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SHOULD THE IDEAL
ONE HAVE?

CD REPERTORY:
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Matthew Polk's Magnificent Sounding New SDA 2A



SDA 2A
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Digital Disc Ready

Matthew Polk stands proudly alongside the latest version of his Audio Video Grand Prix Award Winning SDA 2A

The Magnificent Sound of Matthew Polk's Extraordinary New SDA 2A Puts the Competition to Shame!

*"It has the ability to make your
previous favorite speaker sound almost second rate"*

Stereo Review Magazine

Matthew Polk's magnificent sounding new 3rd generation SDA 2A incorporates many new advances pioneered in his top-of-the-line Signature Edition SRSs. It achieves stunningly life-like musical reproduction which would be remarkable at any price but is simply extraordinary at \$499. each. Stereo Review said, "listen at your own risk." Once you hear them you'll never be satisfied with anything else!

Polk's Revolutionary True Stereo SDA Breakthrough

The magnificent sounding new SDA 2A incorporates Polk's revolutionary True Stereo SDA technology. This patented, critically acclaimed, Audio Video Grand Prix Award winning breakthrough is the most important fundamental advance in loudspeaker technology since stereo itself. In fact, the design principles embodied in the SDAs make them the world's first and only True Stereo speakers.

Why do Polk SDAs always sound better than conventional speakers? When conventional loudspeakers are used to reproduce stereo both speakers are heard by both ears causing a form of acoustic distortion called interaural crosstalk which cuts down stereo separation, obscures detail and interferes with the proper reproduction and perception of imaging, and spaciousness. Polk SDAs are designed to eliminate interaural crosstalk so that each speaker is only heard by the one correct ear (i.e. left channel/left ear, right channel/right ear), like headphones. The result is dramatically improved stereo separation, detail and three-dimensional imaging. In order to accomplish this each SDA incorporates a separate set of drivers which radiates a special dimensional (difference) signal which cancels the undesirable interaural crosstalk coming from the wrong speaker to the wrong ear. High Fidelity called the results "Mind Boggling".

The Most Extraordinary Value in High End Audio Today

The new SDA 2As, like all the current SDAs, incorporate the latest 3rd generation SDA technology developed for Matthew Polk's Signature Edition SRS and SRS-2 including **1:** full complement sub-bass drive for deeper, fuller, tighter and more dynamic bass response; **2:** phase coherent time-compensated driver alignment for better focus, lower-coloration smoother, clearer, more coherent midrange and improved front-to-back depth and; **3:** bandwidth-optimized dimensional signal for smoother high-end and even better soundstage and image. The new SDA 2A is the finest sounding and most technologically advanced speaker ever produced at its extraordinarily modest price. It sounds dramatically better than speakers from other manufacturers that cost 4 times as much and more and is, at \$499 ea., truly the speaker of your dreams at a price you can afford.

"Breathtaking... a new world of hi fi listening."

Stereo Buyers Guide

The spectacular sonic benefits of SDA technology are dramatic and easily heard by virtually anyone. Reviewers, critical listeners and novices alike are overwhelmed by the magnitude of the sonic improvement achieved by Polk's SDA technology. Stereo Review said, "These speakers *always* sounded different from conventional speakers — and, in our view, better — as a result of their SDA design."

All Polk's SDAs, including the new 2As produce a huge lifelike three dimensional sonic image which will amaze you. You will hear for the first time instruments, ambience and subtle musical nuances which are present on your recordings but masked by the interaural crosstalk distortion produced by conventional speakers. Stereo Review said, "Spectacular...literally a new dimension in the sound...the result is

always better than would be achieved by conventional speakers". High Fidelity said, "Mind Boggling...Astounding... Flabbergasting...we have yet to hear any stereo program that doesn't benefit". With SDAs every instrument, vocalist

"Mindboggling, Astounding, Flabbergasting"

High Fidelity Magazine

and sound becomes distinct, tangible and alive; allowing you to experience the spine tingling excitement, majesty and pleasure of live music in your own home.

Other Superb Sounding Polks From \$85. to \$1395. each

No matter what your budget is there is a superb sounding Polk speaker perfect for you. Polk's incredible sounding/affordably priced Monitor Series loudspeakers utilize the same basic components as the SDAs and begin as low as \$85. each. The breathtaking sonic benefits of Matthew Polk's revolutionary True Stereo SDA technology are available in 5 SDA models priced from \$395. to \$1395 ea.

"You owe it to yourself to audition them"

High Fidelity

The experts agree: Polk speakers sound better. Use the reader's service card or write to us for more information. Better yet, visit your nearest Polk dealer today. Your ears will thank you.

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Monitor 3B
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\$259.95 ea.

Digital Disc Ready

Matthew Polk's remarkable Monitors offer state-of-the-art technology and performance usually found only in systems which sell for many times their modest cost.

Prices are Manufacturer's Suggested Retail. Prices may vary.

"Matthew Polk's Remarkable Monitors Deliver Incredible Sound/Affordable Price"

"Vastly superior to the competition"

Musician Magazine

Polk Audio was founded in 1972 by three Johns Hopkins University graduates who were dedicated audiophiles with a common dream: superior sound for everyone.

"The affordable dream"

Off the Record

They believed that it was possible to design and manufacture loudspeakers of uncompromising quality which performed as well as the most expensive and exotic loudspeakers available, but in a price range affordable to virtually every music lover. The Monitors are the spectacularly successful result of their quest.

Polk Audio has worked hard over the ensuing years to maintain the Monitor Series' preeminent position as *the* standard for quality and value in the audio industry. The Monitors have been continually improved and refined as a result of Polk's never ending search for better sound quality. There have been literally thousands of improvements made to the Monitors and the result is that today, as in the past, the Polk Monitors are absolutely the best sounding loudspeakers for the money available on the market. Musician Magazine said, "If you're shopping for stereo, our advice is not to buy speakers until you've heard the Polks." You owe it to yourself.

"The best high performance speaker value on the market."

Off the Record

A new generation of Polk Monitors is now available which incorporate the same high definition silver coil dome tweeter and Optimized Flux Density drivers developed for the SDAs. Polk Monitor Series loudspeakers have always had a well deserved reputation for

offering state-of-the-art performance and technology usually found only in systems which sell for many times their modest cost. In fact, many knowledgeable listeners consider that outside of the SDAs, the Polk Monitors are the finest imaging conventional speakers in the world, regardless of price. They have been compared in performance with loudspeakers which sell for up to \$10,000 a pair and are absolutely the best sounding loudspeakers for the money available on the market.

"Absolutely first rate... superior sound at a modest price"

Stereo Review Magazine

All the Polk Monitors regardless of price offer consistently superb construction and sonic and performance. They achieve open, boxless, three-dimensional imaging surpassed only by the SDAs. The Monitors' silky smooth frequency response assures natural, non-fatiguing, easy to listen to sound; while their instantaneous transient response results in music that is crisply

"At the price they're simply a steal."

Audiogram Magazine

reproduced with lifelike clarity and detail. In addition dynamic bass performance, ultra wide dispersion, high efficiency and high power handling are all much appreciated hallmarks of Monitor Series performance.

The consistently superb performance of the Polk Monitors is in large part due to the fact that they all utilize very similar components and design features. However, more importantly, it is the elegant integration of concepts and components which results in the superior sonic performance and value which sets the Monitor Series apart. Audiogram magazine said, "How does Polk do it? We think it is mostly execution.

They hear very well and they care." Audiogram is absolutely right. At Polk we take the same care with each and every product we build, whether it is our most or least expensive. We lavish the same lengthy amount of critical listening and tuning on every single Polk speaker because we know that having a limited budget does not necessarily indicate that you have a limited ability to appreciate true musical quality.

Superb Sounding Polks From \$85. to \$1395. each

No matter what your budget is there is a superb sounding Polk speaker perfect for you. Polk's incredible sounding/affordably priced Monitor Series loudspeakers utilize the same basic components as the SDAs and begin as low as \$85. each. The breathtaking sonic benefits of Matthew Polk's revolutionary True Stereo SDA technology are available in 5 SDA models priced from \$395. to \$1395 ea.

You can afford the incredible sound of Polk

The experts agree: Polk speakers sound better! There is a Polk speaker which is perfect to fulfill your sonic dreams at a price you can afford. Visit your nearest Polk dealer today and audition the remarkable Monitors and the revolutionary SDAs. You'll always be glad you bought the best.

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The Speaker Specialists®

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MARCH

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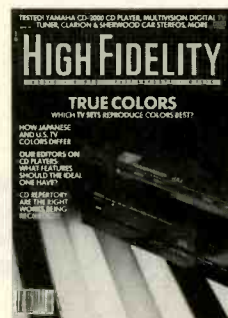
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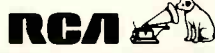
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BY MICHAEL RIGGS

EXTENDED HORIZONS

WHEN HIGH FIDELITY BEGAN PUBLICATION, in 1951, the very idea bordered on the radical: That music could be reproduced with almost literal realism was something no one (to my knowledge) envisioned before the late Forties. And it remains an elusive goal, though we certainly are far closer than we were 35 years ago.

In the last decade, that idea has begun to spill over into video—mainly in the form of new, high-technology video monitors, though Laserdisc players and improvements in home VCRs also have played a role. Spurred by these developments, we began regular (as opposed to sporadic) coverage of video in 1980. At the time, this was a controversial move, and we took a lot of heat from readers and manufacturers alike, mostly to the effect that we should stick to our knitting. We still get a letter or two along these lines now and again, but the preponderance of mail is positive; quite a bit of it is in the form of questions, which often appear in "Crosstalk."

In short, the worm has turned. It would seem unnatural now (at least to me) for us to cover audio alone. And many of the companies that once complained of our video coverage now manufacture products that we cannot adequately describe, let alone test, without spending a lot of time in that once forbidden field. More and more, people expect high-quality audio to accompany high-quality video, and vice versa. They want high fidelity for the eye and ear alike.

And yet the feeling lingers that audio is somehow the higher calling. I think this attitude stems partly from a difference in histories. High fidelity audio started as a hobby that grew into a mass market; video is going the other way. Radio and the phonograph grew up together, whereas broadcast television was the only game in town until the 1970s, when the first home VCRs were introduced. The world's three television transmission systems—PAL, SECAM, and

our own NTSC—define the limits of home video in a way that has no direct corollary in audio. Think of the relative ease, for example, with which the Compact Disc has entered the audio mainstream. Then consider how difficult it would be to introduce HDTV (high-definition television), which on a strictly technical basis is no less feasible a proposition. The various audio recording media feed the world's radio transmitters, but they are not deeply beholden to them. In video, on the other hand, broadcast standards rule the roost—disc and tape are the tagalongs.

Presumably, it doesn't have to be that way, but I wouldn't hold my breath waiting for special high-definition videodiscs and multistandard monitors to take advantage of them. The road to high fidelity video, on which we've only just embarked, will in these early days shadow the main highway very closely. But be of good cheer: There's still plenty of room for improvement. It is possible to enhance NTSC video in both broadcast and reception, perhaps ultimately to a level of performance rivaling that of some proposed HDTV systems. And it is possible to wring more out of what's already available on the air (and on disc and tape).

The latter is the subject of this month's main feature, "True Colors," by video consultant and engineer Carleton Sarver and our technical editor, David Ranada. Not a single consumer video monitor or television set on the market today can accurately reproduce NTSC color. In this respect, we've gone backwards. You'll find out how this came about (misplaced priorities—surprise, surprise), how to make the best of the present less-than-ideal situation, and how things may be improving. Much of the information in this article has never before been discussed outside the tightly knit community of television engineers. If you care about high fidelity video, you'll find it to be fascinating reading.

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MISNOMER

IN YOUR DECEMBER 1986 ISSUE, YOU REVIEWED the Denon DRA-95VR "audio-video receiver." Just by the title, one would think that this unit receives not only radio, but also TV broadcasts. Careful reading of the review reveals that it does not, providing only switching for video components. So why is it called an audio-video receiver? To me, this usage seems very misleading.

Timothy Hendel
Miami, Fla.

In principle, we agree. But that is what such devices have come to be called. The only receiver ever to include a TV tuner was the Jensen AVS-1500, which regrettably is no longer available.—Ed.

UNDERRATED RESOLUTION?

I READ WITH INTEREST YOUR JANUARY REVIEW of the Pioneer CLD-909 CD/Laserdisc player. In it you say that the player "really does deliver more than 300 lines of horizontal resolution, and that's about twice the resolution of even a good VCR." Laserdisc players, such as the Pioneer and Yamaha models (the only ones available on the U.S. market), are indeed capable of providing more than 300 lines of resolution; in fact, they can deliver as

many as 400 lines of horizontal resolution and currently are limited only by the resolution of available program material.

However, your statement that 300-plus lines of horizontal resolution is about twice that of a good VCR is inaccurate, as it implies that they provide only 150 or so lines of resolution. Even a very bad VCR does better than that. Super Beta VCRs recording in Beta Is yield approximately 300 lines of horizontal resolution. Regular Beta, 8mm, and VHS VCRs recording at their highest speeds are capable of approximately 240 lines of horizontal resolution. Although these figures are not up to the best a Laserdisc player can do, they are far better than the 150 lines you cite.

Robert A. Whitehead
West Hartford, Conn.

The standard way of calculating horizontal resolution is to multiply the video cutoff frequency (in megahertz) by 80. We define the cutoff frequency as the point at which response is down by 6 dB, so you can see by looking at the data in our report that for the CLD-909 this works out to just a little more than 300 lines. Sony's SL-HF750 Super Beta VCR (test report, December 1986) gives between 160 and 240 lines (probably about 200) in both

Beta Is and Beta II, and a typical 8mm or VHS deck is struggling to make 160 at SP. The much higher figures often quoted by manufacturers are based on a -12-dB criterion for the cutoff frequency, which we consider excessively generous. Finally, modern feature films have higher resolution than any consumer videodisc player.—Ed.

OPEN-REEL DEFENDED

IN YOUR RESPONSE TO THOMAS E. HILBORN'S letter [January 1987], you say that as a consumer product, the open-reel tape deck already has two feet in the grave and that the LP is fading fast. In a sense, you may be right. However, it is narrow-minded editors like you who contribute to this being so. People in your position fail to recognize the tremendous influence they have. I can't wait until all recorded music will be on ROM chips. Why don't you tell your readers that CD and DAT are not the way to go because no-moving-parts audio is just around the corner—or is it that you own a Compact Disc player or DAT system, so your opinion is biased?

There is a market for open-reel tape and equipment, but no supplier or manufacturer wants to get it out into open view because it costs so much. Well, you can go ahead and



Sony just extended the range of

push your toy cassettes with endless azimuth problems and your 8mm recorders that probably will run for eight hours or so and then quit because of the dinky pot-metal and plastic workings. As for me, I want man-sized gear built to last.

Joe Nechanicky
Owatonna, Minn.

We didn't kill the consumer open-reel tape deck—it just died. The same is true of the LP, which was steadily losing ground to prerecorded cassettes even before the Compact Disc came along. If we were as powerful as you say, everyone would be buying quadraphonic systems. (Try to find one of those!) The reason we don't advise people to wait for no-moving-parts audio is that it is a very long way off.
—Ed.

FAVORITISM AND RACISM?

I HAVE BEEN AN AVID SUBSCRIBER TO YOUR magazine for eight years—and I am considering canceling my subscription at the end of its current term. The reason is simple: I am a successful black deejay who uses your magazine as a source of information on new products and services, but I rarely see any music articles representing blacks in a positive light. I have observed as many as ten pages

covering the classics but never more than four pages covering black or other minority entertainers. And when you do cover black jazz and r&b musicians, you view them as incompetent, whereas you tend to depict rock musicians as gods. Your catering to a select segment of the industry is tantamount to favoritism and racism. A good example of my concern is your July 1986 issue.

I have no plans to renew my subscription unless you begin to print a representative proportion of articles and reviews covering jazz and r&b—as well as all other forms of music.

Gregory Allen
Kansas City, Mo.

Popular Music Editor Ken Richardson replies: First, let's look at your July 1986 example. Of the 15 popular reviews in that issue, seven are of jazz or r&b artists who are black or who belong to other minorities—almost 50 percent. And of those seven stories, only one is a pan: the review of Prince and the Revolution's Parade, an LP that was also panned by many other critics. Considering these facts, I'm sure that my predecessor, Georgia Christgau, who edited the July 1986 issue, would take exception to your comments about the representative proportion of stories on—and the fair treatment of—nonwhite

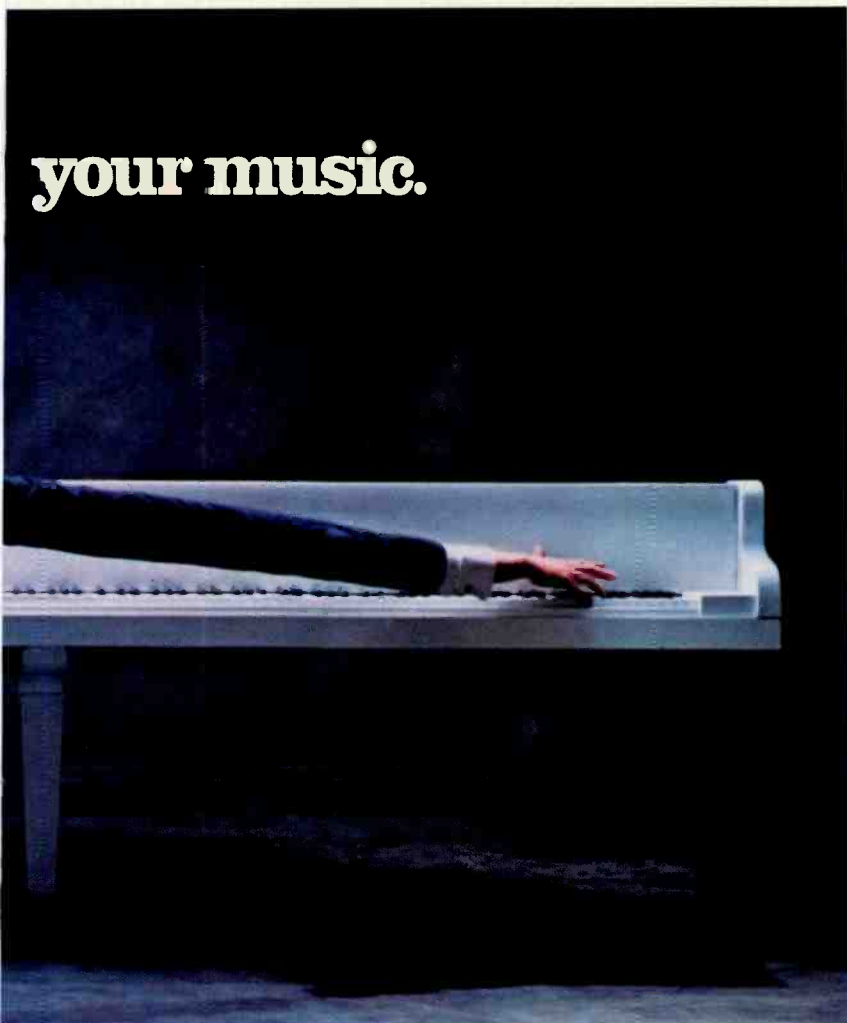
musicians. I certainly do.

Now, let's look at the big picture. Among the nine feature articles edited by Georgia in 1986 (January through September) are stories on Latin singer and percussionist Sheila E., Panamanian artist Rubén Blades, black singer Abbey Lincoln, and black producers Jimmy Jam and Terry Lewis. And among the six feature articles I have edited since then are stories on Brazilian artist Gilberto Gil, black South African pianist Abdullah Ibrahim and singer Sathima Bea Benjamin, and black trumpeter Booker Little. It goes without saying—but I'll say it nevertheless—that none of these stories views its subject as "incompetent." As for "all other forms of music," the remaining features since January 1986 cover subjects as varied as performance artist Laurie Anderson, jazz pianist Ran Blake, fusion guitarist John McLaughlin, and a host of country musicians (in three articles), including Hank Williams, Patsy Cline, Dwight Yoakam, and this month's Pat Alger. All of which means that you should look elsewhere for bastions of favoritism and racism, because you won't find one at this magazine.

THE RED DWARF?

MELODIYA, WHICH WILLIAM TYNAN CALLS "THE Soviet recording giant" and Harlow Robinson says is "one of the world's largest record companies" [June 1986], must be one of the

your music.



Our new UX tapes deliver higher highs, lower lows and wider dynamic range.

If you're going to listen to music at all, you may as well get it all. No matter how high or low, how loud or soft. Captured so faithfully that trying one of these new tapes at least once is something you owe yourself. And your music.

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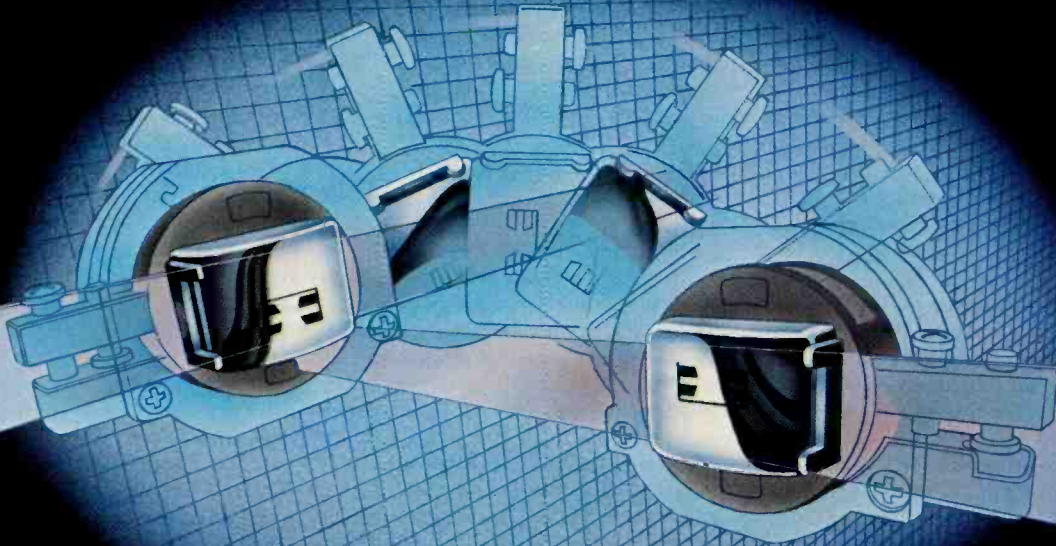
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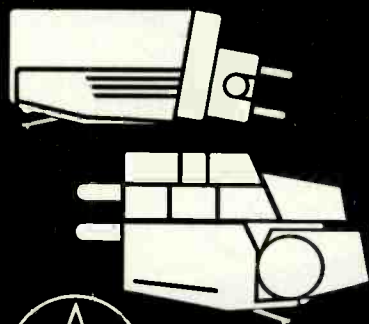
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world's smaller giants. "It produces," Robinson says—though he must mean that it *manufactures*, for producing is something quite specifically different—133 million LPs and cassettes annually, which does not strike me as being a particularly large number at all. When I was vice-president of the world's largest record company, more than ten years ago, we figured that it took only a few days for just our own plants and just those in the United States to match a year's output of the Soviet Union. I'm sure that you could get some up-to-date comparative figures on this from the Record Industry Association of America that would interest your readers greatly.

Leonard Burkat
Danbury, CT.

We'll do just that, if you promise not to tell the Soviets that they've fallen behind in this critical measure of strategic power. By the way, any time you can think of an American label with as many classical titles in print as Melodiya has, let us know.—Ed.

ROYAL FLUSH

YOU REPORT THE ROYAL PHILHARMONIC'S claim to be "the first orchestra in the world

to have its very own record label" [July 1986]. Not so. How could you forget the Louisville Orchestra's First Edition series, which has been so important in recording and distributing new music deemed "non-commercial" by the major labels? From your description of their planned repertory, it doesn't seem that the RPO label will be making any comparable contribution, since Walton's *Belshazzar's Feast* is more than adequately represented on record (and deserves reissue on CD in the composer's own excellent recording).

Arthur S. Leonard
New York, N.Y.

We apologize for failing to catch the Brits at their usual game of jingoism. By the way, according to the SCHWANN catalog, not a single LP or cassette of Belshazzar's Feast is currently in print.—Ed.

SUPREME REFERENCE?

I AM INTRIGUED AND HIGHLY CONFUSED. IN HIS review of Giuseppe Sinopoli's Mahler Fifth [June 1986], Harry Halbreich described the performance as having "attacks, nuances, and articulation . . . of matchless precision" and said that it reminded him of the "supreme reference" of Hermann Scherchen.

A year ago, I heard the Scherchen Westminster set and was amazed that so many poor attacks, false entrances, and missed entrances (obvious enough that I heard them without having a score) could have been passed, even 35 years ago. Any emotional effect was shattered when the final note of Part One (end of Side One) was not an exhausted tap but a gigantic slug.

It wasn't "routine"; it wasn't "traditional"; but was it even Mahler? I just don't understand how something as rudimentarily wrong as peak volume for a whisper can be a "supreme reference." Or was this an early example of "fresh views"? I'm baffled.

Richard Sebolt
Springfield, Mass.

Recording techniques being what they were 35 years ago, it's possible that the drum stroke in question was softer than it sounded. Still, your point is valid as far as the "accuracy" of that Scherchen performance is concerned. But remember that Mr. Halbreich wrote that it was "especially in the first movement" that the Sinopoli account reminded him of the Scherchen LPs.—Ed.

KOCSIS KUDOS

MY COMPLIMENTS FOR THE VERY FINE PIECE ON Zoltán Kocsis [January 1987]. Rarely has an interviewer been able to penetrate Kocsis's many complex barriers as sensitively as Varga did.

Nancy Zannini
Vice-President, Philips Classics
New York, N.Y.

LOST AND FOUND

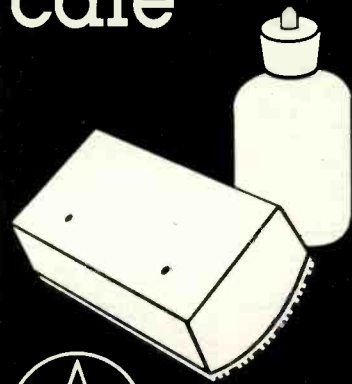
WHEN I MOVED FROM GRADUATE SCHOOL several years ago, a box containing more than 300 LPs was lost. Much of the collection has been replaced. Next on the list for replacement are complete versions of the three Tchaikovsky ballets. In your opinion, which are the best of the sets available today? I want LPs with today's stereo sound and performance, but not specifically digital.

George C. Ongemach
Spartanburg, S.C.

You can't do better than Doráti when it comes to the Tchaikovsky ballets, so I would recommend his more recent accounts of the complete Nutcracker, still in print, and the complete Sleeping Beauty, recently deleted, both with the Concertgebouw Orchestra on Philips, both beautifully recorded. For Swan Lake, you might try the Ozawa recording with the Boston Symphony on Deutsche Grammophon. There are five complete Nutcrackers on CD at the moment, one Swan Lake (the Ozawa), but not a single Sleeping Beauty. Prince Charming, where are you when we need you?—Ed.

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

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CO Arvada: Soundtrack • **Aurora:** Soundtrack • **Boulder:** Soundtrack, Wavelength Stereo • **Colorado Springs:** Sunshine Audio • **Denver:** Soundtrack • **Littleton:** Soundtrack • **Pueblo:** Sunshine Audio • **Thornton:** Soundtrack
CT Avon: Hi Fi Stereo House • **Fairfield:** Audio Design • **Greenville:** Al Franklin's • **Groton:** Robert's • **Hartford:** Al Franklin's • **New Haven:** Audio Den • **Newington:** Hi Fi Stereo House • **New London:** Robert's • **Norwalk:** Auditoriums
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EDITED BY CHRISTOPHER J. ESSE

Home Videotape Editing System

THE MAKING OF HOME MOVIES HAS BECOME relatively easy with the arrival of camcorders. They offer long recording times, painless operation, and immediate results. The tendency among most amateur videographers, however, is to shoot first and ask questions later. Basic cut-and-slash edits can later be made onto a home VCR, and there are devices on the market that can do fading, framing, and tiling to tidy things up. Beyond this are professional editing devices that can provide some degree of automation, but they are fairly expensive and won't work with typical consumer camcorders and VCRs. Especially speaking, home editing is a messy chore.

The first product from a new California-based company seeks to alleviate this problem. The Videonics home editing system can be programmed in advance to automatically perform a number of essential editing functions and to insert titles and creative effects in conjunction with a second VCR that has an infrared wireless remote. The system consists of a control console that connects with the source deck (usually a camcorder); a second, or "destination," VCR; and a video monitor. A comprehensive wireless remote is used to control all of the editing functions, including the starting and stopping of the destination deck (the remote must first be programmed to mimic the destination deck's remote). To understand how the Videonics system works and what it can do, let's

examine a typical application. Consider an hour-long camcorder recording. First, this tape is played back by the camcorder and recorded in its entirety on a blank tape in the destination deck. As these signals pass through the Videonics unit, a timing track and "event" markers are invisibly embedded within the video signal being recorded. The events are small electronic impulses (unrelated to the primary video and audio signals) that are detected in the original tape; the markers will later be used to synchronize the timing of your editing instructions with the final production on a fresh blank tape.

The next step is to play back the copied version on the destination deck. As you view this copy, a portion of your TV screen will display a menu of commands for specifying the start and stop points for the scenes that you wish to keep; also displayed is a running bar graph that charts your progress through the tape and shows the sections that you have blocked off. A "help" button on the remote will display more-detailed instructions as needed. Points within a scene that may later be chosen for a title insert or a creative effect can be noted by the reading on a timer display. Now you are ready to create the storyboard. Selected scenes can be arranged in any order, and tiling and creative effects can be specified for insertion at any point between or within these scenes. Tiling can be done in any of 64 colors; creative effects in-

Magnificent Reception.

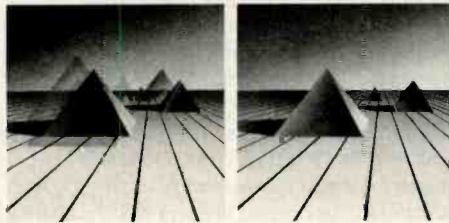
THE TX-11a COMBINES CARVER'S REVOLUTIONARY ASYMMETRICAL CHARGE COUPLED FM DETECTION CIRCUITS WITH AN AM STEREO SECTION CAPABLE OF FM-QUALITY RECEPTION.

The Carver TX-11a Stereo AM-FM Tuner is the most complete high fidelity broadcast reception component ever offered. It is a technical tour-de-force which further distances Bob Carver's unique products from traditional electronic components. First, by eliminating forms of FM distortion and interference that even the most expensive tuners available can't correct. And second, with a unique additional tuning section capable of making AM stereo sound as good as FM!

THE SILENT TREATMENT. While AM stereo may not yet be available in your area, you can receive FM stereo. Including stations so fraught with interference and distortion that you may be tempted to return to mono AM. That's why the TX-11a includes the first circuitry to remove hiss, "picket fencing" and the myriad other unpredictable noises which often disturb FM listening. Without reducing stereo imaging, frequency response or dynamic range.

Part of the FM signal, the left minus right portion, is extremely prone to "ghosting," or multipath interference caused by hills, buildings and other obstructions. Bob Carver's Asymmetrical Charge Coupled circuitry cancels distortion-causing "dirty mirror" images before they can reach your ears. It filters out noise and restores the part of the signal

needed by our ears and brain to construct stereo imaging. Reintroduced into the mono (L + R) signal matrix, a net reduction of 93% — or better than 20dB of noise reduction — is achieved. All ambient and localizing information is recovered. Only hiss and



distortion are left behind. Or, as *High Fidelity* magazine put it, "... clean, noise-free sound out of weak or multipath-ridden signals that would have you lunging for the mono switch on any other tuner."

Ovation magazine observed that the circuit, "... may well mean the difference between marginal reception of the station signals you've been yearning to hear and truly noise-free reception of those same signals."

Audio magazine called it, "An FM tuner breakthrough."

THE FIRST AUDIOPHILE AM STEREO CIRCUITRY. Contrary to popular belief, most AM stereo stations have frequency response (20-15kHz), separation (35dB) and signal-to-noise ratios (70dB) audibly indistinguishable from FM stations of equal strength. But only Carver offers the technology to appreciate this hidden performance.

At a press conference in front of America's top stereo writers, Bob Carver unveiled a low powered C-QUAM format AM stereo broadcast transmitter with a Carver Compact Disc Player as a source. The CD source and the TX-11a were also routed directly to a preamplifier and speakers for comparison.

When Bob switched back and forth, most listeners had difficulty distinguishing between the straightwire CD player and the TX-11a's over-the-air AM stereo reception! Many could tell no difference at all!

HUMAN ENGINEERED FEATURES AND CONVENIENCE. The TX-11a is designed to make enjoying FM and AM easy, not dazzle you with flashing light and complex programming. Thirteen presets, wide/narrow band selection, automatic/manual scanning as well as Multipath and Noise Reduction buttons are inset into the burnished anthracite metal face. Full instrumentation including digital display, 6-step signal strength LEDs and other monitor functions are tastefully recessed, visible but not garish. The result is performance without theatricality, access without complication.

CLEAR THE AIR by visiting your nearest Carver dealer. Ask to hear the most expensive tuner they sell. (It probably won't be the Carver TX-11a). Tune a multipath-ravaged, hiss-filled FM station on it; then the same station on the TX-11a Stereo AM-FM Tuner. Now press the Carver Multipath and Noise Reduction buttons. You'll hear why *High Fidelity Magazine* called it, "By far the best tuner we have tested..."



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clude a selection of prefabricated "occasional" graphics, such as a birthday cake or a Santa Claus.

Once the storyboard is constructed, you are ready to record the final production onto a fresh blank tape in the destination deck. The first copy, which you viewed while creating the storyboard, is not used here; instead, it can be filed away and used again to create another, possibly different, second-generation edited tape. Assume that you have chosen five scenes to be recorded in the order 1, 2, 5, 3, 4. Scenes 1, 2, and 5 will be recorded sequentially, along with any specified titling and effects. (Remember, the Videonics remote has now been positioned to control the destination deck's transport.) Meanwhile, you can sit back with the Sunday paper. When Scene 5 is finished, the system's attention indicator will light, and the on-screen display will instruct you to fully rewind and then restart the source tape so that Scenes 3 and 4 can be located and recorded. A reordering of scenes such as this requires that the source tape be reinitialized, which is a minor inconvenience considering that the actual editing process is completely automatic. When it's all over, you'll have a customized home video production.

The Videonics home editing system is

modular, the first unit being the control console (also called Direct-Ed) described here. It retails for \$500. Additional modules scheduled to be introduced (for about \$100 each) will connect to the control console via a central information bus. For more information, write Videonics, 15951 Los Gatos Blvd., Suite 18, Los Gatos, Calif. 95030.

CAR RADIO ADAPTER

THE SOUND SENDER MAKES IT POSSIBLE TO listen to a portable CD or cassette player through any car audio system that contains an FM radio. The unit connects at one end to the headphone jack of a portable player and at the other to the car's cigarette lighter, from which it broadcasts (in mono) the supplied signal through the car's electrical system. The signals can be received on any FM channel between 105.1 and 107.1 MHz by matching the setting of the unit's frequency dial with the radio's tuned frequency. According to its distributor, the Sound Sender uses a proprietary circuit that enables it to feed a signal through a car's filtered electrical system. Retail price is about \$30. For more information, write to Hartzell Manufacturing, Dynasound Organizer Div., 2516 Wabash Ave., St. Paul, Minn. 55114.

UNIQUE SPEAKER SYSTEM

GETTING BIG SOUND FROM A SMALL BOX IS A continual pursuit of loudspeaker engineers, since in many listening rooms a large speaker system is undesirably obtrusive. We previewed the Bose AM-5 system in what would be considered an average-size listening room. Each cube speaker array was hidden behind a decorative tree, and the bass module was off to the side behind a couch. Initially, we were led to believe that the impressive sound was emanating from the speakers in a console television, which might have proved less surprising than what was subsequently revealed when the trees were removed.

Like the Bose Acoustic Wave system, used most recently in a new line of Zenith television sets (see "Currents," December 1986), the AM-5 system uses just one relatively small enclosure to reproduce low bass frequencies. According to accepted auditory research, the human hearing system cannot localize low bass frequencies, so a single bass source can be placed almost anywhere within a listening room without compromising the perceived stereo image. This is the theory behind subwoofer systems. But a typical subwoofer is subject to distortion caused by deformation of the speaker cone. (CONTINUED ON PAGE 16)

THE ALAN PARSONS PROJECT COMPLETE COMPACT DISC CATALOGUE

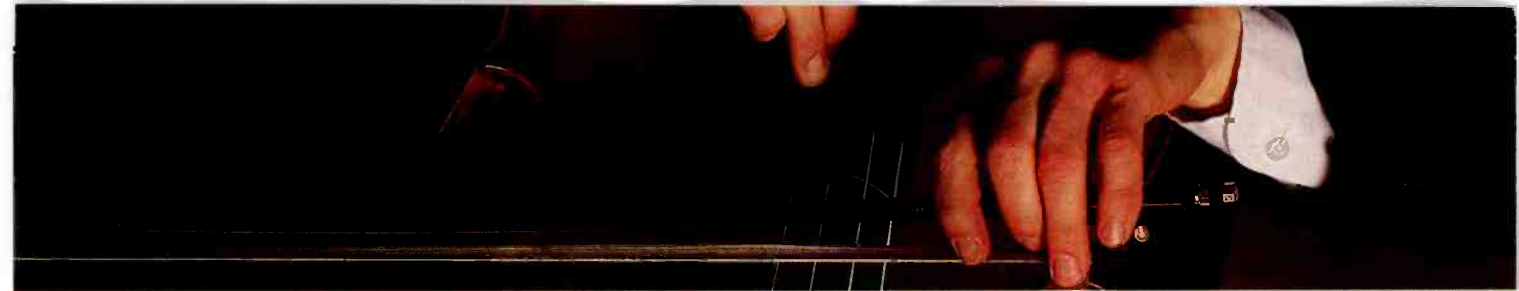
<p>I ROBOT</p>  <p>ARCD 8040</p>	<p>PYRAMID</p>  <p>ARCD 8225</p>	<p>EVE</p>  <p>ARCD 8062</p>	<p>THE TURN OF A FRIENDLY CARD</p>  <p>ARCD 8226</p>	<p>EYE IN THE SKY</p>  <p>ARCD 8033</p>
<p>THE BEST OF THE ALAN PARSONS PROJECT</p>  <p>ARCD 8193</p>	<p>AMMONIA AVENUE</p>  <p>ARCD 8204</p>	<p>VULTURE CULTURE</p>  <p>ARCD 8263</p>	<p>STEREOTOMY</p>  <p>ARCD 8384</p>	<p>GAUDI</p>  <p>ARCD 8448</p>

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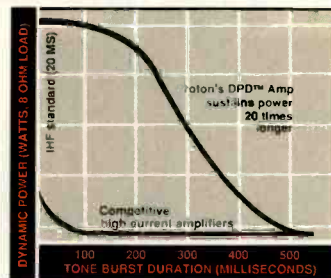
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(CONTINUED FROM PAGE 14)
The resulting spurious harmonics can reach up into frequencies that *can* be localized.

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First, there is negligible cone excursion at the enclosure's two resonant frequencies, which minimizes the amount of distortion actually generated by the drivers. Second, because the acoustical response of the ports rolls off steeply above approximately 110 Hz and all the output is through the ports, most of the distortion that is emitted by the drivers is filtered out. Since it is small enough to be easily moved, the bass module can be positioned to provide more or less bass according to personal taste and the acoustic properties of the listening room.

Frequencies above 180 Hz are reproduced by a pair of minuscule (about four inches a side) speaker arrays, each consisting of two identical speaker cubes, mounted axially and connected by a standard phone jack to allow full 360-degree rotation. Bose says that a coupling effect between the two 2½-inch drivers in each array causes them to act like a larger single driver to produce the upper bass frequencies.

Crossover circuits for both channels are contained within the bass module, which thus serves as the connecting point between the satellite speakers and the amplifier. System impedance is a nominal 4 ohms, and Bose cautions against using amplifiers that cannot handle such a low-impedance load. The satellite units are magnetically shielded for use in proximity to video gear. Retail price for the system is \$600. A pair of optional mounting arms, like those used for the Bose Roommate and 101 systems, costs \$40. For more information, write Bose Corp., The Mountain, Framingham, Mass. 01701.

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- 350736. Rolling Stones—*Rewind*. (Rolling Stones Records)
- 348987-398982. Linda Ronstadt—*Round Midnight with Nelson Riddle and His Orchestra*. (Asylum)
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- 319996-399998. Motown's 25 #1 Hits From 25 Years. (Motown)
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- 291278. The Doobie Brothers—*Best of the Doobies*. (Warner Bros.)
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- 314443. Neil Diamond's 12 Greatest Hits, Vol. 2. (Columbia)
- 308049. Creedence Clearwater Revival Featuring John Fogerty/Chronicle. *Greatest Hits*. (Fantasy)
- 343582. Van Halen—*5150*. (Warner Bros.)
- 345553. Branford Marsalis—*Romance For Saxophone*. Top 10! English Chamber Orchestra. (Digital—CBS Masterworks)
- 347054. David Lee Roth—*Eat 'Em and Smile*. *Yankee Rose*; *Gain Crazy*; more. (Warner Bros.)
- 263293. Bolling: *Suite For Flute & Jazz Piano*. Rampal, Bolling. (CBS Masterworks)
- 343327. Wynton Marsalis—*Jolivet/Tomas: Trumpet Concertos*. Philharmonia Orchestra. (Digital—CBS Masterworks)
- 339226. Gershwin: *Rhapsody In Blue*; *Second Rhapsody*; etc.—M. Tilson Thomas, Los Angeles Phil. (Digital—CBS Masterworks)
- 326629. Bruce Springsteen—*Born In The U.S.A.* (Columbia)
- 342097. Barbra Streisand—*The Broadway Album*. *Somewhere*; *Something's Coming*; more. (Columbia)
- 341073. Steely Dan—*A Decade of Steely Dan*. *Reelin In The Years*; *Hey Nineteen*; more. (MCA)
- 345827. Bob James and David Sanborn—*Double Vision*. Joined by Al Jarreau, others. Includes *Since I Fell For You*. (Warner Bros.)
- 343095. Philip Glass—*Songs From Liquid Days*. Lyrics by Paul Simon; David Byrne; etc. Featuring Linda Ronstadt. (CBS)
- 219477. Simon & Garfunkel's *Greatest Hits*. *El Condor Pasa*; *Bridge Over Troubled Water*; etc. (Columbia)
- 316604. Tchaikovsky: *1812 Overture*; *Marche Slave*; *Beethoven: Wellington's Victory*. Lorin Maazel, Vienna Phil. (Digital—CBS Masterworks)
- 343286. Phil Collins—*No Jacket Required*. Album of the Year! (Atlantic)
- 348649. The Pachelbel Canon And Other Digital Delights. The Toronto Chamber Orchestra. (Digital—Fanfare)



349324



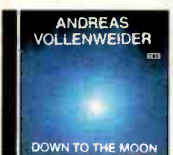
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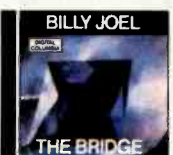
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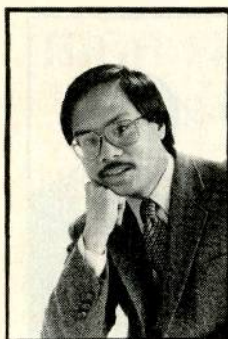
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THE COMPLETE CD PLAYER

IN OFTEN FRUITLESS ATTEMPTS TO DIFFERENTIATE their products from those of the competition, manufacturers of CD players have been waging the same two-front war over specifications and features that they've been fighting in other product areas. Sometimes the weapons border on the bizarre: Vibration-isolating feet, optical coupling between circuits, and random-track-order playback are just three of many features meant to attract attention, if not improve audible performance. In the works are 18-bit digital-to-analog converter chips, which probably won't make for better-sounding players either, although they will undoubtedly unleash a violent round of one-upmanship in specifications. I suggest that you ignore such controversies and instead look for new features that will really enhance the usability of a CD player. For example, take the following blue-sky ideas, all of which I would build into a truly complete CD player.

WIGWYD. "Where it goes is where you direct" derives from WYSIWYG, computer-talk for "what you see is what you get." No CD player in my experience behaves in this way. All of them, even the "professional" ones, are factory-programmed with certain assumptions in mind. At the end of a disc, say, they all stop disc rotation and reset the laser to its starting position. This assumes that the user will either change the disc or start it over. I, for one, am just as likely to want to replay the climactic closing chords of a piece and would prefer to just back up the laser from the end of the disc (a location very difficult to cue up with most players). A CD player should "begin at the beginning," as the King said in *Alice's Adventures in Wonderland*, "and go till [it comes] to the end; then stop." It should reset neither laser position nor track counter but should simply halt like a cassette deck coming to the end of its tape. The series of digital pits on the disc should be handled more like the tape in a cassette than the groove on an LP.

A USEFUL INDEX FUNCTION. Most CDs could profit by index points encoded at significant junctures in the music (arias within an act of an opera, for example, or exposition, development, and recapitulation sections in a symphony movement), but they don't have them, so a CD player's index buttons are useless most of the time. How about a switchable index control that can be set to move playback by fixed amounts of time within a track? A 15- or 30-second jump function would greatly aid in cueing up desired passages and would make the following feature less necessary.

VARIABLE FAST-SCANNING. Some of the very first CD players (like Sony's classic CDP-101) had two scanning speeds selected by different buttons so that the user could switch between fast- and slow-scanning at will. Nowadays, the faster speed becomes available only after you've held down a button for a few seconds of slow-speed scanning, a significant decline in flexibility. The ideal solution would be a variable-speed scanning function controlled, perhaps, by a slider or knob. The way scanning operates in most players—by skipping a fixed number of turns in the

trail of pits—precludes a continuous change in scanning speed, but the gaps between available speeds might be made too narrow to matter.

ERROR INDICATORS. Every player's digital decoding circuits produce signals that indicate when they have detected an error in the digital bit stream and the severity of that error. Very few manufacturers of home CD players have taken advantage of these signals and put on the front panels monitor lights that flash whenever the player's error correction circuits are correcting or interpolating. If realized properly, the correction lamp would flash fairly often, whereas the interpolation light would rarely turn on (maybe once every several discs when playing undamaged pressings). Not only would I like to see such lights on more players, I'd also like an indicator that comes on in the event of music-disrupting mistracking (a "stuck groove" or skip). This would not only assist in set-and-forget dubbing but would also enable radio programmers to audition CDs for pressing faults and disc damage without having to listen to them.

INTERACTIVE REMOTE CONTROL. This might be asking for a bit too much, at least in terms of battery life, but all manner of consumer devices have long been in need of infrared remote controls with low-power liquid-crystal readouts showing the current status of the controlled device. It's simply unreasonable to expect a user to read microscopic front-panel indicators from across the room.

While I'm in this comprehensive mood—and because this article is more of a wish list than a prescription for design—I might as well throw in those features that would make for an ideal CD player:

- A display switchable among all six useful modes (elapsed or remaining time since the start of the track, programmed sequence, or disc).

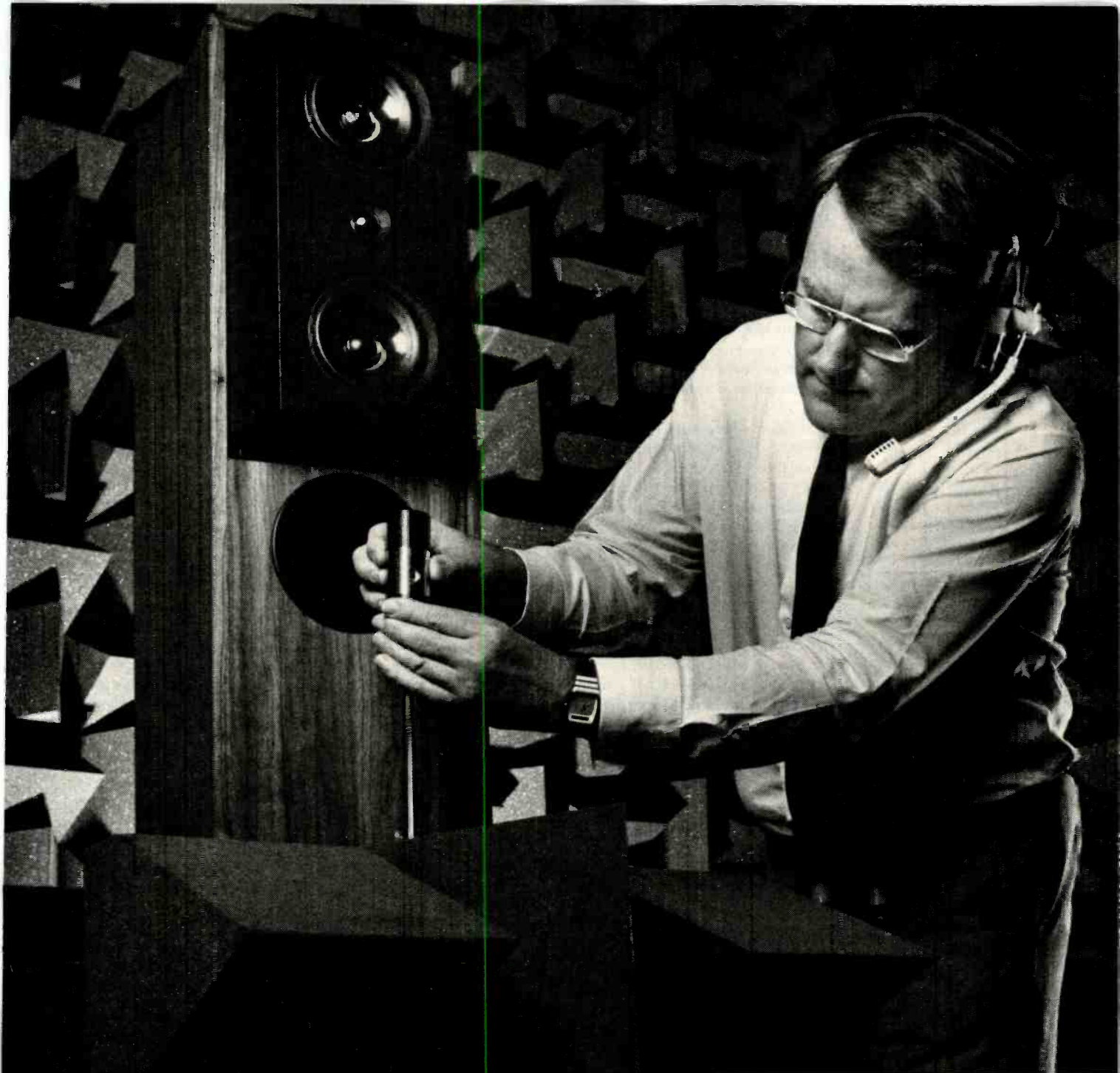
- Complete cueing capabilities (track, index point, and time).

- A de-emphasis indicator light showing when a disc or track has automatically switched in the player's de-emphasis network.

- A full complement of repeat modes (disc, track, user-selected passage) that can be activated without using the programmed playback functions.

- A good-sounding—preferably digitally processed—variable compressor circuit. One cannot always use or appreciate 90-plus dB of dynamic range.

Alert CD-player shoppers will note that some, but not all—and not with the completeness contemplated here—of these last features are available in many models now on the market. Although manufacturers undoubtedly would like to install more of these capabilities in their products, each would add at least a small increment to the cost of a player. (Someone has to pay for that extra pushbutton.) But before long, unless new CD capabilities like graphics and interactive audio/video programming start stimulating new sales and new markets, you just might start seeing some of these features on the latest players, as manufacturers seek to market the one that does it all. ■



**'Before we could make our speakers better,
we had to invent a better speaker test!'**

—Laurie Fincham, DIRECTOR OF KEF RESEARCH AND DEVELOPMENT

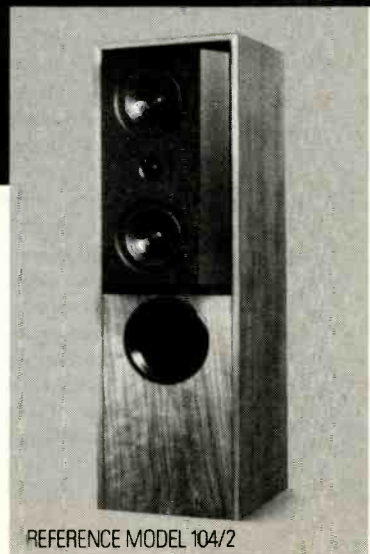
ONE STEP IN THE MAKING OF A KEF

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THOSE PESKY CURVES

THERE ARE CERTAIN PERENNIAL TOPICS—LIKE, UNTIL recently, whose batting record Pete Rose was going to break *this* year—that automatically spring up among fans like dandelions in a turf outfield. In audio, one of those topics is the meaning of certain response curves, and the truth often is as astonishing to many audiophiles as a good curve ball is to an unwary batter.

In audio, as in baseball, you need a practiced eye to see what's really important. Of all the curves a tape deck can throw you, the most difficult to interpret correctly, I think, are those made with a companding noise reduction system. Whether we're dealing with one of the Dolby versions (B or C) or with DBX—or with one of the other systems that, whatever their virtues, have retired from the field in favor of these three—the relationship between the noise reduction system and the various ways frequency response is measured tends to produce misleading test results.

To determine how much boost or attenuation should be applied at any instant, a compander system "looks at" the signal in a band of control frequencies. This signal must be band-limited if it is not to lead the system astray. If, for example, Dolby B (which compands only the high frequencies) were to respond to bass-drum beats, altering level each time the drum was struck no matter what was going on in the highs, you would hear the tape hiss pulsing along with the drum whenever there were no loud highs to mask the hiss. Consequently, Dolby B (and Dolby C and DBX) use control bands that cut out the extreme highs and lows.

A tape recorder's frequency response usually is measured with swept tones whose instantaneous waveform is sinusoidal (that is, it is a "pure" tone) but whose frequency is constantly increasing. The tone generator starts at 20 Hz—below the control band of any home compander system I'm familiar with—and sweeps up to, usually, 20 kHz. A chart recorder capable of locking onto the instantaneous frequency tracks the tone and graphs the recorder's output response over the covered range.

As long as the signal frequency is outside the control band, the compander behaves as though no signal were present; when the signal is within the control band, the compander will respond accordingly. When a deck's output is inherently flat, a properly adjusted compander will maintain this flat response. But if the test signal reaches a response anomaly within the control band, the compander will interpret this as a shift in level that requires compensation. In playback, this means expansion: Any rise or dip in basic deck response will thus be exaggerated.

Let's assume, for instance, that we are using a 2:1:2 compander with a deck that, for whatever reason, inherently rolls off by ½ dB at 4 kHz, 1 dB at 8 kHz, 3 dB at 10 kHz, and 6 dB at 15 kHz. Assuming that all these frequencies are within the compander's control band, it will double all of these attenuations, and a swept tone will be down by 1 dB at 4 kHz, 2 dB

at 8 kHz, 3 dB at 10 kHz, and 12 dB at 15 kHz. How can such test results be misleading? After all, they are obtained by methods valid for amplifiers and other components.

Try listening to music on such a deck, and you'll find out. In practice, this exaggeration does not take place. When you record a typical broadband music signal and switch the compander in and out so that you're comparing record/play with and without noise reduction, you may hear a significant difference in hiss content, but you will hear little or no difference in the apparent spectral content of the music. The reason is that nearly all musical sounds contain many different frequencies simultaneously; on the whole, most of the musical information is at frequencies that are not influenced by response anomalies. Any response errors that do take place, therefore, are swamped by correct performance at other frequencies: Whereas 100 percent of the control signal was affected as a swept test tone passed by a response anomaly, perhaps only 10 percent or less of the control signal is changed with music. Here, the changes added by expansion during playback are slight, and the actual frequency response with music is flatter to the ear than the test response curve is to the eye.

Just how a given compander will be misrepresented by a swept-tone test depends on several factors. With Dolby noise reduction, the level at which the test is carried out is important because that system applies its compansion only in part of the frequency range (the higher frequencies) and only in part of the dynamic range (roughly, between 0 and -40 dB) within that frequency range. DBX is more straightforward in its action, but it uses a higher compansion factor, which can further exaggerate any response anomalies during tests while providing greater noise reduction.

So how does one interpret frequency response curves taken with and without noise reduction? Begin by comparing them. In any frequency range where the curves without noise reduction are flat, the departures from flat with noise reduction tend to be occasioned by causes that will affect music recordings as much as swept tones. Where basic deck response isn't flat, the measured anomalies with noise reduction may or may not affect music recordings similarly. You have to ask yourself what available mechanisms may be at work. Is the mistracking inherent to the noise reduction system's design or merely a by-product of its misadjustment? Poor tape choice for the deck in use also can introduce tracking problems, as well as compromising the flatness of high-frequency response. In cases where anomalies without noise reduction are simply exaggerated by the compander, the chances are that music will suffer much less than swept tones. Though departures from flat response occasioned by a mistracking noise reduction system are generally far less audible than they appear to be on swept-sine frequency response plots, the less mistracking the better. ■

ONE STEP IN THE MAKING OF A KEF

Anyone can build a good prototype. The real challenge is assuring the quality of everyday production. That's why KEF have the most stringent production test programme in the industry.

'We test each individual Reference Series driver for amplitude response with respect to frequency. The computer collates the tested drivers and crossovers into left and

right pairs that match to better than $\pm 0.5\text{dB}$. This accounts for KEF's spot-on stereo imaging. Then we test the completed pairs for frequency and phase response against the original prototype.

'We keep all this data by serial number on permanent file. If a driver should ever need replacement, we can supply an exact duplicate.'



REFERENCE MODEL 'C7

KEF
The Speaker
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'Our testing may seem fanatical, but it's the only way to guarantee performance.'

—Frank Merricks, KEF PRODUCTION ENGINEER



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



NICK BASILION

**This month, the first thorough laboratory appraisal of Multi-
vision's innovative Model 3.1 digital TV tuner, which displays
picture-in-picture and other special effects on any TV set or video
monitor. Also tested are the two car-stereo front ends pictured at
left, the Sherwood CRD-350 with its matching EQA-280
equalizer/amp and the Clarion Audia 200; Yamaha's CD-2000
Compact Disc player; Tandberg's no-holds-barred \$3,000
power amp, the TPA-3016A; the Linn Axis turntable; and the Teac
V-770 cassette deck. Reports follow.**

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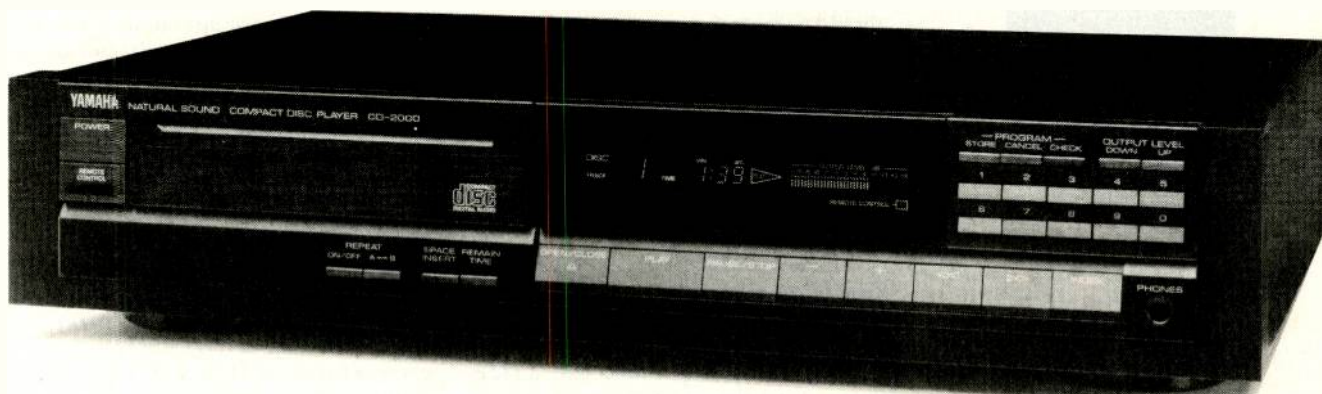
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Yamaha CD-2000 Compact Disc Player



DIMENSIONS: 17 BY 3 1/4 INCHES (FRONT), 11 INCHES DEEP PLUS CLEARANCE FOR CONNECTIONS. **PRICE:** \$800, INCLUDING RS-D20 WIRELESS REMOTE CONTROL. **WARRANTY:** "LIMITED," ONE YEAR PARTS AND LABOR. **MANUFACTURER:** NIPPON GAKKI CO., LTD., JAPAN; **U.S. DISTRIBUTOR:** YAMAHA ELECTRONICS CORP., USA, 6660 ORANGETHORPE AVE., BUENA PARK, CALIF. 90620.

YAMAHA'S TOP-OF-THE-LINE HOME Compact Disc player, the CD-2000, is basically the same as its rack-mount professional model, the CD-2000M. As such, it incorporates a number of relatively rare features. Prominent among these is a heavy copper vibration-damping assembly surrounding critical portions of the digital-to-analog conversion circuitry. This is said to reduce audio distortion stemming from signal modulation caused by external vibrations.

Of much more apparent utility are the dual sets of gold-plated outputs on the back panel, the level of one pair being adjustable by two front-panel buttons, and the supplied wireless remote control, which duplicates the front-panel features (including VOLUME, but excluding the main power switch). This suggests two basic hookup schemes. You can wire the adjustable output (labeled "line") into your main system so that the level of CDs, at least, can be controlled from your armchair. Or, if you frequently listen through headphones connected directly to the player, you may prefer to use the remote to control their level and connect the fixed output to your other components. A sub-code output is also provided for connection to still unannounced accessories.

Particularly welcome, if you have CDs with indexing (the intratrack access points that many players—and most CD producers—ignore), is the ability to check your

place in the music by pressing INDEX (which, for a few seconds, replaces the time display with the index number) or to go directly to an index point by using the front-panel or remote-control numerical keypad.

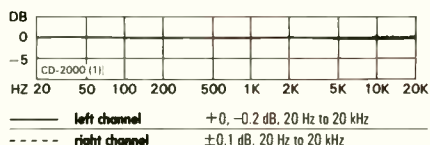
The keypads also simplify track selection. With them, you can go directly to the beginning of any track or program a sequence of as many as 12 selections for playback. You can repeat the sequence, the whole disc, or any portion of the record between cues (which can be set anywhere). You can skip forward or back, track by track. And you can scan at high speed or, if you keep the control pressed for a second or two, at a still higher speed. If you begin scanning from PAUSE, the process is silent, guided only by the track/time readout; if you start from PLAY, you can hear the music pass by quickly at reduced output. In normal operation, the display can be switched to show either elapsed time of a track or remaining time on the disc or in a programmed sequence.

A matter of taste (though it really pleased ours) is the SPACE INSERT, which adds about three seconds of silence to the time between tracks on a disc. This extra breather gives each selection its due, minimizing the impression of Muzak-like background in playing pop albums, recital discs, or even classics with separate tracks for each movement.

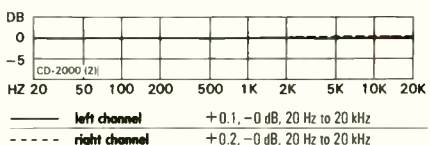
The mild and nearly symmetrical ringing in the pulse and square-wave photos speaks clearly of Yamaha's two-times oversampling digital filter system, which is supplemented by gentle analog ultrasonic filtering. (Only digital processing can produce "non-causal" ringing that occurs before the transient that triggers it.) There is a slight response ripple, amounting to about 1/4 dB between the lowest dip just below 15 kHz and the

All data were obtained using the Sony YEDS-7, Technics SH-CD001, Philips 410 055-2, and Philips 410 056-2 test discs.

FREQUENCY RESPONSE WITHOUT DE-EMPHASIS



FREQUENCY RESPONSE WITH DE-EMPHASIS



CHANNEL SEPARATION (at 1 kHz)	96 dB
CHANNEL BALANCE (at 1 kHz)	±0.1 dB

S/N RATIO (re 0 dB; A-weighted)	
without de-emphasis	99 3/4 dB
with de-emphasis	104 dB

HARMONIC DISTORTION (THD + N; 40 Hz to 20 kHz)	
at 0 dB	≤ 0.050%
at -24 dB	≤ 0.050%

IM DISTORTION (70-Hz difference; 300 Hz to 20 kHz)	
0 to -30 dB	< 0.01%

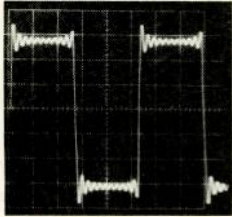
LINEARITY (at 1 kHz)	
0 to -40 dB	no measurable error
at -50 dB	-0.1 dB
at -60 dB	-0.2 dB
at -70 dB	-1 dB
at -80 dB	-3.6 dB
at -90 dB	-2.4 dB

TRACKING & ERROR-CORRECTION	
maximum signal-layer gap	800 μm
maximum surface obstruction	≥ 800 μm
simulated-fingerprint test	pass

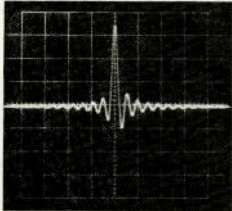
MAXIMUM OUTPUT LEVEL	
fixed line output	2.13 volts
variable line output	5.35 volts
headphone output	5.32 volts

OUTPUT IMPEDANCE	
fixed line output	585 ohms
variable line output	685 ohms
headphone output	100 ohms

SQUARE-WAVE RESPONSE (1 kHz)



IMPULSE RESPONSE



peak value just below 20 kHz (the precise lie of the curve depends on which channel you're examining), but no significant drop-off in response below 20 kHz.

The linearity data show an unusual downward "expansion" of low signal levels, as opposed to the slight upward "compression" that we normally see in this test. In any case, the nonlinearity is not nearly great enough to engender misgivings. Distortion products likewise are all below audibility, though the prevalence of the third and other odd-order harmonics induced us to give these data more than routine consideration.

In tracking and error correction, the player is rather more "tender" than most in its susceptibility to external shock. But no record skipped, repeated, or otherwise mistracked during our listening tests (as long as we didn't jar the player), and we encountered no evidence of problems caused by acoustic feedback.

Of the unit's virtues, the operation of the remote control will particularly appeal to many users. It is quite compact, even though it is powered by two supplied AA cells. The handset's rubberized buttons have a pleasant tactile quality, and the layout is less cluttered than average for a feature-laden player. What is special about the remote is precisely its comprehensiveness. You can even close the transport drawer from your chair, if you forgot to do so when you insert-

ed the disc, or open it so that the disc is out and ready for replacement by the time you get to the player.

When you operate the volume from the remote, you can see the resulting setting on the CD-2000's front panel, which includes a display resembling that for recording level in a cassette deck. Its equivalent of a 0-dB calibration is at "normal" level—that is, the level of the fixed output. The adjustment range is calibrated in dB above or below this point from +8 to -20 dB. So no matter what the program is doing at the moment, you can judge how far up or down you've adjusted the level (as long as you're not too far from the rather small display). The level you set is retained when the player is switched off. With our headsets, we found it necessary to adjust level well below "normal" if we weren't to jeopardize both the headsets and our ears.

Clearly, we are well pleased with the thoughtfulness that Yamaha has invested in the design of the CD-2000. Although it has an exceptionally full range of features and capabilities, none of them strikes us as all glitzy or frivolous. Their sober usefulness—and the player's simple and serious layout and appearance—doubtless are partly the by-product of the intent to make a similar transport in a rack mount for professional use. But whatever the derivation, the result is quite apt for a home deck. ■

T E S T R E P O R T S

Tandberg TPA-3016A Power Amplifier

DIMENSIONS: 17¼ BY 8¼ INCHES (FRONT), 13¼ INCHES DEEP PLUS CLEARANCE FOR CONNECTIONS. PRICE: \$3,295. WARRANTY: "LIMITED," THREE YEARS PARTS AND LABOR, TRANSFERABLE. MANUFACTURER: TANDBERG A/S, NORWAY; U.S. DISTRIBUTOR: TANDBERG OF AMERICA, INC., P.O. BOX 58, ARMONK, N.Y. 10504.

IN OUR APRIL 1985 ISSUE, WE REVIEWED (glowingly) Tandberg's TPA-3006A power amp. The TPA-3016A could almost be described as the same amplifier—only more so. For though it is bigger (more than twice as tall), heavier (more than 60 pounds), and substantially more powerful, it is very similar to the junior unit in design, construction, and overall styling. And this, we think, is to the good.

All of the circuitry is built around close-tolerance, high-grade discrete components, including eight power MOS FETs per channel in the output stage. MOS FETs (metal-oxide semiconductor field-effect transis-

tors) are more expensive than conventional bipolar devices, but they offer the designer some significant benefits. In particular, they are not subject to the thermal runaway that can cause ordinary transistors to self-destruct when asked to deliver large amounts of current. Consequently, they require no complex (and potentially fidelity-degrading) protection circuits to assure reliable operation. The TPA-3016A is prevented from outright overheating by a variable-speed fan that turns on only when the heat-sink temperature becomes too high; *in extremis*, the amp will shut itself down and light its front-panel thermal-overload LEDs (one per channel).

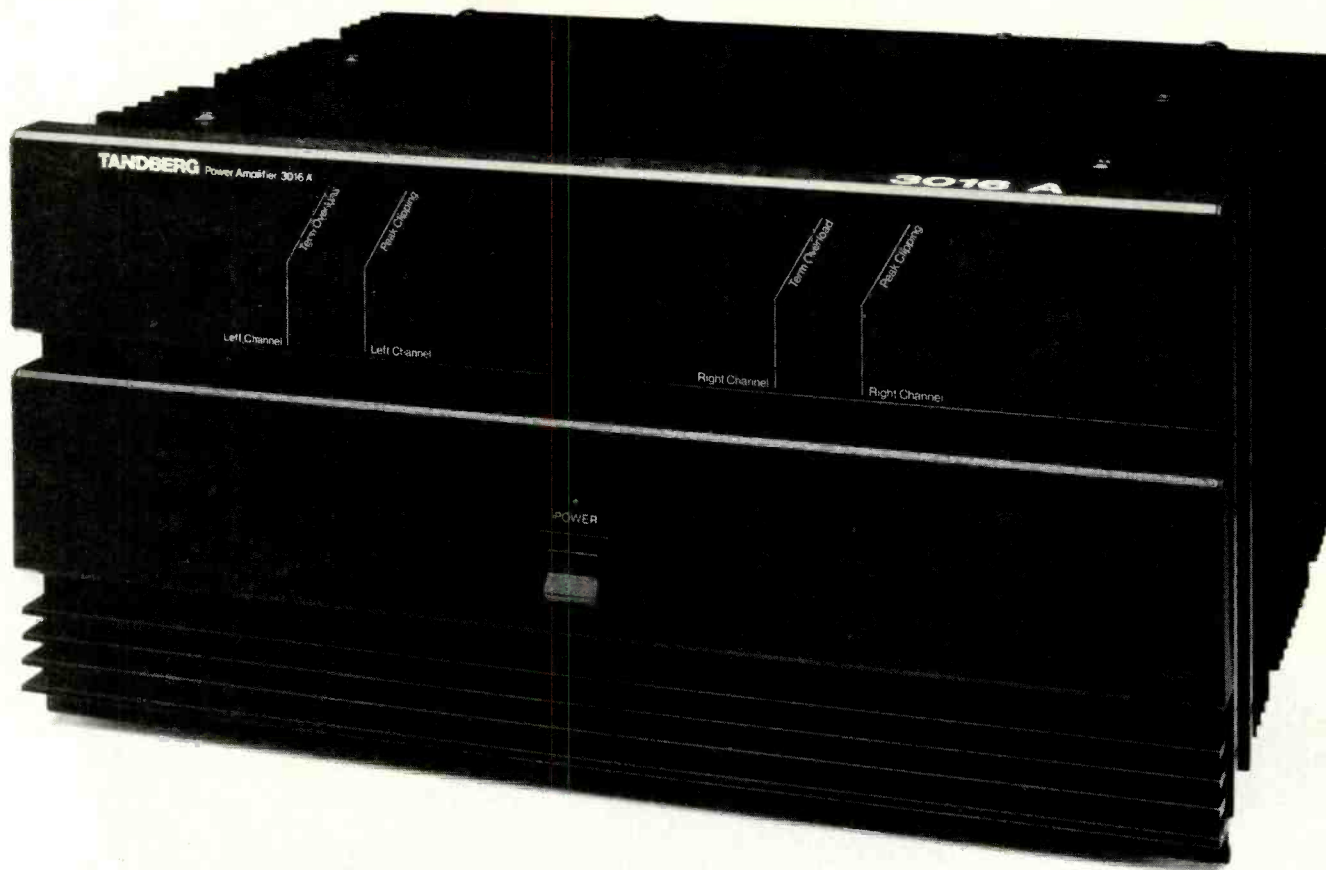
Even more unusual is Tandberg's avoidance of negative feedback. The company's engineers prefer instead to use feed-forward error correction, which can yield greater stability into some loads and, they feel, better

sound. A proprietary servo circuit is used to eliminate DC offset at the output.

The TPA-3016A's principal distinction from the 3006A, apart from sheer bulk, is its dual-mono construction. Each channel has its own massive power supply built around a 1.5-kilowatt transformer and 120,000 microfarads of filter capacitance (that's per side, remember).

In addition to the thermal-overload lights, the front panel has a pair of clipping indicators, a large power switch, and a pilot LED. On the back panel are pin-jack inputs and color-coded output binding posts suitable for use with banana plugs, spade lugs, or bared wire. Options include black Lucite or rosewood endpieces and rack-mounting kits.

Diversified Science Laboratories' measurements confirm that the TPA-3016A is an extraordinary amplifier. Power output is



very high into 8 ohms and increases steadily (and substantially) as the load impedance is reduced—evidence of high current capability. Short term (that is, in bursts of a few milliseconds), this amp can deliver the equivalent of 320 watts into 8 ohms, 560 watts into 4, and 810 watts into 2. Distortion at full rated

power is higher than we would expect to see in a modern feedback amp, but still well below the threshold of audibility. At modest outputs, it's quite low by any standard.

Two other points in the data bear mentioning as evidence of the design's technical tidiness. One is the damping factor (essentially an inverse index of the amplifier's output impedance), which is exceedingly high, not only at the reporting frequency (50 Hz), but all the way to the top of the audio band. Even at 20 kHz, it is still greater than 200, which is better than most amps in the deep bass. We don't want to make too much of this (damping factor is one of those things for which enough is enough and enough is not a lot), but it should help the TPA-3016A maintain flat frequency response into loudspeakers whose impedances drop very low in the extreme treble—most electrostatics, for example.

The other item is the channel separation, which also is large and holds up exceptionally well at high frequencies (84 dB at 10 kHz). Again, this does not in itself have any direct audible benefit—30 or 40 dB of separation at midband is more than enough for superb stereo—but it is indicative of Tandberg's meticulous engineering and craftsmanship.

In short, the TPA-3016A is an outstanding (if heavy and costly) amplifier capable of utterly neutral reproduction and very high output into virtually any load. We can't think of any greater recommendation for a power amp.

ABOUT THE dBW

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

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

RATED POWER	23.4 dBW (220 watts) / channel
OUTPUT AT CLIPPING (at 1 kHz; both channels driven)	
8-ohm load	24.5 dBW (280 watts) / channel
4-ohm load	26.6 dBW (460 watts) / channel
DYNAMIC POWER (at 1 kHz)	
8-ohm load	25.1 dBW
4-ohm load	27.5 dBW
2-ohm load	29.5 dBW
DYNAMIC HEADROOM (re rated power; 8-ohm load)	+1.7 dB
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)	
at 23.4 dBW (220 watts)	≤ 0.17%
at 0 dBW (1 watt)	≤ 0.024%
FREQUENCY RESPONSE	
	+0, -1/4 dB, < 10 Hz to 63.2 kHz
	+0, -3 dB, < 10 Hz to 282 kHz
S/N RATIO (re 0 dBW; A-weighted)	91 3/4 dB
SENSITIVITY (re 0 dBW)	100 mV
INPUT IMPEDANCE	140k ohms
DAMPING FACTOR (at 50 Hz; re 8 ohms)	430
CHANNEL SEPARATION (at 1 kHz)	101 dB

Linn Axis Turntable



SPEED ACCURACY (105 to 127 VAC)	
at 33 rpm	0.9% slow
at 45 rpm	1.0% slow
WOW & FLUTTER (ANSI weighted peak)	
average	±0.075%
maximum	±0.085%
TOTAL AUDIBLE RUMBLE (ARLL)	
	≈ -65 dB
EFFECTIVE TONEARM MASS	
	≈ 22 grams
VTF-GAUGE ACCURACY	
up to 1.0 gram	no measurable error
at 1.5 to 2.5 grams	reads 0.1 gram high
at 3.0 grams	reads 0.2 gram high
TOTAL LEAD CAPACITANCE	125 pF

DIMENSIONS: 17 1/4" BY 13 3/4" INCHES (BASE) PLUS CLEARANCE FOR CONNECTIONS, 5 1/2" INCHES HIGH WITH COVER CLOSED; ADDITIONAL 10 1/2" INCHES ABOVE AND 2 1/2" INCHES AT BACK NEEDED TO OPEN COVER FULLY. **PRICE:** \$575 INCLUDING LINN BASIK LVX TONE ARM; \$425 WITHOUT ARM. **WARRANTY:** "LIMITED," TWO YEARS PARTS AND LABOR. **MANUFACTURER:** LINN PRODUCTS, LTD., SCOTLAND; **U.S. DISTRIBUTOR:** AUDIOPHILE SYSTEMS, LTD., 8709 CASTLE PARK DR., INDIANAPOLIS, IND. 46256.

FOR MORE THAN A DECADE, THE LINN Sondek LP-12 turntable has been *the* model to own among serious audiophiles. Above and beyond its obvious craftsmanship and thoughtful design, it possesses the imponderable of charisma, an aura no doubt aided by its price (which, without tonearm, pushes \$1,000). But the Sondek is by no means as outrageously expensive as some truly radical designs, which it is not: Its route to excellence is thoroughly traditional. And now we have the Axis, which aims to achieve the same ends at a more modest price.

Price aside, a major factor in American hesitation to adopt the Scottish line without reservation has been the daunting need, in the original Sondek, to install your own tonearm. The new Axis turntable, which allows you the option of a premounted Linn Basik LVX arm, should therefore earn itself a much wider audience here. But it still, as the saying goes, requires some assembly, including adding oil to the bearing well. This requires some care (oil on the drive belt is to be studiously avoided) and makes the turntable messy to move unless you can keep it horizontal in the process. Linn does supply a plastic cap for the well, but it is not altogether leakproof.

Otherwise, setup is much the same as for any other belt-drive turntable. An inner platter is driven by the belt, working from the motor pulley. An outer platter and felt mat sit on top, hiding the pulley and contributing to the flywheel effect that helps minimize wow and flutter. A detachable, grounded (three-prong) power cord must be plugged into the chassis, and the arm's counterweight must be attached and adjusted for your cartridge, along with the antiskating. But since the turntable suspension is self-centering, you need concern yourself with leveling only if you use an arm other than the Basik. ▶

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As an integral part of the project, we harnessed the talents of one of America's top industrial designers to create a speaker that you'll be proud of even when it's not playing. In place of the typical 1/125-inch veneer, these speakers have solid American Walnut or Oak tops and bottoms* nearly one inch thick.

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*Wood top only on Model TSW-100.

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TONEARM/CARTRIDGE MATCHING GRAPH

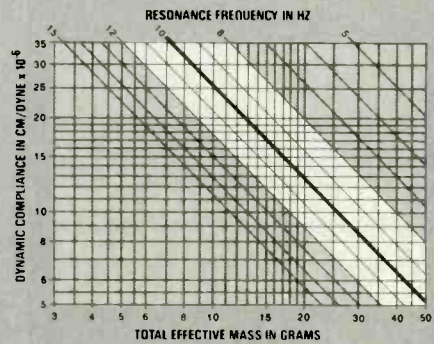
By means of this nomograph, you can quickly and easily determine the compatibility of any cartridge and tonearm we have tested. Ideally, the arm/cartridge resonance frequency (indicated by the diagonal lines) should fall at 10 Hz, but anywhere between 8 and 12 Hz will assure good warp tracking and accurate bass response. (It is usually okay to let the resonance rise as high as 15 Hz, although we don't normally recommend this.)

Begin by looking up the weight and dynamic compliance shown in the cartridge report and the effective mass listed in the turntable or tonearm report. Add the weight of the cartridge to the effective mass of the tonearm to get the total effective mass. Then find the point on the graph where the vertical line for the total effective mass intersects the horizontal line for the cartridge's dynamic compliance. For a good match, this point should fall in the white region, between the 8- and 12-Hz diagonal lines.

You can back-figure compliances and effective masses for cartridges and tonearms tested before we began reporting these figures directly (in January 1983). For cartridges, look up the vertical resonance frequency (measured in the SME 3009 Series II Improved tonearm) and the cartridge's weight. Add 15 grams (the SME's effective mass) to the cartridge weight to get the total effective mass. Then find the intersection of the vertical line representing that mass with the diagonal line representing the measured resonance frequency. Now you can read off the compliance from the horizontal line passing through the point of intersection.

For tonearms, look up the vertical resonance frequency as measured with the Shure V-15 Type III cartridge. Find the intersection of the diagonal line for that frequency with the horizontal line representing the Shure's dynamic compliance of 22.5×10^{-6} cm/dyne. Reading down the vertical line on which the point of intersection lies will give you the total effective mass of the arm with the Shure V-15 Type III mounted in it. Then subtract 6.3 grams (the weight of the V-15 Type III) to get the tonearm's effective mass.

Because of differences in measurement techniques, manufacturers' specifications for compliance and effective mass often differ from our findings and may therefore yield inconsistent results if used with this graph.



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The headshell—or, more properly, cartridge platform—is held in place by an allen screw at the end of the straight, tubular arm. A small hole in the outboard end of the platform calibrates overhang: When the stylus is directly under it and the cartridge body parallel to the outer edge of the platform, overhang and lateral tracking angle are optimized. The system couldn't be simpler. Antiskating is set at a dial just below the arm's rest lock; vertical tracking force (VTF) is adjusted in the usual fashion: by balancing the arm, setting the counterweight dial to zero, and turning the counterweight until the arm's index mark aligns with the dial calibration for the desired VTF.

A tap on the power switch—at the front edge of the base, outside the closed cover—starts the platter at 33 rpm and lights a red LED built into the switch. If you want 45 rpm, you must hold the switch down until the red LED goes out and a green one lights. Each light is labeled with the speed it represents, so you don't have to remember the color code. Another tap on the switch turns off the power when you're through.

Both the arm and the turntable are completely manual. There isn't even an automatic shutoff when the arm reaches a runout

groove. Whether this enhances or reduces its appeal is a matter of individual taste, but it can easily be argued that the lack of any mechanical couplings to inhibit performance or photoelectrical ones to misbehave is among the design's technical strong points.

The top plate floats above the base, which is mounted on feet that are designed to absorb vibrations arriving through the mounting surface. The arm and turntable bearing are attached directly on the top plate, through which the drive pulley protrudes, and are decoupled from the pulley. To reduce vibration from the 24-pole synchronous motor, Linn uses a proprietary load-sensing servo drive that reduces motor torque once the platter is up to speed with no unusual load (such as a record-cleaning device) working against it. The drive amplifiers for this system are responsible for the heat sink at the back of the base.

The resulting mechanical system seems worrisome when you tap the top plate, but only because we're used to separate suspension of the tonearm and platter, decoupled from the plate. In practice, nothing impinges on the top plate once the cover is closed, and vibration isolation from the base

itself (which is exposed, of course) is very good. However, unless your floors are quite stiff, you can get pitch wavers due to foot-falls. It's probably a good idea to mount the Axis near a wall, rather than on a table in the center of the room, if there's any doubt on this score.

The measurements at Diversified Science Laboratories demonstrate that the Axis is a fine turntable, though not a champion. Rumble is excellently low (and measures even lower—about -68 dB—when the Thorens test coupler is substituted for the lab's standard test lacquer), and flutter is about par for a good turntable. We're disappointed by the speed measurement, however: It's within the pale, to be sure, but farther from the mark than we'd expect from a turntable with so much motor-control circuitry.

But the Axis does indeed exude much of the quality and charisma of its "big brother"—and at a considerable reduction in price. More important for many users in this country, it requires no exceptional devotion to audio duty in the setup procedures. And in operation, all is elegance and simplicity. There's no getting around it: A product that is this carefully designed and manufactured is just plain fun to use. ■

T E S T R E P O R T S

Teac V-770 Cassette Deck

DIMENSIONS: 17 BY 4 1/4 INCHES (FRONT), 10 1/4 INCHES DEEP PLUS CLEARANCE FOR CONNECTIONS. PRICE: \$469. WARRANTY: "LIMITED," ONE YEAR PARTS AND LABOR. MANUFACTURER: TEAC CORP., JAPAN; U.S. DISTRIBUTOR: TEAC CORPORATION OF AMERICA, 7733 TELEGRAPH RD., MONTEBELLO, CALIF. 90640.

TEAC PRODUCED A PROTOTYPE COMPONENT cassette deck even before stereo, Dolby B noise reduction, and chrome tape. In keeping with its heritage, the company now offers an exceptionally comprehensive deck line, from quite basic and simple to sophisticated and complex. Although it is not Teac's flagship model, the V-770 lies closer to the

sophisticated end of this spectrum. It is equipped with Dolby B and C and offers considerably more than minimal features.

A three-head deck of conventional layout, the V-770's recording and playback head elements are in a single housing facing the cassette shell's central opening, with the erase head occupying the "upstream" open-

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ing. The automatic source/tape monitor switching (to the tape at turn-on or when the transport is running, to the source when in recording-pause) can be overridden by a front-panel button. The recording mode is entered by pressing RECORD along with either PAUSE or PLAY. You can even start recording while the tape is running in the play mode, for punch-in (flying-start) recording.

The V-770 provides two random search modes: CPS (Computomatic Program Search) and CDS (Computomatic Direct Search). The former works in the usual fashion, starting at any point on the tape. You press the CPS/CDS button the same number of times as the number of interselection blanks you want the deck to skip (two or three for the third selection away, depending on the direction of search, for instance) and then press the fast-forward or rewind button. CDS, on the other hand, begins with a fast wind to either end of the tape; then, depending on how many times you press the CPS/CDS button, the deck will automatically cue up the selection that many interselection blanks away. There is also a recording-mute button to create blanks of the appropriate length during recording.

We tend to take such functions more or less for granted these days because micro-processors have made them so commonplace. But Teac, in its sober, communicative owner's manual, makes no bones about the shortcomings of these features. If you record music that doesn't have much dynamic range (that is, with no extremely quiet passages), and do so carefully, you may get consistently good results with the search features. But tapes with hum between selections or the pregnant pauses so dear to classical composers can easily fool the system into, respectively, missing an interselection blank that's there or finding one that isn't.

There is also an "intro check" feature to scan the tape in fast wind, playing the first ten seconds of each selection it finds. A "block repeat" function enables you to mark a start and a stop location, and the deck will play back whatever is between the two. If you put the starting point after the stop, it will

play from the start location to the end of the tape, rewind to the beginning, play from there to the stop marker, fast-wind to the start location, and so on.

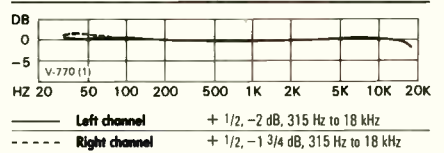
The electronic counter has two modes: arbitrary numbers (functioning as a "turns counter") and elapsed time in minutes and seconds. In an unusual and potentially useful twist, Teac lets you zero these modes independently, so that one can count or time from the head of the tape while the other does so from the beginning of a selection. In addition to Dolby B and C noise reduction, there's Dolby HX Pro headroom extension (which can't be defeated) and a switchable multiplex filter. The headphone output has its own level adjustment (a feature we like); the line feed has a fixed output level. Either recording or playback can be started automatically with a timer.

Recording level is adjusted with a pair of sliders—one for each channel—near the bottom of the front panel. Balance adjustments can be retained during fades by placing a finger across the two sliders and moving them together, though channel-level differences can't be preserved when you fade to silence and back to full level unless you don't fade the higher channel all the way down.

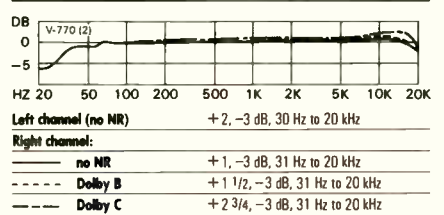
Basic bias and equalization settings are made automatically by the deck on the basis of the cassette shell keyways. There is a finetuning bias adjustment on the front panel, but no real calibration or instrumentation to assist you in setting it. The manual simply tells you to use the monitor switch to compare tape with source while you're recording and leave the knob wherever it results in best replication. If you are attentive, listening in particular for changes in high-frequency response with pink noise or FM interstation hiss, this method can give good results.

Surprisingly, the manual leaves out any reference to recommended tapes. Diversified Science Laboratories made its measurements with three TDK formulations: SA-X as the Type 2 chrome-equivalent ferricobalt, MA as the Type 4 metal, and AD as the Type 1 ferric. On the basis of the record/play response curves, the center detent seems just

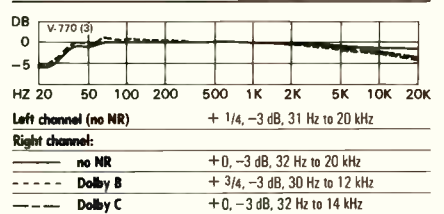
PLAYBACK RESPONSE (BASF test tape; -20 dB DIN)



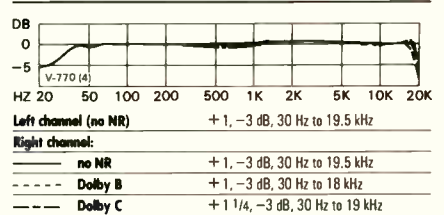
RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)



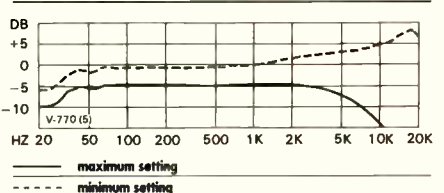
RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)



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



BIAS ADJUSTMENT RANGE (-20 dB; Type 1 tape)



MULTIPLEX FILTER (defeatable)

-3/4 dB at 15 kHz; -33 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
no NR	55 1/2 dB	55 dB	53 1/2 dB
Dolby B	64 1/4 dB	64 1/4 dB	63 1/4 dB
Dolby C	72 dB	71 3/4 dB	69 3/4 dB

INDICATOR READINGS FOR DIN 0 DB (315 Hz)

Type 2 tape	+2 dB (with 2.5% THD)
Type 4 tape	+2 dB (with 1.3% THD)
Type 1 tape	+4 dB (with 1.2% THD)

INDICATOR READINGS FOR 3% DISTORTION (315 Hz)

Type 2 tape	+4 dB (for +1.1 dB DIN)
Type 4 tape	+6 dB (for +2.8 dB DIN)
Type 1 tape	+6 dB (for +1.2 dB DIN)

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

Type 2 tape	≤ 0.74%
Type 4 tape	≤ 0.54%
Type 1 tape	≤ 0.21%

ERASURE (at 100 Hz)

Type 2 tape	68 dB
Type 4 tape	57 dB

CHANNEL SEPARATION (at 315 Hz)

	49 3/4 dB
--	-----------

INDICATOR "BALLISTICS"

Response time	1.6 msec
Decay time	≈ 440 msec
Overshoot	0 dB

SPEED ACCURACY (105 to 127 VAC)

	2.1% fast
--	-----------

FLUTTER (ANSI weighted peak; R/P)

	±0.085%
--	---------

SENSITIVITY (re DIN 0 dB; 315 Hz)

	98 mV
--	-------

INPUT OVERLOAD (at 1 kHz)

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

INPUT IMPEDANCE

	82k ohms
--	----------

OUTPUT IMPEDANCE

	3,000 ohms
--	------------

OUTPUT LEVEL (from DIN 0 dB)

	0.57 volt
--	-----------

about ideal for the Type 1 tape, perhaps a little low for Type 2 (SA-X is a "hot" tape compared to many other ferricobalt formulations), and a hair high for the Type 4. Fine-tuning adjustments for such minor mismatches must be made with care, however; as the final graph suggests, the adjustment range is unusually wide, making severe misadjustment possible. And at extreme bias settings, output level is affected enough to cause sizable Dolby mistracking, too.

However, as the graphs show, with these tapes and the detented bias settings, the Dolby tracking is excellent. So is the high-frequency headroom, although it doesn't show on the curves. At high levels (DIN 0 dB), the ferric-tape response in particular is flat up to almost 10 kHz; curves for the metal reach above 10 kHz before beginning to drop off significantly. With all three tapes, the Dolby C curves reach higher than those without noise reduction, as is regularly the case, but much of the credit for the excellence here must go to the HX Pro circuit. The playback curves also are unusually flat, partly because of a very good match between the deck's playback azimuth and that of the BASF test tape.

The metering offers 12 elements per channel, calibrated from -20 to +12 dB, with 2-dB steps in the range between -4 and +8 dB—all with respect to a 0 dB that is a few dB lower than DIN 0, depending on which type of tape is in use. The deck seems to assume poorer performance in the ferric setting than in the other two, but among the tapes chosen by the lab, the ferric actually has the lowest distortion and almost as much midrange headroom as the metal. It is the ferricobalt that, biased and equalized as it is in this deck, perhaps should be treated most

gently.

Mechanically, the drive strikes us as quite good. Flutter, for example, is slightly better than we've come to expect in this class of equipment: Anything lower than 0.1 percent can be considered very good. But our sample runs 2 percent fast and will reproduce nearly a quarter-tone sharp any tapes made at precisely the nominal transport speed of 1 7/8 ips. Actually, most home decks do run a little fast (this promotes slightly better high-frequency response), so the disparity when playing tapes made on other machines will be a little less than the 2.1 percent found by DSL. Of course, the V-770 will correctly reproduce at the proper pitch and tempo any tapes made on it, but we usually expect decks of this overall quality to be within 1 percent of nominal speed.

In other respects, the V-770 mostly confirms our overall good impression of it. At 3,000 ohms, output impedance is higher than average, but not by enough to influence frequency response significantly unless the output is fed to a preamp or receiver with an extremely low input impedance or by way of a very long cable.

The V-770 occupies an important middle ground between the elaborately automated or ultratech models that inhabit the upper price bracket and the budget models that grind out so-so tapes at the other extreme. A deck so situated should offer more than basic functions and performance, but it shouldn't be intimidating. The V-770 admirably fulfills these criteria. Thanks to good front-panel layout, its controls are simpler to operate than our descriptions may imply. And the response curves speak clearly of the care with which Teac has addressed performance. ■

T E S T R E P O R T S

Multivision 3.1 Digital TV Tuner

DIMENSIONS: 17 BY 3 INCHES (FRONT), 10 INCHES DEEP PLUS CLEARANCE FOR CONNECTIONS. **AC OUTLETS:** ONE, SWITCHED BY REMOTE CONTROL (300 WATTS MAX.). **PRICE:** SUGGESTED RETAIL PRICE IS GIVEN AS "BETWEEN \$499 AND \$599." **WARRANTY:** "LIMITED," 90 DAYS PARTS AND LABOR. **MANUFACTURER:** MULTIVISION PRODUCTS, INC., 1751 FOX DR., SAN JOSE, CALIF. 95131.

DIGITAL TELEVISIONS, MONITORS, AND VCRs have been in the news lately. These units use digital processing of the video signal to provide several innovative features, principally the ability to display simultaneously more than one picture on

the screen (a function often called inserted-picture or picture-in-picture). Up to now, viewers with older sets would have had to replace them entirely in order to obtain digital-picture features. But Multivision's 3.1 will add these capabilities, along with stereo-TV decoding and extensive source-switching features, to any television set or monitor.

Of what use is inserted-picture display? Multivision's well-organized and comprehensive manual lists a few applications made possible by the 3.1's features: watching two programs (broadcast, VCR, videodisc, or

any combination of these) simultaneously; swapping the full-screen image (and sound) with the smaller, inserted one; watching one program while scanning other channels or video inputs on the inserted image; watching one show while monitoring the recording of a second show on a VCR; freezing the inserted picture; and electronically "babysitting" with a video camera feeding the inserted image. We also believe (though the manual doesn't cover it and we haven't tried it) that the 3.1 would be very useful for video-editing applications, both by obviating the

Digital Discrimination.

BECAUSE ALL CD'S ARE NOT CREATED EQUAL, THE NEW CARVER DTL-200 COMPACT DISC PLAYER IS INTRIGUINGLY DIFFERENT.

The Carver DTL-200 answers the audiophile's demand for a CD Player which provides not only the greater dynamic range and richer bass expected from compact disc technology, but also the musicality, spectral balance and spatial qualities of well executed analog high fidelity recordings.

The new remote control Carver DTL-200 represents the next logical evolutionary step towards marrying the awesome technology of digital playback with Bob Carver's commitment to the re-creation of the live performance. It embodies the latest digital/analog conversion circuitry with oversampling, sophisticated laser system and a wealth of operating features. And it possesses unique Carver circuitry that solves real-world sonic problems associated with commercial CDs.

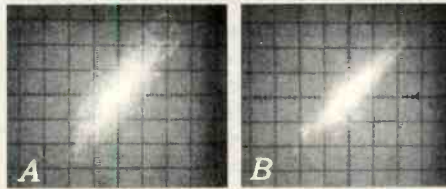
TIME DOMAIN CORRECTION. The Carver DTL-200 incorporates an important new computer logic innovation that monitors the incoming digital signal for imperfections and "glitches" caused in recording and production. Such errors are immune to conventional error-correction processes because they are actually data anomalies. Yet they can add overall harmonic distortion and cause audible changes in sound quality.

The DTL-200's Time Domain Correction circuit constantly performs a complex, 25-bit digital calculation on passing data. This high-speed error correction algorithm, in conjunction with a 121-pole digital filter, terminates distortion-causing high harmonics as they occur in the bit stream. The result is frequency response within 1/1000 of a dB of the original, with significant reduction of distortion to less than 0.007%.

PLUS THE DIGITAL TIME LENS. On top of this unerring ability to produce natural, real-sounding music from the CDs' digital bits, the Carver DTL-200 has the remarkable Digital Time Lens circuit to insure your listening enjoyment.

When Bob Carver obtained his first compact disc player, he was surprised at the sound derived from most of the compact discs he purchased. The three-dimensional musical perspective which his analog system provided in lush abundance on phono discs evaporated into a flat, brittle wasteland. After exten-

sive testing, Bob uncovered two fundamental flaws in almost all compact discs: 1) An unpleasant, harsh spectral energy balance. The overall octave-to-octave energy balance was shifted on the CD towards more midrange above 400 Hz; 2) The amount of L-R signal (which carries the special detail of the music) on the CD was inexplicably, but substantially, reduced when compared with the amount of L-R signal found on the corresponding analog disc. The difference is obvious in these two oscilloscope photos.



- A. Lissajous pattern showing spatial detail (L-R) (L+R) ratio from an LP record.
B. The same instant of music but taken from the CD version. Note the decreased (L-R) content, as shown by the narrowed trace.

Carver's circuitry corrects the ratio of L-R to L+R by performing one extra, but important mathematical operation on the signal stream that all other CD players fail to perform. This final operation makes all the difference.

The result is a natural sound with more of the three-dimensional information that places us in the same space with performers. You won't need the Digital Time Lens on all CDs. But it is there when you need it.

In the beginning, Carver hoped, indeed he expected, that once recording artists and engineers became more experienced with CD technology

fewer and fewer CDs would require the Digital Time Lens. But both laboratory and listening tests reveal that the majority of even the most recently released CDs benefit significantly from the Digital Time Lens.

PACKED WITH USEFUL FEATURES. The Carver DTL-200 makes enjoying Compact Discs a simple exercise in button pushing from your favorite listening chair. You can program any combination of up to twelve tracks from a single CD, repeat a specific track or a whole Compact Disc for uninterrupted enjoyment.

Along with the ability to skip forward or backwards song-by-song; a touch of a key allows you to audibly review a disc backwards or forwards at many times normal speed. An A-B Specific Phrase Repeat lets you carefully analyze one section of a performance or simply provide a point of reference in a long, un-indexed symphonic movement.

All functions are displayed on an easy-to-read but subtle LCD display including programming sequence, current selection number, individual and total playing times plus indexing cues.

HEAR THE CARVER DIGITAL DIFFERENCE.

Just as all CD's are not created equal, neither are Compact Disc Players. Of all the models currently available, only the new DTL-200 (and DTL-50) have the innovative and exacting Bob Carver touches that can substantially enhance your enjoyment of the digital medium.

Audition the new DTL-200 today at your Carver dealer, using a variety of discs. You will be surprised at how audibly it can improve on what is already the best playback medium ever offered.

SPECIFICATIONS. Frequency Response, 5Hz-20kHz @ 0dB, ± 0.2 dB. Total Harmonic Distortion, 0.007% S/N, 100dB. Channel Separation, 90dB @ 1kHz. Dynamic Range, 96dB. Wow & Flutter, unmeasurable. Programming, 12-track remote and manual.



CARVER

P.O. Box 1237, Lynnwood, WA 98046

POWERFUL

MUSICAL

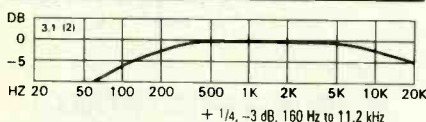
ACCURATE

Distributed in Canada by: evolution technology



All measurements were taken at the direct audio and video outputs with no inset.

AUDIO FREQUENCY RESPONSE (mono)



AUDIO S/N RATIO (mono; A-weighted)

best case (no chrominance or luminance)	56 dB
worst case (crosshatch pattern)	17 dB

RESIDUAL HORIZONTAL-SCAN COMPONENT (15.7 kHz)

	-81 3/4 dB
--	------------

MAXIMUM AUDIO OUTPUT (100% modulation)	0.34 volt
--	-----------

AUDIO OUTPUT IMPEDANCE	4,800 ohms
------------------------	------------

VIDEO FREQUENCY RESPONSE

at 500 kHz	+1 3/4 dB
at 1.5 MHz	flat
at 2.0 MHz	-1 dB
at 3.0 MHz	-4 1/4 dB
at 3.58 MHz	-13 dB
at 4.2 MHz	*

LUMINANCE LEVEL	standard
-----------------	----------

GRAY-SCALE NONLINEARITY (worst case)	≈ 14%
--------------------------------------	-------

CHROMA DIFFERENTIAL GAIN	≈ 18%
--------------------------	-------

CHROMA DIFFERENTIAL PHASE	≈ ±5°
---------------------------	-------

CHROMA ERROR

	level	phase
red	-10 dB	-1°
magenta	-10 dB	-1°
blue	-10 1/4 dB	-2°
cyan	-9 1/4 dB	-1°
green	-9 3/4 dB	+1°
yellow	-8 1/4 dB	-1°
median error	-9 1/4 dB	-0.5°
uncorrectable error	±1 dB	±1.5°

* Too low to measure

need for an extra editing monitor and because the inserted-picture effect itself is recordable.

To provide all this, the 3.1 contains two separate television tuners, an MTS decoder, a complex digital picture-processing integrated circuit, audio and video inputs and switching for two video devices (VCRs or videodisc players, for example), and a small (2.5-watt, 3.9-dBW per channel) stereo amplifier, among other things. In essence, the unit will substitute for the tuner and amplifier portions of any monitor or television it is connected to. An infrared handset controls the works, enabling remote selection of video source, broadcast channel, and placement and size of the inserted-picture display, as well as its brightness and color inten-

sity. The remote also controls volume, balance, muting, stereo/mono operation, and CONCERT (a phase-shifting simulated-stereo feature). Thus, the unit will add full remote-control capability to any TV or monitor lacking it.

The manual graphically illustrates the hookup options available, including various VHF and UHF antenna configurations, cable adapters, televisions and monitors (either by a mono-only RF link or through a composite video signal), VCRs, stereo speakers, satellite receivers, video cameras, videodiscs, and component stereo systems. After connection, several default power-on settings can be altered by the user. These include the 3.1's RF output channel (either 3 or 4), the television source type (broadcast, normal cable, or "harmonic" or HRC cable), the TV channels to be added to the unit's automatic scanning sequence, the position of the inserted-picture window, and the power-on volume level. If you make a mistake, there is a button-pushing sequence to restore the device to its factory settings. And if you want a quick tour of the 3.1's digital-picture capabilities, there is also an automatic demonstration mode, activated, like all the unit's features, through remote-control commands.

Since the 3.1, when hooked up properly, takes over the vital front-end tuner functions of one's monitor or television, we were slightly disappointed by the measured performance of the tuner's video and audio sections, which does not overall come up to that achieved by today's advanced monitors and TVs. In particular, audio and video frequency response, gray-scale nonlinearity, chroma level, audio signal-to-noise ratio, and harmonic distortion could all stand improvement. We also found the maximum audio output a little on the low side. In all fairness, however, we tested a very early production sample (so early that it hadn't even been assigned a serial number). Perhaps performance in these areas will be improved by the time full-scale production units reach the stores. Fortunately, the 3.1's video and audio characteristics were essentially neutral through the two sets of direct inputs, meaning the quality of the main picture and sound was unchanged when using a VCR or videodisc player as the source. And in one respect—color phase (hue) accuracy—the

3.1's tuner section proved unusually good.

All of the 3.1's digital-video features work precisely as claimed. Although the excitement of adjusting the inserted picture from 1/5 to 1/8 of full-screen size and of changing its position by minute increments wore out quickly, other aspects of the device never bored us: The channel-scan, freeze-frame, and picture-swap controls demonstrated that an inserted picture is not just another gimmick—it can truly enhance viewing pleasure. The 3.1's ability to place two different broadcast channels, each selectable by the same remote control, on the screen (unlike many televisions with inserted-picture processing, which allow only one channel to be displayed along with the picture from an auxiliary video source) makes rapid channel swapping easy, which is especially useful for crowded weekend sports schedules. During news broadcasts, the two-channel swap capability enables you to avoid commercials, compare coverage styles, and skip over those obnoxious happy-talk sessions between ill-informed "broadcast journalists."

If you have been satisfied with your TV set or monitor but were thinking of chucking it in favor of one of the higher-tech newcomers, take a look at the Multivision 3.1. It can add many high-tech features to your present TV set at a not too high-tech price. It is an innovative and promising start by a young American company. ■▶

A QUICK GUIDE TO TAPE TYPES

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

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

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

TYPE 3 (IEC Type III) tapes are dual-layered ferrichromes, implying the 70-microsecond ("chrome") playback EQ. Approaches to their biasing and recording EQ vary somewhat from one deck manufacturer to another, when they are accommodated at all. Formulations of this type are no longer being made.

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

Not Evolutionary, Revolutionary.



Pioneer's Revolutionary Audio/Video Receiver

This is all you need to turn your existing electronic equipment into a superior A/V system. Because this revolutionary invention not only makes all of your audio and video components work better. It makes them work better...together.

For example, you'll see a better picture, due to a one-of-a-kind split-screen video enhancer that actually sharpens and focuses every video image. You'll hear a better sound too, due to three surround sound listening environments. And please, don't be

confused by what others may promise, because this machine delivers Dolby Surround® Sound, the finest in the world.

Yet even with all these dramatic improvements, your individual components have never been easier to operate. The reason: Pioneer's ultra-sophisticated 59-function, system remote control.

Pioneer's Revolutionary Audio/Video Receiver. It makes all the components you already own, all together better.

 **PIONEER®**

CATCH THE SPIRIT OF A TRUE PIONEER.

©1986 Pioneer Electronics (USA) Inc., Long Beach, CA *Pioneer's VSX5000 remote controls all Pioneer SR™ components. ®Dolby is a trademark of Dolby Labs, Inc.

but can be confusing. Along the bottom are six preset buttons, each storing one station from each band.

The AM tuner section receives C-Quam stereo stations, though none is strong enough in our testing area to give adequate results for critical judgments. Mono AM reception was judged good—perhaps better than average among the receivers we test. The response curve, more than any other specific, shows why: It is unusually flat in the critical upper midrange, with a rapid rolloff above about 2.5 kHz, where interference “birdies” begin to become intrusive. The sound isn't high fidelity in the broadband sense, but is relatively free of major annoyances, including the gross tonal imbalances

fairly typical of those for car decks, and at no point in our road test could we hear any shock-induced wow. Transport speed, at 2 percent fast or slightly less for all test voltages (though a hair better in the reverse than the forward direction), is farther from the mark than we like, but not by enough to be a serious problem for most listeners.

The tone controls are fairly typical, though the bass actually has maximum effect of about +15, -20 dB at around 40 Hz, a bit deeper than usual. The LOUDNESS operates progressively as you reduce volume; when 1-kHz output is reduced by 20 dB, the deep bass (around 40 Hz) is reduced by only a little more than 10 dB, while the high treble is altered less (about -15 dB, relative to

INPUT IMPEDANCE	19K ohms
DAMPING FACTOR (at 50 Hz; re 4 ohms)	27
CHANNEL SEPARATION (at 1 kHz)	50 1/4 dB

full volume, at 20 kHz).

The amplifier section carries four per-channel power ratings: bridged (for two speakers) or unbridged (for four) and narrowband (at 1 kHz, with as much as 10 percent distortion) or wideband (40 Hz to 20 kHz, with less than 0.5 percent distortion). In the bridged mode, these ratings are 20 and 12 watts (13.0 and 10.8 dBW), respectively; unbridged, they are 6 and 3.5 watts (7.8 and 5.4 dBW). The specs for the amp in the EQA-280 are essentially the same.

Diversified Science Laboratories mea-

Sherwood CRD-350 Car Front End



sure power at 3 percent distortion (THD+N), so its numbers can be compared with Sherwood's. The lab's figure for the built-in power amp, measured in the bridged mode, essentially confirms the specs. Likewise with the lab data for the amp

in the EQA-280 (also bridged). These are not blockbuster amps, which in any case usually strike us as overkill for typical automotive use. Sherwood has a saner sense of scale and has supplied all the power most car drivers ever will want.

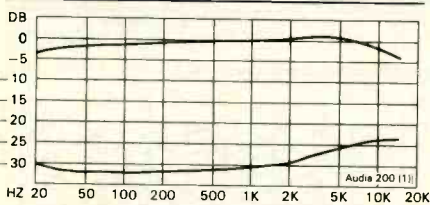
So for a distinctly modest price, Sherwood supplies handsome hardware that performs well. Unquestionably, the CRD-350 represents a very good value, whether or not you decide to spring for the optional equalizer/amp, which also is a very good buy. ■

Clarion Audia 200 Car Front End



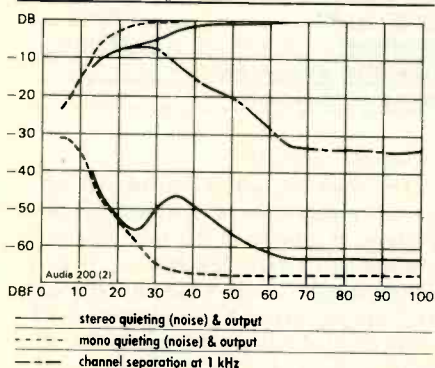
FM TUNER SECTION

FREQUENCY RESPONSE & CHANNEL SEPARATION



Frequency response +1, -3 dB, 23 Hz to 13 kHz
Channel separation ≥ 25 dB, 20 Hz to 6.5 kHz

FM SENSITIVITY & QUIETING



DIMENSIONS: 7 BY 2 INCHES (CHASSIS FRONT), 5/8 INCHES DEEP; ESCUTCHEON, 7 1/2 BY 2 1/8 INCHES; "NOSE," 4 1/2 BY 2 INCHES; MAIN SHAFTS, 5/8 INCHES. CONNECTIONS: BARED WIRES FOR IGNITION, BATTERY; SPADE LUG FOR GROUND; FLAT FEMALE FOR POWER ANTENNA; 6-PIN DIN PLUS ADAPTER FOR FRONT AND BACK LINE OUTPUTS (MALE PIN CONNECTORS) AND POWER-AMP SWITCHING (FLAT FEMALE); STANDARD COAXIAL FEMALE FOR ANTENNA INPUT. FUSE: 3 AMPS IN IGNITION LINE. PRICE: \$580. WARRANTY: "LIMITED," TWO YEARS PARTS AND LABOR. MANUFACTURER: CLARION CO., LTD., JAPAN; U.S. DISTRIBUTOR: CLARION CORPORATION OF AMERICA, 5500 ROSECRANS, LAWNSDALE, CALIF. 90260.

CLARION PACKS A LOT OF FEATURES AND capabilities into its Audia 200, as befits a model in its premium car stereo series. As it is also made for conventional installation—with a central nospiece flanked by symmetrical knob clusters—its controls must be multifunctional, which always makes for an extended orientation period. But Clarion has kept confusion in regular operation to a minimum by labeling the primary functions and relying on the instruction sheet (it can't be called an owner's manual in the usual sense) to sort out the set-and-forget options.

The left knob normally controls volume and on/off switching, but it also adjusts bass when pushed in and treble when pulled out, each tone control having a center "flat" detent. The left knob's outer ring controls left/

right speaker balance. The ring around the right knob is the front/back fader. The spring-loaded right knob itself tunes up or down in full-channel increments (0.2 MHz per step on FM, 10 kHz on AM), moving one step for a quick twist but tuning quite rapidly across the band if you hold the knob in either position. Pushing in the right knob toggles on and off the seek-tuning mode, which homes in on the next strong station up or down the dial, rather than stepping channel by channel, while a pull on the knob toggles the AM IF (intermediate frequency) bandwidth between narrow and wide.

There are six station presets, each of which will memorize two stations on the FM band and one on AM. There is no separate memory button. If you tap a preset, the 200 will retune to the corresponding stored frequency, but if you hold the preset button in for two seconds, it will memorize the last-tuned frequency instead, muting output until it has done so. A button marked P/S (preset scan) sequences through the memorized frequencies, playing each for five seconds, but only if any station at those frequencies is strong enough for good reception wherever you happen to be. If you hold the button in for two seconds, the tuner will automatically store the first six strong stations it finds, beginning at the bottom of the dial—a useful

Only NRI teaches you to service all computers as you build your own fully IBM-compatible microcomputer

NEW!
Train with the newest Sanyo 880 Series Computer—it's fully IBM-compatible and runs almost twice as fast!

With computers firmly established in offices—and more and more new applications being developed for every facet of business—the demand for trained computer service technicians surges forward. The Department of Labor estimates that computer service jobs will actually *double* in the next ten years—a faster growth rate than for any other occupation.

Total systems training

No computer stands alone... it's part of a total system. And if you want to learn to service and repair computers, you have to understand computer systems. Only NRI includes a powerful computer system as part of your training, centered around the new, fully IBM-compatible Sanyo 880 Series computer.

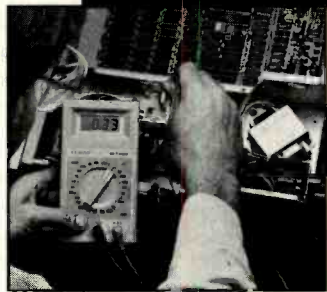
As part of your training, you'll build this highly rated, 16-bit, IBM-compatible computer system. You'll assemble Sanyo's "intelligent" keyboard, install the power supply and disk drive and interface the high-resolution monitor. The 880 Computer has two operating speeds: standard IBM speed of 4.77 MHz and a remarkable turbo speed of 8 MHz. It's confidence-building, real-world experience that includes training in programming, circuit design and peripheral maintenance.

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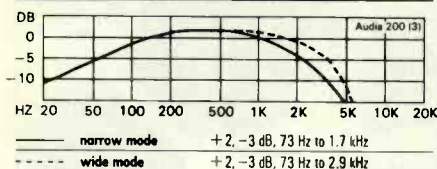
Accredited by the National Home Study Council

161-027

Stereo sensitivity (for 50-dB noise suppression)		
43 dBf, with 16-dB separation at 1 kHz		
Mono sensitivity (for 50-dB noise suppression)	20 dBf	
Stereo S/N ratio (at 65 dBf)	62 1/2 dB	
Mono S/N ratio (at 65 dBf)	67 3/4 dB	
CAPTURE RATIO	3.0 dB	
SELECTIVITY (alternate-channel)	> 76 1/2 dB	
AM SUPPRESSION	57 dB	
DISTORTION (THD + N)		
	stereo	mono
at 100 Hz	1.6%	0.66%
at 1 kHz	1.1%	0.34%
at 6 kHz	2.0%	0.21%

AM TUNER SECTION

FREQUENCY RESPONSE (re 1 kHz, narrow mode)

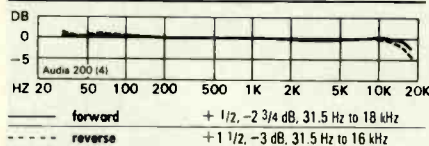


SENSITIVITY

narrow IF mode	2.7 μ V
wide IF mode	3.0 μ V
SELECTIVITY	see text
AVC RANGE	\geq 72 1/4 dB

CASSETTE TRANSPORT SECTION

FREQUENCY RESPONSE



WOW & FLUTTER	$\pm \leq$ 0.13% average; $\pm \leq$ 0.17% peak
SPEED ACCURACY (10.8 to 14.4 volts)	\leq 2.6% fast

PREAMPLIFIER SECTION

BASS CONTROL	\pm 10 dB at 100 Hz
TREBLE CONTROL	+9, -10 1/2 dB at 10 kHz
LINE OUTPUT IMPEDANCE	330 ohms
MAXIMUM LINE OUTPUT LEVEL (see text)	
from FM (100% modulation)	1.20 volts
from tape (DIN 0 dB)	0.83 volt

feature when you're driving through a radio *terra incognita*.

There is a clock whose display replaces the station frequency when the cassette deck is in use or, for about five seconds, when you tap a button marked CLK. If you hold this button down, you can set the clock by turning the tuning knob: counterclockwise to advance the hours display, clockwise to advance the minutes.

The tape deck doesn't automatically override the tuner, so you don't have to remove the tape in order to listen to the radio. When you switch to the latter—for instance, to tune in the local traffic report—the transport automatically stops, so you can pick up on the tape right where you left off. You also can use the APC (automatic program con-

trol) to fast-wind to the next interselection blank, forward or back, while you're listening to the radio. When you do that, the transport will stop at the blank; if you have already switched to tape, it begins playback automatically. Transport disengagement is automatic when you turn off the power, and the eject button still works without power, so you can retrieve the tape without reswitching the ignition.

To set equalization and noise reduction without the addition of more buttons, the bottom row of station presets does double duty. One button is for equalization and is, for once, correctly marked "70 microseconds" (instead of the usual "metal"). The other two select Dolby B and Dolby C, respectively; if you want no noise reduction, a tap on the lighted Dolby button turns it off.

The tape deck's response tails off toward the top end in our graph, perhaps partly because of an inherent rolloff of the Audia 200 in that region, but doubtless exacerbated by an azimuth mismatch between its head and the lab's BASF test tape. As you can see, the match was somewhat better in the forward transport direction than in reverse. Flutter is very slightly lower in the forward direction, but the figures are above reproach either way. Although some severe road shocks did produce audible wow, our test track is admittedly very rough and the wow was barely perceptible. Speed accuracy is better (just under 1 1/2 percent fast) in the reverse direction than in forward, which, at 2.6 percent fast, is almost a quarter-tone sharp with tapes recorded precisely at the nominal speed.

As with most of the car equipment we test, the FM reception behavior is complex and involves changes in output level and separation, as well as quieting, as stereo signal strength drops. Down to about 65 dBf—a fairly strong signal and the standard rating point for such characteristics as signal-to-noise (S/N) ratio—separation at 1 kHz is about 35 dB. Below this point, it drops off quite rapidly but very evenly, so that we never perceived the sort of sudden image collapse that can be disturbing with weak signals.

The stereo sensitivity rating point (for a 50-dB S/N ratio) occurs at 43 dBf. This doesn't sound very impressive until you consider that separation still is 16 dB at this point; many car units with dramatically better (lower) sensitivity ratings don't actually have enough separation at the rating point to qualify as true stereo. Below 43 dBf, S/N hovers just above 50 dB, while the output level tails off so that noise isn't too intrusive when it finally takes over at extremely low signal strengths. Noise bursts due to fluctuations in signal and multipath are quite frequent, but they're rather dulled in quality, keeping the annoyance factor in check.

How much of the departure from flat response should be attributed to the FM tuner and how much to the preamp is a moot point since a product of this sort offers no opportunity for testing the two completely sepa-

rately. The response rolls off slightly toward the deep bass, shows a slight (1 dB) prominence centered on 3 or 4 kHz, and a marked rolloff at the very top end. At a 65-dBf test level, separation is very good across the range, right up into the highest frequencies.

The AM section is equipped for stereo reception of C-Quam broadcasts, though no stations using it are strong enough in our test area to achieve really clean stereo reception. The IF control is intended to help in this respect. As you can see from the data, its normal narrow mode is a little better in sensitivity and very slightly better in AVC range. Diversified Science Laboratories found the biggest difference between wide and narrow IF settings in the response curves, where the wide band picks up considerably more treble, as would be expected.

Subjectively, the difference is marked but not dramatic. Truly broadband AM can be extremely noisy, and both modes exclude much of this high-frequency garbage. But the sound in the wide mode is distinctly brighter and more lively on strong stations; on weak ones, it's often overlaid with birdies, making the comparatively dull-sounding narrow-mode sound more listenable. As we might have expected from the excellent sensitivity figures, we found the 200's AM dial full of stations; what we didn't expect, on the basis of the equally excellent AVC range figures, was the low number of stations we could receive really cleanly. In this last respect, we judged the 200 about average for its price class.

The tone controls are fairly standard in their operation. The TREBLE has some influence far below 1 kHz, however, while the BASS has a reverse effect on the treble: a big bass boost induces a slight cut in the lower treble, and vice versa. The LOUDNESS is very gentle and introduces a boost only in the deep bass, primarily below 100 Hz.

Most unusual is the remaining equalization option: the 180-Hz "acoustic compensation" button (labeled, along with its indicator light, "180"). It takes a 10-dB bite out of the response curve in a narrow band around that frequency. The idea is to control resonances—that is, standing waves—in the car interior. In our test car, we did find that it alleviated a characteristic heaviness in this range, but not always entirely to the music's benefit. The precise effect, however, will doubtless depend on the specific dimensions of the car in which you use the set, so our experience doesn't go very far in predicting how you may react to this feature, which does represent an essentially useful idea.

There are screwdriver adjustments (accessible on the chassis until the unit is mounted) to match output to the sensitivity of the amplifier with which the 200 is used. It is factory-set for Audia amps, according to Clarion, and our sample was set—and tested—at its maximum, which should suit most amps on the U.S. market. Obviously, Clarion has packed a lot into the Audia 200. ■

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TRUE COLORS

BY CARLETON SARVER AND DAVID RANADA

ALTHOUGH WE CALL THEM COLOR televisions and use them to watch color programming, just how accurately they actually reproduce color—presumably their prime function—is largely ignored. In fact, as you'll see, we've been judging color TV receivers and monitors mainly on the basis of their black-and-white performance alone. A set's color capabilities usually are put in terms of "good flesh tones," even though most color picture tubes cannot even produce the entire range of greens and reds.

That may be changing. A new, more critical group of television viewers is emerging. These viewers—you might be one—want the best possible picture quality from available program sources, especially high-quality ones like video-discs, satellites, and off-air broadcasts. TV manufacturers have begun to respond, bringing out monitors and receivers with better picture performance. And a few recent sets reproduce more of the color information from the incoming video signal and with greater accuracy than others. To find out how to tell these units from the colorless masses, read on.

Carleton Sarver is a video-product development and marketing consultant who remembers what original NTSC color looked like. Technical Editor David Ranada has yet to see true NTSC color.

**YOUR VIDEO MONITOR
ISN'T GIVING YOU
ACCURATE COLORS.
HERE'S WHY—AND HOW
YOU MAY BE ABLE
TO DO BETTER.**

RESOLUTION IN COLOR



A "COMPOSITE" COLOR VIDEO SIGNAL, AS generated by a TV tuner, VCR, or videodisc player actually consists of two separate signals: one encoding the image's brightness (luminance) and the other carrying its color (chroma). Black-and-white TV sets show only the

luminance signal. Whenever you watch a color picture on a color set, you're seeing the two picture signals reproduced simultaneously, with luminance controlling the image's brightness and chroma its color.

You may already know that the television picture signals, as broadcast, are limited to a luminance bandwidth of no more than 4.2 MHz. (Videodisc and satellite sources may have greater bandwidth, home VCRs provide much less.) This is a direct measure of the fine detail a picture can have and translates to about 330 lines of what is commonly called "lines of horizontal resolution." However, this figure is *not* a measure of the color portion of the picture. It refers to the sharpness of the black-and-white portion only and should correctly be called "lines of horizontal *luminance* resolution."

The amount of *color* detail in a TV picture is likewise limited by the bandwidth of the chroma signal. In setting the U.S. standard for that bandwidth, the National Television System Committee (NTSC) took into account an interesting characteristic of the way we see: In resolving extremely fine detail, our eyes rely only on its brightness, not its color. Thus, the luminance signal can safely be made the sole carrier of the finest details in an image since they are seen essentially in black-and-white. And this means, in turn, that the bandwidth of the chroma signal can be considerably narrower than that of the luminance signal.

The chroma signal itself consists of two components—called I and Q—which in various proportions can represent any transmitted color. In setting the exact bandwidth of these signal components, the NTSC exploited another property of our limited color-vision acuity. Of all the visible colors, we see medium-size details best in just two: orange and cyan (a greenish blue). So the I component, which carries these two colors and other colors nearby (like some shades of red and yellow) was given a nominal bandwidth of 1.5 MHz, distinctly narrower than the luminance bandwidth. The Q component was assigned to colors in which we can discern only large details, and it was given a bandwidth of just 0.6 MHz (600 kHz). Other colors are formed by mixtures of I and Q, and their effective bandwidths are intermediate. In a TV camera, I and Q components usually are formed by matrixing (mixing in defined proportions) the outputs of separate red, green, and blue picture sensors.

For the best possible performance, a color monitor should demodulate the full bandwidths of the I and Q com-

ponents, which will provide a maximum horizontal chroma resolution of about 120 lines, depending on the color. Currently, only the top RCA sets are known to offer full-bandwidth chroma demodulation, although some NEC models show some evidence that they do also. Other models use a simpler, "equiband" demodulation method. This ignores much of the information carried by the I signal and limits the bandwidth of all colors to around 0.6 MHz, for a maximum of about 48 lines of horizontal chroma resolution.

That's not much color detail, and you can spot a monitor using equiband demodulation by looking for blurred edges between what should be different, sharply separated colors, particularly where red, orange, or yellow is involved. Narrow, vertical, colored lines—especially the yellow ones often found in newscast graphics—will erroneously take on the color of the area immediately to their left, or their color may drop out entirely, leaving them a shade of gray. Multicolored floral arrangements and clothing with colored patterns may appear indistinct on a limited-resolution monitor, but they will reveal their fine color detail on a full-color-bandwidth monitor. Reds and yellows in sports uniforms will also be sharper, making it easier to identify the names and numbers of distant players. On a color-bar test pattern, the transitions between bars should be sharp; with impaired resolution one color will blur into the next. This is most noticeable at the yellow-to-cyan, green-to-magenta, and red-to-blue transitions.

Ideally, manufacturers' specifications and magazine equipment reviews should specify the chroma demodulation method used, along with the resulting chroma bandwidth. It's also desirable, and probably more understandable, to note lines of horizontal chroma resolution. A figure of about 120 implies maximum color resolution; a figure of around 48 means that resolution is impaired.

RUNNING THE GAMUT



WIDE-BANDWIDTH COLOR DECODING IS NOT the only thing necessary for good color performance: All the colors actually encoded by the NTSC system have to be reproduced accurately. Unfortunately, that is impossible with present-day video monitors and television receivers

because of the gradual escalation of picture brightness over the years.

First, a quick review. A color picture tube's image is produced by millions of dots made up of chemicals, called phosphors, that emit colored light when hit by an electron beam. When activated in the right proportions, the three different phosphors in a color tube—for the primary colors red, green, and blue—will give a full-color picture. It is impossible for any three color phosphors to produce all visible colors, but

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PROJECTION TUBES

The color triangle formed by most projection

the CIE chart. Red is significantly richer, with a true strawberry red possible. Green, blue, and intermediate hues are reproduced with greater saturation.

ture as high luminance resolution, you can expect to see CIE charts (or X and Y phosphor coordinates) in reviews and advertisements.

— C.S. and D.R.

TRUE COLORS

the color must be standardized by the NTSC in its original most later sets, including all present-day models, which can

TRUE COLORS

Although no present-day color picture tubes reproduce the full NTSC color gamut, some are more successful at it than others. In buying a monitor, you can choose between a number of distinct and identifiable color gamuts. Because of the physics and economics of large-scale picture tube manufacturing, the geographic origin of a tube usually determines its color gamut, regardless of the set's maker or brand. You can even compare the color performance of various picture tubes—without seeing them—by means of a simple diagram (see "Somewhere under the Rainbow," p. 50). Armed with this knowledge, you can look, though probably in vain, for a screen that truly provides redder reds and greener greens.

COLOR ACCURACY

ONE MORE FACTOR IS ESSENTIAL TO GOOD color reproduction: accurate re-creation of specific colors within the available color gamut. It all boils down to a question of which white is right. For example, consider two identical sheets of white paper side by side, with one illuminated by sunlight and the other by incandescent light. The sheet illuminated by sunlight would appear bluish, while the one lit by incandescent light would seem yellowish, even though each alone appears white. This phenomenon is quantified by "color temperature," which is always measured in degrees Kelvin. (Degrees Kelvin are the same "size" as degrees Celsius, but 0 degrees Celsius equals 273 degrees Kelvin.) The color temperature of sunlight is relatively high and bluish (paradoxically, it is termed a "cool" white), while incandescent light is yellowish and much lower in color temperature (it is "warm").

A color television system must specify what color temperature its white should be; all cameras and monitors should be adjusted to that standard so that the colors come out correctly. For NTSC, the reference white is equivalent to 6500 degrees—a color about the same as average daylight. For accurate color rendition, a monitor should also produce a 6500-degree white when fed a chroma-less signal. However, many monitors on the market deviate from this, producing a cooler (bluer) white from the same input. Such units don't reproduce the color picture as intended: Increasing the color temperature is equivalent to putting a colored filter in front of the screen.

Some U.S.-brand monitors, notably those of RCA, maintain the ideal white of 6500 degrees; others are bluer—about 7700 degrees. In the past, most Japanese monitors had quite high color temperatures—of 9300 degrees or more—which yielded a very cool, bluish picture, much like that from a black-and-white set. Flesh tones on these sets sometimes showed unnatural blue overtones that picture controls couldn't correct. Currently, however, some Asian brands

may be tending toward lower color temperatures.

Although deviation from a 6500-degree color temperature produces color distortion, to a certain extent our eyes can adapt to it. In addition, the perceived color is influenced by the color and intensity of the ambient light. In fact, arguments can be made for both warm and cool settings. In the end, it's a matter of personal preference. This may explain why Sony wisely offers switch-selectable color temperatures in some of its XBR sets. A few Japanese monitors intentionally alter the color temperature as the image is traced, so that white areas are made a bit bluish, while dark areas are warmer. This produces the illusion of a crisper picture, much as laundry bluing makes white clothes seem whiter. Even though this manipulation is actually a form of color distortion, you may like the results.

A TV GUIDE

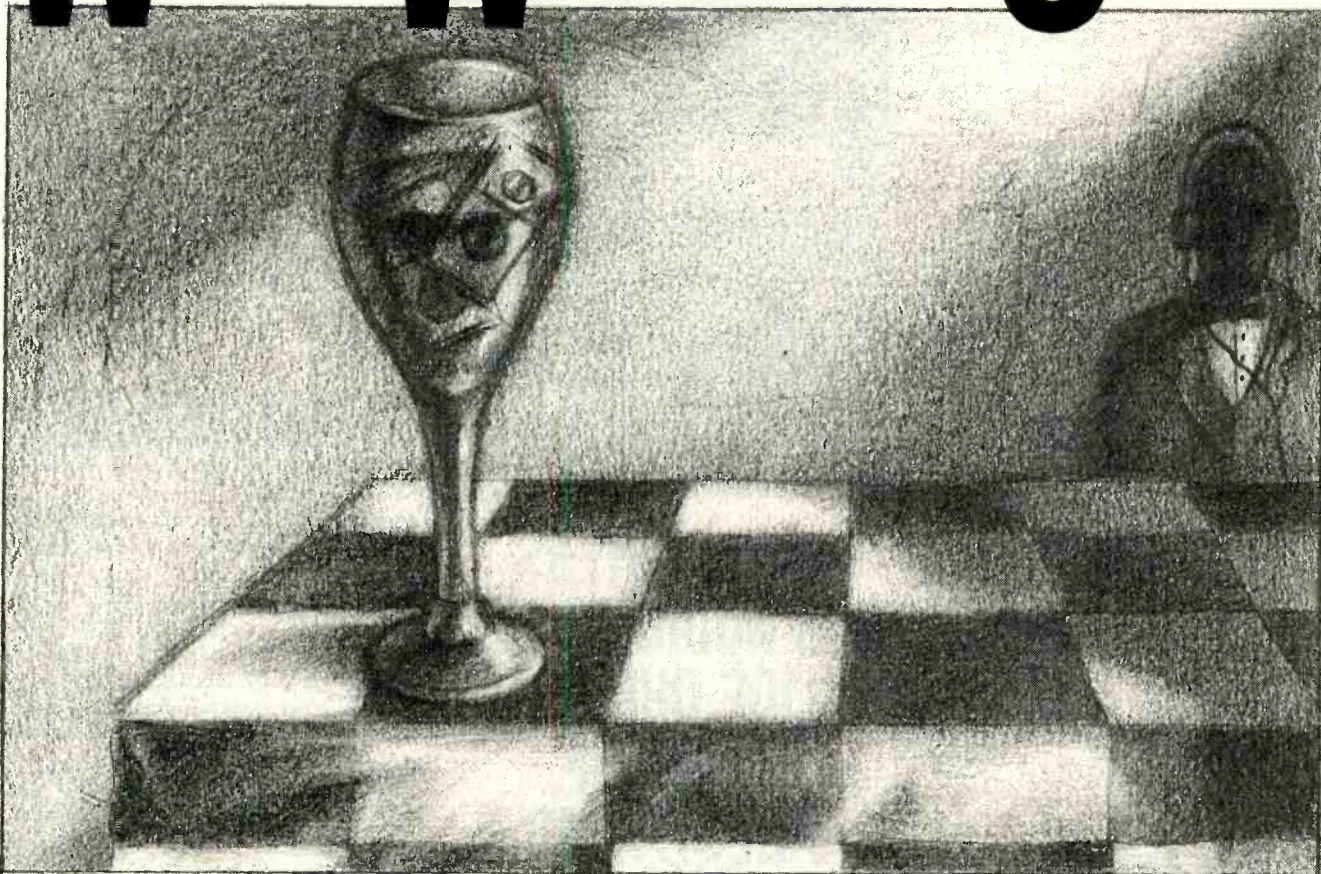
WHEN MAKING SUCH JUDGMENTS WHILE shopping, however, make sure you follow the basic in-store viewing guidelines. The high ambient lighting common to many stores is definitely a drawback in evaluating monitors. You'll need to look beyond distracting reflections, as well as compensate for picture brightness that may be turned up too high. Also, make sure that all the monitors you compare are adjusted for the closest possible match in black level (brightness control), white level (contrast or picture control), color saturation (color control), and hue (tint control). This is best done when the same program is being fed to each unit, preferably from a well-mastered videodisc or off-air broadcast.

If a monitor has an automatic color control (these go under various names), turn it *off*. In most Asian sets, this will defeat factory-preset adjustments, which may be incorrect anyway. In some American sets, turning off the automatic color control also will defeat a circuit that attempts to render all flesh tones the same color (distorting other colors in the process). For best viewing, you should leave all automatic color-adjusting features off, except when viewing degraded source material with poor flesh tones.

These are the basics of evaluating color picture performance. You're now better equipped to estimate just how well the incoming NTSC color signal is brought to life on-screen. In turn, that will enable you to select a monitor or TV receiver with the best color picture—even though none currently delivers the full range and detail of NTSC colors. Even on that score, be assured that manufacturers would like nothing better than to sell you higher-performance products (for premium prices), but they can successfully market only what you want. So if you'd like to see new monitors that take fullest possible advantage of the NTSC color signal, by all means let them know. Just say, "I want my NTSC." ■

B Y R I C H W A R R E N

WINE, WORDS, & SONG



ILLUSTRATIONS BY STEVE DINUNNO

Wine tasters and audiophiles have more in common than their jargon.

WHEN I USE A WORD," HUMPTY DUMPTY said, in rather a scornful tone, "it means just what I choose it to mean—neither more nor less." Audio writers and wine critics have learned well from Lewis Carroll's overlarge egg and have adopted a host of colorful words and phrases in attempting to communicate the unconveyable: a sensation.

Audiophiles and oenophiles (wine lovers) have simply run up against the limits of language to transmit information, limits already long probed by poets and aestheticians. But the subjective vocabularies of audio and wine are being used as the basis of product criticism, with readers selecting their vintages or equipment on the verbal advice of critics. Instead of reasoned judgment, metaphor commands the marketplace.

Wine, like audio componentry, is easily quantified. Laboratory measurements can

reveal acidity, alcohol content, and chemical structure for wine as easily as readings of frequency response, total harmonic distortion, and signal-to-noise ratio can be obtained for audio components. However, such lab data often convey little about how a taster or listener will react to a particular wine or audio component, especially to a person not versed in correlating technical terminology with internal experience and expectation. Both wine and audio critics slide quickly (sometimes too quickly) from the objective to the subjective and take refuge in evocative words and phrases that, unfortunately, may mean different things to different people and ultimately convey very little useful information.

In their attempts to avoid technical lingo, both fields have created a sometimes equally incomprehensible subjective jargon. Audio aficionados casually bandy about words and phrases quite alien to the world of electron-

ics and acoustics. "Grainy," for example, more appropriately describes products from Kellogg's than from KEF. Wine tasters do the same, describing their preferred liquid with words such as "supple."

Descriptive jargon for both disciplines (I use that term loosely) are so similar they might as well be interchangeable. I found the following example in a well-respected audio publication (the names have been changed to protect the innocent): "We found the entire upper range of the Gangov 4 consistently a hair prickly. Overall, we thought the sound generally well balanced and often excellently delineated, with crisp textures and colors." Note the similarity to a wine review—simply substitute Chateau Retsof 1976 for the Gangov 4 and "taste" for "sound." The same could be said for this

Rich Warren is a nationally syndicated audio columnist.

slightly tipsy rewrite of another review: "At times this speaker sounds just a bit too fresh and 'honest.' We missed a little of the meatiness and pungency provided by the cellos and double basses in orchestral material and the astringency of a kick drum in popular music."

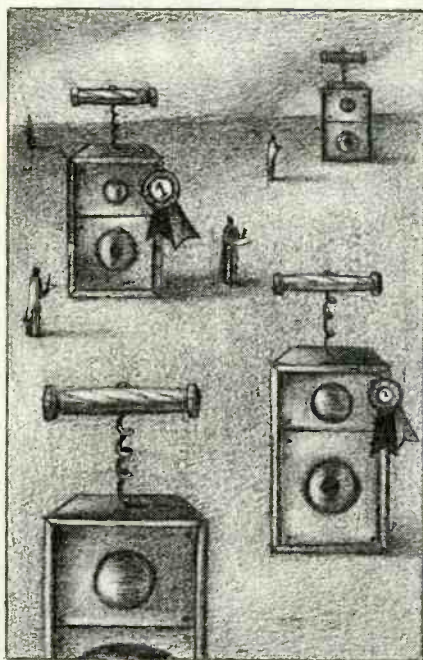
Pulling out all the stops—with corkscrews—would yield something in this vein: "The Dynamo 10s arrived corked. [In the wine idiom, this does not mean "factory sealed." See "Speaking in Tongues," p. 55 for a glossary of wine terms.] Lacking the buttery sound of the preceding model 9, the 10 comes on goaty, without finesse. Its mawkish midrange exacerbates the oxidized highs. A yeasty bass should indicate to all that these speakers may suffer imminent breakdown. The bitter-almond sound of guitar strings almost masks the bad-egg presence of the bass. We were relieved, however, by the lack of geraniums, considering the flowery excess of so many contemporary speakers."

What's fascinating about these wholesale transubstantiations of wine jargon into audio componentry is that so much of it sounds good. Besides confirming that the realm of the senses, whether it be sound or flavor, distills rather poorly into words, these examples point the way to an important lesson. If the basic attitudes and vocabulary of wine and audio connoisseurs are so similar, there may indeed be something that the long and respected tradition of wine tasting can teach the audiophile.

TASTE TESTS

IN HIS *POCKET GUIDE TO WINE TASTING* (Christie's Wine Publications, 1982), Michael Broadbent, citing the cynical truism "A sight of the label is worth fifty years' experience," advises blind tastings, in which the tasters do not know what they are drinking. "Tasting . . . completely blind, without any hint of what it might be," he continues, "is the most useful and salutary discipline that any self-respecting taster can be given. It is not infrequently the most humiliating."

Substitute "listening" for "tasting," and you have an apt description of the effects of "blind" listening tests, in which the listener knows neither the identities of the components he is auditioning nor the specific effect, if any, he is listening for. Unfortunately, blind audio evaluations are far more rare among audiophiles than blind tastings are among oenophiles. (It is easier to keep the wine bottles out of sight than audio components.) And other restrictions apply in audio: For best results, the component switching should be as rapid as possible, with levels matched to within a fraction of a dB.



WINE TASTERS AND AUDIOPHILES SLIDE QUICKLY FROM THE OBJECTIVE TO THE SUBJECTIVE, TAKING REFUGE IN EVOCATIVE WORDS AND PHRASES.

But even these difficulties do not explain the resistance of some listeners to this method, one of the few guaranteed to produce generalizable results. Perhaps the lack of distinct differences among various components (amplifiers, CD players, and some phono cartridges) often uncovered with blind listening tests is discouraging. After all, how can you prove how much you know or how well you can hear if there are no sonic differences worth talking about? Oenophiles have it easier: It's rare that any two vintages will taste identical, even under the most scientifically controlled tests. Still, a blind audio comparison test is indeed among the most instructive—and possibly the most humbling—of all audiophile activities. Every self-respecting audio enthusiast should participate in at least one.

VINTAGE VENEERS

FOR THOSE SEEKING TO FURTHER EXPLORE THE wine/audio connection, I suggest a marketing concept that has so far been overlooked by both the audio and wine industries: Every loudspeaker should come packaged with suggestions for an appropriate wine. For example, conservatively designed British speakers go well with an aged port. A certain West Coast speaker manufacturer requires a wine with strong oak qualities. The few speakers originating in Washington State beg a wine redolent of apples. White wine is a must for German speakers, and Swiss speakers must be auditioned with Swiss wine (almost impossible to get outside of Switzerland, however). Japanese speakers cry for sake (heated, preferably). Wine coolers are appropriate for the overly loud and bass-heavy systems found in vans and other recreational vehicles.

Once you've matched the broader class of wine to the speaker, you can narrow the selection to the specific variety that complements the music. Some antidigital audiophiles might suggest an astringent, austere, flinty drink for Compact Disc listening. And you must never serve white wine for listening with tube electronics, as it must be served chilled and that would diminish the experience of the tubes' natural warmth. Don't go too far, however. Unlike wine, audio components rarely improve with age. Storing a pair of speakers in a cold, damp cellar awaiting a maturation of their sound quality will ultimately prove fruitless. Fortunately, when auditioning speakers, you don't need to expel the sound from one speaker before proceeding to the next, unlike wine tastings, in which you must spit out each taste. This explains why audio showrooms are usually cleaner than wine cellars.

SPEAKING IN TONGUES

MANY ADJECTIVES USED IN SUBJECTIVE descriptions of audio-component sound are also used in wine tasting. Among them are: bland, clean, coarse, common, crisp, fine, firm, great, harsh, honest, mellow, metallic, neutral, ordinary, rich, robust, rough, silky, and thin. But wine tasting, being an older and presumably more mature craft, has exceeded even the furthest fringe of underground audio publications in its use of language to describe sensations. Some of the following wine words and phrases might therefore prove to be valuable additions to today's limited audio vocabulary.

astringent: causing puckering of the mouth (or ears)

austere: harsh and severe; without complexity

buttery: having a positive taste and smell related to butter

clean: without any negative tastes or odors

corked: obnoxious to the hilt; caused by spoilage

bad eggs: a harmless but disgusting smell caused by hydrogen sulfide gas

finish: the end taste, after the wine has been swallowed

flinty: having an evocative overtone from growing in soil containing flint

flowery: having a flowerlike fragrance

forward: not at a midrange peak, but rather advanced in maturity for its age

geraniums: used as a derogatory comparison to the not-so-pleasant smell of these flowers. Might also be a good word to describe weird-looking speakers.



THERE MAY BE SOMETHING THAT THE LONG AND RESPECTED TRADITION OF WINE TASTING CAN TEACH THE AUDIOPHILE.

grip: a forceful, positive combination of attributes; the opposite of milquetoast

long: having a lingering flavor, indicating quality. In audio, however, it could indicate a lack of damping.

mawkish: drab and insipid, often with a sickly sweet taste

mousy: flat, yet vinegary

mulled: flavored with spices

noble: possessing superior elegance; the ultimate in stature and breeding. Also applies to all loudspeaker-company presidents with British accents.

noble rot: the furry mold that aids in wine making, but which is a disaster if it appears prior to the fermentation process. Responsible in audio for such things as the Elcaset and quadriphonic sound.

oak: an attribute imparted from the aging wine cask, desirable in moderation but not in excess. Commonly used to describe speaker cabinets.

oxidized: flat and stale

peppery: raw and harsh (like some early CDs)

prickly: having a sharp-edged, raw, almost effervescent quality

pungent: powerful and assertive; heavily scented or spicy

send it back: the ultimate rejection

sulphurous: having a smell that pricks the nose and throat, like that of a volcano

zing: self-explanatory

Adapted from "Pocket Guide to Wine Tasting and Wine Cellars" by Michael Broadbent, © 1982 by Mitchell Beazley Ltd. Reprinted by permission of Simon & Schuster, Inc. ■



SALIERI AT RIDER

RIDER COLLEGE IS LOCATED IN Lawrenceville, New Jersey—about halfway between Princeton University and Trenton State College. When I was a student at Rider in the late '70s, I would use that description to tell friends and relatives where I was. Rider always had a fine reputation as a business school, but more often than not it was in the shadow of its neighboring institutions. Come April 11, Rider will have its own name boldly on the map when it hosts the first modern performance—and the American debut—of Salieri's Mass

in B flat. On stage will be the Pennsylvania Pro Musica and the Rider College Chorale, under the direction of Franklin Zimmerman, professor of music at the University of Pennsylvania. And in the audience will be the person who edited the piece for this performance: Dr. Jane Schatkin Hettrick, Rider's torch-bearing associate professor of music and this country's leading authority on Salieri.

Studying Salieri in Vienna several years ago on a fellowship from the National Endowment for the Humanities, Hettrick was in the Austrian National Library when she came across the composer's autograph score and performance parts to the Mass. (One vocal part is signed by one of Salieri's choirboys: Franz Schubert.) "This final Mass is more lyrical, less contrapuntal than [his] earlier ones," Hettrick says. "There is a cello part that is very melodic." Salieri completed the work on May 11, 1809—the very day of Napoleon's second invasion of Vienna—and wrote "*Finis!!!!!!*" on the last page, the six exclamation points echoing the bombardment outside.

Also on the April 11 program will be Salieri's C major Organ Concerto. Hettrick, who published the first edition of the concerto in 1981, will be the soloist. Details on the concert (and the limited-admission dress rehearsal the night before) are available from Rider at (609) 896-5326.

By the way, in her ongoing studies, Hettrick is looking at Salieri's controversial connection with Mozart. "I can't make a final judgment yet, but it's highly unlikely that Salieri poisoned Mozart," Hettrick says. "Still, the level of intrigue in Vienna was extraordinary, and Salieri must have been part of it. As for psychological poisoning, considering that Salieri was a generous patron of music—he taught Liszt without payment and supported a charity for the widows and orphans of musicians—there is certainly a lacuna when it comes to Mozart."

Ken Richardson

MUSIC FOR EXPORT: POP!

I THINK I CHOSE THE WRONG profession—or at least the wrong part of the right profession. Granted, music is not a bad place to be. But I chose classical music, and all the action is on the pop side, as I found out during a short trip to Europe this past December. It wasn't so bad eating breakfast at an inn in Ostfriesland to the accompaniment of the usual Christmastime ballads (sung in English, of course), piped over the Muzak system, or the radio, or whatever it was. But when I got to be part of the studio audience for Danish

Radio's morning TV show, each segment of which begins with a rock video (sung in English, of course), I began to feel strangely out of place—and right at home at the same time. This is Europe, I kept telling myself. The cradle of classical music. What's going on?

What was going on was that the truth of that old platitude about music being the universal language was starting to hit me in a way I hadn't quite expected. I was beginning to realize that there is nothing more universal in the world today than American popular music, a.k.a. rock 'n' roll—its sound, its language, its conventions, its appeal. It doesn't matter whether the performers are from Malmö or Manhattan: The style is the same, the gestures are the same, the point is the same. America may have fallen on hard times as an economic power, and we may be on the short end of a whopping trade deficit, but when it comes to music, we are the world's leading exporter, its No. 1 power, and its creative genius all wrapped into one. Who'd have thought that rock would be our most obvious and significant contribution to world culture?

Anyone who didn't have his head buried in classical music, I guess. I confess I felt rather pleased when I realized that it's our *music* that is the universal language, even more—far more—than English is the universal tongue. (There are lots of places where English isn't spoken, but not many, I'll wager, where American music isn't in demand.) The night before this revelation, I had gone to the National Theater in Copenhagen and heard Donizetti's *Don Pasquale* sung in Danish so that a fairly sophisticated audience could understand what was going on. But nobody, nowhere, has to have rock music translated. Even if the lyrics are in a language that isn't familiar to the hearer, the music itself translates every time. Talk about an art that transcends national boundaries!

Ted Libbey



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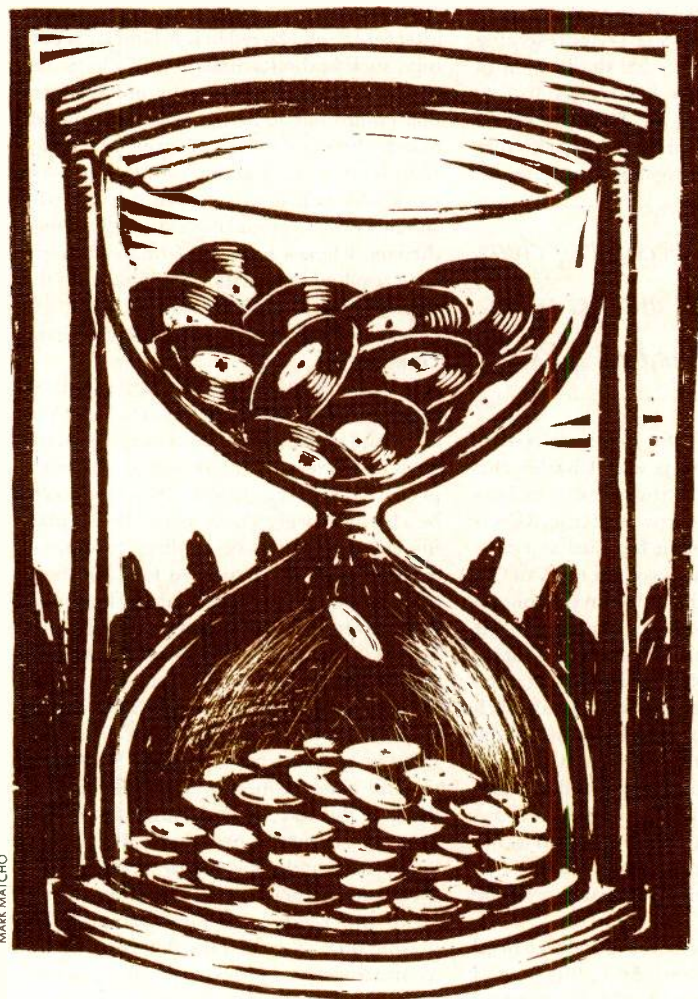
E D I T E D

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Taking stock of the Compact Disc as it begins its fifth year



BY THEODORE W. LIBBEY, JR.

A Little Less Noise, Please

without describing at too great a length, its many advantages in terms of durability, portability, programmability, playing capacity (75 minutes), and, most important of all, musical fidelity. Sure, there are some so-

IN THIS, THE FIFTH YEAR OF THE COMPACT Disc, one does well to remember the opening lines of Lewis Carroll's poem *The Walrus and the Carpenter*: "The time has come," the Walrus said, 'to talk of many things'—a fitting summons because the time *has* come to talk of many things. The CD has supplanted the long-playing record as the medium of choice for serious high fidelity listening, but it is far from achieving the popularity the cassette enjoys as the medium of convenience, nor has it even begun to challenge the LP in terms of the breadth of repertory it makes available. The romance is over—the oohing and aahing part is, at least—and a pleasant but somewhat problematic reality is left. Yes, the Compact Disc is a wonder, but the time has come, we Walruses might say, to speak of what CD has *not* managed to do in its first half-decade and to ponder the prospects of its making good in several critical areas.

To take stock of the CD at this point in its history, one needn't be an apologist. One can concede,

called purists who are still out to knock digital recording techniques and laser-optical playback on the grounds that they don't sound natural, but I suspect that most of these "true believers" formed their opinion of what natural sound is from a phonograph and haven't spent much time with the sounds of live musical instruments in their ears. At any rate, I have yet to encounter an objection of theirs that I couldn't dismiss with a simple A/B comparison of LP and CD.

That still leaves the "converts" to CD with plenty to gripe about. There is a lot of repertory on CD, but not enough. Some outstanding recordings of the past have been digitally remastered and reissued on CD, but not enough. A certain amount of attention has been paid to user convenience, but not enough. The criticisms most in need of being made today have less to do with how the CD sounds than with how it satisfies the needs of the serious listener and the beginning collector, especially that collector whose LPs have for the most part been retired from service be-

cause of the clear superiority of the silver discs.

The most important concern to both classes of consumer is what is being put on those discs. The basic complaint is that there is, at the same time, too little and too much; that a variety of labels both small and large, because of what might be termed "the vinyl mentality," have been reluctant to give consumers their money's worth by exploiting the CD's extended storage capacity (too little playing time), and that many if not all of the major labels, instead of seeking to enrich the catalog, have cowered behind the flimsy excuse that certain repertory always sells, no matter who the performer, and have continued to issue the same works over and over again (too much duplication of repertory).

There are, happily, a few labels that, so far at least, are not to be tarred with these brushes. Delos has laudably adhered to the policy of filling its CDs with an hour or more of music, even if that means devising different program configurations from those originally released on LP. And Erato, Nonesuch, Chandos, BIS, and Harmonia Mundi have, on the whole, conscientiously avoided the beaten track and brought a wealth of interesting repertory into the catalog, most of it in commendable performances. But Angel (to cite a label that has fallen down in both respects) until quite recently ignored complaints that it was giving consumers modest, if not paltry, value on many of its CD releases. An especially irksome case of this was the separate reissuing of Riccardo Muti's recordings of *Petrouchka* and *The Rite of Spring*, when both could easily have been accommodated on a single disc (this after Muti himself, according to informed sources, suggested the pairing of the two ballets on one CD and received assurances from Angel that it would be done).

Angel is not alone in its transgressions: Other labels have fallen short and continue to do so. In the "saturation of repertory" department, Deutsche Grammophon recently released its fifth CD of Wagner preludes and overtures. As if the four discs it already had on the market—two from the Vienna Philharmonic with Karl Böhm, and two from the Berlin Philharmonic, one with Furtwängler conducting, the other with Karajan—weren't sufficient, the yellow label has produced a tedious new collation in which, thanks to the conducting of Giuseppe Sinopoli, luster is almost completely lacking in the playing of the New York Philharmonic. Then, in the "where's the beef?" department, there are Leonard Bernstein's new recordings of two Mahler symphonies: the Seventh with the New York Philharmonic and the Ninth with the Concertgebouw Orchestra, each on two CDs. The individual timings of the two discs on which the Seventh is recorded are 38:42 and 43:38. The Ninth, not available at the time of writing, is longer by about 10 minutes. It doesn't require a degree in higher mathematics to realize that the two works could easily have

been carried on three CDs, at a considerable saving to the consumer.

Over at RCA, there has been admirable sensitivity to matters of repertory and program length in Compact Disc reissues, and the firm's promise of 12 CDs a month from the Red Seal vault are causing a lot of mouths to water. But what are we to make of RCA's new product? Another Tchaikovsky Concerto No. 1 in B flat minor—this one with Barry Douglas as soloist—representing meager value and unneeded duplication of repertory? (Note that Telarc has just released a CD that offers the Tchaikovsky and the Prokofiev Third, played by Jon Kimura Parker. The same pairing is also available on

*Only now is it becoming clear
how strong the market is for
reissues of the best LPs.*

a recent DG Compact Disc, a reissue of Martha Argerich's accounts with Charles Dutoit.) True, Douglas just won the Tchaikovsky competition in Moscow, and true, RCA is trying to capitalize on the fact, just as it did a generation ago when it brought out Van Cliburn's recording of the Tchaikovsky concerto in the wake of his Moscow victory. But this is the CD generation, and CDs hold 75 minutes of music, not 35. On top of that, Red Seal has released another Shostakovich Fifth, this one from Leonard Slatkin and the Saint Louis Symphony. Was that in case collectors found the choice between Bernstein, Rostropovich, Haitink, Rozhdensvensky, Mravinsky, and Maazel too narrow? Why not the Shostakovich Eighth (which Haitink currently has to himself) or a pairing of the Sixth and Ninth?

Philips, too, seems to think there's a need for another Shostakovich Fifth, this time as the vehicle for Semyon Bychkov's recording debut (with the Berlin Philharmonic, not yet released). Why a no-name conductor should be launched on a recording career with this symphony, against such competition, is beyond comprehension, unless Philips has so little confidence in its new boy that it is convinced nothing else will sell. The Dutch giant could learn a lesson from Chandos, DG, and BIS, who have made Neeme Järvi one of the most recognized conductors in the recording field today, virtually from scratch, by giving him cycles of Tubin, Sibelius, Berwald, Glazunov; and Prokofiev. Not exactly safe bets, any of them.

Over at London, the no-risk policy seems to be just as firmly entrenched. Warhorses dominate the company's new release sheets, and some rather curious decisions are being made with regard to who rides them. In recent months, for example, London has given us a Tchaikovsky B flat minor Concerto (here we go again . . . fortunately, this one has the Dohnányi *Variations on a Nursery Song*

as filler) with András Schiff and Georg Solti, a Grieg/Schumann concerto pairing from Jorge Bolet and Riccardo Chailly, and yet another complete cycle of the Beethoven piano concertos, with Alicia De Larrocha as soloist and Chailly conducting. There has also been a new *Don Quixote* from the Cleveland Orchestra, with soloist Lynn Harrell, presided over by that noted Strauss conductor Vladimir Ashkenazy. London deserves credit at least for trying Harrell in less familiar repertory, such as the Rachmaninoff Cello Sonata. Or so it would seem, until one discovers that Philips has come out with the same sonata at the same time, interpreted by Heinrich Schiff. The Rachmaninoff is a good work and well worth recording, but why should two Polygram labels cut each other's throats, when a little coordination might have resulted in a further enrichment of the catalog? How about CDs with the sonatas of Debussy, Weill, Kodály, Shostakovich, and Prokofiev?

One could go on, but the point should already be clear. More imagination has to be exercised in deciding what repertory should be newly recorded for CD, and by whom, especially at the large labels. And there has to be a lot more willingness to use the full playing capacity of the silver disc, on new releases as well as reissues. At least the latter end may be achieved when labels finally free themselves from the notion (referred to earlier as "the vinyl mentality") that CDs should contain no more music than will fit on an LP so that new LPs can be issued using the same master, the same program, the same liner notes, and the same artwork as the CD. None of the big labels will admit to thinking this way, but most are guilty of limiting the content of new single-disc recordings to LP length. It would be nice if some of them had the nerve to go the other way, as Delos and Telarc have done, and make the playing time of the CD the determining factor in arriving at a program for new product. The time has come to say to hell with the LP; it should have happened already, but it hasn't, and it's unlikely to happen soon. Just how unlikely can be gauged from the zealous overpromotion of new product at several of the major labels, especially the Polygram trio, and the corresponding underpromotion of CD reissues (which usually, though not always, have no LP or cassette equivalents). These labels still want to sell as much vinyl as they can, and until the time comes when they lose that option, they will continue to hold the CD to less than its potential. Ironically, Polygram is obstructing its own progress here, since Philips, along with Sony, created the CD format in the first place.

The fact that Polygram has routinely underpromoted reissues, not just in terms of advertising priorities but in its overall marketing strategy (review copies of reissues normally are not sent to the press), is evidence of an even greater misconception, one held by all the major labels, not Polygram

alone. The blunder—and it certainly can be called one—is that until recently no one grasped the real potential of the Compact Disc as a reissue medium. Only now is it becoming clear how strong the market is for reissues of the best recordings made during the LP era and how comparatively weak is the demand for new recordings, other than those by a few big-name crossover artists (which is a phenomenon of the major labels' own making that they're going to have to live with for a while).

The greatest catalogs of the first half of the stereo era were those of EMI, RCA, and CBS, but Decca/London stole a march on all those labels by issuing more of its treasures during the first years of the CD boom. (At least one Polygram label had its thinking cap on.) Despite some failures, London's ADRM series of digitally remastered analog recordings set a technical standard for the industry. It also has given new currency to such glorious achievements as Benjamin Britten's recordings of his *Peter Grimes* and *War Requiem* and Georg Solti's landmark traversal of the *Ring*. Happily, other labels have been catching up: RCA has gone back to its vaults for Reiner and Heifetz, while CBS, after some prodding from its Japanese affiliate CBS/Sony, has rolled out most of Bruno Walter's early stereo Columbia Symphony recordings, Bernstein's Mahler and Beethoven symphony cycles, and a good deal of other material as well.

EMI has been slower, due to chronic difficulties with CD production (for which it has had to rely, until recently, on outside sources). The firm is beginning to reissue some of the outstanding titles in its catalog, but, in several instances, its decisions concerning what to release (and what not to release) have been sadly misguided, if not downright ludicrous. It is almost painful to disclose one of these cases, but it shows what can happen when a label's management doesn't understand the market it is serving. Word leaked from Angel some time ago that the reason Furtwängler's *Tristan* has yet to appear on CD in the United States is that Angel's executives decided to devote the press time at their disposal to a series of Beverly Sills CDs—an extraordinary misappropriation of resources. The success of the label's Callas reissues should have tipped those executives off to the presence of the strong collectors' market that has established itself here, a market to which important Furtwängler reissues have infinitely more appeal than Sills bonbons. This was not just a lost opportunity for landslide sales, it was also a major disservice to the serious collector.

Much of this argument is academic, however, because Angel is currently unable to keep the vast majority of its CD titles in stock. In spite of its having released several hundred titles, it supplies merchants each month with a short list of about 20; important reissues like the Beethoven string quartets played by the Alban Berg Quartet and the Callas *Tosca* are unavailable for months,

sometimes for more than a year. But of course, Jeffrey Tate's new Schubert Ninth will be available on CD, as will Hildegard Behrens singing Wagner arias, and Eduardo Mata's new recording of Copland's Third, with an anemic-sounding Dallas Symphony. Is there vanity at Angel EMI? You can bet there is.

Once that vanity cools, reissue policy should become the burning issue at Angel, as indeed it should at any label with a catalog worth mining. There are many suggestions to be made, since there are still quite a few glaring deficiencies in the catalog as a whole. At present, the catalog is stronger in orchestral repertory than in other areas, for rea-

*Important Furtwängler
reissues have infinitely more
appeal than Sills bonbons.*

sons that aren't too hard to fathom: That is where most of the warhorses are to be found and where the medium is at its best in comparison with the LP. Even so, there is no top-class César Franck D minor Symphony in the lists, nor is there an adequate representation of the symphonies of Brahms. The areas of repertory that have been overlooked include vocal music and opera (especially Baroque, 20th-century, bel canto, and grand opera—but we *do* have four *Rings*, with two more on the way); chamber music (there is exactly one recording of Mozart's *Haydn* Quartets in the catalog, by the Kocian Quartet on Denon); wind music; early music (whatever happened to Angel EMI's *Reflexe* series?); contemporary music; American music; ballet; and show music (other than Sondheim and the unfortunate works that have been fouled by Kiri Te Kanawa).

Among specific projects I would like to see, either newly recorded or reissued, are CDs of the operas of Monteverdi, Cavalli, Handel, Auber (*La Muette de Portici* is on the way from Pathé Marconi), Meyerbeer (London, how about a reissue, or a remake, of *Les Huguenots*?), Tchaikovsky, Debussy, Strauss, Janáček, Shostakovich, and Prokofiev (a *War and Peace* conducted by Rostropovich can be expected soon from Erato). Among the reissues I would like to see are Solti's *Der Rosenkavalier* (slated by London for January 1987 release), Karajan's *Salome* with Behrens (her one successful operatic outing), Mackerras's *From the House of the Dead*, and Böhm's final *Elektra* with the Vienna Philharmonic. (It's alleged that DG is unwilling to release this *Elektra* because the sound for the video production was recorded by London and is "not up to standard." I've heard it, and it's smashing.) I would like to have Sutherland's *I Puritani* (it's hard to believe that London has missed the boat on this one, since it's been known for several years that she would be singing it at the Met this season), anything

with Tebaldi, anything with Bjoerling, and everything recorded by William Kapell and Dennis Brain. I am waiting for the Quartetto Italiano (we could start with their Mozart). I would also like Karajan's *Pelléas et Mélisande* and Rostropovich's *Eugen Onegin*, *Queen of Spades*, and *Lady Macbeth* to be available on CD. From RCA, I would like all of Martinon's Chicago Symphony recordings, the best of the Munch/Boston Symphony outings, and *Victory at Sea*—and anything Toscanini recorded. The time has come for these recordings—and many, many more—to be on CD.

But before they are reissued, let us pray for musical guidance for the technicians. Though there can be little doubt that digital remastering has become a fine art in itself, there is still too much signal processing going into the effort. It's one thing for today's engineers to use digital reverberation when making new recordings, as the DG teams in Berlin and New York do (I think it's unfortunate, but presumably the artists involved are party to the decision); it's quite another thing to add reverberation to recordings as they are being remastered years later. For one thing, it's a falsification of what the artists created and, in theory at least, approved. Moreover, it's risky: EMI's "mono" reissues of the Callas recordings, with artificial reverberation added, surrender about 3 dB in dynamic range, while CBS's reissue of Boulez's *La Mer*, also with artificial reverb, sacrifices the dry clarity of the original recording for nothing in added atmosphere.

While they are at it, the technicians might also pay attention to the user's need for convenience. Unfortunately, it's too late to ask for the restoration of the index feature, which Polygram has effectively killed. The explanations that were offered by the likes of Polygram's Hans Gout as to why indexing was impractical were never valid, but, in this case, might have made "right." Still, most new discs would be improved by having a greater number of access points, especially those of large symphonic works with lengthy individual movements.

The watchword is *care*: care in remastering, care in reissuing, care in new recording ventures, and above all, care for musical and not just commercial considerations. There needs to be less thinking in terms of today's few big names and more thinking in terms of the truly big names of the past. Less preoccupation with making new records of sure-fire repertory with modest talents and a greater effort to insure that the *best* performances of the great works are brought to Compact Disc. Less mass-market razzle-dazzle and more willingness to produce a catalog that has balance, interest, and a sense of adventure and musical value. The serious listener expects no less, and the recording industry should realize it before it is too late, before the disenchantment sets in. For today's CD consumer, unlike the young oysters in Carroll's poem, is not going to be easily led astray. ■

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Liszt Galore

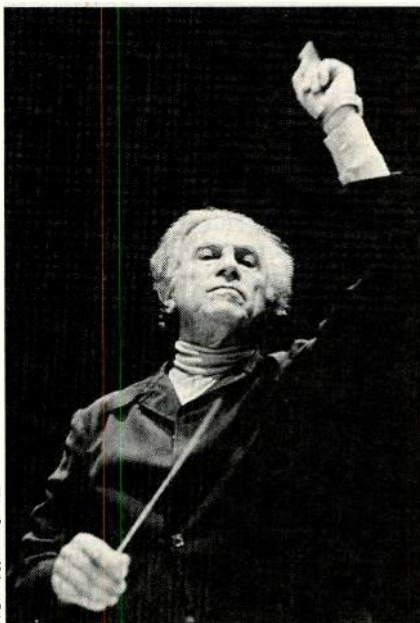
ACCORDING TO THE POPULAR HUNGARIAN humorist (actually, he calls himself a "humoralist"), György Sándor, Hungary is a country poor in mineral resources but rich in anniversaries. This is certainly true. We Hungarians seem to revel in anniversaries, and we celebrate them with a vengeance. During the past year, we have had Liszt—as the saying goes—flowing from the water tap: radio quiz programs on his life, learned symposia on aspects of his *oeuvre*, books (most notably, the first volume of Alan Walker's outstanding biography), the opening of a Liszt museum, exhibitions, an international piano competition bearing his name, and countless concerts and records.

Hungaroton obtained from Paris a copy of the manuscript of Liszt's adolescent opera *Don Sanche, ou le château d'amour*, and released a recording (MC 12744/45) of the work to mark the Liszt centenary. *Don Sanche* received its premiere on October 17, 1825 (five days before the composer's 14th birthday), with Rodolphe Kreutzer conducting the Paris Opera. Hungaroton prides itself on issuing the first studio recording of the opera (a concert performance had been available on disc). The title role is sung by Gérard Garino of France, and the cast includes Katalin Farkas, Ildikó Komlósi, and István Gáti. Tamás Pál conducts the Hungarian Radio Choir and the Budapest Opera Orchestra.

In conjunction with Sefel Records, Hungaroton has released all of Liszt's symphonic poems in a collection of six LPs (five CDs), with Árpád Joó conducting the Symphony Orchestra of the Hungarian Radio and Television. The two *Episodes from Lenau's Faust* and the orchestral version of the *Mephisto Waltz No. 2* have also been included.

Some 30 of Liszt's piano pieces have now been printed for the first time, as part of Editio Musica Budapest's complete Liszt Edition, and a selection from these novelties will be made public by Hungaroton on four records (*The Unknown Liszt*), the first two of which have already appeared. István Lantos plays *Urbi et orbi*, *Stabat mater*, *Vexilla regis prodeunt*, a *Berceuse*, and other pieces on the first disc (HCD 12634). It has just been followed by one (SLPD 12635) offering *Invocation*, *Hymne du matin*, *Hymne de la nuit*, another *Berceuse*, the *Klavierstück in F*, *Epithalam*, *Harmonies poétiques et religieuses*, *In festo transfigurationis Domini*, *Ave Maria*, *Nuages gris*, *Am Grabe Richard Wagners*, and *Trauervorspiel und Trauermarsch*, played by Kálmán Dráfi. On the way are a disc featuring Jenő Jandó and

Bálint András Varga works in Budapest at Editio Musica, the state music-publishing agency.



HIGH FIDELITY ARCHIVES

CONDUCTOR ANTAL DORÁTI PRESIDES OVER A NEW RECORDING OF LISZT'S MONUMENTAL ORATORIO "CHRISTUS."

Dráfi playing original works by Liszt (SLPD 12511) and another with István Székely performing Liszt's paraphrases of works by Russian composers, including Glinka, Cui, and Dargomizhsky (SLPD 12767).

The *Missa Choralis* has been released in a new rendition (SLPD/HCD 12747), with Kálmán Strausz conducting the YCL Chorus and Zsuzsa Elekes playing the organ part. Miss Elekes is also credited with an all-Liszt record (SLPD 12749) of her own, featuring *Ad nos, ad salutarem undam*, *Evocation à la Chapelle Sixtine*, *Trauerode*, and *Nun danket alle Gott*.

The monumental oratorio *Christus* has been newly recorded, complete and unabridged, on four LPs (three CDs), some 15 years after Hungaroton's first recording of the work. From that cast, only Sándor Sólyom Nagy has been retained (once again, he has been entrusted with the title role). Conductor Antal Doráti, who selected Veronika Kincses, Klára Takács, János B. Nagy, and László Polgár for the other roles, leads the Hungarian State Orchestra, the Hungarian Radio Choir, and the Children's Choir of Nyiregyháza (a town in eastern Hungary) on this digital recording (HCD 12831-33-2).

There are three more Liszt records in the pipeline: the first-ever recording of the choral work *Septem Sacramenta* (which will account for one side of SLPD 12748, with smaller choral pieces as filler); a rarely heard version of *Via Crucis*, with the Tomkins Ensemble and the piano duo of Dezső Ránki

and Edit Klukon; and a recording of the first version of the *Faust* Symphony (which does without a choir, and which some people prefer to the better-known final version).

Liszt does not, of course, account for Hungaroton's entire output. The label continues its joint venture with CBS with the release of an unusual set of Haydn concertos featuring the noted French flutist Jean-Pierre Rampal and the oboist Pierre Pierlot. The concertos were composed at the request of Ferdinand, King of Naples, for the king's favorite instrument, the *lira organizzata*. It was related to the hurdy-gurdy but fitted with one or two rows of organ pipes as well. Haydn himself prepared the versions for flute and oboe, and it is these double concertos that the Hungarian recording company has now marketed. The disc also includes the Oboe Concerto in C and the Flute Concerto in D, which was until recently ascribed to Haydn but which scholarly research has established as having been written by Leopold Hoffmann. The Ferenc Liszt Chamber Orchestra is led by János Rolla. Further ahead is an all-Telemann album and a disc offering five flute concertos by C. P. E. Bach, with Rampal and the Ferenc Liszt Chamber Orchestra, also coproduced by Hungaroton and CBS.

Since I last reported on the recording debut of Richard Strauss's *Guntram*, the set has been awarded the Grand Prix of the Académie du Disque Lyrique. Hungaroton now has high hopes for Umberto Giordano's *Fedora*, starring Éva Marton and José Carreras, and preparations are under way for the next opera project: the same composer's better known *Andrea Chénier*, featuring Marton, Carreras, and Giorgio Zancanaro, with Giuseppe Patané conducting the Hungarian State Orchestra.

Meanwhile, the ensemble Schola Hungarica continues its exploration of Hungary's musical past. Conductors Albert Simon and László Dobszay have committed to disc several liturgical works by the virtually unknown 18th-century composer Benedek Istvánffy. While the entry on Istvánffy runs to just three lines in a Hungarian musical encyclopedia published in the 1960s, the edition printed in 1984 has a more substantial paragraph on this organist and composer. Hungaroton's may well be the first recording devoted entirely to works by Istvánffy, in this case, his *Introtitus*, *Anthems*, *Antiphonae*, and *Offertoria*, sung in Latin and accompanied by the Schola Hungarica orchestra (SLPD 12733). ■

BY BÁLINT ANDRÁS VARGA

THE CD SPREAD

MINI-REVIEWS OF THE LATEST COMPACT DISCS

BY ROBERT E. BENSON, THOMAS L. DIXON, AND TERRY TEACHOUT

RAVEL "BOLERO": LONDON SYMPHONY, PREVIN

MORE THAN 15 CD RECORDINGS OF RAVEL'S *Bolero* are currently available, and just about all of them are preferable to Angel EMI's new CD reissue featuring the London Symphony Orchestra conducted by André Previn. It is not Previn's fault that the recording is not a success: His choice of a slow tempo is commendable (indeed, this is perhaps the slowest account available), and the London Symphony Orchestra plays very well for him, as they do in the accompanying second suite from *Daphnis et Chloé* and the *Pavane pour une infante défunte*. The problem is the surprisingly poor quality of reproduction. In these analog recordings, made in 1980, there is a decided lack of solid bass and sonic impact, even at the conclusion of the work. The limited playing time (41:14) of the CD is another drawback. (Angel EMI CDC 47162.)

R.E.B.

SIBELIUS TONE POEMS: SCOTTISH NATIONAL, GIBSON

CHANDOS HAS RELEASED A TWIN-CD SET THAT contains all of the symphonic poems of Jean Sibelius in performances by the Scottish National Orchestra conducted by Sir Alexander Gibson. These are analog recordings dating back about a decade, but the reproduction is excellent: warm, rich, and resonant. The Scottish ensemble does not have the sonic weight or the powerful brass essential for *En Saga*, Op. 9; *Finlandia*, Op. 26; or *Tapiola*, Op. 112; but it makes a strong case for the gentler scores: *Spring Song*, Op. 16; *The Bard*, Op. 64; *The Dryad*, Op. 45, No. 1; *Pohjola's Daughter*, Op. 49; *Night Ride and Sunrise*, Op. 55; and *The Oceanides*, Op. 73. The cantata for soprano and orchestra, *Luonnontar*, Op. 70, is given a magnificent reading by soprano Phyllis Bryn-Julson, who easily negotiates the treacherous score. While the performances of the larger symphonic poems occasionally leave something to be desired, there is still much of value here. Playing time: 109:52. (Chandos CD 8395/6.)

R.E.B.

BRITTEN ORCHESTRAL SONGS: PEARS; BRITTEN

LONDON HAS RECOUPLED PETER PEARS'S definitive 1963 stereo remakes of Benjamin

Britten's *Les Illuminations* and *Serenade for Tenor, Horn, and Strings* with the 1959 recording of his *Nocturne*, an orchestral song cycle on texts by Shelley, Tennyson, Coleridge, Middleton, Wordsworth, Keats, Shakespeare, and Wilfred Owen. Britten is the matchless conductor for all three works, with Barry Tuckwell equally outstanding as the horn soloist in the *Serenade*. The London Symphony Orchestra and the English Chamber Orchestra are in top form, and Philip Brett's liner notes are particularly insightful. Each song is separately banded, and complete texts are enclosed. With digitally remastered sound and a playing time of more than 70 minutes, this is one of the best bargains in the CD catalog. Playing time 72:46. (London 417 153-2.)

T.T.

DINU LIPATTI: BACH, MOZART, CHOPIN

MOST OF THESE RECORDINGS HAVE BEEN continuously in print for well over three decades, and their transfer to CD is an appropriate tribute to the re-creative genius of Dinu Lipatti. The first disc couples Lipatti's 1950 studio recording of the Chopin waltzes with three shorter selections, one of them Lipatti's incomparable 1948 recording of the *Barcarolle*. The second contains the Mozart Sonata in A minor, the Bach Partita in B flat, two Scarlatti sonatas, and four transcriptions (by Ferruccio Busoni, Wilhelm Kempff, and Myra Hess) of works by Bach. Our notions of Baroque and Classical performance style have changed considerably since Lipatti taped these latter performances for Walter Legge in 1947 and 1950, but issues of stylistic authenticity inevitably pale beside playing of such chaste simplicity and repose. Playing time for Chopin: 64:35. (Angel EMI CDC 47390.) Playing time for Mozart, Bach, Scarlatti: 50:09. (Angel EMI CDC 47517.)

T.T.

BRITTEN, BRIDGE, BAX WORKS: ULSTER, HANDLEY

A LOVELY, SALTY MENU: ONE MAIN REPERTORY dish—the four *Sea Interludes* from *Peter Grimes*—accompanied by two side orders of lesser-known works, both eminently worthy of inclusion. *On the Sea-Shore* will be particularly prized by fans of Bax's music.

Is it possible that Vernon Handley is

plotting to corner the market on British orchestral works? If so, more power to him. Although he is unknown in this country except through his recordings, British opinion speaks of him as the logical successor to Sir Adrian Boult. Logically, yes, but musically, no. Boult was, throughout his career, ever the sturdy architect. Handley is a poet, more akin to the spirit of Bruno Walter than anyone else coming immediately to mind.

These performances lend credence to his emerging stature. If a more searchingly lovely version of the *Sea Interludes* has ever been recorded, I don't really care to hear it. As for Frank Bridge's *The Sea*, not only does Handley present us with an account more commanding than that of Charles Groves, but he comes close to convincing any sympathetic ear that this work should be regularly programmed by orchestras on both sides of the Atlantic. The Bax reconstruction will neither add to nor subtract from that brazen romantic's reputation among either friends or enemies.

A fine example of brilliant programming, exceptionally well executed by all concerned. This is one Compact Disc that will move from the shelf to the player more frequently than many a buyer might think. Playing time: 52:15. (Chandos CD 8474.)

T.L.D.

SCHUBERT QUINTET: MA, CLEVELAND QUARTET

CBS BRINGS TO THREE THE NUMBER OF CD versions of the Schubert Quintet in C with this superlative performance by Yo-Yo Ma and the Cleveland Quartet, who shun the fussy overinterpretation to which the piece often falls victim in favor of a straightforward, "masculine" approach. The only flaw is the persistent sniffing of one of the players, which also turns up on other Cleveland Quartet recordings and which is exacerbated by the clarity of James Mallinson's digital recording. The first-movement repeat is observed. Playing time: 54:30. (CBS Masterworks MK 39134.)

T.T.

STRAVINSKY RITE, APOLLO: BERLIN, KARAJAN

THIS IS NOT THE *LE SACRE DU PRINTEMPS* OF Herbert von Karajan and the Berlin Philharmonic that Stravinsky curtly dismissed as "a

pet savage rather than a real one," but the 1977 remake in which Karajan apparently took Stravinsky's remarks to heart and reworked his approach completely. The result is a forceful, magnificently played *Sacre* of enormous power and intensity. Some will find the interpretation overcontrolled, but it is impossible not to respond to the manifold beauties of this fascinating recording. The generous coupling is Karajan's 1973 *Apollo*, an overripe performance that is remarkably seductive all the same. Both works are fully banded. Playing time: 66:50. (Deutsche Grammophon 415 979-2.) T.T.

BRAHMS SONATAS: PERLMAN, ASHKENAZY

ITZHAK PERLMAN AND VLADIMIR ASHKENAZY perform Brahms's three sonatas for violin and piano in their customary style: direct, technically assured, and warmly expansive. Sometimes the interpretative edges are a bit too soft for comfort. The first movement of the Sonata in G, for example, is very lovely, but it is played at a tempo distinctly slower than the *vivace ma non troppo* specified by Brahms. For the most part, though, these are first-rate performances. The digital recording by Suvi Raj Grubb offers good studio sound, and the excellent liner notes are by Colin Kolbert. Playing time: 69:00. (Angel EMI CDC 47403.) T.T.

STRAUSS ALPINE SYMPHONY CONCERTGEBOUW, HAITINK

THIS IS A BEAUTIFULLY PACED, LUSTROUS performance of *Eine Alpensinfonie*, and certainly one of Bernard Haitink's finest recorded interpretations. He does all that can be done for the score, which contains pages of idyllic beauty alongside some of the most banal orchestral outbursts ever penned. In a recent interview [HF, May 1986], Haitink observed that while the Concertgebouw is a beautiful hall, it is a difficult place in which to record, which suggests that he is apologizing for the results lately achieved by the Philips engineers.

The present recording offers a rather distant perspective, with the strings somewhat lacking in body and the brass lacking bite. Program notes are minimal, and although there are 21 track references, they are all labeled in German, with no English translations. Playing time: 49:30. (Philips 416 156-2.) R.E.B.

TCHAIKOVSKY, PROKOFIEV CONCERTOS: PARKER; PREVIN

JON KIMURA PARKER, THE FIRST CANADIAN pianist to win the Leeds International Piano Competition, obviously has what it takes. Here, he offers solid performances of Tchaikovsky's Piano Concerto No. 1, in B flat minor, and Prokofiev's Piano Concerto No. 3, in C, with André Previn and the Royal Philharmonic providing spirited accompaniments.

Telarc's recordings are known for superb sonic quality, but I find this one not up

to its usual standards. The orchestral sound is big and resonant, but the solo piano is muddy in the bass and lacks brilliance in the upper octaves. The same coupling of the Tchaikovsky First and Prokofiev Third is available on Deutsche Grammophon 415 062-2, a CD reissue of analog recordings made by Martha Argerich in 1971 and 1967, respectively. I find the DG preferable in sound to the new Telarc. Playing time: 67:53. (Telarc CD 80124.) R.E.B.

MENOTTI, BARBER VIOLIN CONCERTOS: RICCI; PACIFIC

EVEN THE ADMIRERS OF VIOLINIST RUGGIERO Ricci have experienced discomfort in recent years over the variability of his public and recorded performances. Let it be said straight off, however, that his fans—and less devoted listeners as well—can sit back, relax, and enjoy these accounts of the Menotti and Barber violin concertos. For those who may be acquainted with the Barber but not with the Menotti, there is especially good reason to be interested in this release.

As the program notes point out, a tremendous performance of the Menotti concerto was recorded for RCA roughly 30 years ago by Tossi Spivakovsky, with Charles Munch and the Boston Symphony. After listening to that performance again, my suspicions were confirmed: Ricci and conductor Keith Clark do not reach those heights. However, the Spivakovsky account is all but impossible to find nowadays, while this new one comes most suitably paired with a reading of the equally lyric Barber concerto. The performances of both works provide ample musical rewards. Ricci is in fine form, and neither the digital sound nor the accompanying jacket notes leave anything to be desired.

A near winner, then—and what a pleasure to welcome back into print the Menotti work with all its limpid beauty. Playing time: 53:32. (Varèse Sarabande VCD 47239.) T.L.D.

DELIUS ORCHESTRAL WORKS: ULSTER, HANDLEY

I WONDER WHO IT WAS WHO SAID THAT THE allure of Delius's music would surely die with the death of Sir Thomas Beecham. The music continues to live, of course, but not just that: It continues to be revealed in new ways, thanks to the insights of conductors whose affection is as great today as was Beecham's in days past, yet whose viewpoints are often amazingly different from, if not at actual variance with, Sir Thomas's.

Take Vernon Handley. Setting aside the differences in recorded sound, if one compares this latest offering with Beecham's classic accounts (the *Florida Suite* on a marvelous new EMI reissue and a mint copy of *North Country Sketches* on the old American Columbia), one realizes that while Beecham was unique, Handley discovers even more poetry in many spots, so that one hears both works as though they were new. When you

add the Chandos sound and the playing of the Ulster Orchestra (until recently, little known outside of Belfast), what emerges is a clear winner. Playing time: 66:20. (Chandos CD 8413.) T.L.D.

GRIEG, SCHUMANN CONCERTOS: BISHOP-KOVACEVICH

PRIOR TO THIS RELEASE, THE PAIRING OF THE Grieg and Schumann concertos had not been very well served on Compact Disc. The available choices entrapped buyers in the following ruts: With Radu Lupu and André Previn, performances that never rise above the routine; with Russell Sherman and Joseph Silverstein, long stretches of ponderousness and affected Arrau-ish phrasing that weigh heavily against the moments of fine poetry; with Krystian Zimerman and Herbert von Karajan, interpretive immaturity on the part of a young soloist pitted against a conductor set to outdo himself by providing overwhelming statements of both works.

This reissue of Stephen Bishop-Kovacevich's 1970-1971 performances comes as a genuine relief. Simply stated, this disc contains one of the two or three finest Grieg/Schumann combinations ever offered. Even though the sound is somewhat two-dimensional when compared with the Stokowskian color of the Karajan, the performances sweep aside the competition—and will continue to do so, I suspect, until EMI sees fit to reissue the renditions of Dinu Lipatti, or until that blessed day when Arturo Benedetti Michelangeli decides to record both works once again. The latter's 1966 broadcast of the Grieg, by the way, is the greatest account of the work I have ever heard. Playing time: 60:11. (Philips 412 923-2.) T.L.D.

BRAHMS LIEDER: NORMAN; PARSONS

THIS 1980 COLLECTION OF 12 FAMILIAR BRAHMS songs has not aged well. Jessye Norman's interpretations are as static and uninteresting as her singing is dark and statuesque. Geoffrey Parsons's subdued piano playing adds to the general air of dullness, as does the sleepy choice of material. The digitally remastered sound is a bit tubby. Ulrich von Wrochem is the excellent violist in the Op. 91 songs. Playing time: 41:24. (Philips 416 439-2.) T.T.

JOAN MORRIS: RODGERS AND HART

THE RODGERS AND HART CD CONTAINS 22 wonderful Rodgers and Hart songs performed to perfection by Joan Morris and William Bolcom, our reigning masters of American popular song. In fact, everything about this disc is perfect; even Leroy Parkins's fine analog recording has been improved in the transfer to CD. The very good liner notes are by Robert Kimball. And Lucy Simon and Max Morath chime in on five charming numbers. *Very* highly recommended. Playing time: 70:56. (RCA Red Seal RCD1-5858.) T.T.



▲ SOPRANO KARITA MATTILA: AN INTRIGUING VOICE AND A SPECIAL ATTRACTION IN JÄRVI'S "KULLERVO."

▶ SAULI TIILIKAINEN, BARITONE SOLOIST IN "THE ORIGIN OF FIRE."



SEPPÖ SALMINEN

CLASSICAL
REVIEWS

New Sibelius From Sweden

SIBELIUS:

Kullervo, Op. 7.

● Mattila, Hynninen; Laulun Ystävät Male Choir, Gothenburg Symphony Orchestra, Järvi. Robert von Bahr, prod. BIS CD 313 (D). (Distributed by Qualiton Imports, 39-28 Crescent St., Long Island City, N.Y. 11101.)

SIBELIUS:

Choral and Symphonic Works.

● Tiilikainen*; Laulun Ystävät Male Choir†, Gothenburg Symphony Orchestra, Järvi. Robert von Bahr, prod. BIS CD 314 (D). (Including Kullervo): 313/4 (2).

Tulen syntä, Op. 32*†; Sandels, Op. 28†; March of the Finnish Jaeger Battalion, Op. 91, No. 1†; Har du mod?, Op. 31, No. 2†; Atenarnes Sång, Op. 31, No. 3†; Finlandia, Op. 26†; Promotiomarssi.

JEAN SIBELIUS'S FLAWED YET STRIKING AND often monumental early vocal symphony *Kullervo* has received another superb new recording, hard on the heels of Paavo Berglund's excellent account for Angel EMI. This time, the BIS label has issued it as part of its ongoing series devoted to the com-

plete orchestral works of Sibelius; once again, the Gothenburg Symphony Orchestra is led by music director Neeme Järvi. The singers include baritone Jorma Hynninen—a holdover from Berglund's recording—soprano Karita Mattila, and the Laulun Ystävät Male Choir. Making a choice between Järvi's traversal of the score and Berglund's is difficult, though what might well tip the scale in favor of the Järvi is the fact that BIS gets the entire work on one CD (playing time: 69:45), while Angel lets it spill over onto two. This does, however, give Berglund space to offer two additional Sibelius choral works—*The Origin of Fire (Tulen syntä)* and *My Native Land (Oma maa)*.

The two *Kullervos* have more similarities than differences. Both conductors give the work a sense of sweep, with forceful musical punctuation and winning imagery, and both succeed in getting the work to hold together—no easy task, considering Sibelius's not quite fully formed talents at the time he composed the score (1892). The orchestral playing on both versions is quite fine—perhaps a

bit sharper on Järvi's, although this may be because of the somewhat brighter sonics (occasionally *too* bright) that BIS has provided. Järvi's tempos are generally the faster, although he achieves this without sacrificing clarity in texture or instrumental articulation. Vocally, there's no problem with either interpretation—Hynninen's singing *cum* Järvi is every bit as full-voiced and committed as it is with Berglund—though listeners may find Mattila's intriguing voice a special attraction of the Järvi account. The part of Kullervo's sister is scored for mezzo-soprano, but Mattila's powerful spinto soprano and fierce energy of projection make it work splendidly for her. Järvi's chorus is likewise beyond reproach. We now have two magnificent presentations of *Kullervo* on Compact Disc, and the buyer can't possibly go wrong with either.

There is, however, some frustration to be experienced in Järvi's companion CD to *Kullervo*, which is devoted to six Sibelius works for chorus and orchestra, featuring the Laulun Ystävät Male Choir and the Gothenburg

Symphony. It begins with the *Origin of Fire*, but, disappointingly, doesn't include *My Native Land*. If it had—and it easily could have, since the playing time of the disc is a comparatively short 41:48—the purchaser would have no problem choosing. Nevertheless, it must be said that Järvi's *Origin of Fire* (with Sauli Tiilikainen as an effective baritone soloist) is superior to Berglund's, chiefly because of its broader tempo. With the exception of *Sandels* (a big battle scene that shows Sibelius at his wildest) and a version of *Finlandia* with chorus, the rest of the works on this disc—*March of the Finnish Jaeger Battalion*, *Har du mod?*, *Song of the Athenians (Athenarnes sång)*, and the orchestral *Academic March (Promotiomarsssi)*—are of marginal interest. But at least they're lively, and they're obviously well presented. *Bill Zakariasen*

HOVHANESS:

Symphony No. 9, Op. 80 ("St. Vartan");

Artik, Op. 78.

- ① National Symphony Orchestra, Hovhaness. Crystal CD 802 (D).

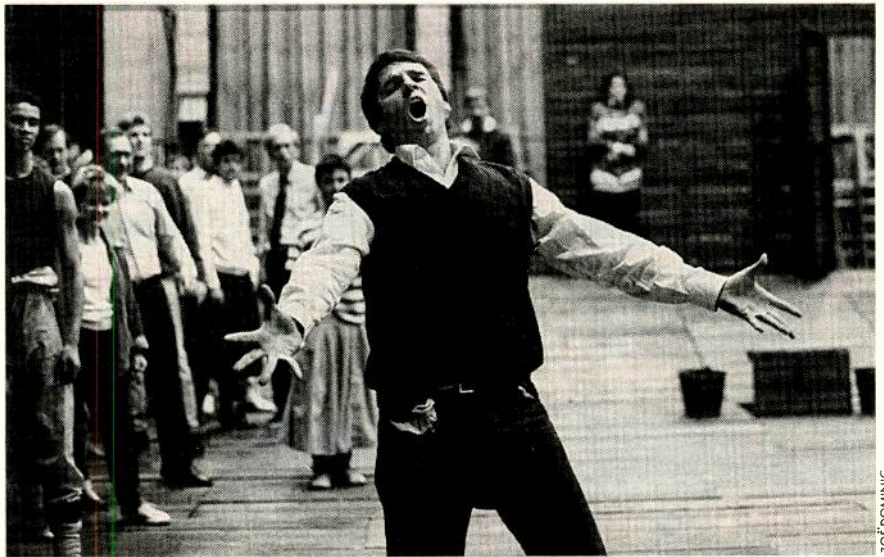
ALAN HOVHANESS'S SYMPHONY NO. 9 (*St. Vartan*) is one of his most celebrated scores (more for its length than anything else), so it's odd that this new recording of it from Crystal Records, with the National Philharmonic Orchestra of London conducted by the composer, is the first since the pioneering effort by MGM with Carlos Surinach in the early 1950s. When that recording came out, it seemed almost unlistenable: The orchestra was undersized, the acoustics made studio 8H seem a model of resonance, and as for the music itself . . . well, I found it merely a collection of 24 all-too-short movements that never seemed to go anywhere. Sadly, the vastly improved sonics of the new release don't do much for *St. Vartan*, and my impression remains much the same. My frustration with the piece has a lot to do with the way Hovhaness occasionally gets a good idea going and then suddenly lets it stop in midair. This continues throughout the symphony and is particularly annoying toward the end, where the music gets louder and more elaborate. These Mideastern meanderings eventually sound pretty much the same. Perhaps the score might serve for a Transcendental Meditation session, accompanied by an appropriate mantra and incense, but it's hardly likely to find a place in the concert hall. The filler, *Artik*, for horn and strings, is more of the same, but it brings the playing time of the disc up to 61:54. *Bill Zakariasen*

KÁLMÁN:

Die Csárdásfürstin (The Gypsy Princess).

- ① Rudiféria, Wächter, Kales, Nemeth, Poppell; Vienna Volksoper Orchestra and Chorus, Bibl. Denon C37-7933/4 (D, 2).

THE VISIT OF THE VIENNA VOLKSOPER TO THE UNITED STATES during the spring of 1984 drew mixed reviews, but the critics gave a unanimous thumbs-up to the company's presentation of Imre Kálmán's *Die Csárdásfürstin*. The fact that this was a new, well-



NEIL ROSENSTEIN, SHOWN HERE AT COVENT GARDEN, GIVES A WARM ACCOUNT OF LOEFFLER'S "FIVE IRISH FANTASIES"

rehearsed production (unlike the *Fledermaus* and *Merry Widow*, which were also taken on the tour) had a lot to do with it, of course, but perhaps the most important reason was that Kálmán's delightful operetta is just the sort of vehicle that shows the Volksoper's abilities at their best: fine acting, serviceable singing, and above all a peerless sense of ensemble. Happily, Denon made a live (oh, very live) recording of it in Japan during the company's tour the following year.

Die Csárdásfürstin is probably Kálmán's finest operetta. It is full of infectious melodies and remarkable ensemble writing, and even has a libretto (a busy one about backstage intrigue) that is basically intelligent and witty, despite some involved convolutions. The entire cast, vigorously led by Rudolf Bibl, delivers the goods—not always with the most mellifluous singing imaginable, but with a zest and timing that in this case must be regarded as unique. Milena Rudiféria and Franz Wächter handle the romantic leads with panache, but it is the comic turns by Elisabeth Kales, Sándor Nemeth, and Jack Poppell (an American-born song-and-dance expert who reminds me of the young Donald O'Connor) that prove to be the most satisfying parts of the show. They all have the time of their lives during this performance. There's action galore, and although the sound effects are often on the verge of being deafening, they never seem to interfere with the musical flow. The recorded sound on this two-disc set (playing time: 125:51) is superrealistic: You could swear you were right there, in a center seat at Tokyo's Bunka Kaikan theater. Most joyously recommended. *Bill Zakariasen*

LOEFFLER:

La Mort de Tintagiles, Op. 6;

Five Irish Fantasies*.

- ① Rosenshein*; Indianapolis Symphony Orchestra, Nelson. Elizabeth Ostrow, prod. New World NW 332 (D).

THE SCHWANN CATALOG HAS A COUPLE OF

entries for Charles Martin Loeffler's vocal and chamber music, but it lists none of his works for orchestra (*Pagan Poem*, conducted by Leopold Stokowski and formerly available on Seraphim, is now deleted), so there is good reason to welcome this very interesting release offering two important works by Loeffler, both recorded for the first time. New World Records' invaluable Anthology of American Music, far from restricting itself to the contemporary scene, in this way explores a fascinating past as well.

Although he was born in French Alsace and spent his childhood in Russia and Hungary, Loeffler, after completing his formal training in composition in Berlin and Paris, emigrated to the United States at the age of twenty and remained there until his death at age seventy-four in 1935. In spite of an exceptionally cosmopolitan background and education, he must thus be considered an American composer, though the pieces recorded here show little enough of American influences.

In reference books, Loeffler is usually described as an Impressionist—or even a Decadent. To judge by the two works on this record, he seems to be neither. The vigorous opening of *La Mort de Tintagiles* is very far removed from the rather debilitating hot-house atmosphere of the Maeterlinck text on which it is based. And as this vast tone poem unfolds in a lush display of harmonies and rhythms—with Loeffler's remarkable orchestral craftsmanship and his sense of tone color betraying a certain French influence—one is reminded of the (self-styled) "brazen romantic" Arnold Bax. The similarity even extends to a certain coarseness, as exemplified by the "military" episodes in the piece. But by any standard, this is a remarkable and quite advanced piece of writing to have seen the light of day in America in 1897. Apart from Ives, who had completed only the first of his symphonies, no composer on the western side of the Atlantic had a harmonic idiom anywhere as free as Loeffler's. The piece

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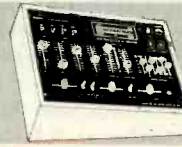


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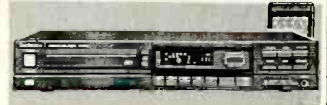
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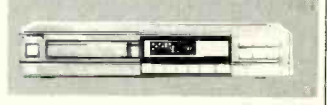
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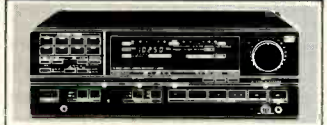
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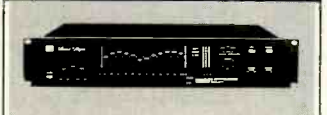
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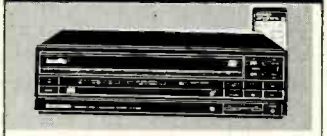
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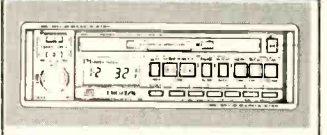
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FINZI:

Concerto for Cello and Orchestra, in A minor, Op. 40*.

LEIGHTON:

Suite for Cello, Oboe, and Strings, "Veris gratia," Op. 9†. Wallfisch*, Caird†; Royal Liverpool Philharmonic Orchestra, Handley. © Chandos CD 8471, Feb.

FRANCK; DEBUSSY; RAVEL:

Sonatas for Violin and Piano. Mintz, Bronfman. © Deutsche Grammophon 415 683-2, Jan.

HONEGGER:

Symphony No. 1; Pastorale d'été; Mouvements symphoniques; No. 1 (Pacific 231); No. 2 (Rugby); No. 3. Bavarian Radio Symphony, Dutoit. © Erato MCE 75254, Jan.

MOZART:

Quintets for Strings (6). Grumiaux Trio, Gérecz, Lesueur. © Philips 416 486-2, Jan.

ORFF:

Choral Works (7). Carl Orff Choir, Gross. © Wergo WER 4006-50, Feb.

PROKOFIEV:

Symphony No. 5, in B flat, Op. 100; Waltz Suite, Op. 110. Scottish National Orchestra, Järvi. © Chandos CD 8450, Jan.

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Sonata for Piano, in B flat, Op. Posth. D. 960; Allegretto in C minor, D. 915; Impromptu in A flat, D. 935, No. 2. Goode. © Nonesuch 79124-1, Jan.

TCHAIKOVSKY:

Iolanta, Op. 69. Vishnevskaya, Gedda, Grönroos, Petkov, Krause; Orchestre de Paris, Rostropovich. © Erato ECD 88 147, Jan.

still makes enjoyable listening today, especially in a performance as brilliant and as well recorded as this one. Unfortunately, the copy I received did not include the insert containing the synopsis of the piece and, more importantly, the texts of the *Five Irish Fantasies*.

The *Fantasies*, written between 1906 and 1920, emphasize the "Celtic" associations conjured up by the older piece; here, we are reminded not only of Bax but of E. J. Moeran, with a tinge of Vaughan Williams now and then. *The Fiddler of Dooney* and the final part of the concluding *Song of Caitilin ni Uallachain* are two splendid bits of genuine Irish music, and the whole cycle certainly repays closer contact. Neil Rosenshein gives a warm, committed, and vocally immaculate performance. Although this may not be American music in the way Loeffler's contemporary Edward MacDowell wrote it, it is nevertheless good, enjoyable music written by an American. In a production of such outstanding quality, it is definitely worth investigating.

Harry Halbreich

MARTINŮ:

Double Concerto for Two String Orchestras, Piano and Timpani; Fresky Piero Della Francesca.

① Růžicka, Bouše; Prague Radio Symphony Orchestra, Mackerras. Supraphon CO-1056.

AS AN ADMIRER OF THE MUSIC OF BOHUSLAV Martinů, I welcome this Compact Disc, although in some ways it turns out to be a disappointment. The Double Concerto and the *Frescos* are two of Martinů's strongest, most inspired compositions. The former—premiered in 1940 by the Basel Chamber Orchestra conducted by Paul Sacher, to whom the piece is dedicated—was considered by Martinů to be his most important creation, a struggle of densely rich sonorities. The three *Frescos*, a product of the composer's final years, were inspired by the magnificent paintings in a church in Arezzo, Italy. The first two movements of the suite depict *The Queen of Sheba* and *The Dream of Constantine*, and the final movement is a coupling of two battle scenes. To say that the serene beauty of the *Frescos* is reminiscent of some of the finest music of Miklós Rózsa and Dimitri Tiomkin is not to underestimate Martinů but rather to pay the two film composers a high compliment.

Charles Mackerras leads the Prague Radio Symphony Orchestra in dedicated, thoughtful performances of both works, but much of the impact of the Double Concerto and the iridescent beauty of the *Frescos* is only suggested, to some extent because of the rather dry sound. The old Czech Philharmonic recordings of both works (issued on Artia and long out of print) presented both scores more effectively. The playing time (39:27) is meager, and the program notes are minimal, not even giving the titles of the *Frescos*. But since it is unlikely that there will be another CD of these works in the near future, this recording, despite its drawbacks,

can be recommended to all admirers of Martinů.

Robert E. Benson

REGER:

Variations and Fugue on a Theme of J. S. Bach, Op. 81.

HAYDN:

Sonata for Piano, No. 46, in C, Hob. XVI:50.

① Serkin. Judith Sherman, prod. CBS Masterworks MK 39562 (D). ©

RUDOLF SERKIN HAS BEEN PLAYING MAX Reger's 1904 *Variations and Fugue on a Theme of Bach* ever since he was first introduced to the piece by Arnold Schoenberg, one of Reger's staunchest admirers. ("One step further," Schoenberg told Serkin in 1919, "and he would be with me.") Serkin's occasional public performances of the work have finally led to this digital recording from CBS, and it is a pleasure to report that the playing is quite remarkable for a man in his mid-eighties. Despite patches of technical discomfort, Serkin copes manfully with Reger's involved contrapuntal textures and plays with repose and transparency.

The variations themselves are not nearly as formidable as their grim reputation would suggest. Reger's obvious point of departure, in both architecture and keyboard style, was Brahms's *Variations and Fugue on a Theme by Handel*, and the level of inspiration is consistently high throughout. The result, though not exactly the stuff of which major revivals are made, is an enormously interesting work that, at the very least, belongs on the fringes of the standard repertory. The coupling, a performance of Haydn's Sonata in C, is charmlessly angular in places but otherwise persuasive. The sound on cassette is good in the Reger, flat and unresonant in the Haydn. The liner notes, by Frederick Dorian and Judith Meibach, tell too much about the *Bach Variations* and not enough about their little-known composer. Each variation is banded separately on the Compact Disc.

Terry Teachout

RODRIGO:

Fantasia para un gentilhombre*; Concierto Andaluz†.

FALLA:

El Amor brujo*.

① Vergara*; Moreno*†, Garibay†, López†, Ruiz†; Orquesta Sinfónica del Estado de México, Báltiz. Brian Culverhouse and Tom Null, prods. Varèse Sarabande VCD 47219 (D).

THIS HANDSOME, WELL-FILLED COMPACT DISC features performances of authority, all beautifully recorded in a fine, resonant acoustic with a close-up aural perspective. The two concertos by Joaquín Rodrigo have seldom sounded better; in particular, one notes the rousing strumming of the four guitars in *Concierto Andaluz*. The soloists here are nicely balanced against the orchestra, but in *El Amor brujo*, mezzo-soprano Victoria Vergara sounds as though she were in (or behind) the orchestra, not in front of it. Moreover, the brief role of the gypsy girl requires a powerful, gutsy low voice, something Vergara does



INGE BORKH AS SALOME. THE SWISS SOPRANO RECORDED THE FINAL SCENE IN 1955, PRIOR TO HER METROPOLITAN OPERA DEBUT IN THE ROLE.

not possess, and her approach is too placid for such fiery music.

If you are looking for a recording of *El Amor brujo* and don't particularly care for the Rodrigo concertos, you might investigate the superb London CD featuring Charles Dutoit and the Montreal Symphony Orchestra, on which the coupling is the complete *El Sombrero de tres picos* ballet (London 410 008-2). While the total playing time of the present CD is a generous 71:26, individual playing times are not given for any of the works included, either in toto or by movement.

Robert E. Benson

STRAUSS:

"Dance of the Seven Veils" and Final Scene*, from **"Salome"**; **Monologue***, **Recognition Scene*†** and **Final Scene****, from **"Elektra."**

Borkh*, Yeend°, Schoefflert; Chicago Lyric Theatre Chorus*, Chicago Symphony Orchestra, Reiner. Richard Mohr, prod. RCA Red Seal 5603-2 (A).

WHAT A TREASURE THIS IS AS A MEMENTO OF what Fritz Reiner and the Chicago Symphony could do with Strauss's operatic music. There are a few vocal weaknesses here, but the Compact Disc is well worth having for its moments of glory, which are many. The *Dance of the Seven Veils* is from the first recording session that Reiner and the Chicagoans did for RCA (March 1954), the same session that produced their stunning *Ein Heldenleben*,

and it is just as wonderfully played and recorded. The *Salome* finale with Inge Borkh was recorded in December 1955. Borkh sang the role often, and although her voice was not really right for it, at least she sang on pitch. (It is unfortunate, however, that at these sessions Reiner was unable to rerecord the finale with Ljuba Welitsch.) The *Elektra*

excerpts were recorded after complete concert performances in April 1956. Borkh is a far better Elektra than a Salome, and while she lacks the imperious freedom and brilliance of Birgit Nilsson, she is solidly satisfying musically. The opening monologue—with Reiner's incredible way of building tension and the orchestra's superb playing—is magnificent, as is the recognition scene, in which Paul Schoeffler is an ideal Orestes. The orchestral outburst at Elektra's moment of recognition, one of the great passages in all of Strauss, is definitively presented here, with the Chicago brass in top form. The final scene is effective enough, although for those accustomed to Leonie Rysanek, Frances Yeend is a weak Chrysothemis. The sonic quality of these readings is resplendent, despite their having been recorded 30 years ago. Complete texts are provided. Playing time: 66:39.

Robert E. Benson

TALLIS:

English Anthems (Complete).

Ⓛ Tallis Scholars, Phillips. Steve C. Smith and Peter Phillips, prods. Gimell CDGIM 007 (D). © 1985-07. ☒ (Distributed by Harmonia Mundi, U.S.A.)

If ye love me; Hear the voice and prayer; A new commandment; O Lord, give Thy Holy Spirit; Purge me, O Lord; Verily, verily, I say unto you; Remember not, O Lord God; Tunes for Archbishop Parker's Psalter; Out from the deep; O Lord, in Thee is all my trust; Christ rising again; Blessed are those that be undefiled.

THE ARTICLE ON THOMAS TALLIS IN THE *New Grove Dictionary of Music and Musicians* lists quite a few more four- and five-voice settings of sacred texts in English than are represented on this recording. Most of them, however, are adaptations of Latin motets or psalm tunes that somehow don't fit the standard definition of *anthem*. Therefore, this brief compendium is actually more complete than the title suggests: Its penultimate selection is the five-voice "Christ rising again," now usually attributed not to Tallis but to William Byrd; the concluding five-voice "Blessed are those that be undefiled" is generally thought to be an adaptation by Tallis of the psalm "*Beati immaculati*"; and the nine four-voice *Tunes for Archbishop Parker's Psalter* (the third of which, "Why fum'th in sight," is the basis of Vaughan Williams's familiar *Fantasia on a Theme of Thomas Tallis*) are for the most part too short and too simple to fall properly into the anthem category.

However one classifies them, these pieces get tender, loving treatment from Peter Phillips's 12-member ensemble. The tempos are animated, but not too brisk to fit comfortably into the resonant ambience of Oxford's Merton College Chapel, and the diction is always as clear as a bell. Unfortunately, the women's voices seem to have been too closely recorded for good playback results; there's distortion whenever their ascents into the top register coincide with the music's dynamic peaks. Playing time: 38:05.

James Wierzbicki ▶

Format Key

- Ⓛ LP
- ☒ Cassette
- Ⓛ Compact Disc
- ☒ Videocassette
- Ⓛ Videodisc
- Ⓛ Open reel

RECORDING INFORMATION

- (A) analog original
- (D) digital original

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VILLA-LOBOS:**Rudepoema.****MÜLLER-SIEMENS:****Under Neonlight II.**

① Banfield, Wergo 60110-50 (D). ©

THE SPRAWLING TEN-SECTION, 17-MINUTE *Rudepoema* (the Portuguese title means, more or less, *Rough-hewn Poem*), which was intended by Heitor Villa-Lobos to be a sort of portrait of his old friend and early advocate Artur Rubinstein, makes such merciless demands on a pianist that it almost never gets performed anymore. Mark the name of Volker Banfield, a sensationally gifted Bavarian pianist (b. 1944) trained by Adele Marcus at Juilliard and Leonard Shure at the

University of Texas, for he plays it here in electrifying fashion. He seems to shape up as a kind of Gidon Kremer of the piano, for in addition to his more conventional repertoire (with particular emphasis on Schumann, Liszt, Scriabin, and Messiaen), he takes delight in performing the kind of music that gives most concert managers ulcers.

Detlev Müller-Siemens (b. 1957), a pupil of György Ligeti and a composer new to me, writes music of a type the term *eclectic* hardly covers. He wrote the six pieces that make up *Under Neonlight II* specifically for Banfield and his awesome technical proficiency, and they exploit that proficiency in a manner rare among card-carrying avant-gardists.

The author of the blood-curdlingly erudite album notes, Prof. Dr. Hans-Christian Schmidt, invokes such sources of inspiration for the pieces as Art Tatum, Fats Waller, Keith Jarrett, Wayne Shorter, et al. in a manner I hope will make more sense to you than it does to me; the same applies to his summation of Müller-Siemens as "a young composer whose cool head, Byronic sensitivity, and blue-jeans agility seem to form a whole."

Well, anyway, Volker Banfield's pianistic abilities, in combination with the *Rudepoema*, certainly make this CD something far out of the ordinary.

Paul Moor

RECTALS AND MISCELLANY**CINCINNATI POPS:****Stokowski Transcriptions.**

① Cincinnati Pops Orchestra, Kunzel. Robert Wood, prod. Telarc CD 80129 (D). © DG 10129.

Bach: Toccata and Fugue in D minor, B.W.V. 565; Fugue in G minor, B.W.V. 575. Beethoven: Sonata No. 14, in C sharp minor, Op. 27, No. 2 ("Moonlight"). Albéniz: El Corpus en Sevilla, from Suite Iberia, Bk. 1. Debussy: La Cathédrale engloutie; Clair de lune. Boccherini: Minuet, from Quintet in E. Rachmaninoff: Prelude in C sharp minor, from Morceaux de fantaisie, Op. 3. Mussorgsky: Night on Bald Mountain.

IT WAS IN CINCINNATI IN 1909 THAT THE 27-year-old Leopold Stokowski first became a principal conductor of an American orchestra, and it is appropriate that a collection such as this be made there. Stokowski wrote almost 200 orchestral transcriptions and recorded most of them—a hard act to follow. But Erich Kunzel was obviously enthused about this project, and the Cincinnati Pops plays like a hand-picked studio orchestra, most of the time, in its bid to reproduce the "Stokowski sound."

Bach's Toccata and Fugue in D minor opens the program, and if the performance isn't quite as magical as one by the Master himself, it still has plenty to offer. The "Little" Fugue in G minor sounds a bit tentative, and purists will probably be offended by the arrangement of the first movement of Beethoven's *Moonlight* Sonata, with its soft gong punctuation—the only transcription included on this CD that Stokowski himself never recorded. The remainder of the program is superb: Albéniz's *Festival Day in Seville*, Debussy's *The Engulfed Cathedral* and *Clair de lune*, Boccherini's *Minuet*, Rachmaninoff's *Prelude in C sharp minor*, and Mussorgsky's *Prelude in Bald Mountain*. What a pleasure it is to hear the rich but defined strings, the solid bass, and the glowing brass, with the extraordinary clarity of texture that marks this fine Telarc recording (playing time: 57:11). Is it too much to hope for a sequel? Those who would like to hear Stokowski himself conducting his transcriptions should investigate *Stokowski Spectacular* (Compleat CDCPN 4) on CD or the fine collection on a CBS black disc (M 34543), both recorded with the National Philharmonic.

Robert E. Benson

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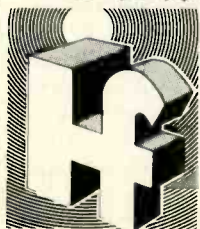
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The Backbone of Country

prospect of more reissues and hoping for an old country revival. That, he said, would be the heart of country's future.

Like so many other country fans his age, Morthland prefers the music lean and spare—music that makes him nostalgic for a time he's too young to have lived through, that recalls lives many of its artists worked hard to escape. The appeal is obvious: Traditional country, with its clean and unpretentious emotions, evokes a rough honesty, an artistic correlative to the Wild, Woolly West's shoot-outs and rough living. It's art for a more individualistic time, when people had only what they made for themselves.

It's not surprising that such fans disapprove of country that tries on pop and rock paraphernalia in a fight to hold on to audiences. They jeer at the music's love/hate relationship with commercialism, disturbed to find even well-known artists growing more industry-conscious and pop-savvy. These fans fail to recognize that country music has always been image-conscious—and very commercial. Bands looked for sponsorship from homey products like Martha White's Flour because those necessities were known by all classes of fans. The sponsors in turn looked to country for its emphasis on integrity, hooking their products to sincere qualities, not advertising slogans. That pact lasted until pop took over, aided by the rapid expansion of media. Fewer country sponsors meant



BARRY ETENGER

THE GROWING AUDIENCE FOR THE TELEVISED Country Music Awards, a proliferation of country-influenced films, and SRO national concert tours like those sponsored by Marlboro and Wrangler are signs of country music's endurance in the face of changing fashion. Last March in this space, however, fellow contributing editor John Morthland disparaged the music's contemporary state and speculated darkly on "Country's Future Days." Morthland began by detecting "three main currents in modern country music." He disdained stars such as Kenny Rogers, Dolly Parton, and the Oak Ridge Boys who make use of pop forms. He praised traditionalists such as Merle Haggard, Johnny Cash, and George Jones but decried the market's downplaying of their music as well as the artists' reliance on public images, which he described as cartoons. And though he applauded the intent of "new traditionalists" such as George Strait and Ricky Skaggs, he called their performances "thin and calculated compared to the originals." But Morthland came not to bury country music, rather to resurrect it, glorying in the reissues and compilations of Hank Williams, Roy Acuff, Floyd Tillman, and Patsy Cline. Everything old is new again, he proposed, brightening at the

THREE OF MUSIC CITY'S HADIEST TALK SHOP IN THE BACK ROOM OF BROWN'S DINER (ABOVE, LEFT TO RIGHT): PAT ALGER, JIM ROONEY, AND FRED KOLLER.

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that country artists had to rely more on performance fees and record sales. Bowing to commercial pressures, the artists revamped their performances, costumes, and even band personnel and musical settings to keep pace with the trends. But to equate these trappings with artistic compromise—or to define country's essence with circumscribing musical details like naked vocals and pedal steel guitars—denies what is essentially country. As singer/writer Gene Tunonis puts it, "You can take away the drums and even the guitars, and it's still country, because country is narrative."

AT THE HEART OF COUNTRY MUSIC IS THE songwriter. Pop goes through artist-generated fads: political songs, joke songs, and the mainstay of love-'em-and-lose-'em. But country retains its shape because its writers reflect the commonplace concerns and everyday philosophies of a broad audience. Critics often dismiss these songs as sentimental and clichéd—attributes that fans applaud. Country lyrics can be as homely as cornbread, as smart as science, as happy as a hoedown, as lonely as a well. And the music, whether traditional or hybridized as country-pop, -rock, -swing, or -soul, suits their universal nature.

In the universe according to RJ Smith, however, a British acoustic-punk band like the Mekons has more to offer country fans than anything coming out of Nashville. In his "Lost Highway" feature last July in these pages, where he praised the Mekons and other non-Nashville types such as Dwight Yoakam and Hasil Adkins, Smith went so far as to lodge the following claims: "As a viable creative system, Nashville doesn't even exist. And as an economic system, policing its sound to squeeze out a few more bucks, it deserves to be paved over. You can find great country music today, but not with a map to Music City."

Clearly, RJ was looking at the wrong map. The current crop of Nashville songwriters boasts as many viable influences as there are active performers. From Fred Koller's almost beer-commercial novelty rocker, "Drink American," to Pat Alger's merry-ry-of-our-love song, "Once in a Very Blue Moon," there are tunes to fit every stylist.

In fact, most country songwriters are still drawn to Nashville. Koller came from the Chicago headquarters of the '70s folk-influenced singer/writer movement. Alger returned to the South by way of the folk scenes of Woodstock and New York City, partly on the urging of his ex-Woodstock buddy Jim Rooney, who had already found Nashville musically conducive. John Prine (another Chicagoan), whose roots are in Kentucky, and Steve Forbert, from Mississippi, had some success in the New York clubs, but when their careers stalled at the end of the '70s, each migrated to Music City. Other current residents include Steve Young, who wrote the Eagles hit "Seven Bridges Road";

Steve Gillette, the California folkie who wrote "Darcy Farrow" and "Sweet Melinda"; and country-influenced rockers like the O'Kanes (from the East and the Midwest) and Sweethearts of the Rodeo (from California). In Nashville, the air vibrates with possibility.

There are really two distinct Nashvilles. The Country Music Hall of Fame section, which draws tourists to gaudy personal shrines (Barbara Mandrell Country, the Minnie Pearl Museum, Hank Williams Jr.'s Home of His Family Traditions) and celebrity shops (Loretta Lynn's clothing stores, Ernest Tubb's record shops, and Mandrell's one-hour photo outlets), is largely ignored by the friendly cliques of not-yet-household-name writers and performers, who operate on its outskirts. The tourist-trap section spells opulence with a kind of populist glamour that appeals to those who dream of artistic success. But the dreamers are the sad stories of Nashville: They don't get far in that practical town.

On the other hand, those who work for success usually taste it. True, it often comes in small doses, and even large successes rarely bring financial freedom. Alger's "Once in a Very Blue Moon" (co-authored by Eugene Levine) is a case in point. The song was first recorded by Nanci Griffith, who made it the title and the centerpiece of one of her LPs (Philo PH 1096, distributed by Rounder); then Dolly Parton covered it on *Real Love* (RCA AHL 1-5414). When Alger himself performs it live, as he did in 1985 while opening for the Everly Brothers, it receives favorable reviews. But Alger didn't get rich from the song—and is unlikely to. And Koller, sometime writing partner of Shel Silverstein (the children's book author—and the wag who wrote "A Boy Named Sue"), may have his "Drink American" on the eponymous LP by Peter Stampfel and the Bottlecaps (Rounder 9003), but that won't make him rich either. Every album has about 12 slots that can be filled by 12 different writers, and unless a song is released as a single, it's likely to get lost among the other nonsingle cuts and the material on the recording artist's successive albums. Yet those writers who nonetheless make a substantial portion of their income from royalties say it beats having a day job. Good songs, after all, attract recording artists to particular writers time and time again. Following her success with "Once in a Very Blue Moon," Griffith chose "Goin' Gone," which Alger and Koller wrote with Bill Dale, for her current LP, *The Last of the True Believers* (Philo PH 1109).

IN NASHVILLE, EVERYONE IS A SONGWRITER. There are waitress/songwriters, car-salesman/songwriters, even doctor/songwriters and lawyer/songwriters—and every one of them hopes to make it big. You can find circles of these poets commiserating over almost-made-its and praising one another's (CONTINUED ON PAGE 79)

IN
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POP AND JAZZ MINI-REVIEWS

WORLD SAXOPHONE QUARTET:

① **Plays Duke Ellington.** Nonesuch 79137-2.

① **Live at Brooklyn Academy of Music.**

Black Saint BSR 0096CD.

CALLING JAZZ "BLACK CLASSICAL MUSIC" makes a lot of sense after listening to the World Saxophone Quartet's tribute to Duke Ellington. With its pared-down instrumentation, W.S.Q. has been likened to a string quartet. In Ellington, the four have found their Beethoven: a composer whose fundamental repertoire points the way to modernism. Never letting reverence get in the way of experimentation, W.S.Q. uses 40 years of musical hindsight to salute the maestro. They take chances—five minutes of themeless, knee-buckling polyphony heralds "I Let a Song Go Out of My Heart," and the hushed prayer of "Come Sunday" rocks into a double-time tenor workout for David Murray—illuminating the durability and expandability of these classics.

If the Ellington gives established pieces new flair, the BAM recital demonstrates how unfamiliar, more abstract material can become inviting. Attuned to nuance and detail, strutting with virtuosic sass, W.S.Q. communicates the pleasures of demanding music through sheer spirit. With a strong blues feeling lying at the center of even the knottiest pieces, this set falls as firmly "in the tradition" as the nod to Ellington. W.S.Q.'s architectonic wall of sax sound comes through as forcefully and cleanly on the live CD as it does on the studio one. *Steve Futterman*

THE PRETENDERS:

① **Get Close.** Sire 25488-1.

THIS ONE REALLY HURTS. FOR ALL THE HOOPLA about a reshuffled lineup, the newest sound here is that of a major cultural hero falling—hard. When Chrissie Hynde isn't spinning out the most irrelevant lyrics of her career, she's making music of almost no interest whatsoever. Jeez, the phony funk experiment of "Dance!" accomplishes the impossible: It makes John Fogerty sound like George Clinton. For anyone who found the hard-earned maturity of *Learning to Crawl* as exciting as the overdrive attack of the first album, this LP is inexplicable. "The Pretenders get close"? On this one, they're not even 2,000 miles away. *Wayne King*

JAMES BROWN:

① **Gravity.** Scotti Bros. FZ 40380.

JAMES BROWN SOUNDS REMARKABLY LIKE James Brown on this, his first album in four years. The band, however, sounds like a band trying to sound like the James Brown band. And the whole affair is produced by Dan Hartman, who is perhaps not quite as funky as one might reasonably hope for in a James Brown producer. By all this, I mean that Brown has his shouts, screams, and

moans down cold—though they don't have the element of surprise or transcendence they once did. The players know all the classic licks and riffs, but never once do they threaten to burn. And Hartman uses a paint-by-numbers kit to put together a James Brown record, or a contemporary dance record, or whatever this is. Actually, it's a pretty decent approximation of the JB sound—as that sound has been tempered to accommodate both the aging process and a new audience that missed him (or flat-out rejected him) the first time around. I guess that's the most that can be expected of a Brown album today, but *Gravity* sure is a hard way of finding that out. *John Morthland*

THE DON PULLEN—GEORGE ADAMS QUARTET:

① **Breakthrough.** Blue Note BT 85122.

THE ALBUM'S TITLE REFERS TO THE FACT THAT, after more than a half-dozen imported gems, this is the group's first LP on an American label. Otherwise, the set is typical: a varied program, played with brio, and (as always) recommended. Aside from their mix-and-match approach (Don Pullen's "Song from the Old Country" sounds like a Yugoslavian bossa nova), this combo's flavor derives from the way tenor saxophonist George Adams and pianist Pullen take once controversial licks and place them in a fairly conventional postbop context. With their ecstatically free solo peaks pitched against the stalwart rhythms of bassist Cameron Brown and drummer Dannie Richmond, these guys have found a way of having one's cake and chomping on it, too. *Richard C. Walls*

DONALD HARRISON/TERENCE BLANCHARD:

① **Nasconco.** Columbia BFC 40335.

ALTOIST DONALD HARRISON AND TRUMPETER Terence Blanchard continue, like those other two prodigies from New Orleans, to flesh out the designs and strategies of '80s neo-classicism. And though, on first hearing, much of this seems familiar, the duo are just now becoming recognizable personalities, the scope of the music just beginning to be realized. Things are, in a word, nascent. The compositions take a little time to warm up to, the exception being Harrison's "Chong Chong," a Mardi Gras-derived number that combines old-timey and mod touches. The solos, however, are instantly impressive, especially Harrison's; his tone has an insinuating liquidity, his phrasing an urgency that suggests he wants to vault out of these lively, lapidary frameworks. *Richard C. Walls*

ALVIN LEE:

① **Detroit Diesel.** 21 Records 90517-1.

ALVIN LEE IS ONE OF THE GUYS WHO BROUGHT the blues into the modern age. On his first album in six years, he works from that point. The pyrotechnical guitar work of old is just that: an antique image Lee seems anxious to shed. Those songs that aren't in the techno-boogie of recent ZZ Top often smack of latter-day Rolling Stones, albeit with more biting guitar work ("Too Late to Run for Cover," "Ordinary Man"). And there are strong guest appearances by Boz Burrell, Jon Lord, and George Harrison, whose slide guitar makes "Talk Don't Bother Me" one of the tastiest blues-rock songs in recent memory. *Detroit Diesel* has gotten better each time I've listened to it. I can't say that about too much I've heard lately. *Hank Bordowitz*

GIL EVANS, MONDAY NIGHT ORCHESTRA:

① **Live at Sweet Basil.** Gramovision 8610-1.

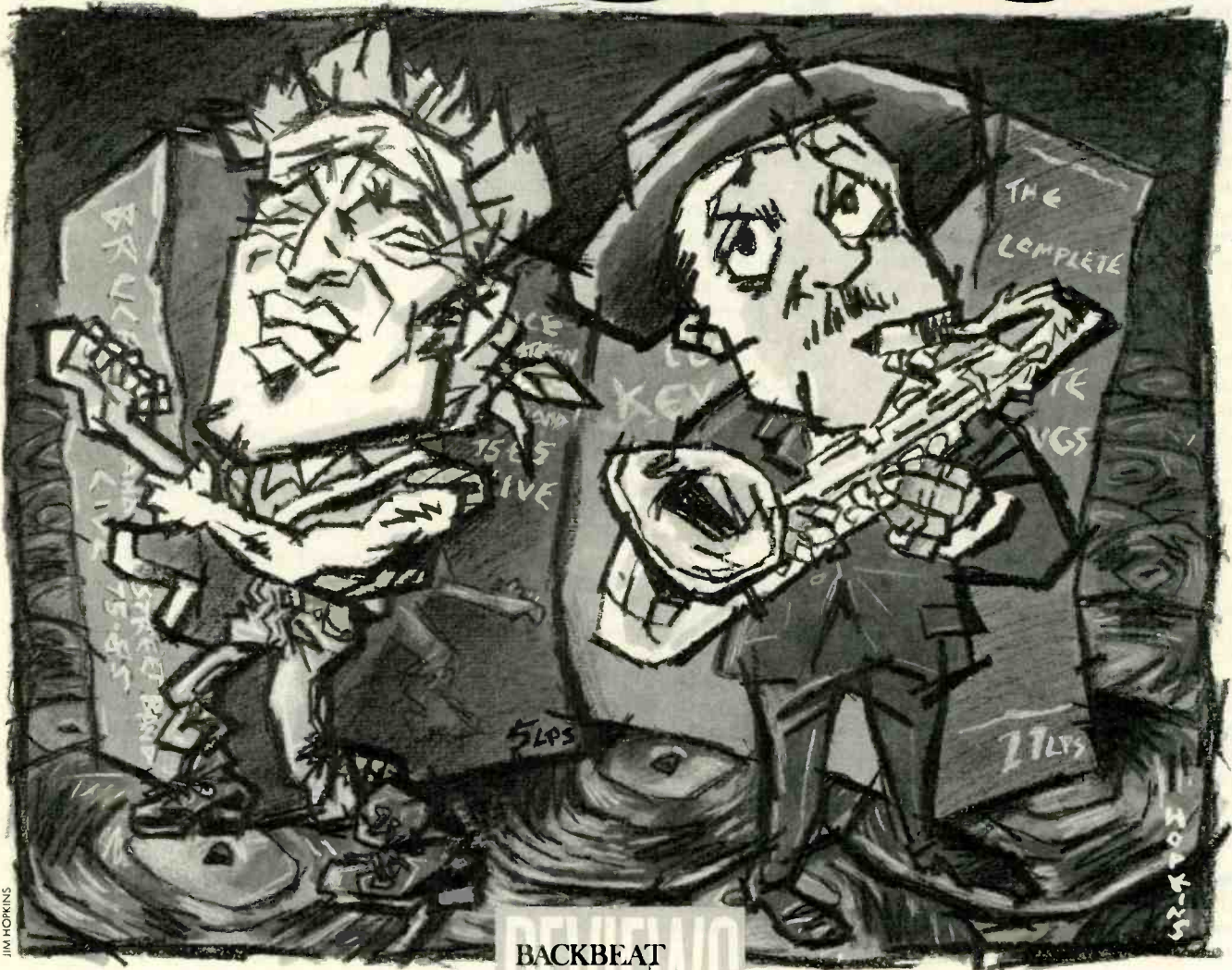
THIS TWO-LP SET PROVIDES A GOOD SAMPLING of the now legendary workshop, as Gil Evans guides his musicians through a potpourri from Charlie Parker to Jimi Hendrix. Actually, Evans's arranging style in recent years has tended to be off the cuff: He relies more on his soloists' extemporizations than on any written charts, an approach that works best on loosely knit tunes like "Goodbye Pork Pie Hat." This group contains some high-flyers (Howard Johnson, George Adams, Lew Soloff), but they are periodically at war with a rather heavy-footed rhythm section—a problem that is intensified when 14 musicians have so much freedom. However, such risk-taking is essential if jazz is to survive as an improvised art form. Although this may not be the most together band I've heard, it can be a very exciting one. *Joe Blum*

JEAN CARNE:

① **Closer than Close.** Omni 90492-1.

JEAN CARNE BEGAN HER CAREER IN STRAIGHT jazz, scatting impressively and helping compose black-nationalist lyrics for songs by improvisers like Lee Morgan while working in a group led by her husband, Doug. Seventeen years later, she's enjoying the fruits of pop acclaim by singing love songs and torch ballads in a quasi-jazz setting. Her powerful voice sounds alluring on the title song, pensive on her cover of the Stylistics' "Break Up to Make Up," and striking on "Flame of Love." Producer Grover Washington Jr.'s smooth, round alto makes a perfect partner on several numbers; he doesn't intrude or draw attention away from Carne but shows enough flamboyance to occasionally remind you of his organ-combo roots. This is impeccably produced, elegantly sung stuff. Carne, however, had more spark in her voice and fire in her soul when the *e* was missing from her last name. *Ron Wynn*

Boxing Days



BACKBEAT

POP

BRUCE SPRINGSTEEN & THE E STREET BAND: *Live/1975-85*.

Ⓢ Bruce Springsteen, Jon Landau, and Chuck Plotkin, prods. Columbia CSX 40558 (5). Ⓜ (3). Ⓢ (3).

NO OTHER ROCK ARTIST OF THE PAST DECADE has so diligently worked a turf as broad, deep, and terrifying as the America presented here by Bruce Springsteen. The five-LP song cycle of *Live/1975-85* represents as ambitious and fully realized a vision of what has become of the American Dream as has been witnessed over the last ten years.

The earliest songs, heard throughout the first three sides, lust for escape from a reality that's ever closing in. Afterward, things get tougher. The barren emotional terrain of "Badlands," with its brutal facts and terrible desires, extends to the "Darkness on the

Edge of Town," where determination is all that's left. In "Racing in the Street," even that is gone, leaving lives whose only constants are numbing habit and blind chance.

It is with Sides 6 and 7, and "War" on Side 8, that Springsteen forever secures his reputation. From "This Land Is Your Land" to the Strong-Whitfield classic, his view of the choices facing us is bleak and unsparing. There's no room for the faith of the poor souls in "Reason to Believe," no reason to trust in the government that makes "War," no assurance for the soldier unlucky enough to do the dirty work and live to return home in "Born in the U.S.A." This is music inspiring in its look into the abyss, music made horrific by the certainty and dread it comes back with.

(CONTINUED ON PAGE 75)

JAZZ

VARIOUS ARTISTS:

The Complete Keynote Collection.

Ⓢ Harry Lim (original) and Kiyoshi Koyama (reissue), prods. Keynote 830 121-1 (21). (Distributed by Polygram.)

THE HISTORY BOOKS TELL US THAT FIRST there was swing and then there was bop—but what came in between? If you've got the time, inclination, and money, *The Complete Keynote Collection* will provide you with enough clues to ponder till at least the end of this century. The blatant chutzpah of the project has a divine madness to it: 334 cuts on 21 LPs, including 115 previously unissued tracks, all amounting to the entire recorded legacy of the New York-based independent label that flourished from 1941 to 1947. Producer Harry Lim was the auteur, (CONTINUED ON PAGE 79)

(CONTINUED FROM PAGE 74)

But for this lapsed Catholic, there is always hope to go along with one's inevitable, absolute destiny. And it's felt in three songs near the end of the set that sum up Springsteen's social outlook. It appears in the father who hangs in there for his boy, just like his own father did before him, in "My Hometown"; in the tramps with no place to hide, running, always running, in "Born to Run"; in the man with only youthful ideals to hang on to in "No Surrender."

Like the Okies of John Steinbeck's *The Grapes of Wrath*, the characters in Bruce Springsteen's songs learn how to adapt—to do whatever's necessary to live. And always, as in the marvelous solo version of "No Surrender," they do so with a wide open country in their heart and romantic dreams in their head. *Wayne King*

TINA TURNER:

Break Every Rule.

Various prods. Capitol PJ 12530. 46323.

THREE YEARS AGO, TINA TURNER'S RISE TO superstardom off the pop scrap heap and her subsequent revelations about ex-husband Ike's proclivities for mental and physical abuse made her both a worldwide celebrity and a role model. It didn't hurt that *Private Dancer* was one of the decade's best albums.

In the interim, Turner has become somewhat notorious in the Afro-American community for a series of irritating comments about the nature and quality of her heritage and the music she once performed, including her *Today Show* reference to r&b as "that awful music." To many people, Turner's work reflects a supreme paradox: Despite her protestations that she wants to sing only rock, her voice's dusky qualities and her whole stage persona are ideal for the unrelenting passion of classic r&b. On *Break Every Rule*, principal producers and songwriters Terry Britten, Mark Knopfler, and Neil Dorfsman recognize this fact even if Turner doesn't (or won't accept it), and thus a great deal of the LP takes advantage of her vocal power, range, and sensuality, much as the music of the Ike and Tina Turner Revue pivoted around her booming screams and cries.

First single "Typical Male," like *Private Dancer*'s "What's Love Got to Do with It," uses a quasi-reggae progression, though this time it's more understated and inverted around a prominent pop lick and a saxophone solo. Turner's performance is huskily impressive. "Till the Right Man Comes Along," "Back Where You Started," and "Paradise Is Here" also get sharp emphasis from attributes Turner perfected in her earlier days: the dramatic projection and lyric extension of "Back Where You Started" are particular trademarks of a soul shouter.

Many of rock's prime performers lend a hand, including Phil Collins, whose steady drumming anchors "Typical Male," and

Steve Winwood, who takes a spindly synthesizer run during "Afterglow." But it's Turner—by twists sympathetic, confrontational, appealing, defiant—who makes *Break Every Rule* a solid follow-up to *Private Dancer*. Whether you like what she says on TV, her performing prowess here can't be disputed. *Ron Wynn*

RICHARD THOMPSON:

Daring Adventures.

Mitchell Froom, prod. Polydor 829 728-1.

IT'S IMMEDIATELY APPARENT THAT THIS LP IS A bit different from the last few Richard Thompson albums. Lead track "A Bone Through Her Nose," a snide putdown of "the belle of the ball," begins with the combined thwack of electric guitars, keyboards, and drums. It's one of the most brazen, if not most modern, openers ever on an album by the ex-Fairport Conventioneer. And indeed, *Daring Adventures* is the record that finds Thompson—known for cranking out albums in a few days, just to get them over with—coming to terms with modern recording technology.

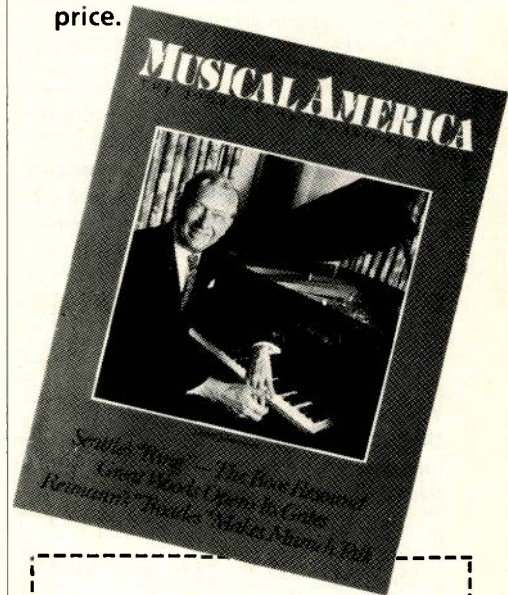
Thankfully for all involved, the results are not just slick but also faithful to Thompson's Celtic-rock vision: If you listen closely to Mitchell Froom's textured arrangements, you'll hear dulcimers, accordions, and fiddles. There are also a couple of requisite acoustic-based ballads, but for the first time, they sound almost incidental. From Thompson's sharp but brief guitar solos to Froom's beefy production, *Daring Adventures* rocks. Thompson serves up skewed British rockabilly ("Baby Talk"), flat-out rockers ("Valerie"), and even one track that sounds like an outbreak from a horror-film soundtrack ("Cash Down Never Never"). On the closer, "Al Bowlly's in Heaven," he and the band create a smoky jazzbo sound perfect for a depressing song about a homeless, crippled World War II vet fondly remembering a big band singer.

Beyond its high-tech gloss, though, the LP covers much of the same thematic ground as Thompson's post-*Shoot Out the*

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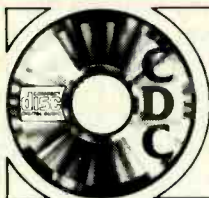
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Lights records, including enough lost-love/done-me-wrong songs to make him sound like the drunk at the bar who won't stop talking about an old affair. Given that his marriage to Linda Thompson broke up five years ago and that he has since rewed, one wonders why he's still singing bitter tunes like "Long Dead Love." It's ironic that a record with such a fresh musical direction is often weighed down with sentiments that ring tired or regressive. *David Browne*

PHIL ALVIN:

Un"Song Stories."

Phil Alvin and Pat Burnett, prods. Slash 25481-1. ☐



TALK ABOUT AN IDEA THAT BEGS FOR MAULING by a critic: A member of a prominent L.A. rock band (emphasis on "L.A.") decides to record a batch of jazz, blues, and gospel songs from the early part of this century, partially as a way to show he has "roots." Ry Cooder tried it on his 1978 album *Jazz* and wound up with pristine but bloodless recreations of '20s and '30s swing. And if an estimable musician/archivist like Cooder couldn't pull it off, how can a young turk like Blasters lead singer Phil Alvin?

Easy. For one thing, Alvin's clenched-teeth vocals show he can really *sing*, whereas vocalizing has never been one of Cooder's strengths. For another, Alvin recruited some truly idiosyncratic jazzmen—Sun Ra and New Orleans's Dirty Dozen Brass Band—instead of relying on the usual L.A. session hacks who've hampered Cooder's work. Ra in particular adds swinging, multilayered arrangements, even breathing life into a tired Cab Calloway medley. And last, Alvin opted not only for standards like "Brother, Can You Spare a Dime?" but also for lesser-known gems by bluesmen Peetie Wheatstraw ("Gangster's Blues") and Alec Johnson ("Next Week Sometime").

But as its title suggests, this is an album of *story* songs, and some of the tales are terrific: a mother pleading with the Devil to save her ill son ("Death in the Morning"), a miner trapped ("Collins' Cave"), a man threatening another with all sorts of bodily harm for stealing his woman ("Gangster's Blues"). Those numbers, accompanied

mostly by just Alvin's own electric guitar, are the heart of the LP. When he adds a small blues combo to the mix, as he does for Otis Blackwell's ramblin'-guy romp "Daddy Rollin' Stone," this exercise in old-meets-new musicology becomes more than just a hip novelty record. Miracles can happen, you know. *David Browne*

TALKING HEADS:

True Stories.

☐ Talking Heads, prods. Sire 25512-1. ☐
 TALKING HEADS, WHOSE ART-FED, AVANT-bland bossman David Byrne has lately been spotted on the big screen and the cover of *Time*, have made a loose, smart, absolutely wonderful record. Though in the past I've been skeptical, remaining in dark for most of this band's critically acclaimed decade in the sun, *True Stories* is excellent. Comprising the Heads' versions of songs from Byrne's film of the same name, it owes much of its success to two significant factors. First, though for most of the '80s the quartet has been "augmented" very nearly out of existence, this LP is clearly the band's work, arranged and produced collaboratively amongst the four of them, renewing the original creative bonds and sounding like a rock 'n' roll record rather than an elaborate, hit-or-miss, hothouse hybrid.

Second, the heady mix of potent, hard-edged riffs with their peppery forebears from American regional musics—the joyous simplicity of both the Velvet Underground-style "Love for Sale" and the Tex-Mex Farfisa chugfest "Puzzlin' Evidence"—makes an exciting gumbo and reifies the overall theme evoked by the inspiring "City of Dreams": that the melting pot has been bubbling not merely for decades but for eons. From the Huey "Piano" Smith New Orleans wobble of "Hey Now" to the lullaby waltz of "Dream Operator," *True Stories* marks Talking Heads' happiest and, for me, best work yet. *Jeff Nesin*

CD Alert!

NEXT MONTH'S BACKBEAT SECTION will be devoted entirely to reviews of recently issued Compact Discs. The focus will be on simultaneous multiple releases from an artist's catalog, including nearly 30 titles from the Rolling Stones and the first nine CDs each from the Two Franks—Sinatra and Zappa. We'll also cover assorted-artist multiple releases from a company's vaults, including 12 classic jazz recordings from the Impulse! label (newly reactivated by MCA), several titles from Motown's twofer series, and five samplers from the CD-only label Rykodisc. And more.

(CONTINUED FROM PAGE 74) his star players the cream of the cream: Lester Young, Coleman Hawkins, Roy Eldridge, Benny Carter, Red Norvo, and Lennie Tristano are only a few of the leaders. The "sidemen" were no slouches either. Consider Cozy Cole's All-Stars, with Hawkins and Earl Hines taking second billing; bassist Billy Taylor's Big Eight, with Johnny Hodges and Harry Carney; or a conglomerate called the Kansas City Seven, which included Count Basie, Lester Young, Dicky Wells, Freddie Green, Buck Clayton, and Jo Jones. Heady stuff.

A number of the names don't speak for themselves: From Record 15 on, there's a slew of sessions from the likes of Bernie Leighton, Danny Hurd, Herbie Haymer, Clyde Hurley, and Arnold Ross. I can't say they struck me with the same force as Lester Young's "Sometimes I'm Happy" date. [That's Lester with Bruce Springsteen on page 74.—Ed.] Still, none are without their period interest or charm. The most surprising pleasures lie in the inspired performances of the second-stringers who roamed 52nd Street, such as trumpeters Joe Thomas and Jonah Jones, bassist Milt Hinton, and saxmen Tab Smith, Pete Brown, and Willie Smith.

The Complete Keynote Collection doesn't build to a swing-is-dead, long-live-bop epiphany: The sound changes gradually and logically through permutations of small-group aesthetics. Listening to the extraordinary virtuosity and sustained creativity of the earlier masters, you hear how the boppers built upon these achievements rather than making a clean break from them. The Keynote box doesn't rewrite history, it merely clears away a great deal of time's distorting fog.

Steve Futterman

WYNTON MARSALIS:

J Mood.

Steve Epstein, prod. Columbia FC 40308. HERE'S WYNTON AGAIN, BUT WITHOUT brother Branford on sax or Kenny Kirkland on piano. Remember when those two left the fold to work with Sting? Well, they never returned, and that's quite a void to fill. The sax chair remains empty, and Wynton has made the adjustment by writing more reflective tunes and giving a lot of space to his new keyboardist, Marcus Roberts, a promising young find who may not have Kirkland's miraculous agility but who plays with power and inventiveness, knocking this quartet back in the groove any time it falters. He's bad.

Leaning on Roberts's ample ad-lib abilities, Marsalis creates a looser, funkier framework than the tricky tunes and devious arrangements of his previous records. These songs are rhythmically simpler (offering drummer Jeff "Tain" Watts few cross-rhythms to play with, but he throws them in anyway), and although there are some shifting tonics and subtle melodic changes, they move slowly enough for any untutored ear. "Much Later," my favorite, is the only up tune, as most of the selections tend to be pensive, even brooding. Miles Davis once built a career on such moods, but Marsalis requires the challenge of intricate, Monkish chords to really shine, and that challenge isn't here.

If he asked me, I'd like to see Marsalis move away entirely from the solo-centered, small-group format and work more on his composing... but he hasn't asked. Meanwhile, he has a pretty solid new quartet, which I'm sure will sell lots of records and get lots of critical putdowns 'cause all it does is sound good.

Joe Blum

(CONTINUED FROM PAGE 72) successes. When singer/writer Janis Gill arrived in Nashville from California, those hospitable let's-get-togethers turned out to be not lunch invitations but offers to co-write songs. Jamie O'Hara and Kieran Kane were introduced to each other's work in a similar fashion. Having had separate successes—O'Hara with "Grandpa (Tell Me 'Bout the Good Old Days)," recorded by the Judds, and Kane with "Gonna Have a Party," recorded by Alabama—they are now working together, and on *The O'Kanes* (Columbia B6C 40459) they create a sound that's greater than the sum of their two parts.

The full-timers and the serious part-timers talk shop constantly in the back rooms of bars-cum-diners like Brown's and perform at showcases like the Douglas Corner Cafe, which boasts drinks, a mike stand, and a tiny stage. One Tuesday night at Douglas Corner, more than 25 writers performed two songs apiece. Some had two new ones, others dusted off a personal favorite for the second. All were earnest, and more than a handful were promising. With so much good material, don't they get discouraged? "Oh, some of us do," Alger said. "But each week, 50 new guys breeze into town. Some of them last a few months or longer, hoping to get a break. A few find this scene is wrong for them and move on to where they think the music industry will find them. Sometimes it does."

That Tuesday night, Alger's turn at the mike came up late, when almost everyone else had played and the bar had nearly emptied. But when he sang "Once in a Very Blue Moon," he was applauded, whistled at, and stamped for by a very proud group of his peers.

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