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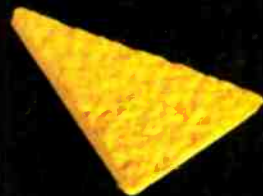
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VOLUME 35 NUMBER 2

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AUDIO

Currents Edited by Peter Dobbin.....	10
CrossTalk by Robert Long.....	17
Basically Speaking by Michael Riggs.....	18
The Autophile by Jay Taylor.....	20
*New Equipment Reports	
Sony PCM-501ES PCM digital audio processor... 22	Ultrix RD-C61 cassette deck..... 28
Onkyo TA-2090 cassette deck..... 24	Nakamichi BX-300 cassette deck..... 29
Vector Research VCX-650 cassette deck..... 26	
*Is Automatic Better? by Edward J. Foster.....	31
Which recording features do you need on your tape deck?	
Form + Function by Peter Dobbin.....	33
Modular cabinets and "new media" racks for housing today's audio-video component systems	

NEW TECHNOLOGIES

Make Way for Kodavision by Robert Angus.....	36
A hands-on report: Kodak's 8mm camcorder	
*Ultimate Portables Compiled by Frank Lovece.....	39
A buying guide to more than 45 camcorders and ultralight video cameras	
*Video Lab Test: Jensen AVS-6200 VHS Hi-Fi videocassette recorder	43
Music Reviews	48
Popular Compact Disc: Chick Corea and Gary Burton; Sarah Vaughan	
Popular Video: "The Everly Brothers' Rock 'n' Roll Odyssey"	
Classical Compact Disc: Bruckner's Fourth with Tennstedt; Schubert Piano Sonatas from Richter	
*New Compact Discs: More than 50 classical and pop recordings listed.....	50

CLASSICAL MUSIC

Ljuba Welitsch: A Force of Nature Reviewed by Bert Wechsler.....	52
Re-experiencing the Bulgarian soprano's intensity, courtesy of Melodram	
More Welitsch on Disc Reviewed by Robert E. Benson.....	53
*A Musical Rx Reviewed by R. D. Darrell.....	54
Our annual selection of cassettes for "walkabout" listening	
Reviews: Bartók from Doráti in Amsterdam; Peter Serkin's <i>Hammerklavier</i> ; Boulez meets Zappa.....	56
Critics' Choice	63

BACKBEAT/Popular Music

Black and Tan Fantasy by Pamela Bloom.....	64
The real story behind The Cotton Club, that white oasis of black entertainment	
Jazz Reviews: Jack DeJohnette's Special Edition; Stacy Rowles; Jess Stacey.....	69
Pop Reviews: Brave Combo; Culture Club; Madonna; Staple Singers.....	70
Birthday Boy Reviewed by Mitchell Cohen.....	75
A look at RCA's six-record package celebrating Elvis Presley's fiftieth birthday	

DEPARTMENTS

About This Issue	2	Reader-Service Card	65
Letters	4	Advertising Index	82
		*Cover Story	

About This Issue

CONGRATULATIONS TO MUSICAL AMERICA and to its editor, Shirley Fleming. For the second straight year, MUSICAL AMERICA is sharing with one of its contributors a prestigious ASCAP Deems Taylor Award.

Co-recipient is Professor Nick Rossi, whose award-winning article, "A Haydn Journey," appeared in the August 1983 issue of HIGH FIDELITY/MUSICAL AMERICA. He was one of ten newspaper and magazine writers to be cited this year by the American Society of Composers, Authors, and Publishers. Formerly professor of music at the City University of New York, Rossi currently is administrative director of the Firenza Lirica Studio in Florence, Italy. Last year, MUSICAL AMERICA shared a Deems Taylor Award with critic Tim Page of New York City for a series of articles.

"A Haydn Journey" is a photographic essay exploring the scenes of Haydn's youth and later career. It includes rare photos taken by Rossi of sites now behind the Iron Curtain, virtually inaccessible to Westerners. The professor's latest article for MUSICAL AMERICA—in commemoration of the 300th anniversary of George Frideric Handel's birth—appears in this month's edition.

Incidentally, kudos also to James Wierzbicki, music critic of the *St. Louis Post-Dispatch* and a contributing editor of HIGH FIDELITY/MUSICAL AMERICA, who also won a Deems Taylor Award this year for work while he was with the *St. Louis Globe-Democrat*.

And now some thoughts on this issue. From the early days of audio,

knowing how to make high-quality recordings on a tape deck has held a certain cachet. Especially before the days when superformulation tapes and advanced electronics provided greater latitude around the "correct" recording level, setting up a deck required more than rudimentary knowledge.

As cassette decks and tapes evolved during the early '80s, preparing to record looked like it might soon require an engineering degree. Fortunately, this evolution split into two paths, one heading straight toward convenience. In fact, a new genus of cassette decks has appeared, one that incorporates the hard-wrought technology of today's state-of-the-art decks yet eschews the airliner-cockpit approach to controls.

Similarly, home videotaping components have increasingly steered toward ease of operation. Much effort has focused on reducing size and weight with a concomitant increase in portability. One offspring has been the camcorder, a lightweight, handheld, all-in-one video camera/recorder. The first was Sony's Betamovie in early 1984, followed by JVC's VHS-C-format Videomovie (see "On the Road with Videomovie," July 1984). Most recently, Kodak introduced its 8mm Kodavision system.

For this issue, we are concentrating on taping convenience, as found today in both audio and video recording. Our coverage includes test reports of four new convenience-oriented cassette decks; an examination of Jensen's first VHS Hi-Fi VCR; a hands-on evaluation by our roving videophile, Robert Angus, of the Kodavision system; and a compilation by regular contributor Frank Lovece of facts and figures on all the camcorders and ultralight (less than four pounds) video cameras currently available.

Also, in his special report "Is Automatic Better?" Consulting Technical Editor Edward J. Foster delves into

specific convenience features on tape decks, noting which yield benefits and which are of marginal value. Rounding out our coverage is tape critic R. D. Darrell's annual sampler of prerecorded tapes recommended for listening on your personal-portable deck. (Incidentally, Darrell has set aside his long-running column, "The Tape Deck," to critique tapes at greater length within the regular review sections of HIGH FIDELITY and MUSICAL AMERICA, as well as to contribute special roundups from time to time.)

In other music features this month, Bert Wechsler explores the mystique of Ljuba Welitsch, who for a few energy-filled years in the late '40s and early '50s stunned the operatic world with legendary performances and who today remains revered in her retirement. The lead-off review in our MUSICAL AMERICA edition concerns the premiere recording of the revised version of Samuel Barber's last opera, *Antony and Cleopatra*. And BACKBEAT reviewer Pamela Bloom looks at the Cotton Club, which currently is receiving renewed prominence in Francis Coppola's movie of the same name. Many of the songs, the stars, and the midnight-to-dawn times are recalled in both words and rare period photos.—W.T.



COVER DESIGN:
Skip Johnston

Cover Photo: Grant Roberts

ON THE COVER: Left: Onkyo TA-2090 cassette deck (top), Ultrix RD-C61 cassette deck. Right: Sony PCM-501ES PCM adapter (top), Jensen AVS-6200 VHS Hi-Fi VCR.

1985 EDITION COMPLETE GUIDE TO HIGH FIDELITY'S TEST REPORTS

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Letters

Indexing Interest

Theodore W. Libbey Jr.'s case for indexing on Compact Discs [October 1984] is well made and amply justified, and I certainly hope that the major CD producers will take note of his comments. A number of further points also could be made.

First, subdividing a single movement into separate "tracks" is undesirable because of the limited number of tracks most CD players can program. In the mentioned example of Deutsche Grammophon's recording of Mahler's Ninth Symphony, with four movements that are given all of 30 track numbers, some CD players could not program even two complete movements. Second, even if your player can program the desired consecutive tracks, chances are that it will not play them back without muting briefly between them, something that would unpleasantly interrupt the continuity of the music within a movement.

Finally, a not-often-appreciated capability of the CD system is the consecutive numbering of bands in multidisc sets. This would be particularly beneficial for opera recordings, but it would be equally desirable in multidisc sets of other types. For example, Decca/London's two-disc recording of Georg Solti conducting Mahler's Second Symphony ought to have had its final three (of five) movements labeled as bands 3

through 5 on the second CD of the set, rather than as bands 1 through 3 on that disc. So far, I have not encountered even one multi-CD set with consecutive numbering throughout.

Stanley P. Lipshitz
Waterloo, Ontario, Canada

The indexing issue is not as simple as it first appears, according to Polygram. After some delay, we have received a reply to Ted Libbey's article from Hans G. Gout, Director, Compact Disc Coordination, Polygram International, The Netherlands. Mr. Gout's side of the controversy will be printed in full in next month's (March) issue.—Ed.

Questions of Sound

Your August 1984 issue contains reviews of five new cassette decks. What I find interesting is that none of the reports makes any mention of how the unit sounds. Are we to assume that at the current state of the art all decks of their quality sound the same? When you use the word "performance," are you talking about sound or only durability and features?

Stan Davis
Buena Park, Calif.

We apply the word "performance" to characteristics that can affect the sound. For example, the

input level required to produce 3 percent distortion in the midrange tells you approximately how much signal you can put on the tape without getting audible distortion. This, together with the signal-to-noise (S/N) ratio, determines the deck's dynamic range with the tape used for the test. Many performance specifications are of this nature, telling you how far you can push the machine without getting into trouble.

Usually, the test that tells the most about how a component of any type will sound under normal operating conditions is the one for frequency response. If its response is flat from approximately 30 Hz to 15 kHz, it will not change the sound's tonal balance. Most of today's high fidelity components, including cassette decks when they are properly adjusted for the tape being used, are quite good in this respect. They might sound different from one another under extreme signal conditions, but it usually is hard (except in the case of loudspeakers) to attribute to any of them a characteristic, ever present sound.—Ed.

In your August 1984 issue, Crispin Cioe says that he was unable to make a tape copy of any LP that sounded as good as a high-quality prerecorded cassette of the same title. What noise reduction system did he use—Dolby B, Dolby C, or DBX? In my experience, DBX works rather well. It seems to have difficulty with the upper register of



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solo piano and marimba, but they usually sound fine when accompanied by other instruments. Had Cioe used DBX, would the copies have been close to LP sound?

Richard Reid
Grand Rapids, Mich.

He probably used Dolby B, but we doubt that switching to DBX would have made a difference. After all, the prerecorded cassettes were made with Dolby B, and most pop and much classical material can be copied using Dolby B without any audible increase in noise.—Ed.

The More the Merrier

I read with great interest your response to Mr. Barron's letter in "CrossTalk" [October 1984] regarding the addition of two more speakers to his system for "four-speaker sound." I, too, was skeptical of such a setup, until I tried it. One can achieve a pleasant balance and blending of sound without any audible degradation of imaging. It does require careful installation and similar sound quality from the front and back speakers, and the output from the amplifier for the back pair must be adjusted so that the overall volume at the listening position is increased by 2 to 4 dB over what it would be if the front speakers alone were operating. This leaves one with the impression that the back speakers are not operating at all—until you turn them off. At that point, the advantages of a four-speaker system become clear.

Michael Johns
Charlotte, N.C.

Mr. Barron indicated that he did not want to have the second pair of speakers at the back of the room, and we don't think additional speakers in the front would improve the sound. If anything, they probably would make it worse.—Ed.

Keep On Trekking

Your review of the *Star Trek III: The Search for Spock* soundtrack album [October 1984] is unfair. Although the record certainly is not a classic, it by no means deserves the caustic criticism your reviewer Noah André Trudeau leveled at it.

Some of James Horner's music is derivative, particularly his early scores, but his recent work is vital and quite exciting. You complain that the music for *The Wrath of Khan* is a pale reflection of Jerry Goldsmith's score for *Star Trek: The Motion Picture*, but actually Horner's *Battle Beyond the Stars* commits greater sins in the plagiarism department. *The Wrath of Khan* is a damn good score—perhaps not a symphony on record like some of Goldsmith's work, but excellent background for the film and one of the best aspects of an overrated movie.

The *Star Trek III* score is not as good as *Khan*, I agree, but it is still fine music. And of course Horner reuses themes from *Khan*; the movie is not merely a sequel but more like a second act. Do you object to John Williams reusing themes from *Star Wars* or *Raiders of the Lost Ark* in the sequels?

Small points so far. But Mr. Trudeau cuts his own throat admitting ignorance of the *Brainstorm* and *Gorky Park* scores. Horner's two best works. Would you judge Holst without hearing *The Planets*? Or speak out against Beethoven without giving his Ninth Symphony a listen? I can't claim a great knowledge of musical form or

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MUSICAL

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structure, but *Brainstorm* is simply incredible music: It is the emotion of the film. There are not many records that give me goose bumps, but *Brainstorm* is one of them. *Gorky Park* is exciting, jazzy music for the most part, but the main-title sequence, which mixes ominous echoing chords with Tchaikovsky, is ingenious.

Horner is a young man. With some encouragement, rather than empty complaint, he could grow to be as talented as Goldsmith or Bernard Herrmann.

And say, if you don't like the so-called bonus, then throw it away! Or better yet, heat it up in the oven and bend it into a flowerpot.

Alan M. Foss
Livonia, Mich.

No argument here with Noah André Trudeau about the derivative nature of James Horner's *Star Trek III* recording, but it seems a bit late to complain. After all, there are parallels to all the objections raised. A certain other film composer began with not a trace of "solid creative capacity" (remember John Goldfarb, *Please Come Home* or the monotonous *Lost in Space* theme?) but became a celebrity when a note-for-note lift from Holst became the evil motif in a score of his. As for Horner's accession of the music from the Romeo-Tybal duel, the same music is only one of the Prokofiev passages recycled in the other composer's score for *Return of the Jedi*. The inclusion of a bonus disco version of the *Star Trek III* theme is no fresh invention either: What

about the "special complimentary single" in which the other composer discoed his theme from *Close Encounters of the Third Kind*?

It seems rather like a double standard to condemn Horner for the practices that have been rewarded with Oscars, Emmys, Grammys, and conductorships—when done by established "geniuses."

Richard Sebolt
Springfield, Mass.

Noah André Trudeau replies: *I am heartened to learn that there is still passion to be found on behalf of film music. I do wish, however, that the subject of these letters was worthy of defense.*

I've now heard all of Horner's scores on record, and they confirm the disturbing pattern I noted in my review. Occasionally Horner will show a flash of originality, but more often than not, when a crucial point in the score is reached, he will fall back on someone else's solution. Suggesting that since his Khan score sins less in this respect than his Battle Beyond the Stars score it is therefore better strikes me as specious reasoning. Please reread my review, Mr. Foss. I wasn't objecting to Horner's reusing his Khan main theme in Star Trek III. My point was that the theme did not lend itself to manipulation and that Horner's attempts to do so resulted in the dulling of what musical interest there was in the score.

I thought I was being encouraging by giving Horner the benefit of the doubt on his Gorky Park and Brainstorm scores. I've since heard both and can only report that the quality of Horner's imitations is better in these instances. The fact remains that they're imitative scores.

Finally, those insipid "bonus" discs that aren't challenged eventually wind up displacing legitimate film-music cuts on soundtrack albums. The monument to this utter tastelessness is the Arista issue of Bernard Herrmann's last score, Taxi Driver, with one whole side rearranged à la pop. Aargh! The memory of that desecration has not left me, and I'll damn 'em anytime I find 'em.

Corrupted Values

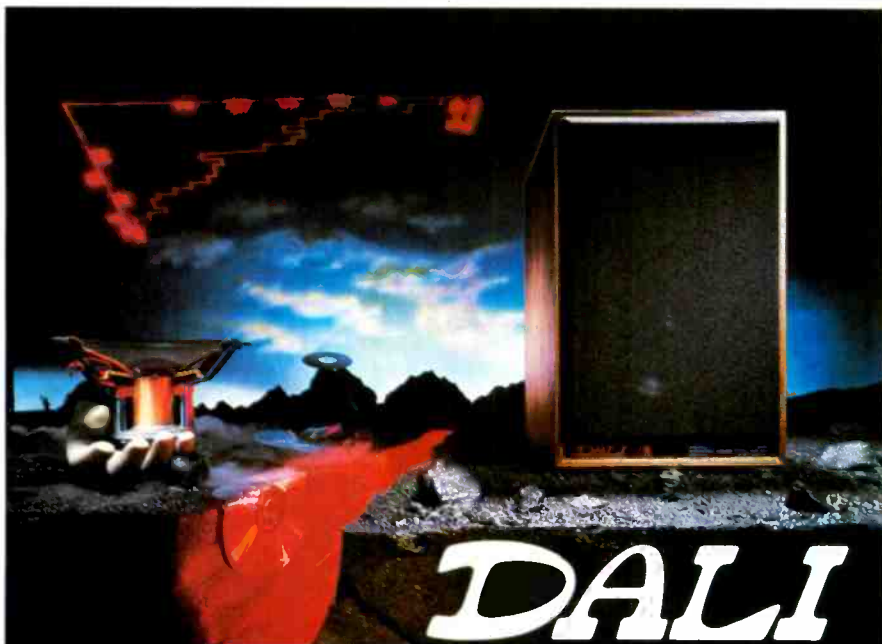
I have noticed that in most ads for stores carrying high-end merchandise, names that have been around for years—mainstays of high fidelity, such as Shure, AR, and so forth—are nowhere to be found. Am I missing the boat somewhere, or have my "golden ears" deteriorated? Are these shops confusing quality with price?

It is painful for me to read the many letters in "CrossTalk" from people who have expensive components and want reassurance that what they are hearing is good. I have truly enjoyed my own equipment for years. Before buying it, I read test reports and listened until I found what sounded good to me. I'm not ashamed to admit that I still love the sound of my Dynaco A-25s, even in this digital age. As a matter of fact, the better the recordings get, the better my system sounds. I think that for the many years I've been reading your magazine this is what you've been saying all along: Listen, and buy what you like.

Elliot Dennis
Old Bridge, N.J.

Sounds right to us.—Ed.

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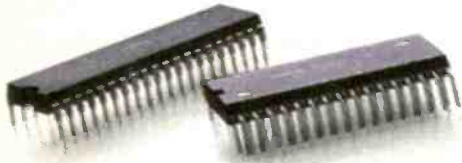
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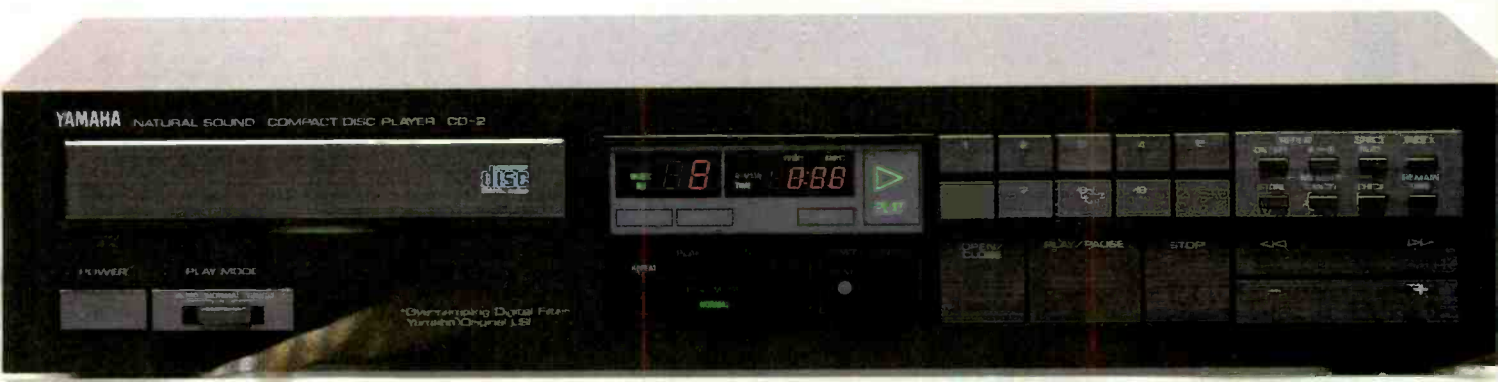


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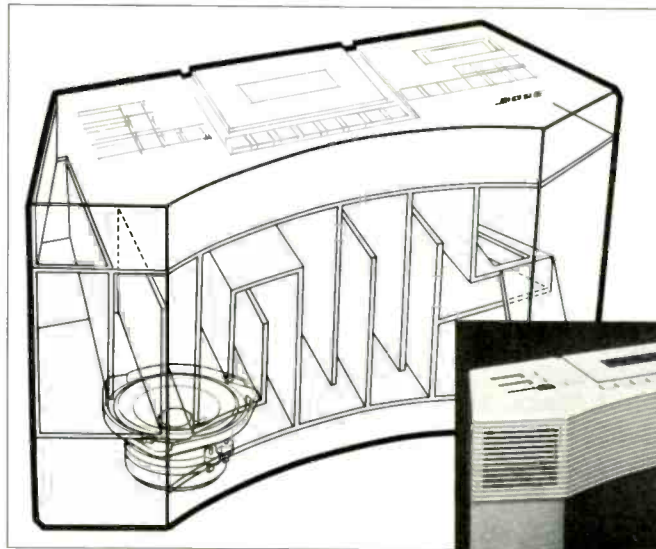
News, new products, and new technologies Edited by Peter Dobbin

A Breakthrough From Bose

Bose Corporation has introduced a compact audio system incorporating a radically new method of loudspeaker loading. Called the Acoustic Wave Music System, it contains a cassette recorder, a digital frequency-synthesis AM/stereo-FM tuner, and bi-amplified stereo loudspeakers in a plastic case measuring no more than 18 inches wide by 10 $\frac{1}{4}$ inches high by 7 $\frac{1}{4}$ inches deep.

Speaking at the corporation's hilltop headquarters in Framingham, Massachusetts, founder and president Dr. Amar Bose described the introduction of the Acoustic Wave Music System as the most important event in his company's history. Code-named "Sun," the product was under development for 14 years. Progress was slow, however, until Dr. Bose invented an entirely new method of loudspeaker loading that is said to permit a hitherto impossible combination of high efficiency, deep bass extension, and small enclosure volume. Bose says the Music System's response goes down to 57 Hz, which is comparable to that of a conventional bookshelf loudspeaker. Yet its bass driver, which handles both channels from 500 Hz down and is driven by a modest 20-watt (13-dBW) amplifier, can play quite loud without audible distortion. Such performance is unprecedented in an enclosure of this size (less than half a cubic foot).

The company sees the product as a secondary, but very high quality, portable system for audio enthusiasts and as a primary music source for people who are put off by the apparent complexity of typical component or rack systems. For example, the cassette deck's tape-type selection is automatic, its built-in Dolby B noise reduction system is always on, and all recordings are



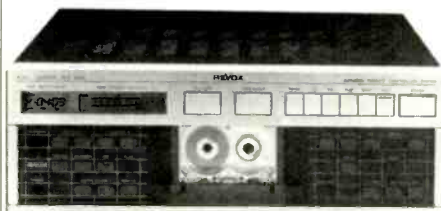
The low-frequency driver in the Bose Acoustic Wave Music System is loaded, front and rear, by a complex folded tube.

made through an automatic level control (ALC). The tuner, which comes on whenever no cassette is being played, has ten programmable station presets as well as up/down tuning buttons. A sophisticated loudness-compensation circuit is said to maintain natural tonal balance at all listening levels without the unpleasant side effects often created by such systems. Back-panel tape outputs and inputs permit connection of auxiliary program sources, such as an external tape deck, a TV tuner or VCR, a Compact Disc player, or a turntable with a built-in phono preamplifier that Bose plans to introduce as an optional accessory. The system's price is \$649, and a carrying case with built-in battery pack will be available for \$70.

Although we were able to listen to the



system only briefly, we came away impressed with its overall sound quality and particularly by its ability to deliver good bass at high volumes. Bose is actively studying other applications, including television and car audio, and there seems to be no reason why it could not lead to the development of genuinely full-range, high-efficiency minispeakers. Only time will tell. We will have more to say about both the Music System and the Acoustic Wave speaker technology in a later issue. Meanwhile, you can obtain more information on the product by calling 1-800-282-2673 or writing Bose Corp. (The Mountain, Framingham, Mass. 01701).



Revox's Essay in Automation

That microprocessors can make an important contribution to the functioning of audio equipment is amply demonstrated in Revox's new B-215 cassette deck (\$1,390).

Indeed, so extensive is its array of computer-mediated functions that describing them is best accomplished by taking you through a sample recording session. Pop a cassette into the tape well, press a button, and the deck automatically fine-tunes bias current by analyzing distortion at three different frequencies. Nonvolatile memory will store bias settings for six different tape formulations for instant recall at a later time. Recording levels are next on the agenda, and Revox claims its automatic level-setting circuitry can perform the task with great precision. A three-head design, the B-215 will even switch from source to off-tape monitoring as recording begins,

and should you halt recording by entering the pause mode, the deck reverts to source monitoring automatically. During recording, Dolby HX Professional circuits constantly monitor and adjust the bias level at the record head to minimize self-erasure of high-frequency program material. In playback, the deck's automatic features are equally impressive. A real-time tape counter used in conjunction with search controls enables you to locate any point on the tape by elapsed time. And as in some CD players, a two-position "loop" memory lets you repeat a particular tape segment indefinitely. Adding to the convenience of the deck is an optional remote control and

NOT JUST ANOTHER PRETTY FACEPLATE.

There are a lot of people putting their names on the front of cassette decks these days.

But, quite frankly, it's much easier building faceplates than it is building cassette decks. So when it comes to buying one for your system consider this: Teac has been building cassette

decks ever since there was a cassette.

And because we also make professional recording equipment, you can expect to find more professional features included on a Teac for your home

In fact, we were among the first to offer cassette decks featuring built-in dbx* and Dolby noise reduc-

tion,** direct-drive motors, auto reverse, cobalt amorphous heads, and programmable search and memory systems, to name a few.

So ask yourself this: Do you want a row of matching faceplates, or do you want a cassette deck that can't be matched?



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a programmable timer. For more information, write to Revox Div., Studer Revox America, Inc. (1425 Elm Hill Pike, Nashville, Tenn. 37210).

MIDI Magic

With the wide-scale adoption of the musical instrument digital interface (MIDI) last year, manufacturers provided the hardware connection necessary for synthesizers to "talk" to computers. Now Passport is offering a series of programs that enable computers to talk back. (To use the software, your computer must be equipped with a MIDI interface. Passport sells interfaces for the Apple IIe and Commodore 64 for \$195.) Two song albums (\$39 each), one containing an assortment of Beatles hits and the other a selection of current pop tunes, demonstrate some of the capabilities of the MIDI interface. Load a diskette into your

computer's disk drive, and the songs play back through your synthesizer. To vary the orchestration of the pieces, simply change the synthesizer's presets or daisy-chain several synthesizers together. A more complex program, Polywriter (\$299), enables your computer to transcribe the pieces you play on any MIDI-equipped instrument. Passport says that the program is extremely accurate and is capable of creating scores with correct beaming, split stemming, and ties. A series of music tutorials covering intervals and chords is also available. For more information, write to Passport (625 Miramontes St., Half Moon Bay, Calif. 94019).

Pyramid Power

A handsome little bookshelf system, the Pyramid from SFI-Sawafuji eschews conventional cone drivers in favor of something

SYSTEMS & SOLUTIONS

Is Dolby Dulling Your Highs?

First, let's try to separate myth from misbehavior. I meet all too many sound enthusiasts who are firmly convinced that Dolby noise reduction—of any type—dulls the highs. They simply won't use it. They even turn the switch to OFF when they're playing tapes recorded with Dolby B. In one extreme case, a noted concert pianist is said to have preferred his Dolby A studio tapes played back undecoded!

There are two sources for this myth. The first is the well-established peculiarity of human hearing that leads us to prefer the slightly louder or brighter of two otherwise identical sounds. Relative to the sound after decoding, a Dolby-encoded signal is both. The sense of excitement we derive from its extra level, particularly at high frequencies, easily cajoles the ear into believing the sound is more accurate than the "dull" decoded version. Comparison with the original, however, would show that the reverse is true.

The second source for the myth is in various sorts of misbehavior that can dull highs and tend to do so more with noise reduction than without. The cure is not to turn off the noise reduction but to attack the problem at its root. Dirt on the heads, which forces the tape slightly away from the gap and thus weakens high-frequency response, can be the culprit. Low frequencies are not so easily attenuated because their longer recorded wavelengths have a better reach (that is, they produce a more three-dimensional magnetic field) than the short wavelengths of the highs. So don't forget to clean your heads. And if you've had the deck for years, check for signs of head wear, which can produce similar results. Most heads will outlive the transport itself in normal home use, however.

If your deck is one that doesn't groom

its own residual magnetism away, it can be weakening the highs, which (again because they stay closer to the surface of the tape's oxide coating) are more easily erased by weak magnetic fields in close proximity than the lows are. Once this happens, you can't restore the damaged tapes (though a slight treble boost on playback may make them sound better), but degaussing the deck will prevent further tape damage.

More in the limelight these days is the question of head azimuth. When the angle between the playback head gap and the tape path is not identical to that between the recording head gap and the tape, highs suffer—progressively, as the disparity increases. It's my impression from our cassette-deck tests that azimuth is more nearly standardized today than it used to be and that improved cassette-shell mechanics lead to less skewing of the tape and therefore less azimuth irregularity. That's good, because there's little you can do to correct an azimuth mismatch except have a service technician align the deck to one of the test tapes that are available and hope that the tapes you plan to play match it within reason.

Finally, if your homemade tapes sound dull but prerecorded ones don't, try to determine whether it's only the peaks that suffer. If so, you may be recording at too high a level. Cutting back by a few dB should improve bells, cymbals, brass transients, and so on. If it doesn't, the deck's recording parameters may be poorly set for the tape you're using. In particular, the bias may be too great, rolling off high-frequency response prematurely. There are two solutions: Try other brands until you find a tape that doesn't dull the sound in your deck, or have a service technician touch up the adjustment of your deck for the brand you're using.—Robert Long

YOU'RE LOOKING AT THE SIX BEST AUTO-REVERSING DECKS YOU CAN BUY.

THREE HEADS WITH TAPE MONITORING CAPABILITY—
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HIGH-TUNED DC AMPLIFIER—
AKAI, NAKAMICHI, SONY, TEAC

SPECTRUM ANALYZER ENCOMPASSING MOL DISPLAY—
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AKAI
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MODEL GX-R99
3-HEAD DECK, AUTO REVERSE SYSTEM
DOUBLE D.D. DOUBLE CAPSTAN
DECK, AUTO TUNING SYSTEM
8-MODE REAL TIME DISPLAY

SUPER GX HEADS—
AKAI

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AKAI, SONY, JVC, PIONEER, TEAC

TWIN DIRECT-DRIVE CLOSED LOOP
DOUBLE CAPSTAN TRANSPORT—
AKAI, NAKAMICHI

COMPUTER RECORD LEVEL
PROCESSING SYSTEM—
AKAI

AUTO MONITOR—
AKAI

Staying ahead of the competition in auto-reversing cassette decks has been an AKAI tradition for the past 14 years. Now we're introducing the all-new GX-R99, a deck that has so many advanced features you'd have to buy six other auto-reversing decks to get them all.

Features like our Computer Record Level Processing System, that sets a tape's bias, equalization and tape sensitivity, measures a tape's MOL, then sets the optimum recording level. A Spectrum Analyzer encompassing MOL

display, which displays frequency response with greater accuracy. AKAI's exclusive Auto Monitor. And our super GX heads. So super, they're guaranteed for 17½ years of continuous play.

It's easy to see why the GX-R99, just one of four great AKAI auto-reversing decks, is called the Dragon Slayer. And to find out why it's getting more praise than all the other guys combined, write to AKAI, P.O. Box 6010, Dept. H9, Compton, CA 90224.

AKAI
Hi-Fi & Video



the company calls Dynapleats. Consisting of a pleated diaphragm that vibrates vertically over a grouping of bar magnets, a Dynapleat driver is said to be capable of wide frequency response and broad dynamic range. The Pyramid uses four of these drivers to reproduce bass and midrange frequencies; treble is handled by a ribbon tweeter. The 4-ohm system has a rated sensitivity of 86 dB (for a 1-watt input). The Pyramids measure 24 inches high by 18 inches wide by 12 inches deep at the base and cost \$600 per pair. For more information, write to SFI-Sawafuji America Corp. (23440 Hawthorne Blvd., Torrance, Calif. 90505).



Sparkomatic Opto For Motorola

Sparkomatic is the latest car stereo manufacturer to introduce receiver/cassette players equipped with Motorola C-Quam stereo-AM decoding circuits. The SR-430 (\$250) has an electronically tuned radio section with five AM and five FM station presets plus a two-position bandwidth control for fine-tuning AM reception. The unit contains a five-band graphic equalizer, DNR noise reduction, and an autoreverse cassette deck. Power output is rated at 40 watts per channel with 1 percent total harmonic distortion. Two less-expensive stereo-AM front ends, the SR-425 (\$180) and SR-420 (\$150), are also available. For more information, write to Sparkomatic Corp. (Milford, Pa. 18387).



A Higher Standard From TDK

Priced about 10 percent higher than its standard videotape, TDK's new HS formulation

It's All Digital At Japan Fair

The Japanese public's fascination with anything electronic is well documented, but nothing can prepare a visiting foreigner for the drawing power of a Tokyo electronics show and the unbridled enthusiasm of the crowds elbowing their way through the exhibits. The '84 All-Japan Audio Fair, which ran concurrently in October with the Japan Electronics Show, drew more than 100,000 people, and all who attended came away with the same message: The future in both audio and video is digital.

In Compact Disc technology, the emphasis was on smaller and cheaper home players, and several car players were on display as well. Pioneer thinks its combination CD/Laserdisc player will bring renewed excitement to the optical videodisc market. Obviously Sony and Teac agree, for each took this opportunity to unveil its combo unit. (Teac's move into video involves more than one product: Also on display were a straight Laserdisc player and a VHS Hi-Fi VCR.) Recordable CDs are still a few years away, but Sanyo attracted a lot of attention with its prototype system that can record 30 minutes of music on an erasable CD.

Also generating some excitement were CD graphics processors. Designed as an interface between a CD player and a TV set,

is said to offer significantly better performance. Improvements include a high-precision shell mechanism, a superflat film base, a high-durability binder system, and ultra-fine Super Avilyn particles. TDK says these improvements yield a sharper picture with more-vibrant colors and fewer dropouts. HS videotapes are available in VHS and Beta formats. For more information, write to TDK Electronics Corp. (12 Harbor Park Dr., Port Washington, N.Y. 11050).



Dreams of Power

Surely the beefiest amplifier we've ever seen, Perreaux's 5150B is startling in the extreme. Its manufacturer claims that each channel is capable of delivering more than 30 amps of continuous current. Perreaux stops short of giving a power rating in watts. How much power it will actually deliver may be more a function of how much current your AC house wiring will deliver than any limitation of the amp itself.

such a processor enables you to view still video images stored on specially encoded CDs. The demonstration material at the show consisted of album liner notes and song lyrics. The companies exhibiting processors (Technics, JVC, Kenwood, Mitsubishi, Sharp, and Toshiba) said that units could be marketed in this country by mid-year, if the record companies get cracking on producing software.

Digital TV sets were the big news at the electronics show. Digital's special-effects capabilities, such as screen-within-a-screen displays, attracted crowds at the Mitsubishi and Toshiba exhibits. Sony got its share of attention with an outboard processor that doubles the number of scanning lines through digital interpolation, creating a smoother image with greater apparent vertical resolution. The DSC-10 converter (about \$820 in Japan) must be mated with Sony's KX-14HD1 14-inch monitor (about \$520 in Japan). A 21-inch monitor will be added soon. Sorry, no word yet on U.S. marketing plans.

NEC's major attraction was a prototype car navigation system that tracks a car's position with help from an on-board computer and travel data stored on a floppy disk. And Pioneer demonstrated its commitment to digital technology with a prototype CD-ROM decoder that will make it possible to read computer data stored on a Compact Disc.—Paul Terry Shea

Let's you think that power was the only desideratum in the design of the 5150B, Perreaux also claims that the amp's bandwidth extends out to 3 MHz. Such brute strength doesn't come cheap, however. At \$3,500, the 5150B is also one of the most expensive amps around. For more information, write to Perreaux International (875 Merrick Ave., Westbury, N.Y. 11590).



Sony from a Distance

If you own a Sony Trinitron TV set or a Profeel video component system, you may want to investigate Sony's ISH-777 wireless stereo headphones. The infrared transmitter accepts audio inputs from a TV tuner or stereo receiver, and the hand-held receiver doubles as a ten-key remote controller for Profeel and Trinitron video systems. The ISH-777 (\$220) has a 16-foot range. For more information, write to Sony Consumer Products (Sony Dr., Park Ridge, N.J. 07656).

JBL Introduces Titanium Series loudspeakers. To tell the truth.



A team of specialists at JBL labored nearly five years to develop a unique manufacturing process, a patented design, a significant advance in materials application, and four stunning new loudspeaker systems.

The new Titanium Series takes its name from a truly revolutionary high frequency driver. A blast of nitrogen gas against a sheet of pure titanium creates a dome thinner than a human hair yet capable of withstanding the crushing force of more than 1000 Gs.

The new titanium high frequency driver easily copes with the

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Coupled with a new midrange driver, a new dividing network, and other major and minor innovations, the resulting new Titanium Series loudspeakers are the most neutral, the most detailed, the most pleasing loudspeakers you're likely to hear. And the very best from JBL.



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Northridge, California 91329

Pictured above: JBL's new pure titanium high frequency driver with patented diamond surround.



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A HIGHER MOL, AND GREATER DYNAMIC RANGE.**

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It all translates the same.

Music sounds better when it's recorded
on Maxell XL-S cassettes.

That's because we've improved our crystallization process. So we can now produce magnetic particles that are both smaller in size and more uniform in shape. Which allows us to pack more of these particles on the tape's surface, in turn, making it possible to record more information within a given area of tape.

AC bias noise is reduced by 1dB. And maximum output levels are increased by 1.5dB on XLI-S and 2dB on XLII-S.

As a result, XL-S delivers a significantly expanded dynamic range. A noticeably improved signal to noise ratio. And a fuller impact of dynamic transients.

So if you want to hear your music the way it was meant to be heard, put it on Maxell XL-S.

Because recording tapes just don't get any better.

Or any badder.



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CrossTalk

Practical answers to your audio and video questions by Robert Long

A Beta Alternative

Is it practical to buy a new Beta VCR to record stereo FM, to get longer playing times and higher fidelity than with regular audio cassettes?—A. Abrams, Roslyn Heights, N.Y.

By all means, assuming that by "new" you mean a Beta Hi-Fi model. It's perhaps arguable, however, whether the fidelity is really better than that of top-grade audio cassettes and hardware, though there certainly is less flutter, for instance. On the other hand, you can get much longer playing times, and it's astonishing how close the two media are in tape costs when you figure them in dollars per hour.

Some Are More Equal

Your April 1984 test report on the Harman Kardon CD-491 cassette deck lists indicator readings for 3 percent distortion but doesn't say whether these are with the meter-weighting feature in operation. I've found this feature puzzling. It tends to make the meter readings substantially higher than they are without the EQ. Therefore, the maximum safe readings must also be higher with the EQ feature engaged. Would you please explain how I should use it? The manual isn't at all helpful.—Kenneth J. Slapin, Norwalk, Conn.

The 3 percent distortion measurement is made in the midrange (at 315 Hz), where the two modes should function identically. Normal practice with conventional metering would be to keep maximum signal levels somewhere around the 0-dB indication. As our data show, actual midrange safe recording level is between 3 and 7 dB higher, depending on the tape. This allows a "fudge factor" of several dB to prevent compression of high-level high frequencies (where recording EQ prevents the tape overload curves from being so generous).

If you switch to equalized metering, the indication often will be higher because the high frequencies are boosted, but this doesn't mean that the safe recording level is any higher—just that you can now be more precise in setting your levels because the meter is giving you a more accurate picture of how close to tape overload the signal is running. If you're using Type 2 (ferricobalt or chrome) tape, for instance, our data tell you that it can be driven to +3 on the meters. You can now set the level accordingly, without any fudge factor, with rea-

sonable assurance that audible overload should not occur at any frequency.

Unfair Start?

I use an AR turntable with an Audio-Technica AT-99SX cartridge when I tape records on my Aiwa cassette deck. Though the meter levels (both VU and LED) are well within the "safe" region, I sometimes get severe overmodulation distortion during the first minute or so of the first cut on a side. Redubbing at reduced level clears up the problem, and when I record something else on the same spot, the results are perfect, so the tape itself doesn't seem to be at fault. According to the specs, the arm/cartridge resonance is around 11 or 12 Hz, which should be fine, and the records sound okay when heard direct. What's wrong?—Steve Kiorpes, Madison, Wis.

Particularly when they're stored very loosely packed and at a relatively high ambient temperature, edge-standing LPs can develop flat spots along the perimeter, which distorts the outer grooves and induces infrasonic output when you play the first cut. It can be quite severe without creating audible output or necessarily registering on the metering of typical cassette decks. The infrasonics add to the audio signal, and, in tandem, they can overload the deck's input stage or recording amp. I suspect that something of the sort is happening to your Aiwa. If so, an infrasonic filter should help. If your electronics don't include one (or if it is placed after the tape output in the circuit), you can get a reasonably priced outboard model from Ace Audio (532 Fifth St., East Northport, N.Y. 11731).

UnacCountable

For years I've had problems because the counter numbers on one audio deck didn't match those on another. Now I've bought my second video machine, and the same thing is true. Why can't the industry standardize on this?—Richard A. Harris, Ludlow, Ky.

You've caught me with my gullibility up: I thought that VCRs had standardized counters. So much for progress! About a decade ago, there was a proposed standard for counters in audio cassette decks, but as many manufacturers went their own ways as followed it. What standardization exists appears to result only from several deck manufacturers' buying their counters from

the same source, which is a pretty shabby state of affairs. Naturally, the problem does not exist with real-time counters, which are becoming increasingly common.

Chrome Trim?

Your explanation ["Why Chrome Cassettes with Ferric EQ?," August 1984] of commercially recorded cassettes in which chrome tape is used with the 120-microsecond ferric equalization for improved signal quality left me with some unanswered questions. My Technics RS-M245X switches equalization automatically. Will it play the nonstandard chrome cassettes? Also, my deck's manual asks for Japanese tapes. Wouldn't a European prerecorded tape give poorer fidelity?—Joella Yoder, Renton, Wash.

The 120-microsecond chrome cassettes normally are housed in standard "ferric" shells without the keyway for 70-microsecond EQ. If you were to record on such a cassette, the bias would be wrong, but presumably you wouldn't want to erase a pre-recorded tape. Also of interest only when you're recording is the difference between chromium dioxide and ferricobalt tapes. (I assume that's what you mean, since all current Japanese Type 2 tapes use ferricobalt oxides, while the most prominent brand to offer chrome Type 2 probably is BASF, which is based in Germany.) Correctly pre-recorded ferricobalt and chrome cassettes are interchangeable in playback.

Cold Shoulder

Since cassettes are closing the gap with records in terms of numbers sold, there is nothing extraordinary about dubbing decks these days. They are on a par with the traditional deck-turntable combination. Why, then, does HIGH FIDELITY treat them as though they don't exist?—Marc Claessens, Toronto, Ontario, Canada

There are some I wish didn't exist, and I think even the best are no match for a pair of really good single-well decks. One reason I'm so confident of this judgment is that we have tested several models. They do offer a certain measure of convenience, but even their manufacturers will tell you that performance usually isn't their long suit.

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

Basically Speaking

Audio and video concepts and terms explained by Michael Riggs

Making Sense Of Distortion

ONE OF THE THINGS a high fidelity system should not do is distort the signals that are fed to it. Indeed, in the broadest sense, "high fidelity" and "low distortion" are simply two ways of saying the same thing. The idea is to get out exactly what the musicians and record producer put in.

In audio lingo, however, the term distortion normally encompasses only the non-linear variety. Linear distortions include frequency response errors and phase shift, in which the output is still directly proportional to the input. Such misbehavior is relatively easy to reduce or eliminate.

The nonlinear stuff is a tougher nut. It comes in two varieties: harmonic and intermodulation. All audio gear introduces at least a little of both. Harmonic distortion consists of unwanted output at multiples of the desired frequency. For example, one of the most common specifications in audio is that for total harmonic distortion (THD) at 1 kHz. It is obtained by feeding the device under test a pure 1-kHz sine wave and then examining the output for spurious energy at 2 kHz, 3 kHz, 4 kHz, and so on. The rms (root mean square) sum of these added tones is the total harmonic distortion at the test frequency (also known as the fundamental). Usually, the amount of distortion is given as a percentage of the amplitude of the fundamental.

Sometimes distortion components are mentioned individually: second harmonic distortion, third harmonic, and so forth. For a 1-kHz tone, the second and third harmonics are at 2 and 3 kHz, respectively; for a 2-kHz signal, they are at 4 and 6 kHz; and on up and down the line. The reason for this concern with the separate components is that some are more easily heard. The most innocuous is the second harmonic, which can be present in large quantities before becoming audible and even then may not sound really unpleasant. Most offensive are high, odd-order components, such as the fifth, seventh, and ninth harmonics, which can far more readily put a nasty edge on the sound. So although a THD spec can serve as a rough-and-ready figure of merit, it does not always tell the whole story.

Intermodulation (IM) distortion arises only when the signal comprises two or more frequencies—which always is the case for music, because every instrument or voice produces both fundamental tones (the prin-

cipal determinants of pitch) and harmonics that give it its characteristic timbre. IM consists of sum and difference products. For example, if an amplifier is fed two tones, one at 500 Hz and the other at 700 Hz, the first-order intermodulation components will be at 200 Hz and 1.2 kHz. Higher order products also will appear, comprising the sums and differences of multiples of the fundamental frequencies. Viewed on a spectrum analyzer, the whole thing would look like two telephone poles (the fundamentals) surrounded by weeds (the IM products, plus any harmonic distortion). IM also is customarily given as a percentage of the amplitude of the fundamentals.

Low distortion is the essence of high fidelity.

The amounts of harmonic and IM distortion that a device generates usually are similar, so one measurement often will serve. This is why IM testing—which is the more difficult of the two—frequently is omitted. But for equipment with limited response beyond the audible band, harmonic-distortion measurements alone can be misleading at high frequencies. For example, all the harmonics of a 12-kHz tone are well above 20 kHz and therefore would not appear in the output of a typical CD player, even if it were producing large amounts of distortion. In this case, an IM test is a much better performance indicator, since intermodulation products show up below as well as above the fundamental frequencies.

The ultimate question concerning distortion is when should you worry about it, to which the only unambivalent answer I can give is "not often." Under some conditions, it is possible to hear very small amounts of distortion. On pure tones played at reasonably high levels, for example, distortion of well under 1 percent may be audible. But on music, speech, or other complex signals, much, much more usually will pass completely unnoticed. Audibility thresholds as high as 20 percent have been reported in some tests.

Of course, that's an extreme example, and I certainly would encourage you to avoid such excess. On the other hand, there's really no point in going overboard in the other direction either. We long ago stopped listing distortion measurements of less than 0.01 percent in our test reports

because that's already so far below the threshold of audibility for any conceivable type of music signal.

Exactly where that threshold lies depends on both the signal and the characteristics of the distortion. The key here is a phenomenon known as masking. When two signals are present at nearly the same frequency, only the louder one will be heard if their levels are sufficiently different. In a complex musical passage played by many instruments, substantial energy will be present over a wide range of frequencies, which is why even large amounts of distortion may be hard to hear: It literally is drowned out by the music. Thus, distortion that would be acceptable on orchestral music might be audible on a flute solo.

The characteristics of the distortion are important mainly because they influence how maskable it is. Intermodulation and high, odd-order harmonic distortion correspond poorly to the natural harmonic structure of most music. Thus, on simple music especially, there tends to be much less energy available near the frequencies of such distortion components and therefore less masking of them.

The last joker in the pack is level, which can make a profound difference. Consider, for example, two signals, one reproduced 50 dB louder than the other but with the same *percentage* of distortion. This means that there also will be a 50-dB difference in the absolute levels of the distortion products. If the low-level signal is low enough, its distortion may be too far down into the room noise to be heard even if it is very high on a percentage basis, whereas the same proportion of distortion on the louder signal might be plainly audible.

Actually, this phenomenon is most significant for distortion that increases on a percentage basis as the signal level decreases: crossover distortion in amplifiers, for example, or quantizing distortion in digital audio gear. Even though the distortion is going up proportionally, its absolute level may be decreasing fast enough to prevent it from ever becoming audible. This indeed is what happens in CD players, power amplifiers, and the like when they are operated properly. In other words, if you were to turn the volume all the way up while listening to a very soft passage on a CD, you might hear something you didn't like, but when the level on the disc came up, it would blow you out of the room. The real problems come when the distortion rises precipitously with the signal level, as in cartridge mistracking or amplifier clipping. **HF**

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Going on the road with stereo by Jay Taylor

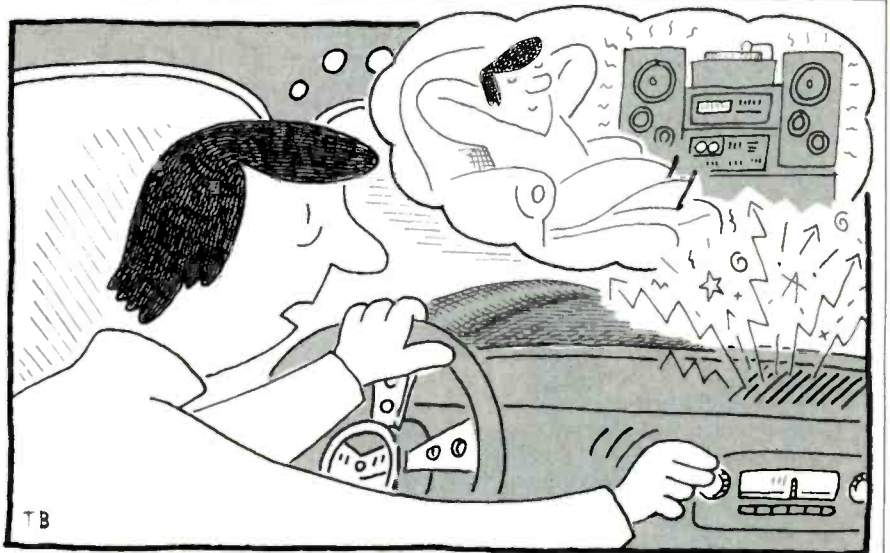
Getting Serious About Sound

IT DOESN'T MAKE MUCH SENSE, but in my experience it's the truly ardent audiophile who often ends up driving around with the worst possible car stereo gear. Why are these arbiters of audio excellence so complacent about the quality of their mobile music systems? The answer is found in a self-fulfilling prophecy. Audiophiles tend to view car stereo technology with a great deal of suspicion. Consequently, when selecting a system, they often settle for the least expensive, least sophisticated gear. After all, why waste money on "good" equipment when everything is a rip-off? The result, of course, is low-fi performance on the road—and the perpetuation of a belief that is patently false.

I admit that *some* suspicion of car stereo gear is warranted. There are probably more cheap "200-watt sound exploders" on the market than legitimate amplifiers, but the persistence of the former only attests to the need for some consumer education. I really don't believe that anyone would settle for junky equipment if he or she knew that good-sounding, well-made gear is also available. HIGH FIDELITY's test reports are an excellent source for such information, and I'll try to add my own insights here.

Simply put, there's no reason to judge car and home stereo equipment by different standards. They both must produce a smooth, natural sound from a variety of sources. What differences do exist are a function of the special problems involved in achieving good sound in a moving car. For example, if you're shopping for an in-dash receiver/cassette player, usually referred to as a front end, you should limit yourself to those brands whose reputations and longevity are well documented. (After all, you wouldn't select a home component unless you were reasonably familiar with the manufacturer.) If you live in an area where FM stations are scarce or hard to receive, take a close look at the specifications for the unit's tape section. It shouldn't be hard to find a deck capable of reasonably flat response out to 15 kHz, with wow and flutter well under 0.5 percent. Excellent tuners are also available. Here the difficulties of achieving consistent reception on the road force manufacturers to design tuners that perform strange-

Jay Taylor, our guest "Autophile" columnist, is a free-lance writer specializing in car stereo.



ly when compared to home units, but characteristics such as sensitivity and selectivity should rival those of their stationary cousins.

You will find that good car components cost more than shoddy ones, of course, and this is where the double standard really comes into play. If you take music seriously, it's very likely that you will devote more than \$1,000 to buying a home system. But most people simply aren't willing to duplicate that expense when they buy systems for their cars. If you were to examine how you spend your time, however, you'd probably find that more of it is spent listening to music in the car than at home. On that basis alone, it seems to be just good sense to increase your expectation of what a car stereo system should cost. No, you don't have to fork out \$1,000 to get good car sound; you can probably put together a decent system for half that amount. But in my experience, a typical \$150 setup consisting of a bargain-basement front end and a pair of no-name speakers is bound to sound mediocre.

There are several reasons for this, but space allows me to explore only the one that usually gets the least consideration when it comes time to make a purchase: power. A typical in-dash receiver will put out only a measly 3 or 4 watts. Would you settle for such a low-power receiver at home? Of course not. Typical musical dynamics would quickly cause the amplifier section to run out of steam and clip. In a car—admittedly a much smaller listening space—an amplifier has to work hard just to keep the music above the noise floor. And if you like your music loud, chances are the amp will be clipping almost constantly.

People often compound the problem by trying to get additional power from a booster, which goes between the receiver's power outputs and the speakers. Such devices add their own distortion (which is often considerable) to the already high distortion of the cheap front end, resulting in louder but very dirty sound.

Opting instead for a higher-power receiver is the easiest way to lessen the problem, but the most you can expect from such a unit is about 12 or 16 watts per channel, with distortion not much better than 1 percent. Such performance, however, is better than what's available from a bargain-basement unit, and it represents a tremendous sonic improvement.

Eventually, you may find that you need still more power. If you add a subwoofer or a second pair of speakers to your system, for instance, even a high-power receiver may run out of steam. Luckily, many better-quality front ends are equipped with line-level outputs, making it possible to hook up an outboard amplifier. This is a good way to get the power you need. Outboard amps usually have low distortion, and units rated from 20 to more than 100 watts per channel are available.

You can also assemble a system around a preamp-only front end. This unit, which lacks an amplifier section, usually provides the best performance that a manufacturer can deliver, and it runs rings around a similarly priced all-in-one receiver. With such a unit, you can assemble a system consisting of a medium-power amp and a single pair of speakers. Later, you can add more speakers and a second amp without having to replace any of the original components.

HF

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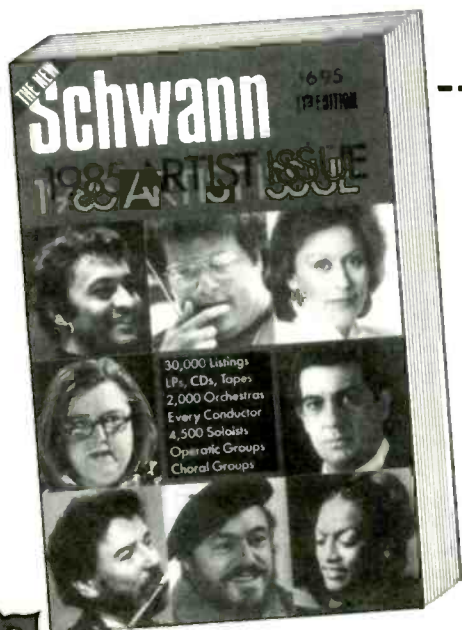
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New Equipment Reports

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



Sony's Dual-Mode PCM Processor

Sony PCM-501ES PCM digital audio processor. Dimensions: 17 by 3 inches (front panel), 12¾ inches deep plus clearance for controls and connections. Price: \$750. Warranty: "limited," three years parts and labor. Manufacturer: Sony Corp., Japan; U.S. distributor: Sony Corp. of America, Sony Dr., Park Ridge, N.J. 07656.

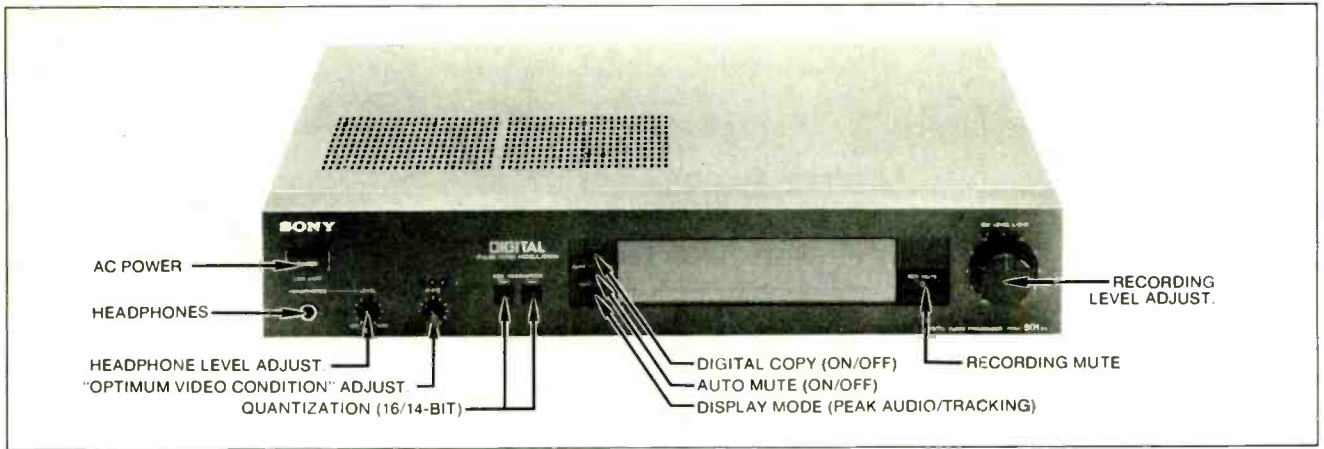
IN THE BEGINNING, many schemes were proposed for digital encoding in consumer audio tape equipment. Then the Electronics Industry Association of Japan (EIAJ) promulgated its official format for such applications as the recording of music on videocassettes using an outboard PCM (pulse-code modulation) processor to feed an appropriately encoded signal to the *video* input of a VCR. All of the digital processors we've tested to date have been based on that standard.

What principally distinguishes the PCM-501ES and its siblings—the PCM-701ES and the portable PCM-F1—is their ability to record and play back in both 14- and 16-bit modes. Although the original EIAJ standard did not rule out the latter, it assumed that 14-bit encoding would be used, and so far, only Sony has made consumer processors with a 16-bit option. Recently, the EIAJ amended its standard to explicitly embrace Sony's 16-bit scheme. This version of the format gives signal-encoding duties to two of the bits normally employed in error detection and correction, making it more vulnerable to tape dropouts

and the like. In all other respects, however, performance should be superior to that of the conventional 14-bit version.

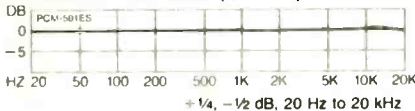
The PCM-501ES can be used to make or play back tapes in either mode, and it will choose the correct playback format automatically. The 16-bit format can yield greater dynamic range and lower distortion, though these benefits are not as apparent in our data as you might expect. Theoretically, each additional bit available for signal encoding increases the maximum signal-to-noise (S/N) ratio by 6 dB, which would yield a 12-dB advantage for 16-bit encoding, rather than the 3 dB Diversified Science Laboratories measured for the PCM-501ES.

We suspect the reason is that Sony has dithered the 16-bit mode but not the 14-bit one. Dither is a small amount of white noise injected into the signal before it is quantized (digitized) to linearize the processor's operation at low levels. This technique reduces distortion and, more important, prevents the playback signal from cutting off abruptly at levels below the undithered reach of the least-significant bit (so-called digital



Reference recording level (the assumed 0 dB) is the level at which the metering also reads 0 dB.

RECORD/PLAY RESPONSE (at -10 dB)



ANTI_ALIASING FILTER RESPONSE

at 15 kHz	+ < 1/4 dB
at 20 kHz	- 1/2 dB
at 22 kHz	- 59 1/2 dB
at 24 kHz	- 45 1/4 dB

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

16-bit mode	91 dB*
14-bit mode	88 dB

INDICATOR READING AT OVERLOAD

see text

DISTORTION (THD at -10 dB; 315 Hz to 20 kHz)

16-bit mode	≤ 0.034%
14-bit mode	≤ 0.034%

CHANNEL SEPARATION

> 90 dB, 100 Hz to 10 kHz

INDICATOR "BALLISTICS"

Response time	0.8 msec*
Decay time	≈ 200 msec
Overshoot	0 dB

SENSITIVITY (re 0 dB; 315 Hz)

365 mV

INPUT OVERLOAD

> 10 volts

INPUT IMPEDANCE

47k ohms

OUTPUT IMPEDANCE

line	380 ohms
headphone	240 ohms

MAXIMUM OUTPUT (from 0 dB)

line	1.39 volts
headphone	7.2 volts*

*See text.

deafness). Dithering allows sounds to be recorded 10 to 15 dB below the noise floor (just as in analog recording), ensuring that hall ambience and other low-level phenomena are reproduced naturally. Thus, the effective dynamic range should be significantly greater in the PCM-501ES's 16-bit mode than in its 14-bit mode, despite the similar S/N figures. The reason for not using dither in the 14-bit mode is that the hiss might be apparent in soft passages of recordings of music having wide dynamic range.

Another, much smaller departure from the norm is the PCM-501ES's sampling rate. The new EIAJ standard calls for 44.1 kHz at 16 bits but 44.056 kHz at 14 bits. Sony adopts the higher rate in both modes for this processor, so its analog output with tapes recorded through a conventional 14-bit encoder should be very slightly time-compressed, raising pitch. Since the disparity will be only about 0.1 percent, however, it should be inaudible. It is not entirely clear why Sony and the EIAJ chose to up the sampling rate for 16-bit recording, but since 44.1 kHz is the frequency used for Compact Discs, its adoption might facilitate direct digital dubbing.

There are two controls that help you set up a VCR for digital recording. When you press TRACKING in the switch group next to the level display, the right-channel portion converts to show whether the deck's tracking control is adjusted optimally. At the same time, the three LEDs over the OVC (optimum video condition) knob are activated as an aid to setting the VCR's sharpness (picture) control, if it has one. The LEDs actually indicate correction rate. The poorer the deck's video frequency response, the more errors it will create and, therefore, the poorer the indication in this display. For VCRs without such a control, the OVC knob evidently acts as a substitute, to touch up high-frequency response and thereby balance the conflicting considerations of pulse definition and noise level.

There also is an automatic-mute control, which can be used to defeat the muting that normally takes over when errors are beyond correction. Sometimes the garbage

that results from uncorrectable errors is preferable to the muting "dropouts," so this can be a useful option. A COPY button enables you to transfer signals from one digital recorder to another with minimal reconnection and without analog decoding and re-encoding. This circuit is subject to a copy-protection code built into the digital system: If the processor encounters the code, a front-panel LED lights and no signal appears at the back-panel COPY OUT jack.

There are seven other pin jacks. Four of them are for the analog inputs and outputs in each channel, to interconnect with your audio system. Two carry the "video" signals—actually containing stereo digital audio when the processor is in use—to and from the VCR. And there's a monitor output for flexibility in integrating a digital recording system with a working video setup. The owner's manual diagrams several interconnection options, your choice depending on intended use.

The manual (at least, the interim version supplied with our preproduction sample) is a little sketchy about how best to use the PCM-501ES. Naturally, it suggests a Sony Betamax as the best possible deck to use with the processor and fingers Beta I and Beta II as the preferable speeds for high-quality audio. Sony's reticence about VHS may be taken amiss by owners of VHS decks, but the company confirms that it doesn't mean to rule them out for use with the PCM-501. In fact, it claims that the OVC will help you get the best possible results with what it considers, not unreasonably, the worst possible option: VHS's EP (slowest) speed.

In theory, there actually is a continuum of considerations that determine the rate at which errors will accumulate and, thus, the point at which muting dropouts or decoding garbage may become objectionable. The better the design of the deck (in such matters as optimum gap width for the chosen transport speed), the higher the transport speed, the better the condition of the deck's heads, the better the condition of the tape, and the better the grade of tape chosen for the job, the lower the error count will be and

the less critical the setting of the OVC. In practice—as far as we can tell from a limited number of combinations of these factors—theory is vindicated here.

We carried out most of our use-testing on a Beta deck. With good-quality tape—even tape that previously had been used to time-shift TV shows and thus was no longer virgin—the results were uniformly superb at both Beta II and Beta III speeds. We could induce deterioration by grossly misadjusting the tracking control on the deck or the OVC on the processor, but with any setting near the detents on both controls, the right-hand green LED of the OVC remained continuously alight when the TRACKING was engaged, indicating optimum performance. Doubtless the adjustments would be needed much more in playing tapes made on other decks or with tapes that had been damaged physically; we found them utterly uncritical.

In fact, the only audible distress we could spot in normal operation resulted, as it must, from overrecording. Digital media are unforgiving of levels that even momentarily exceed the top of their quantization scale: Unlike analog systems, they simply cannot respond to off-scale values. In recognition of this, Sony has placed its meter 0 dB right at the top of the quantization scale and suggests that you leave a pad of 15 dB or so, depending on the nature of the signal, above peak levels.

The top 10 dB of the metering (which extends down to -50 dB) is divided in 2-dB increments. Response time is fast, at 0.8 milliseconds—though the additional overload light is even faster, responding in less

than 0.02 milliseconds, or 20 microseconds—and decay is slow enough to allow easy visual evaluation. In addition, the maximum value reached in either channel remains lit for three or four seconds as a peak-hold cursor. Altogether, this constitutes a much more useful signal evaluation system than those found in some other digital processors, which seem to emulate (inappropriately, considering the differences involved) the metering in home audio cassette decks.

The results of DSL's bench tests confirm the processor's excellence. Frequency response, channel separation, signal-to-noise ratio, and other standard measurements are uniformly exemplary, and in common with the Compact Disc and other digital systems, there is no flutter at all. Distortion is somewhat higher in the 14-bit mode than at the 16-bit setting, particularly at low signal levels, but the difference is not great. (The figures shown in our data column, for -10 dB, actually are identical in the two modes.) One oddity is that the headphone output clips on a 0-dB signal when the level control is turned all the way up, but as you can see from the very high maximum output voltage, this is hardly a serious limitation.

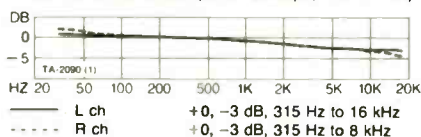
A comparison with past reports will show the PCM-501ES to be technically the most capable digital processor we have yet tested. We also deem it the most functional and the easiest to use. And when you consider its price—the lowest yet—our inescapable conclusion is that we know of no more attractive model than the PCM-501ES.

A Do-It-All Cassette Deck From Onkyo

Onkyo TA-2090 cassette deck, with Dolby B and C and DBX noise reduction, Dolby HX Pro headroom extension, and Auto Accubias automatic bias adjustment system. Dimensions: 17¼ by 4¼ inches (front), 14½ inches deep plus clearance for connections. Price: \$800; optional RC-ST remote control, \$50. Warranty: "limited," two years parts and labor. Manufacturer: Onkyo Corp., Japan; U.S. distributor: Onkyo U.S.A. Corp., 200 Williams Dr., Ramsey, N.J. 07446.

All measurements shown below were taken with Dolby HX Pro off.

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



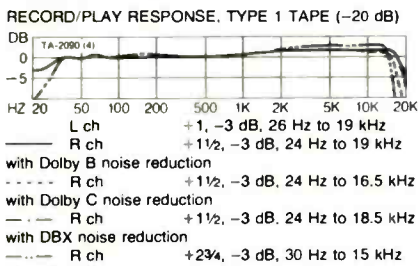
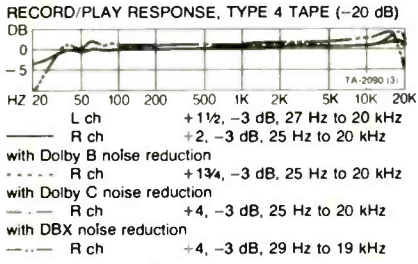
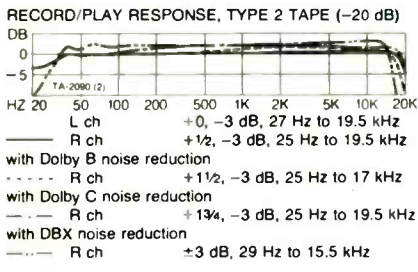
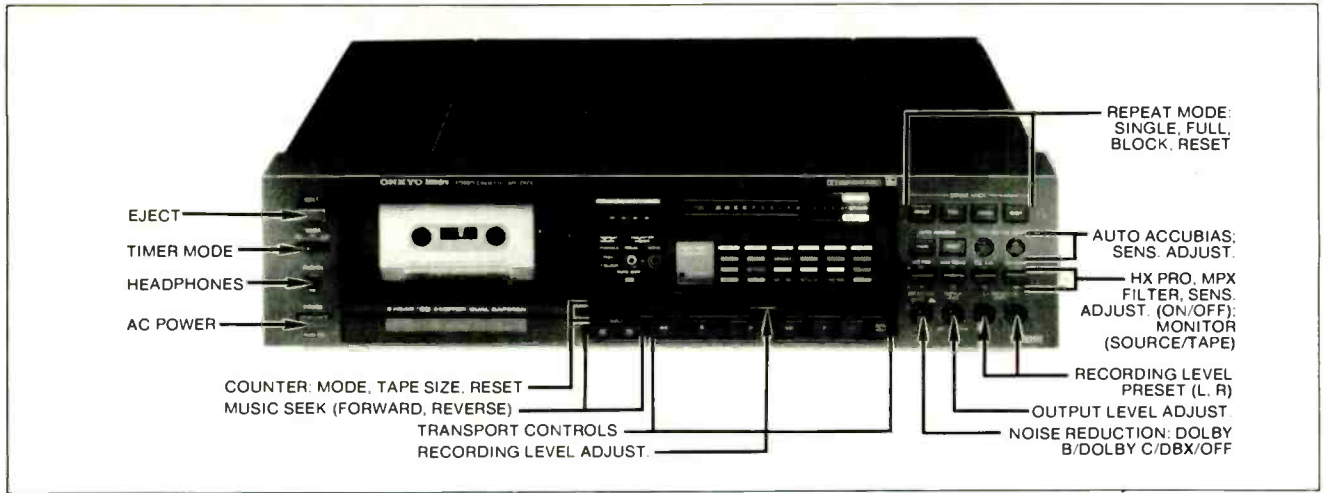
IN MANY RESPECTS, Onkyo's TA-2090 is a logical successor to its TA-2070 deck (test report, February 1982). The TA-2070 was the company's first model to sport Dolby C noise reduction and it included an automatic bias adjustment system called Auto Accubias. Both are retained in this new three-head machine, which adds a music-scan system, automatic tape-type selection, DBX noise reduction, and Dolby HX Pro headroom extension.

HX Pro actually was a joint development of Dolby and B&O. Unlike other Dolby products, it is not a noise reduction system. Instead, it is designed to improve high-frequency headroom by altering the bias dynamically according to the treble content of the program. The theory is that because high-frequency signals actually provide some biasing effect, the amplitude of the bias signal proper can be reduced accordingly, allowing recording at higher levels near the top of the spectrum without increasing midrange distortion. This is a real boon for cassettes, which typically count

limited high-frequency headroom among their greatest weaknesses.

As our data show, DBX also benefits the medium, yielding 6 to 9 dB better measured signal-to-noise (S/N) ratios than Dolby C on this deck. We were therefore a little perplexed when we noticed that Dolby C sounded slightly quieter on some music. This appears to be at least partly the result of some hiss pumping: rising and falling of tape noise along with the signal. (Interestingly, switching to our outboard DBX box virtually eliminated the effect.) In any case, the problem is apparent only on quiet passages in recordings of certain material having very wide dynamic range.

There is no manual override for the automatic tape-type selection, so you will not get accurate reproduction from old or nonstandard chrome or metal cassettes lacking the appropriate identifying notches in their shells. For most users, however, this is not a problem. When you first insert a cassette, the TA-2090 will switch to its preset bias, equalization, and sensitivity (Dolby



MULTIPLEX FILTER (defeatable)
-1/4 dB at 15 kHz; -33 dB at 19 kHz

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

	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	58 dB	57 1/2 dB	56 dB
with Dolby B noise reduction	66 1/2 dB	66 dB	64 1/2 dB
with Dolby C noise reduction	72 3/4 dB	72 1/2 dB	70 1/4 dB
with DBX noise reduction	78 1/2 dB	80 1/2 dB	79 dB

INDICATOR READINGS FOR DIN 0 DB (315 Hz)

Type 2 tape	+2 dB (with 3.5% THD)
Type 4 tape	+3 dB (with 1.8% THD)
Type 1 tape	+3 dB (with 1.1% THD)

INDICATOR READINGS FOR 3% DISTORTION (315 Hz)

Type 2 tape	+1 dB (for -1/2 dB DIN)
Type 4 tape	+3 dB (for +1/2 dB DIN)
Type 1 tape	+3 dB (for +2 1/2 dB DIN)

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

Type 2 tape	≤ 1.10%
Type 4 tape	≤ 0.63%
Type 1 tape	≤ 0.45%

calibration) adjustments for the tape type. Presumably, these are optimized for recording on Maxell UD-SI, UD-XLII, and MX (Types 1, 2, and 4, respectively), which are the tapes Onkyo recommends in the manual and which we used for testing. But if you want to record with some other tape, the Auto Accubias and manual Dolby calibration controls will save the day.

Operation of the Accubias system is both simple and foolproof: Wind past the tape leader, put the deck into recording/pause, and press the Accubias start button. The deck then records a series of tones with various bias levels and searches for the setting that yields the flattest frequency response. Having several steps to the procedure slows you down just a little, but it minimizes the chance of accidental activation and is not a significant inconvenience. Accubias settings can be canceled with the reset button. The sensitivity calibration (necessary for proper Dolby tracking) requires the adjustment of two pop-out knobs—one for each channel—with the help of a built-in test-tone oscillator, but it, too, is relatively straightforward.

Pressing either of the two AMCS (automatic music control system) buttons sends the tape scuttling off in the indicated direction until a blank of at least four seconds is detected. The deck will then shift into PLAY for ten seconds before whizzing on to the next gap. This process will con-

tinue until either the end of the tape is reached or you press PLAY, which will cause playback to continue uninterrupted from that point. If necessary, you can add a four-second blank by pressing the "auto space" button, or you can make a longer blank by holding the button down. The TA-2090 also can be set for as many as five consecutive repetitions of a selection, a complete cassette side, or any continuous segment of a cassette side.

We like Onkyo's counter, which reads either elapsed or remaining time. It does not have a mode in which it performs as a conventional turns counter, but we do not miss it. All you have to do is make sure it is set for the correct tape length. The fluorescent bar-graph recording-level indicators are calibrated from -30 to +8 dB, with 1-dB increments from -3 to +3. Level-setting is accomplished with a pair of rotary controls on the bottom left of the front panel and a master slider. Thus, you can preset levels and use the slider to make smooth fades without losing the initial settings.

Microphone inputs are on the back panel, next to a slide switch that selects between them and the line inputs. This arrangement can be a little inconvenient, but since the mike inputs probably will not be used very often, it is hardly a big drawback. Nonetheless, Onkyo has not skimped on the mike preamps, which are much better than average for a consumer cassette

A Quick Guide To Tape Types

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

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

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

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

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

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

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

AUDIO New Equipment Reports

ERASURE (at 100 Hz)	≥ 69½ dB
CHANNEL SEPARATION (at 315 Hz)	48½ dB
INDICATOR "BALLISTICS"	
Response time	7.5 msec
Decay time	≈520 msec
Overshoot	0 dB
SPEED ACCURACY	0.4% fast, 105 to 127 VAC
FLUTTER (ANSI weighted peak; R/P)	±0.039%
SENSITIVITY (re DIN 0 dB; 315 Hz)	
line input	56 mV
mike input	0.56 mV
INPUT OVERLOAD (at 1 kHz)	
line input	>10 volts
mike input	165 mV
INPUT IMPEDANCE	
line input	84k ohms
mike input	6.1k ohms
OUTPUT IMPEDANCE	1,000 ohms
MAXIMUM OUTPUT (from DIN 0 dB)	1.25 volts

deck, providing ample headroom. And the front-panel headphone output provides more than adequate level, adjustable by means of the deck's front-panel volume control.

Despite its large array of features, the TA-2090 is very easy to use. The controls are well laid out, and below the meters is a bank of indicator lamps that gives you a comprehensive view of the deck's operating status. We were happy to find that all of the important parts of the transport are clearly labeled (although the indicator lights in the record and pause buttons are rather dim) and that the cassette-well door can be removed to facilitate cleaning.

Performance is also to a high standard. Particularly impressive is the flutter figure, doubtless a result of the transport's dual-capstan design. Following its usual practice, Diversified Science Laboratories employed the deck's tape-matching facilities

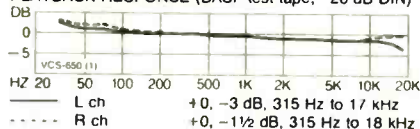
to set it up for testing. The resulting record/play response curves are quite extended and basically smooth. Surprisingly, though, curves taken with the HX Pro circuits engaged (not shown) peak up by as much as 4 dB at the very top of the audio range. This suggests that the system is causing a slight underbiasing of the tapes, at least on our sample.

Otherwise, there is little to fault in the TA-2090 and much to admire. Overall performance is excellent. The deck can make first-class recordings, virtually indistinguishable from their sources, and it is remarkably easy to use for a model with so many tricks up its sleeve. And most of the features are both well thought out and genuinely useful, particularly those comprising the tape-matching system, which give you the freedom to record on the formulations of your choice.

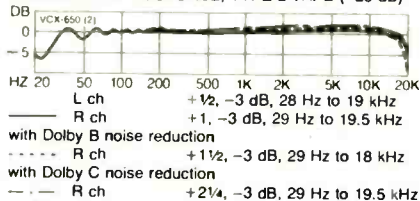
Vector's Cassette Deck With Equalizer

Vector Research VCX-650 cassette deck, with Dolby B and C noise reduction and built-in five-band graphic equalizer. Dimensions: 17 by 4½ inches (front panel), 12¼ inches deep plus clearance for connections. Price: \$450. Warranty: "limited," one year parts and labor. Manufacturer: made in Japan for Vector Research, Inc., 20600 Nordhoff St., Chatsworth, Calif. 91311.

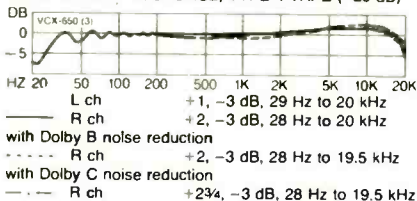
PLAYBACK RESPONSE (BASF test tape; -20 dB DIN)



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



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



THERE ARE TWO fundamentally different approaches to frequency response in cassette recording. In talking to manufacturers of decks and blank tape, we have learned that some Japanese audiophiles, at least, like to "shade" the response by altering bias or, conversely, by deliberately using a tape that technically would be better served by greater or less bias—thus subtracting or adding treble "zing," respectively—than their decks deliver. We've taken the opposite view, that bias is correct when it optimizes sensitivity and distortion across the audio band and that recording equalization (EQ) is correct when it results in the flattest possible playback frequency response.

The relatively limited and unpredictable effects of misbiasing become even more haphazard when manufacturers change their tape formulations, so when response alteration is desirable, we prefer to do it with an equalizer. Most of the time, that means using an outboard unit, though a few all-in-one stereo compacts of recent years have incorporated rudimentary equalizers. Now Vector Research has incorporated an equalizer into the recording circuitry of a component deck.

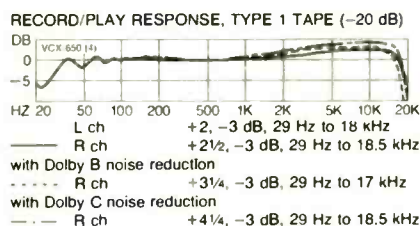
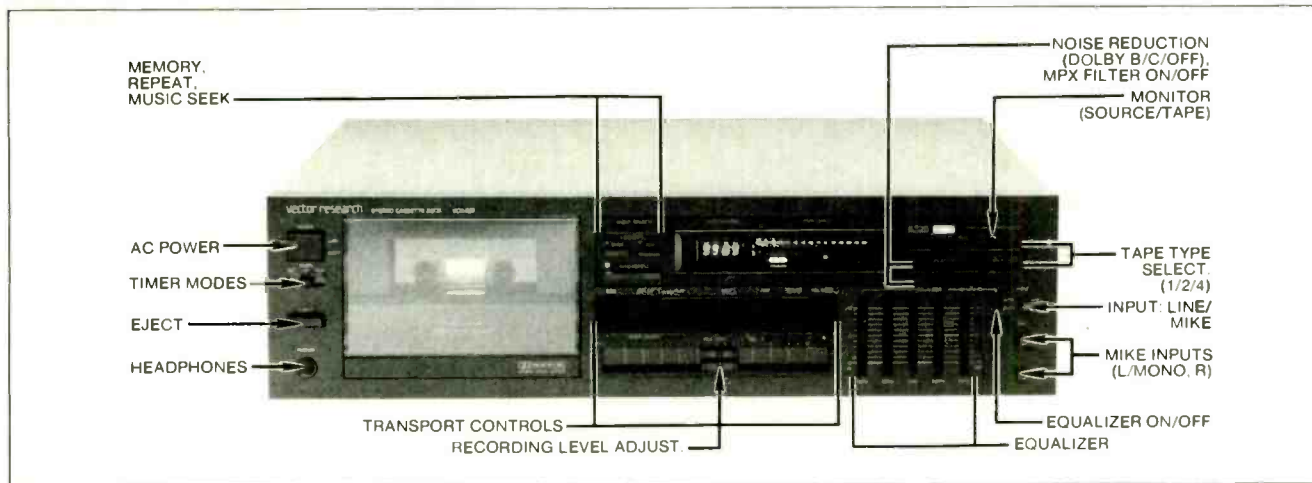
The one in the VCX-650 isn't a substitute for a separate speaker or program equalizer—which, when needed, should be available on playback and for any source—nor is it at all elaborate. Essentially, it's typical of the five-band graphic equalizers built into other home-entertainment products. The two channels are ganged on a single set of sliders, for example, and the calibration is only approximate in implying 2 dB of boost or cut per step. The first two steps on both sides of the 0-dB detents are somewhat larger than that, and those near the extremes of slider travel are smaller. Total boost/cut range in the center of each

band is close to the indicated 10 dB, however, and the disparities are too minor to be of real consequence, particularly when you consider that you will be judging the effect by ear anyway.

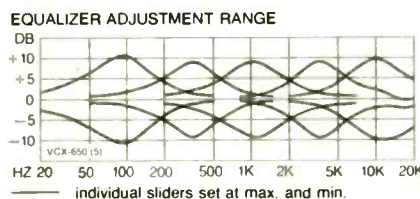
The bands are evenly spaced across the frequency range at accurately labeled center frequencies of 100 and 330 Hz and 1, 3.3, and 10 kHz. The owner's manual (printed in Japan and not up to the standard we would expect of a company that calls the shots from the U.S.) gives some very sketchy rules of thumb for modifying each band. You're probably better off just experimenting with the sliders' effects, which is easy to do with the monitor switch at SOURCE. With this setup, you can determine exactly what you want to do before you begin recording. If you want no EQ, you can defeat the section altogether.

Though the maximum boost and cut are mild compared to what's available from some other graphic equalizers (which may offer as much as ±15 dB), you can achieve effects that are quite gross. More circum-spect settings yield subtler results, partly because the bands are quite broad and interactive under those circumstances, though no more so than is typical among home equalizers. The manual suggests custom equalization of cassettes you plan to play in your car, which is an eminently sensible suggestion. But all sorts of touch-ups are possible, depending on your taste and inclination. (Really precise control is beyond the capability of inexpensive consumer equalizers, however; if you want to play record producer, you might do better to spring for a separate parametric model.)

The VCX-650 has two other special features. One is MUSIC SEEK, which fast-winds forward or backward to locate blanks of at least four seconds between selections.



MULTIPLEX FILTER (defeatable)
+ 1/2 dB at 15 kHz; -37 1/4 dB at 19 kHz



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

	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	58 1/4 dB	56 dB	55 1/4 dB
with Dolby B noise reduction	65 1/4 dB	65 dB	65 dB
with Dolby C noise reduction	73 1/2 dB	71 3/4 dB	70 1/2 dB

INDICATOR READINGS FOR DIN 0 DB (315 Hz)

Type 2 tape	+1 dB (with 1.17% THD)
Type 4 tape	+1 dB (with 0.43% THD)
Type 1 tape	+2 dB (with 0.28% THD)

INDICATOR READINGS FOR 3% DISTORTION (315 Hz)

Type 2 tape	+3 dB (for +3 dB DIN)
Type 4 tape	> +8 dB (for +7 1/2 dB DIN)
Type 1 tape	+5 dB (for +5 1/2 dB DIN)

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

Type 2 tape	≦ 0.61%
Type 4 tape	≦ 0.40%
Type 1 tape	≦ 0.41%

ERASURE (at 100 Hz) ≧ 60 1/2 dB

CHANNEL SEPARATION (at 315 Hz) 43 3/4 dB

INDICATOR "BALLISTICS"

Response time	7.4 msec
Decay time	1,050 msec
Overshoot	0 dB

SPEED ACCURACY 0.9% fast, 105 to 127 VAC

FLUTTER (ANSI weighted peak; R/P) ±0.095%

SENSITIVITY (re DIN 0 dB; 315 Hz)

line input	76 mV
micro input	0.30 mV

INPUT OVERLOAD (at 1 kHz)

line input	> 10 volts
micro input	31 mV

Each extra tap on FAST FORWARD or REWIND skips over one blank, so you can jump multiple selections in either direction. During a search, the counter registers the programmed number of blanks. A mute button automatically inserts such a blank and leaves the deck in recording/pause when you press it during recording. Shorter blanks can be created by pressing the button a second time before the four seconds are up; longer ones result from holding it in. The music-peek system thus is fairly typical.

Somewhat less usual is the MEMORY REPEAT, which can be set to replay an entire cassette side or any portion of it. There are separate buttons for MEMORY START and MEMORY END, each with its own pilot to indicate when the function has been set. This arrangement makes operation more obvious than it is in some other decks that offer selective repeat. Either of these special functions can be used to replace conventional memory-rewind or memory-play options.

The metering scale extends from -20 to +8 dB, with 1-dB increments in the range between -3 and +3 and a 0-dB indication 1 to 2 dB above DIN 0 dB. There is no peak hold as such, but the decay time is long enough for you to read brief peaks if you're watching attentively. The meter is considerably smaller than average, though it's fairly easy to read if you keep the deck reasonably near eye level.

When Diversified Science Laboratories measured playback response, the resulting curves were quite flat. However, the lab did note evidence of azimuth disagree-

ment between the BASF test tape and the deck, implying that the actual response might have a slightly rising characteristic.

The owner's manual lists many specific tape formulations as appropriate for the VCX-650, including ones as disparate as Maxell's LN, UD, UDXL-1, and XL-IS, among the ferrics. DSL tested the deck with three TDK formulations: SA-X ferricobalt for the Type 2 "chrome," MA for the Type 4 metal, and AD-X for the Type 1 ferric. All measured surprisingly flat at 0 dB—flatter than at -20—out to the beginning of serious saturation, though this is a case of overload compression that "compensates" for an inherently rising response characteristic.

In any event, response anomalies are not severe even where they are most pronounced, including the deep bass, where some contour effect (head bumps) can be seen in the graphs. Dolby tracking (the agreement of the curves despite changes in noise reduction setting) is excellent, particularly in the lower midrange, where Dolby C often introduces a substantial rise. Incidentally, comparing SOURCE with TAPE to assess such matters is not quite as easy as it might be, because of a brief hiatus in the sound when you switch the monitor back to SOURCE.

All in all, the VCX-650 is an interesting deck that offers well above routine standards in both features and performance and does so at a moderate price. If you want to be able to equalize your tapes as you make them but don't need elaborate, quasiprofessional EQ, this deck is uniquely suited to your needs.

INPUT IMPEDANCE

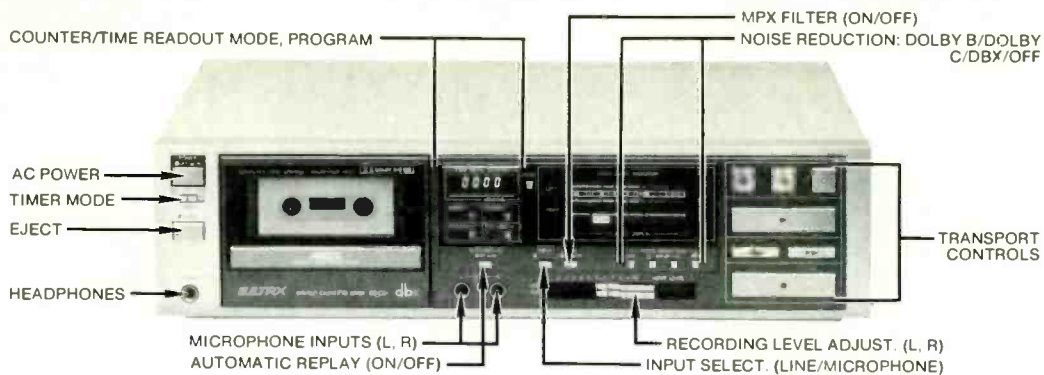
line input	48k ohms
micro input	10k ohms

OUTPUT IMPEDANCE

	2,450 ohms
OUTPUT (from DIN 0 dB)	0.52 volt

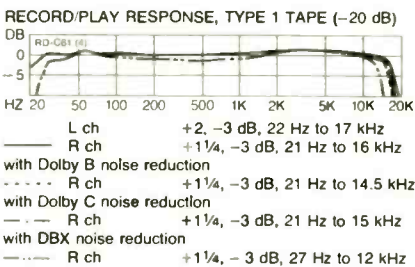
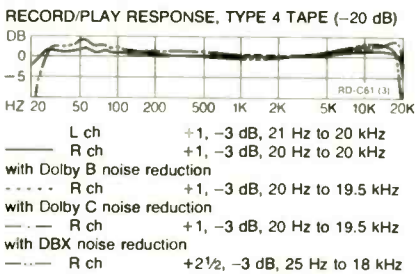
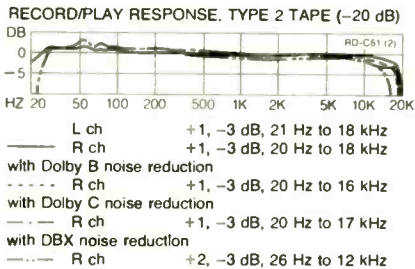
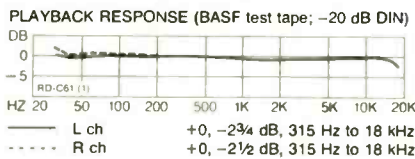
Report Policy Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by Diversified Science Laboratories. The choice of equipment to be tested rests with the editors of HIGH FIDELITY. Samples normally are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

reports in advance of publication, and no report or portion thereof may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested. HIGH FIDELITY and Diversified Science Laboratories assume no responsibility for product performance or quality.



Ultrax's Budget Breakthrough

Ultrax RD-C61 cassette deck, with Dolby B and C and DBX noise reduction and wired remote control. Dimensions: 16½ by 4¼ inches (front), 8¾ inches deep plus clearance for connections. Price: \$270. Warranty: "limited," two years parts and labor. Manufacturer: Sanyo Electric Co., Ltd., Japan; U.S. distributor: Sanyo Electric, Inc., 1200 W. Artesia Blvd., P.O. Box 5177, Compton, Calif. 90220.



MULTIPLY FILTER (defeatable)
+¼ dB at 15 kHz; -3½ dB at 19 kHz

THE RD-C61 IS THE FIRST product we have tested from Sanyo's Ultrax line. Best known for low-priced appliances, television sets, and the like, the company seems to have decided that a new name is what's needed to break into the component audio market. This strategy is similar to the one Panasonic used some years ago when it introduced the Technics brand. And that is not the only likeness: Both companies are Japanese manufacturing behemoths, justly famed for their ability to build large quantities of almost anything electronic at very low cost.

Consequently, the RD-C61's price tag is not as big a surprise as it might be if it were attached to another maker's top non-reversing model. (The only deck higher in the Ultrax line is the bidirectional RD-R81.) In terms of features, the only obvious concession is the use of a combination record/play head instead of separate elements that would permit off-tape monitoring during recording. Otherwise, this remarkably small, light unit is very well appointed.

For example, the RD-C61 is one of the few models we have seen at any price to incorporate not only Dolby B and C noise reduction circuits but also DBX. And a wired remote control for all transport functions is standard equipment, not an extra-cost option. Tape-type selection (1, 2, or 4) is automatic, but since there is no override switch, the manual warns against using old or nonstandard metal or chrome cassettes that do not have the necessary control keyways in their shells. For the most part, though, this feature is an unassailable convenience.

The RD-C61 has a headphone jack and a stereo pair of microphone inputs on the front panel. Output level from the former is adequate but not adjustable and therefore of limited utility. And though the built-in mike preamps are handy, their relatively low overload point makes them unsuitable for recording music with a wide dynamic range. Ultrax provides a front-panel switch for choosing between the mike and line inputs.

Recording level is adjusted by means of a pair of horizontal sliders. The fluores-

cent bar-graph meters are calibrated from -40 to +18 dB, with segments lighting in 2-dB increments between -12 and +8 dB. Segments light in one of three colors: blue up to 0 dB, green from there to +8 dB, then red. These divisions are sensible. Ultrax suggests setting peak levels between 0 and +4 dB, and Diversified Science Laboratories' measurements show that midrange levels as high as +8 dB are acceptable with the Type 1 (ferric) and Type 4 (metal) tapes used for testing: TDK AD and MA, respectively. For the Type 2 ferricobalt (TDK SA), 3 percent midrange distortion was reached at +4 on the meters, confirming the manufacturer's recommendation.

Unfortunately, DSL measured considerable overshoot in the meter action (surprising for electronic indicators), which may cause you to be several dB more conservative than necessary when setting levels for dynamic material. As a result, it may sometimes be advantageous to let the meters run slightly higher than Ultrax and our data suggest is prudent. The indicators have very fast response and decay times, with a peak hold to make them easier to read. (The decay time shown in our data column is not directly comparable to those shown for other decks we have tested, because the meter is not calibrated between -12—where the lab took its measurement—and -40 dB, even though there are several segments in the interval; our decay measurement normally is to -20 dB.) On the other hand, each illuminating segment is made up of a number of thin vertical lines, which tends to make the display more difficult to interpret when it is changing rapidly. We also found the red segments rather hard to see in bright room lighting.

The digital tape counter can be used in four ways: as a standard turns counter, as an elapsed-time display, as a time-remaining readout, or as a program-number indicator for the automatic music select system (AMSS). Like most other elapsed-time displays we've seen, the one on the RD-C61 is not absolutely accurate, but Ultrax says that it will never be off by more than a few minutes and that at the end of a tape it will be less than a minute off. This is a very

S/N RATIO (re DIN 0 dB; R/P; A-weighted)		
	Type 2 tape	Type 4 tape
without noise reduction	56 dB	55 1/4 dB
with Dolby B noise reduction	65 dB	64 dB
with Dolby C noise reduction	72 dB	70 1/4 dB
with DBX noise reduction	80 dB	79 dB

INDICATOR READINGS FOR DIN 0 DB (315 Hz)	
Type 2 tape	+4 dB (with 2.5% THD)
Type 4 tape	+4 dB (with 0.71% THD)
Type 1 tape	+4 dB (with 0.76% THD)

INDICATOR READINGS FOR 3% DISTORTION (315 Hz)	
Type 2 tape	+4 dB (for +3/4 dB DIN)
Type 4 tape	+8 dB (for +4 1/2 dB DIN)
Type 1 tape	+8 dB (for +3 1/4 dB DIN)

DISTORTION (THD at -10 dB DIN; 50 Hz to 5 kHz)	
Type 2 tape	≤ 0.83%
Type 4 tape	≤ 0.38%
Type 1 tape	≤ 0.37%

ERASURE (at 100 Hz)	
Type 2 tape	71 1/2 dB
Type 4 tape	59 1/2 dB

CHANNEL SEPARATION (at 315 Hz)	
	48 dB

INDICATOR "BALLISTICS"	
Response time	3 msec
Decay time	18 msec*
Overshoot	+4 dB

SPEED ACCURACY	
	1.3% fast, 105 to 127 VAC

FLUTTER (ANSI weighted peak; R/P)	
	±0.13%

SENSITIVITY (re DIN 0 dB; 315 Hz)	
line input	110 mV
mike input	0.46 mV

INPUT OVERLOAD (at 1 kHz)	
line input	>10 volts
mike input	39 mV

INPUT IMPEDANCE	
line input	64k ohms
mike input	7.2k ohms

OUTPUT IMPEDANCE	
	1,350 ohms

OUTPUT LEVEL (from DIN 0 dB)	
	0.67 volt

*See text.

useful function that we wish more decks incorporated. We are less happy with the elapsed-time indicator only because it automatically resets to zero whenever you put the deck into a fast wind.

The AMSS enables you to wind a cassette directly to the selection you want by specifying its position relative to where the tape already is. To do this, you press the program button once for each selection you want to skip. The deck distinguishes individual programs by looking for a blank of at least four seconds, which it takes to be a break between selections. The counter display will show the number you have punched in. Then you press PLAY together with either FAST FORWARD or REWIND, and the tape will wind to the specified point and begin playback. The system can be fooled by long pauses or quiet passages in classical music, but it is very reliable on pop material. (Ultrix says that it also may misbehave if placed on top of a television set, because of signals radiated by the set when it is on.)

If need be, you can create the required pauses with the RECORDING MUTE in the transport controls. Push it while the RD-C61 is in the recording mode, and the deck will create a four-second blank and then go into recording/pause. To create longer blanks, you simply hold the button down. There also is a memory-stop function that operates by rewinding the tape to whatever position reads zero on the counter.

The RD-C61's performance is respectable by any standard and impressive for a deck combining so many features with so low a price. Response is for the most part smooth and extended, though no records are

set in either category. Noise is low, and the headroom is high, yielding wide dynamic range. However, the lab did note considerable amounts of the second harmonic in its distortion measurements, indicating that the electronics as well as the tape (which characteristically produces only the third harmonic) were contributing to the total. And in our listening tests, we heard a very small amount of what sounded like hiss pumping on quiet passages of DBX-encoded recordings of certain material having unusually wide dynamic range—enough to make us prefer Dolby C in those few instances. Speed is not dead on, but it is close enough, and flutter is adequately low.

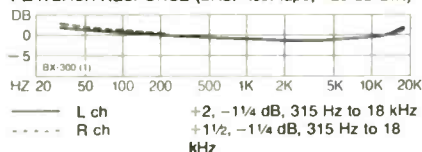
We found the RD-C61 a pleasure to use and capable of making excellent copies of any material we fed it. The owner's manual is clear and thorough, and the control layout is logical and uncluttered. The only problem we encountered was with head cleaning. Pressing PLAY raises the head block and engages the capstan and pinch roller, which is a help, but the benefit is more than offset by the nonremovable cassette-well door. Otherwise, everything is straightforward. And we suspect many users will find the RD-C61's unusually shallow case an advantage, since it will fit on many shelves that will not readily accommodate most other components.

Although decks are available with higher performance or more elaborate features, most are substantially more expensive. (Indeed, we have seen models that offered less for a great deal more.) The RD-C61 is a fine machine for the money asked. Such a good value should not pass unnoticed among the budget-conscious.

Simple Excellence From Nakamichi

Nakamichi BX-300 cassette deck, with Dolby B and C noise reduction. Dimensions: 17 by 4 inches (front panel), 10 inches deep plus clearance for connections. Price: \$650; optional RM-200 wired remote control, \$45. Warranty: "limited," one year parts and labor. Manufacturer: Nakamichi Corp., Japan; U.S. distributor: Nakamichi U.S.A. Corp., 19701 S. Vermont Ave., Torrance, Calif. 90502.

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



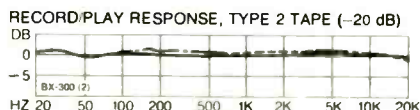
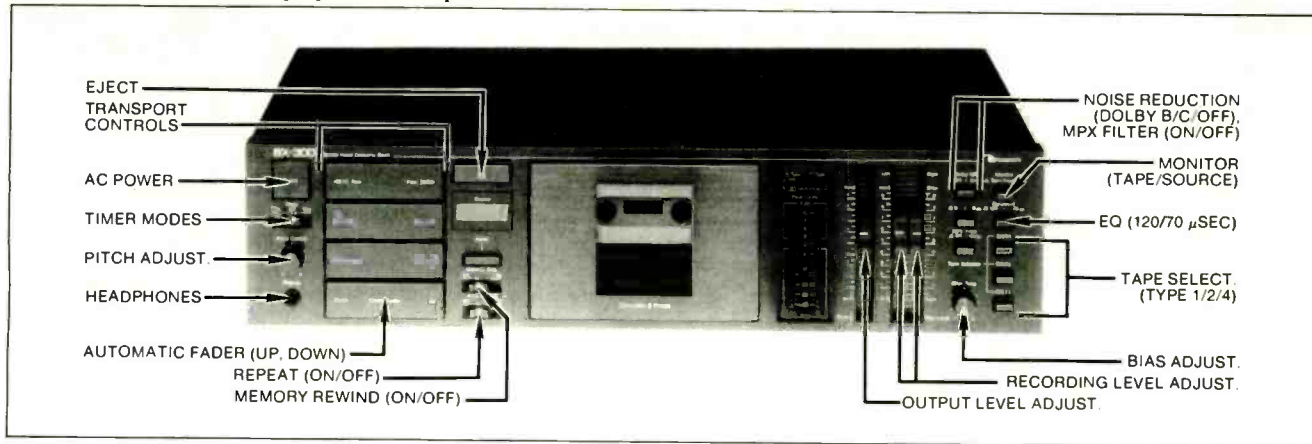
WE'RE SO INURED to startling originality in the Nakamichi products we test that we are tempted to describe the BX-300 as "just an excellent deck." It is that—a fine performer in a fairly conventional format—but it's hardly a me-too design. It achieves its quality partly by adopting proven assemblies from Nakamichi's more radical models, partly by the old-fashioned procedure of whittling away at the little things that, in aggregate, can prevent a good concept from achieving its full potential.

Nakamichi's Asymmetrical Dual-Capstan Diffused-Resonance drive, a regular feature of recent models, introduces differences of diameter and rotation speed to prevent the two capstan assemblies from reinforcing each other's residual tendency to wow or flutter. The direct-drive motor is described as a high-inertia design (for minimum cogging) controlled by a fast-response servo.

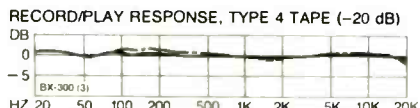
The tape passes through a tape guide ahead of the first capstan and pinch roller at

the first large window in the cassette shell. The tiny erase head occupies the small window between it and the large center opening, where the independent recording and playback heads are located. The latter head is considerably larger than average to minimize bass contour effects (so-called head bumps, which perturb response at long wavelengths as a function of the tape-to-head contact geometry). It is flanked by two protrusions that keep the cassette's pressure pad from contacting the back of the tape during use. Their purpose—like that of the guide-free path between the two capstans—is to minimize scrape-flutter and related fidelity inhibitors. The "downstream" capstan and pinch roller occupy the last large opening.

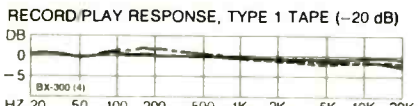
The control functions focus squarely on ease of normal use and avoid complications and esoterics. The only concessions to the standard "flash" features of recent years are a timer-operation switch, a REPEAT (which can be set to play an entire



L ch ± 1 dB, 20 Hz to 20 kHz
 R ch $\pm 1/2$ dB, 20 Hz to 20 kHz
 with Dolby B noise reduction
 R ch $+1, -1/4$ dB, 20 Hz to 20 kHz
 with Dolby C noise reduction
 R ch $+1 1/2, -1$ dB, 20 Hz to 20 kHz



L ch $+1, -1/2$ dB, 20 Hz to 20 kHz
 R ch $\pm 1/2$ dB, 20 Hz to 20 kHz
 with Dolby B noise reduction
 R ch $+1/2, -1 1/4$ dB, 20 Hz to 20 kHz
 with Dolby C noise reduction
 R ch $+1 1/2, -1 3/4$ dB, 20 Hz to 20 kHz



L ch $+0, -1/4$ dB, 20 Hz to 20 kHz
 R ch $+0, -1$ dB, 20 Hz to 20 kHz
 with Dolby B noise reduction
 R ch $+1/4, -2/4$ dB, 20 Hz to 20 kHz
 with Dolby C noise reduction
 R ch $+1 1/2, -2 1/2$ dB, 20 Hz to 20 kHz



maximum bias setting
 minimum bias setting

MULTI-PLEX FILTER (defeatable)
 $-1/2$ dB at 15 kHz; $-33 1/2$ dB at 19 kHz

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

	Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	55 1/4 dB	55 1/4 dB	52 dB
with Dolby B noise reduction	65 dB	64 3/4 dB	61 3/4 dB
with Dolby C noise reduction	72 dB	71 3/4 dB	68 1/2 dB

INDICATOR READINGS FOR DIN 0 dB (315 Hz)

Type 2 tape	+5 dB (with 1.58% THD)
Type 4 tape	+5 dB (with 0.36% THD)
Type 1 tape	+5 dB (with 0.77% THD)

INDICATOR READINGS FOR 3% DISTORTION (315 Hz)

Type 2 tape	+5 dB (for +2 dB DIN)
Type 4 tape	>+10 dB (for +8 1/2 dB DIN)
Type 1 tape	+10 dB (for +3 3/4 dB DIN)

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

Type 2 tape	$\leq 0.67\%$
Type 4 tape	$\leq 0.30\%$
Type 1 tape	$\leq 0.38\%$

cassette side or to return only to the counter's zero setting), and—most surprising—a playback pitch control, which is something we seldom see on a cassette deck.

There is an uninstrumented bias adjustment: Nakamichi instructs you to leave the knob at its center detent for all of the tapes listed in the manual and to adjust it by ear—for equal brightness in source/tape comparison—for other brands. This is not exactly a precise method, but if accuracy is what you're after, you can always stay with the listed tapes. The remainder of the tape-matching system is traditional Nakamichi: You choose basic type by means of three buttons marked with both Nakamichi tape designations and the appropriate IEC type numbers. This sets bias and sensitivity (Dolby tracking) but not equalization (EQ), which has its own switch.

Diversified Science Laboratories tested the deck with the BIAS at the detent and using Nakamichi tapes: SX ferricobalt, ZX metal, and EX-II (which, despite the "II," is a Type 1 ferric). All the curves are excellent. There is slight residual contour effect, but it is negligible. There also is a slight rise in the midbass with Dolby C, which is not unusual (though Nakamichi says it hand-picks its Dolby ICs for unusual tracking precision). Roll-off at high frequencies is likewise very slight.

High-frequency headroom is very fine with all three tapes, especially Type 4 and particularly with Dolby C engaged. The bias adjustment range with Type 1 is shown in our data column. That for Type 2 is similar, except that it yields a little less treble boost at minimum bias and a little more attenuation at the maximum setting. The range is predictably less broad for Type 4.

Playback response is exceptionally flat

to above 10 kHz, where it begins rising, though not to a serious degree. The lab noted that output is exceptionally stable at high frequencies, indicating excellent azimuth agreement between deck and tape and the absence of serious skewing.

The metering adopts a relatively low 0-dB calibration: 5 dB below DIN 0 dB. This gives lots of elbowroom for driving peaks above meter zero without overload, but it can lead to lower levels (and, therefore, noisier tapes) than necessary if you back off too early into the red. Indeed, with the generous midrange headroom of the metal tape, the overload point is beyond the meters' +10-dB maximum calibration. The indicator elements light in pairs, at 2-dB intervals in the most important range between 0 and +7 dB. The scale extends down to -40, though the bottom elements are always lit when the deck is on; those at -30 dB are the lowest that are signal-responsive.

Speed, measured with the pitch control at its center detent, is spot-on—a rarity even in a nonadjustable deck. The control range (which affects playback only) amounts to about a half-tone in either direction. More important, the flutter is superbly low, undoubtedly because of the deck's sophisticated transport mechanism.

We continue to wish that Nakamichi would revert to switching of higher visibility than its small black-on-black buttons afford, particularly for the tape type and EQ, where a mistaken setting can ruin a recording. But this is a small criticism of what must be accounted a very fine deck. If you dislike gadgets and demand superb technical fundamentals in a cassette deck with off-the-tape monitoring capability, Nakamichi has designed the BX-300 expressly for you.

ERASURE (at 100 Hz)	≥ 67 dB
CHANNEL SEPARATION (at 315 Hz)	46 1/2 dB
INDICATOR "BALLISTICS"	
Response time	2 msec
Decay time	820 msec
Overshoot	0 dB
SPEED ACCURACY	no measurable error, 105 to 127 VAC
SPEED ADJUSTMENT RANGE	-6.5 to +7.2%

FLUTTER (ANSI weighted peak; R/P)	$\pm 0.08\%$
SENSITIVITY (re DIN 0 dB; 315 Hz)	74 mV
INPUT OVERLOAD (at 1 kHz)	>10 volts
INPUT IMPEDANCE	84k ohms
OUTPUT IMPEDANCE	2,180 ohms
MAX. OUTPUT (from DIN 0 dB)	1.55 volts

IS AUTOMATIC BETTER?

“Intelligent” microprocessor-equipped cassette decks are designed to simplify the recording process. But are they smart enough to guarantee great-sounding tapes?

by
Edward J.
Foster

Convenience features in audio equipment are often berated by purists as either unnecessary or just plain silly. Indeed, a microprocessor-assisted volume control in an amplifier is hardly an improvement over a rotary potentiometer in flexibility or speed. But cassette decks are another story. Here, automatic controls can take some of the guesswork out of the recording process.

There are situations, however, where automation can foul things up. Automatic tape-type selectors, which “read” the keyways on the spine of the cassette shell and switch bias and equalization (EQ) accordingly, are a good example. Some of my recordings are on early-vintage chrome (Type 2) tapes that lack keyways. The sensing system responds to these tapes by switching to ferric (Type 1) equalization, resulting in over-bright playback. And should the urge ever hit me to record on a ferrichrome or old metal cassette (which also lack keyways), the automatic selection system will cause the deck to supply too little bias for the formulation.

More important, there are times when I like to use *nonstandard* equalization—say, 120 microseconds with a Type 2 tape—to improve high-frequency headroom. For that

reason, I prefer *separate* bias and equalization switches, even though that practice raises the possibility of choosing the wrong EQ in playback. I would recommend, therefore, that you try to find a deck that will give you the option of overriding the automatic tape-type selector.

If you're a serious recorder, you will want some means to fine-tune bias, Dolby tracking, and perhaps equalization to match the tape you're using. I use so many different formulations that I can't get by without it. But even if you were

to stick with just one or two tapes recommended by the manufacturer of your deck—which presumably will result in optimum performance—you would eventually find yourself in need of a fine-tuning control to compensate for the constant and often unpublicized modifications manufacturers make in their formulations.

There are three ways to implement a fine-tuning system: manually without test tones, manually with test tones, and automatically. The automatic method—whereby a microprocessor tests the tape by

recording and playing back a series of tones using various bias and recording levels (and possibly equalizations) to see which works best—used to be very expensive. Now such systems are available in moderately priced decks.

I'm all for such automatic systems, providing they do the job *accurately*. All too often, however, the pressure is on the designer to accommodate too wide a variety of tapes with too few bias and recording levels. (The microprocessor selects settings only from among those it has been programmed



The Onkyo TA-2090 (test report, page 24) is one of the new breed of cassette decks with features designed to make recording easier and more foolproof.

to choose: It does not make adjustments in a continuous analog fashion.) When the bias and level steps are too coarse, accuracy suffers. I have even seen decks choose *different* settings on subsequent tests of the *same* tape when the correct settings lay between the choices provided.

If you are willing to take a few moments, you can probably get more accurate results using a deck with built-in tone generators and manual bias and

The least sophisticated—but still useful—fine-tuning system enables you to adjust bias by ear to get the best match between the original sound and the recording. A three-head deck with monitoring provisions enables you to make such source-tape comparisons quite easily with music as your test signal. On a two-head deck, it's best to use FM interstation noise instead of music for your test recording. You can count on it being reasonably uniform in character, which makes it possible to switch between tape playback and tuner when evaluating the effect of different bias settings.

Changing bias affects virtually every tape characteristic: distortion, maximum output level (MOL), sensitivity, and frequency response. One self-testing deck—the B&O Beocord 9000 (test report, May 1982)—measures midrange MOL as part of the test procedure and recalibrates its metering system accordingly. As a result, the red area above 0 dB really means what it says, no matter what tape you use. So far, this is an exclusive feature of the 9000, though many decks readjust the “overload” indication based on the general type of tape you've chosen: metal, ferric, chrome, or whatever.

The meters on most decks display the raw music signal; the indicators on a handful of models (for example, those from B&O and Tandberg) display the level of the signal actually being recorded, that is, the level *after* recording equalization is applied. These can be a bit confusing until you get used to them, because the meter does not seem to follow the loudness of the music, especially when there's a lot of high-frequency energy present. But to the extent that the recording equalization is roughly the reciprocal of the tape's overload curve, an “equalized” meter shows you how near overload you are no matter what the

spectral content of the music. If you record jazz that is loaded with high-frequency brass energy or synthesizer rock, equalized metering can help retain bright, clean attacks. At least one deck—the Harman Kardon CD-491 (test report, April 1984)—offers a choice of equalized or unequalized metering.

While on the subject of bias and recording equalization, I should mention Dolby HX and Dolby HX Pro. The original Dolby HX system dynamically manipulated bias and equalization in accordance with the spectral content of the music as determined by the Dolby noise reduction circuitry. It had a brief day in the sun, but it was abandoned when audiophiles discovered that it changed frequency response, producing too much coloration.

The newer Dolby HX Pro system—which actually was invented by B&O—manipulates only the bias, and its control signal is derived by its own circuitry. Dolby HX Pro reduces the bias-oscillator output as the signal's high-frequency content increases, thereby keeping total high-frequency energy relatively constant. The idea is to keep the *effective* bias constant so that the tape won't be driven into self-erasure with treble-rich signals.

Automatic level controls (ALCs) are one feature that I cannot recommend for music recording. Conventional ALCs are fine for voice recording on a portable and can do a creditable job when recording TV dialogue on a VCR, but they make a mess out of music. A typical ALC monitors and adjusts the incoming signal to keep the recording level relatively constant. During quiet passages, it increases gain to keep the signal above tape noise; during loud passages, it decreases gain to prevent overload. The problem with this constant gain-riding is that it severely modifies musical dynamics: Prolonged pianissimos

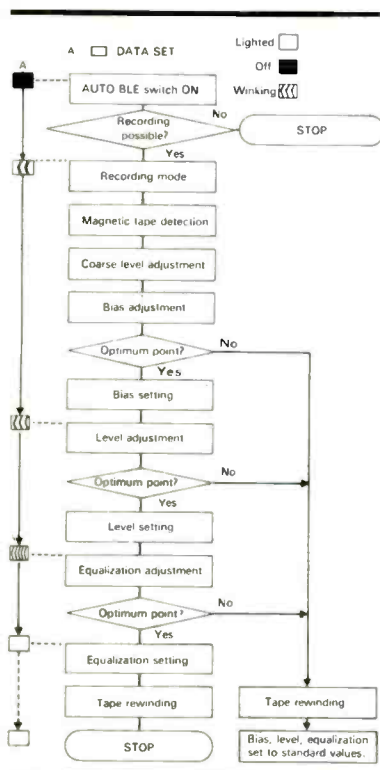
and fortissimos come out sounding very much the same: mezzo forte.

Another problem with ALCs is that it takes some time for the circuit to decrease gain on a sudden loud passage or to increase gain when the sound level suddenly drops. Therefore, a brief fortissimo may escape the squashing ministrations of the ALC but, in so doing, overload the tape. Conversely, after a sudden drop in level, you may hear the music and noise increase unnaturally as the circuit turns up the recording level.

A useful automatic level control would set and then freeze recording level, rather than attempting to follow program dynamics. Fortunately, deck manufacturers sometimes offer such circuits. The first one I encountered was on the JVC KD-A8 (test report, December 1979). More recently, the Sony TC-FX1010 (test report, February 1983) offered a similar approach.

The JVC system duplicated the action you would take in setting recording level manually. If you were taping an LP, for instance, you cued the tone-arm to the loudest section on the disc and then engaged the circuit by depressing a spring-loaded lever. Starting at maximum, the recording gain was reduced in steps until a level that would not overload the tape was achieved. When you released the lever, the gain remained at that level. If you had played the loudest portion of the LP during the level-setting procedure, you were pretty well assured that you were not unnecessarily sacrificing signal-to-noise (S/N) ratio and that the tape wouldn't overload during recording.

JVC no longer offers this sort of automatic control. Instead, the company helps remove some of the confusion about level-setting—which, we are told, leads many people to (Continued on page 82)



This flow chart depicts the progress of Pioneer's Auto BLE system as it fine-tunes bias, Dolby levels, and EQ.

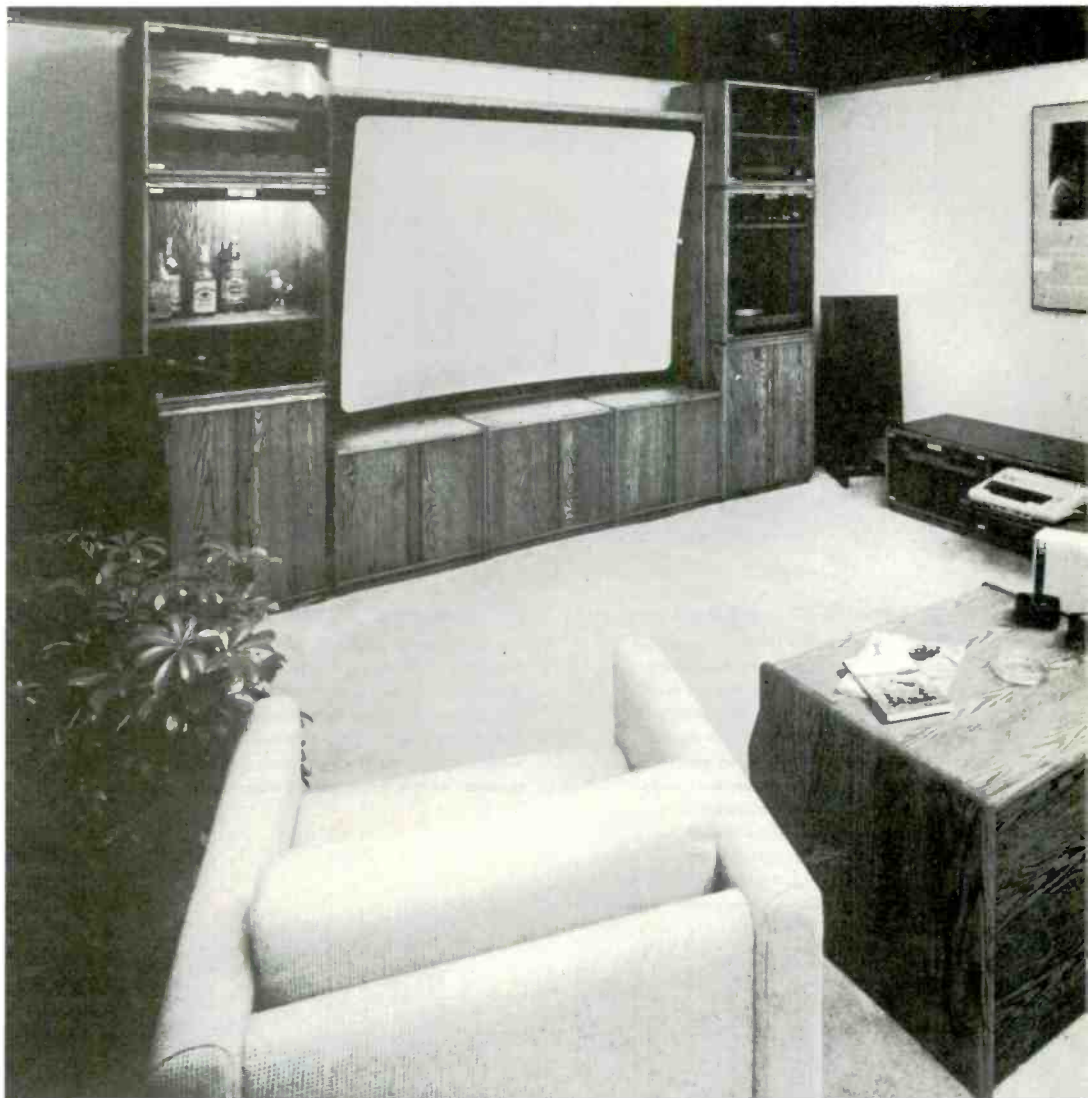
sensitivity controls. Such decks often do not let you vary the recording equalization, because it's too dangerous to juggle three interrelated parameters simultaneously, but this is a small price to pay. Some decks duplicate the bias and sensitivity controls for each major tape type so you can “store” the settings for your favorite tapes. Decks that adjust automatically usually have electronic memories to store one or more settings for each type.

Form + Function

BY

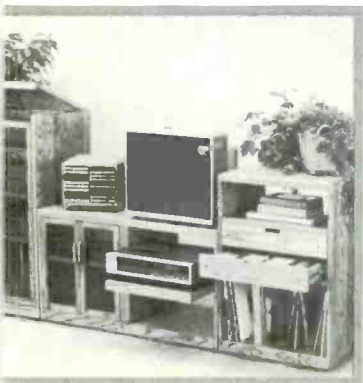
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Form + Function



The Gallery

Collection from Bush Industries uses traditional furniture motifs to create audio-video cabinets that blend well with a variety of decors. The AV-765 system (top left) is finished in lightly distressed pecan tones and costs \$330. GUSDORF pursues similar ends with its Amari modular system (top right). This grouping consists of an audio rack (\$300), a video center (\$380), and an "omni" center (\$380) that conceals a pop-up computer desk behind the cabinet doors.

Recognizing

the popularity of audio cassettes, Danefurn includes a unique software-storage system in its DFAV-6 walnut-veneer audio cabinet (bottom left, \$492). A vertical drawer holds 60 cassettes, and there's room at the bottom of the cabinet for about 80 LPs.

Auctions

and flea markets are good places to find interesting old pieces that can sometimes serve new-media roles. High Fidelity publisher Steven Rosenbaum uses an Edison-cylinder storage rack (bottom center) to hold his considerable collection of Compact Discs. The unit's sloping shelves raise the spines of the CDs' plastic housings for better readability. Esoterica in Rare Woods sells solid-ash storage racks (bottom right) for 60 cassettes (\$89), 20 videotapes (\$109), and 49 CDs (\$89).



For more information, write to **Bush Industries**, 312 Fair Oak St., Little Valley, N.Y. 14755; **Custom Woodwork and Design**, 7447 S. Sayre Ave., Bedford Park, Ill. 60638; **Danefurn**, 425 Hueni Rd., Northbrook, Ill. 60062; **Esoterica in Rare Woods**, Box 32B, Groton, Mass. 01450; **GUSDORF Corp.**, 6900 Manchester Ave., St. Louis, Mo. 63143; **Sonrise**, 13622 N.E. 20th St., Suite F, Bellevue, Wash. 98005.

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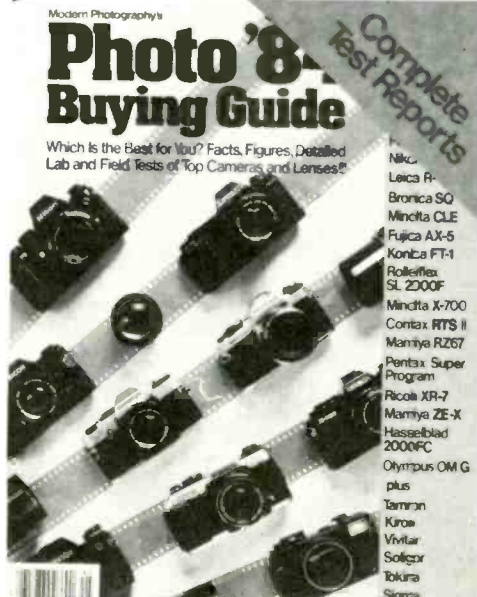
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Digital Audio
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Our traveling videophile puts Kodak's 8mm camcorder to the test.

By
Robert Angus

Once upon a time (a year ago, to be exact), there was only one video camcorder system. It was called Betamovie, and all agreed that Sony deserved much credit for designing a one-piece camera/recorder that used a standard Beta cassette. Then came Videomovie, JVC's camcorder built to accommodate the diminutive VHS-C cassette. Because the VHS-C cassette uses half-inch-wide tape, it can be played back on standard VHS decks—though doing so requires an adapter caddy. Now we have the first unabashedly nonstandard camcorder format: Kodavision, Kodak's initial foray into home video hardware and the first video recording system to use 8mm-wide tape.

Arguments about whether the world is ready for another video format have raged since Kodak displayed prototypes of its 8mm system almost a year ago. I deliberately resisted prejudging the matter, believing instead that the merits of Kodavision (not the egos of elec-

tronics writers) would determine its success or failure in the marketplace. In fact, 8mm camcorder systems are compatible with homebound decks in the sense that it's simple (and desirable) to edit down your camcorder cassettes to half-inch via the portable's video output. (Considering that 8mm tapes cost about \$16, reusing them is a must in my opinion.)

So the question is, How well does Kodavision perform? I found out by putting one through its paces during a trip I made recently to Europe.

The Kodavision system has three parts: the camcorder itself, a "cradle" that converts the camcorder into a tabletop VCR, and a battery charger/voltage converter (the cradle will also recharge two camcorder batteries at home). You can route the video and audio outputs of the camcorder directly to a TV monitor or VCR—bypassing the cradle—with an optional connector cable; the charger/converter contains an RF modulator, which you can

use if your TV set lacks direct inputs. Each of these hookups saves you the cost of the cradle (\$240), which can imitate the functions of a full-featured VCR with the addition of a tuner/timer module. (Considering that the longest recording time available on an 8mm cassette is 90 minutes, the \$300 tuner/timer seems an option you can live without.) But the basic system still adds up to a sizable investment: \$1,900 for the Model 2400 camcorder that I used (a less automated unit, the Model 2200, saves you \$300) and \$180 for the charger/converter.

The 2400 has just about every automatic feature you might want: exposure, focus, white balance, one-touch fades (in and out), and a motor-drive zoom. The unit also uses an AFM (audio frequency modulation) recording technique that makes its sound quality comparable to that of a Beta or VHS Hi-Fi VCR—albeit in mono. And Kodak's instruction manuals are the clearest, best organized, and most interesting I

MAKE WAY FOR KODAVISION





Kodak's Model 2400 camcorder: ready for recording (left) and reclining in its playback/recharger cradle (right)



have ever seen. I was going to say "read," but the photographic geniuses up in Rochester offer so many pictures in the manuals that the effect is more like that of a movie than of a book; in fact, the last half of the camcorder manual presents a step-by-step guide to making home movies.

Like most stand-alone video cameras, the 2400 has an electronic viewfinder. Personally, I find these miniature black-and-white monitors less helpful than an optical viewfinder for judging perspective or composing a scene. Indicator lights around the monitor's screen tell you whether the tape is running, whether you're set for natural or artificial light, and when the battery is about to expire.

The viewfinder would have been more useful if it were positioned more precisely and didn't wobble so easily. Because of the slippage, the horizon tended to dip to the left or right in some of my recordings, and occasionally I wasn't able to see the tape-running indicator. The viewfinder does enable you to play back your tapes seconds after filming, so I was able to spot screwed-up scenes and reshoot them.

Overall, the 2400's controls are neatly and logically organized, at least for right-handed people. You slip your hand through the padded strap and the thumb falls naturally on the record/pause button, leaving the second and index fingers

Robert Angus (on location, left) writes extensively on video equipment and technology.

free to operate the lens's zoom controls. An especially nice feature is the review button located next to RECORD/PAUSE. Depress it, and the camcorder will give you quick confirmation of the scene just taped by replaying the last four seconds. The rest of the controls are located on the left side of the camcorder, and you must remove the unit from its shoulder perch in order to operate them.

There's no doubt about it: The 2400 is a pleasure to work with. Its one-button fader enabled me to create smooth on-location segues between scenes; the fader also helped when I was dubbing portions of the 8mm recording to half-inch tape. The autofocus lens works well, but be forewarned: In crowded street scenes, it will attempt to focus on everyone and everything that passes by. This not only wears heavily on the battery, but ruins a scene if you're filming a particular person or object and the lens decides to refocus on something else. The designers at Kodak realized this, and the autofocus feature can be defeated, leaving you in manual control of the lens. I discovered, however, that auto and manual focusing can work well together: Taping a group of musicians on the streets of Haarlem, Holland, I let the automatic system do its thing, but then defeated it when the crowd threatened to fool the lens into refocusing.

Since the camcorder I used was an NTSC model, I was not able to play my tapes during my stay in Europe. When I returned home, however, I quickly positioned the camcorder in

its cradle and made the appropriate connections to my TV set and audio systems. First, the kudos: The sound of the recordings is superb. The street musicians I mentioned earlier come through with remarkable fidelity. The absence of wow and flutter (a hallmark of AFM recording), the smooth and extended frequency response, and the natural-sounding dynamics make me wish it were capable of stereo recording.

But what about the picture? In sharpness and detail, the video images are quite good, but color reproduction is another story—at least with the metal-particle tape I used. Some of the problems concern the system's reproduction of greens and blues. Valleys covered in haze appear purple in playback, and the rich green mosaic of a forested hillside emerges in shades of dirty green, blue, and even gray.

There's also a problem with color stability. For one scene, I had panned down from a shot of an azure sky dotted with clouds to the distant horizon and eventually to the landscape before me. In playback, the scene starts with the blue sky, but there's a touch of pink in what should be pristine white clouds. The pink eventually disappears, but as the landscape enters the lower part of the frame, the blue vanishes entirely from the sky, and the sunny scene suddenly takes on a leaden, overcast tone. Another example of color shifting is obvious in a scene I shot on a bright day in Luxembourg. Struck by

the beauty of some flowers in a park and the contrasts made by a mandarin-red bench, the green of a lawn, and a fountain nearby, I had lifted the camcorder to my shoulder and panned across the tableau. This time, the reds shift to gray in playback.

I encountered further trouble when filming objects against a bright background. On every railway platform in Holland, there is an internally illuminated sign spelling out the name of the station in white letters against a blue background. On a previous trip, I had recorded these signs close-up as index points, using JVC's Videomovie camcorder. The reproduction with the VHS-C unit was quite natural-looking, the letters sharp and clear. With the Kodavision system, the letters appear ballooned and distorted.

Considering Kodak's expertise in the field of color photography, I tend to believe that final production samples of the Model 2400 camcorder will be capable of better performance. A camcorder is a terrifically complex device, and judging the new 8mm format on the basis of one sample from an early production run seems unreasonable. If you're interested in the Kodavision system, test one out for yourself at a local dealer. Meanwhile, I'm going to try some retests and will report what I find in a future issue.

HF

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C O M P I L E D B Y F R A N K L O V E C E

ULTIMATE PORTABLES

Shopping guides to the latest generation of portable video gear: ultralightweight cameras and one-piece camera-recorders



If you're eager to try your hand at some creative videography or just want to capture your next vacation on videotape, you'll be delighted to learn that there is an abundance of ultralightweight cameras on the market. Indeed, the 35 models in our video camera guide all weigh less than four pounds, with some tipping the scales at barely half that. Of course, you'll need a portable VCR, too, but many of you already own one that you use at home with a companion tuner/timer.

If your present deck is a full-size AC-only model, you might want to investigate a relatively new type of portable recording system—the one-piece camera-recorder, or camcorder. This handy device combines the convenience of an 8mm film camera with the flexibility and economy of video recording.

An extraordinarily convenient approach to portable videotaping, the camcorder combines camera and recorder into one housing. There are three types of camcorders, each using a different cassette. The Sony BMC-220K (top left) employs standard Beta tapes,



JVC's GR-C1U accommodates VHS-C cassettes, and



the Polaroid PB-C1—shown in its playback cradle—uses 8mm tape.

There are currently three camcorder formats to choose from, differentiated by the type of videocassette used: 8mm, VHS-C, or standard Beta. Rumors abound that a fourth system will soon appear using standard half-inch VHS cassettes. All camcorders except the Betamovie models can play back as well as record, which is particularly convenient for editing your movies down to half-inch cassettes. To edit a Betamovie tape created in the field, you'll have to use two VCRs at home, at least one of them a Beta-format machine. The same holds true when you use a separate video camera and VCR: If the portable VCR also serves as your home deck, you'll need access to a second machine for editing.

Choosing a camcorder is like selecting a portable video camera: Weight, features, and overall performance are important factors. The charts that follow detail much pertinent information about both types of equipment, but we stop short of citing manufacturers' specifications. Video specs are often confusing, with manufacturers adhering to a variety of standards. For instance, what one company calls an acceptable image at 20 lux illumination (which ends up being its low-light sensitivity figure) may not coincide with what another manufacturer deems acceptable. Our field tests of cameras and camcorders, such as those described in "Make Way for Kodavision" (page 36) and "On the Road with Videomovie" (July 1984), give you insights into how portable video gear fares in actual use.

Unlike VCRs, video cameras are neither Beta nor VHS, but that doesn't mean it will be possible to hook a Sony camera, for example, to a JVC recorder. Connector configurations differ from brand to brand, so at minimum you may need special adapter cables to make a successful hookup. Several cameras made by VHS suppliers have switches that enable you to vary the routing of the signals that appear at the various connector pins, so that you'll have a better chance of mating the camera to a variety of decks. You'd be well advised, however, to tell your dealer what brand and model of VCR you intend to use with your camera. Experienced dealers know what connectors are available and which camera-VCR combinations will work.

To satisfy your creative requirements, you must select a video camera or camcorder with the pickup tube characteristics, lens quality, and degree of automation you desire. Video pickup tubes differ by type in spectral sensitivity (inherent color balance), image retention, and resistance to wear, among other things. Vidicon tubes are rugged and reliable, but prone to image-retention problems. Saticons are more sensitive and less prone to image retention, but they are more expensive. Cropping up this year are the "high-band" Saticons, which are said to process the chroma (color) signal at a higher frequency than do standard tubes. The aim is to produce a more detailed image with less crosstalk between the chroma and luminance signals. Newvicon tubes are usually considered to have the best low-light sensitivity of any video pickup. And tubeless pickups—metal oxide semiconductors or charge-coupled devices—are essentially free of image-retention problems and virtually immune to burnout caused by prolonged exposure to very bright light.

Almost all camcorders and cameras are fitted with zoom lenses, which are specified in terms of zoom ratio, focal-length range, and "speed." A zoom ratio of 6:1, for example, means that an object will appear six times as

ULTIMATE PORTABLES

close with the lens adjusted to its maximum focal length as it would at the lens's widest-angle setting. A lens's field-of-view characteristics are given by the focal-length range: The smaller the numbers (in millimeters), the wider the lens's maximum field of view. Two different lenses, one with a range of 12–72mm and one with a range of 8–48mm, can each be said to have a 6:1 zoom ratio. The former will be capable of greater magnification at its longest setting (72mm), while the latter will have a wider field of view over part of its range (8 to 12mm).

A lens's maximum iris

opening is often referred to as its "speed": The smaller the f/stop number, the larger the maximum iris opening and the "faster" the lens. Lenses rated at *f*/1.4 or *f*/1.6—as are many found on video cameras—should be quite sufficient for most lighting conditions. An automatic iris, which saves you the bother of manually adjusting the f/stop under changing conditions, is standard on most video cameras. Having a manual override or a backlight compensation control is good for difficult lighting situations.

Automatic focus is another common feature. There are several ways of achieving an

automatic-focusing lens, and none is completely accurate all the time. Cameras that use infrared echoing or light-based triangulation systems, for instance, have a hard time focusing on dark objects. Whatever system you choose, the camera should also be equipped with a manual override.

All cameras and camcorders include at least one microphone, and most offer an input for an external mike. Some cameras are designed to operate with stereo VCRs and are equipped with a pair of mikes, plus inputs for an external set. (Unfortunately, stereo camcorders are not yet available.)

Boom-mounted mikes usually are preferable to those mounted directly on the body of the camera or camcorder. When telescoped to its full length, a boom mike is less likely to pick up noise from zoom and autofocus lenses.

Finally, a word about cost. As usual, we include the suggested retail price of each piece of gear. These "book" prices are what manufacturers would like to see their products sell for, not what you will have to pay. Discounts on video gear can approach 40 percent in many instances, so a bit of comparative shopping can save you lots of money. **Peter Dobbin**

Video Cameras

Model	Lens	Pickup	Controls	Viewfinder	Additional Features*	Weight	Price
Aiwa CV-5M	<i>f</i> /1.6; 8:1 (8.5–68mm) power zoom; macrofocus	½-inch Saticon	Auto/manual iris; auto white balance	Optical	Handheld; mono boom mike	3½ lbs.	\$750
Canon VC-200A	<i>f</i> /1.2; 6:1 (8.5–51mm) 2-speed power zoom; macrofocus	½-inch high-band Saticon	Infrared auto/manual focus; auto iris; auto white balance; backlight compensation; character generator with stopwatch	1-inch electronic	Handheld; body-mounted mono mike	3¼ lbs.	\$1,100
Elmo Astron EC-10	<i>f</i> /1.4; 4:1 (10–40mm) manual zoom	½-inch Saticon	Auto iris; auto white balance; backlight compensation; VCR compatibility switch	Optical	Handheld; mono boom mike; focus lock	2 lbs.	\$500
GE 1CVC-5032E	<i>f</i> /1.4; 6:1 (8–48mm) power zoom; macrofocus	½-inch Newvicon	Auto iris; auto white balance; backlight compensation; video fade-in/out	½-inch electronic	Handheld; detachable mono mike	2 lbs.	\$550
Hitachi VK-C840	<i>f</i> /1.2; 6:1 (8.5–51mm) power zoom; macrofocus	½-inch high-band Saticon	Contrast-companson auto/manual focus; auto/manual iris; auto/manual white balance; audio/video fade-in/out	1-inch electronic	Handheld; body-mounted mono mike	3 lbs.	\$995
Hitachi VK-C1500	<i>f</i> /1.2; 6:1 (12.5–75mm) manual zoom; macrofocus	MOS chip	Auto/manual iris; auto/manual white balance	1-inch electronic	Handheld; body-mounted mono mike	2 lbs.	\$1,225
Hitachi Denshi Everex GP-84	<i>f</i> /1.2; 6:1 (8.5–51mm) power zoom; macrofocus	½-inch Saticon	Auto/manual iris; auto/manual white balance; VCR compatibility switch	1-inch electronic	Handheld; body-mounted mono mike; earphone jack; light shoe	3¾ lbs.	\$850
JVC GX-N4	<i>f</i> /1.2; 6:1 (8.5–51mm) power zoom; macrofocus	½-inch Newvicon	Auto/manual iris; auto white balance; backlight compensation; VCR compatibility switch	½-inch electronic	Handheld; body-mounted mono mike; accepts optional character generator	2¼ lbs.	\$750
JVC GX-N7	<i>f</i> /1.2; 6:1 (8.5–51mm) power zoom; macrofocus	½-inch Newvicon	Infrared auto/manual focus; auto/manual iris; self-correcting color temperature/white balance; VCR compatibility switch; audio/video fade-in/out	½-inch electronic	Handheld; body-mounted stereo mikes; stereo mike jacks; accepts optional character generator	2½ lbs.	\$950
JVC GX-S3U	<i>f</i> /1.2; 6:1 (8–48mm) power zoom; macrofocus	½-inch Saticon	Auto/manual iris; auto white balance	1-inch electronic	Handheld; body-mounted mono mike; stereo mike jacks	2¾ lbs.	\$900
JVC GZ-S5	<i>f</i> /1.2; 6:1 (8–48mm) power zoom; macrofocus	½-inch Saticon	Contrast-companson auto/manual focus; auto/manual iris; auto white balance; audio/video fade-in/out	1-inch electronic	Handheld; body-mounted stereo mikes; stereo mike jacks	3 lbs.	\$1,050

*All cameras are equipped with color temperature controls. Unless otherwise noted, all cameras are equipped with a mono external mike jack.

ULTIMATE PORTABLES

Konica CV-301	f/1.5; 3:1 (10-30mm) manual zoom	1/2-inch Cosmicon	Auto iris; auto white balance	Optical	Handheld; body-mounted mono mike	1 1/2 lbs.	\$600
Konica CV-601	f/1.5; 3:1 (10-30mm) manual zoom	1/2-inch Cosmicon	Infrared auto/manual focus; auto iris	Optical	Handheld; detachable mono mike	2 lbs.	\$700
Magnavox VR-8275BK	f/1.2; 6:1 (8.5-51mm) manual zoom; bayonet mount	1/2-inch Newwicon	Auto/manual iris; auto white balance; backlight compensation; VCR compatibility switch	1/2-inch electronic	Handheld; body-mounted mono mike; light shoe	2 lbs.	\$750
Magnavox VR-8276BK	f/1.2; 6:1 (8.5-51mm) manual zoom; bayonet mount	1/2-inch Newwicon	Infrared auto/manual focus; auto/manual iris; backlight compensation; VCR compatibility switch; audio/video fade-in/out	1/2-inch electronic	Handheld; body-mounted stereo mikes; stereo mike jacks	2 1/2 lbs.	\$1,000
Minolta K-500S	f/1.2; 4:1 (10-40mm) manual zoom; macrofocus	1/2-inch high-band Saticon	Auto iris; self-adjusting color temperature/white balance; backlight compensation; VCR compatibility switch	Optical	Handheld; body-mounted mono mike; no mike jack; light shoe	2 lbs.	\$665
Minolta K-520F	f/1.2; 6:1 (8.5-51mm) power zoom; macrofocus	1/2-inch high-band Saticon	Contrast-comparison auto/manual focus; auto/manual iris; auto/manual white balance; VCR compatibility switch; audio/video fade-in/out	1-inch electronic	Handheld; body-mounted mono mike; earphone jack; light shoe; optional VCR remote control	3 1/2 lbs.	\$1,165
NEC TC-110E	f/1.4; 6:1 (11.5-70mm) power zoom; macrofocus	CCD chip	Auto iris; auto white balance	3/8-inch electronic	Handheld; body-mounted stereo mikes; stereo mike jacks; light shoe	2 1/4 lbs.	\$950
Olympus VX-305	f/1.2; 6:1 (7-42mm) power zoom; macrofocus	1/2-inch New Cosmicon	Infrared auto/manual focus; auto iris; auto white balance; backlight compensation; date/time generator; video fade-in/out	1/2-inch electronic	Handheld; detachable mono mike	2 1/2 lbs.	\$975
Panasonic PK-410	f/1.4; 6:1 (8-48mm) power zoom; macrofocus	1/2-inch Newwicon	Auto iris; auto white balance; backlight compensation; video fade-in/out	1/2-inch electronic	Handheld; detachable mono mike	2 lbs.	Not avail.
Panasonic PK-450	f/1.2; 6:1 (7-42mm) power zoom; macrofocus	1/2-inch Newwicon	Infrared auto/manual focus; auto iris; auto white balance; backlight compensation; date/time generator; video fade-in/out	1/2-inch electronic	Handheld; detachable mono mike; available in black or silver finishes	2 1/2 lbs.	\$850
Quasar VK-704XE	f/1.4; 6:1 (8-48mm) power zoom; macrofocus	1/2-inch Newwicon	Auto iris; auto white balance; backlight compensation; video fade-in/out	1/2-inch electronic	Handheld; detachable mono mike	2 lbs.	\$720
Quasar VK-714XE	f/1.2; 6:1 (7-42mm) power zoom; macrofocus	1/2-inch Newwicon	Infrared auto/manual focus; auto iris; auto white balance; backlight compensation; date/time generator; video fade-in/out	1/2-inch electronic	Handheld; detachable mono mike	2 1/2 lbs.	\$920
RCA CKC-018	f/1.2; 6:1 (8.5-51mm) power zoom; macrofocus	1/2-inch Saticon	Auto iris; auto/manual white balance	1-inch electronic	Shoulder mount; body-mounted mono mike; adjustable grip; light shoe	3 1/2 lbs.	\$800
RCA CKC-019	f/1.2; 6:1 (8.5-51mm) power zoom; macrofocus	1/2-inch Saticon	Infrared auto/manual focus; auto iris; auto/manual white balance	1-inch electronic	Shoulder mount; body-mounted mono mike; adjustable grip; light shoe	3 1/2 lbs.	\$860
RCA CKC-020	f/1.2; 6:1 (12.5-75mm) power zoom; macrofocus	MOS chip	Auto/manual iris; auto white balance	1-inch electronic	Handheld; body-mounted mono mike	2 1/4 lbs.	\$995
Sony VSC-700	f/1.2; 6:1 (12.5-75mm) power zoom; macrofocus; C-mount	MOS chip	Auto/manual iris; auto white balance; VCR compatibility switch	1-inch electronic	Handheld; body-mounted mono mike; earphone jack; light shoe	2 1/2 lbs.	\$1,000
Sony VSC-800	f/1.2; 6:1 (12.5-75mm) power zoom; macrofocus; C-mount	MOS chip	Contrast-comparison auto/manual focus; auto/manual iris; auto white balance; VCR compatibility switch	1-inch electronic	Handheld; body-mounted mono mike; earphone jack; light shoe	2 1/2 lbs.	\$1,300
Sharp QC-54	f/1.5; 3:1 (10-30mm) manual zoom	1/2-inch Newwicon	Auto iris	Optical	Handheld; detachable mono mike; light shoe	1 1/2 lbs.	\$530
Sharp QC-78	f/1.2; 6:1 (9-54mm) power zoom; macrofocus	1/2-inch Newwicon	Infrared auto/manual focus; auto/manual iris; auto/manual white balance; character/date generator	1-inch electronic	Handheld; mono boom mike; no mike jack	3 1/2 lbs.	\$1,050
Sony CCD-G5	f/1.4; 6:1 (12-72mm) power zoom; macrofocus	CCD chip	Auto iris; auto white balance; video fade-in/out	1-inch electronic	Handheld; body-mounted mono mike; stereo mike jacks; earphone jack; light shoe	2 1/2 lbs.	\$1,300
Sylvania VCC-125BK	f/1.2; 6:1 (8.5-51mm) power zoom; macrofocus	1/2-inch Newwicon	Infrared auto/manual focus; auto iris; auto white balance; audio/video fade-in/out	1-inch electronic	Handheld; detachable stereo mikes; stereo mike jacks; light shoe	2 1/2 lbs.	\$950
Toshiba IK-2000	f/1.4; 4:1 (10-40mm) manual zoom	1/2-inch Saticon	Auto iris; auto white balance; backlight compensation	Optical	Handheld; mono boom mike; no mike jack; focus lock	2 lbs.	\$550
Toshiba SK-47	f/1.2; 6:1 (8.5-51mm) power zoom; macrofocus	CCD chip	Infrared auto/manual focus; auto iris; auto white balance; VCR compatibility switch; video fade-in/out	1/2-inch electronic	Handheld; body-mounted mono mike	2 1/2 lbs.	\$1,200
Zenith VC-1000	f/1.4; 6:1 (8-48mm) power zoom; macrofocus	1/2-inch Saticon	Contrast-comparison auto/manual focus; auto iris; auto white balance; audio/video fade-in/out	1-inch electronic	Handheld; detachable stereo mikes; stereo mike jacks	3 lbs.	Not avail.

ULTIMATE PORTABLES

Camcorders

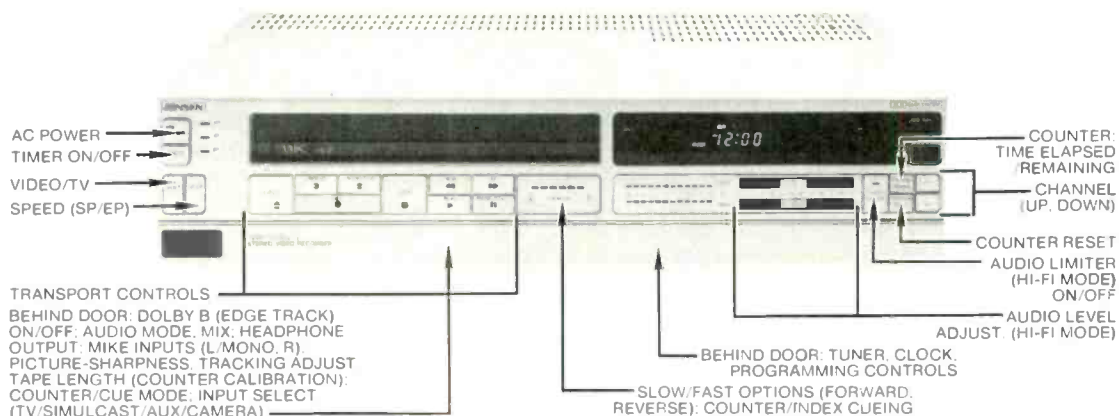
CAMERA SECTION

VCR SECTION

Model	Lens & Pickup	Controls	Viewfinder	Format	Special Effects	Additional Features	Weight	Price
GE 1CVM-5080E	f/1.2; 6:1 (8-48mm) power zoom; macro-focus; 1/2-inch Newicon	Infrared auto/manual focus; auto iris; auto/manual white balance; backlight compensation; video fade-in/out; date generator	1/2-inch electronic	8mm	Freeze frame; frame advance; forward/reverse scan	3 video heads; shoulder mount; detachable mono mike; 45-min. battery; 90-min. cassettes (2-hour cassettes planned for mid-1985)	4 1/2 lbs.	\$1,750
JVC GR-C1U	f/1.2; 6:1 (8-48mm) power zoom; macro-focus; 1/2-inch high-band Saticon	Auto/manual iris; auto white balance; backlight compensation	1/2-inch electronic	VHS-C	Freeze frame; 3X forward/reverse scan	4 video heads; shoulder mount; detachable mono mike; earphone jack; 45-min. battery; 20-min. cassettes	4 1/2 lbs.	\$1,595
Kodak 2200	f/1.2; 6:1 (7-42mm) power zoom; macro-focus; 1/2-inch Newicon	Auto iris; auto white balance	1/2-inch electronic	8mm	Freeze frame; frame advance; 5X forward/reverse scan	2 video heads; shoulder mount; body-mounted mono mike; 1-hour battery; 90-min. cassettes (2-hour cassettes planned for mid-1985); optional cradle (\$239), converter charger (\$179), or cable (\$40) needed for external playback	4 3/4 lbs.	\$1,600
Kodak 2400	f/1.2; 6:1 (7-42mm) power zoom; macro-focus; 1/2-inch Newicon	Infrared auto/manual focus; auto iris; auto/manual white balance; backlight compensation; audio/video fade-in/out; date generator	1/2-inch electronic	8mm	Freeze frame; frame advance; 5X forward/reverse scan	3 video heads; shoulder mount; body-mounted mono mike; 1-hour battery; 90-min. cassettes (2-hour cassettes planned for mid-1985); optional cradle (\$239), converter charger (\$179), or cable (\$40) needed for external playback	4 3/4 lbs.	\$1,900
NEC BM-22EU	f/1.2; 6:1 (9-54mm) power zoom; macro-focus; 1/2-inch Saticon	Contrast-comparison auto/manual focus; auto iris; auto white balance	Optical	Beta	Record only	2 video heads; shoulder mount; body-mounted mono mike; earphone jack; light shoe; 1-hour battery; 200 mins. of recording with L-830 Beta cassettes; optional remote control	6 1/2 lbs.	\$1,495
Polaroid P8-C1	f/1.4; 6:1 (9.5-57mm) power zoom; macro-focus; CCD chip	Auto iris; auto white balance; backlight compensation	Optical	8mm	With camcorder mounted in playback caddy (supplied); freeze frame and 6X forward/reverse scan	2 video heads; handheld; body-mounted mono mike; 45-min. battery; 90-min. cassettes (2-hour cassettes planned for mid-1985); wired remote control for playback caddy	4 lbs.	\$1,600
Sanyo VRC-100	f/1.2; 6:1 (9-54mm) power zoom; macro-focus; 1/2-inch Saticon	Auto iris; auto white balance	Optical	Beta	Record only	2 video heads; shoulder mount; body-mounted mono mike; earphone jack; light shoe; 1-hour battery; 200 mins. of recording with L-830 Beta cassettes; optional remote control	6 1/4 lbs.	\$1,600
Sony BMC-110K	f/1.2; 6:1 (9-54mm) power zoom; macro-focus; 1/2-inch Saticon	Auto iris; auto white balance	Optical	Beta	Record only	2 video heads; shoulder mount; body-mounted mono mike; earphone jack; light shoe; 1-hour battery; 200 mins. of recording with L-830 Beta cassettes; optional remote control	6 1/4 lbs.	\$1,395
Sony BMC-220K	f/1.2; 6:1 (9-54mm) power zoom; macro-focus; 1/2-inch Saticon	Contrast-comparison auto/manual focus; auto iris; auto white balance	Optical	Beta	Record only	2 video heads; shoulder mount; body-mounted mono mike; earphone jack; light shoe; 1-hour battery; 200 mins. of recording with L-830 Beta cassettes; optional remote control	6 1/4 lbs.	\$1,600
Toshiba V-BM37	f/1.2; 6:1 (9-54mm) power zoom; macro-focus; 1/2-inch Saticon	Auto iris; auto white balance	Optical	Beta	Record only	2 video heads; shoulder mount; body-mounted mono mike; earphone jack; light shoe; 1-hour battery; 200 mins. of recording with L-830 Beta cassettes; optional remote control	6 1/4 lbs.	\$1,500
Zenith VM-6000	f/1.2; 6:1 (8-48mm) power zoom; macro-focus; 1/2-inch Saticon	Auto/manual iris; auto white balance; backlight compensation	1/2-inch electronic	VHS-C	Freeze frame; 3X forward/reverse scan	3 video heads; shoulder mount; body-mounted mono mike; earphone jack; 45-min. battery; 20-min. cassettes	4 1/2 lbs.	Not avail.

JENSEN AVS-6200 VHS HI-FI VCR

Special features: cable-ready 14-day/8-event programmable tuner/timer, wireless remote control, time-remaining indicator, sleep timer, program seek, and VHS Hi-Fi high fidelity stereo audio recording and playback capability. **Dimensions:** 17¼ by 4¼ inches (front), 14¾ inches deep plus clearance for connections. **Price:** \$1,295. **Warranty:** "limited," one year parts and labor. **Manufacturer:** made in Japan for Jensen Sound Laboratories, 4136 N. United Parkway, Schiller Park, Ill. 60176.



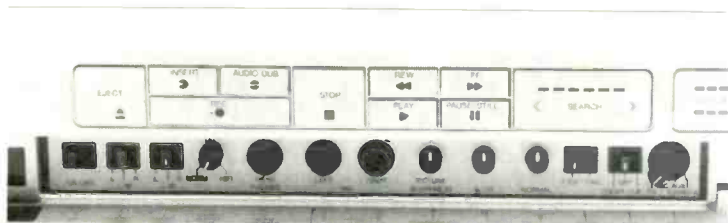
IN PAST REVIEWS of Jensen video components, we've commented on how well conceived they were. The AVS-6200 is the first Jensen VCR we've had the opportunity to evaluate, and it maintains the high standards we've come to expect from that company. It uses the VHS format, with

Hi-Fi stereo recording piggybacked onto the video track and Dolby-encoded stereo on the edge tracks. You can defeat the Dolby system to maintain compatibility with unencoded mono tapes.

The AVS-6200 records at the highest and lowest VHS speeds—SP

and EP, respectively—but it can reproduce tapes made at the intermediate LP speed, albeit without the special effects available in SP and EP. Separate sets of video heads ensure optimum performance at each recording speed, and the lack of LP recording strikes us as relatively unimportant, given the essentially identical audio performance at all speeds in the Hi-Fi mode.

THIS IS THE FIRST VCR we've reviewed with the ability to mix the outputs from standard and Hi-Fi soundtracks. You can put together your own video movie or slide



SECONDARY CONTROLS are along the bottom left of the front panel, behind a flip-down door. Among them are audio output and dubbing switches, a headphone jack, mike inputs, sharpness and tracking controls, and an input selector.

show with music recorded on the Hi-Fi tracks and commentary on the edge tracks and blend the two in whatever proportions you like. You can go back any time you like and change the commentary (using the AVS-6200's audio dub feature) without upsetting the video or music track. Or you can use the insert editing feature to alter the video track without changing the audio edge tracks, although this mangles the Hi-Fi audio recording.

There are two line-level audio outputs. One carries the Hi-Fi signal at all times, independent of the mix control setting. The other stereo pair is the one Jensen suggests for normal use. It carries the Hi-Fi signals, the conventional edge-track signals, or some blend of the two, depending on the mix control setting. The headphone output carries the mixed signal and has an underdeck low/high switch to accommodate headphones of different sensitivities.

Both audio feeds can be switched to carry left- or right-channel signals only. The choice is made at a selector

behind a full-length flip-down door beneath the main transport controls. An adjacent switch with identical markings determines whether audio dubbing is performed on one or both channels, so it's even possible to replace one without affecting the other.

A rotary switch near the right end of the subpanel controls the audio-video recording possibilities. At "TV," broadcasts received by the AVS-6200's tuner are recorded. (The tuner cannot decode stereo broadcasts, so all TV recording is in mono.) The "SC" setting enables you to record a stereo simulcast, with the video taken from the internal tuner and the audio from a separate FM receiver fed to the audio line inputs. "Aux" sets the VCR up for straight audio recording in VHS Hi-Fi. And the last position accepts audio and video signals from a back-panel multipin camera input (although the audio can be fed to the deck's front-panel microphone jacks instead).

Recording level on the audio edge tracks is controlled by a nondefeatable automatic level control (ALC). Levels on the Hi-Fi tracks can be set manually via a pair of sliders or automatically. When the ALC is active, the 12-segment fluorescent meters go dark. A back-panel switch engages what Jensen calls Dynamic Aperture Control (DAC), which is said to enhance picture clarity (provided the incoming signal is clean and quiet).

The AVS-6200's frequency-synthesis tuner covers midband, superband, and hyperband CATV channels as well as the usual VHF and UHF channels. There's no fine-tuning control, but none should be needed for normal broadcast and cable reception. Channels are selected via up/down buttons on the front panel; frequencies unused in your area can be skipped by programming the system to do so. From the wireless remote control, you can scan through the programmed channels or select any one directly by entering its number on a ten-key pad. Pressing ENTER after the number selects the channel instantly; otherwise, there's a three-second delay.

The 14-day, 8-event memory is programmed via controls on a pop-out tray behind the door at the far right. This control cluster also serves to set the clock, select the channels to be retained in the scan memory, switch between broadcast and cable reception,

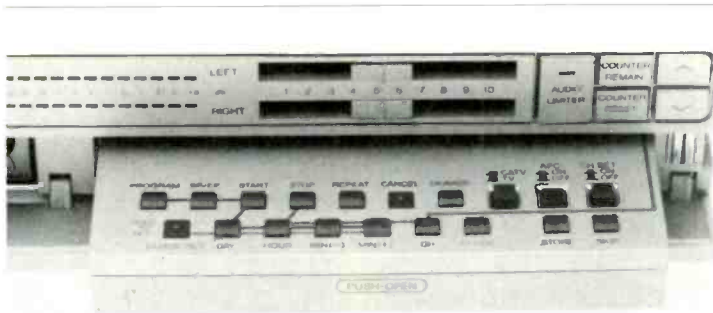
Laboratory data for HIGH FIDELITY's video equipment reports are supplied by Diversified Science Laboratories. Preparation is supervised by Michael Riggs, Peter Dobbin, and Edward J. Foster. All reports should be construed as applying to the specific samples tested. HIGH FIDELITY and Diversified Science Laboratories assume no responsibility for product performance or quality.

and activate or defeat the automatic frequency control (AFC). Any program can be set to repeat indefinitely. The clock and program memory are maintained for ten minutes in the event of a power failure—a bit on the short side for current VCRs.

The remote duplicates the main panel's video/TV and audio-dub switches and transport controls. In PLAY, pressing PAUSE freezes the

memory system entirely. The display switches between "time remaining" and the normal counter via successive taps on the "counter/remain" button. A switch behind the flip-down door corrects the time-remaining indication for T-160 tapes.

When the tape runs out, the AVS-6200 automatically rewinds to the beginning, ready for playback. Pressing the "instant recording" button twice



PROGRAMMING CONTROLS are on a convenient pop-out tray at the right end of the subpanel. Lines connecting the buttons guide you through the steps necessary to set the deck up for unattended recording.

picture on the screen. You can then step forward or back a frame at a time by touching PAUSE again. Pressing REWIND or FAST FORWARD from the play mode searches through the tape at seven times normal speed in either direction. Separate buttons provide seven additional speeds in each direction, from one-fortieth to seven times normal, depending on the number of presses. The search speed is suggested by a six-segment display, the first three signifying reverse search, the right three forward search. And a tape-run indicator at the upper-right corner of the display panel blinks more or less rapidly, depending on transport speed. Independent "slow" and "normal" tracking controls help clear the picture at any speed.

EACH TIME a recording begins, the deck lays down a cue tone. In playback, you can search for the beginning of the next program (or return to the beginning of the current one) by setting the tape memory switch to "cue" and pressing FAST FORWARD or REWIND. You can rewind to counter zero by switching TAPE MEMORY to "count," or you can defeat the

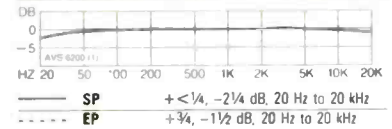
within ten seconds begins recording and sets an internal timer for a 30-minute countdown to turnoff. Each additional press adds 30 minutes to the countdown up to a maximum of four hours. Once the deck is in this mode, you can "fine-tune" the timer with the hour and minute buttons on the pop-out programming tray, increasing the maximum delay to four hours, 59 minutes.

Jensen's AVS-6200 performed exceptionally well in Diversified Science Laboratories' audio tests. In fact, it's the first VHS Hi-Fi deck we've evaluated that approaches what we consider the true potential of the system. Except for a slight rolloff in the deep bass, response is virtually ruler-flat across the audio band. Tracking of the VHS Hi-Fi noise reduction system is very good, too: Response is identical within a half decibel at all recording levels from 10 dB below the 3-percent total harmonic distortion (THD) point to 40 dB below that reference. When we checked response with a VHS Hi-Fi tape we'd recorded on a different model deck, tracking was less admirable, but the difference is very likely due to the

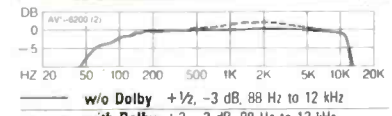
VCR SECTION

Except where indicated otherwise, the recording data shown here apply to both the SP and EP speeds. All measurements were made at the direct audio and video outputs, with test signals applied to the direct audio and video inputs. The 0-dB reference input level is the voltage required to produce 3 percent third-harmonic distortion at 315 Hz; the 0-dB reference output level is the output voltage from a 0-dB input.

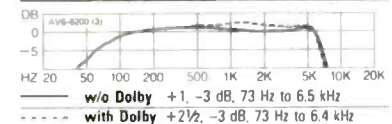
VHS HI-FI RECORD/PLAY RESPONSE (-20 dB)



STANDARD RECORD/PLAY RESPONSE (-20 dB; SP)



STANDARD RECORD/PLAY RESPONSE (-20 dB; EP)



AUDIO S/N RATIO (re 0-dB output; R/P; A-weighted)

	SP	EP
VHS Hi-Fi	87 dB	81 dB
standard with Dolby	54 1/4 dB	50 dB
standard w/o Dolby	45 3/4 dB	43 dB

INDICATOR CALIBRATION (315 Hz; VHS Hi-Fi)

for 0-dB input	>+8 dB
for -10-dB input	+3 dB

DISTORTION (THD at -10-dB input; 50 Hz to 5 kHz)

	standard	VHS Hi-Fi
SP	≤ 2.77%	≤ 1.30%
EP	≤ 8.79%	≤ 1.37%

CHANNEL SEPARATION (315 Hz)

VHS Hi-Fi	53 1/4 dB
standard	≈64 dB

INDICATOR "BALLISTICS"

Response time	8 msec
Decay time	≈260 msec
Overshoot	0 dB

FLUTTER (ANSI weighted peak; R/P; average)

	standard	VHS Hi-Fi
SP	±0.20%	<±0.01%
EP	±0.38%	<±0.01%

SENSITIVITY (for 0-dB output; 315 Hz)

	mike	line
VHS Hi-Fi	1.67 mV	560 mV
standard	1.16 mV	386 mV

MIKE INPUT OVERLOAD (1-kHz clipping)

25 mV

AUDIO OUTPUT LEVEL (from 0-dB input; 315 Hz)

VHS Hi-Fi	1.6 volts
standard	0.6 volt

AUDIO INPUT IMPEDANCE (VHS Hi-Fi)

line input	64k ohms
mike input	3.4k ohms

VIDEO RECORD/PLAY RESPONSE

	SP	EP
at 500 kHz	+1¼ dB	+1¼ dB
at 1.5 MHz	-1¼ dB	-5 dB
at 2.0 MHz	-3¼ dB	-10½ dB
at 3.0 MHz	-20¼ dB	-15¾ dB
at 3.58 MHz	*	-6½ dB
at 4.2 MHz	*	*

SHARPNESS CONTROL RANGE

at 500 kHz	+½, -¾ dB
at 1.5 MHz	+3, -2¼ dB
at 2.0 MHz	+4, -3¼ dB
at 3.0 MHz	+2½, -0 dB
at 3.58 MHz	+2¼, -0 dB
at 4.2 MHz	no measurable effect

LUMINANCE LEVEL

SP	2% low
EP	3% low

GRAY-SCALE NONLINEARITY (worst case) ≈ 11%

CHROMA LEVEL

SP	2 dB low
EP	2¼ dB low

CHROMA DIFFERENTIAL GAIN

none

CHROMA DIFFERENTIAL PHASE

±0°

MEDIAN CHROMA PHASE ERROR

SP	≈ -5°
EP	0°

* Too low to measure

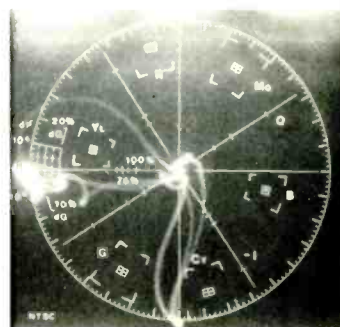
deck on which the tape was recorded rather than to the Jensen.

Hi-Fi response is essentially the same at the two recording speeds, but the edge-track response is substantially better at SP than at EP, as is to be expected. Some Dolby mistracking was evident with the particular tape used (a Fuji Beridox T-120), but it is within acceptable limits.

Even the tuner's audio response is

from 50 Hz to 10 kHz.

Distortion on the edge track also is remarkably low, but this may be attributable to recording at a somewhat lower level than that used in testing other VCRs. DSL normally establishes the input reference for edge-track recording 10 dB above the "knee" of the ALC: the point at which the ALC causes 3 dB of compression. Distortion is measured 10 dB below the reference,



COLOR CONSISTENCY of the AVS-6200's recorder section (left) and TV tuner (right). In each case, the ideal would be for the cluster of dots toward the left edge of the grid to be a single dot at the intersection of the nine-o'clock axis with the circumference. The radial spread of the dots indicates chroma differential gain—a measure of how much color saturation (chroma level) varies with changes in scene brightness (luminance). The angular spread shows the chroma differential phase, which tells how much hue (chroma phase) shifts with changes in brightness. The VCR's performance is perfect, and the tuner's is excellent, with most of the error concentrated at the highest brightness level.

much better than average: within ±½ dB from 53 Hz to 20 kHz, which is well beyond the normal broadcast limit. Despite the extended high-frequency response, horizontal-scan whistle is well suppressed. Signal-to-noise ratio on normal broadcasts is excellent; only the multiburst test pattern (which is highly artificial) caused it to degrade significantly.

Output level and impedance are well suited for interfacing with other equipment. Flutter is below measurement limits with VHS Hi-Fi recording but averaged ±0.20 percent on the edge track in the SP mode and almost double that at EP. Distortion is safely below 0.5 percent from 100 Hz to 6.3 kHz (at both speeds) with Hi-Fi recording and remains less than 1.5 percent across our entire test band,

i.e., at the ALC knee. On the Jensen, distortion at the usual reference level exceeded 3 percent (it was 4.4 percent), so DSL established the reference at the midrange 3-percent THD point, some 14¼ dB lower. The ALC is very "tight": Once it is in effect, recording level increases only 0.05 dB for every 1-dB increase in input.

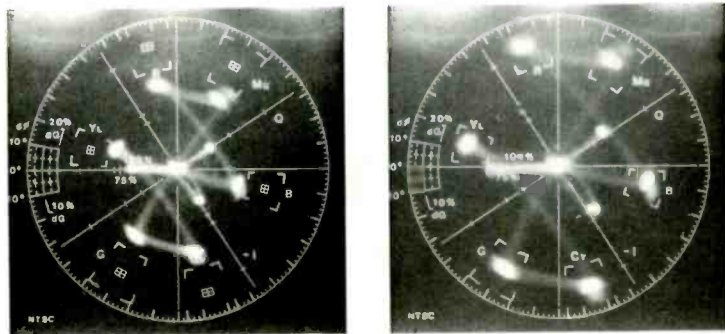
The reference level for Hi-Fi recording is set at the 3-percent midrange distortion point with the ALC off. The indicator is well past the top of the scale at this point. Meter response is reasonably fast and without overshoot. Decay time is somewhat shorter than average: about a quarter of a second.

Separation is very good in both modes—surprisingly, even better on the edge-track pair than with Hi-Fi

recording. A-weighted noise is more than 80 dB below the reference with Hi-Fi recording and a respectable 50 or more dB below reference with edge-track recording, provided Dolby noise reduction is used.

VIDEO FREQUENCY response, which determines picture detail, is exceptionally good at the fast speed but less remarkable in EP. A

degrees. Gray-scale linearity is unusually good, and although there's a fair amount of chroma differential gain (leading to a loss of color saturation as scene brightness increases), it is confined mostly to the last brightness step. Chroma differential phase is low. The tuner's video response holds up very well to the chroma-burst frequency (3.58 MHz), for a potential resolution (directly feeding a good



VCR COLOR ACCURACY is very good at both speeds. The vectorscope photos shown here are for SP, with the one at left indicating low color saturation (chroma level) and a small amount of hue (chroma phase) error. The photo at right—made with 2 dB additional chroma gain and approximately 5 degrees of counterclockwise phase rotation—simulates the best results one could obtain using the color and tint controls on a monitor. This brings all six color vectors (the white blobs near the circumference of the grid) onto or very near their targets, which is excellent. Performance in EP is similar to that in SP, except for greater chroma noise (indicated by the size of the "fuzzballs"), marginally lower chroma level, and essentially perfect phase.

built-in sharpness control can be used to boost response by as much as 4 dB at 2 MHz, producing a remarkably detailed picture from SP tapes (though at some expense in video noise). Luminance level is almost perfect, chroma level a trifle low, at both speeds. There's no measurable differential gain or phase, indicating that color saturation and hue remain constant regardless of changes in scene brightness. And there is no more than a normal amount of gray-scale nonlinearity. On average, hue (chroma phase) accuracy is perfect at the EP speed and very good at SP. There is substantially more chroma noise at the slower speed, however.

Luminance and chroma levels from the tuner are almost perfectly accurate, and despite a median chroma phase error of 5 degrees, the uncorrectable error is a mere ± 3

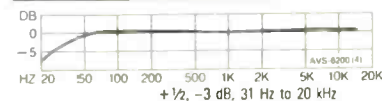
monitor) approaching 300 lines. There's some extra boost in the 1 to 2 MHz range, which adds a little extra sharpness when viewing a broadcast through the VCR's tuner.

In a nutshell, the Jensen AVS-6200 performs extraordinarily well at the standard recording speed. We could ask for a bit more resolution and a trifle lower chroma noise at the slow speed, but performance in that mode is at least par for the course and pales only in comparison to the noticeably superior reproduction at SP. VHS Hi-Fi performance is almost as good at EP as at SP, and we'd have no reservation at all about making eight-hour audio tapes on the AVS-6200. For its multiple special effects, outstanding audio recording capability, and superior video reproduction in the SP mode, we give the Jensen AVS-6200 high marks.

TV TUNER SECTION

All measurements were taken at the direct audio and video outputs with the automatic level control (ALC) turned off.

AUDIO FREQUENCY RESPONSE



AUDIO S/N RATIO (A-weighted; 100% modulation)

best case (no color or luminance)	57 dB
worst case (multiburst display)	19 dB

RESIDUAL HORIZONTAL SCAN COMPONENT (15.7 kHz)

	-57 3/4 dB
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MAXIMUM AUDIO OUTPUT (100% modulation)

mix control at Hi-Fi	1.55 volts
mix control at standard	0.55 volt

AUDIO OUTPUT IMPEDANCE

	580 ohms
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VIDEO FREQUENCY RESPONSE

at 500 kHz	-1/2 dB
at 1.5 MHz	+2 3/4 dB
at 2.0 MHz	+2 3/4 dB
at 3.0 MHz	+1 1/4 dB
at 3.58 MHz	-1/2 dB
at 4.2 MHz	-8 3/4 dB

LUMINANCE LEVEL

	2% high
--	---------

GRAY-SCALE NONLINEARITY (worst case)

	= 5%
--	------

CHROMA DIFFERENTIAL GAIN

	= 23%
--	-------

CHROMA DIFFERENTIAL PHASE

	= $\pm 4^\circ$
--	-----------------

CHROMA ERROR

	level	phase
red	-1/4 dB	+4°
magenta	-1/4 dB	+5°
blue	-1/4 dB	+2°
cyan	-1/4 dB	+8°
green	-1/4 dB	+6°
yellow	standard	+8°
median error	-1/8 dB	+5°
uncorrectable error	$\pm 1/8$ dB	$\pm 3^\circ$

Pop and classical
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and digital
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POPULAR VIDEO

EVERLY BROTHERS:

The Everly Brothers' Rock 'n' Roll Odyssey.

Richard Deligter, director; Delilah Films, producer. MGM/UA MV 600366 (VHS); MB 600366 (Beta); \$59.95.

The Everly Brothers' Rock 'n' Roll Odyssey" strives to be as understated and straightforward as its two plainspoken subjects, who narrate this documentary themselves in an amiably chatty manner while never straying far from the facts. The impetus for assembling this hour-long look back was the Everlys' historic London reunion concert in 1983, ten years after their acrimonious split. One number from that show, which became a Home Box Office feature, serves as the moving climax to a rags-to-riches-to-rift story told through a combination of interviews with Phil and Don and their contemporaries and good performance footage arranged in workmanlike, chronological fashion.

The Everlys' tale is almost too folksy to be true: Two honey-voiced brothers from an itinerant musical family are taught to appreciate the folk traditions of the South and Midwest by an ambitious miner-turned-radio-performer father. As angelic-looking teenagers, they find themselves playing a major role in the nascent pop culture of the late '50s, transforming their Kentucky country sensibility into a bittersweet brand of rock and roll. Phil and Don relate their story humbly, though, recalling their mentors and the music that influenced them with affection and a certain reverence. They seem to be still a little in awe of their own talent as well, looking upon it as a sort of genetic gift, and that lends them an ingenuous quality that belies their years and the ups and downs of their career. In the wonderful concluding sequence, the brothers gaze into each other's eyes as they sing a slow and carefully phrased *Let It Be Me*, seemingly as transfixed by the magic of their harmonizing as anyone else listening to it.



EVERLY BROTHERS: Harmonies from heaven and bittersweet rock 'n' roll

The odyssey continues on the album "EB 84" (Mercury 822 431-1)—the Everly Brothers are working together again in earnest, and the mood is similar: low-key and comfortable. It exudes the warmth and intimacy of a family reunion rather than the big-time drama and high stakes of a major comeback attempt.

David Edmunds's pared-down production, disrupted only by Jeff Lynne's syrupy arrangement for his *The Story of Me*, allows nothing to get in the way of Phil and Don's made-in-heaven harmonies. The material outside songwriters have contributed is perilously slight, particularly Paul McCartney's pretty but facile *On the Wings of a Nightingale* and Frankie Miller's puerile *Danger Danger*, but Don himself provides much-needed substance with material designed for adult Everlys. While their voices haven't aged, the brothers have—"Rock 'n' Roll Odyssey" makes that clear—and even though Don's songs reflect the same elusiveness of love the brothers lamented as teenagers, they're written from the perspective of someone who has savored that transient feeling, not merely anticipated it. Their rendition of *Lay, Lady, Lay*, an obvious choice turned into an inspired cover, shares the tone of Don's work; unlike Bob Dylan's original, it's more of a plea than an observation, plaintive instead of cynical, and that makes it sexier—and a little sadder, too.

"EB 84" offers no surprises; as in their video reminiscences, the Everly Brothers just stick to the facts, reaffirming what two very special voices can do.

—MICHAEL HILL

POPULAR
COMPACT DISC

CHICK COREA and GARY BURTON:
In Concert, Zurich, October 28, 1979.

Manfred Eicher, producer. ECM 1182-2 (analog recording, digital Compact Disc). LPs (2): 2-1182. Cassettes (2): 2E5 1182.

Pianist Chick Corea and vibist Gary Burton, relaxed and in tune with each other, were in the middle of a tour when they recorded "In Concert." Both players produce a lot of notes in a kind of effervescence—or spontaneous overflow, to use Wordsworth's phrase. Corea accompanies Burton with full two-handed chords and short, restlessly varied rifflike patterns, occasionally accompanied by a walking bass. Burton is equally busy and poised. If they sound like they are having fun playing familiar compositions, it is perhaps because they were recording four of them for the second time. This Compact Disc has eight numbers, two fewer than the original LP set (the solo features of Burton and Corea are omitted).

Corea's piano has more solidity and more tang, I am tempted to say, on the CD than on the excellently recorded LP. The vibes seem to be closer on the disc and are somewhat more clearly separated from the piano. The recording in both formats has a disconcerting trait, though: The sound of the vibes travels from the extreme right to the center, mimicking too closely Burton's own movements. If this is not as problematic as an early stereo recording I once heard of Liszt études that seemed to

have the pianist zipping across the room as if he were imitating a sound-effects record of a train, the ambulatory quality of Burton's vibes is still unsettling. And there is a steady hiss that must be on the original tape, since it is audible in both formats. A caveat, perhaps, except that it's clearly present in *Crystal Silence*, the duo's one-time hit, which is rendered here in a spacious, 12-minute version. Also included are *Bud Powell*, Corea's genial, boppish tribute to the great pianist, and Corea's whimsical *Senior Mouse*, as well as his slow ballad *Song to Gayle*. More typically, Burton and Corea are uptempo and sunny, taking joy in their sheer musicianship, as when they play fast unison passages, erupt bumptiously under the other's solos, or bounce ideas off each other. This, their third album together, is not their tightest, but it has an airy, good-natured volubility that many will prefer to the chamber-music quality of the earlier recordings.

—MICHAEL ULLMAN

**SARAH VAUGHAN:
Sassy Swings Again.**

MERCURY 814 587-2 (analog recording, digital Compact Disc)

On "Sassy Swings Again," an exuberant Sarah Vaughan struts gleefully before a brassy big band featuring musicians Clark Terry, J. J. Johnson, Benny Golson, and Phil Woods. The recording, well received when it was originally released in 1967, has not to my knowledge been reissued in its entirety in this country. The Book-of-the-Month Club's three-record Sarah Vaughan collection includes four of its ten numbers, however.

I compared the BOMC issue to the new Compact Disc. There is a big difference from the very first bars of *Sweet Georgia Brown*, arranged by Thad Jones in the bright, punchy manner he developed with Count Basie. On the LP, the sound is acceptable, but muffled and remote. On the CD, we hear out of a dead silence the brass strike in with a group of staccato chords that are full, rich, and clearly defined. Vaughan's voice—or perhaps one should say her *voices*, for she has a range of tones from a resonant chest sound down low to a mincing, little-girl squeal up high—is accurately rendered. The CD is also capable of reproducing the slam-bang vigor that is one of the joys of big bands.

The recorded sound does have some peculiarities. The sharp imaging of the CD seems to put the singer somewhere left of center in front of the brass, but at times almost behind the drummer's cymbals. The underused reeds are kept well to the left, creating a distracting Ping-Pong effect when they are trading phrases with the brass. The band seems to approach when the music gets loud and recede in the (too rare) moments when the arrangers—J. J. Johnson, Manny Albam, Bob James, as

well as Thad Jones—allow the band to play less than forte.

The best arrangements, not surprisingly, elicit the most interesting singing. Albam's *Sposin'* opens with the punch of the brass opposed to a series of dainty chords by the reeds that bring in Vaughan, who indulges in a woozy ascent on the opening line. "Sposin' I should fall in love with you." She sounds like she is reeling, if not falling. Johnson contributes a notable *Take the A Train*, and James provides the witty arrangement of *The*

Sweetest Sounds (according to expert Martin Williams; the jacket lists J. J. Johnson as the arranger). Vaughan is sprightly and inventive throughout. On *Every Day I Have the Blues*, she imitates Clark Terry's noodling trumpet obbligato, and elsewhere she proves that she has a better wah-wah sound than most brass players. "Sassy Swings Again" doesn't show Vaughan at her most dramatic, but it captures the richness of her technique in beautifully recorded performances that are appealing in themselves.

—MICHAEL ULLMAN

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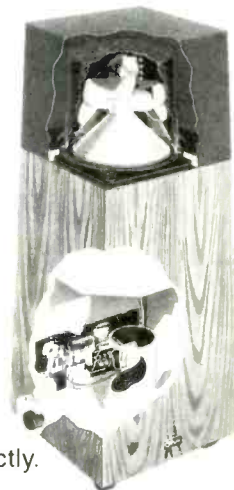
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NEW COMPACT DISCS

Because no store we know of carries every new CD, each month we will present a list of the latest releases. Most retailers can order your selections, even if they don't stock them. The list is compiled for us by the editors of THE NEW SCHWANN RECORD & TAPE GUIDE from CDs that they have received—not from a record company's roster of scheduled releases, which may or may not be available.

CLASSICAL

ALBÉNIZ
Rapsodia española, for Piano & Orchestra, Op. 70; Falla: Nights in the Gardens of Spain; Turina: Rapsodia sinfónica for Piano & Strings, Op. 66
 De Larrocha, Frühbeck de Burgos, London Phil. London 410289-2 LH

BACH, J. S.
Concerto in c for Violin and Oboe, S. 1060; Vivaldi: Concerti for Oboe, Violin & Orchestra; Concerti for Violin & Two Orchestras
 Kremer, Holliger, St. Martin-in-the-Fields Academy, Philips 411466-2 PH

BARTÓK
Concerto for Violin & Orchestra; Berg: Concerto for Violin & Orchestra
 Kyung-Wha Chung, Solti, Chicago Sym. London 411804-2 LH

Concerto No. 3 for Piano; Prokofiev: Concerto No. 3 in C for Piano, Op. 26
 Ashkenazy, Solti, Chicago Sym. London 411969-2 LH

Divertimento for String Orchestra (1939); Music for Strings, Percussion, & Celesta
 Rolla, Liszt Chamber Orch. Hungaroton HCD-12531

Quartets (6) (complete)
 Takács Or. 3-Hungaroton HCD-12502/04

BEETHOVEN
Quartet No. 15 in a, Op. 132
 Fitzwilliam Or. London 411643-2 LH

Sonates for Piano: No. 8 in c, Op. 13, "Pathétique"; No. 14 in c sharp, Op. 27, No. 2, "Moonlight"; No. 23 in I, Op. 57, "Appassionata"
 Ashkenazy London 410260-2 LH

Symphony No. 3 in E flat, Op. 55, "Eroica"; Overture (Egmont)
 Bernstein, Vienna Phil. Deutsche Grammophon 413778-2 GH

Symphony No. 6 in F, Op. 68, "Pastorale"; Overture (Leonore 3)
 Bernstein, Vienna Phil. Deutsche Grammophon 413779-2 GH

Symphony No. 7 in A, Op. 92; Overtures (Coriolan; Egmont)
 Ashkenazy, Philharmonia Orch. London 411941-2 LH

BERLIOZ
Symphonie fantastique, Op. 14
 Davis, Concertgebouw Orch. Philips 411425-2 PH

BIZET
L'Arlésienne: Suites 1 & 2; Carmen Suites 1 & 2
 Marriner, London Sym. Philips 412464-2 PH

BOITO
Nerone (1877-1915; compl. & rev. by Tommasini & Toscanini, 1924)
 Tokody, J. Nagy, Dene, Queler, Hungarian State Opera Orch., Cho. [I] 3-Hungaroton HCD-12487/9

BRAGA
Songs; Guastavino: Songs; Villa-Lobos: Songs
 Teresa Berganza, w. A. Parejo (piano): O'Kinimba; Capim di pranta; Nigue-nigue-ninhas; São João-dá-raraão; Engenho novo, A casinha pequenina; Viola quebrada; Adeus Éma; Canção do poeta do século XVIII; Samba clássico; Desejo; Xangô; Milonga de dos hermanos; Hermano; Mi viná de Chapany; La rosa y el sauce; Pampapapa; Se equivocó la paloma; Abismo de sed; Bonita rama de sauce; El Sampridino Claves CO-8401

BRUCKNER
Symphony No. 8 in c; Wagner: Siegfried Idyll
 Haitink, Concertgebouw Orch. 2-Philips 412465-2 PH2

CHOPIN
Études, Op. 10 and Op. 25
 Ashkenazy London 414127-2 LH

OVORÁK
Concerto in b for Cello, Op. 104; Tchaikovsky: Variations on a Rococo Theme for Cello, Op. 33
 Rostropovich, Karajan, Berlin Phil. Deutsche Grammophon 413819-2 GH

HANDEL
Concerti grossi (6), Op. 3
 Rolla, Liszt Chamber Orch. Hungaroton HCD-12463

Italian Ouzts (22)
 M. Zadori & P. Esswood, w. P. Ella (harpsichord) and C. Falvy (cello) [I] 2-Hungaroton HCD-12564/5

IVES
Songs
 Roberta Alexander, w. Tan Crone (piano) (26 songs) [E]: Songs my mother taught me; Slow march; Dreams; Memories; Berceuse; Romanza (di Central Park); Slugging a vampire; Spring song; The cage; Autumn; The things our fathers loved; Tom sails away; Down east; Serenity; Maple leaves; Like a sick eagle; On the counter; The se'er; Evening; Immortality; The Housatonic at Stockbridge; The greatest man; Two little flowers; The side show; 1, 2, 3; Charlie Rutlage
 Etcetera KTC-1020

MAHLER
Oas Lied von der Erde
 Fernier, Patzak, Walter, Vienna Phil. [G] (rec. May 1952)
 London 414194-2 LH (M)

Symphony No. 1 in D
 Solti, Chicago Sym. London 411731-2 LH

Symphony No. 4 in G
 Te Kanawa, Solti, Chicago Sym. [G] London 410188-2 LH

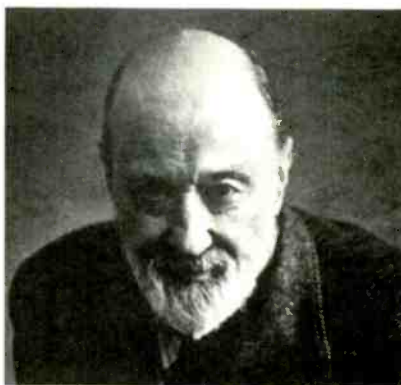
Symphony No. 6 in a
 Tennstedt, London Phil. 2-Angel CDC-47049

MOZART
Concertos (4) for Horn, K.412, 417, 447,

495
 Tuckwell, English Chamber Orch. London 410284-2 LH

Concerto in C for Oboe, K.314; Sinfonia Concertante in E flat for Oboe, Clarinet, Bassoon, Horn & Strings, K.Anh.9 (297b)
 Holliger, Marriner, St. Martin-in-the-Fields Academy Philips 411134-2 PH

Concertos for Piano & Orchestra: No. 12 in A, K.414; No. 23 in A, K.488



Ives's songs come to CD

Kocsis, Rolla, Liszt Chamber Orch. Hungaroton HCD-12472

Concerto for Violin & Orchestra No. 2 in O, K. 211; Sinfonia Concertante in E flat for Violin and Viola, K.364
 Brown, Suk, St. Martin-in-the-Fields Academy Argo 411613-2 ZH

Divertimentos in D, B flat, F, K. 136, 137, 138; Serenade No. 6 in O, K.239, "Serenata notturna"
 I Musici Philips 412120-2 PH

Mass in C, K.317, "Coronation"; Mass in C, K.337, "Missa Solemnis"
 Marshall, Murray, Covey-Crump, Wilson-Johnson, Cleobury, English Chamber Orch., King's College Choir [L] Argo 411904-2 ZH

Sonatas for Violin & Piano, K.301, 304, 376, 378
 Grumiaux, Haskil Philips 412253-2 PH

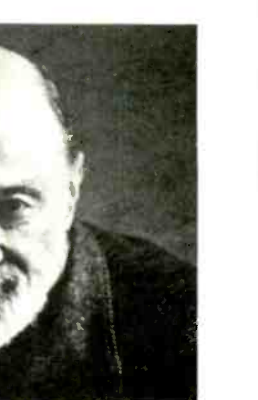
Symphonies: No. 38 in D, K. 504, "Prague"; No. 39 in E flat, K. 543
 Hogwood, Academy Ancient Music Orseau Lyre 410233-2 OH

PROKOFIEV
Peter and the Wolf, Op. 67; Tchaikovsky: Nutcracker Suite, Op. 71A
 Moore, Williams, Boston Pops [E] Philips 412556-2 PH

Peter and the Wolf, Op. 67; Saint-Saëns, Carnival of the Animals

Phrlman, K. & M. Labèque, Mehta, Israel Phil. Angel CDC-47067

PURELL
Songs
 Dalton (countertenor), w. Uittenbosch (harpsichord), Borstlap (viola da gamba) (16) [E]: Music for a while; Fairest isle; Since from my dear Astrea's sight; I attempt from love's sickness to fly; There's not a swain; Take not a woman's anger ill; The fatal hour comes on apace; Love's



Ives's songs come to CD

power in my heart; More love or more disdain I crave; Who can behold Harella's charms; Sweeter than roses; The Queen's epicedium; Thou wakeful shepherd; Now that the sun hath veiled his light; Sleep, Adam, sleep and take thy rest; Lord, what is Man? Etcetera KTC-1013

RACHMANINOFF
Symphonic Dances, Op. 45; Isle of the Dead, Op. 29
 Ashkenazy, Concertgebouw Orch. London 410124-2 LH

RAVEL
Gaspard de la nuit; Menuet sur le nom d'Haydn; Prélude; Sonatine for Piano; Valses nobles et sentimentales
 Rankl Hungaroton HCD-12317

RESPIGHI
Fountains of Rome; Pines of Rome; Ancient Airs and Dances (third set)
 Karajan, Berlin Phil. Deutsche Grammophon 413822-2 GH

SATIE
Apertus désagréables; La belle excentrique; En habit de cheval (1911); Parade (1917); Trois morceaux en forme de poire (1903); Trois petites pièces montées
 Jordans & Ooeselaar (piano, 4 hands) Etcetera KTC-1015

SCHOENBERG
Verklärte Nacht, Op. 4; Wagner: Siegfried Idyll
 Ashkenazy, English Chamber Orch. London 410111-2 LH

SCHUBERT
Winterreise, D. 911
 Talvela, w. Gothóni (piano) [G] Bis CD-253

SIBELIUS
En Saga, Op. 9; Symphony No. 5 in E flat, Op. 82
 Ashkenazy, Philharmonia Orch. London 410016-2 LH

Symphony No. 2 in D, Op. 43
 Ashkenazy, Philharmonia Orch. London 410206-2 LH

STRAUSS, RICHARD
Also sprach Zarathustra, Op. 30; Don Juan, Op. 20; Till Eulenspiegels lustige Streiche, Op. 28
 Solti, Chicago Sym. London 414043-2 LH

TCHAIKOVSKY
Concerto No. 1 in b flat for Piano & Orch., Op. 23; Concerto No. 3 in E flat for Piano & Orch., Op. 75
 Postnikova, Razhdvestvensky, Vienna Sym. London 410112-2 LH

Serenade in C for Strings, Op. 48; Nutcracker Suite, Op. 71A
 Marriner, St. Martin-in-the-Fields Academy Philips 411471-2 PH

VERDI
Falstaff
 Kabaivanska, Schmidt, Ludwig, Araiza, Taddei, Panerai, Karajan, Vienna Phil. & State Opera Cho. [I] 2-Philips 412263-2 PH2

I lombardi alla prima crociata
 Sass, Lombardi, Kovats, Gardelli, Hungarian State Opera Orch. & Cho. [I] 3-Hungaroton HCD-12498/500

Overtures and Preludes
 Chailly, Nat'l Phil. (Forza del destino, Aroldo; Nabucco; Vespri siciliani; Giovanna d'Arco; Luisa Miller) London 410141-2 LH

VIVALDI
Concertos for Cello & Orchestra (R.401, 411, 412, 413, 418, 424)
 Schiff, Brown, St. Martin-in-the-Fields Academy Philips 411126-2 PH

WAGNER
Arias
 Estes, Fricke, Berlin State Orch. [G] (Fliegende Holländer, Walküre, Parsifal) Philips 412721-2 PH

Overtures and Preludes
 Tennstedt, Berlin Phil. (Rienzi; Tannhäuser, Meistersinger; Lohengrin) Angel CDC-47030

Overtures and Preludes
 Behrens, Minton, Hofmann, Weikl, Sotin, Bernstein, Bavarian Radio Sym. & Cho. [G] 5-Philips 410447-2 PH5

Die Walküre
 Nilsson, Rysaneck, Burmeister, King, Adam, Nienstedt, Böhm, Bayreuth Fest. [1967] [G] 4-Philips 412478-2 PH4

CLASSICAL
COMPACT DISC

BRUCKNER:

Symphony No. 4, in E flat ("Romantic").

Berlin Philharmonic Orchestra, Klaus Tennstedt, cond. (John Willan, prod.) Toshiba EMI Ancestral CC38-3124 (fully digital Compact Disc). LPs (2). DS 3935. Cassettes (2). 4X2S 3935.

This is simply one of the grandest orchestral recordings yet made in the digital era. The Berlin Philharmonic, in magnificent form, is unquestionably the right vehicle for Klaus Tennstedt's visionary interpretation of the score—an interpretation that is lucid, masterfully paced, and altogether remarkable for the sustained grandeur it achieves. Everything has direction in this account, for unlike so many Bruckner conductors who shoot all their marbles in the first two minutes and roll



TENNSTEDT: delivers the goods

them around for the next hour. Tennstedt keeps some of his in reserve.

Tennstedt and the Berliners treat every detail as if it were important, yet overstate nothing for effect. The climaxes are built with exceptional skill and arrive with monumental force; at the same time, there is an extraordinary delicacy of sound and transparency of texture in the more atmospheric moments. Most striking of all is the way the symphonic argument doesn't fall into sections but unfolds in a continuous line of action, thus imparting to the whole a gripping excitement typical of concert performance.

The recording, too, has something of the clarity, presence, and sonic weight of a live performance; indeed, it is so lifelike that you not only hear the orchestra, you practically smell it. The bite of bows on the strings of the double basses, the breathing (and sometimes even the tonguing) of the wind and brass players—all is there, without anything seeming unnaturally spotlighted. It is even possible to hear the resonance of the podium (sounding a bit like a muffled bass drum) as Tennstedt

shifts his weight prior to some of the climaxes. The amazing thing is that this was all done in the Philharmonie in Berlin, a venue that the competition (Deutsche Grammophon) has had less than great success with.

The version recorded here is that of 1880, in the Robert Haas edition. The CD makes an especially good buy, since Angel's LP release is priced as a two-disc set.

—THEODORE W. LIBBEY, JR.

SCHUBERT:

Sonatas for Piano: in A, D. 664, Op. 120; in A minor, D. 784, Op. 143.

Sviatoslav Richter, piano. (Tomoo Nogima, prod.) Vox Clam Laude MCD 10030 (fully digital Compact Disc). LP: DVCL 9027. Cassette: CVCS 9027. (Distributed by Moss Music Group, Inc., 48 W. 38th St., New York, N.Y. 10018.)

It was a dozen years ago that Sviatoslav Richter last performed in the United States, and the chances of his returning seem dim. All the more reason to explore the live taping from a pair of recitals given in Tokyo in February 1979. Richter was then on the eve of his sixty-fourth birthday, and the pianism was clearly as powerful as ever—the granitic bass well in hand, the fleet fingerwork unfettered, the deep reach into the heart of the keyboard undiminished.

Richter's Schubert, though, may not be everybody's cup of tea. It is at times so searching and serious that the weight of the scrutiny proves very heavy indeed. The first movement of the A major is solid and deliberate; it never attains—and never intends to attain—De Larrocha's light, flowing momentum or Ashkenazy's bell-like touch and articulate voicing (both performances on London). Nor does it reveal Brendel's formidable intellectual discipline (Philips). Such contrasts are accentuated in the Andante, where Richter's slow tempo lets the line sag to a bothersome degree.

The A minor fares in similar fashion: again a loss of propulsion in the slow movement, where Ashkenazy is particularly cohesive and collected. But compensation comes in the finales of both sonatas, where the demand for sheer virtuosity seems to set Richter free. The fountains of scale figures in the A major cascade brilliantly; the A minor's running figuration is smooth and shapely.

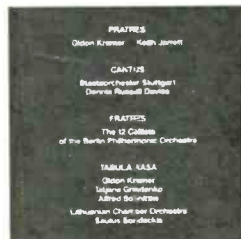
The CD sound (just a hair more sharply defined than the very good disc version) brings out a little too faithfully the idiosyncrasies of the Tokyo piano (unidentified), which is fulsome and boomy in the lower register and tinny at the top. That upper-end clang is especially noticeable in the treble passages in the first movement of the A minor sonata. The recording also brings out too faithfully the applause at the close of each work, jarring the listener right out of the chair. If applause *must* be included, I wish the engineers would give it to us *solito voce*.

—SHIRLEY FLEMING

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A Force of Nature



Recent releases from Melodram give new life to the legend of Ljuba Welitsch.

Reviewed by Bert Wechsler

Welitsch posed for this portrait in 1949, the year of her Met debut as Salome. Her riveting intensity and her ability to project a character with near hallucinatory power come through the vinyl just as they came across the footlights.

PHILIPPE HALSMAN

LJUBA WELITSCH WAS BORN on July 10, 1913, in Borisovo, Bulgaria. It wouldn't be long before the country would become famous for the soprano.

Before her voice was discovered, Welitsch read philosophy at the University of Sofia. Beginning in 1934, she sang small roles with that city's opera company, on one occasion performing with Feodor Chaliapin. The government sent her to Vienna to study with Theodor Lierhammer, but it is completely possible that her voice—really more of a force of nature—just developed on its own.

Welitsch made her professional debut in Graz in 1937, singing the roles of Nedda and Musetta. In 1940 she went to Hamburg, and by the end of the war she was in Vienna

Bert Wechsler is the editor of Music Journal and a frequent contributor to publications on the arts.

(where she lives today). She married a policeman, was left by him "for a younger woman," and became known as, let us say, a passionate lady.

As an actress, she was torrential. Her Salome was a wilful, lustful child that only Christel Goltz would approach, her Tosca the height of stage temperament. And her voice was absolutely unique. You knew immediately that this was Welitsch, not by a wobble, not by a certain hollowness, but by an elemental totality—a fullness, a richness, and a thrust. She did not prepare a phrase, nor did she ever save on any: She gave everything all the time, yet never as an unnuanced noise. Welitsch was in style, in character, and always musical. It is possible that her unstinting use of the voice in all registers caused her early decline—although that decline was not as early as once thought.

Welitsch's commercial discography

was never large, but it keeps growing, long after her retirement. Recently, the Italian company Melodram [distributed by German News Co., 220 E. 86th St., New York, N.Y. 10028] rekindled the Welitsch blaze with several releases that are likely to upset our American view of when her voice developed and failed.

We first learned about the soprano in 1949; Thomas Beecham knew her in 1947. That complete *Elektra* is now available on Melodram 041 with Erna Schluter in the title role, Elisabeth Höngen as Klytemnestra, and Welitsch as Chrysothemis. Paul Schoeffler is the Orest, and Walter Widdop the Aegisth. The final scene does not reach the intensity of the RCA recording (how about a .5 reissue of that?), yet it is still spectacular. Beecham begins the scene at a lower emotional pitch than one would expect, but it builds inexorably to the climax; it is impossible to sit still while listening.

The sound on this new release doesn't come near RCA's, but anyone used to listening to radio recordings of the period will not be put off. And while Welitsch's voice does not ring as we know it, it is there, and we react to it. Without taking anything away from Leonie Rysanek's various renditions of Chrysothemis (the phrase "Ich bin ein Weib und will ein Weiberschicksal" still belongs to her), this *Elektra* is the one to own, the source.

A complete *Ballo in maschera*, recorded in 1949 at the Edinburgh Festival, shows up on Melodram 019 with Welitsch as Amelia. Next is the 1950 Salzburg Festival *Don Giovanni*, which has been around a lot—first as a pirated recording, then from the Bruno Walter Society, then on Olympus. It is now on Melodram 713, in very acceptable sound. Welitsch is the Donna Anna, and she is dominant (if not as thoroughly in control of her voice as in the Metropolitan Opera performance or on the deleted Odyssey disc of arias). Wilhelm Furtwängler conducts, and he makes the whole thing a bit frenetic. Tito Gobbi sings the Don as if he were Iago on a mean day, and Elisabeth Schwarzkopf wanders as Elvira. Actually, in a cast that includes Irmgard Seefried, Anton Dermota, Alfred Poell, and Josef Greindl, only Erich Kunz is continually smooth—but he has never been a Leporello to my taste. This recording, then, is worth having only for Welitsch.

Was she finished by 1952? It was thought so here in New York, but this city can be as provincial as any other: We may think that if it doesn't happen here, it doesn't happen. But it often does. Melodram 403 gives us Puccini's *La Rondine*—from Vienna, and from 1955. Welitsch's Magda is a masterful interpretation, that haunting tone per-

fect for the character and the Lehar-like music. There are no problems; while the gamut of colorings is smaller than what we are used to hearing from Welitsch in her prime, all is in place. Dermota is her Roger,

records of various Welitsch selections from 1947 to '55. There are well-chosen excerpts from the previously mentioned *Elektra*, *Don Giovanni*, and *La Rondine*, but also a *Salome* final scene from 1955. No, the voice is not gone here:

It is not quite the force it once was, but the timbre is still that of the willful child, the notes are all there, and the interpretation is chilling. In its way, this may be Welitsch's best *Salome* finale. Hans Muller-Kray conducts the South German Radio Orchestra of Stuttgart.

This set also has "Morrò, ma prima in grazia" from the 1949 Edinburgh *Ballo in maschera*. "Rusalka's Song" from a Munich production of the Dvořák opera (with Richard Kraus and the Bavarian Radio, 1949), and a London "Vissi d'arte" (1948). Two Joseph Marx songs, with the composer at the piano, date from 1947; two songs each by Schumann and Schubert and three by Brahms were recorded in London in 1949 with Joseph P. Nelles as accompanist. And if you want novelties, how about Cherubino's "Voi che sapete" (London, 1948) and the *Gypsy Baron* duet "Wer uns getraut" with tenor Hugo Meyer-Welfing as conducted by Otto Matzerath (Vienna, 1953). By the way, the photographs reproduced here are fascinating, especially the one of Welitsch with two male drinking companions and Maria Callas in the rear, looking as if she had drunk vinegar.

When Welitsch finally retired from singing, she did not retire from the stage. Her acting career was long and honorable, both in the theater and in films. Remember the scene in *The Man Between* where we kept wanting James Mason to go back into the opera house? On stage, that was Welitsch, in *Salome*. **HF**

ALTHOUGH LJUBA WELITSCH made so few commercial recordings, there is in addition to the recent Melodram releases enough material for those who never heard the soprano to become acquainted with her compelling artistry.

The selections on the long-available Seraphim 60202 disc have been remastered and now sound better than ever on Pathé Marconi 1012671 [distributed by International Book and Record, 40-11 24th St., Long Island City, N.Y. 11101]. The high point is, of course, the *Salome* final scene, taken from a 1944 Austrian radio broadcast with Lovro von Matačić conducting. This is the definitive interpretation of the scene. Welitsch colors her voice exquisitely, with a miraculous, youthful sound that to this day is unmatched by any other soprano. Those familiar with the score will notice that in the climax of the scene, on the last syllable of "Jokanaan," Welitsch does not sing the usual G sharp, but a D sharp; this is the only version in which she sings the optional note. The LP also contains Welitsch's fine readings of the Letter Scene from *Eugene Onegin*, and arias from *Freischütz*, *Tosca*, and *Bohème*, all recorded in 1947 or 1948.

Admirers of Welitsch will also want to own "Excerpts from Strauss Operas" (World Records Ltd. SH 286; distributed by International Book and Record). Included among treasurable performances by other sopranos are three quarters of Welitsch's *Salome* finale recorded in November of 1948 with Herbert von Karajan and the Vienna Philharmonic. Because the second of the four original 78-rpm

More Welitsch on Disc

Reviewed by Robert E. Benson

sides was damaged, this *Salome* recording was never before issued. And what a performance it is! For lovers of Strauss, this is an essential LP.

There are several pirate versions of the 1949 Metropolitan Opera *Salome*. Without question the finest is on BRJ 156-2, which offers clear reproduction of that magic Met broadcast (or possibly a different performance from that season). Who could ever forget the incredible moment when Salome, rejecting all of Herod's offers of gifts, shrieks out "Gib mir den Kopf des Jokanaan!" in a stunning display of animalistic, perverse intensity. This album also contains an appreciation of Welitsch and conductor Fritz Reiner, along with several fine photographs. By all means avoid the Met's commemorative album offering the 1952 broadcast. While the sonic quality is good, Welitsch was then not in the best of voice, and the supporting cast is not as strong.

Welitsch and Reiner also recorded the *Salome* final scene for a disc of arias, and up until a year ago it was available on Odyssey 32 16 0078. Also included were selections from *Die Fledermaus*, *The Gypsy Baron*, and *Don Giovanni*, as well as the Love Duet from *Tosca* with Richard Tucker.

Still in the catalog, though hardly representative of Welitsch's best, is a disc coupling the *Four Last Songs* with Lieder of Mahler and Joseph Marx (Odyssey Y 32675; distributed by CBS). Her Rosalinde in the Met's English-language production of *Die Fledermaus* has also been recorded and remains available today (Odyssey Y2 32666). There once was a ten-inch Columbia LP (ML 2118) containing outstanding performances of Lieder of Mussorgsky, Dargomijsky, Marx, and Strauss, but this has long since disappeared from the catalog, as has Welitsch's recording of selections from *Un ballo in maschera* and *Pique Dame*, coupled with several operetta arias (London 5836, later reissued on Richmond Opera Treasury R 23188).

Welitsch can also be heard in the brief part of Marianne in Karajan's recording of *Der Rosenkavalier* on Angel SDX 3970 and she appears in the Gala Performance included in his *Die Fledermaus* on London 1319—singing, appropriately, "Vienna, City of My Dreams." Finally, there is a broadcast recording of *Tosca* from Vienna on EJS, a pirate label of the early Sixties.

the second pair of lovers is Dorothea Siebert and Waldemar Kmentt, and Meinhard von Zallinger conducts the Vienna Symphony. It is a wonderful recording—in German, but so what?

The big gift is Melodram 095, two

in the theater and in films. Remember the scene in *The Man Between* where we kept wanting James Mason to go back into the opera house? On stage, that was Welitsch, in *Salome*.

A Musical Rx



often when, in bad weather (a rain hat or parka hood making even the slimmest of headphones impractical), I must walk to the accompaniment of only my own thoughts. What I miss then is the muscular stimulus of invigorating outer rhythms and, even more desperately, some kind of external patterns to organize my thinking. For when my mind idles or is bored, it inevitably drifts away in a stream of subconsciousness, the vaguest of pointless daydreaming. The marked contrast between what usually goes on in one's head when walking in silence and what occurs when walking to music suggests how beneficial the sum of Activity + Listening can be to our inner as well as outer well-being.

First of all, it banishes boredom and lethargy. And as the novelist Trevanian has perceptively noted, "In seeming contradiction of physical laws, Time is heavy only when it's empty." A serendipitous by-product turns out to be genuine, often potent, psychosomatic therapy. And while there never can be any panacea, a walking/listening regimen may well be as versatile a palliative for us as the herb marjoram was for Jacobean Englishmen who prescribed it "for happiness and also to do good work against cold in the nose, ague in the joints, and wambling in the stomach."

Since most of us are sold on the need for regular physical exercise and have begun (or intend to begin) some kind of program, the obvious first musical choices are strongly rhythmic marches and dances. The former have acquired, from parade and summer-concert familiarity, the added attraction of hypaethral (i.e., open-air) associations; both are usually so tuneful they encourage whistling and singing along.

The latest Sousa march program, by the Philip Jones Brass Ensemble on London [see "A Selection of Walkabout Cassettes"], is exceptional both for the precision of the playing and for the ringing sound in which these British virtuosos have been digitally recorded. It is also notable for imaginative programming that combines the expected favorites with seldom-heard novelties (*Guide Right*, *The Bride-Elect*, *Comrades of the Legion*). The only missing element here is the inimitably American exuberance found in the Philips Classette reissue of a superb Eastman Wind Ensemble program featuring six once-popular Edwin Franko Goldman marches along with long-time band hits by Fillmore, Rodgers, Alford, et al. The early-stereo sonics still boast razor-sharp brilliance, while the idiomatic verve of Frederick Fennell's readings remains unexcelled.

Even more irresistible are the Caribbean rhythms and calypso-scented tunes of the *Antillean Dances* by Curacao composer Wim Statius Muller—in a Spectrum sleeper that introduces charming miniatures worthy

A sampling of new cassettes for "walkabout" players suggests that Activity + Listening leads to inner as well as outer well-being.

Reviewed by R. D. Darrell

OUR MUCH-MALIGNED Younger Generation's frantic search for new means of entertainment, or of somehow escaping the stresses of contemporary life, just may have resulted in an almost miracle-working fitness regimen for everyone, young or old. It's easy for the elders to laugh, even sneer, at bemused kids stepping out to the beat of personal drummers only they can hear, via headphones and a Walkman-type cassette player; in the long run, though, the *kids* may well have the last laugh. We scoffers are missing out, not only on spellbinding musical experiences, but also on unexpectedly efficacious remedies for much of what ails us—even if that's no more than a mild case of anhedonia, the simple inability to enjoy oneself.

When Sony first introduced small, battery-powered cassette players with light-

weight "hear-through" headphones, their immediate popularity was confined to vogue-susceptible teenagers interested in pop/rock music. But it wasn't long before the idea spread, overcoming the initial skepticism of adventuresome musical connoisseurs and more casual elder listeners. Witness my public conversion chronicled earlier in these pages [see "Going Walkabout," February 1983, and "Walk on Ayre," February 1984]. And I am by no means alone among those adult audiophiles who began as merely curious investigators, only to wind up, like an amazed Saul on the road to Damascus, as fervent proselytizers for what we had previously disdained.

Pondering further over this personal-portable phenomenon, I continue to discover more of its potential—disclosed not only in daily musical walks themselves, but

of comparison to those of Gottschalk, Joplin, and that 1983 discovery Ernesto Nazareth. If you insist on having symphonic dance music, however, you'll want the latest Willi Boskovsky/Strauss Orchestra treasures: a batch of polkas and waltzes from Johann's brother Josef that are no less delectable and often refreshingly novel.

THOUGH WE ALL RELISH occasional stepping-out sessions (some of us may never demand anything more), we soon feel a need for music that invigorates our minds as well as our muscles. And for that, nothing seems to work better than Baroque polyphony. The very characteristics that some consider unexciting or tiresome in the concert hall are ideal for walkabout listening: the relative objectivity and avoidance of overt emotionalism . . . "terraced" dynamics . . . steady pace (fast or slow, but rarely extremely so) . . . the intellectually challenging intricacies of contrapuntal textures and differentiations of tone color . . . above all, an always purposeful *movement*.

The fugues of Bach and his contemporaries are especially impressive for their radiation of tremendous yet always precisely controlled energy—comparable only to that sensed when one is close to the massive, smoothly rotating dynamos of an electric power station. This immeasurable force floods not only our ears but seemingly every cell in the body, figuratively recharging our own batteries and literally revitalizing us. I know of no more immediate cure for physical or mental fatigue, nor any with fewer unwanted side effects. Moreover, the absolute assurance and sublime certainty with which these mighty tonal structures integrate many exactly ordered details provides a paradigm for the better utilization of our own minds.

Is all this giving too much credit to the busily bustling, sewing-machine action typical of Baroque music-making? Are these notions deep waters for everyday listeners to drown in? Perhaps. Nevertheless, this most intensely personal and electrifying musical experience does often produce influential effects quite unsuspected, even unimaginable, until we actually encounter them for ourselves. In any case, no such larger concerns need worry casual, nonphilosophizing walker/listeners who find simpler satisfactions in merely being carried along in a Baroque tidal flow.

Those captivated by the apparently limitless popularity of Vivaldi's *Four Seasons*, and those long since wearied of its familiar pictorialism, may find fresh attractions in the pungent period-instrument timbres and crisp, non-Romantic readings of the Christopher Hogwood performances on Oiseau-Lyre. Here, each concerto features a different violin soloist (as in Vivaldi's own practice with his Venetian girls-school orchestra). Another current digital/chrome cassette, this one from Archiv, offers a boldly declamatory, almost too urgent per-

A Selection of Walkabout Cassettes

SOUSA: Marches (15).

Philip Jones Brass Ensemble, Elgar Howarth, cond. [Chris Hazell, prod.] LONDON 410 290-4 (digital recording, chrome cassette).

FREDERICK FENNEL: "March Time."

Eastman Wind Ensemble, Frederick Fennell, cond. PHILIPS 412 300-4 (ferric cassette). From Mercury SR 90170; 1958.

Works by Goldman (6). Alford, Fillmore, Hall, Reeves, Rodgers, and Seitz.

MULLER: Antillean Dances (24).

Wim Statius Muller, piano. SPECTRUM SC 284 (ferric cassette). (Division of UNI-PRO Recordings, Inc., Harbman, N.Y. 10926.)

STRAUSS, JOSEF: Polkas (7) and Waltzes (5).

Johann Strauss Orchestra of Vienna, Willi Boskovsky, cond. [Christfried Bickenback, prod.] EMI ANGEL 4XS 38077 (digital recording, ferric cassette).

Polkas: Im Flugé, Op. 230; Vorwärts: Die Schwätzerin, Op. 144; Ohne Sorgen, Op. 271; Feuerfest; Frauenherz, Op. 166; Jockey-Polka, Op. 278. Waltzes: Dorlschwalben aus Österreich, Op. 164; Delirien, Op. 212; Geheime Anziehungskräfte ("Dynamiden"), Op. 173; Aquarellen, Op. 258; Mein Lebenslauf ist Lieb und Lust, Op. 263.



VIVALDI: The Four Seasons, Op. 8, Nos. 1*, 2†, 3*, 4*.

Christopher Hiron*, John Holloway†, Alison Bury*, and Catherine Mackintosh*, violin; Academy of Ancient Music, Christopher Hogwood, cond. [Peter Wadland, prod.] OISEAU-LYRE 410 126-4 (digital recording, chrome cassette). (Distributed by London.)

BACH: Organ Works (6).

Ton Koopman, organ. [Andreas Holschneider, prod.] ARCHIV 413 162-4 (digital recording, chromium cassette). (Distributed by Deutsche Grammophon.)

Passacaglia in C minor, B.W.V. 582; Pastorale in F, B.W.V. 590; Fantasia in G, B.W.V. 572; Canzona in D minor, B.W.V. 588; Allabreve in D, B.W.V. 589; Prelude in A minor, B.W.V. 569.

MOZART: Serenade in G, K. 525 ("Eine kleine Nachtmusik")*; Serenade in D, K. 239 ("Serenata notturna")†; Notturmo in D, K. 286†.

Barry Guy, double bass*; Salomon String Quartet*; Academy of Ancient Music, Christopher Hogwood, cond.† [Peter Wadland, prod.] OISEAU-LYRE 411 720-4 (digital recording, chrome cassette).

SCHUBERT: Quintet for Strings, in C, D. 956.

Christopher Van Kampen, cello; Fitzwilliam String Quartet. [Peter Wadland, prod.] LONDON LDR 5-71071 (digital recording, chrome cassette).

formance by Ton Koopman of the mighty Bach Passacaglia in C minor, on the c. 1730 organ of the Grote Kerk in Maassluis, The Netherlands. This all-Bach recital also includes the contrastingly limpid Pastorale, plus four less familiar shorter pieces.

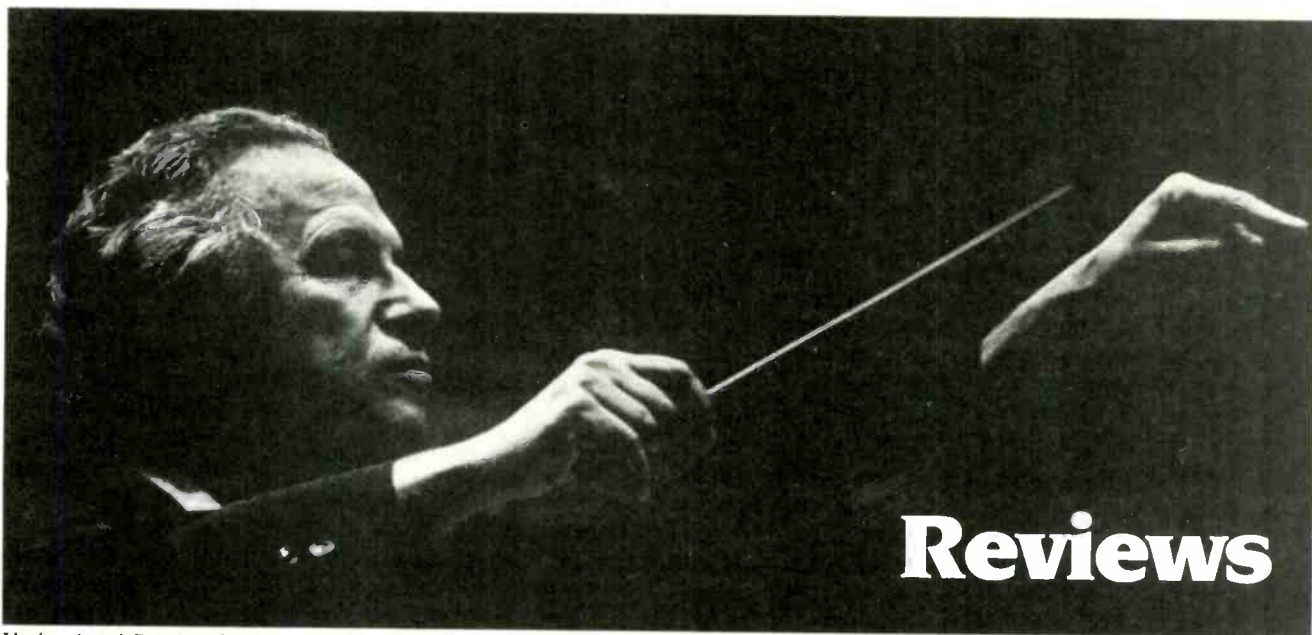
For some nonspecialist listeners, the acceptance of historically authentic tone qualities and performance styles may be eased by turning from the Baroque to the Rococo and early Classical periods. Indeed, many novices already have been won over by the eloquence of Hogwood and his colleagues in their milestone Mozart symphony series. And for those seeking a less expensive introduction to more familiar, less demanding Mozartiana that's even better suited to peripatetic listening, there's an ideal new single-play cassette. It's the Hogwood/Salomon Quartet/Academy of Ancient Music program of serenades on Oiseau-Lyre that features (along with the K. 239 and 286 nocturnos) the well-known *Eine kleine Nachtmusik* in sparkling guise: an exceptionally crisp, straightforward reading by a period-instrument quintet, with an apt Mozart-Attwood minuet replacing the long-lost original second movement. Even Dr. Scholl's best Air-Pillo Insoles can't match the buoyancy that will be felt by anyone who steps out to this version!

Do I need to remind readers that my few specific cassette recommendations are merely current-release exemplars, or that your own tastes should determine other appropriate choices from the recordings reviewed in these pages or listed in SCHWANN as still in print? For anyone who doesn't share my predilections, there's an embarrassment of riches in the Classical, Romantic, and modern repertoires. But I do hope you'll at least try to test my argument that chamber works seem best suited to this quintessentially private listening mode.

This is particularly true of the chamber music by certain major composers that provocatively suggests how *they* wrestled with the stresses, with the personal and social problems of health, economics, self-doubt, and all the rest that beset them. Beethoven's early string quartets are apt examples; so is the even more heartening String Quintet, D. 956, that Schubert wrote only a couple of months before his far-too-early death. The latest first-rate recording of that work is exceptionally well suited for al fresco listening—partly for London's thrilling digital technology (even more effective in headphone playback), but mainly for the exuberance with which the Fitzwilliam foursome and second cellist Christopher van Kampen convey the musical epiphanies of Schubert's own hopes and fears.

Whatever your affinities, the choices are innumerable. Below the turbulent surface of current activity, blurred new releases, and latest technology hullabaloo lies the inexhaustible treasure of past pro-

(Continued on page 82)



Reviews

Under Antal Doráti, the Concertgebouw Orchestra performs Bartók's Concerto for Orchestra with unusual distinction.

BARTÓK: Concerto for Orchestra; Két kép (Two Pictures), Op. 10.

Concertgebouw Orchestra, Antal Doráti, cond. PHILIPS 411 132-1 (digital recording). Cassette: 411 132-4. CD: 411 132-2.

I can think of no other composer whose scores indicate tempos as precisely as those of Béla Bartók. Not content with mere metronome markings nor even with noting what he regarded as ideal timings of entire movements, he routinely specified timings for individual *fractions* of movements. In this work, for instance, he wanted the first 34 measures to last 1:38, the next 15, 1:00, the following 24, 0:50, and so on. Only with a computer giving the beat could any performance comply absolutely. Bartók wanted the whole work—one of his greatest and also one of his most accessible—to last about 37 minutes. Antal Doráti does it in 36:32, which should have satisfied even Bartók's punctilio.

I especially commend Doráti's idea of *presto* in the finale. Too many conductors let Magyar exuberance and the virtuosity of their orchestras carry them away (I recall Eugene Ormandy as a particular offender), and the music suffers as a result. Doráti resists that temptation: *less*, under his baton, does indeed become *more*—at least here. He creates an especially apt and effective atmosphere in the elegiac third movement, but he also gets a bit aberrant there. Although Bartók does indeed indicate *molto rubato* at measure 62, I seriously doubt that he meant that as license for Doráti to convert measures 74, 76, and 78 from 3/4 to a very clear-cut 4/4.

Amsterdam's Concertgebouw (the name simply means a building for concerts) has the acoustics musicians and architects

dream about, acoustics that, combined with this superb orchestra, result in a memorable recording. Incidentally, if you have never heard this work while reading the score, I particularly recommend it as a revelation of what a genius can create and develop out of a single musical interval—in this case, the perfect fourth.

Doráti chooses to end the work with the alternative ending Bartók supplied (as has every other conductor I've ever heard do this work). The other, shorter, ending—which evidently Bartók preferred—remains a riddle to me, since it seems startlingly less effective.

The *Two Pictures*, which Bartók composed at the age of thirty-one, recall by their style a story of his arrival in Paris as an eager young man, with an introduction to an eminent older composer—Saint-Saëns, I think. To the old man's question "Would you like me to send you to this, that, and the other leading composer here, who would welcome you and treat you nicely, or would you rather be insulted by Debussy?" Bartók at once replied, "I would rather be insulted by Debussy." The first of the *Two Pictures* reflects that unquestioning admiration of Debussy; together, the two works afford a valuable glimpse of one of music's greatest geniuses still seeking his national identity. Under Doráti's experienced guidance, this orchestra performs both the early and the late music with unusual distinction, and the Philips team has recorded them opulently.

PAUL MOOR

BEETHOVEN: Sonata for Piano No. 29, in B flat, Op. 106 ("Hammerklavier").

Peter Serkin, piano. [Peter Serkin, prod.] PRO ARTE PAD 181 (digital recording). Cassette:

PCD 181. (Distributed by Intersound, Inc., 14025 23rd Ave. N., Minneapolis, Minn. 55441.)

Those strange clicks and thuds heard on this recording are not Peter Serkin dropping his music in a feverish effort to come to grips with the mighty *Hammerklavier* Sonata, they are the vagaries of the Graf fortepiano he's using. Might this clunking be not only authentic but Brechtian, in its allowing the listener to hear the mechanics of the performance at the same time as the performance itself? Perhaps, but once the ears become accustomed to the instrument—its piercing, glassy sound in the higher notes and narrow range of articulation—one hears a rather different Beethoven than in many conventional recordings of the work.

Though I still find the Pollini interpretation more cogent and the Giljels more expressive (both are on DG), the simple fact that this new recording is the first one widely available of the *Hammerklavier* on an authentic instrument—and by a major talent like Serkin—makes it a major addition to the discography. One doesn't even have to like or agree with Serkin's performance, because there is so much to be learned about the piece from it. It is not, in fact, a feverish performance at all, but a cool breeze blowing over musical terrain that makes most musicians sweat bullets.

The music has frequently been considered a product of the composer's inner sound world, composed without much heed for performance practicalities or listenability by mere mortals. In fact, Beethoven was perhaps being modest when he said the sonata probably wouldn't be widely understood for 50 years. However, Serkin's performance suggests that Beethoven hadn't

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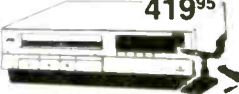
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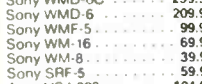
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forgotten the real world after all. Harmonies that can easily sound dense and ugly on a modern piano are heard with more clarity here, so that the music actually becomes a bit sensuous, a quality further brought out by the way the piano is surrounded with a generous reverberation (though not so generous as in Serkin's two previous recordings on the Graf).

While Serkin can be gently accused of piano bashing in what seems like a misguided attempt to make a grand statement in the first movement, the ethereal slow movement is lush, particularly with the luxuriously resonant bass notes the Graf instrument possesses. The lighter textures reveal otherwise obscured echoes, albeit distant ones, of the folksy harmonies Beethoven seemed mostly to leave behind in his late period. The profuse scales in the final movement's Bach-on-drugs counterpoint take on an almost harplike delicacy at times, though Serkin, true to the demands of the score, doesn't always play them that delicately. He captures the maniacal energy of Beethoven's writing here (and in other parts of the sonata as well). Beethoven's wrestling with the cosmos sounds every bit as rough as it should, even though the instrument Serkin has chosen for this performance is a gentle one.

Instruments aside, Serkin promises to be an important Beethoven interpreter. Although it's easy to hear this sonata as disembodied music, divorced from a particular time and culture, Serkin grounds it in its own period more than any performer I've heard. The intense concentration that served him so well in his Messiaen recordings is welcome in a piece that is at once incredibly compact and incredibly expansive. Serkin does, however, seem somewhat encumbered at times, as illustrated by the lack of fine shades of color in this performance. Also, I would like to have heard greater tempo differentiations between the first, second, and fourth movements.

If the *Hammerklavier* is one of the most elusive and forbidding of Beethoven's sonatas, it is also the one that begs the most for clarification, of the sort that an early-instrument performance is in a unique position to offer. Should this recording by chance be made obsolete in the next few years by undreamed-of discoveries in performance practice or improvements in the standard quality of fortepianos, it will still have served an important purpose.

DAVID PATRICK STEARNS

BRAHMS: Symphony No. 3, in F, Op. 90; Variations on a Theme by Haydn, in B flat, Op. 56a.

New York Philharmonic Orchestra, Zubin Mehta, cond. [David Mottley and Richard Einhorn, prods.] CBS MASTERWORKS M 39032 (digital recording). Cassette: MT 39032.

The orchestra takes the spotlight here; it plays superbly, with the solo winds sound-

ing especially good. As for Zubin Mehta, I find him to be erratic and, in the long run, disappointing. He ignores the repeat in the symphony's first movement, thus knocking the sonata form out of proportion. Where Brahms specified *un poco sostenuto*, Mehta alters *un poco* to *molto*; then he makes up for it, to no apparent purpose, by suddenly speeding up at measure 188. The first movement's ending he drags to a slow death, with no such indication whatever in the score. The second movement, Andante, simply doesn't "anda," doesn't move; indeed, it plods, and within the first 45 measures it drops to a *lento*, even *larghetto*. At letter F (measure 108), Mehta drags it into



Mehta: overinterpreting Brahms?

another new tempo, slower still—all with no hint of justification from Brahms. At that speed, the passion inherent in the violin writing between letters F and G simply dissipates, so that well before the movement's end the music is dead on its feet.

Mehta handles the symphony's second half, especially the fourth movement, in a more musicianly, satisfying fashion, but even here he interprets it to death, particularly with regard to tempos. When measure 267 brings again the indication *un poco sostenuto*, he has already done that a full 15 bars earlier. A bit further on, he has almost gone to sleep.

Distressing violations of Brahms's tempo indications also mar the Variations. At variation no. 3, Mehta ignores the *con moto*; no. 6 brings an extremely sluggish *vivace*, with no. 7 hardly *grazioso*, as marked. In the finale, Mehta suppresses rather than emphasizes the importance of that unusual five-bar ground bass, and he arrogantly ignores Brahms's express stipulation to end the work *in tempo*.

The orchestra's excellence fails to compensate for the conductor's eccentricities here. Brahms, the creative genius, made his intentions completely clear in the

printed score. This recording offers a prime example of a conductor, a mere interpreter, who evidently believes he knows better.

PAUL MOOR



Sherman: sensitive playing, but . . .

CHOPIN: Twenty-four Preludes, Op. 28; Barcarolle, in F sharp, Op. 60.

Russell Sherman, piano. [Wolf Erichson, prod.] PRO ARTE PAD 162 (digital recording). Cassette: PCD 162. (Distributed by Intersound, Inc., 14025 23rd Ave. N., Minneapolis, Minn. 55441.)

This release utterly baffles me. Who is Russell Sherman, and what does he want? His name means nothing to me, but my recent 32-year expatriation may explain that. (Anyway, he recorded this in Frankfurt.) The album tells us not one word about him. Instead, Pro Arte has filled the bulk of text space with notes by Sherman about each prelude: the silliest, most pretentious notes I've ever read. I feel tempted to quote four particularly voluptuous blooms, but one will have to suffice. Sherman sums up No. 15, the *Raindrop* Prelude, with: "Only a mythical Beatrice can lead us back from the underworld. Her raiment is embroidered with Burgundian sixths."

Sherman plays his best in the eighth and twenty-third preludes and in parts of the *Barcarolle*. He demonstrates a serviceable, sometimes fleet technique and a more than adequately sensitive musicianship. However, the numerous recordings of this music by many of the world's most formidable virtuosos constitute a body of fierce competition that any new recording, from one perspective or another, must seriously challenge. This one, I regret to report, does not.

PAUL MOOR

HAYDN: Concerto for Trumpet and Orchestra, in E flat, Hob. VIIe: 1*; Concerto for Cello and Orchestra, in D, Hob. VIIb, No. 2†; Concerto for Violin and Orchestra, in C, Hob. VIIa; No. 1°.

Wynton Marsalis, trumpet*, National Philharmonic Orchestra, Raymond Leppard, cond.*; Yo-Yo Ma, cello†, English Chamber Orchestra, José Luis García, cond.†; Cho-Liang Lin, vio-

lin°. Minnesota Orchestra, Neville Marriner, cond.° [Thomas Mowray*, Roy Emerson†, and Steven Epstein°, prods.] CBS MASTERWORKS M 39310. Cassette: MT 39310. CD: MK 39310.

Performances from three previously issued discs have been assembled here into one album of Haydn concertos. The trumpeter Wynton Marsalis has, in addition to accuracy and beautiful tone, an extraordinary flair for shaping phrases freely and purposefully around a secure beat. This performance is made even more outstanding by Raymond Leppard's delightful pointing up of the orchestral accompaniment, by which Haydn continually leads the trumpet off in wholly unexpected directions and makes this piece a far better work of its kind than the martial concertos of most of his contemporaries. The orchestra sounds distant, unfortunately.

In the equally good Cello Concerto in D minor, Yo-Yo Ma's playing is on such a high level of musicianship, taste, and technical accomplishment that it seems almost small-minded to criticize anything about it. I will only say that I do not always understand the reason for what he does. The cello's opening statement, in which Haydn sets forth ideas he will expand upon later, is so exhaustively expanded upon by Ma at the outset that I cannot see how it could lead one to anticipate any further elaboration in the development, either by Ma or by Haydn. Almost every note swells in volume and tone, and every phrase rises to a climax in the middle rather than gravitating to its harmonic resolution and leading onward to the next. (Marsalis overwhelms his first entrance in the Trumpet Concerto, too, but nothing thereafter.)

Ma's delicate elisions and gradations of volume and tone are so exquisite, and so eminently suited to the development once he gets there, that to suggest anything different brings to mind Anton Dolin's cable to Stravinsky: "Ballet great success stop . . . can the Pas de Deux be orchestrated with the strings carrying the melody this is most important to ensure greater success"—to which Stravinsky wired back, "Satisfied great success."

Nevertheless, I have come to believe it to be almost a rule that you don't give everything away at the start. As an example, Cho-Liang Lin's straightforward phrasing at the start of Haydn's early Violin Concerto gives his performance greater cumulative effect than Ma's, even though he is not as brilliant a player. The concerto itself is uninteresting except for the slow movement, whose flow of melody is lovely, even if unbroken by any of the unexpected modulations and changes of instrumentation that make the other two concertos unmistakably Haydn's.

The balance between soloist and orchestra is good in the cello and violin concertos, and José Luis Garcia and Neville Marriner accompany sensitively.

THOMAS HATHAWAY

ROSSINI: L'Italiana in Algeri (The Italian Woman in Algiers).

CAST:

Elvira Jeanne Marie Bima (s)
Isabella Lucia Valentini-Terrani (ms)
Lindoro Francisco Araiza (l)
Mustafà Wladimiro Ganzarolli (b)

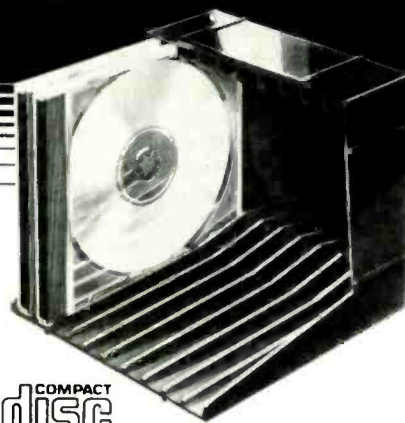
Cologne Radio Male Chorus; Capella Coloniensis, Gabriele Ferro, cond. [Klaus L. Neumann and Otto Nielen, prods.] CBS MASTERWORKS M3 39048 (three discs). Cassette: M3T 39048.

The inferior cast and conductor in this recording may not deter buyers who are curious to hear period instruments in a Rossini opera and Ricordi's new critical edition

of the score. Therefore, it must be pointed out that, except for the oboe and French horn, the opera orchestra of the 1820s does not sound noticeably different from a modern one, at least on records. And where it does differ, its unique characteristics are not always attractive. In fact, some are so distinctly unpleasant it is inconceivable that Rossini would have wanted them preserved.

The oboe playing turns out to be wonderful. It seems even more so knowing that it is achieved on a more difficult kind of oboe. But to use the valveless 18th-century horn is to put the special interests of the historically minded before musical sense

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CLASSICAL Reviews



Valentini-Terrani: too opulent to suit?

and the composer's intentions. Unlike 18th-century strings and winds, the valveless horn was a deficient instrument. It could not change keys and still play a scale without radically altering some tones by stopping the bell with one's fist. Lindoro's first act Cavatina, then, is not improved by a horn that authentically disrupts its accompaniment with the pinched tones Rossini could not avoid. Instead, it is spoiled. (It seems especially doctrinaire to insist on Rossini's horn when it is generally believed that the Cavatina is a later interpolation by another composer. Rossini does not expose the horns this way anywhere else in the opera.)

Otherwise, the orchestra on this album is a good one. The recording is more seriously flawed by the singers and conductor. Lucia Valentini-Terrani's opulent mezzo is too heavy in timbre to suit Isabella, whose character it is to be always one jump ahead of everyone else. Valentini-Terrani sings accurately and musically, but not vividly, her unvarying tone restricting her to a narrow range of expressive devices: elisions, breathy notes, or the sudden raising of her voice. Baritone Wladimiro Ganzarolli, the Mustafà, has an even more unwieldy voice; he cannot negotiate his florid part, and he sings out of tune. The rest of the cast is adequate most of the time: tenor Francisco Araiza, the Lindoro, when he is singing quietly, and Jeanne Marie Bima, the Elvira, when her light soprano is not outweighed by the others in ensembles.

As for Azio Corghi's new critical edition of the score (of which the jacket makes a special point), it does restore a few things not often heard before, like the "Turkish" percussion in the overture. But long before now, conductors such as Carlo Maria Giulini (who made his great recording of the opera in 1954) incorporated into their performances many of the corrections that are only now appearing in printed editions.

Consequently, conductor Gabriele Ferro's account here, while it is uncut, does not remove the veil from a work that had been heard only imperfectly in previous recordings. On the contrary, Giulini's Seraphim record—with its more subtle singing by Giuletta Simionato, Mario Petri, and Graziella Sciutti, and above all with the animation, expressiveness, and breathtaking ensemble Giulini achieves with both orchestra and singers—is the one that illuminates the comic writing Ferro's often stolid conducting obscures.

Columbia's English libretto, incidentally, is a singing version in rhyme, not a literal translation. The program notes, too, are plainer in their French version than they are in English. THOMAS HATHAWAY

SIBELIUS: Symphony No. 2, in D, Op. 43; Romance for String Orchestra, in C, Op. 42.

Gothenburg Symphony Orchestra, Neeme Järvi, cond. [Lennart Dehn, prod.] Bis LP 252 (digital recording. Direct Metal Mastering). CD: CD 252. (Distributed by Qualiton Imports, 39-28 Crescent St., Long Island City, N.Y. 11101.)

With this release, the Swedish firm Bis's ambitious project devoted to the orchestral works of Sibelius reaches Vol. 6. Gothenburg (population 425,875) is Sweden's second city (up on the western coast opposite Denmark's Jutland), and it has reason for pride in an orchestra of such high quality. However, the strings simply cannot rise to the occasion when conductor Neeme Järvi rips into the *vivacissimo* third movement of this symphony at a clip that would tax the articulation of the greatest virtuoso orchestras in the world.

Sibelius gave the second movement the unusual marking *tempo andante, ma rubato*. Since the slow pizzicato bass has the character almost of an even, regular ostinato, he must have intended the *rubato* to apply to the sporadic comments from the bassoons, oboes, and clarinets; Järvi takes a lugubrious tempo and ignores the *rubato* altogether. The composer punctuated the last movement with nine tempo changes, plus subdivisions, but Järvi pays them only sporadic heed. In the finale, the horns sound out, but the trumpet fanfares sound anything but festive—in fact, almost dull.

In opus numbers, the little romance immediately precedes this symphony; here it fills out the second side well enough.

Although this is a commendable series, the present recording is not one of the most felicitous releases. PAUL MOOR

VIVALDI: Concertos for Cello, Strings, and Continuo: in F, R.V. 411/412; in A minor, R.V. 418; in B minor, R.V. 424; in G, R.V. 413; in C minor, R.V. 401.

Heinrich Schiff, cello; Academy of St. Martin-in-the-Fields, Iona Brown, dir. PHILIPS 411 126-1 (digital recording). Cassette: 411 126-4.

Vivaldi wrote some 30 cello concertos. The surprising fact about the five recorded here is how different each is from the others and how fresh and often moving are Vivaldi's inventions for cello and orchestra. Heinrich Schiff plays with vigor and expressiveness,



Vigor and expressiveness from Schiff

though without the seemingly effortless virtuosity of Yo-Yo Ma.

Heard through headphones, Iona Brown's discreet accompaniment is damaged somewhat by the unnaturally bright recording and by the microphone placement, which spreads the stereo image from wall to wall; through speakers, however, the sound is not objectionable. In the original French, the notes are unhelpful. In their English translation, they are obscure.

THOMAS HATHAWAY

VIVALDI: Concertos for Oboe, Strings, and Harpsichord: in C, R.V. 447; in A minor, R.V. 461; in F, R.V. 457; in D, R.V. 453; in A minor, R.V. 463.

Maurice Bourgue, oboe; I Solisti Veneti, Claudio Scimone, cond. [Michel Garcin and Françoise Garcin, prods.] RCA ERATO NUM 75110 (digital recording). Cassette: MCE 75110.

An unfortunate tendency exists in this country to lay a disc on a turntable and listen to it all the way through, regardless of its content, often inducing unconscious surfeit. (Some years ago, when I learned that President Carter liked to have Mozart drizzling out of the White House loudspeakers day and night, intuition told me that little good could come of it.) This disc offers numerous delights, but only if you sample them in a sensible way; how many people can assimilate five oboe concertos in succession? Typical of Vivaldi's concertos, these have the advantage of compactness: The shortest lasts 8:09, the longest only 13:08. Heard individually, they will prove that—at least in this case—the separate parts ultimately

amount to more than the whole.

Maurice Bourgue, born in 1939 in Avignon, has won first prize for oboe in competitions in Munich, Prague, and Budapest, and tied with James Galway for first woodwind prize in Birmingham. He subsequently gave up first chair with the Orchestra of Paris to accept a chamber music professorship at the Paris Conservatory. He plays with remarkable dynamic subtlety, discreetly rationing his vibrato, producing a sonority at once sweet, full, rich, and robust, and employing uncommonly delicate ornamentation. Claudio Scimone provides top-flight accompaniment from I Solisti Veneti. (Four of the 13 soloists, incidentally, answer to such names as Kazuki Sasaki, Garth Knox, Jodi Levitz, and Susan Moses, but the overall collaboration sounds authentically Venetian.) Take these charming concertos one at a time, however—don't OD. PAUL MOOR

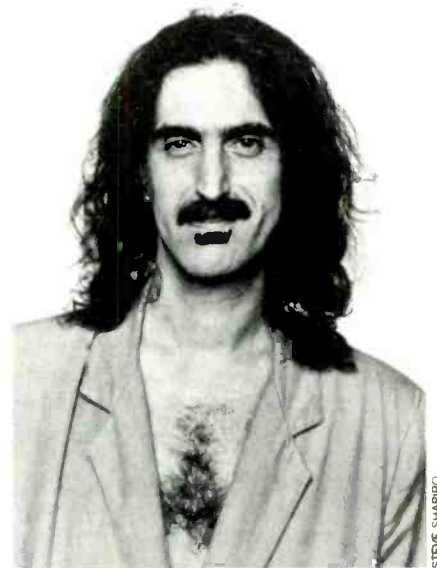
ZAPPA: The Perfect Stranger*; Naval Aviation in Art?*; The Girl in the Magnesium Dress†; Outside Now, Again†; Love Story†; Dupree's Paradise*; Jonestown†.

Ensemble InterContemporain*, The Barking Pumpkin Digital Gratification Consort†, Pierre Boulez, cond. [Frank Zappa, prod.] EMI ANGEL DS 38170 (digital recording). Cassette: 4XS 38170.

"The Perfect Stranger" is an extraordinary recording, and its pairing of composer Frank Zappa and conductor Pierre Boulez is hardly as bizarre as some commentators have made it out to be. The official relationship between the notorious "fringe" rock and roll star and the famous champion of the mainstream European avant-garde dates only from 1983, when Boulez commissioned the album's 13-minute title cut for performance on the new-music concert series he runs from his base at the Institut de Recherche et Coordination Acoustique/Musique (IRCAM) in Paris. But surely long before that, the eclectic Boulez was at least aware of Zappa's music. As early as 1970, Zubin Mehta—Boulez's successor as music director of the New York Philharmonic—had conducted excerpts from Zappa's quasi-operatic *200 Motels* film score in Los Angeles, and the next year United Artists released the Royal Philharmonic Orchestra's two-disc recording of the complete work (7C 138-92854/5).

In 1979, Warner Brothers issued "Orchestral Favorites" (DSK 2294), an album of "serious" Zappa compositions for chamber ensemble that included one short piece—*Naval Aviation in Art?*—that Boulez opted to re-record for "The Perfect Stranger." Early in 1983, another album of "serious" music, this time performed by the London Symphony Orchestra under the direction of Kent Nagano, was brought out on Zappa's own Barking Pumpkin label (FW 38820). Boulez was familiar with this music, and he probably had some acquaintance with Zappa's essays in the rock idiom

as well. Doubtless, in all of it he heard the influence of Edgard Varèse, the composer Zappa identified (in the liner notes he wrote for Finnadar's SR 9018 Varèse collection) as "the idol of my youth" and whom Boulez hailed (in an appreciation included in his



STEVE SHAPIRO

Zappa: warmly human emotions

1981 book *Points de Repère*) as one of the foremost "formal thinkers" of 20th-century music.

What attracted the young Zappa to such works as *Ionisation*, *Octandre*, and *Intégrales* was Varèse's deft use of brilliant sound colors, the forcefulness of his gestures and—most important—the dynamic energy that resulted from rapid alternations of sharply contrasting sonic weights, densities, and textures. To a certain extent, one can hear these elements in Zappa's rock songs; aside from the deliberately raunchy lyrics, it's the constant, erratic shifting of gears that is the main source of the ditties' weirdness. Perhaps because there are no extramusical distractions, the Varèse influences seem even more prominent in Zappa's orchestral and chamber works. The juxtapositions are just as bold, but here they're effected with remarkable subtlety, and the overall impression they give—as with Varèse's music—is that behind all the appearance of chaos there lies an extremely refined sense of order.

Of the seven pieces on "The Perfect Stranger," three are scored entirely for standard instruments, four mostly for keyboard-operated electronic music synthesizers. (In the latter group, it often sounds as though the mix also includes marimbas, glockenspiels, and electric guitars, but it's hard to tell for sure, and the jacket gives absolutely no clue to the makeup of The Barking Pumpkin Digital Gratification Consort.) Zappa calls them "dance pieces," and he provides a synopsis for each. Presumably the synopses are deliv-

ered tongue-in-cheek, yet there's a wonderful gloomy mood conjured up by the sonically glittery and rhythmically steady *Outside Now, Again* ("the entire cast [is] in an endless soup line, [their] pitiful sustenance . . . dished out by people dressed to look like grant-givers from the National Endowment for the Arts"). Similarly, the jaunty title cut really does make reference—after a fashion—to the doorbell, vacuum cleaner, and dog mentioned in the blurb, and *Dupree's Paradise* (set in a bar where "winos, musicians, degenerates, and policemen . . . do the things that set them apart from the rest of society") blends silky strings and brazen winds with piano figures à la Gershwin's *An American in Paris*.

Zappa tells the reader-listener that "all material contained herein is for entertainment purposes only, and should not be confused with any other form of artistic expression." Be that as it may, these are beautiful works whose appeal is both visceral and intellectual. All of them are cast in an essentially atonal language, but nevertheless one easily capable of communicating a wide variety of warmly human emotional states. The craftsmanship is exquisite, and so are the performances. JAMES WIERZBICKI

Recitals and Miscellany

BRASS IN BERLIN.

Canadian Brass Ensemble; Berlin Philharmonic Brass Ensemble. [James Mallinson, prod.] CBS MASTERWORKS IM 39035 (digital recording). Cassette: IMT 39035. CD: MK 39035.

ALBINONI (attrib. to): Adagio. BACH: Excerpts from "Herz und Mund und Tat und Leben," B.W.V. 147, and "Singet dem Herrn ein neues Lied," B.W.V. 225. GABRIELI, G.: Jubilate Deo; Sonata pian e forte; In ecclesiis; Sonata XIII. GIBBONS: In Nomine. LASSUS: Echo Song. PACHELBEL, C. T.: Magnificat. PACHELBEL, J.: Canon. PALESTRINA: Jubilate Deo.

First, the bad news, in the form of brickbats to producer James Mallinson, annotator David Ossenkop, and everyone else at CBS who ought to have caught one of the most flagitious musicological blunders I have ever found on any record anywhere. Ossenkop, in chorus with the label and the album cover, calls the fifth selection on Side One "an excerpt from Bach's monumental motet *Jesu meine Freude*." In a pig's eye! We get, in fact, an arrangement—anonymous, like all of these—of a chorale from Bach's Cantata No. 147 (*Herz und Mund und Tat und Leben*) that became familiar in this country, largely due to Myra Hess's piano transcription, as "Jesu, Joy of Man's Desiring." Conceded, its German title ("Jesus bleibet meine Freude") resembles

that of the unaccompanied five-part choral motet, but otherwise the two have no connection whatever. I find that sort of musicological illiteracy impossible to excuse and difficult even to understand; the mind boggles at the thought that *no one* at CBS recognized "Jesu, Joy of Man's Desiring" or knew the difference between it and that great motet.

The bad news continues. The dividing line between chamber music (without conductor) and chamber orchestra (with) remains fluid, but in general, any group bigger than an octet feels the need for a conductor to coordinate things. These five Canadians and five Berliners (four trumpets, two horns, two trombones, and two tubas) certainly suffer from dispensing with one, especially in the second Bach selection, which constitutes the first 150 measures of another motet, "Singet dem Herrn ein neues Lied." Bach composed it antiphonally, for two separate four-part choruses, so some contrapuntal sections get awfully busy and make a conductor indispensable if certain voices are to be brought out and others kept down. Here it sounds like every man for himself.

The good news applies to these expert musicians' sound and technique. Never blarey, they have a tonal quality, even at their loudest, reminiscent of old gold. Even the tubas demonstrate exemplary flexibility and virtuosity. The four Gabrieli pieces show the performers at their best, but connoisseurs of trivia may zero in on the piece by Johann Pachelbel's son, Charles Theodore, who, it says here, eventually settled in Charleston, South Carolina. PAUL MOOR

LOCKENHAUS 1983.

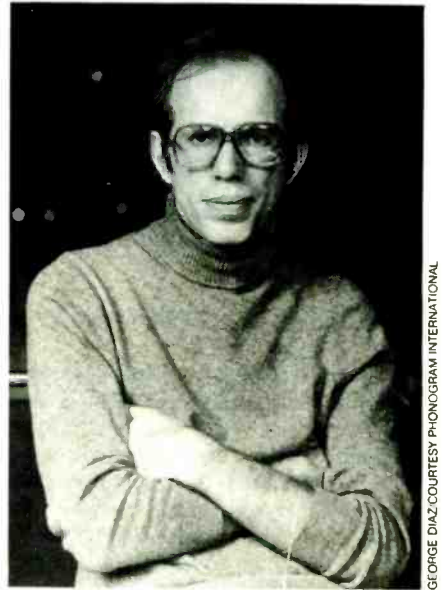
Valery Afanassiev, Vladimir Ashkenazy, Heidrun Holtmann, Aloys Kontarsky, Alexandre Rabinovitch, and James Tocco, piano; Annette Bik, Lukas Hagen, Nigel Kennedy, Gidon Kremer, Cho-Liang Lin, and Thomas Zehetmair, violin; Valter Dešpalj, Clemens Hagen, Ko Iwasaki, Ksenija Jankovič, and Misha Katsky, cello; Veronika Hagen, Kim Kashkashian, and Tabea Zimmermann, viola; Georg Hörtnagel and Ernst Weissensteiner, double-bass; Eduard Brunner, clarinet; Wolfgang Horvath, organ; Karl-Heinz Zöller, flute; The Lockenhaus Strings, Lev Markiz, cond. [F. Axel Mehrle, Dieter Sinn, and Diether G. Warneck, prods.] ORFEO S 099-844 (digital recording; four discs). (Distributed by Harmonia Mundi, U.S.A., 2351 Westwood Blvd., Los Angeles, Calif. 90064.)

Works by Asriel, Bartók, Boccherini, Brahms, Bruch, Chopin, Fauré, Ives, Joplin, Kuhlau, Messiaen, Milhaud, Mozart, Schnittke, Schubert, Shostakovich, Webern, and anonymous; two jazz improvisations.

In the summer of 1981, violinist Gidon Kremer established a music festival at Lockenhaus, a town about 15 miles from Vienna in the Burgenland region on the Hungarian border. It was a friendly little affair—rather like the Marlboro Festival in Vermont—with artistically and socially compatible musicians gathering for the

sheer joy of performing together. Programs were not planned far in advance, and patrons were encouraged to feel more like guests at private soirées than mere purchasers of cultural commodities. The Lockenhaus Chamber Music Festival is still friendly, and while it has grown in both scope and popularity, efforts are being made to maintain a scale decidedly more intimate than that of the summertime musical bashes in Salzburg and other central-European cities.

The liner-note essay by Peter Cossé bears a striking resemblance to the copy one finds in an advertising brochure. It contains a telling caveat that the performances recorded are of "live concerts with all their imponderabilities, high-flying interpretations, and brief lapses in intensity." The warning continues: "But at the point where



Gidon Kremer, genius of Lockenhaus

serious artistic practice and amusing self-satire meet, there is no place for petty criticisms."

I suppose that means I would not be welcome at Lockenhaus. That's too bad, because these recordings—much more so than Cossé's blurb—make the place seem very enticing. Kremer and his buddies appear to have as much fun with the heavier-gauge repertory as with the novelty numbers included in Side 8; in fact, every one of these documents from the 1983 festival radiates an appealing *joie de vivre*. All things considered, the occasional sound of an audience member coughing or kicking over a chair is hardly objectionable.

JAMES WIERZBICKI

ANNA TOMOWA-SINTOW: Opera Arias.

Anna Tomowa-Sintow, soprano; Munich Radio Orchestra, Peter Somer, cond. [F. Axel Mehrle, Dieter Sinn, and Diether G. Warneck, prods.] ORFEO S 106841 (digital recording). (Distributed by Harmonia Mundi, U.S.A., 2351 Westwood Blvd., Los Angeles, Calif. 90064.)

CILEA: Adriana Lecouvreur; lo sono l'umile ancella. GIORDANO: Andrea Chenier: La mamma morta. MOZART: Così fan tutte: Per pietà, ben mio, perdona. PUCCINI: Manon Lescaut: In quelle trine morbide; Turandot: Tu che di gel sei cinta. STRAUSS: Ariadne auf Naxos: Es gibt ein Reich; Daphne: Ich komme. VERDI: Un ballo in maschera: Ecco l'orrido campo; Ernani: Ernani, involami. WAGNER: Tannhäuser: Dich, teure Halle. WEBER: Der Freischütz: und ob die Wolke sie verhülle.

By the standards of the 1980s, Bulgarian-born Anna Tomowa-Sintow is a major singer. She owns a large yet malleable voice with an easy extension at both ends of her range (though her tone has at times a tendency to flutter), and she is sufficiently versatile artistically and vocally to navigate easily between the Italian lyric *spinto* and the German *leicht* and *hochdramatische* repertoires. Not many sopranos these days can do this as easily, though 20 years ago the Metropolitan Opera had quite a few who could—for instance, Mary Curtis-Verna, whose voice, abilities, and certain defects are strikingly recalled in Tomowa-Sintow's performances, both on and off records.

True, Curtis-Verna seldom sang German roles at the Met, but she delved quite successfully into them elsewhere, in particular during the Cincinnati Opera summer seasons. Moreover, she had the requisite vocal heft and potent top register to sing Turandot with notable distinction (remember that during this period, the Met could cast Turandot not only with Nilsson but with Ingrid Bjoner, Marian Lippert, Gladys Kuchta, and Anita Välkki as well).

At any rate, another Curtis-Verna would be welcome these days at the Met, and it appears we have her in Tomowa-Sintow. She is above all a most musical singer, whose usefulness to the current operatic scene can hardly be overestimated.

This recital record begins somewhat unpromisingly with a "Per pietà" in which phrasing and breath control go awry, but things change markedly for the better in the *Freischütz* aria, in which Agathe's rapt musings are beautifully captured in radiant tone and seamless scale. These virtues remain intact through the rest of the program, which is at its best during the *Daphne* finale, the *Ballo* aria (a truly grand performance), and the *Ernani* excerpt. There are some impressive *fiorature* passages in this last aria, which cause one to wonder why the Met has yet to cast Tomowa-Sintow as Elvira.

Tomowa-Sintow's dramatic efforts most of the way through this program are rather generalized, but they are always sensible, and she certainly knows where the big climaxes are. The orchestral accompaniments are efficient, and Orfeo's sound and surfaces can't be faulted. All in all, a most impressive recital, which by the way is also very good value for the dollar, with generous timings of 36:10 on Side 1 and 32:45 on Side 2.

BILL ZAKARIASEN

Critics' Choice

The most noteworthy releases reviewed recently

BARTÓK: Divertimento: Music for Strings, Percussion, and Celesta. Franz Liszt Chamber Orchestra, Rolla. HUNGAROTON SLPD 12531, Nov.

BRAHMS: Concerto for Piano, No. 1, in D minor, Op. 15. Weissenberg, Philadelphia Orchestra, Muti. ANGEL DS 38008, Dec.

DEBUSSY: Préludes, Bks. 1 and 2; Reflets dans l'eau, from "Images," Set 1; Estampes. Egorov. ANGEL DSB 3954, Jan.

DEBUSSY: Reflets dans l'eau. RAVEL: Sonatine. SCHOENBERG: Six Little Piano Pieces, Op. 19. STRAVINSKY: Sonata. Boyk. PERFORMANCE RECORDINGS PR 4, Nov.

HANDEL: Concerti Grossi, Op. 6, Nos. 5-8*, 9-12†. Standage, Wilcock, Pleeth; The English Concert, Pinnock. ARCHIV 410 898-1*, 410 899-1†, Jan.

HAYDN: Symphonies Nos. 26, 41, 43, 44, 48, 52; Overture to "Le Pescatrici," in D. L'Estro Armonico, Solomons. CBS 13M 39040, Jan.

HONEGGER: Symphonies Nos. 3, 5. Bavarian

Radio Symphony Orchestra, Dutoit. RCA ERATO NUM 75117, Dec.

JANÁČEK: The Diary of One Who Disappeared. Hirst, Love, Kubalek; Columbia Pro Cantare. ARABESQUE 6513, Dec.

MAHLER: Symphony No. 4, in G. Battle; Vienna Philharmonic Orchestra, Maazel. CBS 1M 39072, Jan.

PROKOFIEV: Suite from "Lieutenant Kije," Op. 60. KODÁLY: Suite from "Háry János." London Philharmonic Orchestra, Tennstedt. ANGEL DS 38095, Jan.

PROKOFIEV: Symphony No. 5, in B flat, Op. 100. St. Louis Symphony Orchestra, Slatkin. RCA ARC 1-5035, Jan.

SORABJI: Opus clavicembalisticum. Madge. KEYSTONE RCS 4-800, Dec.

MAURICE ANDRÉ: Trompetissimo. André, instrumental ensemble. ANGEL S 38068, Dec.

SUNDAY IN THE PARK WITH GEORGE: Original Broadway Cast Recording. Sondheim, Gemignani. RCA HBC 1-5042, Nov.

Theater and Film

GOLDSMITH: Gremlins.

Jerry Goldsmith, cond. (side two*). [Bruce Botnick, and Jerry Goldsmith, prods.*; various prods. (side one†)] GEFEN GHS 24044Y. Cassette: M5G 24044Y.

Additional performances† by Michael Sembello, Quarterflash, and Peter Gabriel.

Jerry Goldsmith's newest soundtrack recording confirms his place as one of Hollywood's finest composers. *Gremlins* has something of the character of a 1980s *Parade*: the same delightful insouciance, the same expert manipulation of bizarre sounds into the instrumental fabric, the same adroit turns from pathos to absurdity as Satie's classic.

But the idiom is pure Goldsmith, with a curiously autobiographical feel to it. One senses rather than hears allusions to earlier Goldsmith scores: *Star Trek*, *Patch of Blue*, *Our Man Flint*, and others. Yet never is there a suggestion of recycling old ideas. These elements are part of a masterfully constructed symphonic fabric that remains compelling with repeated listenings.

Goldsmith's music here may lack the blatant "epic" quality of other big-budget summer film scores, but I earnestly hope that the Oscar jury can hear beyond volume to quality, for truly there is an Oscar contender here. (Goldsmith's side of this "specially-priced seven-cut mini album" opens

with Max Steiner's full-blooded Warner Brothers fanfare; the suggested linkage to Hollywood's Golden Age of Film Music fits honestly in this case.)

Side One of this album is given over to three rock songs of no particular distinction. Be that as it may, at least someone in Tinsel Town has the sense to hire rock artists to write rock songs for films.

The sound of this analog recording is excellent. Annotation is nonexistent. Missing from the credits is any indication of who provided the superb orchestrations, but in recent years, Goldsmith's mainstay in this capacity has been Arthur Morton.

NOAH ANDRÉ TRUDEAU

JOBIM (arr. Castro Neves): Gabriela.

Oscar Castro Neves, cond. [David Franco, prod.] RCA ABL 1-5186. Cassette: ABK 1-5186.

Veteran songwriter and composer Antonio Carlos Jobim checks in with an agreeable-sounding effort that wisely refrains from overreaching itself. The same Brazilian jazz/pop idiom is employed here that established Jobim's reputation in the late 1960s with albums like "Wave." A cut entitled "Attack of the Jaguncos," however, reveals Jobim's inability to deal effectively with primitive, violent scenarios. His bag is the picture postcard; for the most part, this album provides the postcards unabashedly. The arrangements by Castro Neves are less interesting than those done for Jobim by Claus Ogerman, but they are modestly successful in their way.

Pleasant listening, well recorded.

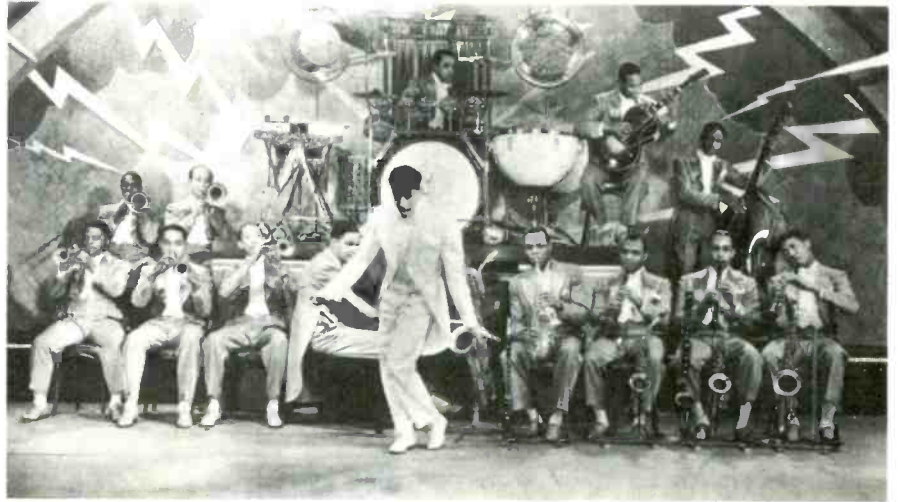
NOAH ANDRÉ TRUDEAU

BACKBEAT

Black and Tan Fantasy



ALL PHOTOS FRANK DRIGGS ARCHIVES



Clockwise from top: the humble exterior of the Cotton Club; Cab Calloway, showman at heart; singer Adelaide Hall. Facing page: Ethel Waters performing "Stormy Weather."

Coppola's white gangster movie *The Cotton Club* tells one story. Ethel Waters, Duke Ellington, and Cab Calloway tell another.
by Pamela Bloom

YOUNG COMPOSER HAROLD ARLEN pulled out the tune he had just written for his 1933 revue. The new girl singer listened to it once and told him he was off the track. The song, she said, was about deep human emotions, and the simulated storm effects in the orchestration only muddled up the lyrics. She asked to take the lead sheets home, searched herself for a more dramatic ending, and returned with a performance that made her, the song, the composer, and the club legendary overnight. The singer was Ethel Waters, the song was *Stormy Weather*, and the place was the Cotton Club.

Between the World Wars, that white oasis of black entertainment fed the imagination of the Mink Set, who hungered after the exotica of Harlem. For the intelligentsia

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and the socialites of the Twenties, the Cotton Club was an erotic, fevered playground, ideally suited to the psyche of a plantation owner. But for Waters and many other black performers, it provided a rare opportunity to be paid royally for the peak expression of hard-earned artistry. Years after the 22nd Cotton Club Revue catapulted Waters to international stardom, she could still recall: "When I got out there in the middle of the Cotton Club floor, I was telling things I could not frame in words, the story of the wrongs and outrages done to me by those I had loved and trusted. I sang *Stormy Weather* from the depths of [my] private hell."

The musical passion of an Ethel Waters, however, was not born from a wasteland. A slew of sophisticated musical revues written, arranged, choreographed, and produced by blacks and drawing from a long tradition of black minstrelsy had stormed Broadway to thunderous acclaim. In 1921, William and Walker's *Shuffle Along*, a raucous, fast-paced musicale fea-

turing vaudeville duo Noble Sissle and Eubie Blake, opened at the 63rd Street Music Hall, legitimizing for a white audience the distinctly American sound of ragtime. The very names of the shows—*Chocolate Dandies* (Sissle and Blake), *Blackbirds* (Lew Leslie), and *Hot Chocolates* (featuring Fats Waller's *Ain't Misbehavin'*)—suggested a rich subculture politely deafened to racial overtones and merrily given to caricature. The revues were crammed with exuberant talent like Bill Robinson, Adelaide Hall, Florence Mills, Aida Ward, and Jazzlips Richardson, but an opening chorus of hoofers alone could stop the show.

Excited by the new sounds, whites dared to venture beyond the Mason-Dixon Line of 110th Street and soon flooded the cabarets and bars of Harlem. When the Volstead Act of 1919 left America high and dry, organized crime seized upon what would become the most lucrative underworld scheme until the advent of dope. Capitalizing on the national desire for boot-



leg liquor, the syndicates opened numerous speakeasies around 113th Street between Lenox and Seventh Avenue, giving white downtowners the chance to savor black entertainment, drink some hooch, and hobnob with real-live hoods all at the same time. Dynamite commercialism, but it eventually demarcated Harlem into two distinct areas: According to a *Variety* reporter in 1926, there was the real Harlem and there was the "Black and Tan," which was staged for the whites "like Paris is staged for the Americans."

The Black and Tan bars included Connie's Inn, Ed Small's Paradise, and the Cotton Club—the "Aristocrat of Harlem," as Lady Mountbatten had called it, notorious for its ownership (gangleader Owney Madden) and its all-white admission policy. Although most blacks would not have been inclined to patronize a semi-Jim Crow establishment, the cover charge alone (\$3) was enough to deter them. In 1927, Duke Ellington, levered by his success at the club, persuaded the management to relax the policy for friends and relatives of the band, but the open door never became official, and black guests were still directed to a dark corner of the house.

The look of the Cotton Club was jungle chic with an undertow of the primitive—cotton branches hovering under crystal chandeliers. Service was impeccable. Waiters were dressed in red tuxedos like butlers; unlike the employees in other clubs, they did not Charleston their way to the table while balancing a dinner tray (the house considered that gauche). Instead, dinner and drinks were served with a flourish and élan that nearly rivaled the floor show.

It was *the* place to go, and you had to be somebody to get in. A top-rank celebrity was Mayor Jimmy Walker, who trod both sides of the law, and on any one night you

might have found Irving Berlin, Leopold Stokowski, Earl Wilson, Jimmy Durante, Ethel Merman, and Jack Johnson rubbing knees with gangsters Dutch Schultz and Warden Lawes. Although Cab Calloway remembers in his autobiography, *Of Minnie the Moocher and Me*, that "the idea was to make those who came to the club feel as if they were being catered to and entertained by black slaves," impeccable behavior was demanded of the guests. No heckling, overt drug usage, or face-smashing—a real papier-mâché jungle.

The show itself was hot and snappy. Producer Dan Healy hit upon the formula that became the Cotton Club signature: two hours of foot-stomping, uptempo skits usually built around types, including a band, an eccentric dancer, a comedian, a chorus line, and a singer who delivered an adult song liberally laced with suggestion. The performers were black, but a strict color line was drawn for the stage management. Thus, despite the wealth of black talent available then, the directors, choreographers, and set and costume designers were all, by house law, white.

The big attraction, of course, was the girls, gowned and jeweled in the best Ziegfeld fashion. They were long-legged, light-skinned, and gorgeous (or "tall, tan, and terrific," as the tune went)—that is, until Lucille Wilson (the future Mrs. Louis Armstrong) knocked the producers and the audience over with her talent, black face notwithstanding. But looks were usually crucial; even Lena Horne, a radiant young beauty who by her own admission couldn't dance or sing very well when she joined the chorus at the age of sixteen, knew she hadn't been tapped for her talent. Still, most of the six show girls and ten chorus girls were at least great sashayers, and occasionally great dancers. Good-natured tease abounded in the costumes, from fabulous gowns and wild headdresses to glitzy bloomers and tap shoes. Horne remembers feeling particularly naked in her first outfit—three feathers strategically placed—for the fan dance made famous by Sally Rand.

Promoted briefly to solo vocalist before literally escaping one night to join Sissle's tour, Horne was one among many girl singers who lent a decidedly feminine flair to the all-male orchestras. Ellington fashioned Adelaide Hall's quivering resonance into the orchestral texture of his wordless *Creole Love Call* and recorded it to haunting effect in 1927. A staple of the Ellington group for ten years, Ivy Anderson's metallic voice debuted songs like *It Don't Mean a Thing If It Ain't Got That Swing*, and she recorded *Stormy Weather* with the band for the soundtrack of *Bundle of Blues*. Maxine Sullivan established herself with sweet, ultracool renditions of Irish hits such as *Loch Lomond* and *Annie Laurie*. Waters was, of course, the queen: The voluptuous voice bent easily to subtle musi-

cal shadings, and her earthy, generous stage presence was without peer. Her take of *I'll Get Along Somehow* ("I wanted love/You promised love, but all I got was conversation") was elegant, ironic, and full of invincible humor.

The Cotton Club was also a hotbed for dancers with a gimmick, and Manhattan's studios were crammed with people waiting to learn the club's latest craze. Among memorable debuts were the cakewalk, the skronch of 1939, and the peckin', which was introduced by a chorus line dressed up as chickens. The featured soloists—contortionists, exotics, peg-leggers, and what-nots—could grind, wriggle, and wind around a beat as fast as the band could cut it, often inspiring new compositions. Bill "Bojangles" Robinson, one of the most beloved black entertainers in history, decided one night to prance up and down the staircase leading to the orchestra pit, spontaneously creating what would fast come his signature step. Jigsaw Jackson, otherwise known as the Human Corkscrew, managed somehow to execute a mean tap to Ellington's *Rockin' in Rhythm* with his face glued to the floor and his body running around his head in circles. Even more exotic was Earl "Snakehips" Tuckers, surely the forerunner of Presley and Prince, who could grind his torso over quivering knees, hypnotizing and horrifying the audience.

Five generations of Cotton Club bandleaders—Andy Preer, Duke Ellington, Cab Calloway, Jimmie Lunceford, and Andy Kirk—helped create the musical tradition known as big band jazz. Caught somewhere between the blues and mainstream swing, these black bandleaders opened up the harmonic possibilities of the jazz repertoire to the 32-bar popular song and added an almost manic rhythm capable of propelling an unwary audience immediately to its feet. The tempos were breathtaking and back-breaking; most of the dance tunes sounded like they were sittin' on hot potatoes, and even the ballads, though cooler, were kicked to swing. The Cotton Club became a household word when WHW, a small local radio station, began to broadcast Ellington several nights a week from the club; later, his show was picked up by CBS and its famous announcer Ted Husin. But the real music of Harlem happened after hours, when band members dropped in the Lenox Club or the Nest to jam until dawn.

Working five days a week at the Cotton Club, however, no doubt molded Ellington, with his obvious leanings toward show music, into the era's foremost American composer. A Cotton Club orchestra was a show orchestra, necessarily limited to the production at hand, but the restrictive environment taught Ellington how to work in miniature, a skill later honed to perfection in his mood pieces. Although he had previously developed a reputation in the capital as a ragtime pianist, in Harlem his



band became his instrument. He chose his colleagues carefully, for their individuality as well as their ability to blend into the "Ellington Effect" (as Billy Strayhorn called it), a style that magically reflected the wild elegance of the club itself. Ellington produced about

two dozen show tunes there, heavy stompers in four beats and jungle jingles, but they were really cooperative creations, influenced by the nearly vocal growls of horn men James "Bubber" Miley, Cootie Williams, and Tricky Sam Nanton with their wah-wah mutes and plungers, supported by the slap-happy bass of Wellman Braud. And Sonny Greer's drums—an outrageous battery of percussion for its time, including tom-toms, chimes, vibraphone, snares, and kettledrums—added immeasurably to the jungle mood. Still, Ellington was not allowed to write the entire score of a revue until 1938, when he had already become an international star. In collaboration with flamboyant Henry Nemo, he attempted love ballads for the first time and produced two outstanding ones. *If You Were in My Place* and *I Let a Song Go out of My Heart*.

By contrast, Calloway wasn't much of a musician—he didn't compose and he could barely play the drums—but his onstage shenanigans, sadly lost in recorded performance, earmarked him for success. Once he gave a downbeat, he was a man in motion, wildly waving his arms, running up and down the stage with microphone in hand, shouting to his soloists, and finally ending the number with a furious dance sequence, tails flapping behind him. Calloway admits that he was first hired only when the Duke went on vacation, but one night he made his own reputation when he forgot the lyrics and scatted "hi-de-ho" instead. A showman, Calloway appreciated applause wherever he found it. His Cotton Club days brought him fast cars, flashy clothes, and lots of dames, and he loved being a star, even if his friends weren't allowed in to see him.

The stock market crash did not really touch the Cotton Club's regular patrons, but the end of Prohibition and the onset of the Depression dampened the appeal of Harlem nightlife. By 1934, eight out of ten Harlem residents were on relief, and a reveler coming uptown for the evening might have to pass a breadline on the way to the club. Violence broke out frequently in the streets; gangsters began taking care of business in public, and Rev. Adam Clayton Powell, Jr., was rousing a new militancy. Attacking the exploitation of black performers by white managers, he denounced Ellington, Calloway, and Lunceford as "musical sharecroppers."

The Cotton Club owners saw the

Selected Discography

Cab Calloway and the Cotton Club Orchestra (1933–34). RCA Édition FXM 1-7125.

Cab Calloway: Mr. Hi-De-Ho (1930–43). MCA 1344.

Duke Ellington: Rockin' in Rhythm, Vol. 3 (1929–31). MCA 1360.

Adelaide Hall: That Wonderful (1970). Monmouth MES 7080.

Fletcher Henderson and the Dixie Stompers (1925–28). Swing SW 8445/6 (two discs). (Distributed by DRG.)

Fletcher Henderson: Developing an American Orchestra (1923–37). Smithsonian 2006 (two discs).

Andy Kirk: The Lady Who Swings the Band (1936–38). MCA 1343.

Jimmie Lunceford: Harlem Shout (1935–36). MCA 1305.

Sister Rosetta Tharpe: Gospel Train (1944–49). MCA 1317.

Ethel Waters: On Stage and Screen (1925–40). Columbia CCL 2792.

Ethel Waters: Performing in Person Highlights from Her Illustrious Career (late 1950s). Monmouth MES 6812.

Chick Webb 4: Ella Swings the Band (1936–39). MCA 1327.

COLLECTIONS

Cotton Club Stars (1927–45). Louis Armstrong, Cab Calloway, Duke Ellington, Ella Fitzgerald, Lena Horne, Jimmie

Lunceford, Nicholas Brothers, Bill "Bojangles" Robinson, Maxine Sullivan, Ethel Waters. Stash ST 124 (two discs).

Harlem Comes to London (1926–38). Buck and Bubbles, Lavada Carter, Duke Ellington, Adelaide Hall, Ike "Yowse Suh" Hatch, Nicholas Brothers, Plantation Orchestra, Noble Sissle, Valaida with Billy Mason, Fats Waller, Elisabeth Welch. Swing SW 8444.

Ridin' in Rhythm (1933–39). Stanley Black, Benny Carter, Duke Ellington, Coleman Hawkins, Fletcher Henderson, Horace Henderson, Jack Hylton, Meade Lux Lewis, Mills Blue Rhythm Band, Buck Washington. Swing SW 8453/4 (two discs).

Souvenirs of "Hot Chocolates" (1929). Louis Armstrong, Eddie Green, Fats Waller, Edith Wilson. Smithsonian 2012.

Swing Street, Vol. 2 (1931–41). Fats Waller, others. Tax M 8030. (Zim Records, P.O. Box 158, Jericho, N.Y. 11753.)

VIDEO

Big, Black, and Beautiful (1940–50). Count Basie, Cab Calloway, Nat King Cole, Duke Ellington, Lionel Hampton, George Shearing. Tellerhouse Video Productions TVP 114 (Beta, VHS). (660 Madison Ave., New York, N.Y. 10021.)

changing tide and in 1936 relocated downtown in the heart of the theater district. The furnishings reminded customers of the old tropical decor, but the theater boxes and cupid-strewn ceilings added a mainstream touch. Calloway headlined the opening revue there as a superstar, along with Bill Robinson. On the program cover was a painting of naked black primitives dancing and beating drums, and the inside notes described the performers as "50 sepia stars and 50 copper-colored gals." The spring of 1936 brought the first score in which major numbers were written by blacks—Ellington, Andy Razaf, John R. Edmond, and Reginald Forsythe. That year also saw the Cotton Club debut of the Nicholas Brothers; the singing, tap-dancing duo, who had started their careers when they were children, came straight from a triumphant London engagement.

The club's last two years were chock full of old stars, yet they also introduced new ones. The fall of 1938 presented Sister Rosetta Tharpe (in the first Holy Roller gospel act), Stepin Fetchit, and the Dandridge Sisters, whose middle sister, Dorothy, would later star in the film version of *Porgy and Bess*. In 1939, Louis Armstrong played the club for the first time, his debut long delayed by what was rumored to be the management's preference for light-skinned bandleaders. Nevertheless, his inimitable New Orleans scatting and tooting was an instant success.

Then the club's management was slapped with tax evasion indictments, and the spirit of the troupe seemed a bit deflated, despite the presence of Armstrong and Fetchit. One reviewer caught the downhill drift in a brief comment: "It's a slower-upper." On June 10, 1940, a year after Armstrong's debut, the Cotton Club closed for good.

From a larger perspective, show biz itself had changed. Ellington, Waters, Robinson, Horne, and Calloway no longer needed the club for exposure; they had Broadway, Hollywood, and Europe. Lavish Ziegfeld productions could no longer be financially sustained, even on Broadway, and sophisticated New Yorkers were turning to the more intimate musical comedies of Noel Coward. National taste veered to the white sound of big band swing—Benny Goodman, Artie Shaw, and Tommy Dorsey. Perhaps, simply, the sure-fire idea of 1927 had finally run its course.

Harlem between the wars was like no other place in the world—and there was nothing like the Cotton Club either. But the club was not Harlem; part sham, part ham, part genuine heart, it was born at the unlikely junction of Park Avenue and Lenox, inspired by a mutual conspiracy between audience and actor that could never again be duplicated. It was a look, a style, a sound, geared to a time that could afford the illusion. It was the ultimate Black and Tan Fantasy. **HF**

Very Special Jack DeJohnette



David Murray, Howard Johnson, Rufus Reid, Jack DeJohnette, and John Purcell of *Special Edition: jazz past, present, and future*

Jack DeJohnette's Special Edition: Album Album

Jack DeJohnette, producer
ECM 1280

Four years ago Jack DeJohnette released "Special Edition," a record that established this immensely gifted journeyman drummer and distressingly erratic solo artist as a first-rate bandleader. "Special Edition" found the common ground between '60s free form and '70s structural aesthetics; its elaborate compositions and orchestrations put the open-ended improvisation into relief. The LP was influential, but it also seemed like a fluke—both of DeJohnette's two follow-ups lacked its vision and scope.

"Album Album" changes all that. With it, the Special Edition band joins David Murray's groups and the World Saxophone Quartet at the forefront of what critic Jon Pareles has dubbed "avant-gutbucket": contemporary jazz that combines effusive in-the-tradition swing with forward-looking experimentation. These groups can sound as loose and earthy as a 1940s' Harlem jump band or as precise as the Philip Glass Ensemble. The music is as far-reaching as the leadership is tight-knit; Murray, a

member of WSQ, is featured on both "Special Edition" and "Album Album."

Joining the tenor saxophonist in DeJohnette's new front line are promising alto/soprano saxophonist John Purcell and the phenomenal Howard Johnson, who alone has tamed those two monsters of the low register, the baritone sax and the tuba. Each man is a take-charge type, playing with a competitive, live-wire bite.

But this music only works when solo improvisation is placed in an equally dynamic context. DeJohnette loves writing stompers that run short rhythmic phrases, somewhat akin to jazzier Glass lines, off funky swing-style riffs: Ice meets fire. *Third World Theme* celebrates this alliance. In the cathartic climax of this piece, Rufus Reid's fat bass tones and DeJohnette's drums kick in from behind, while Purcell and Johnson let loose exultant two-note shrieks to herald Murray's blazing solo. For these musicians, exuberance and affirmation aren't dead issues just yet.

On two tracks, DeJohnette steps away from his space-age riff-band style. *Monk's Mood* is given a gloriously sensual WSQ-ish arrangement by Johnson, whose robust baritone solo jumps out and shakes you awake to his genius. The real shocker is the

r&b groover *New Orleans Strut*, which successfully makes use of drum machines, synthesizers, and electric bass to create a frothy gumbo of funky rhythms percolating under suitably mangy rhapsodies by Purcell and Murray. This song is a rarity: a genuine jazz classic that deserves to be a hit single.

"Album Album" may be the worst title of the year, but the LP is one of 1984's best records—and, I hope, a harbinger of better things to come. STEVE FUTTERMAN

George Kelly Plays the Music of Don Redman

Bernard Brightman, producer
Stash ST 240

Don Redman was a pioneering big-band arranger for Fletcher Henderson in the '20s, and his ability to teach previously unexceptional musicians his charts resulted in one of the great bands of the early '30s, McKinney's Cotton Pickers. These talents overshadowed his work as an alto saxophonist and even his songwriting, although as this collection of his music shows, several of his pieces have become standards.

Most of Redman's tunes were based on simple, catchy phrases, the basis of the Cotton Pickers' approach. These performances

take tenor saxophonist George Kelly back to his days with the Savoy Sultans, an intensely riff-oriented band of the '40s. But it's instructive to note that two of the three best-known pieces here are *not* riff tunes.

Fred Norman's arrangement for *Chant of the Weed*, which was used as a theme by Redman's own band, adds to the exotic flair of this mood piece. The appealing melody



Kelly: more than just Redman's riffs

of *Gee, Baby, Ain't I Good to You* keeps humming in your mind. The third and probably most familiar Redman tune, *Cherry*, can be reduced to a riff but is really much more.

The sextet includes the versatile Glenn Zottola, whose alto saxophone and crisply phrased trumpet allow for varied combinations with Kelly's tenor instrument. The eight tunes are split among three arrangers: Two by Norman and two by Al Cobbs emphasize solos from Kelly, Zottola, and pianist Richard Wyands, while the remaining four, all arranged by Kelly, bring in guitarist Buck Pizzarelli and bassist George Duvivier.

JOHN S. WILSON

Humphrey Lyttelton: In Canada

John Norris, producer
Sackville 3033 (Box 87, Station J,
Toronto, Ontario, Canada M4J 4X8)

Trumpet player Humphrey Lyttelton was, along with Johnny Dankworth, a leading catalyst in English jazz after World War II. His primary influences—King Oliver, Louis Armstrong, Sidney Bechet, and Jelly Roll Morton—also inspired the spate of trad bands that turned up there in the 1950s. By then, however, Lyttelton was moving along to Duke Ellington, Count Basie, and the swing era. Today, his eclectic compositions

show a strong leaning toward those survivors and, in one instance, a debt to Bechet's enchantment with West Indian music.

The quintet on this disc includes the Scottish saxophonist and clarinetist Jim Galloway and the brilliant Canadian guitarist Ed Bickert. On open trumpet, Lyttelton is full toned and positive. While his mute contributes some Ellingtonian moodiness, it lacks his open horn's color and warmth. But Galloway fills out their duets and the ensembles, adding urgency and flair. Bickert's beautiful, gently persuasive solos are shimmery, almost ethereal, in contrast to Galloway's genial gruffness and Lyttelton's brisk, purposeful attack.

On *Caribana Queen*, both Lyttelton and Galloway shift to clarinets to play a jaunty, joyful duet that captures both Bechet's delightful appropriation of Calypso rhythms and his native New Orleans's street march beat. Although the album's purpose is to spotlight its star, who is rarely heard on this side of the Atlantic, "In Canada" is more than a showcase: The group as a whole is well balanced, and the individual members are provocative. JOHN S. WILSON

Stacy Rowles with Jimmy Rowles:

Tell It Like It Is
Leonard Feather, producer
Concord Jazz CJ 249

Sometimes, limited jazz musicians are just as gratifying to listen to as virtuosos. Take trumpeter/flugelhornist Stacy Rowles, twenty-nine-year-old daughter of pianist Jimmy, who is making her debut on "Tell It Like It Is." Technical facility isn't her strong point; she never strays from midrange and rarely takes off on long, fast-flying runs. But Stacy is her father's daughter: She has honed an affecting style that always accents personality over chops. And she has the maturity to transform her liabilities into virtues.

Rowles's one-note-instead-of-ten approach mirrors Jimmy's gleefully thrifty playing, and her easy-flowing, behind-the-beat phrasing perfectly suits her scaled-down sensibility. The tightly controlled, almost pinched sound of Rowles's muted trumpet draws from Dizzy Gillespie's later period, while her flugelhorn's wider, more luxurious sonority coats the ballads *Lotus Blossom* and *Old Folks* with warm, confidential tones. On faster tempos, her unfailing rhythmic sense and economic melodic turns compensate for any lack of pyrotechnic display.

Besides playing wonderfully idiosyncratic piano throughout, Jimmy obviously influenced the song selections and arrangements on "Tell It." His great offbeat taste in composers (Wayne Shorter, Lee Morgan), oddball choices (Duke Ellington's 1937 *Alabama Home*), and penchant for horn-piano duets (*Lotus Blossom*) are all here. The supporting musicians, particularly drummer Donald Bailey, are paragons of

the lightly swinging mainstream West Coast sound. Their ebb and flow on *There Is No Greater Love* and on Shorter's *Devil's Island* is subtle enough to be missed; it shouldn't be. But Stacy's compact, finely etched statements are still the heart of this album. Sometimes, it pays to think small.

STEVE FUTTERMAN

Jess Stacy: Blue Notion

George H. Buck, Jr., producer
Jazzology JCE 90 (3008 Wadsworth Mill
Place, Atlanta, Ga. 30032)

During the '30s and '40s, Jess Stacy was a pianist who consistently surprised his listeners. Basically a follower of Earl Hines, he refined Hines's flashy and sometimes florid ideas into tight, light, crisp phrases set to a resilient beat. Stacy played in Benny Goodman's big band and then in Bob Crosby's, but he never developed a following comparable to those enjoyed by such star sidemen as Harry James and Gene Krupa. And his own big band, started in the '40s, was a victim of bad timing.

Nevertheless, Stacy's style, flair, and individuality were one of the joys of pre-World War II jazz. This recording, made on October 6, 1944, allowed him to display his touch and taste, and especially his infectious sense of rhythm. Like other releases in Jazzology's World Transcription series, "Blue Notion" presents the entire session: False starts and incomplete takes are offered with issued and unissued versions, an irritating and repetitious practice when all attempts at each title are lumped together. A side of complete versions would allow one to at least listen in peace.

These superb examples of Stacy's playing include *After You've Gone* and other standards from the era, as well as a couple of originals: a swinging *Jumpin' with Jess* and a gorgeously relaxed but rhythmic blues, *Blue Notion*. The LP's unedited fragments prove fascinating on one tune, *Someone to Watch Over Me*. Three times Stacy attempted to produce a satisfactory take and abandoned it, although each is a beautifully turned bit of playing as far as it goes.

JOHN S. WILSON

Popular

Brave Combo: World Dance Music

Brave Combo, producers
Four Dots FD 1010
(Box 233, Denton, Texas 76201)

Who knows what secrets, what dark, wild thoughts lurk in the imagination of Happy Louie, titan of polka? Who has the courage to essay the unknown poetry ablaze within *Who Stole the Kishka?* or *The Beer Barrel Polka?* Pretty near nobody but Brave Com-

bo. Apt name, that. And if they are alone in their labors of regenerating polka music for rock and pop folks, it just means that their accomplishment is all the greater.

Which is not to say that Bravo Combo celebrates the polka way of knowledge exclusively: On "World Dance Music," they deliver 13 international styles on 14 songs. They do about a hundred more things with an oom-pah beat than you've probably heard and throw in Africa, Mexico, the Ukraine, and a "bird dance," too, "perhaps the fastest-growing dance craze in the world today," according to the liner notes. All this as if their 1981 "Music for Squares," which was polka-dominated, or last year's "Urban Grownups," which added ska and rock, didn't have enough unlikely sources. But somehow it gels. After listening to "World Dance Music," you won't be waiting for someone to draw little dance-chart feet on the floor before you start moving.

Brave Combo are the best sort of folklorists (although that's one of their lesser achievements). They're serious enough about the music to play it straight in most every way I can think of, save the way they handle the beat, which is boosted without being disrespectful. The group's five members are accomplished on piano, accordion, washboard, tuba, and a raft of reeds; obvi-

ously, a lot of woodshedding has gone down. Their genius is in playing a wonderful schottische and then moving on to a cumbia. And in knowing that the people they are playing to found out about mambos from Ricky Ricardo—people whose minds, uh, wander. So they leapfrog from style to style, outpacing short attention spans.

As residents of the same Texas thrill zone that produced bands like the Big Boys and the LeRoi Brothers, Brave Combo knows how to throw a party. You can hear singer Carl Finch push the seams of *Lili Marlene*, turning the melancholy World War II song into something almost happy. He's best when yelping like somebody gave him a hotfoot while he was busy with his squeeze-box: Listen to him race through a version of Cuban bandleader Perez Prado's *Skokiaan*, and you'll know how warm it must get down there in Denton.

After they've taken the husks off this corn, they make it genuinely funny. A passable hora accompanies the lyrics to the Doors' *People Are Strange*. Tennessee Ernie Ford's *Sixteen Tons* bursts forth like a border-radio chartbuster. And the lyrics to *Ice Machine in the Desert* are as absurd as that image. Live, I've seen them do Who songs as polkas and then turn around and perform some credible James Brown straight up. Which may be the best thing

about Brave Combo: They know how to be funny and how not to be silly. RJ SMITH

Culture Club:

Waking Up with the House on Fire
Steve Levine, producer
Virgin/Epic OE 39881

On "Kissing to Be Clever" and "Colour by Numbers," Boy George and Culture Club colleagues Roy Hay (guitar), Mikey Craig (bass), and Jon Moss (drums) threw open the doors to outcasts of every racial stripe, sexual preference, body shape, and (leftist) political affiliation. And from the first track of "Waking Up with the House on Fire," *Dangerous Man*, they continue to champion brotherhood and sexual freedom: Who else but Boy George would fashion a Holy Trinity from Martin Luther King, John Lennon, and Brian Epstein?

Boy George's depiction of a turbulent world is both endearingly klutzy and sage. *The War Song*, with its chirpy, ingenuous chorus of "War, war is stupid/And people are stupid/And love means nothing/In some strange quarters," makes nuclear disarmament a children's crusade—a powerful image when you consider the singer's Pied Piper hold on preteens. The sense of impending chaos that fuels *The War Song*

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BACKBEAT Reviews

and the antiwar ballad *Mistake No. 3* invades the album's more personal songs as well. "Life will never be the same as it was again," sings Boy George (somewhat redundantly) in the bumpy Calypso-campfire tune *The Medal Song*, but he's smart enough to regard his fame as warily as he views the political scene. We haven't heard teeny-bop as clean and happy as *Mannequin* since the Cowsills retired, but Boy George spikes the sugar with a brusque swipe at his detractors: "I can give you nothing but me, though it isn't what you want to see."

"Waking Up" isn't a pop jewel like "Colour by Numbers": It lacks the sexy, soulful interplay between Boy George and backing vocalist Helen Terry, its hits aren't as extravagant, and its filler sometimes rehashes old grooves. But this LP is respectable enough to prove that Culture Club is for real. And it's the strongest example yet of Boy George's uncommon humanness, generosity, and commitment. Hey, do you think it's easy turning bubblegum pop into a political forum?

JOYCE MILLMAN

The Del Fuegos: The Longest Day

Mitchell Froom, producer
Slash 25174

Boston's Del Fuegos were formed in 1982 as a rockabilly-blues-punk trio (guitarist Dan Zanes, bassist Tom Lloyd, drummer



Mikey Craig, Jon Moss, Boy George, and Roy Hay of Culture Club: here to stay

Steve Morell); their gigs were glowingly energetic but also, in the heat of the moment, sloppy and beer-soaked. Still, the Fuegos' lack of pretension and polish was a welcome change in a local music scene increasingly characterized by slickness and synths. A delightfully raucous independent single, *I Can't Sleep b/w I Always Call Her Back*, spread the band's reputation down the East Coast and, through the support of X (for whom they'd opened several shows), out to Los Angeles. After some personnel

changes—Zane's guitar-playing brother, Warren, joined the group after his high school graduation, Morell quit to go to college and was replaced by Brent Giesmann—the Fuegos made it to the West Coast, where producer Mitchell Froom smoothed their rough edges without losing the lusty rawness of their live sound.

"The Longest Day" catches a glimmer of the rude, hip-shaking excitement of early Stones. On thrashing love ultimatums like *Nervous and Shaky*, *Backseat Noth-*

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ing, and the title track, the Zanes brothers' guitars are countrified and mean, Lloyd's bass is swampy and low, and Giessmann's drums clang like trash-can lids. On slow-burning blues numbers like *Anything You Want* and *Have You Forgotten*, Dan's bottom-of-the-bottle growl is full of sexual menace. And on *Missing You*, he and Lloyd harmonize in a ragged yet tender tribute to the Everly Brothers.

In fact, "ragged yet tender" describes the entire album. The band needs to work on consistency, but unlike most ultrasleek outfits (say, the Stray Cats), the Del Fuegos play borrowed styles as if they were their own.

JOYCE MILLMAN

Eddy Grant: Going for Broke

Eddy Grant, producer
Portrait FR 39261

Eddy Grant doesn't bet the house on "Going for Broke." There are no surprises or risk-taking here, just characteristically feel-good music that provides us with the right prescription for mental tranquilizers and mood elevators. No matter what the temperature is outside, Grant makes it feel like summer.

Nine of the ten cuts are nothing but love songs. While some celebrate the physical, others expose Grant as a hopeless romantic. One of these, *Romancing the Stone*, has survived both the film and sub-

sequent radio overlap. Its logical follower on the charts should have been the rhythmically self-propelled *Telepathy*, though the bulk of the album succeeds simply on the strength of Grant's mellow, pop-infused reggae. On *Come On Let Me Love You*, Grant's minor-sixth harmony with himself creates a vast, open feeling. (With these seductive sonorities, one can even excuse his rhyming of "sky ah" and "fire.") His deadpan delivery in *Till I Can't Take Love No More* sounds more like a resignation than an invitation, but the rhythms and pulse keep the tune a-bobbing.

Someone, even when he's serious on "Going for Broke," Grant has a light touch. The best example of this is *Only Heaven Knows*, a curious country-western number about a lover who will "kick me like a football/Then . . . just tell me go." But instead of whining, he responds with a real toe-tapper, one he genuinely seems to enjoy singing.

Two cuts, *Rock You Good* and *Boys in the Street*, sound like leftovers from 1980's "My Turn to Love You," which was mostly commercial funk filler. Clichés such as "You're setting my fuse alight" just don't belong in Grant's vocabulary. *Boys in the Street* was the second single release, and, predictably, it fizzled.

The morning-after country ballad *Blue Wave* could soar, given more fluid treatment by, say, Rita Coolidge. But even with

Grant's raspy, monochromatic voice, it's a perfect, placid way to end an album. You don't even want to get up and turn off the stereo. Besides, you can't: Eddy Grant has already transported you to the islands.

SUSAN GALARDI

Chaka Khan: I Feel for You

Various producers
Warner Bros. 25162-1

Chaka Khan would be unthinkable without her excesses—the mercurial swoops of her singing, her penchant for the unprovoked scream—and it seems as if she has spent her six-year solo career in search of the sharpest forum for her boundless vocal energy. In 1983, it looked like she had hit her stride: Only the gratuitous *Be Bop Medley* tarnished the hothouse eclecticism of the "Chaka Khan" LP. *Ain't Nobody*, a subsequent single from her one-shot reunion with Rufus, worthily topped the r&b charts with steamy singing that matched the song's rhythmic percolation. But "I Feel for You" 's hasty retreat into the expensive security of a baroque pop production represents either monumental insecurity or push-button laziness. On an album that boasts nine producers, scads of menial laborers (a random spin through the DOR Rolodex), and a "project supervisor," the most programmatic material (*Eye to Eye*, *Through the Fire*, *Caught in the Act*) reduces Khan's

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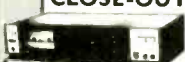







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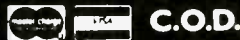
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arsenal of whoops and glides to another hired effect.

Part of the irony here is that the LP flexes much of its corporate muscle trying to emulate hip-hop's crackles, fissures, and maddening repetitions—intentional disruptions that a wily DJ can coax out of a turntable, nothing more. On mixmaster John Robie's update of Gary Wright's *My Love Is Alive*, the simulated whoops and scratches feel grafted on. To marvel at the freshness of this remake is to forget how lame the original was. Khan's cover of Prince's *I Feel for You* is also a desperate grab at hipness (not to mention hopness), but Arif Mardin's cutup of Melle Mel's rap, Stevie Wonder's harmonica solo, and Khan's soaring flights has a grabby audacity both wondrous and dumb. This approach is the aural equivalent of some moneyed know-nothing staring at a wall of subway graffiti and thinking, "Now, this would make a divine coffee table": *I Feel for You* is a great single whose impulses you distrust.

Granted, Chaka Khan has always had a taste for such subversion: Few pop singers have so jarringly used jazzy flutter and grainy texture to laugh at the blues, to loosen r&b vocalese from its long-suffering cries. We get only a glimpse of that sort of irreverence here as Khan rips through the album's opener, the System's *This Is My Night*, a hard-won declaration of independence whose careering vocal seems a promise of rules happily trashed and rewritten. It's revelry that little of "I Feel for You," for all its concrete chic and laying-on-of-hands, follows through on. **MARK MOSES**

Madonna: Like a Virgin

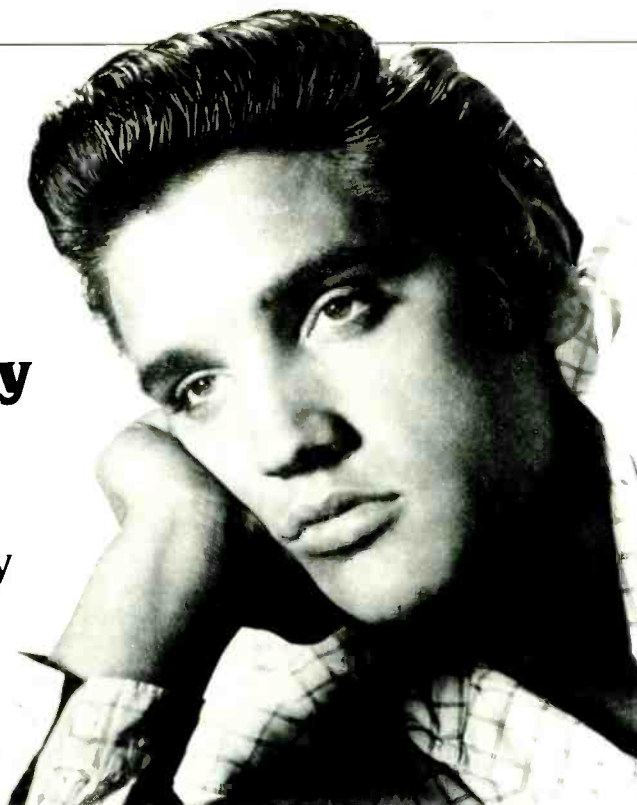
Nile Rodgers, producer
Sire 25157-1

If stardom was unexpected for Madonna the first time out, it seemed more unlikely that a second record would top her hit-heavy debut. Much of the "Madonna" LP's success came from simply being so much better than what its surface promised: an inexperienced, fashion-conscious singer backed by standard disco tracks. "Like a Virgin" finds itself in the reverse of that situation, having to equal or better a launching that made an indelible impression on the public. Thanks to improved singing and songwriting, canny cover selection, and Nile Rodgers's production smarts, Madonna pulls off the neat trick of outstripping her own fast start.

Madonna's first LP was produced by veteran r&b boardman Reggie Lucas, with one cut each handled by New York DJ/mixers Mark Kamin and Jellybean Benitez. The industry rule-of-thumb (If it ain't broke, don't fix it!) would have dictated a return to vinyl with the same lineup, but for "Virgin," the sultry singer switched to Rodgers. Granted, his impeccable credentials make the move less than radical, but his work of late—David Bowie, INXS,

Birth Day Boy

Reviewed by
Mitchell
Cohen



Elvis Presley: A Golden Celebration
Various producers
RCA CPM 6-5172 (six discs)

EARLY ROCK AND ROLL was a lewd, glorious joke, and Elvis Presley was central to it, embodying its flashy impudence as well as its self-mocking sentimentality. Listen to him introduce a number as "one of the most beautiful love songs ever written" and then lurch into an eruptive version of Little Richard's *Ready Teddy* that proves him right. This performance is one of many revelatory moments on "A Golden Celebration," part of the hoopla surrounding what would have been (on January 8) Presley's 50th birthday. Along with this six-disc, gold-slipcased collection, there are home video releases of TV specials from 1968 and 1973, Compact Discs, a music video of *Blue Suede Shoes*, picture-sleeved singles on colored vinyl, a Home Box Office program, a new compilation of early rockers, and the overdue "mono restoration" of four classic LPs.

By concentrating on his periods of irrefutable triumph, "A Golden Celebration" fills a longstanding need. It begins with Sun Records outtakes, goes through television and live appearances from 1956-57, and after two sides of doodles that would have been better left unearthed concludes with almost a half hour of music recorded at the sessions for the '68 "comeback" TV show. Until now, much of this material could be found only on bootlegs or scattered through various RCA anthologies.

Laying the groundwork, the Sun side includes a frail reading of *Harbor Lights* (Elvis whistles!), which may have been in-

spired by the version Clyde McPhatter did with the Dominoes, and an early run-through of *That's All Right*. Presley and his sidemen work out arrangements while Sam Phillips comments from the sound booth, offering advice ("Don't make it too damned complicated") and encouragement ("Hell, that's different; that's a *pop* song now"). By Side 2, Presley has left Phillips's small label, signed with RCA, and is making his network TV debut on the Dorsey Brothers' *Stage Show* with a hot Joe Turner medley and Ray Charles's *I Got a Woman*.

Presley's *Stage Show* run—six dates from January through March of 1956—was the last time television presented him as a purely musical event. From then on, he was a video curio. By midyear, he had become this . . . thing, this bumping bumpkin who somehow made rock and roll into a "craze." Hearing his subsequent TV performances in sequence is a lesson in how American culture deals with the unprecedented, how it reduces everything to manageable terms. Television made Presley participate in his own attempted trivialization. In trying to make him a rebel without claws, it treated him as a novelty. Milton Berle played opposite him as his "twin brother, Melvin Presley"; Steve Allen stuck him in white tie and tails and had him sing *Hound Dog* to a real pooch; Ed Sullivan, in a symbolic emasculation, kept the camera above Presley's waist. And Presley politely went along.

The undercurrent of "A Golden Celebration" is Dealing with Elvis—that is, the class, race, and moral prejudices that sur-

facated because of his background, his affinity for rhythm and blues, his sexuality. Presley's fame made him unignorable and his musical vitality was undeniable, but he posed a problem. It's startling to hear him engage in silly banter with Berle and then snap into a ferocious *Hound Dog*. He plays the butt of Berle's ribbing, but when it comes to the music, he ain't kidding around. Yet by the time of his Sullivan shows later that year, Presley seems almost completely tamed: He sings more ballads (some gospel, too), plugs his movie, and stands by while his host, like a teacher on parents' day, calls him "a real decent, fine boy."

This moment would be dismaying were it not for "Celebration"'s centerpiece, a previously unreleased concert of Presley at his peak. Between his first and second Sullivan stints, he went home to Tupelo for the Mississippi-Alabama Fair and Dairy Show. Honored with a parade and a key to the city, he responded with two astounding performances. Especially at the matinee, Presley was fired up: You can feel the kick he gets from the crowd as he sprints through *I Got a Woman* and *Long Tall Sally*. He's already getting tired of the hits, but he approaches them and the slower stuff (*I Was the One* and *I Want You, I Need You, I Love You*) with an attitude that's part mocking, part sincere, and totally enjoyable.

The only other comparable music on "Celebration" is the excerpt from the '68 comeback. Once again, he was going on television with something to prove. In '56, he had to convince a skeptical public that he was for real; now he is determined to show that years of forgettable films and their accompanying soundtracks haven't made him an anachronism. For a segment of the show, he sits down informally with some of his cronies from the Fifties, tearing off a set of hits, oldies, and blues. The music is shot through with a sense of liberation.

"I've been traveling over mountains," he sings on the last song here. "Even through the valleys too/I've been traveling night and day/I've been running all the way/Baby, tryin' to get to you." He first recorded *Tryin' to Get to You* in Memphis in 1955; in Burbank 13 years later, it becomes a plea, an apology, and a renewed promise to himself and his audience. He digs into it, and the screams it elicits aren't nostalgic. It's truly a moment worth celebrating: Elvis reaching out, connecting in a way that he hadn't in a long, long time.

From *Baby, Let's Play House* and *Money Honey* on the Dorseys' show to *One Night* and *Lawdy Miss Clawdy* more than a dozen years later, "A Golden Celebration" covers some of Elvis Presley's most essential live rock and roll. If you've never investigated him before, this collection, the mono reissues (plus the already mono "Sun Sessions"), and the 1968 video performance are excellent places to start. **HF**

Southside Johnny, the Spoons—has been spotty, and success was hardly guaranteed. This LP, however, should restore his rep in full; the sound is clean, crisp, and varied throughout.

The uptempo numbers featuring Rodgers on guitar with Chic compatriots Bernard Edwards on bass and Tony Thompson on drums (*Material Girl*, the title tune) develop quirky little grooves without locking themselves into clichés, and the best of the ballads (*Love Don't Live Here Anymore*, *Shoo-Bee-Do*) wrap themselves snugly around Madonna's warm vocals. It is on the ballads, especially, that Madonna's growth as a singer is markedly evident.

Most importantly, "Like a Virgin" overcomes my mixed feelings stemming from the ambitious and sometimes arrogant rise of her lucky star. Her persona is softened by the ballads and by numbers like *Angel* and *Stay*; it even comes in for some self-mocking on the humorously crass *Material Girl*, an ode to the almighty dollar reminiscent of the Contours' *First I Look at the Purse*. If making records is merely a convenient way station for a career trajectory that includes world domination (she's already making two movies), it should be acknowledged that Madonna is giving her all here and now. And that proves to be quite a lot.

WAYNE KING

Robert Quine & Fred Maher: Basic
Robert Quine & Fred Maher, producers Editions E.G. EGED 36 (Distributed by Jem, 3619 Kennedy Rd., South Plainfield, N.J. 07080)

When guitarist Robert Quine and drummer Fred Maher left the Voidoids and Material, respectively, they wound up backing Lou Reed, providing with bassist Fernando Saunders the best support he has ever had. But as soloists, their music is more serious, which accounts both for "Basic" 's strengths and for its weaknesses.

Most of the songs are detailed, pleasing, even ravishing. Maher drums with simplicity and clarity or, as is the case here, programs drum machines with simplicity and clarity while Quine adds economical lines that surprise the listener with flashes of incisiveness and wit. At its best moments the music they make together is transparent: One sees directly through the guitars to the underlying rhythm. Quine responds passively to the rhythm tracks, preferring inflection and coloring to melody.

But these instrumentals are too samey. "Basic," distinctive though it is, is also static and at times monotonous. Quine has a tendency to drone that goes unchecked here, and Maher sometimes imposes a metronomic lockstep that is anything but pleasing. Occasionally, there are so many over-tracked guitars that it becomes impossible to attend to them all. And there are a couple of real clunkers, such as *Dark Place*, an

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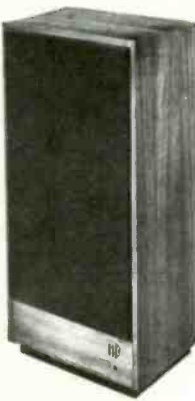
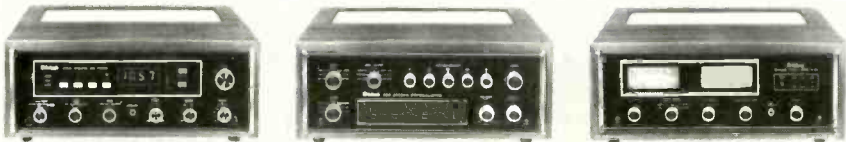
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Cleo, Pops, Mavis and Yvonne Staples meet David Byrne: it's a hit!

exercise in mere noise.

If you take your pop music seriously—and you probably do if you're a Voidoids, Material, or Reed fan—get back to "Basic"; if you'd rather boogie than meditate, give it a miss. **CRISPIN SARTWELL**

The Ramones: Too Tough to Die
T. Erdelyi & Ed Stasium, producers
Sire 25187-1

With "Too Tough to Die," the Ramones have achieved something that few pissed-off young rockers ever do: They've grown up with grace. They've never before displayed this sort of depth and assurance; always one of our most valuable rock and roll bands, they're now one of our most venerable, too. Not since the Stones metamorphosed from derivative blues-rockers to gritty, original pros has such a marvelously nasty bunch of punks developed along such durably listenable lines. In short, this is the Ramones' masterpiece.

The album traverses familiar ground as well as wholly unexplored territory. As its name implies, "Too Tough to Die" is a resolution to survive: it's also a celebration, and as such it is devastatingly sincere. "I'm not afraid of life, of the poor man's struggle or the killer's knife." Joey professes in *I'm Not Afraid of Life*. Yes, boys and girls, this is the same band that sang *Now I Wanna Sniff Some Glue* and *Gimme Gimme Shock Treatment*, a fact demonstrated in the scorching instrumentation and sardonic humor that are standard ingredients of every song they play.

But style has also changed to fit content. Joey has added an octave of range and a world of feeling since '83's "Subterranean Jungle." These forefathers of today's punks also try their own hand at hardcore, with Dee Dee taking the lead vocal for the first time since their '76 debut. He snarls his way through *Wart Hog's* lyrics (quoted on the sleeve as "??") while the band lays down a vicious thrash.

On this album, the Ramones at last find something to sing about besides self-destruction, and they sing about it with terse eloquence. When they first appeared they seemed too fast to live; they've proved too tough to die. **CRISPIN SARTWELL**

The Staple Singers: Turning Point
Pervis Staples & Henry Bush, producers
Private I Records F 239460
(Distributed by CBS)

The black church and gospel music have served as a fertile training ground for secular artists. Soloists such as Johnny Taylor and Sam Cooke certainly made their mark, but the Staple Singers were one of the first groups to cross over into the mainstream. For the last four years, however, little has been heard from them. The release of "Turning Point" should change that.

The Staples have made leaner, sparer albums in the past, consistent with their musical heritage and with the direct, emotional immediacy of a church setting. "Turning Point" employs high-tech flash to flattering advantage, though, yielding a detailed yet danceable disc of Southern soul. Drum machines and electronic effects have expanded the polyrhythmic and poly-metric web created by scratchy guitars, staccato keyboards, and husky call-and-response choruses behind Mavis Staples's sensuous, breathy vocals. Sharp tempo breaks, echoes, and slithery guitar solos add a tough, eerie quality to most songs.

David Byrne's *Slippery People* becomes a dense, haunting masterpiece studded with drum bursts that punctuate the tune's tumbling energy. The wedding of Byrne's pan-ethnic eclecticism with the Staples's penchant for messages produces a sermon that is neither dour nor condescending. On *Bridges Instead of Walls*, Mavis delivers unity and give-peace-a-chance vocals with an alluring growl over the staggered, propulsive interplay between banjoish guitar, stomping drum, and light, steel-drum synthesizer. "Turning Point" is produced, perhaps overproduced, but the result is more a sound collage of licks than an egregious transformation.

But my unabashed praise has to be reserved for the first side only. Side 2 is salvaged by *Hate*, with its sinister, sinuous rhythm, and by the syncopated upbeat of *That's What Friends Are For*, but Pop Staples's preaching on *Right Decision* and the limp ballad *On My Own Again* interrupt what could have been an all-night dance album. **DON PALMER**

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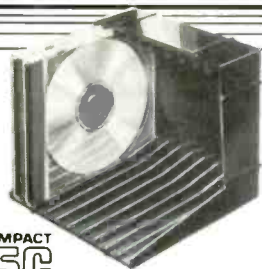
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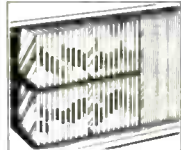
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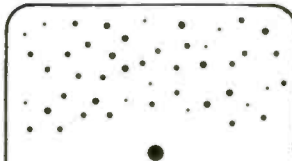
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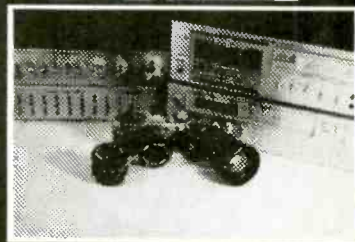
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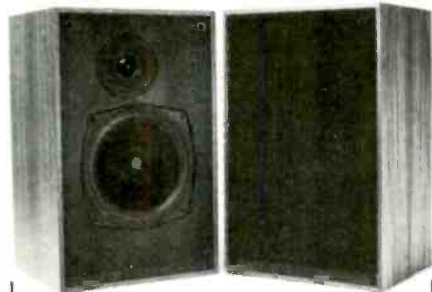
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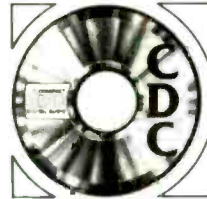
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Advertising Index

RS #		Page #
	Akai America, Ltd.	13
	Audifon	77
29	Carver Corp.	5
1	DALI	6
6	Denon America, Inc.	8
17	Fujitsu Ten	8
	Illinois Audio	72
10	International Book & Record Distributors	59
48	International HiFi	77
8	JBL	15
20	J&R Music World	73
	JVC Co. of America	Cover II
14	LaBelle Camera & Stereo	57
	Maxell Corp.	16
42	McIntosh Laboratory, Inc.	76
32	Nakamichi U.S.A. Inc.	3
11	Ohm Acoustics Corp.	49
35	Polk Audio Inc.	19
28	Sansui Electronics Corp.	Cover III
	Shure Brothers Inc.	4
24	Sony Corp. Of America	12
22	Sound Reproduction	60
15	Stereo Corp. Of America	71
5	Stewart National Operatic Group	60
40	S&W Electronics	76
12	TDK Electronics Corp.	Cover IV
25	Teac Corp. Of America	11
	Warner Brothers	51
7	Wisconsin Discount	74
23	Yamaha	7

IS AUTOMATIC BETTER?

(Continued from page 32)

use too low a setting for fear of overloading the tape—with a sensing circuit that helps you tell where to set the level control for the music at hand. Decks like the DD-VR9, DD-VR7, and DD-V6 give you a numerical readout of the highest musical peak.

Pioneer was the first company to offer something called blank search, which is a real boon to recordists who don't want to spend time searching through a partially recorded tape to find the beginning of the unrecorded segment. A deck with this feature will fast-wind through a tape until it senses an unrecorded segment of about eight seconds in duration. The tape is then automatically rewound so as to leave a four-second blank after the recorded section.

Another feature that's bound to delight the avid recordist is a real-time tape counter, which in its most useful incarnation displays the time remaining on a cassette. Using it in conjunction with the blank-search function on Pioneer's CT-90R, for instance, you can load a partially recorded tape and within a minute or so determine how much recording time you have left.

If you need to make long, relatively

uninterrupted recordings, you'll want to investigate autoreverse decks with bidirectional recording capability. Most such decks reverse the direction of the tape at the end of the side and simultaneously either rotate the tape head to align with the second set of tracks or activate a second pair of head gaps in a four-track head assembly. Nakamichi's UDAR (Unidirectional Auto Reverse) mechanism takes a different approach. UDAR flips the tape (as you would by hand) rather than reversing the direction of motion. The company argues that keeping the head assemblies stationary and the tape moving in one direction minimizes tape-to-head azimuth errors, which compromise high-frequency response.

Finally, if autoreverse recording is important to you, make sure the deck you're investigating switches sides at the beginning of the leader. Such decks can continue recording with just a second or so of delay. Reversing mechanisms that are activated by increased tape tension as the leader runs out can take a big chunk out of the music. On at least one autoreverse deck (the Nakamichi RX-505), there's a circuit that automatically fades the recording out just before the end of Side A, flips the tape over, and then fades the recording back in on Side B. **HF**

A MUSICAL Rx

(Continued from page 55)

ductions and artists. Moreover, for outdoor headphone listening, the age of any originally good recording is no real handicap: Almost everything in stereo, and even some outstanding monos, will be endowed with fresh vitality and immediacy.

Such considerations make the burgeoning reissue-series trend so inviting and rewarding, not just musically but economically, since so many have bargain prices. Another attraction is that a considerable number of today's reissues make certain recorded performances available on cassette for the first time. Of special interest to walker/listeners are the new tapes (mostly of reissued material) that are specifically programmed for personal-portable use, many of them featuring double-play running times. These 90-minute-cassette series are asterisked in the following (undoubtedly partial) list of leading classical reissue and/or walkabout-designed lines:

CBS: Odyssey, Great Performances, Masterwork Portraits, Classical 90s*.

Deutsche Grammophon: Basics*, Musikfest, Doubletime*, Signature (chromium tape), Walkman Classics (chromium tape)*.

EMI Angel: Seraphim, Red Line, Miles of Music*.

Everest: Master Series.

London: Stereo Treasury, Jubilee, Viva, Super Concert*.

Mercury: Gold.

Moss Music Group: Allegro, Allegro-Melodiya.

Pantheon: Budget Series.

Philips: Sequenza, Festivo, Classette, Musica da Camera.

Pro Arte: Sinfonia (digital/chrome), Classics for Joy*.

RCA: Victrola, Victrola Double-play*.

The extensive sampling I've done from most of these series has been consistently satisfactory. And in the many cases where I still have the original recordings (or my review notes on them), the sonic improvement and surface-noise minimization on the reissues have been at least noticeable and at best striking.

WARNING: WALKABOUT LISTENING may be hazardous. . . . Even as an unlicensed practitioner, I'd be remiss if I failed to remind experienced as well as novice walker/listeners of some very real dangers: those of aural damage from playing the music too loud and of bodily injury from being distracted while walking or driving in any kind of traffic. (Some cities and states actually have prohibitory laws.) Finally, I urge you to avoid financial hardship by investing in nickel-cadmium batteries and a little home recharger for them if you intend to make more than rare, brief use of a portable cassette player.

With that, let me close with triple best wishes: for good listening, good walking, and good health! **HF**

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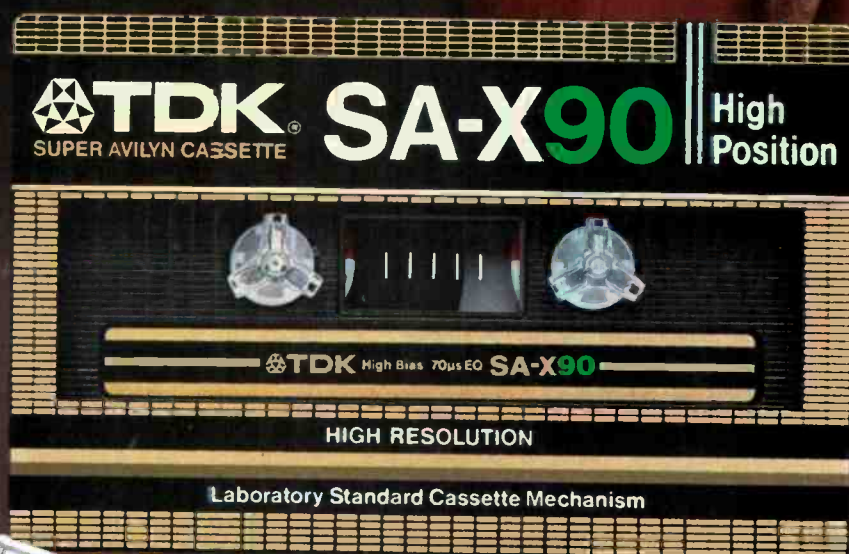
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