy pyrotechnics, André Watts has turned more and more away from the Lisztian roudades and cadenzas that brought him sensational early celebrity. On this recording he plays very solid Beethoven indeed, and an occasional burst of Lisztian fire merely enhances the sub-

stance of his musicianship.

Beethoven gave both the sonatas of Opus 27 the subtitle "almost a fantasia," and that applies especially to No. 1. Its seven sections, played without pause, have sharply contrasting tempos that create problems of cohesion, but the piece gives Watts no trouble here, and the final Allegro vivace (contrapuntal after the manner of a Bach two-part invention) comes vivaciously alive. The *Appassionata*, as you would expect, gives Watts the chance to show how Liszt himself might have played it. He makes the most of the opportunity, but remains unusually faithful to the score—as he does generally in his playing. He does the thoroughly hackneyed *Moonlight* Sonata the favor of not trying to approach it from some novel perspective; he merely plays it as the score shows Beethoven wanted it. A curmudgeon might quibble over a few wisps of trivia—a couple of slow, unilinear passages deliberately but inexplicably veiled by the pedal (with no call for it in the score); a "traditional" but unindicated change of tempo in the *Appassionata*; an occasional immature tendency to rush—but they do little to diminish the pleasure one can derive from these admirable performances. Playing time: 59:03.

Paul Moor



André Watts: very solid Beethoven, with an occasional burst of Lisztian fire

BOLCOM: Symphony No. 4*;
Session I.

① *Morris**; *St. Louis Symphony Orchestra, Slatkin. Elizabeth Ostrow, prod. New World NW 356-2 (D).* ⊙

BOLCOM: Twelve New Etudes.

WOLPE: Battle Piece.

① *Hamelin. Elizabeth Ostrow, prod. New World NW 354-2 (D).*

Unless they sell out or go off and shoot somebody, American composers rarely make the front pages more than once a year, usually on the day when the Pulitzer Prizes are announced. William Bolcom had his fifteen minutes of fame last spring when his *Twelve New Etudes* won the 1988 Pulitzer for music. By chance, the first recording of *Twelve New Etudes* was in the stores a few days later. The pianist is Marc-André Hamelin, a young Canadian who won the Carnegie Hall International American Music Competition for Pianists in 1985.

One of the prizes Hamelin captured was funding for this recording. He makes the most of it, romping through Bolcom's fiendishly tricky etudes and Stefan Wolpe's equally demanding *Battle Piece* with impressive technical command and sensitivity. These qualities are for the most part wasted on *Battle Piece*, an ugly, monotonous composition that, like most of Wolpe's work, sounds suspiciously like a caricature of all the bad things to which composers like Philip Glass and John Adams have made a career out of overreacting.

Fortunately, Bolcom is neither a hermetic modernist nor a simpleminded Minimalist, and his latest compositions constitute a welcome new attempt to develop what Bolcom calls "a musical speech that is at once coherent and comprehensible and in constant expansion." Bolcom's *Twelve New Etudes* achieves this goal on a modest scale. Beautifully laid out for the keyboard, these witty pieces, which bear titles like "Scène d'opéra" and "Butterflies, Hummingbirds," are more exercises in compositional style than in sheer mechanical dexterity. Bolcom originally intended the etudes for the late Paul Jacobs, but it is hard to imagine anyone else playing them with Hamelin's flair.

New World Records has also brought out an equally accomplished performance of a far more ambitious work, Bolcom's Symphony No. 4, composed in 1986 for mezzo-soprano Joan Morris, conductor Leonard Slatkin, and the St. Louis Symphony. The symphony is in two movements, the first an instrumental scherzo called "Soundscape" and the second a lengthy setting of Theodore Roethke's poem "The Rose." "Soundscape," a cunningly paced succession of large, unforced instrumental gestures, serves as prelude to a richly Romantic vocal movement designed on a Mahlerian scale and scored

with comparable delicacy (Shostakovich also comes to mind from time to time).

To be sure, Roethke's words frequently resist musical setting, even by a composer as sensitive to verbal values as Bolcom. In one section of the second movement, the composer even resorts to unpitched declamation—a "solution" that merely draws attention to the resolutely unmusical lines the singer is called upon to speak. Still, Bolcom's Fourth Symphony sounds for the most part like a flawed but major statement by a composer who is wonderfully unafraid to please, and repeated hearings suggest that the symphony has real staying power. The filler is a recording of *Session I*, an instrumental nonet composed in 1965 for Luciano Berio's Domäne Musical ensemble; the clever but ultimately arid avant-garde techniques used in it demonstrate how far Bolcom has come as a composer in the last two decades.

Joan Morris, usually heard in recitals of American popular song with Bolcom at the piano, here proves herself able to sustain a far more substantial musical role with absolute assurance. It's time for her to branch out into more ventures of this kind. *Pierrot lunaire* in English would do for a start, but a recording of Bolcom's *Songs of Innocence and Experience* would be just as welcome, and New World ought to start scraping up the money to produce one. Judging by this recording, St. Louis is the place to make it. Under Slatkin, the St. Louis Symphony has become a top-drawer ensemble that plays modern music as well as any orchestra in the country, and Slatkin and his players give Bolcom's Fourth the deluxe treatment.

These two new works, together with the equally exciting music of composers like Ellen Taaffe Zwilich and Libby Larsen, suggest that American music is finally about to emerge from a dismally long bad patch. If Bolcom and his contemporaries can keep it up, the Minimalists had better run for cover. Playing times: 47:27 (356-2); 60:51 (354-2). *Terry Teachout*

DEBUSSY: Préludes (Books 1 and 2).

① *Gieseking. Geraint Jones and Walter Legge, prods. Angel EMI CDH 61004 (A).*

These interpretations stand high on that rarefied list of recordings one can legitimately and accurately call unique. Although he was German, Walter Gieseking (1895–1956) rarely missed an opportunity to remind people of his French birthplace—Lyon—and when it came to playing Debussy and Ravel, he had little serious contemporaneous competition. For one thing, Gieseking rejoiced in a transcendental technique, and although he never brandished it, it stood him in indispensable stead in some of the bravura pieces where Debussy's debt to Liszt manifests itself.

In homage to Chopin, Debussy did call the contents of these two volumes *Préludes*, but he gave all but one of them programmatic titles. Gieseking treats them like miniature tone poems for piano, and time after time he turns them into miraculous little revelations. As Pierre Boulez would do later with the orchestral works, Gieseking proves that the more faithfully one adheres to Debussy's richly detailed printed score, with no pseudo-Impressionistic horsing around, the better one realizes the music's full measure of genius.

In this music, the pianist set a standard that no one since has matched. He recorded the first dozen *Préludes* in London in 1953 and the second group in 1954, but as rejuvenated for CD they sound far more recent. In Angel EMI's "Great Recordings of the Century" series you also get them at a bargain price, but with a woefully inadequate leaflet that tells nothing about the individual pieces except their titles—and in French only. Even so, the CD release of these performances amounts to a public service to music. Playing time: 69:45. *Paul Moor*

DVOŘÁK: Symphony No. 9, in E minor, Op. 95 ("From the New World"); Carnival, Op. 92.

① *Amsterdam Concertgebouw Orchestra, Chailly. Andrew Cornall, prod. London 421 016-2 (D).* ⊙

TCHAIKOVSKY: Manfred, Op. 58.

① *Amsterdam Concertgebouw Orchestra, Chailly. Paul Myers, prod. London 421 441-2 (D).* ⊙

These are the third and fourth releases by the Concertgebouw Orchestra under the direction of its newly appointed chief conductor, Riccardo Chailly, to appear on the London label. The first two, recorded in August 1986, were a coupling of Franck's Symphony in D minor and *Symphonic Variations*, with pianist Jorge Bolet (417 487-2), and a traversal of Mussorgsky's *Pictures at an Exhibition*, with Ravel's *Boléro* and two short pieces of Debussy as the fill-

FORMAT KEY

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|---|--------------|---|---------------|
| Ⓛ | LP | Ⓜ | Videocassette |
| Ⓢ | Cassette | Ⓜ | Videodisc |
| Ⓢ | Compact Disc | | |

RECORDING INFORMATION

(A) Analog original (D) Digital original

Large symbol at left margin indicates reviewed format. Small symbols following catalog number of reviewed format indicate other available formats (if any). Catalog numbers of formats other than the reviewed format are printed only if their basic numbers differ substantially from that of the reviewed format.

Arabic numeral in parentheses indicates number of items in multi-item set.

er (417 611-2). The Franck disc offered an expansive reading of the symphony, but the variations received one of their most boring recorded performances, with Bolet in a particularly pedantic frame of mind. The Mussorgsky and Ravel showpieces were given somewhat staid readings (with some fine individual touches in *Pictures*), and the reproduction was poorly defined and blurred in the bass—a far remove from the sonic spectacle one would expect.

The two new recordings are hardly major additions to the CD catalog. Chailly's account of Dvořák's *Symphony From the New World* is easygoing and devoid of excitement, even in the finale; the *Carnival Overture* fares better, but Chailly's is uninspired Dvořák, in spite of the orchestra's fine playing. *Manfred*, which contains some of Tchaikovsky's most vivid ideas, is treated to a performance that is prosaic, to say the least. Those familiar with Toscanini's blazing interpretation will barely recognize the piece, through which Chailly ambles placidly and unimaginatively. Even the "bacchanale" of the finale is serenely stated.

The engineering is best on the *Manfred* recording, although the bass is rather undefined and the strings sound less than full. The Dvořák is particularly disappointing, with thin strings, horns that are

too distant, muddy bass, brass lacking in bite, and little bloom to the sound. London's early-1960s stereo recordings of Mahler and Tchaikovsky with the Concertgebouw sound much better than these efforts. Playing times: 55:13 (421 016-2); 55:37 (421 441-2). *Robert E. Benson*

HINDEMITH: Sonatas for Viola (4); Sonatas for Viola and Piano (3).

● *Kashkashian, Levin. Manfred Eicher, prod. ECM 833309-2 (D, 2).* ○ (3). □ (3).

Sonatas for Viola: Op. 11, No. 5; Op. 25, No. 1; Op. 31, No. 4; Sonata (1937). Sonatas for Viola and Piano: in F, Op. 11, No. 4; Op. 25, No. 4; in C (1939).

Paul Hindemith was, among other things, a sufficiently distinguished violist to have played the world premiere of William Walton's *Viola Concerto* in 1929. "His technique was marvelous," Sir William later recalled, "but he was rough—no nonsense about it. He just stood up and played."

Between 1919 and 1939, Hindemith composed a lengthy series of works for viola, including four unaccompanied sonatas and three sonatas with piano, that forms the core of the instrument's modern repertory. Violist Kim Kashkashian and pianist Robert Levin have now recorded

these works for ECM, a jazz label best known for recordings by Keith Jarrett and Gary Burton. Together, these seven sonatas—two of which are still unpublished—eloquently illustrate the development of Hindemith's musical language. They also give the lie to the popular image of Hindemith as a dry, compulsive craftsman.

Violists rarely have the opportunity to undertake this kind of large-scale recording project. Kashkashian, a handsome, lyrical performer, makes the most of it. Her richly assured playing could hardly be bettered. A new recording of *Der Schwanendreher* is overdue, and Kashkashian is clearly the woman to undertake it. Levin's playing is highly competent but somewhat monochromatic.

This set, by the way, serves as a useful reminder that Hindemith recorded extensively as a violist during the 1930s. RCA Victor could put together a very nice Compact Disc containing the composer's own recordings of the 1939 viola sonata, *Der Schwanendreher*, and the 1937 *Trauermusik*, with the recording of the four-hand 1938 Piano Sonata made by Hindemith and Jesús María Sanroma thrown in as a *bonne bouche*. All of these performances have been out of print for decades. Playing time: 127:50.

Terry Teachout

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LULLY: Atys.

● *De Mey, Laurens, Mellon, Gardeil, various artists; Les Arts Florissants, Christie, Michel Bernard, prod. Harmonia Mundi France HMC 901257/59 (D, 3).* ○ (3). □ (3). (Distributed by Harmonia Mundi, U.S.A.)

This extravagant production commemorated the tercentenary of Jean-Baptiste Lully's death in 1687. To make it possible, two important French opera companies—in Paris and Montpellier—joined forces with the Teatro Comunale in the city of Florence, where the composer (who came into the world as Giovanni Battista Lully) was born in 1632. Lully probably got his first French gig from the Duc de Guise, then joined Mme. de Montpensier's string band but got fired because of some "scurrilous" verses and music he composed. In 1652, Lully joined the violin section of Louis XIV's court band, where his talent for brazen, merciless intrigue won him a meteoric rise and enabled him to develop into the most important French court and operatic musician of his century.

Just imagine a court where Molière wrote plays and Lully provided them with incidental scores. . . . Molière had nothing to do with *Atys*, though: Philippe Quinault, Lully's librettist for the last 15 years of his life, provided the text. Instead of the customary commentary, Harmonia Mundi's generous and handsome text booklet provides five gossipy contemporaneous

letters that sketch the work's genesis. The unidentified writer noted at that time: "M. Quinault has prepared the outlines of five great subjects suitable to the tragedy; he has taken them to the King for him to choose one of them. Then he gave the outline to Lully, and Lully, seeing what it was about, set his imagination to work on devising divertissements, dances, and airs to be sung. . . . The entire drama will evolve in this way, in half-tints: no impressive showpieces for the singers, no big airs; but small *airs de cour* and recitatives, all with continuo; and only their alternation to give movement to the action. . . ."

Don't look here for sumptuous arias such as "Bois épais" from Lully's *Amadis de Gaul*. This recording nonetheless provides the most important presentation of Lully's music in many a year, or even decade. It also provides a particular triumph for the American who conducts it. Ever since he founded the ten-member Paris-based Baroque ensemble called Les Arts Florissants ("Les Arts Flo" to the in crowd), William Christie has brought together some of Europe's finest performers of French music of the 17th and 18th centuries. Harmonia Mundi has already issued a number of their impressive recordings, but for several reasons this one tops them all.

The strings—exclusively gut, certainly, and of course entirely without vibrato—sound a bit whiny in crescendos at first, but you soon get used to hearing all the instruments sound the way we assume they did in Lully's day. The woodwinds have a softness and mellowness of timbre that modern instruments cannot emulate. All four of the main singers stand out in their roles, as do several of the supporting cast; Gilles Ragon, for instance, who sings the role of Sleep, has a strikingly beautiful tenor voice, with unusual flexibility, and he executes impeccable ornamentations.

The plot (apparently from Ovid's *Fasti*) involves an amatory triangle, fatally complicated by the surreptitious illicit dalliance of gods and goddesses with mortals. Forget about realism in a libretto where exposition takes such lumbering forms as "However fortunate you may be, are you envious of him, you, whom today the fair bonds of marriage must unite with the King of Phrygia?" It all ends with unusual horror—Atys castrates himself—but Lully, who knew how to please his boss if he knew anything, reverts at the very end to some exceptionally jolly music, and the whole shebang winds up with thunder, lightning, and an earthquake. Throughout the work, in fact, at the drop of a chapeau Lully puts the action on momentary hold so that the orchestra and ballet can whip into a little incidental gavotte, ritournelle, or *symphonie*.

Quinault and Lully lead off with a

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scene-setting prologue, aimed directly at their employer, which leaves them both looking like sycophants, but with that out of the way the quality picks up. The fourth scene of Act III seems to me the work's high point, both theatrically and musically. While Atys sleeps, his dreams—good, bad, and ominously prophetic—people the stage, and bring the work vividly to life, even here with the visual element missing. For some reason, Jean-Marie Villegier, who staged the original, has Bernard Deletré play the river god Sangar for comedy, almost for farce, but that interjects the only comic relief in a story of otherwise unrelieved tragedy.

Lully's music itself contains numerous surprises. Already at the end of the prologue he startles us with a passage marked by four beats plus five, and during the course of the work he shuffles meters as he might a deck of cards. Little wonder that Louis himself had to defend his innovative protégé against his court's musical fuddies.

The thirty-three choristers (trained by Olivier Schneebelli) sound especially wonderful, and so do the acoustics of Studio 103 of the Maison de Radio France. Lovers of the French Baroque will probably have to wait a long time before anything remotely comparable to this gem comes along again. Playing time: 170:39.

Paul Moor

MACHOVER: VALIS.

● *Mason, Felty, Edwards, Azéma, King, various artists; Ciampolini, Stephenson, Machover. David Starobin, prod. Bridge BCD 9007 (D). © BCS 7007. (Distributed by Allegro Imports.)*

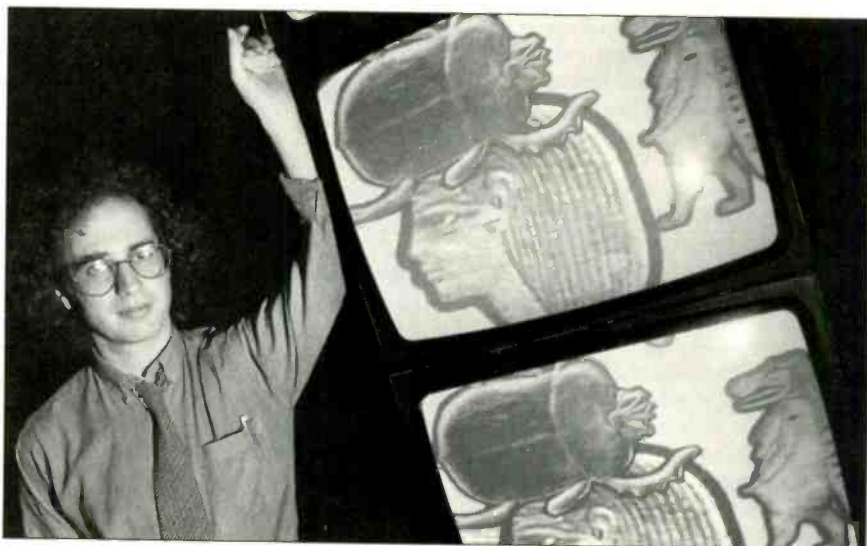
VALIS is an acronym that stands for Vast Active Living Intelligent System. It's the title of a 1981 science-fiction novel by the late Philip K. Dick, a semi-autobiographical novel supposedly based on Dick's own experience of such a system in 1974 (when a revelatory "pink light" was beamed into his brain by some unknown entity). And now it's also the title of a one-act opera by Tod Machover, an American composer who recently spent five years as director of musical research at Pierre Boulez's IRCAM (Institut de Recherche et de Coordination Acoustique/Musique) facility in Paris and who currently is on the faculty of the Massachusetts Institute of Technology. Machover's *VALIS* was commissioned by the video division of the Pompidou Center, of which IRCAM is a part, to celebrate the center's tenth anniversary. With accoutrements by French video artist Catherine Ikam and stage direction by Jean-Louis Martinelli, *VALIS* received its premiere performances in the Pompidou foyer during the first week of December 1987. Machover subsequently revised both the score and the libretto (originally

by Machover, Ikam, and the American actor/director Bill Raymond); the version presented here, which the composer says is "definitive and complete," was recorded at MIT's Experimental Media Facility in February 1988.

As befits its subject matter, and as one would expect of an opera born in the depths of IRCAM, *VALIS* relies heavily on computer technology for its sounds. Some of the material—mainly the narrations by Phil, the more lucid half of the main character's severely split personality—is prerecorded. The bulk of it is performed in "real time" by the cast members and an instrumental ensemble consisting only of percussionist Daniel Ciampolini and keyboardist Emma Stephenson. The voices are often shaded with echo effects or submitted to computerized transformations of timbre and pitch, and the accompanying duo is typically turned into an orchestra of "hyperinstruments"—richly colored and dramatically vibrant, with an emphasis on resonant metallic sonori-

later, in a final soliloquy, Phil says: "These days, I have a sense of the goodness of men. I don't know where this came from, but I feel it." Indeed, whether by extraterrestrial aliens or by mundane insanity, *Fat/Phil* has been changed. Although Machover's music graphically illustrates the alleged cause of the change, it serves primarily to document the change itself; in the long run, *VALIS*'s glittery sonorities seem like mere decorations on music that even unadorned would constitute a psychological opera of considerable power.

Like the "inter-connected dreams" that both trouble and pacify *Fat/Phil*, Machover's score is wildly eclectic. The opening monologues are set over pedal points embellished with explosions. The first extended episode of singing, an aria from an enigmatic psychiatrist called Dr. Stone, resembles the chanting of Tibetan monks. Toward the opera's end, when the dead Gloria appears to *Fat/Phil* in a sort of apothecosis, the music has an innocent country-western flavor. At the start of Part II,



Tod Machover with video images from the December 1987 Paris premiere of "VALIS"

ties—via IRCAM's enormous 4X computer and a battery of standard MIDI (musical instrumental digital interface) devices.

Machover's futuristic sound palette is impressive, and arguably essential to a work that depicts a close encounter with a superintelligent, superhuman life-form. As fantastic and fascinating as they are, however, the sounds are not the main focus of *VALIS*. Ultimately, the opera is concerned less with creatures from outer space than with the spiritual transformation that occurs within the inner space of the protagonist's disturbed consciousness. The opera's first words, spoken matter-of-factly by Phil, are: "Horselover Fat's nervous breakdown began the day he got the phone call from Gloria asking if he had any Nembutals." An hour and a quarter

when *Fat/Phil* meets the *VALIS*-inspired rock 'n' roll singers Eric and Linda Lamp-ton, the dialogue is propelled by obnoxious high-tech disco rhythms. And in Part I, after *Fat/Phil* babbles out an "exegesis" in computer-accelerated French, an off-stage Heldentenor sings the blessing ("Gesegnet sei dein Leiden, das Mitleids höchste Kraft. . .") from the finale of Wagner's *Parsifal*.

But as often as the music shifts gear, its dramatic movement stays relentlessly on course. The vocalizations grow increasingly lyrical—to the point of being utterly rhapsodic at the appearance of an angelic soprano named Sophia—as *Fat/Phil* moves deeper and deeper into his *VALIS* reverie. In terms of dissonance, rhythmic animation, and sonic razzle-dazzle, the accompaniment climaxes at the halfway

point—when the Lamptons cryptically explain the nature of VALIS—and then begins a steady descent as Fat/Phil's state of mind returns to a kind of enlightened normalcy.

At the conclusion of his extensive and informative liner-note essay, Machover writes that he has tried to create "a work which would speak its message on the first hearing" but which "would reveal more and more of itself on greater acquaintance." He's succeeded, I think. I've spent numerous hours with VALIS, savoring—with libretto in hand—its fine performances, its sonic richness, and its many musical and textual subtleties, hoping it won't be too long before I can see the opera in the touring production that is now being prepared. But my first VALIS experience happened while I was driving down the highway; even then, with my eyes on the road and with the music covered by the hum of automobile noise, its dramatic essence came through loud and clear. Playing time: 77:31. *James Wierzbicki*

NYMAN: The Man Who Mistook His Wife for a Hat.

Belcourt, Leonard, Westcott; ensemble, Nyman. David Cunningham and Michael Nyman, prods. CBS Masterworks MK 44669 (D). ☐

Oliver Sacks's story of "The Man Who Mistook His Wife for a Hat" is strange but true. The lead and titular anecdote in Sacks's 1985 collection of medical case histories, it documents a neurological disorder suffered by one Dr. P., a "musician of distinction" who late in life suddenly and inexplicably lost his ability to make sense of the visual stimuli he received. There was nothing "clinically" wrong with him, Sacks writes. Yet instead of a rose, Dr. P. saw only an object "about six inches in length," "a convoluted red form with a linear green attachment"; instead of a glove, he saw only "a continuous surface, infolded upon itself," that "appears to have five outpouchings..." After a visit to Sacks's office, Dr. P. reached not for his hat but for his wife's head.

As disturbed as his visual perceptions were, Dr. P.'s musical powers remained unimpaired. Indeed, after hearing him sing excerpts from Schumann's *Dichterliebe*, Sacks was moved to write: "Dr. P. was an aged but infinitely mellow Fischer-Dieskau, combining a perfect ear and voice with the most incisive musical intelligence." Sacks surmised that it was precisely this musical intelligence that enabled Dr. P. to manage from day to day. Aided by a dutiful wife who made his life as organized as possible, Dr. P. "musicalized" his world and sang his way through eating, bathing, dressing himself, and all the other mundane activities necessary for survival. "I think that music, for him, had

taken the place of image," Sacks concludes. "He had no body-image, he had body-music: this is why he could move and act as fluently as he did, but came to a confused stop if the 'inner music' stopped."

British composer Michael Nyman came across the story and immediately recognized its possibilities as the basis for a music-theater piece. He worked quickly; with Christopher Rawlence as librettist and Michael Morris as director, *The Man Who Mistook His Wife for a Hat* was premiered at London's Institute of Contemporary Arts in October 1986, less than one year after Sacks's book had been published. The one-act opera was presented a year later at the American Music Theater Festival in Philadelphia, and in July of 1988—simultaneous with the release of the recording—it was the opening production of the "Serious Fun!" series at New York City's Alice Tully Hall.

When all is sung and done, the story makes for a more worthwhile experience than does the opera. The libretto is quite faithful to Sacks's 15-page account, and when it veers from the source material it does so in the direction of expanding the character of Dr. P.'s wife (ill-defined by Sacks, she is changed by Rawlence into a flesh-and-blood woman whose mixed emotions include large portions of defensiveness and fear). The score is not without cleverness; the *Dichterliebe* song in the opera is "*Ich grolle nicht*," chosen, Nyman says, partly for the appropriateness of its text but largely for its musical resources ("unbroken sequences of repeated quavers are meat and drink to me," the composer explains). Other Schumann songs ("*Die*

Rose, die Lilie," "*Der Nussbaum*," "*Rätzel*," "*Hochländisches Wiegenlied*," "*Lied eines Schmiedes*") make their presence known in more subtle ways.

But Nyman's music—sort of Minimalism à la pop—gives an at least slightly banal flavor to even the cleverest references to Schumann and to the most poignant episodes of Rawlence's libretto. Whereas Sacks's patient evidently had no problems with speech, Nyman's stutters quite a bit; asked to identify platonic solids, for example, he tells the neurologist that one of them is "a te-te-te-te-tetrahedron." Whereas Sacks informs us only that Dr. P. did sing little ditties to himself, Nyman shows us exactly how they went; they're not included in the libretto, but the typical lyric is "bum-bitty-bum-bitty-bum-bum-bum-bum"—*ad nauseum*. Whereas Sacks gives us his conclusions about the case in sensitive but dry prose, Nyman—in his prologue and epilogue—turns them into syrupy melodrama. There are, to be sure, moments of genuine passion and compassion written into the parts of Mrs. P. and Dr. P., respectively, but not enough of them to outweigh the musical simplicity of the opera as a whole.

The recording is uneven. In many places, but not always, the seven-piece accompanying ensemble of strings, harp, and piano severely covers the baritone voice of Frederick Westcott's Dr. P., and through most of the performance, soprano Sarah Leonard seems to be struggling to maintain proper breath support. The best singing—consistently clear in tone, precise in diction—comes from tenor Émile Belcourt as the neurologist. The best music is to be heard midway through the op-

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era, when the unfortunate Dr. P., accom-
panied only by piano, sings Schumann's
"Ich grolle nicht." Playing time: 57:03.

James Wierzbicki

**PROKOFIEV: Symphony No. 5, in B flat,
Op. 100.**

Leningrad Philharmonic Orchestra,
● Jansons. Brian Couzens, prod. Chan-
dos CHAN 8576 (D). ○ ABRD 1271. □
ABTD 1271. (Distributed by Koch Import
Service.)

This should be cause for celebration: the
first Western-made recording in years of
the legendary Leningrad Philharmonic.
Unfortunately, the operative term here is
"legendary." It goes virtually without say-
ing that a Soviet orchestra on tour, in re-
pertoire it knows by heart, won't sound bad.
But this isn't the Leningrad ensemble that
the late Yevgeny Mravinsky raised to stel-
lar heights.

The Leningrad Philharmonic always
had somewhat sour winds and watery
horns, but it redeemed itself in the match-
less precision of its string playing. No
longer. To cite just one example, the violin
chatter after figure 81 in the finale now
comes out as a smear. Mravinsky would
have insisted on, and obtained, clean six-
teenth notes, however improbable the
tempo.

It is always a sop to a critic's vanity to
have a hunch confirmed. Yuri Temirka-
nov, named to succeed Mravinsky as the
Leningrad's music director, did just that
in a remarkably candid interview pub-
lished in *The New York Times* in early
June, 1988, when he described the current
sorry state of his new orchestra. Mra-
vinsky's age and infirmity, wedded to a
very limited repertoire, precluded strong
leadership for over a decade. Emigration
cost the group some 30 string players over
the same period. Say what you will about
the politics motivating Temirkanov's thin-
ly veiled dislike of Mravinsky, but 30
string chairs opening up in a relatively
short time spells disaster.

Perhaps the situation would have been
improved had Mariss Jansons, conducting
the orchestra on this occasion, proved a
more convincing interpreter. His heartless
rushing through the first and third move-
ments makes the symphony seem breath-
less and lacking in poetry, just as his sup-
pression of the heavy percussion robs the
climaxes of impact. This, combined with
the orchestra's decent but decidedly unvir-
tuous response, results in a sort of vague,
Mravinskian caricature, sadly underscor-
ing the passing of an era. No one can
blame Chandos for wanting to capture this
orchestra while it had the chance, and the
label's engineering team has done so in
handsome sound. But that's not reason
enough to acquire this performance. Play-
ing time: 38:14.

David Hurwitz

**VAUGHAN WILLIAMS: Symphony No. 5,
in D; The Lark Ascending*.**

David*, London Symphony Orchestra,
● Thomson. Brian Couzens, prod. Chan-
dos CHAN 8554 (D). ○ ABRD 1260. □
ABTD 1260. (Distributed by Koch Import
Service.)

**VAUGHAN WILLIAMS: Pastoral
Symphony*; Concerto in A for
Oboe and String Orchestra.**

Kenny*, Theodoret; London Sympho-
ny Orchestra, Thomson. Brian Cou-
zens, prod. Chandos CHAN 8594 (D). ○
ABRD 1289. □ ABTD 1289. (Distributed
by Koch Import Service.)

Ralph Vaughan Williams's Fifth Sympho-
ny is one of the greatest orchestral works
of this century, a work of uncompromising
nobility and beauty. If it is unknown to
you, I strongly suggest that you make its
acquaintance via this performance, in the
course of which nothing comes between
the music and the listener. I can think of
no higher praise than that. The account
flows inevitably along, thanks in no small
measure to the London Symphony Or-
chestra's gorgeous string playing, and to
Bryden Thomson's unobtrusive yet mas-
terly guidance. The coupling here, the vio-
lin romance *The Lark Ascending*, main-
tains the mood of the symphony and is
equally well done, and Chandos's record-
ing is well-nigh perfect.

The *Pastoral Symphony* was the weak-
est link in André Previn's Vaughan Wil-
liams cycle for RCA, and EMI botched the
transfer to CD of Sir Adrian Boult's
otherwise excellent version (coupled with
an even more severely sabotaged Fifth).
As a result, this newcomer fills a signifi-
cant gap, and it does so with complete suc-
cess. In the first movement, Thomson con-
veys the sense of awesome power, barely
restrained, better than either of his prede-
cessors. He never lets the predominantly
slow tempos bog the music down, and he
makes the scherzo's fast coda something
absolutely enchanting. David Theodore
plays the Oboe Concerto very well; it's a
finely written and underrated work, very
idiomatic for the instrument, and as a cou-
pling it again complements the mood of
the symphony.

It is unfortunate that most of this love-
ly music has yet to enter the international
repertory. But if the dreary conservatism
of major symphony orchestras in this
country deprives us of live exposure to
these extraordinary pieces, at least we can
experience them at home. This Chandos
cycle may well become the most recom-
mendable set available of Vaughan Wil-
liams's symphonies, assuming the remain-
der of it is as successful as these first
installments. As it stands now, Thomson
and the London Symphony bury the com-
petition. Playing times: 54:28 (8554);
56:07 (8594).

David Hurwitz



MINI-REVIEWS OF THE LATEST COMPACT DISCS

By Robert E. Benson, David Hurwitz, Paul Moor, Christopher Rothko, Terry Teachout, and James Wierzbicki

MUSSORGSKY, RAVEL WORKS: DALLAS SYMPHONY, MATA

These performances of Mussorgsky and Ravel orchestral works by Eduardo Mata and the Dallas Symphony Orchestra were among RCA's earliest and finest digital releases, and now they have been reissued at "budget price" on the company's Victrola line. Anyone wanting *Pictures at an Exhibition* need look no further than Mata's exciting, thoughtful, and individual interpretation. RCA has substituted first-rate versions of Ravel's *La Valse* and *Valses nobles et sentimentales* for the original coupling (a superb *Le Tombeau de Couperin*), making for more than an hour of music. In terms of both technical and artistic quality, Mata puts the highly touted Dutoit/Montreal performances of this music firmly in the shadow. And at RCA's price, this disc is worth owning even if it duplicates repertory already in your collection. Playing time: 64:44. (RCA 7729-2.) *D.H.*

BEETHOVEN NINTH SYMPHONY: DRESDEN STATE OPERA, BLOMSTEDT

Dresden and its Staatskapelle have a Beethoven's Ninth tradition matched by few cities and orchestras even in Germany or Austria. It goes back to the work's rather daring local premiere in 1838; even when Richard Wagner conducted the Ninth there on Palm Sunday eight years later, the orchestra's conservative bosses regarded it edgily as bad for the box office. On the 1927 centenary of Beethoven's death, it was Richard Strauss who conducted Dresden's traditional Palm Sunday Ninth. Ever since the Wagner performance, it has taken war to keep Dresdners from their annual celebration with this symphony.

The live performance recorded here celebrated the reopening of Dresden's gloriously restored Semper Oper on the fortieth anniversary of the city's barbarous obliteration shortly before the end of World War II. Palm Sunday 1985 fell on the last day of March, and you can hear that a few in the audience had colds, but the vibrancy and tension of the performance, with all participants rising nobly to a great occasion, more than make up for any intrusion of ambient sounds. Herbert Blomstedt takes a rigorously Classical approach, letting Beethoven speak for himself. The soloists (stalwarts of the Dresden State Opera) distinguish themselves, the orchestra lives up to its reputation as one

of the world's greatest, and the chorus (also from the opera) sounds especially thrilling. Playing time: 71:42. (Capriccio CDC 10060. Distributed by Delta Music, Inc.) *P.M.*

FAURÉ PIANO WORKS: JEAN-PHILIPPE COLLARD

Jean-Philippe Collard's marvelous account of Fauré's *Barcarolles* was reissued in 1987 by Angel EMI (CDC 47358), and now the label has repackaged the rest of the pianist's Fauré solo recordings in a midprice, two-CD set. This collection contains the complete Nocturnes; the *Thème et variations*, Op. 73; the *Préludes*, Op. 103; and the solo version of the Opus 19 *Ballade*. The performances are exquisite, the music subtle and passionate. Anyone who loves Fauré will want these recordings. Now it's time for EMI to issue a CD version of the wonderful Fauré recital that Frederica von Stade and Collard recorded a few years ago. Playing time: 138:10. (Angel EMI CDMB 69149.) *T.T.*

MARTINŮ CHAMBER WORKS: DARTINGTON ENSEMBLE

This is one of the most delightful chamber-music discs currently available. Martinů's stylistic range was simply astonishing. The Nonet (1959)—for flute, oboe, clarinet, horn, bassoon, violin, viola, cello, and double bass—taps a vein of folk-inspired poetry that is uniquely Czech, especially in the delicate slow movement. By contrast, the Trio in F for flute, cello, and piano (1944) bubbles with neoclassical energy. The *Kitchen Revue* (1927), the earliest work on the disc, is a jazz ballet scored for clarinet, bassoon, trumpet, violin, cello, and piano. It sounds like the work of an entirely different composer, with a memorable, wacky Charleston tour de force in the third movement. The Dartington Ensemble plays each work very well, and Hyperion's sound is excellent. A joy from start to finish. Playing time: 49:10. (Hyperion CDA 66084. Distributed by Harmonia Mundi, U.S.A.) *D.H.*

DVOŘÁK PIANO TRIOS, OPP. 65, 90: AX, KIM, MA

It is a pity to have such fine performances ruined by such a poor recording. Emanuel Ax, Young Uck Kim, and Yo-Yo Ma give deeply felt accounts of two of Dvořák's strongest chamber works, but unfortu-

nately we hear as much of their breathing and bowing as we do of their playing, thanks to CBS's exceedingly close recording. The sound is also poorly integrated, which makes the strings appear to wander about the stage, while the piano seems to be in a different acoustic altogether.

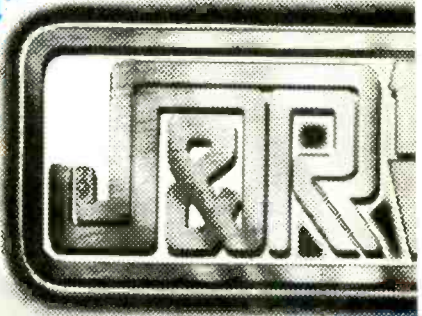
The Trio in F minor, Op. 65, receives an especially loving treatment from these players. The opening Allegro is passionate without becoming syrupy; the performers never shy away from the *molto espressivo* marking, yet they also allow the music to sigh. They capture the perky folk flavor of the Allegretto as well as the lyricism of the Adagio. The finale is intense and direct and dispatched with panache.

The *Dumky*, a more ambivalent work, is still the best loved of Dvořák's trios. The performers are somewhat less successful here, however, in penetrating the work's dark colors and communicating its mystery. Highly Romantic in their approach, these three musicians follow the *Dumky's* many mood swings from melancholy to exuberant, but their playing is less directed and their manner less animated than it is in Opus 65. Violinist Kim is at times somewhat hesitant, but this is more than compensated for by the forceful sensitivity of Ma's cello. Perhaps the LP would be the wiser choice here, where surface noise may actually be a benefit, masking distracting performer sounds and boosting enjoyment of this otherwise excellent release. Playing time: 72:27. (CBS Masterworks MK 44527.) *C.R.*

VERDI "LA TRAVIATA": NBC SYMPHONY, TOSCANINI

This two-CD set contains a complete performance of Verdi's *La traviata* culled from three rehearsals for Arturo Toscanini's 1946 NBC radio broadcasts of the opera with Licia Albanese, Jan Peerce, Robert Merrill, and the NBC Symphony. It bears out the long-held contention of Toscanini's colleagues that he was at his best in rehearsal: more relaxed, more assured, more meaningfully intense. The singing is also noticeably better than in the broadcast performance, especially in Albanese's "*Sempre libera*." The sound is tolerable, given the condition of the lacquer discs from which it derives. The labels and packaging make no mention of the NBC Symphony, presumably to escape the

(Continued on page 68)



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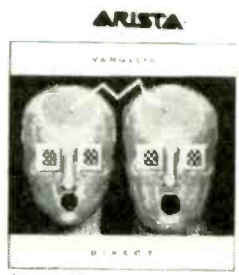
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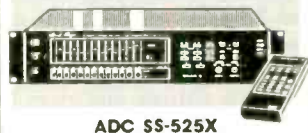


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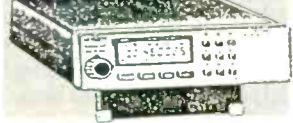


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(Continued from page 65)

wrath of RCA's corporate lawyers. More power to the folks at Music and Arts. The guys in suits at RCA would never have taken the trouble to put together a reissue like this—the inimitable sound of Toscanini hoarsely cheering his musicians on would have sent them running for cover. *Very* highly recommended. Playing time: 103:52. (Music and Arts Programs of America ATRA 271. Distributed by Allegro Imports.) T.T.

IBERT ORCHESTRAL WORKS: BIRMINGHAM, FRÉMAUX

The centerpiece of this disc is a frothy, spirited performance of Ibert's *Divertissement* by Louis Frémaux and the City of Birmingham Symphony Orchestra. Each of the work's six brief sections is banded, which makes it easy to find that pounding piano part that practically anybody can play—it's at the beginning of band 6, just before the exhilarating *galop* finale. The other four works are of varying interest. *Bacchanale* is immediately appealing—a vigorous, intense, wild short dance replete with stunning brass glissandos that well lives up to its title. The shortest work on the disc is the product of a historical commission: Charles Munch requested Ibert to write a symphony for the Boston Symphony Orchestra's 75th anniversary (1956); the composer did not live to complete it, but the first movement survives and is known as *Bostoniana*. Another short work is the *Louisville Concerto*, a concerto for orchestra that dates from 1953. *Symphonie marine* is Ibert's loving tribute to the sea, and at 14 minutes, it is within seconds of the longest work in this collection, the *Divertissement*.

This CD is perhaps not for the introspective, substance-craving listener, yet all of the music is delightful to hear. The orchestration throughout is brilliant, and the recordings, which date from the mid-1970s, are rich and reverberant, yet with sufficient clarity and impact. It is unfortunate that Ibert's best-known work, *Escales*, was not included; it easily could have been accommodated. Playing time: 55:19. (Angel EMI CDC 49261.) R.E.B.

BERIO "LABORINTUS II": ENSEMBLE MUSIQUE VIVANTE, BERIO

Luciano Berio's status as a leader of the postwar European avant-garde, more or less on the same level with Pierre Boulez, Luigi Nono, and Karlheinz Stockhausen, automatically makes this release interesting. Unfortunately, Harmonia Mundi has partially botched things by not showing its customary respect for a work's text—and in a work by Berio, of all people, for whom the vocal element figures so importantly.

The French national radio commissioned this work to commemorate the

700th anniversary of Dante Alighieri's birth, and for it Berio turned to the poetry of Edoardo Sanguineti, who serves here also as speaker. He has crystal-clear enunciation, but unless you are completely fluent in Italian, you will collide with a stone wall, for the leaflet fails to provide even a summary, let alone the complete text. Berio's own participation—as conductor of the Ensemble Musique Vivante, the Chorale Expérimentale, and three female vocal soloists—makes the performance itself definitive. Playing time: 33:01. (Harmonia Mundi France HMA 190764. Distributed by Harmonia Mundi, U.S.A.) P.M.

ELGAR "DREAM OF GERONTIUS": NEW PHILHARMONIA, BOULT

Sir Adrian Boult's 1976 recording of Elgar's *The Dream of Gerontius* has now been transferred to CD, with *The Music Makers*, Op. 69, thrown in for good measure. The New Philharmonia Orchestra, London Philharmonic Choir, and John Alldis Choir are in splendid form in *Gerontius*, and Boult conducts with just the right combination of dignity and intensity. Simon Rattle's new recording with the City of Birmingham Symphony Orchestra, on the same label, simply isn't in this exalted interpretive league.

The only fly in Boult's ointment is tenor Nicolai Gedda. Cardinal Newman's words were not designed for easy enunciation by a foreign singer, however conscientiously coached. Gedda gives it his best shot, but the results are sufficiently unidiomatic to detract from the overall effect. Perhaps Britten's fascinating recording with Sir Peter Pears as Gerontius will be transferred to CD by London at some point—not to mention the even more fascinating live excerpts conducted by Elgar himself and most recently reissued on black disc by Opal. Playing time: 104:57. (Angel EMI CDCB 47208.) T.T.

TELEMANN QUARTETS: QUATUOR RICERCAR

It seems like only yesterday that I was reviewing the initial installment of what promises to be the "first complete recording"—by the Paris-based Pariser Quartett, on Adda [December 1988]—of the 12 so-called "Parisian" Quartets that the prolific composer Georg Philipp Telemann wrote in 1730 and 1738. Now here's another CD treatment of some of the same works, by a Belgian early-music group, the Quatuor Ricercar. As was the case with the Pariser recording, the pieces are played on only four instruments—violin, flute, viola da gamba, and harpsichord—even though it is known for sure that Nos. 6–12 of the set (that is, the six that were actually composed in Paris) were premiered by an ensemble that consisted of those instruments plus a cello. Here, too, the bass

line seems diminished in both importance and effect by its confinement to the non-dynamic left hand of the keyboard player. Otherwise, these are fine performances, although not nearly so adventurous in phrasing or ornamentation as those contained in the Pariser album. Playing time: 66:25. (Ricercar RIC 043020. Distributed by Harmonia Mundi, U.S.A.) J.W.

RESPIGHI "ANCIENT AIRS AND DANCES": BOSTON, OZAWA

Despite their popularity and charm, Respighi's *Ancient Airs and Dances* have received remarkably few complete recordings since the late Antal Dorati's pioneering Mercury set (available on Mercury Golden Imports, a Philips midprice series). Now Seiji Ozawa's performance with the Boston Symphony has been reissued on Deutsche Grammophon's Galleria line. This account has the advantage of updated (analog) recording techniques, and Ozawa's interpretation leaves little to be desired. It's an interesting historical fact that Respighi's first set of these pieces (1917) predated *Pulcinella*. Stravinsky's great neoclassical pastiche, by two years. Both composers were pupils of Rimsky-Korsakov, and though it's not likely that Stravinsky was directly influenced by his Italian contemporary, there certainly was something in the air, some attraction to music of antiquity, during the first decades of this century. This delightful midprice disc makes an ideal introduction to this trend, one of the most appealing and approachable in modern classical music. Playing time: 51:25. (Deutsche Grammophon 419 868-2.) D.H.

ENGLISH ORGAN AND BRASS MUSIC: WILLS; CAMBRIDGE COOPERATIVE

Helios, son of Hyperion—literally as well as mythologically. Hyperion, that admirable small British firm, has now brought out its own low-price label, and this tasty helping of good, clean fun gets the new enterprise off to a promising start. Two of Elgar's *Pomp and Circumstance* Marches and the "Nimrod" section of the *Enigma Variations* are teamed with Walton's *Crown Imperial* coronation march and an excerpt from the *Henry V* film music, all in arrangements by organist Arthur Wills. Wills's *The Fenlands* suite is the coupling.

This recording features the Cambridge Cooperative Band, a brass ensemble of remarkably high quality, plus the mighty organ of Ely Cathedral. As a composer, Wills hardly measures up to Elgar and Walton, but at the organ console he comes into his own. Three works stand out here: the marches. The rest may not have a great deal of musical substance, but all of it does indeed radiate a joyful noise. Playing time: 47:20. (Helios CDH 88005. Distributed by Harmonia Mundi, U.S.A.) P.M.

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KEITH RICHARDS: Talk Is Cheap.

Keith Richards and Steve Jordan, prods. Virgin America 90973-1. ☐

In the course of his many interviews in support of this project, Rolling Stones guitarist (and rumored auteur of the group) Keith Richards has made it clear that this, his first "solo" effort, can be taken as a rejoinder to bandmate Mick Jagger's two attempts at same. Jagger, you see, has failed to live up to the rock tenets established by 20-plus years of Stones music-making: His records have strayed from basics and used synths and mechano-percussion effects, have preached an unhip upbeatism (*Effort No. 2*, anyway), and (one suspects this offends most) have used, in lieu of Richards's functional grunge guitar, such masters of the cheap thrill as the musically loquacious Jeff Beck. Richards has promised a set that is a little more to the point, and that's what he delivers.

True, the pervasive modesty of *Talk Is Cheap* may have as much to do with ability as with conscious effort, but the record does stick closer to the Stones mode than Jagger's have, giving credence to the view of Richards as main shaper of the group's musical persona. In fact, the songs (all co-written with drummer Steve Jordan) often sound like additions to the Rolling canon, still more not-unsatisfying-recyclings of successful moves: "Big Enough" revisits the riff from "Hot Stuff"; "Take It So Hard" features a "Start Me Up" guitar, the solo quoting "Tumbling Dice"; the bridge to "Whip It Up" harkens back to "Can't You Hear Me Knocking"; "Locked Away" is "Coming Down Again" reworked; "You Don't Move Me" is a composite I've yet to unravel.

But if Richards has delivered on his promise of treading in familiar territory, he also has given us a Stones-like record without a proper vocalist. There's no getting around it, folks: Even given the great rock tradition of expressive non-singers, Richards comes up short. Veering from hoarse whisper to straining near-tenor, his voice leaves a noticeable hole in the arrangements—though after a while, it does start to appeal to your sympathy for the underdog (c'mon, Keith, you can do it!). Fortunately, his musical method—to find a groove and kick it repeatedly, dis-

play his unpretentious but earmark guitar stylings clearly, use his supersession guests discreetly—makes for a decent entertainment. Mild praise, perhaps, but more would be hype, less would be untrue.

Richard C. Walls

DAVID LINDLEY AND EL RAYO-X: Very Greasy.

Linda Ronstadt, prod. Elektra 60768-1. ☐

Perhaps the best way to describe David Lindley is to say that he's rock 'n' roll's equivalent of a Keebler elf. He certainly looks the part: With bushy sideburns running down his neck and mounds of hair falling down his shoulders, the diminutive Lindley gives the appearance of someone who just fell out of a tree, having gotten lost in the woods(tock) 20 years ago. And

he certainly sounds like an elf, too: Between all the instruments he masterfully manipulates—if it's got strings, he can play it—and the almost for-dog's-ears-only high-pitched voice in which he sings, Lindley seems to have sprung right out of the pages of some pipes-of-pan songbook. Whatever he is, the solo albums he has been making since he stopped riding shotgun for Jackson Browne at the end of the '70s have featured some of the most delightfully wacky music made by anybody lately, elfin or otherwise. *Very Greasy*, the newest in Lindley's ongoing series of reggae-meets-Tex-Mex-meets-r&b roustabouts (like I said, wacky), is no exception.

To understand the Lindley process, one need go no further than the Bobby Freeman '50s classic "Do Ya Wanna Dance?," which Lindley and El Rayo-X,



SUNAR

his merry band of marauders, turn into a rum-soaked jalapeño pepper stuffed with cheesy organ, tasty timbales, and Telstar-like guitar mini-symphony. Twisting old tunes into weird new shapes is something Lindley is especially good at: If you thought Warren Zevon's "Werewolves of London" was funny before, you'll be devastated by Lindley's hysterical rendition, which includes heavy-breathe-along choruses and allusions to both Lon Chaney and Jack Nicholson. Not everything here is played strictly for fun, though. "Never Knew Her" is a haunting soul song with a knife-edged slide solo that searingly underscores the torment in the lyrics, and both "I Just Can't Work No Longer" and "Talk About You" show that Lindley is just as at home with straight r&b as he is playing a bouzouki.

Can eclecticism this cockeyed find a place in the tunnel-visioned music world of the late '80s? Don't ask me. I'm the one who believes in elves. *Billy Altman*

RICHARD THOMPSON: Amnesia.

● *Mitchell Froom, prod. Capitol CDP*
 48845. ○ □

CLIVE GREGSON AND

CHRISTINE COLLISTER: Home and Away.

● *Clive Gregson, prod. Flying Fish FF*
 473. □ (1304 W. Schubert, Chicago, Ill. 60614.)

CLIVE GREGSON AND

CHRISTINE COLLISTER: Mischief.

● *Clive Gregson, prod. Rhino R2 70842.*
 ○ □

His latest collection is called *Amnesia*, but Richard Thompson has forgotten nothing about writing clever songs and

playing eccentric guitar. His second collaboration with producer Mitchell Froom is in fact a memorable release, even if it is a touch slicker than the preceding *Daring Adventures*. Again poised for mainstream success, Thompson will probably continue to slip through the cracks of American radio, as he follows no formula but his own.

The package's fun photos of Thompson as both juggling jester and chainsaw-wielding guitar hero contradict the album's cynicism (in the same way that his droll stage patter belies a gloomy vision). Even the snappy toe-tappers ("Turning of the Tide," "Jerusalem on the Jukebox," "Yankee, Go Home") tell stories of personal, social, or political evil. Other tunes are more blatantly vicious ("Gypsy Love Songs," "Don't Tempt Me"), sullen ("Reckless Kind," "I Still Dream," "Waltzing's for Dreamers"), or hopeless ("Can't Win," "Pharaoh"). Throughout, Thompson's distinctive non-blues guitar bites harder than all the metal on MTV.

Meanwhile, Clive Gregson and Christine Collister, the guitarist/keyboardist and backup vocalist in Thompson's touring band, have been stepping out for some duo work. The 1988 domestic releases of *Home and Away* and *Mischief* bring Americans up to date on this team, who have had modest success in England for a few years. The 15 live acoustic tunes on *Home and Away* include gentle ballads penned by Gregson along with spirited covers ("Slow Down," "Mama Tried"). Primarily unadorned folk, the album is most interesting for a few new interpretations of numbers originally done by Gregson's earlier new-wave band, Any Trouble—especially "As Lovers Do," once fast and spunky, now stretched out with an Eastern moodiness.

Backed by a full band on *Mischief*, Gregson and Collister enter territory once explored by Richard and Linda Thompson, and they compare admirably without sounding unoriginal. Collister contributes a fine smokier-than-Christine McVie voice, but lead vocals are shared equally, and the perfect harmonies are the most compelling element of this couple. Gregson carries it all with proficient guitar, smooth production, and thoughtful lyrics (which, like Thompson's, are sorrowful, if



We three strings
 (from left to right):
 Richards, Lindley, Thompson

less cynical). Generally more mature than the simple pop of *Any Trouble*, most of these songs are well worth hearing (best: "This Tender Trap"), though some are a little lifeless (worst: "I Wonder What Went Wrong"). Two CD-only tracks—the jaunty "Lost at Sea" and the lyricless filler of "Farewell Note"—are culled from the British LP version. *Andrew Nash*

SAM PHILLIPS: The Indescribable Wow.

T Bone Burnett, prod. Virgin America
 © 90919-1. ☐

This is a smart woman who believes in something, knows what she wants, is unafraid to take major chances . . . and is not a candidate for anything. Well, perhaps she's a reform candidate for top of the pops in an era of safe, calculated singles. Entering music several years ago through her church as Leslie Phillips, she made two obscure records and then began to lose or break faith with the modern Christian music business. Certainly no one could have mistaken her for Amy Grant on 1987's spare and compelling *The Turning*, an unheralded folk-pop effort with fellow adventurer T Bone Burnett at the helm.

Moving from Word to Virgin, from Leslie to Sam, and from a "Christian context" to the world, Phillips has kept T Bone and crew, turned up the electricity and surface snap, and delivered *The Indescribable Wow*, one of the very best records of 1988. It's chock-full of dazzlingly arranged and executed pop songs redolent of the '60s—not just in instrumentation (comping harpsichord, electric sitar, organ of both the drone and the "Incense and Peppermints" varieties, even reverse tape), but in a willingness to experiment, to push farther, that just hasn't been heard much since those hybrid, halcyon days. Her attractive, flexible voice can project smoky intimacy on "Flame," an acoustic samba reminiscent of "And I Love Her," or echoed stridency on "Remorse," another Beatlesque track—out of "She's a Woman" by Ram—about a Brazilian matricide/mass murder . . . she reads the news today, oh boy! As these flattering resonances might indicate, Phillips is a deft lyricist, a sophisticated and resourceful melodist, and a daring, intuitive master of pop hooks and structure.

Most of all, the artfully conceived and deployed backing vocals (all hers) and the dense and rich playing of T Bone's team are focused entirely on the essential 2½-minute mission: the effective imprinting of Sam's songs on the listener. And they im-



TAYLOR KING

Phillips: Beatlesque pop with lyrics, melodies, and hooks of the first order

print like crazy. I count a minimum of five hits here (given adequate promotion and appropriate video support), including the cool acoustic kiss-off "Out of Time" as well as "What Do I Do," all gorgeous suffused longing girded by Van Dyke Parks's postmodern Shirelles string arrangement. Get *The Indescribable Wow* before it gets you. *Jeff Nesin*

RANDY NEWMAN: Land of Dreams.

Mark Knopfler, James Newton Howard, Tommy Lipuma, and Jeff Lynne, prods. Reprise 25773-1. ☐

On Randy Newman's first album of songs in nearly five years, the most interesting and surprising character he conjures up is none other than himself 40 years ago, or so it would seem. The first three tracks incorporate childhood memories both remembered and revised to create specifically observed scenes about moving to New Orleans during the Second World War ("Dixie Flyer"), moving back to Los Angeles ("New Orleans Wins the War"), and

enduring the first day of school ("Four Eyes"). The first two are undercut by the career-long obsession with the vagaries of race and class that have yielded some of Newman's most complicated work. A pained detail like "Drinkin' rye whiskey from a flask in the back seat/Tryin' to do like the Gentiles do" (from "Dixie Flyer") lights up the awkwardness and newfound strangeness that the now-grown-up narrator felt at the time and, judging by the wobbly tone of his voice, still feels today.

Most of the rest of the grab bag of material here rises or falls according to either the law of averages or Newman's ability to stay awake throughout the entire song. Of the three love songs that finish off Side 1, only "Bad News from Home," with its bitter repetition of "You said you love me but I know you lied," has anything more to say beyond the empty romanticism best left to a lesser songwriter. The assembled cast of Reagan-era jerks and dispossessed on Side 2 seems more impressive taken as a

(Continued on page 77)

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(Continued from page 73)

whole than track by track. When you listen closely, you hear Newman straining to understand rap culture ("Masterman and Baby J") and the bottomed-out ("Red Bandana"), barely bothering to inhabit the voices he has brought to life. "It's Money That Matters" is a coarse rewrite of "It's Money That I Love" from 1979's *Born Again* that misses the casual cruelty of its forbear. He works better with the in-your-face intolerance of "Roll with the Punches," even though it's sung by such a stock Newman character that you sense he could have written it, like the weakest tracks here, in his sleep.

It takes two of the most unsettling tunes Newman has ever written to remind you of the ugly perfection he's capable of. "Follow the Flag," with its blankly patriotic clichés, is all the scarier for the submissiveness in the singer's voice. Just who does he mean to be? An idealized average citizen? Oliver North? And what difference is there between the two? In "I Want You to Hurt Like I Do," the outrageous title phrase starts out being sung to the family that the narrator is leaving and ends up as a perverse kind of universal wisdom. The hushed gospel chords give the song a grace that its words have no claim upon; the singer caps the choruses with repetitions of "Honest I do" straight out of Sam Cooke's angelic "You Send Me." In anyone else's hands, the song would seem a joke, but Newman neither laughs at nor flinches from what he has summoned up.

Mark Moses

JAZZ

BOBBY WATSON QUARTET: Love Remains.

Bobby Watson, prod. Red NS 212 (123 212-1). (Distributed by Polygram Special Imports.)

BOBBY WATSON AND HORIZON: No Question About It.

Michael Cuscuna, prod. Blue Note B1 90262.

Love Remains is Kansas native Robert "Bobby" Watson's fourth record for the Italian label Red. *No Question About It*, the alto saxophonist's tenth and most recent album, is his first project for the domestic Blue Note—as well as the first major-label appearance of his new sextet, Horizon, which includes the still-teenaged trumpet sensation Roy Hargrove and also introduces Texan trombonist Frank Lacy. Both records contain finely tuned and balanced selections, all of which swing, each passage delivering a particular message. Indeed, these masterfully conceived sessions should establish the leader (and member of the 29th St. Saxophone Quartet) as one of the premier mainstream alto-

ists and composers of the day.

Watson travels in wonderful circles: The last time I caught him on the bandstand, he performed with guitarist Peter Leitch and bassist Cecil McBee. Surrounded by the personnel on these two releases, the already quite seasoned Watson is encouraged to develop even further. Pushing everyone is the ebullience of pian-



CAROL FRIEDMAN

Watson: playing with both drive and majesty

ist John Hicks and bassist Curtis Lundy, who play on both LPs. Marvin "Smitty" Smith completes the rhythm section on *Love Remains*, and with all his maturity at such a young age, he is certifiably one of the best drummers in the world. Four of the seven tracks on *No Question About It* feature Victor Lewis, an impressive drummer from his days with Woody Shaw in the late '70s right up to his recent outings with Art Farmer, Clifford Jordan, and Frank Morgan. The Blue Note set's other drummer, Kenny Washington, is no slouch either, having earned respect as jazz's youngest leading historian, not to mention having worked with Hicks and Lundy for five years backing Betty Carter.

Watson epitomizes lyricism, and throughout these albums his satiating, loping runs exhibit a keen musicality. On

(Continued on page 79)

I N S H O R T O R D E R

POP AND JAZZ MINI-REVIEWS

LUTHER VANDROSS: *Any Love*.

⊙ *Epic OE 44308.*

Luther Vandross is black pop's best male singer. Period. More original than Freddie Jackson. More consistent than Jeffrey Osborne. And on his sixth LP, Vandross approaches the progressive r&b aesthetic, pioneered by new-jack crooners Keith Sweat and Al B. Sure!, without pandering to a rent-a-rapper mentality. His voice is the sound of seduction: a creamy, sinuous tenor that strokes lightly at the senses until they open up. When Vandross begs for "Any Love" or for a lover to "Come Back," I can't imagine any woman resisting. And on the Major Harris standard "Love Won't Let Me Wait," Vandross still knows how to prolong the ecstasy; though not as intricate as his debut's "A House Is Not a Home," it will turn your blood to milk.

Havelock Nelson

STEVE EARLE: *Copperhead Road*.

⊙ *Uni 7. (Distributed by MCA.)*

... in which our hero grows a beard, lays down his Dukes, gets behind the board himself, and "finally" rocks out. That Steve Earle has doubts about this shows in the neatly schizoid sequencing: The A-side offers all the drawn-out, overblown stuff before the flip returns to the head-on approach of yore. For all its sleek new appearance, Side 1 is actually '70s-mired AOR that's—sorry, man—D.O.A. The trademark work on Side 2 at least benefits from the pumped-up sonic punch (only fix that drum sound next time, huh?). So how to keep recharging a great but potentially confining style? Damned if I know, Steve.

Wayne King

PEGGY LEE: *Peggy Sings the Blues*.

Musicmasters CIJD 60155F. (1710 Route 35, Ocean, N.J. 07712.)

Miracles can happen, and this recording, Peggy Lee's first in years, proves it. Six of the songs are indeed blues ("See See Rider," "Beale Street"), the other six bluesy standards ("Squeeze Me," "Baby Please Come Home"). The history books say that Lee is sixty-eight, but the cool, fresh-voiced singer heard on Billie Holiday's "Fine and Mellow" couldn't be a day over forty. Pianist Mike Renzi leads a marvelously supple backup quintet. Gene Lees provides superb liner notes. The singer's classic Capitol LPs of the '50s and '60s belong on CD, but until they get there, *Peggy Sings the Blues* will do very nicely.

Terry Teachout

ANTHONY DAVIS: *The Ghost Factory*.

⊙ *Gramavision 18-8807-1. (Distributed by Gaia/Polygram.)*

Pianist/composer Anthony Davis is a difficult artist to pigeonhole, and that's the way he likes it. Drawing on jazz and classical influences, Davis has in the past (with his small group, Episteme) devised pieces that have managed to be suggestive of both minimalism and Ellington, post-Ornette jazz avant-garde and Balinese gamelan music. The two sidelong pieces on *The Ghost Factory*, performed by the Kansas City Symphony Orchestra, reflect his ongoing interest in blurring the line between recent improvisational developments and composition: "Maps" leads us into and away from an interlude similar to the Art Ensemble of Chicago's percussion experiments, while the dramatic plateau of "Wayang No. 5" is a Cecil Taylor-ish piano passage. But Davis is more than just a mixer of borrowed innovations, and these new pieces, agilely shifting the textures of a large aggregation, are as stamped with his questing and somewhat melancholy conception as are his earlier solo-piano recordings.

Richard C. Walls

BLACK UHURU: *The Positive Dub*.

ROIR A 159. (611 Broadway, Suite 411, New York, N.Y. 10012.)

Unlike most dub stuff, this keeps its bare feet in the soil at all times. For starters, you get one of the planet's earthiest bass-and-drums duos, plus somehow (see Dub Syndicate, Ruts DC, Mute Beat) the sound of the cassette-only label ROIR always has a knack for sunbaking dub thick so that it won't float flimsily toward the twilight zone like the latest Augustus Pablo LP. But this is even creepier and more crazed than I'd have wagered. The best parts ("Dub Town" especially) are some pantheistic high mass, real ritualistic, with Gregorian chants done backwards, and bells. And even the worst parts echo a lot.

Chuck Eddy

BOB NEUWIRTH: *Back to the Front*.

⊙ *Gold Castle 171 015-1. (Distributed by Polygram.)*

Back in the mid-Sixties when Bob Dylan (Lucky Wilbury to all of you youngsters out there) actually meant something, Bob Neuwirth was his semi-legendary harmonica-bearer-cum-confidante, who had kicked around the folk scene quite a bit already. *Back to the Front* is Neu-

wirth's first record in 14 years, an all-acoustic all-star album brimming with ripe picking and overripe sentiment. From "Eye on the Road," a virtual Alpha Band reunion, all the way to "Akron," an autobiographical meditation from a guy who has been a lot of places in his life and times, the breathy, reaching vocals are honestly touching and the sensitive-tough-guy-who's-seen-too-much lyrics are a matter of taste. Effectively produced by Steve Soles, with help from notables David Mansfield, T Bone Burnett, Bernie Leadon, and designated harp player Mickey Raphael.

Jeff Nesin

DICKEY BETTS BAND: *Pattern Disruptive*.

⊙ *Epic FE 44289.*

Dickey Betts packs this album with hot guitar licks and hard-driving drums, but his gear-shifting arrangements lack the refined thoughtfulness that sparks his previous work. Muffled vocals mask clichéd lyrics behind the all-clout/no-style rock. A repetitive one-line chorus sabotages "The Blues Ain't Nothin'," and the acoustic charm of "Loverman" degenerates into the full-blast format. The meticulously sculpted instrumental "Duane's Tune" should receive the airplay allotted the pointless "Rock Bottom," the kind of disappointing AOR mulch that keeps FM radio entrenched in the "Golden Age" of the '60s and '70s.

Richard Price

DEFUNKT: *In America*.

Antilles/New Directions 90911-1. (Distributed by Island/Atlantic.)

Punkjazz sub-Contortions of yore, quarterbacked by Lester Bowie's blow-bro Joe, crunch up the fonk thang harder than you'd guess, softer than you'd hope. They're more overweight than muscular (and they drag too much, and the hammer-locked horn charts are too corny, and Joe's Jimi-rap bravado is numbskull stuff, and the Caucasians in the group should abandon the wet-look), but at least the bass-beefed butt-to-butt resuscitation ain't completely arty, and when the tempo picks up and Ronnie Drayton wanks his wah-wah, the mess kicks in. Only absolute stinkeroo is the title cut: willed "political" copout crapola ("We're all puppets in America"; speak for yerself, buster), with sampled speech-texts from past-and-present presidents in it. Wonder if they realize how fascist-worthy that JFK "Ask not ..." idea is. Probably not.

Chuck Eddy

(Continued from page 77)

Love Remains, he bebops you big time with the drive of "The Mystery of Ebop"; he scales new heights and attacks with confidence on the uptempo journeys of "Blues for Alto," "Ode for Aaron," and Lundy's "Sho Thang." Equally pleasing are *No Question's* high-powered title track and "Country Corn Flakes." Meanwhile, the title track from the previous record captures Watson and friends in a most sensitive mood—only to be outdone by the impeccable sextet arrangement and sweepingly majestic delivery of Billy Strayhorn's Ellingtonia, "Blood Count," back on *No Question*. I'm so used to hearing Hicks burn à la Bud Powell that, on first listening to these two tracks, I was caught by surprise—elated, to say the least. And Hicks is genuinely moving in his extended solos on "Dark Days (Against Apartheid)" (*Love*) and two songs written by Watson's wife, Pamela: "And Then Again" (*No Question*) and "The Love We Had Yesterday" (*Love*).

Watson has always had a terrific sense of harmonic structure. He also can be spontaneously adventurous. These albums show him accentuating both gifts intelligently and together offer us Watson's best work to date.
Jon W. Poses

FORMAT KEY

- ⊙ LP/EP
- Ⓜ Cassette
- Ⓛ Compact Disc
- Ⓜ Videocassette
- Ⓛ Videodisc

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MODERN JAZZ QUARTET: For Ellington.

Nesuhi Ertegun, prod. East-West
Ⓛ 90926-2. ⊙ Ⓜ (Distributed by Atlantic.)
The Modern Jazz Quartet's latest album is dedicated to Duke Ellington and largely devoted to his music. In fact, three of the tracks here are not only Ellington band classics but Ellington arrangements, more or less. Pianist John Lewis has taken three celebrated charts from the book of the 1940-42 Ellington band—"Jack the Bear," "Ko-Ko," "Sepia Panorama"—

and deftly rescored them for MJQ's piano-vibraharp-bass-drums lineup.

It's fascinating to hear the gaudy instrumental colors of Ellington's fabled gaggle of musical misfits slimmed down to this quartet's minimalist proportions. Bassist Percy Heath, despite moments of uncertain intonation, is a perfectly credible stand-in for Jimmy Blanton; Connie Kay's crisp timekeeping and Milt Jackson's fat-toned vibes are, as always, deeply satisfying. But it is Lewis who most closely recaptures the spirit of Ellington in his dry, witty piano solos and contrapuntal comping.

"It Don't Mean a Thing," "Prelude to a Kiss," and "Rockin' in Rhythm" are given more recognizably MJQ-like treatments, in which Ellington's familiar melodies are passed through the refracting prism of the Lewis-Jackson front line to striking effect. The only weak cuts are Lewis's tepid, gospel-flavored title track and Jackson's polite little riff tune, "Maestro E.K.E." If you buy the CD version, however, you also get to hear Lewis, Heath, and Kay play an exquisite trio version of "Come Sunday," Johnny Hodges's feature number from Ellington's 1943 suite, *Black, Brown, and Beige*. Highly recommended.
Terry Teachout

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(Continued from page 14)

cassette tape, Pentax's newest features a $\frac{1}{1200}$ -second shutter and a 6X power-assisted zoom lens that also has a macro setting so you can move in as close as one centimeter. Other highlights include three video heads and a flying erase head. *Pentax Corp., 35 Inverness Dr. East, Englewood, Colo., 80112.*

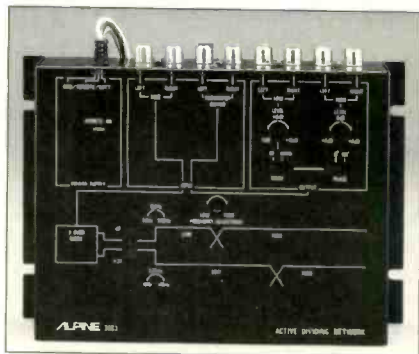
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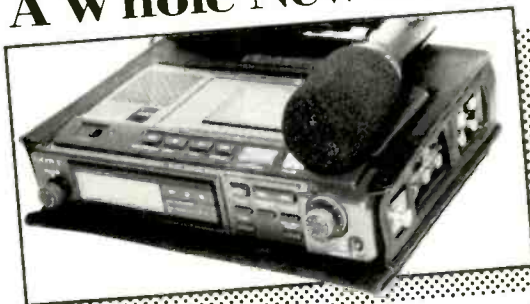
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