VCD-1000 - Having set the sonic standards for home audio, Harman Kardon now enters the world of home video by introducing high fidelity for your eyes! Harman Kardon applied its 30 years of technical expertise to an extraordinary new home entertainment product: the VCD-1000 VHS Hi-Fi.

A breathtaking audio product with high quality video, the VCD-1000 is the perfect link to an integrated audio / video system.

As with all renowned Harman Kardon products, the critical issues of the quality of the circuitry, construction and layout of components were expertly addressed. The VCD-1000 utilizes an advanced record / playback system which FM encodes the audio signal. This FM signal is recorded and played back via high speed rotating heads (1800 rpm), resulting in wide, flat frequency response (20Hz-20kHz, ±3dB), virtually non-existent wow-and-flutter (0.005%), and 80dB dynamic range.

Custom-designed discrete filters are precisely tuned in production to extend frequency response, critically align noise reduction and reduce high frequency distortion.

Applications of Harman Kardon acclaimed amplifier philosophies that are evident in the VCD-1000 are the use of discrete components for reduced distortion and the use of low negative feedback.

Stereo TV Tuner - The VCD-1000 incorporates a built-in 105 channel cable-ready stereo TV tuner, and is capable of receiving, recording and playing back high fidelity stereo TV broadcasts (with bi-lingual channel capability), even if you don’t own a stereo TV yet. There is an independent audio tuner section resulting in improved sound quality from these stereo broadcasts.

The video section offers 4-event / 14-day programming; still frame; high speed forward and reverse picture search; full digital displays; slow motion and an infra-red remote control that duplicates all front panel functions.
VM-100 Video Monitor: To further refine the audio / video vista, Harman Kardon is introducing the VM-100... a 25" diagonal, high resolution video monitor. The VM-100 combines exceptional linearity and superb transient response to deliver a picture that can only compliment the high fidelity sound.

When incorporated with Harman Kardon's unparalleled audio components, your world of high fidelity audio / video enjoyment becomes boundless.

Experience the Harman Kardon line of audio / video products... They're pure high fidelity for your eyes.
24 Armchair Audio
by Paul Terry Shea
The pros and cons of remote-control audio-video systems

28 Easy Does It
by Jay Taylor
Step-by-step basics on installing a car stereo system

36 High-Tech TV
Compiled by Frank Lovece
A buying guide to monitor/receivers

TEST REPORTS

42 Pioneer CLD-900 Compact Disc/videodisc player
46 Harman Kardon HK-690i receiver
48 Talisman Alchemist IA phono cartridge
49 Jamo SL-135 loudspeaker
50 Yamaha PF-800 turntable
51 Sony KV-25XBR Trinitron video monitor/receiver
54 Sparkomatic SR-315 car receiver/tape deck
55 Blaupunkt Aspen car receiver/tape deck

MUSIC

Classical

59 Success Is an Anglo-American Alliance
by Edward Greenfield
Pianist Murray Perahia reveals his recording plans as he readies for his first Carnegie Hall recital.

80 Parker's Elegant Insouciance
by Francis Davis
Taking stock of the ten-disc set Charlie Parker on Verve, 1946-1954

DEPARTMENTS

4 The Editor's Page
8 Letters
13 Currents
21 Crosstalk
22 Basically Speaking
57 Medley
62 Classical Reviews
70 Critics' Choice
78 Popular Reviews
82 Jazz Reviews
88 Reader-Action Page
88 Advertising Index
Sherwood products offer excellent performance at very reasonable prices.

Leonard Feldman, *Audio Magazine*

The occasion of Mr. Feldman's comment was his review of our S2680-CP top-of-the-line receiver. His statement was sparked by the fact that, while quite affordable, the S2680-CP, like all Sherwood receivers, is designed and built with the care, precision and innovation which have become Sherwood trademarks.

A tradition of affordable quality. More than three decades ago Sherwood was founded on this philosophy: Through innovation, make quality audio equipment more affordable. That philosophy has been nurtured throughout Sherwood's history and is the foundation of our newest line of receivers.

We never cut corners on sound. All five Sherwood receivers deliver true high-fidelity performance. Even our budget-priced S2610-CP sounds better than many separate components. And the entire group is laced with features that can make significant differences in your listening enjoyment. Ultra-low-bass EQ, multi-deck dubbing, auto-scan digital tuning and discrete phono preamp circuitry are standard on several Sherwood models, yet missing from many other brands, regardless of price.

Certified Performance. Sherwood is the only manufacturer to test and certify the performance of each individual receiver. On the outside of every cabinet you will find a certificate showing the measurement details of the power amp, phono preamp and FM tuner sections of each receiver. These are not just the rated specs; these are the actual measured performance data of the individual unit, so you know exactly what you're buying.

Find out what the experts say. Get the whole story on why Sherwood receivers—in Mr. Feldman's words—"...offer excellent performance at very reasonable prices."

To get your own copy of his review of the S2680-CP and to find out just how much quality and innovation you can afford, visit your nearest Sherwood audio specialist today. To find him, call (800) 841-1412 during west coast business hours.
A metamorphosis completed

The metamorphosis is over, though the evolution continues. This issue of HIGH FIDELITY marks a major transformation in design and content that began more than four years ago. In brief, the magazine has been reorganized, essentially eliminating the compartmentalization of audio and video in both equipment and music.

As a look at the contents page reveals, our NEW TECHNOLOGIES section has been dissolved, its elements merging into the three new main divisions: AUDIO & VIDEO, TEST REPORTS, and MUSIC. All technical features appear in AUDIO & VIDEO; all equipment reports—whether on audio, video, or car stereo components—come under the TEST REPORTS heading; and all music features and reviews—whether of LPs, CDs, audio cassettes, or videocassettes—appear in our MUSIC coverage, with only the traditional distinction between classical and pop/jazz remaining.

Long-time readers will recognize that the contents have not changed dramatically from last month's issue, though they stand as a radical departure from the HIGH FIDELITY of five years ago. Today's articles and format reflect the rapid changes that have merged audio and video in both components and music. In the coming months and years we will continue reporting on the latest in home entertainment hardware and music recordings.

New with this issue is an expanded "Currents" column. Each month "Currents" will bring you not only the latest in products, but also pertinent news items, how-to advice, and extended answers to readers' questions. This month you'll find a preview of the spring 1985 components lines being unveiled at the Winter Consumer Electronics Show as we go to press. And at the front of our MUSIC coverage, a new page, "Medley," reports news of the classical and pop scenes.

Because both music review sections now contain reviews of works released on a variety of media, we've devised a set of symbols to differentiate between recordings on LP, audio cassette, Compact Disc, videocassette, videodisc, 12-inch single, and open reel. A large symbol denoting the reviewed format is inset at the left of each review heading, while smaller symbols for other available formats appear within the heading itself. Also, at the beginning of each review section is an alphabetical list of all recordings critiqued that month. And recording titles in HIGH FIDELITY text will reflect the rapid changes that have merged audio and video in both components and music.
It dramatically broadens FM reception. And completely eliminates tape noise. The new Supreme Elite car audio system. Only from Panasonic.

This car audio system automatically helps prevent fading of weak FM stations. Stops interference from unwanted stations. And even goes beyond reducing tape noise. To totally eliminating it.

Ordinary car stereos can take you just so far before they feel the FM signal fade. But Panasonic Supreme Elite gives you Hypertuner. So your music comes in longer and stronger than with ordinary car stereo.

Panasonic goes on to give you FM Optimizer circuitry. To further enhance fringe area reception. Impulse Noise Quieting reduces interference caused by other traffic. There's even electronic tuning with automatic seek scan. To automatically lock in stations.

**High performance on the highway.**

For your tapes, Panasonic gives you Dolby* and dbx®. To not only reduce tape noise, but eliminate it. Completely.

The cassette deck section also gives you auto-reverse and locking fast-forward/rewind. So you can keep your hands on the steering wheel. Instead of on the dashboard.

So why buy an ordinary car stereo system? When you can buy a Panasonic that broadens FM reception and eliminates tape noise.

---

*Dolby is a trademark of Dolby Laboratories.® dbx is a registered trademark of dbx, Inc.

Panasonic®
just slightly ahead of our time.
IT'S NOT JUST A VIDEO MONITOR. IT'S A HIGH-PERFORMANCE TELEVISION RECEIVER.

Video monitors that are just video monitors are less than complete. Introducing the first and only video monitor that is also a Full Spectrum television receiver. Due to remarkable developments in audio and video technology, our high-performance monitors for 1985 are the first consumer monitor/receivers to process 100% of the audio/video signal. All the color, all the sound, all the time. Bringing all the magic of life right into your living room. What's more, RCA's Video Monitors come complete with built-in stereo broadcast receiver and speakers for an unsurpassed video experience. (Stereo sound dependent on TV broadcast signal.) Some RCA Monitors, like the one above, actually fit 25 inches of picture (measured diagonally) in about the space of a 19-inch set. And, last but not least, all of RCA's 16 Colortrak 2000's for 1985 are, in fact, Video Monitors.
JACKS IN THE BACK DELIVER A BETTER PERFORMANCE UP FRONT. QUICKLY, EASILY, EFFICIENTLY.

The story behind RCA's Video Monitor helps you get the most from today's video products. As many as 29 rear input-output jacks allow you to bypass the set's antenna circuitry and plug RCA and other video and audio components directly into the chassis. The result is a cleaner, sharper picture from video components. Sound, too, is dramatically improved because audio jacks permit direct hookup to stereo systems. Giving you cleaner, easier, more efficient connections than complicated wire hookups.

And, with RCA's exclusive Digital Command Center, you can run the whole show from across the room, switching from broadcast to VCR viewing. See the full array of RCA's multi-featured monitors at your RCA dealer. Or, for more information and a free copy of our "Living with Video" book (a $2.50 retail value), write RCA Consumer Electronics, Dept. 32-312B, P.O. Box 7336, Indianapolis, IN 46207-7036.

*Selected models.
LISTEN TO THE MUSIC
Compact Disc players are fine, and I have heard good and bad CDs, but I am tired of reading letters from musically deaf individuals who want to throw away their record collections. If they’re serious, let me know. I’ll take all those treasures on old LPs and 78s.

When I purchased my first mono hi-fi system many years ago, I said that it was like bringing a full symphony orchestra into my home. I was only fooling myself: A symphony orchestra wouldn’t fit into my home. I said the same thing about my first stereo system and again and again as I obtained better and better equipment. I was still fooling myself. The only way to put that full orchestra into my living room was to turn the volume up very loud and move about 50 feet away. Not only I but also my neighbors thought the orchestra was in my home; they told me what they would like to do with my audio equipment.

Those who have CD players, more power to you. But you’re only fooling yourself when you say, “It’s like being there.” When I got my CD player, I neither sold nor threw away my record player or records. They are still on my shelves, and I will continue to use them regularly. And when I want to hear a live performance, I will go to a concert.

I wonder how many people sit down before a sound-reproduction device and listen in awe of the talent and long hours of work demonstrated by the composer and performers. I suspect very few. I have never found myself clenching my teeth because I knew a click or pop was coming up; I have been too concerned with listening to the music.

The world has produced a lot of audio gear, but only one Beethoven and one John Lennon. It is time that many people start listening more to the music and less to their equipment.

Gerald W. Meyers
Fraser, Mich.

JUDGING STEREO AM
Regarding your request for personal evaluations of the quality of stereo-AM broadcasts (“The Autophile,” November 1984), I offer these observations. For three months, I have owned a Sony SRF-A100 portable stereo-FM/stereo-AM receiver, which I recommend to anyone who wants to know what stereo AM sounds like. With an inexpensive mini-plug adapter, you can route the unit’s earphone output to an unused aux input on your home system. The Sony radio is capable of excellent FM reception, and it can receive all four types of stereo-AM transmissions. And as far as I can tell, stereo AM sounds every bit as good as stereo FM when a very strong signal is available. The stereo separation is perfect (at least I could not hear any right-channel violin in the left channel). The frequency response is as good as on FM, and with strong broadcasts, the noise level is quite low.

However, I expect that the vast majority of readers who, as you suggest, use a Delco/GM car radio to conduct their evaluations will report awful reception. The reason for this is somewhat complicated. Delco is using a Motorola-only stereo-AM decoder because

Experts agree... we've made “the world’s best cartridge even better.”
Shure's V15 Type V with new MR Tip.

"We were hardly surprised to find that the V15 Type V-MR is a sterling performer... with unsurpassed clarity and freedom from distortion... Shure has made one of the world's best cartridges even better."

High Fidelity Magazine

"Shure's new V15 Type V-MR actually provides a substantial improvement in the tracking ability of what was already the best tracking cartridge we know of."

Stereo Review Magazine

The Shure V15 Type V-MR—no other component can bring so much sound out of your system for so little money. A combination of the revolutionary Micro-Ridge Tip and Shure's extraordinary Beryllium Stylus Shank, this cartridge has redefined the upper limits of high-frequency trackability.

Save up to $25
Save on the V15 Type V-MR as well as other selected cartridges and styli February 18 thru April 19, 1985. See your Shure dealer for complete details!
Until you experience a Blaupunkt car stereo system, you'll never know how alive sound can be.
That's why Blaupunkt car stereo systems come as standard equipment in some of the finest cars in the world.
Yet it's surprising how easy it is to afford one.
For the Blaupunkt dealer near you, call 1-800-228-5333.
In Nebraska, 1-800-642-8788.

Sound so alive you can feel it.
the developer of one of the other stereo-AM systems made the use of wide-bandwidth receiver circuits a licensing requirement. It was this full-range stereo that was supposed to bring the revolution in AM radio. Motorola, on the other hand, set no bandwidth requirements, leaving manufacturers free to put stereo decoders into the same radios they have been making for years, with response that rarely extends beyond 5 kHz.

Also, your statement that "if your local GM dealer is within 100 miles of a transmitter, reception should be okay" is very unrealistic. For example, on a 100-mile drive from the transmitter of WSAM in Saginaw, Michigan, you pass another station broadcasting on the same frequency. In general, don't expect good (I don't mean excellent, just good) reception more than 40 miles from a 50,000-watt transmitter, 20 miles from a 5,000-watt, or 10 miles from smaller stations, and cut those distances in half at night, when interfering signals bounce off the ionosphere and create 10-kHz whines. Furthermore, many stations have directional antennas, and if you're in a null, their range can be extremely short. (It is true that at night you sometimes can hear powerful AM stations from hundreds of miles away, but reliable high-quality reception of such signals is impossible.)

What all this means is that a few minutes in an automobile dealership is no way to evaluate a new transmission medium.

Robert Grant
Detroit, Mich.

HOW DO EARS HEAR?
In December's "Letters," Ken Rihanek gave his views on digital vs. analog systems, stating: "Musical instruments create analog signals, and ears (last time I checked) also are analog devices." Well, yes and no.

The eardrum and its related parts up to and including the inner ear definitely are analog, but beyond that, matters aren't so clear. The evidence suggests that some form of pulse encoding is used to ensure that the auditory nerve transmits an accurate signal for processing by the brain. In other words, the part of the brain that is responsible for the sense of hearing is concerned only with whether a signal is or is not present; minor errors in the pulse form are unimportant.

This operating principle is about as close as you can get to a man-made digital system. And just think, it took us only a couple of million years to catch up to nature. Anyhow, so much for the critic's argument that digital sound is somehow unnatural.

These observations are based on experiments conducted in 1931 at Princeton University by C. W. Bray and Ernest Wever. My source is Life Science Library's Sound and Hearing (Time-Life Books, 1965; rev. 1969). It makes for good reading.

Francis Pivar
New Kensington, Pa.

MISSING AMERICANA
I am pleased to read in his review of Randy Newman's The Natural that Noah André Trudeau has added that fine work to his list of great "Americana" film scores [December 1984]. But I think that his list is uneven—and lacking. He fails to mention several excellent examples, including Elmer Bernstein's Summer and Smoke, Jerome Moross's The Big Country, Franz Waxman's Hemingway's Adventures of a Young Man.
IS SOMETHING MISSING FROM YOUR LIFE?

If performance audio equipment is important to you, it stands to reason that you're probably fussy about your video components. Especially with all the video options available these days from tapes to disks and cable TV.

So why are you still watching your tiny TV? You're missing out on the most incredible television viewing experience ever. Novabeam television. It's so exciting and involving, you'll feel like a participant in whatever you're watching, instead of just an observer.

And if it's quality you're after, you won't find a better picture. It's what Video Review magazine called "by far the most impressive projection TV we have ever seen." For matching sound, all Novabeam monitors hook up easily to your stereo system.

There simply isn't enough room here to detail Henry Kloss' over 15 years development that resulted in Novabeam TV, the state-of-the-art in projection television. It's something you've got to see for yourself. And you won't know what you're missing until you do.

For complete information (including specific installation details on over 20 Novabeam variations) and the name of your nearest Novabeam dealer, call 1-800-343-1155 (in Massachusetts call collect 1-617-577-1000) Or write Kloss Video Corporation, 640 Memorial Drive, Cambridge, MA 02139.

Kloss Video Corporation

NOVA BEAM

WHAT TELEVISION SHOULD HAVE BEEN ALL ALONG.
Discover the classics all over again.

ADS stands for accurate reproduction. In your home. In your car. Suddenly you hear the music you love with more nuance, more detail. For proof see an ADS dealer. For information call 800-824-7888 (in CA 800-852-7777) Operator 483. Or write James Armstrong, a classic in his own right, at ADS, 52 Progress Way, Wilmington, MA 01887.

Parasound. Spice up your system.

For three years we've been redefining ideas of value, cooking up a whole new class of audio and autosound products. Including six equalizers that bring out the best from your system.

Two savory examples: Season to your taste with the EQ300: 12 bands per channel, more useful frequencies and a 3-color Spectrum Display, under $250. Or the EQS-1 with its own calibrated microphone and built-in pink noise generator to measure — and correct — your system and room; under $350.

Parasound. For people who pursue value. And when you're savvy enough to spend less — to get more — that's working class.

Parasound* Parasound Products, Inc. 680 Beach Street, San Francisco CA 94109 (415) 673-4546

and Peyton Place, Bernard Herrmann's The Kentuckian, and the quintessential Americana film score, Hugo Friedhofer's The Best Years of Our Lives.

John Lasher, President Southern Cross Records, Inc. Walnut Creek, Calif.

Noah André Trudeau replies: As the founder of Entr'acte Records and now one of the figures behind Southern Cross and Label X, John Lasher has added a number of important recordings to the soundtrack discography. His additions to my non-exclusive list of Americana film scores are welcome. They reinforce my contention that anyone interested in the modern American nationalist movement that began in the late 1890s with Copland and Thomson would do well to explore some of the fine items to be found on this list.

HARDCORE LIVES

I am surprised and delighted that a well-known audio magazine like yours recognizes hardcore music for what it is: a constructive alternative to "Top 40 mildew" ["Punked Out," January]. It's also encouraging to see a major audio magazine deviate a little from reviewing only conservative forms of music.

Though you listed only a dozen or so bands, you did show how diversified the modern hardcore movement is. The groups have so many different styles, sounds, and attitudes that you can't stereotype them. Some groups you didn't mention are the Dead Kennedys, J.F.A., Youth Brigade, Suicidal Tendencies, and the Proletariat.

Your article renewed my faith in HIGH FIDELITY, and I hope other magazines follow your example. Please review groups like these more often.

Norm Lavigne, Jr. Richmond, Vt.

You're right, we did leave out some important bands, although we didn’t forget the Dead Kennedys—we just disagreed, calling them "posturing and pretentious." Check out reviews of the Replacements and Los Lobos in this issue for more alternatives to Top 40 mildew.—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.
Forecast '85

Though the whole new-product picture won't be clear until we've returned from the Winter Consumer Electronics Show, a hectic round of phone calling and preshow meetings netted this taste of what's to come. Complete show coverage will appear in next month's issue.

The trend of recent years continues, with more audio-only companies embracing video. NAD will introduce a production version of a monitor/receiver first shown as a prototype last year at the June CES. The MR-20 (about $1,000) has a 20-inch screen, three video inputs, and built-in BTSC decoding circuits. Denon's first video product is the AVC-500 ($350), a control center designed to tie audio and video systems together. It offers three video inputs, four pairs of stereo audio inputs, an ambiance recovery circuit, a five-band graphic equalizer, and a video image enhancer. Teac will be displaying a VHS Hi-Fi VCR ($1,400) and an optical videodisc player ($800). And Harman Kardon continues its move into video with a 25-inch monitor/receiver, the VM-100 ($1,095).

You'll also be seeing more integrated audio-video systems this year. Toshiba has two new entries. One comes with a 26-inch monitor/receiver, a CD player, a VHS Hi-Fi VCR, and several audio components. NEC is also letting it be known that the speakers it will offer with the system are U.S.-made models developed by Richard Shahinian, a well-respected designer and the proprietor of Shahinian Acoustics. And Sansui is broadening its video offering first monitor/receiver (the SV-M25 with 25-inch screen), a 100-watt (20-dBW) audio-video receiver, a VHS Hi-Fi VCR, an audio-video signal processor, a linear-tracking turntable, a double-wall cassette deck, and a pair of magnetically shielded three-way loudspeakers—all for the not inconsiderable sum of $5,000.

Some of the most exciting audio introductions will come from Acoustic Research. The company will have a new flagship loudspeaker, selling for $3,500 per pair. The system is said to produce an exceptionally stable stereo image with full acoustic ambience. This is accomplished by using two sets of drivers in each enclosure: one dedicated to reproducing direct sound and the other, angled toward the side wall, ambient information. An integral part of the system is an outboard amplifier/signal-processor, which provides power and controls for the ambient-sound speaker arrays. Two new turntables will also join the AR lineup: a high-end armless unit and a less expensive version of the current model, which will remain in the line.

Infinity is the latest speaker maker to introduce models designed for video applications. The top model ($650 per pair) is a three-way design with a 60-watt (17 3/4-po
IF YOU'RE OBSESSIVE ABOUT DIGITAL AUDIO, WELCOME TO THE CLUB.

It's the Sony Digital Audio Club. The world's first club dedicated to creating awareness and understanding of the remarkable technology behind compact disc players—from the company most qualified to provide it.

This year, to welcome you to the club, you'll receive special promotions on compact discs, discounts on digital accessories; our quarterly newsletter, "The Sony Pulse"; The Sony Book of Digital Audio Technology (over 300 pages of facts and details); a 30" x 40" digital audio poster; a digitally-recorded compact disc, and extensive information about the latest advances in digital products from Sony—the leader in digital audio.

To become a member, simply mail the coupon below, along with a check or money order for $15* to Sony Digital Audio Club, P.O. Box 161, Lowell, Mass. 01852.**

And join the thousands of people who are already well on their way to satisfying their obsessions.

---

Sony KGC-9400 computerized car stereo equalizer

woofers, is introducing its first preamp. The EC-P1 ($1,500) can be used with fixed- and moving-coil pickups and is equipped with two tape loops and three line-level inputs.

Compact Disc player introductions should be quite numerous. Preliminary information indicates that Sony will be showing two new remote-controlled players, the CDP-102 ($450) and CDP-302 ($550). Two more players will probably arrive on these shores in the spring or summer, one of them equipped with digital outputs. Kenwood's latest is the DP-1100 Mk.II (1635), a remote-controlled model designed as part of the company's high-spec Basic Series of separates. Yamaha replaces the discontinued CD-X1 with the CD-X2 ($399), a midsize player with indexing and random-access programmability for as many as nine selections. At $600, the CD-607 is the lowest-priced player yet from NEC. It has a 15-selection programmable memory and audible cue and review. We'll have more to report on new players from Luxman, Akai, Hi-Fi, and Quasar in next month's expanded CES coverage.

In car stereo, the big news comes from Denon, Technics, Infinity, KDF, and B&W—companies that are either entering the field for the first time or expanding their lines with new types of products. Denon's initial foray into car stereo consists of a full line of goodies, including two Dolby-C-equipped front ends, a pair of power amps, and a seven-band equalizer. Harman Kardon is broadening its line with three tuner/tape decks, ranging in price from $275 to $475. Two new power amps will also join the HK lineup. Infinity will unveil its first piece of audiosound electronics at the CES: a 75-watt power amp, the MRA-150. KEF, the venerable British maker of fine home loudspeakers, addresses the car with a satellite-subwoofer combination that is expected to cost about $500. And Kenwood broadens its line with two new front ends, several speakers, and a fancy computerized equalizer: the $300 KGC-9400.

The unit, which comes with four factory-set EQ curves, has pushbuttons instead of sliders in each frequency band and can supply as much as 12 dB of boost or cut in 4-dB increments. The KGC-9400 will also memorize four user-defined EQ curves.—Paul Terry Shea and Peter Dobbin

SYSTEMS & SOLUTIONS

Taping from CDs

Sooner or later, you're going to want to tape Compact Discs. There is nothing especially difficult about doing this, but because of the digital medium's wide dynamic range, you do need to be a little more careful than usual about setting levels and choosing the right noise reduction.

The main thing to watch for is peaks that jump high above the average signal level. These can momentarily overload the tape, causing compression and distortion. If the peak is short enough, you probably won't hear the distortion, but the compression will reduce the signal's peak-to-average ratio, thereby robbing the music of some of its natural dynamics. Since this sort of loss is one of the main clues that music is carried rather than live, it should be avoided if possible.

The best way to prevent such compression is to set your recording levels so that the highest peaks just reach the tape's overload point. This requires either that you monitor portions of the CD before you start recording, to find the peaks and set levels accordingly, or that you use a special CD with low- or mid-frequency 0-6 dB test tones. (Such discs are available from Elektra and Denon.) These tones represent the highest level that can be recorded on a CD, so they serve very nicely as a basis for adjusting recording levels. You have to go through this procedure only once, by the way. The same approximate settings will work for all properly recorded CDs. In some cases,
A few words for those who haven't experienced Sony's new Compact Disc Player.

Listen to it.
however, the levels achieved this way will put soft passages down so low that tape hiss becomes audible. Recording with Dolby C or DBX should eliminate the problem. And if you are recording a passage unusually rich in high-frequency content, you may need to use metal tape or Dolby HX-Pro headroom extension—or to back off slightly on the levels. —Michael Riggs

Revox's Hands-Off Receiver

The heart of Revox's new multicomponent remote control system, the B-285 receiver ($1,600) is a programmable wonder. Two on-board microprocessors and nonvolatile erasable-programmable-read-only-memory (EPROM) retain the frequencies of 29 AM and FM stations, along with their optimum tuning modes (stereo, mono, blend), three phono-input capacitance values, and levels for all source inputs and the preset stations, as well as protective power limits for two speaker systems. A bidirectional port on the back of the receiver accepts an optional timer/interface, which also connects to the company's new B-225 Compact Disc player and B-215 cassette deck. So configured, the system can be set to switch sources and modes automatically. The B-205 remote handset is also optional. It controls power on/off, source selection, scanning and recall of the 29 preset stations, speaker selection, volume, loudness compensation, balance, tone defeat, and muting. The range of the remote can be increased to include any room in the house; optional infrared receiving modules wired to the timer/interface carry commands from the handset to the main system. The B-285 receiver has a rated power output of 85 watts (19 3/4 dBW) per channel. For more information, write to Revox Div., Studer Revox America, Inc., 1425 Elm Hill Pike, Nashville, Tenn. 37210.

A Moving-Coil with Punch

Designed for P-mount tonearms, Ortofon's MCP-100 Super pickup ($250) is said to have sufficient output (0.26 millivolt per centimeter per second at 1 kHz) to match the sensitivity requirements of most receivers and preamps equipped with moving-coil inputs. Ortofon says the additional coil windings necessary to increase the pickup's output do not entail a significant
A few words for those who have.

INTRODUCING THE THIRD GENERATION CD PLAYER THAT'S LIGHT YEARS AHEAD OF THE COMPETITION

After listening to one of Sony's new third generation component CD players, you begin to realize you're hearing something not possible in any first, or even second generation player.

It's a whole new level of technological achievement not merely designed for those who appreciate great specs, but those who appreciate great music, as well.

A RESPONSE CURVE THAT ISN'T A CURVE

All CD players are endowed with a much flatter response curve than any turntable or tape deck is capable of reproducing. Unfortunately, most are also endowed with a conventional converter/filter system. Which tends to cause high frequency irregularities.

However, take the response curve of Sony's new CDP-302 (the one thats flat as a board).

As you can see, its far more uniform than the one found in conventional models. What this should tell you is that when you listen to even the most intricate piece of music, you'll be hearing precisely what the musicians recorded. Nothing more. And nothing less.

YOU CAN'T BEAT OUR CLOCK

Perhaps the most interesting "little" feat of engineering is Sony's new Unilinear Converter System. Its high-speed, digital-to-analog converter works by virtue of a "master clock." Using this single clock dramatically reduces intermodulation distortion common to "multiclock" converter systems.

When you combine all this with our new, high-resolution digital filter, it results in something even the most ardent audiophile will find no fault with: incredibly flat response, remarkable phase linearity and the conspicuous absence of spurious noise caused by conventional oversampling.

Of course, you'll need a master's degree in engineering to fully understand all the intricacies of our new Unilinear Converter. But you certainly don't need one to appreciate it.

A NEW CHIP OFF THE OLD BLOCK

The heart of our new CD player is a thing of beauty. This award-winning microchip governs nine different functions usually requiring multiple chips in conventional players. But more importantly, it simplifies the signal path and improves reliability.

CHANGE TRACKS AT THE SPEED OF LIGHT

Sony has done away with the lumbering gear-driven tracking mechanism, and instead, created a whole new Linear Motor Tracking System. It uses a compact laser optic assembly that's one-third the size of typical units. And its linear, noncogging motor allows the laser to move faster and more precisely.

If you're wondering what speed has to do with these mechanisms, we'd like to remind you of the fact that it takes some CD players up to 15 seconds to go from the first to the last track on a disc. But with ours, you can go from track 1 to 99 in less than a second.

FEATURES WORTH HEARING MORE ABOUT

Not all of these advances are audible to the naked ear.

Both of our new CD players come complete with Sony's Remote Commander unit which provides direct access to up to 99 tracks or subcoded selections. In addition, both have Automatic Music Sensor high-speed search and three-way repeat. (The CDP-302 shown here also allows for programmability of up to 16 of your favorite songs.)

We'd also be remiss in not telling you about our built-in subcode port. Which in the not-too-distant future you can make good use of when CDs are integrated with graphic information.

By now you're beginning to get the idea that the new line of Sony CD players not only sound remarkable, they are.

So having heard and read just about all there is to hear and read about them, we suggest there's only one thing left to do. Go to your Sony hi-fi dealer and purchase one.

Of course, there's no rush. It will take our competition at least one or two generations to catch up.
Hear all 3 kinds before you buy speakers

WE INVITE YOU to hear the best conventional "cones in a box" speakers you can find. Plus the "reflecting" kind. Then—when you hear the unique Wrap-Around Sound of B.E.S.—you’ll appreciate the remarkable difference. B.E.S. stereo imaging follows you everywhere.

Don't settle for ordinary stereo. Call toll-free 1-800-592-4644 for your B.E.S. dealer's address. See and hear slim and sculptured, warm and wide-ranging B.E.S.

B.E.S. Speakers
Wrap-Around Sound—superb stereo everywhere

C. 1985 B.E.S., 345 Fischer St., Costa Mesa, CA 92626 - (714) 549-3833

English Muscle

Mono power amps are relatively rare nowadays, and the handful that do exist are almost all perfectionist items aimed at those who seek maximum channel separation and the shortest-possible cabling from amplifier to speakers. If you are intrigued by such perfectionist pursuits and you have $2,990 available for amplification, then a pair of Naim Audio's NAP-135s deserve some scrutiny. The British-made amps have a rated power output of 75 watts (18 3/4 dBWV) into 8 ohms and a rated bandwidth of 5 Hz to 40 kHz. A miniature cooling fan is activated only when the chassis reaches a preset temperature; to keep fan noise to a minimum, speed increases only if the temperature increases. For more information, write to Audiophile Systems, Ltd., 6842 Hawthorne Park Dr., Indianapolis, Ind. 46220.

Home Foam

Sonex foam panels, long used by professionals to...
control acoustics in recording and broadcast studios, are now available for home use. The two-inch-thick Sonex Junior panels can be effective in controlling standing waves, slap echo, and peak resonances in a listening room. The 24-inch-square panels are available in charcoal, brown, or beige at $40 for a box of four. For more information, write to Illbruck/USA, 3800 Washington Ave. N., Minneapolis, Minn. 55412.

Mixed Media

The growing popularity of cassettes containing miniature reels of tape (such as those distributed by Teac) made it inevitable that someone would dream up cassettes with removable tape reels. Said to be all the rage in Japan, the Bikini system (¥25) contains five reels of high-bias tape and one snap-apart cassette shell with take-up reel. Additional reels are available singly or in packs of three. For more information, write to Reel Corp., 21711 W. Ten Mile Rd., Southfield, Mich. 48075.

Stylish Swabs

Housing a bunch of cotton swabs and a pump dispenser of solvent in a beautiful mahogany box is no mere frippery. The folks at Intraclean expect that their BLESSED CARVER M-1.5t Magnetic Field Power Amplifier

"...the equal of any power amplifier in transparency, focus and smoothness and, of course, far ahead of any other we tested in sheer gut-shaking power and dynamic range. We especially enjoy hearing spatial detail, instrumental definition and completely natural dynamics on familiar records to a degree we did not know was extractable from the grooves when we listened through lesser amplifiers. At this level of sonic performance, the astoundingly small size and cool operation of the M-1.5t become the icing on the cake, rather than the main attraction."

Peter Aczel The Audio Critic Winter 1982-83

Recent advances in analog and digital disc recording technology have made source material with full, real-life dynamic range a reality.

But, if you want to hear this improvement in sound quality, your high fidelity system must include an amplifier fully capable of reproducing all of the music...the CARVER M-1.5t Magnetic Field Power Amplifier.

350 watts rms/chan. into 8 ohms, 20-20 kHz with less than 0.5% THD. And most importantly, the rating that is musically significant: 600 watts/chan. Long-Time-Period Reserve Power with 750 watts/chan. Dynamic Headroom. Weight: 16 lbs.

The CARVER M-1.5t...carefully and specifically designed for those who seek highest fidelity and musical purity.

For more information please write to:

CARVER

Powerful · Musical · Accurate

P. O. Box 1237 19210 33rd Avenue West Lynnwood, WA 98036
Before buying any car or home stereo, you should consult the
Crutchfield Buyer’s Guide. What you learn may save you
hundreds of dollars.

- 100 pages of helpful articles, shopping tips, charts, installation
guides & more.
- Hundreds of color photos of the finest name brand products.

You get more value shopping Crutchfield

- Low discount prices
- 18 toll free order & assistance
dis lines staffed by helpful sales & technical advisors
- Your order shipped within 24 hours
- Huge in-stock inventories
- Free shipping
- All major credit cards accepted
- Confidence of dealing with the industry’s most respected mail order retailer
- Your complete satisfaction guaranteed

Call or send this coupon for your FREE Buyer’s Guide

800-336-5566
In Virginia call toll-free 800-552-3961
Be sure to mention High Fidelity when calling

Name
Address
City
State Zip

CRUTCHFIELD
1 Crutchfield Park Dept. HF, Charlottesville, VA 22906

K-121 recorder care kit will get more use if it is placed
in a highly visible spot rather than squirreled away in a
drawer. The K-121 costs $160; additional 2-ounce
bottles of S-711 head cleaner are $7. For more
information, write to Intraclean Div., A&B Enterprises,
4395 Valley Fair, Box 3592, Simi Valley, Calif.
93063.

Klipsch’s Latest

Fans of Klipsch loudspeakers can ex-
pect a new floor-standing model from
this eminent manufacturer this spring.
The two-way system will sell for about
$520 per pair. Its driver complement
consists of two 8-inch woofers operat-
ing in tandem from 80 Hz to 1.8 kHz and a
horn-loaded 1-inch compression
tweeter. Bass reproduction is aided by a
12-inch passive radiator mounted on
the back of the cabinet. Rated sensitiv-
ity is 91 dB for a 1-watt (0-dBW) input.
As of press time, the new speaker was
not yet christened. For more informa-
tion, write to Klipsch & Associates, Box
688, Hope, Ark. 71801.

SYSTEMS & SOLUTIONS

What to Do ‘til the Repairman Comes

It astonishes me how many people seem unable to
take the first steps in system trouble-shooting, though
they could save themselves a great deal of time and
expense by trying a few simple expedients before
asking for professional help. Often, basic diagnostics
will indicate a cure so obvious, so inexpensive, and so
simple as to be downright embarrassing, especially if
it’s finally an “expert” who comes up with the
solution. And even if your sleuthing only eliminates
some components from the suspect list, you’ll still be
saving yourself the bother of carting your whole
system to the repair shop.

The first step—and don’t laugh, because we’ve all
done it—is to make sure you didn’t forget to plug
anything into the wall outlet. If you still can’t make
part or all of your system come to life, check the fuses.
Just because those in the back-panel fuseholders are
intact doesn’t mean none are blown. Many compo-
nants have fuses (or additional fuses) inside, accessi-
ble only if you remove the cover that says, “Do not
remove this cover; no user-serviceable parts within.”
Don’t believe it. But don’t go digging around inside
with a screwdriver, and don’t work on the component
while it’s plugged in.

The next step is to check all the system switch
positions to make sure that, for example, you don’t
have a monitor switch at TAPE when it should be at
SOURCE. This is still baby stuff, I know, but I’ve made
too many mistakes in exactly this way to take the
matter lightly. Then turn off the system (or the parts
of it that you’ve been able to turn on) and check for
secure connections all around.

Now comes the fun part—assuming that you
still haven’t discovered the source of your woes. In
order to isolate the source of trouble, start substituting
components. Each time you do, turn off the system,
make the switch, and then turn on the system to
assess the results of the switch. In most cases, you
will discover that a single component is the trouble-
maker. Incidentally, don’t overlook cables as system
components: Bent or corroded parts can cause a
malfunction as serious as those occasioned by burnt-
out transistors or leaky capacitors.

The idea is to make a deliberate change and see
whether it affects the problem. If the malfunction is in
one channel, switch left and right leads somewhere in
the system. If the malfunction switches channels as a
result, it is “upstream” from the point at which you
made the substitution, that is, closer to the source; if it
stays in the same channel, it is downstream, closer to
the speakers. Undo the substitution (so you have only
one change in the system at any one time) and make
another in the indicated direction. If both channels are
out, you may need to substitute a similar component or
change the way a single component is connected. A
tape deck can swap places with any other line-level
component, such as a CD player; or either one can feed
out transistors or leaky capacitors.

There are limits to these measures, however. For
instance, unless you have another tonearm to substi-
tute, you won’t be able to check for a suspected fault
in the current arm’s wiring. But the biggest limitation
for most people seems to be a willingness to give up
the hunt too easily.—Robert Long

FREE STEREO
Buyer’s Guide

What you learn may save you
hundreds of dollars.

- Over 1,000,000 consumers refer to this
before buying their car or home stereos.

- What you learn may save you
hundreds of dollars.

- The JANUARY 1984 HIGH FIDELITY is 91 dB for a 1-watt (0-dBW) input.

- It’s finally an “expert” who comes up with the
solution. And even if your sleuthing only eliminates
some components from the suspect list, you’ll still be
saving yourself the bother of carting your whole
system to the repair shop.

- The K-121 recorder care kit will get more use if it is placed
in a highly visible spot rather than squirreled away in a
drawer. The K-121 costs $160; additional 2-ounce
bottles of S-711 head cleaner are $7. For more
information, write to Intraclean Div., A&B Enterprises,
4395 Valley Fair, Box 3592, Simi Valley, Calif.
93063.

- Klipsch’s Latest

- Fans of Klipsch loudspeakers can ex-
pect a new floor-standing model from
this eminent manufacturer this spring.
The two-way system will sell for about
$520 per pair. Its driver complement
consists of two 8-inch woofers operat-
ing in tandem from 80 Hz to 1.8 kHz and a
horn-loaded 1-inch compression
tweeter. Bass reproduction is aided by a
12-inch passive radiator mounted on
the back of the cabinet. Rated sensitiv-
ity is 91 dB for a 1-watt (0-dBW) input.
As of press time, the new speaker was
not yet christened. For more informa-
tion, write to Klipsch & Associates, Box
688, Hope, Ark. 71801.

- SYSTEMS & SOLUTIONS

- What to Do ‘til the Repairman Comes

- It astonishes me how many people seem unable to
take the first steps in system trouble-shooting, though
they could save themselves a great deal of time and
expense by trying a few simple expedients before
asking for professional help. Often, basic diagnostics
will indicate a cure so obvious, so inexpensive, and so
simple as to be downright embarrassing, especially if
MAGIC!
I've read that when they make a Compact Disc from an analog tape, the tape hiss is more noticeable than it is on LPs because of the flawless digital reproduction. Could the hiss be reduced by making the master through a noise reduction system like DBX or CX?

Lloyd R. Hrdlicka
Montgomery, Minn.

Most of the circuits that are known as noise reduction systems—including the Dolby ones and several others, in addition to the ones you cite—do nothing to reduce noise that already is in the signal before they're applied. They only keep processed signals from accumulating more noise—or, at least, as much noise as they would without processing. There are dynamic filters and similar circuits (including DNR) that remove some noise after the fact, but almost invariably at some expense in signal quality. I'd rather live with a slight background hiss than with most of the by-products, frankly.

SLIP-UP
I regularly use alcohol and a Q-tip to clean the heads of my JVC KD-A33 cassette deck, but it frequently starts dragging after I've changed transport modes, even if it has already played a song properly. What's wrong? Could the heads be worn out?

John Ramirez
San Bernardino, Calif.

Although I'm not familiar with the innards of your deck, I'd guess that it has a worn drive belt. Most decks have belts (even models with direct-drive capstans usually employ them for spindle control in the fast-wind modes), and they're often the first element to need replacement. Heads often are the last thing to go.

MUSIC EVERYWHERE
My Yamaha CR-420 receiver has A and B speaker connections, but I want to run four stereo pairs in my new home. How should I hook them up? Will I need another amplifier?

Bill Briere
Bristol, Conn.

Yes, if you expect high fidelity performance out of the system. Among other things, it should give you better control over relative levels in the four pairs than you can get with a single receiver. The standard alternative is to use L pads at the individual speakers, but this, too, entails sonic compromise.

REEL THING
I'm shopping for a 10½-inch open-reel deck with DBX noise reduction built in. I want excellent frequency response, signal-to-noise ratios, and flutter specs at all speeds, at a price of approximately $750. What companies make this type of equipment?

Jeffrey T. Gardner
Wilmington, N.C.

Akai and Teac are the only companies we know of that make such machines, though not within your budget. In fact, it's a pretty tall order to find a well-made NAB-reel model with first-rate specs at that price even without DBX, particularly now that the choice in open-reel decks is dwindling. You may find it easier to shop for the deck and the DBX separately. But be sure you understand that there are two mutually incompatible DBX noise reduction systems. Perversely, the original professional version (Type I) is built into at least one consumer open-reel deck; the consumer version (Type III), which is used for all DBX prerecorded cassettes and LPs, is the one found in all cassette decks and the outboard encoder/decoders sold by audio stores. Unless you're planning to have records cut from your tapes, I would strongly recommend that you go with Type II DBX, for reasons of performance as well as compatibility.

OLD ANGLE
I attempted to line up the stylus of my Shure pickup in my wonderful old Elac 50H with the Dennesen Soundtractor [test report, January 1981]. The Elac's built-in gauge would place the pickup almost as far back as possible; the Dennesen indicates it should go 1 mm farther forward than it can. Which is correct?

W. H. Damon III
APO New York, N.Y.

I'd trust the Dennesen.

WIRELESS?
Somebody goofed in your November 1983 article on Dolby Stereo ["A New Dimension for Video Sound"]. The diagram for surround-sound hookup shows no connecting wire by which the stereo signal can get to the amplifier from the projection TV. Mine doesn't even have a mono output, as a matter of fact. How should I go about making the hookup?

Also, the dematrixing circuit you show was Dynaco's. I know because I have the Dynaco Quadapter. You credit [David] Hafler, who worked for Dynaco at the time.

H. Long
Chicago, Ill.

Hafler designed the circuit, then assigned the patent to his company of that era. If you have the Quadapter, by all means use it instead of our do-it-yourself rig. The stereo signals can come from any convenient spot in your video setup; in most systems, that would be the stereo audio output from whatever source (videodisc player, VCR, or—not—tuner) can supply it, rather than from a monitor or projection device.

TIME IN
Does any company manufacture a cassette deck (preferably with automatic reverse) with a built-in timer like those found in all of the VCRs that are on the market?

Scott Tompkins
Chicago, Ill.

Not that I know of—at least, not in a component-grade deck. More's the pity.

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

by Michael Riggs

A few days ago, while reading a prominent British audio magazine, I ran into a peculiar sentiment. One of the writers mentioned that he had pressed a manufacturer to "eliminate superfluous gadgets from..." I'm all for getting rid of useless clutter, but why anyone would lump tone controls into that category is a great mystery. Still, it is clear that our English friend is not alone in his prejudice. A stroll through just about any high-end audio salon is almost guaranteed to turn up at least one preamp (usually a very expensive one) whose control functions are limited to a power switch, a source selector, volume and balance knobs, and perhaps a tape monitor button.

The thinking behind such crippled beasts turns on what I call the purity-of-signal myth: The one true path to high fidelity is to reproduce exactly what is on the disc or tape with as little alteration as possible. Certainly this is the way to go for records meticulously produced and manufactured to yield accurate reproduction on an accurate system. But if that describes your entire collection, you probably don't own very many records. Equalization, compression, and a variety of more esoteric tricks are practically a way of life at most recording sessions, particularly in pop music. And it is not at all uncommon for producers to mix their records with cheap compressors and AM car radios foremost in their minds. The resulting sound is likely to be unpleasantly bright and forward on a high-performance audio system.

After-the-fact remedies for such maladies are invariably compromises (a good recording will always sound better than a bad one), but that doesn't make them worthless. A firm hand on the treble control can sometimes coax enjoyable music out of what began as unlistenable screech. In short, buy a preamp, amp, or receiver with good tone controls, and don't be afraid to use them. If what you want (or already have) lacks such amenities, add an equalizer.

The distinction between an equalizer and tone controls is one of degree rather than of kind. Both enable you to alter the tonal balance of the sound in a controlled way. An equalizer usually has either five or ten sliders for each channel, dividing the ten octaves of the audible frequency range into one-or two-octave bands, but models are available that permit boosting or cutting of the output in bands as little as a third of an octave wide. This affords extraordinary flexibility, although at the expense of making most simple adjustments more difficult and tedious than they would be with a less elaborate unit. This is even more true of parametric equalizers, which enable you to adjust the placement and widths of the bands as well as the amount of boost or cut in each one. With parametric EQ, you can get the effect you want more exactly than you probably could with a conventional graphic equalizer, but it might take you quite a while.

Tone controls are at the opposite extreme of the versatility/complexity scale. Typically, they operate over only two relatively broad bands: one for the lows, another for the highs. Although the alterations you can make with simple bass and treble controls are crude compared to the subtle effects of which a good equalizer is capable, they are adequate for the kind of EQ most people want to apply most of the time, and they are much easier to operate.

Virtually all modern tone controls are of the Baxandall type (after the British engineer and audio designer Peter Baxandall). Such controls have what is known as a shelving action: They boost or cut everything above or below a certain frequency (known as the inflection point) by the amount you dial in. And the more boost or cut you apply, the further toward the midrange the inflection point moves. This has the advantage of permitting subtle touch-ups at the frequency extremes as well as drastic surgery.

A useful variation on this theme is the provision of selectable turnover frequencies on some top amps and receivers. The idea is to increase flexibility by giving you two or more choices of frequencies at which the controls' effects will first be felt. And occasionally a product appears that sports an extra control for the midrange, bringing the total to three. This usually turns out to be more valuable in theory than in practice, however.

You may be wondering why I haven't said anything about the value of room equalization—the practice of applying EQ for the purpose of smoothing out frequency response irregularities introduced by room acoustics. After all, that is what most manufacturers say you need an equalizer for. Unfortunately, it usually doesn't work. Our perception of tonal balance and instrumental timbres is influenced not only by the frequency response of the reverberant field (the sum of the direct sound from the loudspeakers and all the reflections off the floor, walls, and ceiling), but also by the direct sound alone. Flattening the reverberant-field response may make the direct response more ragged and almost always makes it excessively bright. More often than not, the alleged cure only makes the disease worse. This is by no means to say that you shouldn't have an equalizer, just don't expect it to be a panacea. It can help you improve the sound of bad recordings, doctor tapes for better sound in your car, smooth the response of an errant loudspeaker, and so forth. Acoustic problems, on the other hand, usually respond best to acoustic solutions.
PRESENTING
THE ALL-NEW 11th EDITION OF THE
SCHWANN ARTIST ISSUE

Locate over 25,000 classical recordings according to orchestra, trio, quartet, conductor, soloist, vocalist, choral group or operatic company.

The all-new 11th Edition of the Schwann Artist Issue is finally here. And the sooner you return the order form below, the sooner your copy will be in your hands.

This is the first new Artist Issue in three years. Completely revised and updated, it includes 300 pages—over 25,000 listings—that help you quickly locate virtually any classical recording by:

**Orchestra** - categorized by conductor.

**Conductor** - their recordings with various orchestras and choral groups.

**Quartets and Trios.**

**Soloists** - listed according to instrument.

**Operatic and Choral Groups** - including soloists for each recording.

**Vocalists** - and their recordings by composer.

The Schwann Artist Issue is comprehensive and easy to use. And it is the only classical recording directory of its kind.

To order your copy of the all-new Schwann Artist Issue, return the coupon today.

Copies will be mailed within 4 to 6 weeks after we receive your order.

Reserve my copy of the new Schwann Artist Issue.

I enclose $6.95 (plus $1 for postage and handling) per copy.

Number of copies

Amount enclosed $ 

(Payment must accompany order. Payment in U.S. Currency only.)

Name

Address

City State Zip

Province Country

SCHWANN ARTIST ISSUE Dept. 11, Single Copy Sales, 825 Seventh Ave., New York, NY 10019
Remote control has been a long time coming to audio equipment: Has it been worth the wait? by Paul Terry Shea

Until recently, remote control wasn’t much of an issue for audio enthusiasts. The concept was so closely and exclusively tied to TV that there simply weren’t many remote-controllable audio components. But that is changing rapidly.

Improvements in TV sound have broadened the audiophile’s wish list to include Hi-Fi VCRs and Laserdisc players, both of which come with remote controls as a standard feature. And Compact Disc players, whose ease of use is so obviously enhanced with a remote, have contributed still more to raising the consciousness of audiophiles about the desirability of remote control. Realizing this, manufacturers have responded with a variety of approaches to bringing remote control to traditionally hands-on audio gear. The problem is that it’s all too easy to end up with an integrated audio-video system containing as many as five separate remotes. But some manufacturers are addressing that problem, too.

At present, there are three ways to get remote control in an audio setup: via a receiver, as part of a one-brand package system, or with an add-on remote-control device, such as the SRC from Acoustic Research. Each option has its limitations, so it’s a matter of establishing priorities before deciding which way to go.

If a receiver will satisfy your needs, you’ll be happy to know that there are about 20 remote models to choose from. At minimum, a remote receiver provides control over the most often used functions: power, on/off, volume, and preset station selection. More versatile models add across-the-room access to tone, balance, and loudness-compensation controls, as well as source selection.

In my experience, the ability to vary volume and balance from the listening position is reason enough to invest in a remote-control receiver. The broad dynamic range of a good CD can cause the neighbor-conscious audiophile to change volume settings several times during the run of a symphonic recording. And having the flexibility to vary the left-right balance of the sound as you move about the listening room is crucial to maintaining a good stereo image. A similar argument can be made for remote tone controls. Adjusting the bass and treble for a pleasing sound when you’re standing next to the receiver is no guarantee that the frequency balance will remain the same elsewhere in the room.

A few examples should demonstrate the extent of remote-control flexibility in receivers. The Marantz SR-940 ($640) pumps out a respectable 100 watts (20 dBW) per channel, and its handset gives you remote access to power on/off, AM and FM band selection, tune-

Paul Terry Shea is editor of Audio Times, an industry trade magazine.
...is the choice of those who consider music to be an important part of their life. From digital-ready amplifiers and world’s finest FM tuner, to the most sophisticated cassette & reel recorders, only Tandberg offers a complete family of the most respected music reproduction equipment. European-made...acclaimed world-wide. For a color poster (without advertising copy) and the name of your nearest dealer, send $2 for postage & handling to: Tandberg of America, 1 Labriola Ct., Armonk, NY 10504.
The state of the art in unified remote control, and expensive separates from Revox and, in the near future, Nakamichi, ADS, and McIntosh.

One of the leaders in remote-controlled audio is Bang & Olufsen. Three of its current systems enable you to operate a variety of functions from any room equipped with a Master Control Link (a remote receiver and speaker connector). But such sophistication doesn't come cheap: The Beosystem 5000, which includes a 55-watt (17½-dBW) receiver, a cassette deck, and a turntable, costs $2,485. The new, lower-powered BC/BM 3000 system goes for about $1,000 (sans turntable), while the one-piece Beocenter 7700S costs $2,100 (including speakers). Master Control Links are optional.

Many people, however, like to mix and match their components to arrive at the correct blend of performance and functionality, and a few companies offer integrated remote control over a select group of their components. Sony, for example, has three receivers whose optional remotes will also control about 25 different Sony cassette decks, some dating back to 1979, and about a dozen turntables. If you own a Sony cassette deck or turntable, check to see whether it has a four-pin remote connector on the back. If so, it can probably be wired to an STR-AV760 ($500), STR-AV560 ($400), or STR-AV460 ($300) receiver and be operated via the $40 Remote Commander handset. The Remote Commander will also control two of the company's new CD players.

RCA's Dimensia system gives you access to seven audio and video components via a

single handset.

The Dimensia monitor, receiver, which contains the computer circuits

B-285 receiver ($1,600), B-216 cassette deck ($1,290), and B-225 CD player ($1,150). Add an outboard timer to the system, and the B-205 will operate the system from any room in the house equipped with an infrared transceiver. Though not amenable to multiroom remote control, the company's separates—the B-261 tuner ($1,600), B-251 integrated amp ($1,500), and B-252 preamp ($1,200)—can
be operated via the B-201 handset ($125). And the company's two turntables can be retrofitted for remote operation.

What even multicomponent remote audio systems ignore, however, is the ongoing merger of audio and video. To date, RCA remains the only company with a completely integrated audio-video system: Dimensia. Consisting of a VHS Hi-Fi VCR, monitor/receiver, integrated amp, tuner, cassette deck, Compact Disc player, turntable, and speakers, a fully loaded Dimensia system will set you back $5,000. But you needn't buy everything at once, and other speakers can be substituted with no loss of functionality.

The heart of Dimensia is the monitor/receiver. Its onboard computer accepts commands from the handset and makes logical determinations about what switching arrangements will accomplish them. Necessary to execute remote commands, keeps you informed of the system's operating status with on-screen displays.

For instance, when you select VCR and PLAY on the remote, the computer automatically turns on the VCR, puts it into the play mode, activates the integrated amp, makes the proper audio input selection, and then switches the monitor to accept the VCR's direct video feed. And like a computer, the monitor assists you in operating the system via on-screen function displays.

Considering the marketing clout of a company like RCA and the attractiveness of its Dimensia technology, it seems logical that other manufacturers would be eager to adopt its control scheme as an industry standard for unified remote control. Logical, but unlikely. Manufacturers I spoke with say that getting the cooperation necessary to establish a standard is an enormous challenge. They point out that even if it were possible to standardize on a single remote operating system, the diversity of features in components today would make it almost impossible to guarantee total remote control across brands. Also weighing heavily against standardization is a basic marketing consideration: A standard would mean that you could pick and choose among many brands when assembling an audio-video system capable of responding to the commands of a single handset.

RCA's Dimensia system may point the way toward unified remote control, but no one-brand approach can satisfy everyone's needs and tastes. The ideal solution may well be a "black box" capable of intercepting the commands from a single handset and translating them into signals that can be understood by any manufacturer's remote-controllable equipment. I don't know of anyone working on this sort of system, but the idea is yours for the taking.
Easy Does It

BY JAY TAYLOR

A great way to trim 10 to 20 percent, perhaps more, from the total cost of a new car-stereo system is to install it yourself. Such a suggestion, however, is terrifying to many people, and understandably so: A do-it-yourself installation involves cosmetic surgery on one of the biggest investments you'll ever make.

In fact, I would not advise everyone to tackle the job. Some cars are better left in the hands of a professional installer, and certain complicated systems in any car are no job for an amateur. But if you have a smattering of experience with wiring and are reasonably proficient with saws and screwdrivers, you are probably quite capable of installing a basic system yourself.

I've chosen a Honda Accord hatchback, a Ford Escort station wagon, and a Pontiac Fiero to demonstrate what's involved in a basic system installation. These cars are fairly typical in the challenges they present, both acoustically and mechanically, to the amateur installer.

Of all the cars on the road, Hondas usually present one of the most straightforward installations. Unlike the folks in Detroit, who take great delight in making it difficult for you to install an aftermarket system, Honda designed every car to accommodate at least a basic system. In fact, models from 1983 on were prewired for an in-
Our twelve millionth sound system just found a new home.

Audiovox made the very first custom in-dash radio for audiophiles nearly 20 years ago. Since then, we've made over twelve million custom sound systems for automobiles. One at a time.

Today, our top-of-the-line Hi-Comp matched stereo components produce a response so remarkable they are wooing Mercedes owners away from the most famous European system.

For instance, the Audiovox Hi-Comp HCC-1250 receiver/cassette being installed here is only 5" deep. Yet it's back-lit panel displays not only frequency and time, but all other functions just as though you had a small personal computer at your fingertips.

You get Dolby noise reduction from the deck, plus a music search system that permits scanning of cassette programs in both the forward and reverse modes. And a further refinement is the solenoid soft-touch operating buttons usually found only on the most expensive home cassette decks.

With enormous power and the least cluttered control panel extant, this receiver/deck is designed for minimal eye movement combined with all the listening satisfactions of the home system.

But Audiovox hasn't stopped at sound systems in bringing motorists the comforts of home. Whether you're considering our new Audiotel™ mobile cellular phones or our electronic car security systems, Audiovox leads the way with a host of features the competition hasn't even considered yet. Audiovox. We've made cars more livable for a whole generation of drivers.

Audiovox Corporation, 150 Marcus Boulevard, Hauppauge, NY 11788. (516) 231-7750.
dash receiver and four speakers, and for about $5, you can get an adapter that enables you to plug the front end directly into this harness. Earlier models are also prewired, but you’ll have to splice into the harness, and the back-speaker wires terminate above the fuse box.

The photos here show an installation in an '82 Accord hatchback, but later models are almost identical. Front speakers for an Accord should be 4 inches in diameter, preferably with low-profile grilles that will not interfere with the window crank. If you are replacing existing speakers, the job involves nothing more than removing four screws, swapping the new speakers for the old, and then replacing the screws. If there are no speakers in place, the installation involves a number of steps.

First remove the armrest (held by two Phillips-head screws), the window crank (carefully remove the spring clip from underneath with needle-nose pliers), and the trim from the door lock (unclip a small piece of plastic to reveal a single Phillips-head screw). Now remove the door panel, starting at the bottom and working up, by very carefully prying loose the friction clips around the perimeter of the door. Once it is removed, mark the panel with your new speaker template.

Lay the panel flat and cut around the speaker outline with a sharp carpet knife, making sure not to rip or soil the vinyl. To create the appropriate screw holes, use a drill or a small nail. Pull the speaker wire through the hole, and then reverse the procedure to replace the panel.

Rear speakers present the hatchback owner with two options. Round speakers up to 6½ inches in diameter can be mounted on top of the shock-absorber towers or, with the appropriate speaker kit, 6-by-9s can replace the armrest/storage-compartment in the rear side panel. Unless you already have a pair of 6-by-9s you're dying to install, the shock tower is the way to go. Not only does it offer better high-frequency dispersion, but it's a much easier job for the amateur installer. Only two screws hold the plastic top on; removing them reveals the factory speaker leads. Use a jigsaw or sharp utility knife to create a mounting hole for the speakers.

Accord four-doors can accommodate a 6½-inch speaker in the rear deck. Although it's not absolutely necessary, removing the back seat makes the deck more accessible. Sound complicated? It's not. One bolt holds the bottom half of the seat in place. Located in the crack between the bottom and top cushions, the bolt can be removed, permitting the seat to be tilted forward and out. This reveals three more bolts that hold the seat back. Remove them and the back can be lifted out, giving you access to the rear deck.

A kit is a necessity for in-dash installation in a Honda, because the opening offers nothing to attach the radio to, front...
NOW YOU DON'T HAVE TO PAY AN ARM AND A LEG FOR YOUR EARS.

Becoming an audiophile has always had its price. We have a way of lowering it.

Introducing two of Yamaha’s new high-end separates—the M-40 power amplifier and the C-40 pre-amplifier.

Both have the highest state-of-the-art circuitry and features. For the highest quality sound reproduction possible.

But at a lower price than ever before possible from Yamaha.

For pure sound combined with pure power, the M-40 uses our exclusive Auto Class A circuitry. It automatically switches from pure Class A operation to Class AB when music peaks require high power levels. So purity is never sacrificed for power.

To eliminate crossover distortion during switching, as well as transistor non-linearity distortion, the M-40 has our unique Zero Distortion Rule circuitry.

The C-40 uses ZDR in the phono EQ section. For the purest phono reproduction possible.

And to effectively capture the quieter passages that today’s digital sources are capable of, the M-40 has a phenomenal 127dB S/N ratio.

The result is exceptionally pure and accurate musical reproduction. Which is in keeping with the C-40’s and M-40’s purpose—basic, audiophile-quality sound reproduction—pure and simple.

And at $350* for the C-40 and $400* for the M-40, affordable.

So visit your Yamaha dealer. And satisfy your ears. Without having to sacrifice any other part of your anatomy.

*Suggested USA retail prices
Although the opening is DIN-sized (7-by-2 inches), there are no DIN mounting clips on the sides. Most Honda kits use brackets that attach to the shafts of the radio and then clip to the edge of the in-dash hole. Honda kits also usually contain instructions, which vary in quality depending on the kit manufacturer. In any case, once you've made the wiring connections, do a final check of all functions before seating the receiver in the dash.

Ford's Escort has been a big seller since its introduction. If you own one, you'll be happy to know that the car is reasonably accommodating for a first-time installer. It took me four hours to finish the installation in the '82 Escort station wagon pictured here. The results were well worth the time.

The two change trays in the front dash are perfect for 3½-inch speakers. Removing these trays takes a little patience. Pry them up at the front with a broad, flat instrument. If you use a screwdriver for this operation, be sure to put something under it to prevent damage to the dash. The trays are lodged tightly, so be prepared for lots of prying. Grilles for the dash, which were included with the installation kit, snapped on once the speakers were attached.

Rear speakers for the station wagon may present a small problem. Once the little storage wells in the back side panels are removed, again by prying them up, 5½-by-7 speakers fit well, but you may have a hard time finding this somewhat unusual size. I was eager to see what extra effort was involved with 6-by-9 speakers. A quick inspection revealed that the speakers I had were meant to be installed from underneath, so the panel had to be removed.

This wasn't difficult at all. Removing a cotter pin from each side releases the back seat. This leaves about half-a-dozen screws holding the entire side panel in place. Also take out the four screws that secure the plastic trim across the back, under the hatch. With the trim gone, you'll see two more screws that must be removed. With all this accomplished, both panels can be removed, and the 6-by-9s are now a snap to install. Make a mental note of the screws as you disassemble things; they vary in length, and it speeds the reassembly process if you know where they belong.

Although Ford has been very cooperative with speaker locations, installing the front end poses a problem. There is a plastic assembly in the dash with wells designed to foil aftermarket installations by making it impossible to mount a radio flush with the dash. Your only option is to break it off with a pair of pliers. Though the process is fairly easy, do it slowly, making sure to leave some of the assembly in place. The radio must catch against what's left in order for the faceplate to hold it securely. At the suggestion of a dealer, I used a black metal faceplate (Metra part 89 10 616) designed to fit Chrysler cars to complete the installation. It covered the entire original radio area, and the finished product...
Spend more time driving your Lamborghini and less time fiddling with your dash.

Button. Button. Who's got the button?

Our competitors would have you believe the quality of high end car audio should be judged by the number of buttons per square inch. More buttons, more quality. So, many of the controls on their systems put you to work doing things you shouldn't have to. Ours don't. Audia controls are designed to let you tailor superior sound to your individual taste. Nothing less. Nothing more. That's why many of our features are automatic. Features that allow you a more pleasurable driving experience.

Like our radio/tape switch. Push one button to put your cassette on hold and listen to the traffic report. Push it again and the tape picks up where it left off. No ejection. No correction.

Our bass, treble, balance and volume are all controlled with one knob cluster. And our preset buttons light up to indicate which button is programmed to the station you're listening to.

Stereo/mono and local/distance functions? With Audia, the correct choice is made for you, thereby eliminating human error. Not so with most competitors.

How about our FM Diversity Tuning System? Two separate FM front encs and antennas detect and monitor multipath noise, instantaneously locking onto the strongest, cleanest signal. So you always get optimum reception. Automatically.

Our 180 Hz Acoustic Compensation Control corrects the low end frequency "hump" caused by your car's interior. For mid bass sounds with natural balance and less power drain on the amplifier. No one else offers you this feature.

The Dual-Direction Automatic Azimuth Adjustment is an exclusive feature of our auto-reverse decks. It adjusts the tapehead to achieve accurate zero azimuth in both directions. Eliminating high frequency "drop out."

Impressed so far? Wait 'till you hear it. Let your Audia dealer give you an ears-on "audition." Then you can start enjoying the ultimate combination of listening and driving. And stop fiddling with your dash.
I didn't buy my car stereo backwards. Why should you?

My car stereo dealer told me if you want clean, clear accurate sound—choose your speakers first. Because if the speakers can't handle it, you won't hear it. No matter what kind of sound your receiver pulls in.

Then he told me: Jensen. If you want to hear it the way they played it, choose Jensen speakers first. Jensen invented car speakers in the first place. And they're a leader today. Simply because they know how to deliver the goods.

Naturally I got a Jensen receiver to go with my Jensen speakers. Great team, designed to play best together. Makes sense. Makes great sound, too. Want to hear it all. With Jensen I do.

JENSEN
When you want it all.
looked as good as, if not better than, the original equipment.

Squeezing a good stereo system into the new Pontiac Fiero is easy, even for a beginner. After all, the car's designers didn't leave much to the imagination when it came to speaker placement. In fact, your biggest sonic decision should be made before you buy the car. The Fiero is equipped, in its most economical form, with an AM radio. My advice is to step up to the AM/stereo-FM package. What this gets you (in addition to the radio-only front end) is four speakers, each of which probably cost the General about $1. They are desirable solely because of their placement: A stereo pair is mounted in each headrest, which provides a nice spatial quality. If you forgo this option, the only way you'll ever have speakers in the headrests is to enlist professional assistance, which is very expensive. If you drive a hard-enough bargain, the dealer may even give you a few bucks for the return of the factory radio.

Headrest speakers should not be considered the main speakers. For additional volume and bass, you need dash-mounted drivers. A pair of 4-by-10s fit nicely, the chief caution being that if the tweeter or tweeter/midrange assembly protrudes too far beyond the rim of the speaker, the factory grille will not fit back over it.

Having selected a suitable speaker, remove the dash grilles by gently prying them up with a broad, flat instrument. A screwdriver is appropriate here, but take care not to damage the dash. (The friction fit of the pegs at each corner is commendable; if everything from Detroit were put together this tightly, we'd be exporting cars to Japan.) With the grilles removed, you can quickly replace the factory speakers.

Putting a new front end in the Fiero's dash requires two things you're not likely to have lying around the house. The first is an installation kit. The stock radio is much taller than a typical after-market replacement, so the kit should include a mounting bracket and a faceplate to cover the gaps above and below. You might also use the extra vertical space to mount a slim equalizer above the front end. A good kit should also contain installation instructions and an adapter that will enable you to plug into the factory wiring harness (mine did).

The second unusual requirement for the job is a tool to remove the four screws that hold the trim panel surrounding the radio. They look like standard Phillips Screws, but closer inspection reveals them to be Torx screws, with six points instead of four. A T-15 screwdriver will remove them. The trim panel can then be snapped out, revealing four bolts holding the factory radio. When you remove the radio, a bracket supporting it from behind will remain. Your new front end will probably be deeper than the factory radio, so the bracket will have to be removed. Break it off with pliers. Now bolt in the new front end bracket assembly, replace the trimplate, and you're done.
Monitor/receivers

give you

high performance

without

the hassle.

A couple of years ago, it looked
like television's future lay in
component systems comprising
a high-quality video monitor and
a separate TV tuner. Reports
reaching us lately, however, in-
dicate that two-piece systems
are yielding to combination
monitor/receivers: high-tech
versions of the traditional one-
piece TV set.

It's easy to understand
why. With its built-in amplifier,
speakers, and TV tuner, a mon-
tor/receiver is as amenable to
stand-alone operation as a regu-
lar TV set. Yet its complement
of inputs and outputs allows
easy integration into a complete
audio-video sys-
tem. Does a
monitor/re-
ceiver sacrifice
designed
picture quality?'

Not necessarily. It can be like-
ened to a stereo receiver, which
f properly designed can per-
form just as well as separates.
In fact, choosing between a re-
eceiver and separates in video (as

For a test report of the Sony
KV-25XBR (pictured here), see
page 51.)
A SPECIAL ANNOUNCEMENT TO ALL THOSE WHO LOVE MUSIC AND COLLECT RECORDS

THE SCHWANN RECORD & TAPE GUIDE IS NOW AVAILABLE BY SUBSCRIPTION

12 MONTHLY ISSUES COVERING THE LATEST INFORMATION ON LP RECORDS, TAPES, COMPOSERS, ARTISTS AND LABELS IN CLASSICAL, ROCK, POPULAR, JAZZ, COUNTRY, FOLK, OPERA AND MORE!

Includes A SPECIAL DELUXE YEAR-END ISSUE COVERING thousands of recordings including popular music over 2 years old, mono and simulated stereo classical, pop, and jazz, as well as educational, religious and specialized categories, and recordings on digital Compact Discs. New releases, record and tape price lists, and more.

- LOCATE RECORDS & TAPES IN SECONDS
- TRACK DOWN MUSICAL WORKS IN CONCERT AND FM
- SNATCH UP "COLLECTOR’S ITEM" RECORDINGS
- ADD TO YOUR KNOWLEDGE ABOUT MUSIC, COMPOSERS and ARTISTS—when they lived, what they wrote or recorded...and when.

Over 25,000 listings at your fingertips and hundreds added each month! All subscriptions include a special year-end deluxe edition covering specialized categories, educational, religious, pre-stereo era and more.

HUNDREDS ADDED EACH MONTH!

Schwann Record & Tape Guide

The most comprehensive guide on recorded music ever published.

Take advantage of the special rate shown and enter your subscription today.

YES! Enter my subscription to the NEW Schwann Record & Tape Guide for $30.00 for one year (12 issues).

$ ____________ Payment is enclosed

Canada—$40.00 per year
All Foreign (Surface Mail)—$45.00 per year
All Foreign (Air Printed Matter)—$80.00 per year
PAYMENT IN U.S. FUNDS
MUST ACCOMPANY ORDER
Allow 5-8 weeks for receipt of first copy.

ABC Schwann Record & Tape Guide
Subscription Department
P.O. Box 41094
Nashville, TN 37204

NAME ____________________________ (Please print)

ADDRESS _________________________ APT _________________________

CITY ___________________ STATE _______ ZIP ___________________
in audio) usually comes down to a question of application: If your video system already contains two VCRs, a video switcher, and a stereo amplifier, then a separate monitor is the logical choice. But if such complexity is something you want to build up to slowly, your best bet is an all-in-one monitor/receiver.

First among the requirements of audio-conscious videophiles is reception of multichannel TV sound. Of the 33 models in the accompanying guide to large-screen monitor/receivers, 29 have either built-in BTSC decoding circuits or a set of MPX jacks for hooking up an outboard decoder. Today’s monitor/receivers also are equipped with a reception of multichannel TV sound. Of the 33 models in the accompa-nis an all -in -one monitor/receiver.

If your video setup and main audio system are apart, you’d be well advised to use a modest stereo receiver for audio amplification: Its tuner section will enable you to receive stereo FM simulcasts.

Frankly, we are quite surprised at the number of sets that sport RGB inputs. If you own a personal computer capable of generating an RGB output, you’ll appreciate the convenience of having a color computer monitor available at home. In our experience, however, few monitor/receivers have the resolution necessary for headache-free 80-column text display. Of more practical importance is the inclusion of dual RF inputs on several models, which helps make a set truly cable-ready. Many cable systems offer scrambled channels in addition to their basic fare, and dual RF inputs enable you to route the direct cable feed and the decoded signal to the set simultaneously. This lets you maintain full use of the set’s remote control, which has buttons for choosing between RF inputs.

Another important development this year is the appearance of the flat, square picture tube. Its squared-off corners add an inch diagonally to the screen without noticeably increasing the cabinet size. Finally, one company—Toshiba—promises to offer a fully digital monitor/receiver this spring. Digital TV technology is in its infancy, however, and it is not clear exactly what additional features and benefits its chassis will bring. The only thing that most manufacturers are willing to say is that first-generation models will be top-of-the-line items.

Peter Dobin

### MONITOR/RECEIVERS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SCREEN SIZE</th>
<th>CHANNELS</th>
<th>VIDEO IN/OUT</th>
<th>AUDIO IN/OUT</th>
<th>STEREO DECODING</th>
<th>CONTROLS/FEATURES</th>
<th>SIZE &amp; WEIGHT</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisher PC-218</td>
<td>20 in.</td>
<td>140</td>
<td>4/1</td>
<td>6-pin</td>
<td>4/2</td>
<td>Built-in</td>
<td>Flat, square picture tube; 5-source switching; green-screen mode; sleep timer; headphone jack; simulated stereo; external-speaker terminals; 2 W/ch amp</td>
<td>26 1/2 by 19 3/8 by 20 1/2; 62 lbs.</td>
</tr>
<tr>
<td>Fisher KT-870</td>
<td>25 in.</td>
<td>112</td>
<td>2/1</td>
<td>8-pin</td>
<td>2/1</td>
<td>Built-in</td>
<td>3-source switching; simulated stereo; 7 1/2 W/ch internal amp</td>
<td>41 3/4 by 28 7/8 by 20; 169 lbs.</td>
</tr>
<tr>
<td>GE 19PM-5780K</td>
<td>19 in.</td>
<td>130</td>
<td>2/1</td>
<td>No</td>
<td>2/2</td>
<td>MPX jack</td>
<td>4-source switching; dual RF inputs; channel blocker; audio in level control; headphone jack; simulated stereo; external-speaker terminals; 10 W/ch amp</td>
<td>20 1/4 by 18 3/4 by 18 3/4; 64 lbs.</td>
</tr>
<tr>
<td>GE 25PM-5880K</td>
<td>25 in.</td>
<td>130</td>
<td>2/1</td>
<td>No</td>
<td>2/2</td>
<td>MPX jack</td>
<td>Same as above</td>
<td>24 3/4 by 21 3/4 by 20 1/2; 87 lbs.</td>
</tr>
<tr>
<td>JVC AV-2112</td>
<td>20 in.</td>
<td>144</td>
<td>3/2</td>
<td>No</td>
<td>3/2</td>
<td>No</td>
<td>Flat, square picture tube; 4-source switching; sleep control; sleep timer; on-screen channel/time display; headphone jack; external-speaker terminals; 5 W/ch amp</td>
<td>21 1/4 by 19 11/16 by 19 11/16; 60 lbs.</td>
</tr>
<tr>
<td>JVC AV-2000</td>
<td>25 in.</td>
<td>134</td>
<td>4/2</td>
<td>No</td>
<td>4/2</td>
<td>No</td>
<td>4-source switching; high-content filter switch; tone-sharpness control; external-speaker terminals; 5 W/ch amp</td>
<td>26 1/4 by 24 by 21; 101 1/4 lbs.</td>
</tr>
<tr>
<td>Magnavox RD-4258SL</td>
<td>19 in.</td>
<td>134</td>
<td>2/3</td>
<td>No</td>
<td>2/3</td>
<td>MPX jack</td>
<td>2-source switching; 3.58-MHz cable trap; dual RF inputs; 1-day/1-event timer; video in level control; headphone jack; simulated stereo; external-speaker terminals; 5 W/ch amp</td>
<td>20 1/8 by 18 1/8 by 18 3/4; 62 lbs.</td>
</tr>
<tr>
<td>Magnavox RD-4502SL</td>
<td>25 in.</td>
<td>134</td>
<td>2/3</td>
<td>No</td>
<td>2/3</td>
<td>MPX jack</td>
<td>Same as above</td>
<td>25 1/4 by 25 1/4 by 20 1/2; 103 lbs.</td>
</tr>
<tr>
<td>Mitsubishi CS-2061H</td>
<td>19 in.</td>
<td>140</td>
<td>4/1</td>
<td>6-pin</td>
<td>4/2</td>
<td>Built-in</td>
<td>Flat, square picture tube; 2-source switching; dual RF inputs; sleep timer; simulated stereo; on-screen channel/time display; external-speaker terminals; 3 W/ch amp</td>
<td>19 by 20 1/4 by 19 1/4; 72 lbs.</td>
</tr>
</tbody>
</table>

1. Measured diagonally. 2. Stereo input pairs (unless otherwise noted). 3. Includes Separate Audio Program (SAP). 4. Two-input capabilities. MPX jack reception + purchase of optional stereo decoder. 5. All monitor/receivers have picture-adjustment and bass/treble/balance controls and a remote control. 6. Dimensions in inches, width by height by depth.
There are some people who simply can’t appreciate all that Sanyo’s new FT-E25 car stereo system has to offer. With 2 or 3 times the power of most car stereos, and hardly a trace of distortion, Sanyo gives automotive sound the clarity and “sock” it’s always lacked. Of course, you get bass, treble, and loudness controls - plus a built-in fader to make the most of 4-speaker installations.

Our digital electronic tuning and sophisticated FM Optimizer system deliver superb stereo reception without fading or “picket fencing.” And besides Dolby B, it has super-advanced Dolby C noise reduction to keep tape hiss inaudible.

Fortunately, we’ve made it easy to use — with auto reverse, automatic tape and radio search, human engineered controls, and clever illumination that eliminates fumbling in the dark.

A Sanyo auto sound dealer will challenge all your preconceived ideas by putting the FT-E25 (or one of our other new masterpieces) through its paces.

Warning: Sanyo car stereo definitely separates the men from the meek.
When you're this good, you put your warranties where your mouth is. That's why, overall, Hitachi probably has the finest limited warranty protection ever offered in home electronics products. Products that perform so well, you may never get a chance to see how good our warranties really are.

HITACHI
A World Leader in Technology

NEW COMPACT DIGITAL AUDIO DISC PLAYER
Hitachi leads the way in compact disc performance with Laser Life, a two-year limited parts warranty, twice as long as our major competition. Introducing the DA-600. Three spot laser pick-up servo system; wireless remote control that reads, selects, repeats, skips and scans; memory programming for up to 15 selections; slim-line, front load design.

NEW 5 + 2 HEAD HI-FI VCR
With Adjustomatic, a limited warranty superior to industry standards, the exceptional VT-69A VCR from Hitachi has brought hi-fi technology to video sound. Sound finer than any turntable or conventional tape deck... far superior to ordinary VCRs, it's sound you have to see to believe. Five video heads, two audio heads, cable ready, with a computer brain that guides you through every program function. Each step is displayed on your TV screen.

NEW SIGNAL TRACKER COMPONENT TV
Backed by Hitachi's incomparable 10/2/1 limited warranty, this state-of-the-art 20" diagonal flat square tube receiver/monitor integrates all your home entertainment functions. VCR, VideoDisc Player, stereo system, video games, home computer and total TV reception. Enjoy more on-screen picture and less distortion. And only Hitachi has Signal Tracker control, our most advanced color control system ever. With the handy wireless remote control and wood cabinetry you get ease of operation, great sound and quality good looks. Simulated TV picture.

HITACHI
401 W. Artesia Blvd., Compton, CA 90220. (213) 537-8383
### MONITOR/RECEIVERS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SCREEN SIZE</th>
<th>SCREEN ASPECT</th>
<th>VIDEO IN/OUT</th>
<th>RGB INPUT</th>
<th>AUDIO IN/OUT</th>
<th>STEREO INPUT</th>
<th>MPX DECODING</th>
<th>CONTROLS &amp; FEATURES</th>
<th>SIZE &amp; WEIGHT</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEC CT-1901A</td>
<td>19 in</td>
<td>3/3</td>
<td>2/3</td>
<td>No</td>
<td>2/4</td>
<td>MPX jack</td>
<td>3-source switching; dual RF inputs; 3.58 MB color traps; 1-dey/1-event timer; sleep timer; simulated stereo; headphone jack; external-speaker terminals; 5 W/ch amp.</td>
<td>20 1/8 by 18 1/8 by 18 1/8</td>
<td>$170.00</td>
<td></td>
</tr>
<tr>
<td>NEC CT-2020A</td>
<td>20 in</td>
<td>3/3</td>
<td>2/3</td>
<td>No</td>
<td>2/2</td>
<td>Built-in</td>
<td>Flat, square picture tube; 3-source switching; dual RF inputs; sleep timer; on-screen channel/time display; headphone jack; external-speaker terminals; 5 W/ch amp.</td>
<td>20 1/8 by 19 1/8 by 19 1/8</td>
<td>$180.00</td>
<td></td>
</tr>
<tr>
<td>NEC CT-2501A</td>
<td>25 in</td>
<td>3/3</td>
<td>2/3</td>
<td>No</td>
<td>2/2</td>
<td>MPX jack</td>
<td>Same as NEC CT-1901A</td>
<td>25 1/4 by 23 1/4 by 20 1/4</td>
<td>$185.00</td>
<td></td>
</tr>
<tr>
<td>Panasonic CT-2075R</td>
<td>20 in</td>
<td>3/3</td>
<td>2/3</td>
<td>No</td>
<td>2/2</td>
<td>MPX jack</td>
<td>Flat, square picture tube; 4-source switching; dual RF inputs; on-screen channel/time display; simulated stereo; headphone jack; external-speaker terminals; 5 W/ch amp.</td>
<td>19 1/4 by 19 1/4 by 19 1/4</td>
<td>$1,000.00</td>
<td></td>
</tr>
<tr>
<td>Panasonic CT-2077R</td>
<td>Same as above, but with built-in stereo decoder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,100.00</td>
<td></td>
</tr>
<tr>
<td>Panasonic CT-2079R</td>
<td>25 in</td>
<td>3/3</td>
<td>2/3</td>
<td>No</td>
<td>2/2</td>
<td>MPX jack</td>
<td>Same as above, but with conventional picture tube</td>
<td>25 1/4 by 23 1/4 by 20 1/4</td>
<td>$1,100.00</td>
<td></td>
</tr>
<tr>
<td>Proton 619S</td>
<td>19 in</td>
<td>132</td>
<td>2/1</td>
<td>No</td>
<td>2/1</td>
<td>MPX jack</td>
<td>4-source switching; dual RF inputs; headphone jack; 3.10 W/ch amp.</td>
<td>21 1/4 by 19 1/4 by 19 1/4</td>
<td>$1,700.00</td>
<td></td>
</tr>
<tr>
<td>Proton 619</td>
<td>19 in</td>
<td>127</td>
<td>2/1</td>
<td>No</td>
<td>2/2</td>
<td>MPX jack</td>
<td>Same as above</td>
<td>27 1/2 by 18 1/2 by 20 1/2</td>
<td>$1,850.00</td>
<td></td>
</tr>
<tr>
<td>Quasar TT 6288XW</td>
<td>20 in</td>
<td>139</td>
<td>3/3</td>
<td>9 pin, 21 pin</td>
<td>3/3</td>
<td>Built-in</td>
<td>Flat, square picture tube; 5-source switching; dual RF inputs; sleep timer; on-screen channel/time display; external-speaker terminals; 5 W/ch amp.</td>
<td>20 1/2 by 19 1/2 by 20 1/2</td>
<td>$1,000.00</td>
<td></td>
</tr>
<tr>
<td>Quasar TT 6289XW</td>
<td>Same as above, but without stereo decoding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$950.00</td>
<td></td>
</tr>
<tr>
<td>Quasar TT 9908X</td>
<td>25 in</td>
<td>139</td>
<td>3/3</td>
<td>No</td>
<td>3/3</td>
<td>Built-in</td>
<td>5-source switching; dual RF inputs; sleep timer; on-screen channel/time display; external-speaker terminals; 5 W/ch amp.</td>
<td>25 1/4 by 23 1/4 by 20 1/4</td>
<td>$1,100.00</td>
<td></td>
</tr>
<tr>
<td>Quasar TL 9908XW</td>
<td>Same as above, but in console with larger speakers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,450.00</td>
<td></td>
</tr>
<tr>
<td>Quasar TT 9909X</td>
<td>26 in</td>
<td>139</td>
<td>3/3</td>
<td>No</td>
<td>3/3</td>
<td>Built-in</td>
<td>Flat, square picture tube; 5-source switching; dual RF inputs; sleep timer; on-screen channel/time display; external-speaker terminals; 5 W/ch amp.</td>
<td>26 1/4 by 23 1/4 by 20 1/4</td>
<td>$1,250.00</td>
<td></td>
</tr>
<tr>
<td>RCA* GEC-2040 (console)</td>
<td>25 in</td>
<td>127</td>
<td>2/0</td>
<td>No</td>
<td>2/0</td>
<td>Built-in</td>
<td>Full NTSC color reproduction; 3-source switching; on-screen channel/time display; TV/VCR remote control</td>
<td>28 by 32 by 18 1/2</td>
<td>$1,050.00</td>
<td></td>
</tr>
<tr>
<td>RCA FKC-2022 (tabletop)</td>
<td>25 in</td>
<td>127</td>
<td>4/3</td>
<td>7 jack (digital, B-color)</td>
<td>4/4</td>
<td>Built-in</td>
<td>Full NTSC color reproduction; 4-source switching; on-screen channel/time display; external-speaker terminals; TV/VCR remote control</td>
<td>25 1/4 by 23 1/4 by 18 1/4</td>
<td>$1,100.00</td>
<td></td>
</tr>
<tr>
<td>RCA GEC-2088 (console)</td>
<td>25 in</td>
<td>127</td>
<td>4/3</td>
<td>7 jack (digital, B-color)</td>
<td>4/4</td>
<td>Built-in</td>
<td>Full NTSC color reproduction; 4-source switching; on-screen channel/time display; external-speaker terminals; TV/VCR remote control; equipment shelf</td>
<td>38 by 35 1/2 by 21 1/2</td>
<td>$1,560.00</td>
<td></td>
</tr>
<tr>
<td>Sharp 201-888</td>
<td>20 in</td>
<td>147</td>
<td>2/1</td>
<td>8 pin</td>
<td>2 mono/0</td>
<td>MPX jack</td>
<td>Flat, square picture tube; 4-source switching; sleep timer; on-screen channel/time/inside display; mono amp.</td>
<td>20 1/8 by 19 1/8 by 20 1/8</td>
<td>$1,750.00</td>
<td></td>
</tr>
<tr>
<td>Sony KV-2588R</td>
<td>20 in</td>
<td>125</td>
<td>3/2</td>
<td>34 pin analog/digital</td>
<td>3/2</td>
<td>Built-in</td>
<td>Fine pitch Microtelevision screen color temperature controls, detectable flat-diaphragm speakers; on-screen channel/function display; simultaneous switching; 5 W/ch amp.</td>
<td>20 by 17 1/2 by 18 1/2</td>
<td>$90.00</td>
<td></td>
</tr>
<tr>
<td>Sony KV-2589R</td>
<td>25 in</td>
<td>125</td>
<td>3/2</td>
<td>34-pin analog/digital</td>
<td>3/2</td>
<td>Same as above</td>
<td>25 1/4 by 21 1/4 by 18 1/4</td>
<td>$1,200.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sylvania RNC-1820SL</td>
<td>19 in</td>
<td>134</td>
<td>2/3</td>
<td>No</td>
<td>2/3</td>
<td>MPX jack</td>
<td>2-source switching; dual RF inputs; 3.58 MB color traps; 1-dey/1-event timer; video input control; headphone jack; simulated stereo; external-speaker terminals; 5 W/ch amp.</td>
<td>20 by 18 1/4 by 18 1/4</td>
<td>$1,650.00</td>
<td></td>
</tr>
<tr>
<td>Sylvania RLC-3125L</td>
<td>25 in</td>
<td>134</td>
<td>2/3</td>
<td>No</td>
<td>2/3</td>
<td>MPX jack</td>
<td>Same as above</td>
<td>25 1/4 by 25 1/4 by 20 1/4</td>
<td>$1,890.00</td>
<td></td>
</tr>
<tr>
<td>Toshiba CZ-2074</td>
<td>20 in</td>
<td>133</td>
<td>3/1</td>
<td>8 pin</td>
<td>3/2</td>
<td>MPX jack</td>
<td>Flat, square picture tube; 4-source switching; headphone jack; simulated stereo; external-speaker terminals; 10 W/ch amp.</td>
<td>19 1/8 by 18 1/8 by 18 1/8</td>
<td>$1,050.00</td>
<td></td>
</tr>
<tr>
<td>Toshiba CZ-2084</td>
<td>20 in</td>
<td>133</td>
<td>3/1</td>
<td>8 pin</td>
<td>3/2</td>
<td>Built-in</td>
<td>Flat, square picture tube; 4-source switching; headphone jack; external-speaker terminals; 10 W/ch amp.</td>
<td>19 1/4 by 18 1/4 by 18 1/4</td>
<td>$1,050.00</td>
<td></td>
</tr>
<tr>
<td>Toshiba CZ-2094</td>
<td>20 in</td>
<td>134</td>
<td>3/1</td>
<td>8 pin</td>
<td>3/2</td>
<td>Not avail.</td>
<td>Digital chassis; with-screen water-screen steering; flat, square picture tube; 4-source switching; headphone jack; external-speaker terminals; 10 W/ch amp.</td>
<td>Not avail.</td>
<td>$1,200.00</td>
<td></td>
</tr>
</tbody>
</table>

* Measured diagonally. ** Stereo input jack, unless otherwise noted. ** Includes Second Audio Program (SAP) capability. ** MPX jack necessary for purchase of separate stereo decoder. ** All monitor/receivers have picture adjustment and hex/bi-chroma balance controls and a wrist rest receiver. ** Dimensions are inches; weight by height by depth. ** RCA offers an extensive line of monitors/receivers, of which the models in this chart are representative.
PIONEER CLD-900
CD/VIDEODISC
PLAYER


Although the Compact Disc is the most prominent application of Philips's laser-read disc storage technology, it is not the first. That honor belongs to the optical videodisc—or Laserdisc, as it usually is called. Despite an oft-expressed opinion within the industry that nobody wants anything videoish that doesn't record (unless it's a television set), Pioneer has forged ahead, supplying both players and discs and making a profit at it. True, the Laserdisc has not had the impact on video that the Compact Disc has had on audio, but success is success—a point sharpened by the failure of RCA's competing CED videodisc system.

The reasons behind the contrasting fates of these two basically similar products are complex, but we like to think that one of them is quality.


Laboratory data (unless otherwise indicated) is supplied by Diversified Science Laboratories.
Laserdics are capable of video reproduction superior to that of anything else now available except a good broadcast, whereas CEO performance fell close to what one could get from a VCR. In this we find a clear parallel to the Compact Disc, whose star turns are sound quality and convenience; never mind that you can't record on one.

What could be more natural, then, than a marriage of the two formats: Laserdisc and Compact Disc accommodated by a single player, read by a common laser. And thus we come to the Pioneer CLD-900, the world's first combination optical disc player. Pressing \textsc{ eject} on the front panel or on the elaborate wireless remote control releases a disc loading drawer, which then pops out far enough for you to pull it the rest of the way. Inside are three concentric rings: the inner one for CDs, the middle one for 8-inch Laserdiscs, and the outer one for full-size 12-inch Laserdiscs.

When you push the drawer closed, the CLD-900 senses the type of disc you have loaded and responds accordingly. Because of the different physical characteristics and playback requirements of CDs and Laserdiscs, the player includes two complete disc clamping systems and drive motors, which must be precisely positioned relative to the disc. This is achieved by means of what Pioneer calls a "swing mechanism," driven by a third microprocessor-controlled motor. We suspect that all these extra motors are responsible for the CLD-900's weight (about 35 pounds, according to the manufacturer), which is significantly greater than that of any other CD or videodisc player we have used.

Otherwise, the CLD-900's guts seem to be a fairly straightforward melding of Pioneer's latest Laserdisc and CD playback technology. For example, the company says that the video circuitry uses the same LSIs (large-scale integrated circuits) as the LD-700 Laserdisc player and a very similar diode-laser pickup. The whole is greater than the sum of the parts, however. A "tilt servo" designed to improve tracking of warped Laserdiscs is said also to benefit performance with CDs, and the circuitry required for Compact Disc playback also makes possible reproduction of digital soundtracks on Laserdiscs—a capability unique to the CLD 900 at present.

In recognition of the player's dual role, Pioneer has provided two pairs of pin-jack audio outputs. A gold-plated set, intended for connection to an audio system, carries signals from both Laserdiscs and CDs. The left pair carries only analog Laserdisc output and presumably is intended for connection to the audio inputs of a monitor. This is an exceedingly logical accommodation for those with separate audio and video systems, but who nonetheless want to use the CLD-900 in both its capacities.

Another pin jack delivers a composite video signal to monitors having direct video inputs or to a VCR. Naturally, there also is a standard RF output, terminated with an F connector, carrying an audio-video signal modulated onto either Channel 3 or 4, depending on the setting of a nearby slide switch. Both audio and video quality are somewhat inferior when this connection is used, but it is necessary for feeding conventional television receivers lacking direct inputs. Another F connector is provided for attaching an antenna or cable feed, which can be substituted for the Laserdisc output at the touch of a button on the front panel—again, a convenience for those whose sets do not have direct inputs.

Below this button is an indicator that lights when you select the antenna input. Directly to the right is a similar button/indicator pair for CX noise reduction. Current Laserdiscs trigger the player's CX circuits (and the indicator light) automatically, but the button is still needed to obtain the best possible sound from early CX-encoded Laserdiscs.

Continuing the row are left- and right-channel audio output indicators and an extended-play light. (Despite its similarity to the two left-hand buttons, the panel above these lamps serves only to identify them.) The former is useful when you are playing...
TEST REPORTS

COMPACT DISC PLAYBACK
All data obtained using the Sony YEDS-7, Technics SHCD001, Philips 410 DS5-2, and Philips 410 DS6-2 test discs.

<table>
<thead>
<tr>
<th>FREQUENCY RESPONSE</th>
<th>4 Hz</th>
<th>16 Hz</th>
<th>64 Hz</th>
<th>256 Hz</th>
<th>1 kHz</th>
<th>2 kHz</th>
<th>3 kHz</th>
<th>5 kHz</th>
<th>10 kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>L ch</td>
<td>+1/4, -3/4 dB, 20 Hz to 20 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R ch</td>
<td>+1/4, -1 dB, 20 Hz to 20 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DE-EMPHASIS ERROR</th>
<th>left channel</th>
<th>+1/4, -3/4 dB, 1 to 16 kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>right channel</td>
<td>+1/4, -1 dB, 1 to 16 kHz</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHANNEL BALANCE (± 1 kHz)</th>
<th>± &lt; 1/4 dB</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>S/N RATIO (re 0 dB; 8-weighted)</th>
<th>94 3/4 dB</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>HARMONIC DISTORTION (THD + N, 40 Hz to 20 kHz)</th>
<th>&lt; 0.01%</th>
</tr>
</thead>
<tbody>
<tr>
<td>at 0 dB</td>
<td></td>
</tr>
<tr>
<td>at -34 dB</td>
<td>&lt; 0.05%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IM DISTORTION (70 Hz difference frequency, 100 Hz to 20 kHz)</th>
<th>&lt; 0.01%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to -20 dB</td>
<td></td>
</tr>
<tr>
<td>at -36 dB</td>
<td>&lt; 0.017%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LINEARITY (± 1 kHz)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to -76 dB</td>
<td></td>
</tr>
<tr>
<td>at -80 dB</td>
<td>+ 1/2 dB</td>
</tr>
<tr>
<td>at -90 dB</td>
<td>+ 4 dB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRACKING &amp; ERROR CORRECTION</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>maximum signal-layer gap</td>
<td>&gt; 900 μm</td>
<td></td>
</tr>
<tr>
<td>maximum surface obstruction</td>
<td>&gt; 800 μm</td>
<td></td>
</tr>
<tr>
<td>simulated-fingerprint test</td>
<td>pass</td>
<td></td>
</tr>
</tbody>
</table>

A Laserdisc having separate soundtracks on the two channels, to indicate which has been selected. The latter comes on when a CLV (constant linear velocity) Laserdisc is being played. Such discs can run for up to an hour—twice as long as CAV (constant angular velocity) discs—but do not permit some of the special effects, such as still-frame, that are available with CAV issues. As with the CLD-900's functions are controlled exclusively from the remote handset, which also duplicates the front panel's play and eject buttons. The versatility is remarkable. Aside from programmability (Pioneer's only significant omission), the remote provides just about any CD playback option you could want, including high-speed scan in either direction, track-skipping in either direction, and random access by track and index number. You can even use your monitor to display the track and index numbers for the selection in progress and the elapsed time, plus either the time remaining on the disc or the total playing time and number of tracks on the disc.

In Laserdisc playback, the display option shows chapter (on discs that have them), frame (on CAV but you can search by elapsed time—something you can't do on a CAV Laserdisc or a CD (at least with any player we've seen so far). A set of three buttons enables you to choose stereo, left-channel, or right-channel audio.

Several functions are specific to CAV discs: still-frame, frame-stepping in either direction, playback at three times normal speed in either direction, and variable-speed playback in either direction. (In all of these modes, the player mutes the audio.) The last of these, which Pioneer calls multispeed playback, is particularly interesting. With it, you can vary the speed in nine steps, from as slow as one frame every three seconds to as fast as three times normal.

Diversified Science Laboratories' measurements show the CLD-900's performance to be as impressive as its features. Although CD playback response is not quite as flat as we are.
used to seeing, the errors (a tiny rise at the very bottom of the audio band and a gentle droop in the top octave) are minuscule compared to those routinely produced by tape decks, loudspeakers, and phonograph cartridges. Certainly they are small enough to be inoffensive, and we frankly doubt that they're even audible on most (if not all) material.

The CLD-900's strongest suits are low distortion and superb tracking ability. In both respects, it is among the finest models we have tested. Linearity at low signal levels also is exceptionally good, and the figures for channel balance, separation, and signal-to-noise (S/N) ratio are all in the champion class. We are also pleased to note that the player's output levels are moderately high and its output impedances quite low, so it should mate well with other components almost regardless of their input impedances and the lengths of the connecting cables. However, the headphone output level shown in our data column is into an open circuit with the phone output level shown in our data netting cables. However, the head-

put is a more reasonable 1.48 volts, which is completely adequate.

DSL performed Laserdisc playback measurements with the only test disc available: Pioneer's own F-2. All of its audio test signals are AFM. (Presumably the audio performance on digital Laserdisc soundtracks is comparable to that obtained with Compact Discs.) Unfortunately, no frequency response or separation sweeps are included, and the lab could not obtain reliable noise measurements with the CX system engaged. Even so, the S/N figures are quite good—comparable to what you can get from a good audio cassette deck with Dolby B. And CX should improve matters by at least 15 dB, which is up in the Beta and VHS Hi-Fi range. Distortion is reasonably low, if not world-beating.

More interesting are the video measurements, particularly for frequency response. Although the multi-

burst frequencies are slightly different from the ones we normally use, it is clear that the CLD-900's performance here is far better than that of any consumer videocassette recorder.

It delivers at least 1.5 MHz more usable bandwidth, corresponding to a horizontal-resolution advantage of approximately 120 lines. Only broadcast is better, and by a margin that will be lost on all but the best TV tuners and monitors. Indeed, few conventional television sets can display details as fine as this player can deliver.

In other respects, the CLD-900's video performance ranges from good to excellent. Curiously, the chroma differential gain is mainly at the low end of the luminance scale, indicating some loss of color saturation in dark scenes—the reverse of what we usually encounter. It is too small to be of much consequence, however. The chroma phase (hue) and level (color saturation) errors are modest and easily correctable at a monitor's color and tint controls.

The CLD-900 is a pleasure to use. Part of the reason is the completeness of the feature complement on the remote control, but the reproduction quality also plays a major role. Image sharpness and color rendition are first-rate, and though most discs generate occasional flecks of snow, video noise is significantly lower than we typically see from VCRs. This is most notable in colored backgrounds, which do not have the mottled character usually apparent on tape. As for the sound, the numbers speak for themselves.

Perhaps the most exciting aspect of the CLD-900 is the door it opens to the future, with its ability to play back digital soundtracks on videodiscs and its back-panel 1/0 (input/output) port for connection to a computer. Pioneer is vague about the uses to which the latter might be put, but we can think of two: One is for massive ROM (read-only memory) discs, containing billions of bytes of data; the other is for computer-aided access to interactive or photo-archive discs. Who knows what other applications may emerge.

### 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.

<table>
<thead>
<tr>
<th>WATTS</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>0</td>
</tr>
<tr>
<td>1.25</td>
<td>1</td>
</tr>
<tr>
<td>1.6</td>
<td>2</td>
</tr>
<tr>
<td>2.0</td>
<td>3</td>
</tr>
<tr>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>3.2</td>
<td>5</td>
</tr>
<tr>
<td>4.0</td>
<td>6</td>
</tr>
<tr>
<td>5.0</td>
<td>7</td>
</tr>
<tr>
<td>6.3</td>
<td>8</td>
</tr>
<tr>
<td>8.0</td>
<td>9</td>
</tr>
<tr>
<td>10.0</td>
<td>10</td>
</tr>
<tr>
<td>12.5</td>
<td>11</td>
</tr>
<tr>
<td>16.0</td>
<td>12</td>
</tr>
<tr>
<td>20.0</td>
<td>13</td>
</tr>
<tr>
<td>25.0</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WATTS</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>0</td>
</tr>
<tr>
<td>1.25</td>
<td>1</td>
</tr>
<tr>
<td>1.6</td>
<td>2</td>
</tr>
<tr>
<td>2.0</td>
<td>3</td>
</tr>
<tr>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>3.2</td>
<td>5</td>
</tr>
<tr>
<td>4.0</td>
<td>6</td>
</tr>
<tr>
<td>5.0</td>
<td>7</td>
</tr>
<tr>
<td>6.3</td>
<td>8</td>
</tr>
<tr>
<td>8.0</td>
<td>9</td>
</tr>
<tr>
<td>10.0</td>
<td>10</td>
</tr>
<tr>
<td>12.5</td>
<td>11</td>
</tr>
<tr>
<td>16.0</td>
<td>12</td>
</tr>
<tr>
<td>20.0</td>
<td>13</td>
</tr>
<tr>
<td>25.0</td>
<td>14</td>
</tr>
</tbody>
</table>

**MAXIMUM OUTPUT LEVEL**

| Line output | 2.53 volts |
| Headphone output | 0.77 volts |

**OUTPUT IMPEDANCE**

| Line output | 435 ohms |
| Headphone output | 140 ohms |

**SQUARE WAVE RESPONSE (1 kHz)**

**IMPULSE RESPONSE**

**VIDEODISC PLAYBACK**

All data obtained using the Pioneer F-2 test disc.

**AUDIO S/N RATIO (A-weighted: CX off, 100% modulation)**

- **Best case**: 62 dB
- **Worst case**: 59 dB

**HARMONIC DISTORTION (THD at 1 kHz, 100% modulation)**

- **0.34%**

**IM DISTORTION (1 and 10 kHz)**

- **1.2%**

**AUDIO OUTPUT LEVEL (at 100% modulation)**

- **0.52 watt**

**VIDEO FREQUENCY RESPONSE**

- **at 500 kHz**: -1/2 dB
- **at 1.25 MHz**: -3/2 dB
- **at 2.0 MHz**: -4 dB
- **at 3 MHz**: -5/2 dB
- **at 4 MHz**: -3/2 dB

**LUMINANCE LEVEL**

- **6% kip**

**GRAY-SCALE NONLINEARITY**

- **≈10%**

**CHROMA LEVEL**

- **≈6.1 x 10^-6**

**CHROMA DIFFERENTIAL GAIN**

- **≈10%**

**CHROMA DIFFERENTIAL PHASE**

- **±8°**

**MEAN CHROMA PHASE ERROR**

- **±7°**
HARMAN KARDON
HK-690i
RECEIVER


Although quite a few manufacturers make both receivers and separators (that is, amps, preamps, and tuners), few cut as unswervingly as the same cloth as does Harman Kardon. This practice was brought home to us most recently when we examined Diversified Science Laboratories' measurements on the amplifier section of the company's flagship receiver, the HK-690i. Resembances to its superb HK-870 power amplifier (test report, December 1984) were immediately apparent.

For example, not many receivers even come close to the bandwidth of the 690i, whose "3-dB down" points are below 10 Hz (presumably well below, this being the lower limit of our response testing) and at 157 kHz. Similarly, the data betray no hint of the usual infrasonic rolloff inherent in typical phono preamps, and the switchable infrasonic filter is both unusually low in turnover frequency and fairly gentle in slope. This last characteristic, though desirable if you are adamant (as H/K has always been) that phase shift should be minimized within the operating passband, admits more "warp information" from your records than most designs, putting a premium on the exactitude of your arm/cartridge match.

As in the 870 and its other present designs, Harman Kardon has followed the precepts of Dr. Mati Otala in using only a moderate degree of negative feedback. This is said to reduce the risk of transient intermodulation and certain other subtle forms of distortion. Otala's recent work has focused on the current demanded by actual loudspeakers, as opposed to the simple resistors customarily used in testing amplifiers. His findings confirm what others have often suggested: Instantaneous current requirements are much greater than you might suppose if clean sound is to be maintained on material composed mainly of transients, such as music. Thus, the 690i's amplifier is designed to deliver more current than is typical for a receiver in its power-rating class (600 watts per channel into 8 ohms), yielding the equivalent of 140 watts into 4 ohms on the simulated musical dynamics of DSL's dynamic power test and 170 watts into 2 ohms. Because of current limiting, many amps actually deliver less power into 2 ohms than into 4 or can't safely be used to drive a 2-ohm load at all.
The preamplifier section is fairly standard except in two respects: the inclusion of a moving-coil head amp in the phono stage and of switchable turnover frequencies for the tone controls. The bass shelves at about ±13 dB at the very bottom of the audio range when the turnover is set to 400 Hz and just below the audio range at the 200-Hz setting. The curves suggest that the treble shelves at similar maximum cut and boost values, but beyond 20 kHz even at the lower (nominally 2-kHz) turnover. Unfortunately, the control’s effect at this position reaches far down into the midrange, below 500 Hz, even at moderate settings. Otherwise, the actions of both controls are quite moderate settings.

The loudness compensation shelves below 100 Hz at about +9 dB with respect to 1-kHz response and also introduces a rise in the treble to about +5 dB at 20 kHz. The effect diminishes as the volume is raised above DSL’s reference level for the tuning itself proceeds in full-channel frequency recognition beyond your immediate area—‘these options will help you get listenable results from weak signals.

Also a big help—and quite unusual in today’s receivers—is a muting threshold adjustment on the back panel. At its highest setting (50/3/4 dB), it will exclude all stereo stations that aren’t strong enough to achieve more than about 60 dB of quieting; at the other extreme (28 1/4 dB), it will permit really fine discrimination. The automatic mode seeks out the next receivable station in the chosen direction, depending on the setting of the muting controls.

In all respects, the receiver measures well. And overall, it listens somewhat better than it measures in the sense that it makes it relatively easy to get better than average results with problem FM stations, for instance. The front panel is based on the standard Harman Kardon grid, which we find imposes some arbitrary groupings on the controls. But it does have a handsome appearance and isn’t seriously unergonomic. The overriding impression, however, is of good value. You may find more features at the price elsewhere, but you’re not likely to discover a complement that’s so carefully chosen for uncluttered utility; and finding equal performance in the bargain should prove even more difficult.

<table>
<thead>
<tr>
<th>Channel Separation (at 1 kHz)</th>
<th>53 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phono Overload (2 kHz clipping)</td>
<td>230 V</td>
</tr>
<tr>
<td>Input Impedance</td>
<td>17.3 Ohm</td>
</tr>
<tr>
<td>Moving-Coil Phone</td>
<td>74 dB</td>
</tr>
<tr>
<td>Moving-Coil Phone</td>
<td>74 dB</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>74 dB</td>
</tr>
<tr>
<td>Moving-Coil Phone</td>
<td>75 Ohms</td>
</tr>
<tr>
<td>Moving-Coil Phone</td>
<td>75 Ohms</td>
</tr>
<tr>
<td>Damping Factor (at 50 Hz)</td>
<td>110</td>
</tr>
<tr>
<td>Channel Separation (at 1 kHz)</td>
<td>73 dB</td>
</tr>
<tr>
<td>Infrasonic Filter</td>
<td>-3 dB at 14 Hz, ±1/2 dB/ octave</td>
</tr>
</tbody>
</table>
TALISMAN
ALCHEMIST IA
PHONO PICKUP


One of the main drawbacks to conventional moving-coil cartridges is their low output, which almost always requires the insertion of an additional step-up device ahead of the phono inputs. Consequently, there have been many attempts to achieve higher sensitivity without losing the traditional advantages of the moving-coil principle, such as low output impedance and the resulting immunity to loading effects. Perhaps the most ambitious we have seen is embodied in the "budget" model of Talsman's two-pickup Alchemist line.

Like the much more expensive Model IIIS, the Alchemist IA is based on what its manufacturer calls an Intensified Focus generating system. Full details on how it works are not yet available, but apparently the key lies in focusing the field from a very strong samarium-cobalt magnet precisely at the coils. This is said to reduce or eliminate the need to add windings to the coils, which would increase both the moving mass and the electrical inductance along with the output, thereby degrading transient response. The designers claim to have accomplished this feat without the use of any yokes or pole pieces in the magnetic structure, thereby lessening eddy-current losses and fringing effects. This, in turn, is said to minimize loss of sonic detail and transparency.

The Alchemist's physical configuration is equally novel. Its body is carefully machined from a solid block of zinc to prevent cavity resonances and assure maximum rigidity. Tapering the body advances both of these goals while reducing the cartridge's total mass. The stylus cantilever is made of an aluminum-magnesium alloy chosen for its combination of high rigidity, low mass, and excellent damping. The tip itself is a nude-mounted elliptical diamond.

Diversified Science Laboratories' measurements confirm relatively high output for a moving-coil. Indeed, we have seen a few moving-magnet cartridges with not much higher sensitivity. The Alchemist IA will require you to crank the gain up a few dB above what you would need for a typical fixed-coil model, but this should be no strain for any normal preamp. The outputs of the two channels are also excellently balanced.

Distortion is within reasonable limits for a cartridge at the manufacturer's 1.8-gram recommended tracking force, and tracking ability is excellent. Vertical tracking angle (VTA), as measured with the low-frequency twin-fores of the DIN test record, is a few degrees above the nominal standard—too small a discrepancy to be of any concern, in our view. More important is the excellent agreement with the figure obtained using the misfit frequency tones, which is a mere 1 degree lower. This suggests a nearly perfect stylus rake angle (SRA). Although the Alchemist is relatively heavy as cartridges go, its compliance is only moderate, making it a good match for a wide range of tonearms.

Channel separation is more than adequate across the entire audible band and extraordinary through the midrange and lower treble, where it often exceeds 35 dB. It deteriorates rapidly at very high frequencies, however, perhaps because of a stylus resonance near the top of the band. This would also account for the peak centered on 17 kHz that is apparent in the response curves—the only disappointing result to emerge from DSL's tests.

We are, in fact, a little puzzled, since no such rise appears in the manufacturer's response curves. This prompted us to check a second sample, but the lab found little difference between the two. And the strong overshoot on the leading edge of the square-wave response tends to confirm the response measurements. The manufacturer says that the cartridge is insensitive to loading (as we would expect for a moving-coil), and in any event, the 47,000 (47k) ohms in parallel with 200 picofarads (pf) that DSL used is decidedly middle of the road.

Fortunately, the effect (whatever its cause) is more dramatic on paper than in the listening room, perhaps because it is pronounced only in the left channel and is confined to the top two octaves, where there is relatively little musical energy. Whatever the reason, we could detect little hint of it on most of the material we auditioned. In the main, the Alchemist IA's sound is smooth, clean, and detailed. Stereo imaging is excellent, and tracking remained secure on all of the discs we played. If you are looking for a moving-coil cartridge that does not require an extra gain-stage or an LPman's bankbook, this one is worth considering.
JAMO
SL-135
LOUDSPEAKER


Though not a household word in this country, the Jamo name has been well known in Europe for years. The SL-135 is the second Jamo loudspeaker we've tested (the CBR-903 was reviewed in September 1983) and doubtless won't be the last.

It is a three-way system with a 6-inch woofer loaded by a ducted port that vents at the back of the enclosure. The midrange is handled by a 3-inch cone, the treble by a dome tweeter recessed in an elliptical horn that is considerably taller than it is wide—evidently to focus the beam more narrowly in the vertical direction (with the speaker standing on end) than in the horizontal plane. This gives the highs relatively good dispersion throughout the listening area without creating unduly strong early reflections from the floor or ceiling, which tend to degrade stereo imaging, re-

mixture elements that might introduce reflections, and careful control of tweeter directivity all no doubt contribute to this performance, which helps give the sound the sort of bright and stable. Its vertically aligned drivers, avoidance of heavy grille-structure elements that might introduce reflections, and careful control of tweeter directivity all no doubt contribute to this performance, which helps give the sound the sort of bright and stable. Its vertically aligned drivers, avoidance of heavy grille-

room, and standing directly on the floor, 6 inches from the wall. In a well-carpeted listening room, we fi-
nally decided we liked it best on the floor and out in the room.

Our response graph shows Diversified Science Laboratories' results with the speaker on the floor. Its on-axis response stays within +5 1/2, −4 3/4 dB from below the 50-Hz band to above that centered on 16 kHz. The spread of the off-axis response curve is smaller (+3 3/4, −4 1/2 dB), and the similarity of the two curves in the high treble documents the success of the tweeter design, though the tweeter does roll off more sharply above 10 kHz off-axis.

Use of the stand decreases the on-axis spread somewhat (to ±4 1/4 dB), but the resulting curves exhibit greater roughness in the treble and a noticeable sag throughout the mid-

range. Moving the speaker (and the stand) out from the wall weakens deep-bass response. All of the lab curves show a peak at 2.5 kHz (though its amplitude varies somewhat from one to another) and a steep rolloff above 10 kHz.

The impedance curve is full of hills and valleys—which is to be expected in a three-way system with a vented enclosure—but none of

them is particularly extreme. Its twin bass peaks reach to about 25 ohms, while the remaining high points rise to no more than about half that. And all of the troughs fall between 6.3 and 7.5 ohms. Thus, the SL-135 should not be a "difficult" load for any good amplifier, and most amps probably would accept paralleled pairs without complaint.

In our 300-Hz pulse power-handling test, the speaker accepted the full output of the lab's amp without turning a hair. Calculated peak sound pressure level (SPL) for the 66-volt input (equivalent to 545 watts peak into 8 ohms) was 120 1/2 dB—more than ample for home list-

ting. The distortion measurements run higher than we're used to seeing, however. At a moderate volume (85 dB SPL), total harmonic distortion (THD) above 50 Hz averages about 1/2 percent; by the time the sound pressure level reaches 100 dB, dis-
tortion is more than 1 percent at all test frequencies from 500 Hz down and averages about 2 1/2 percent from 50 Hz up. But since most of the increase is in the second harmonic, the sonic consequences are not as drastic as the totals might suggest.

The speaker does have a some-

what bright sound—an "etched" quality, as some might call it. We're not sure of the reason for this characteristic, but in any event, it certainly isn't very pronounced and isn't necessarily unpleasant; some listeners will doubtless consider it a virtue. And with reasonable care to avoid a position that minimizes the deep bass from the speaker (which inevitably creates a relatively thin sound when the remainder is on the bright side), overall balance is quite pleasing.

The SL-135's most endearing quality is its stereo imaging, which is crisp and stable. Its vertically aligned drivers, avoidance of heavy grille-

structure elements that might introduce reflections, and careful control of tweeter directivity all no doubt contribute to this performance, which helps give the sound the sort of bright and stable detail that has been a hallmark of European loudspeakers. If you like that quality and want speakers that look for less than $200 apiece, by all means add the SL-135 to your auditioning list.

ROOM RESPONSE CHARACTERISTICS

AVERAGE IMPEDANCE (250 Hz to 6 kHz) 9.4 ohms

SENSITIVITY (at 1 meter, 2.8 volt pink noise, 750 Hz to 6 kHz) 93 dB SPL

9.4 ohms

MARCH 1985
YAMAHA PF-800 TURNTABLE


In the LP's waning years, turntable design seems to be moving in two directions. One is toward the bottom of the market, providing serviceable, inexpensive models for those whose aspirations do not reach to the Compact Disc. The other is to relatively high-end units—often manual or nearly so—that aim at extracting the last iota of sonic information from the grooves of the large and still-growing vinyl collections owned by serious audio enthusiasts and music lovers.

Despite what we consider a very reasonable price, the Yamaha PF-800 falls squarely into the latter category. Most noteworthy is the way it incorporates some of the best aspects of American and British turntable technology, particularly with regard to isolating the record from external influences. The platter and tonearm are on a subchassis that hangs from three springs attached to the base by pillars that protrude through the top of the mounting board. Yamaha says that the suspension resonance is tuned to approximately 3 Hz—well below the audible range, for maximum feedback rejection. And hanging the subchassis from the springs, rather than perching it on top of them (the conventional arrangement), further enhances the system's stability by minimizing any tendency to rock or sway.

Another advantage of a hanging suspension is that it allows for easier leveling and alignment of the subchassis. Yamaha has provided two adjustments in the PF-800, accessible beneath the three round spring caps. At the top of each pillar is an inner screw for adjusting the spring's height and an outer washer that can be turned to move the subchassis sideways and front-to-back within the perimeter of the outer base. The latter especially is a little difficult to work until you get the hang of it, but after that, the PF-800 is one of the easiest turntables of its kind to set up. We were particularly impressed with how fast the leveling procedure goes.

The motor is resiliently mounted on the main base and drives the turntable by means of an elastic belt that wraps around the platter's inner hub. This isolates the motor's vibration from the platter and thus from the stylus. Finally, to combat record warps and vinyl resonances, Yamaha provides a clamp that twists down over the spindle, pressing the record firmly against a flat rubber mat.

The speed of the PF-800's motor is regulated by an electronic servo system, which, as the data show, assures high accuracy and stability. Nominal speed (33 or 45 rpm) is selected by means of a two-position switch in the middle of the control array. In addition, there is a thumb wheel for each speed that allows a generous range of variation for tuning a record to a higher or lower pitch. But useful though this may sometimes be, we wonder if the PF-800 doesn't provide too much of a good thing, giving a calibration range almost three times what we're used to seeing. This makes it difficult to make fine adjustments and complicates getting the speed spot-on, despite the probe disc printed on the circumference of the record clamp for the purpose.

The other operational controls—for power and cueing—complete the three-button bank at the front of the mounting board. All have a light touch, so you can use them without disturbing the tonearm, even though they are on the subchassis rather than the base. The remaining controls are of the set-and-forget variety for the tonearm. Among these are a balance-adjustment knob at the back of the counterweight, a tracking-force adjustment, an antiskating dial, a knob for setting the radius at which the arm automatically lifts off the disc, and screws for setting arm height (and thereby vertical tracking angle) and the distance off the record that the arm attaches to the stylus. However, there is no adjustment for stylus azimuth (lateral tilt).

The arm itself is somewhat unusual in design. Most obvious are the two tubes connecting the pivots to the headshell. Each carries the signal and ground wires for a single channel, which Yamaha claims helps maintain separation. More significant, however, is the fact that the arm is dynamically balanced, so that it will track properly regardless of how unlevel the turntable might be. (It should even work upside down, although we didn't try anything that extreme.)

The PF-800 comes with two headsheils (not to mention a replacement belt). You attach a cartridge by means of an ingeniously mounting adapter and finger lift that slides onto the front of the headshell. You put screws through the adapter and cartridge and then tighten them so that the adapter is held snugly to the top of the headshell and the cartridge to the bottom. Overhang is set by sliding the adapter along the length of the headshell. In this, you are aided by a clever little plastic alignment gauge that makes short work of what often is a
rather tedious process. Indeed, we cannot recall setting up any other non-P-mount turntable in less time (or in most cases, as little).

Diversified Science Laboratories' measurements are in the main quite impressive. Particularly outstanding are the rumble figures, which range from -62 to -73 dB on a standard test lacquer. This prompted the lab to double-check them with a Thorens Rumpelmesskoppler—which couples the stylus to the platter by means of a precise, low-friction bearing—to see if the measurement was being limited by the disc. The results ranged between -76 1/2 and -79 1/2 dB, among the best we have ever seen. Also exemplary are the measurements for speed stability and wow and flutter. Indeed, our only serious concern about the design has to do with the tonearm, whose effective mass is relatively high. Best performance will be obtained only if you use a fairly lightweight or low-compliance cartridge, to keep the arm/cartridge resonance above 7 or 8 Hz. And though the tracking force adjustment's scale is reasonably accurate to about 1.5 grams, you probably should use a good external gauge when setting up for cartridges requiring higher VTFs.

SONY KV-25XBR
MONITOR/RECEIVER

Main features: RF (antenna), direct audio-video, and RGB inputs; direct audio-video outputs; 181-channel cable-ready digital frequency-synthesis TV tuner with descrambler loop and built-in BTSC broadcast-stereo decoder; built-in 5-watt (7-dBW) stereo amplifier and detachable loudspeakers; Microblack data-grade Trinitron picture tube; sleep timer; and wireless remote control.

Dimensions: (without speakers) 25 by 21 1/2 inches (front), 18 1/2 inches deep; screen, 25 inches (diagonal).


IIf any company can be said to have launched "videophile" video, it is Sony—with the development of the one-gun Trinitron picture tube, with the U-Matic and Beta VCR systems, and with Profeef and Beta Hi-Fi. We've come to expect a great deal from this pioneering company, and the IN-25XBR monitor/receiver doesn't disappoint. As a straight monitor, it is the most perfect we have examined to date—so good, in fact, that with current test equipment, we'd be hard pressed to distinguish between it and a better monitor, should we happen upon one.

MARCH 1985
What makes this achievement all the more impressive is that the KV-25XBR uses a flat, square-cornered CRT measuring 25 inches diagonally. It is much more difficult to maintain good convergence and geometric linearity over such a large picture area than on the 19- and 20-inch screens used in many other high-quality monitors. Sony attributes the KV-25XBR’s performance to advanced video circuitry and to a new Microblack Trinitron picture tube with a dark screen for improved contrast and an uncommonly fine-pitched aperture grille for higher resolution.

Indeed, the KV-25XBR is one of the very few monitors we’ve tested whose resolution exceeds the theoretical limits of the NTSC system. To really see what it can do, you probably must use the built-in RGB inputs to display high-resolution computer graphics. The KV-25XBR’s exceptionally low overscan makes it more suitable for such applications than the average video monitor.

Sony’s Dynamic Color circuitry is said to ensure accurate flesh tones and pure whites, while its Dynamic Picture circuit automatically adjusts picture contrast to pull more detail out of bright and dark areas of the screen. The company’s Dynamic Focus system is credited with keeping the electron beam focused all the way to the corners of the screen, thereby preventing any loss of sharpness at the edges of the picture. What Sony calls its Colorpure Filter (presumably a comb filter) separately processes luminance and chrominance information, for clean colors without loss of resolution. Call it what you will: it works, and it works well.

The KV-25XBR’s built-in TV tuner includes a BTSC stereo decoder with SAP (Second Audio Program) capability. Detachable magnetically shielded speakers mount on the sides of the cabinet, but there are speaker and line-level audio outputs, so you can connect the KV-25XBR to other speakers or a regular audio system if you prefer. A back-panel bass-boost switch enhances the performance of the supplied Sony APM (Accurate Pistonic Motion) speakers. Another back-panel switch enables you to connect an external FM tuner to the Video 3 audio inputs and listen to that source while viewing a normal TV program. The tuner receives 125 cable channels plus VHF and UHF broadcasts for a total of 181 choices. You can tune any channel directly byoking in its number on the RM-724 wireless remote and then pressing ENTER, or you can scan through the channels via the up/down buttons on the main console or the remote. The procedure for adding channels to the scan memory is simple (although somewhat unusual); erasing a channel number from memory removes it from both the broadcast and cable lineups.

Switching from broadcast to cable reception is accomplished by means of a small button on a subpanel below a flip-down door to the left of the main-panel controls. Also on this subpanel is a button for activating an external RF loop, permitting interconnection of a pay-TV descrambler without rewiring the system. Labeled ANT/AUX, it is duplicated on the remote control.

All RF connections are made via standard F connectors. The audio and video connections to the Video 1 and Video 3 inputs (and the audio and video monitor outputs) are via standard pin (phono) jacks on the back panel. The Video 2 input and a TV output (which carries the tuner’s signal even when another source is being viewed) are on the front subpanel. These use what Sony calls an A/V Uniconnector, which carries video and stereo audio on a single cable. The placement of these connectors facilitates temporary connection of a second VCR. The 34-pin RGB input is on the rear deck.

The RGB input is selected by means of dedicated pushbuttons on the main console and the remote. Selection between the four NTSC options (tuner plus three direct audio-video inputs) is via sequential presses on the adjoining TV/VIDEO button. The name of the source you’ve selected appears momentarily at the upper right of the screen: in the TV mode, the channel number appears. If you’ve set the monitor for simulcast reception, “EXT-A” appears instead of “Video 3.” Other legends indicate the audio mode and whether the external RF loop, audio muting, or sleep timer...
Pressing the front subpanel's mute-stereo button sets the system up for stereo reception of BSTC transmissions, whose presence is indicated by a front-panel lamp. If a broadcast is too weak for quiet stereo, you can release the button and return to mono. The MTS button (duplicated on the front subpanel and the remote) sequences through main-channel stereo reception, SAP, a combined mode (intended primarily for recording) that routes a mono blend of the main program to the left channel and the SAP signal to the right, and back to stereo.

There are back-panel controls for horizontal centering and vertical hold, but our sample of the KV-25XBR was so perfectly adjusted that we had no recourse to them. A six-pin DIN connector on the rear deck connects with the optional SU-171 TV stand and enables you to turn the system on and off, adjust volume, and select channels via foot pedals. (Sony chairman Akio Morita is said to have come up with this idea when he broke his arm playing table tennis.)

In Diversified Science Laboratories tests, the KV-25XBR's performance as a video monitor was exemplary in every regard. It simply can't be faulted. Even under close scrutiny, convergence is essentially perfect right to the very corners of the screen. Geometric linearity is excellent along both axes, and the picture is perfectly centered. Overscan is the lowest we've seen. This is a monitor that really gives you the whole picture. Transient response and black retention are excellent, with no visible overshoot or ringing.

The two fields that make up a video frame are perfectly interleaved, assuring maximum vertical resolution. Gray-scale rendition (with or without chroma modulation) is the best we've seen. Red, green, and blue rasters are absolutely pure, without a trace of blotching, and the colors themselves are remarkably accurate. Only the red is slightly off, tending a little toward orange, but even this discrepancy is noticeably smaller than usual.

The tuner section's performance is less impressive, but not by much and not in the most important regards. Video frequency response is first rate—essentially flat to the color-burst frequency—assuring superb resolution on broadcasts. Luminance level is almost right on the standard, and the gray-scale linearity is on a par with the best we've seen. Chroma accuracy is essentially perfect on the primary colors (red, green, and blue) and farthest off the mark on yellow. Average chroma level is a bit low, but not by an unusual amount.

The weak points are chroma differential gain and phase, which indicate relatively large variations in color saturation and hue according to scene brightness. Nor are the errors confined exclusively to the brightest scenes. Although the difference is clearly apparent when switching from the monitor mode to tuner reception, we must admit that it's less than obvious on actual broadcasts.

Audio performance is adequate, if not stellar. Response is almost ruler-flat from 150 Hz to 13 kHz, but exhibits a substantial bass rolloff and a precipitous drop at the high end as the horizontal-scan filter comes into play. Thanks to the steep notch filter Sony uses, the scan whistle is almost entirely removed.

Despite our reservations about the tuner (which are few), we are extremely impressed with the KV-25XBR. Its video performance sets new standards for consumer monitors. If you can afford it, this is one receiver you shouldn't pass up.
Nest record JVC IRS 1007 Mk III

FREQUENCY RESPONSE & CHANNEL SEPARATION

FM TUNER SECTION

[Graphs showing frequency response and channel separation]

SPARKOMATIC SR-315 CAR RECEIVER/TAPE DECK


If you're after lots of features in a reasonably priced front end, the Sparkomatic SR-315 should be high on your must-see list. Its music-access features include blank search to get you past unrecorded segments in a hurry, song repeat, and a scan that operates in both tape and tuner modes. Add to this both Dolby options, DNR noise reduction, and switchable tape EQ, and you've got a mobile music system that's loaded for bear.

It also has whopping power output by car standards: almost 17 watts (121/4 dBW) per channel with 3 percent distortion (THD+N) at 1 kHz into a 4-ohm load, according to Diversified Science Laboratories' bench measurement. The only way such output can be achieved with a regular 12-volt automotive supply is to strap amps so that one output terminal of each channel is driven negative when the other terminal is driven positive, and vice versa. This delivers twice the potential difference, which is rather sketched in other ways as well, glosses over.

The switches can be used individually or in combination to combat the acoustical problems of car interiors—or simply to exaggerate the bass or lower midrange, if you like. We preferred them off. We also avoided the making it impossible to assess performance quite as directly as we would have liked. The lab added an isolation transformer to prevent the outputs from shorting to the ground terminals of its instruments: we used 100-microfarad capacitors between the SR-315 and the high-level (power) inputs of the ADS amp that we employ for all road testing. In theory, the value (recommended by ADS) should introduce a rolloff at ultralow frequencies. In fact, the bass sounded a little more prominent than usual—or than the graphs suggest. Because of the test setup, however, I'd hesitate to attribute the apparent difference unequivocally to the Sparkomatic, but when the lab measured frequency response with a mono FM signal, a slight (about 1 1/4 dB) rise showed up in the 100-Hz region.

Aside from the bass and treble controls, which are fairly typical in their action, there are three "enhancement" switches that introduce broad prominences of about 6 dB centered on 100, 200, and 300 Hz. The switches can be used individually or in combination to combat the acoustical problems of car interiors—or simply to exaggerate the bass or lower midrange, if you like. We preferred them off. We also avoided the
loudness compensation, which boosts bass in the 80-Hz region and treble above 10 kHz by 8 dB or more relative to 1-kHz response. Sparkomatic's approach to FM tuning is somewhat unusual. It retains full stereo separation—and the increasing noise that attends it—to relatively low input levels. At just over 30 dB, below the stereo sensitivity rating point, things suddenly change. The separation vanishes, causing a reciprocal drop in stereo noise, and—

you have the "mute" feature turned on—the output begins to attenuate sharply. If you also are using the DNR dynamic filter, the high-frequency hiss content may also fluctuate with the audio level. These factors together cause radical changes in the sound of weak stations when the car is moving. Removing the "muting" postpones attenuation until signal strength is still lower (and noise is rapidly returning) but doesn't do much to homogenize the "lumps" in the sound.

On stronger stations, behavior is far pleasanter, as the more-than-respectable lab data indicate it should be. Performance of the AM section is less impressive. Tuning on both bands proceeds in full-channel steps: 200 and 10 kHz, respectively.

Subjectively, the most attractive section of the design is the tape player. Sparkomatic evidently accepts National Semiconductor's claims about the DNR chip doing only good things to the sound: the only way you can turn it off in tape playback is to switch to Delco B or C. The playback curves are therefore somewhat equivocal. Diversified Science Laboratories noted azimuth mismatch between the deck and the (non-Dolby) test tape, perceptible as instability in high-frequency output. But the graph's rolloff may also be partly attributable to the action of the DNR; we have no way of telling for sure. On the road, our Dolby-encoded test tape sounded as fresh and natural as it has in any car unit we've tested.

A final note: We were dismayed to see that Sparkomatic recommends against using C-90 as well as C-120 cassettes, stating that both lengths have too much tendency to form loops and to wrap around drive parts for safe operation in car equipment. Considering the popularity of C-90, those who roll theirs own (often with special equalization) for car playback, this is bad news. We can only say that we haven't yet had such a problem with any brand. Our regular test tape is a C-60, but we do use some C-90s for variety.

Blaupunkt has its own individual style with car stereo gear, as we implied in reviewing the Tucson (October 1983), a high-performance, high-price front end. The Aspen SQR-24 fits the pattern, though in somewhat more modest fashion. It is, in fact, an Everyman's model in more than one sense: It not only dispenses with some of the pesky features of its more expensive relative but is adaptable to an unusually wide variety of installations.

The Aspen SQR-24 adds a front-to-back fader and bass and treble controls to the earlier Aspen, which it replaces. It can be mounted in the rectangular dash cutouts originally introduced in some European cars, or the two ends of the front panel can be disassembled to alter the design to the familiar nosepiece with

<table>
<thead>
<tr>
<th>FM TUNER SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY RESPONSE</td>
</tr>
<tr>
<td>HZ 20</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
<tr>
<td>SENSITIVITY</td>
</tr>
<tr>
<td>SELECTIVITY</td>
</tr>
<tr>
<td>AVC RANGE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AM TUNER SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY RESPONSE</td>
</tr>
<tr>
<td>HZ 20</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
<tr>
<td>WOW &amp; FLUTTER</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
<tr>
<td>SPEED ACCURACY</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
<tr>
<td>PREAMP/AMPLIFIER SECTION</td>
</tr>
<tr>
<td>BASS CONTROL</td>
</tr>
<tr>
<td>TREBLE CONTROL</td>
</tr>
<tr>
<td>OUTPUT (per channel into 4 ohms, at 2% THD+N)</td>
</tr>
<tr>
<td>at 1 kHz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CASSETTE TRANSPORT SECTION</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>FREQUENCY RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HZ 20</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
</tbody>
</table>

| SELECTIVITY | 39 1/2 dB |
| AVC RANGE | 61 1/2 dB |

<table>
<thead>
<tr>
<th>TREBLE CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>+10 dB to -11 dB at 10 kHz</td>
</tr>
</tbody>
</table>

| OUTPUT (per channel into 4 ohms, at 2% THD+N) |
| at 1 kHz | 16.8 watts (12 1/2 dbW) |

Main features: automatic cassette reverse, DNR dynamic noise filter, and built-in clock. Dimensions: 7 by 2 inches (chassis front), 5 3/4 inches deep; escutcheon, 2 1/2 by 2 1/4 inches; "nose," 4 1/4 by 1 3/4 inches; main shafts, 5 to 5 3/4 inches o.c. Connections: flat chassis male plus bare-wire adapter for ignition; small flat chassis male plus bare-wire adapter for battery; small, flat chassis male for power antenna; flat chassis male plus spade-lug adapter wire for ground; DIN chassis female plus bare-wire adapters for front and back speaker outputs; multipin chassis male for ARI adapter; DIN cable female for preamp output; standard coaxial female for antenna input. Fuse: 5-amp in ignition line. Price: $320. Warranty: "limited," one year parts and labor.


Blaupunkt has its own individual style with car stereo gear, as we implied in reviewing the Tucson (October 1983), a high-performance, high-price front end. The Aspen SQR-24 fits the pattern, though in somewhat more modest fashion. It is, in fact, an Everyman's model in more than one sense: It not only dispenses with some of the pesky features of its more expensive relative but is adaptable to an unusually wide variety of installations.

The Aspen SQR-24 adds a front-to-back fader and bass and treble controls to the earlier Aspen, which it replaces. It can be mounted in the rectangular dash cutouts originally introduced in some European cars, or the two ends of the front panel can be disassembled to alter the design to the familiar nosepiece with

<table>
<thead>
<tr>
<th>Cassette transport section</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY RESPONSE</td>
</tr>
<tr>
<td>HZ 20</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
<tr>
<td>SENSITIVITY</td>
</tr>
<tr>
<td>SELECTIVITY</td>
</tr>
<tr>
<td>AVC RANGE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FM TUNER SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY RESPONSE</td>
</tr>
<tr>
<td>HZ 20</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
<tr>
<td>WOW &amp; FLUTTER</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
<tr>
<td>SPEED ACCURACY</td>
</tr>
<tr>
<td>forward</td>
</tr>
<tr>
<td>reverse</td>
</tr>
<tr>
<td>PREAMP/AMPLIFIER SECTION</td>
</tr>
<tr>
<td>BASS CONTROL</td>
</tr>
<tr>
<td>TREBLE CONTROL</td>
</tr>
<tr>
<td>OUTPUT (per channel into 4 ohms, at 2% THD+N)</td>
</tr>
<tr>
<td>at 1 kHz</td>
</tr>
</tbody>
</table>
**TEST REPORTS**

**VOLUME/BASS/BALANCE/FADER**

**TRANSPORT CONTROLS**

**TUNING/SEEK/TREBLE**

**STATION PRESETS**

**DNR (ON/OFF)**

**Diversity Science Laboratories**

**CAPTURE RATIO** 4 1/2 dB

**SELECTIVITY (alternate-channel)** 10 2/4 dB

**AM SUPPRESSION** 63 1/2 dB

**DISTORTION (THD + N)**

- **STEREO**
  - at 1 kHz: 0.5% slow, 10.8 to 14.4 volts
  - at 10 kHz: 0.5% slow, 10.8 to 14.4 volts

- **MONO**
  - at 1 kHz: 0.5% slow, 10.8 to 14.4 volts
  - at 10 kHz: 0.5% slow, 10.8 to 14.4 volts

**AM TUNER SECTION**

**FREQUENCY RESPONSE**

- **SENSITIVITY**
  - **SELECTIVITY**
  - **AVC RANGE** 63 dB

**CASSETTE TRANSPORT SECTION**

**FREQUENCY RESPONSE**

- **INPUT LEVEL**
  - **OUTPUT LEVEL** per channel into 4 ohms

**PREAMP/AMPLIFIER SECTION**

- **BASS CONTROL** + 9.5/2 -11 dB at 10 kHz
- **TREBLE CONTROL** + 9.5/2 -11 dB at 10 kHz

**LINE OUTPUT IMPEDANCE** 600 ohms

**MAXIMUM LINE OUTPUT LEVEL**

- **FROM FM** (100% modulation) 2.3 volts
- **FROM TAPE** (DIN 0 dB) 2.3 volts

**OUTPUT (per channel into 4 ohms; at 3% THD + N)**

- **1 kHz** 5.3 watts (7 1/4 dBW)

**SIGNAL STRENGTH**

- **SENSITIVITY**
  - **CAPTURE RATIO**
  - **SELECTIVITY**
  - **AM SUPPRESSION**

**FM TUNER SECTION**

**FREQUENCY RESPONSE**

- **SENSITIVITY**
  - **SELECTIVITY**
  - **AVC RANGE**

**CLOCK DISPLAY ON**

**STATION PRESETS**

**DNR (ON/OFF)**

**SEEK SENSITIVITY (DX/LOCAL)**

**TUNER BAND (AM/FM)**

**SEEK SPEED ACCURACY**

- **FORWARD**
  - **REVERSE**

**DIVERSITY SCIENCE LABORATORIES**

**SPEED ACCURACY**

- **FORWARD**
  - **REVERSE**

**PREamp/AMplifier SECTION**

- **BASS CONTROL**
  - **TREBLE CONTROL**

**LINE OUTPUT IMPEDANCE** 600 ohms

**MAXIMUM LINE OUTPUT LEVEL**

- **FROM FM** (100% modulation) 2.3 volts
- **FROM TAPE** (DIN 0 dB) 2.3 volts

**OUTPUT (per channel into 4 ohms; at 3% THD + N)**

- **1 kHz** 5.3 watts (7 1/4 dBW)

**HANDLING** of the uncluttered front panel is mostly excellent. There are more functions than we like to encounter on each of the main control shafts, however. At first, we couldn't adjust the balance or fader without accidentally altering the volume setting. But practice improves performance, and the knob "hones" on its volume function, the only one of the three that most people will want frequently. The buttons are well spaced and clearly marked, with one exception: We sometimes hit MEMORY when aiming at PRESET 1, which consequently was reset to the tuned frequency.

The FM section is unusually free of "spitting" noises when multipath and signal strength are fluctuating. What spitting there is can be turned a bit by turning on the DNR (National Semiconductor's one-chip dynamic filter), but this can lend a slightly muffled quality to the sound and, under some conditions, audibly pump the noise in response to the signal. The rapid reduction of output when signal strength falls below 30 dB or so can give you a bumpy aural ride as loudness fluctuates radically.

Sensitivity and capture-ratio figures aren't spectacular, though they are certainly good, and response in the treble range isn't as flat as we'd like. In other respects, the FM section measures very much like those of most leading models, with selectivity and AM suppression proving the most outstanding characteristics. Tuning on both the FM and the AM bands proceeds by full-channel steps (200 and 10 kHz, respectively) and can be made to rush across the dial by holding the tuning knob turned in the desired direction. Sound on the AM band is distinctly tubby, despite the considerable bass roll-off. When an AM station is noisy, incidentally, the DNR does little or nothing to help; evidently the restricted bandwidth gives it too little to work with. On the plus side, we found that the Aspen brought in more AM stations with less noise than most of the other models we've evaluated.

The cassette transport is as immune to road shock as any we've tested. Response is remarkably similar in both directions of tape travel, but there is a somewhat enigmatic high-frequency roll-off. It looks like a disparity in azimuth alignment between the deck and the test tape, but Diversified Science Laboratories assures us that the stability of the high-frequency signal in this test indicates good azimuth agreement. Perhaps it is an attempt to compensate for the lack of either EQ switching (the test tape requires 120-microsecond EQ for correct playback) or Dolby noise reduction. However, fixed EQ can never fully compensate for the dynamically changing signal brightness of Dolby tapes. Neither can the DNR circuit, though it may be of some help.

The deck automatically retracts the pinch roller (but doesn't eject the cassette) when the power is turned off. Otherwise, the Aspen dispenses with the "extras" (though it does offer tuner seek), to keep the model in the medium price range. The only relatively out-of-the-ordinary feature is the clock function of the readout panel. The focus here is squarely on fuss-free music on the road.
Edited by

Georgia Christgau

The Empire Writes Back

MAURICE RAVEL
DAPHNIS ET CHLOE
Orchestre symphonique de Montréal
Chœur de l'Orchestre symphonique de Montréal
Chœur de l'Orchestre symphonique de Montréal
Chœur de l'Orchestre symphonique de Montréal
Chœur de l'Orchestre symphonique de Montréal
CHAES DUTOIT

RUDOLF FIRKUSNY PLAYS

Unindexed Polygram CD (top), and an indexed disc.

Several months ago [October 1984], I criticized Polygram for its failure to index Compact Discs. Herewith its reply, from CD Coordination Director Hans G. Gout.—TL.

To index or not to index: Which would be a betrayal? I say that to have indexed all our 2,000-plus Compact Discs released so far would have been a betrayal. Anyone who bought such a disc would have owned software much more refined than his player. Only 5 percent or so of the 900,000 CD players now in home use around the world have an index feature.

He would have had a Trombone CD listing Scene 2 as a track number and the aria “Tace la notte” as an index number. With his player unable to search an index, he could not directly access that aria. Imagine the outcry from the markets and the media. Instead, Polygram lists the aria as a track number—number 4 on Deutsche Grammophon’s release—enabling the buyer to find the piece easily.

So Polygram-affiliated labels decided to forgo indexing and instead to allocate tracks much more liberally than the CD standard foresaw. That standard actually suggests that track numbers be allocated according to pauses, prolonged silences, or crossfades in the music, with indices subdividing individual tracks.

Our research confirms our beliefs: CD owners have bought the format first because they want to enjoy music. In all the communications we receive from consumers, nobody has ever complained about the absence of indexing. Readers owning a CD player without an index feature—and they will be in the majority for a time to come—surely will appreciate Polygram’s past preference for liberal track listing instead of indexing.

I must also admit to a selfish reason for not indexing: We had neither the equipment (now we do), the expertise, the time, nor the manpower to index more than 2,000 titles in just two years. (It would have meant at least another two hours in tape production every time.) Thus, both the hardware market and the leading software company were not yet ready for indexing.

A few problems remain to be solved. The CD standard specifies that indices should be allocated according to subdivisions of a track. But what are the logical points for such indices: changes in tempo, solos, melodic subjects? And where exactly should they be placed: a second before or spot on? Beethoven (Continued on page 58)

Lone Wolves

Nineteen eighty-four was a good year for pop music. Michael Jackson made room for No. 1 albums by such diverse artists as Bruce Springsteen and Prince; newcomers Cyndi Lauper and Madonna became as familiar as the girl next door in spite of, or maybe because of, their outrageousness; even Tina Turner managed a major Top 10 comeback. It was a good year for debut LPs by American bands, too. Boston’s Del Fuegos, New York’s Del Lords, Los Angeles’ Los Lobos and the Bangles, Minneapolis’s the Replacements, and Winston-Salem’s the dB’s all turned out excellent records. But the success of these releases, many of them started as independent projects, seems independent as well of the interest major labels showed in them.

That’s because the industry isn’t looking for local heroes. As one expert put it, “Record companies don’t bet at the $2 table; they bet at the $500 table.” Large investments require large profits, so the popularity of stars like Springsteen and Prince is insured by tremendous outlays of cash. The sales of a record by a great little band from Winston-Salem, for example, can’t compete—no matter how good their music is.

But instead of discouraging bands, corporate in-

But #2 on the Del Lords.
difference seems to have strengthened them. There's hopefulness and innocence in their sound, qualities that are healthy in this unresponsive climate. The Del Lords, whose excellent Frontier Days (EMI America ST 17133) reflects this attitude, were already in the studio by the time EMI got involved. "You do things your own way, even when you ought to know better," says comanager Marjorie Spencer.

Warner Bros., which this year canceled the contracts of respected artists with supposed tenure such as Bonnie Raitt and Van Morrison, distributes the Slash label, home of at least three auspicious releases in 1984 (Rank and File's Long Gone Dead, Slash 1-25087; the Del Fuegos' The Longest Day, Slash 25174; and Los Lobos' How Will the Wolf Survive?, reviewed in this issue). So although Warner Bros. represents a company that cares about its people seems to have tarnished a bit, it still offers some of its considerable power in the marketplace to struggling new acts on smaller labels. "You take most of the financial risk, and we'll consider distributing you," it seems to be saying.

Standing alone are mavericks like the Replacement, whose album Let It Be is also reviewed in this issue). That group in particular has turned unprofessionalism into an aesthetic, hoping that inconsistent performances and whimsical "concept albums" (such as 1982's Hootenanny) will be forgiven as poetic license. But most bands have sobered since the heyday of '70s punk, when anyone made a single. Their members are learning how to hold down jobs, how to work with lawyers ... and how to make records.—G.C.

CD INDEXING
(Continued from page 57)
didn't have indexing in mind when he wrote "fortissimo"; he does not indicate precisely where it starts or ends. The conductor, however, decides exactly where. So is it up to him to allocate indices, provided one has agreed on a tempo-indexing mode? Or does the producer take on that responsibility and secure the artist's approval afterward? How much more time will this take?

Polygram is all for indexing, and will introduce it on selected items during this year, but neither we nor our competitors are yet quite certain how best to do it. The CD system partners have succeeded in developing a universal disc standard, right down to the packaging. Shouldn't they all agree on an indexing philosophy before hastily jumping to second-best conclusions? Of course, I am speaking here for the marketer of music who has in mind perfect sound reproduction and musical enjoyment at a reasonable price.

Today it is important to satisfy the majority of music lovers who like CD programming as it is. Tomorrow—during the coming year—Polygram labels will be ready with indexing policies that make sense and that are acceptable to all system partners. Why should we aim to be first, when we want only to be best?

The SOURCE
THE ALL NEW
1985 EDITION OF
MUSICAL AMERICA
INTERNATIONAL DIRECTORY
OF THE PERFORMING ARTS
The most encompassing and informative Directory of the Performing Arts in America.
Listings of orchestras, opera companies, publishers and artists’ managers. Competitions, foundations and awards; performances, performers and organizations.
More than 600 pages of complete national and international performing arts information with both a categorical and alphabetical advertisers index in the rear.
It is the one Directory of The Performing Arts that can and will be referred to all year long. It is The Source.
Success Is An Anglo-American Alliance

Bronx native Murray Perahia begins a new project in London.

Few pianists today contradict as completely as Murray Perahia the standard image of the virtuoso as a steel-fingered whiz kid. If his records and concert performances consistently magnetize with poetry rather than power, if they sparkle rather than shock, Perahia the man bears out that impression. At thirty-seven, he remains boyishly diminutive, his voice a light tenor (readily confirmed each time he sings a Mozart phrase in illustration), and when he talks of fellow artists, his eagerness to enjoy and appreciate other points of view shines through. In conversation he laughs a lot, yet his deep seriousness, his sense of purpose, emerge all the more strongly for never being paraded, just expressed in thoughtful and pointed comments on whatever musical subject comes up.

Now that Perahia has finished recording all the Mozart piano concertos (except the double and triple concertos), he can look back over the ten years the project has taken and from sheer experience marvel at the musical miracle they represent. Compliment him specially on his coupling of K. 450 and K. 451, and he will grin with delight: "Oh, aren't they wonderful!" He isn't referring to the recording or his own performances, just to the works themselves. Similarly, when he came to do the four early concertos (K. 37, 39, 40, and 41), he was thrilled to discover—having searched out the models—that the twelve-year-old Mozart had not simply arranged sonata movements by Raupach, Schobert, Honauer, and C. P. E. Bach, but had let his imagination run. Perahia joined in, writing the cadenzas for his recording of those works. Unfortunately, with CBS eager to finish the project quickly, he never got the chance to play the four in public.

Until then, Perahia had made sure (in his unforced way) of programming each concerto in live performances around the time of the studio sessions. That dedication prevented him from ever growing bored with the recording process, and today he firmly denies that he could ever confuse one concerto, or even one passage, with another. [See review of K. 170, Nos. 1–3, in this issue.]

The project also made him fully appreciate the development that Mozart achieved in the concerto form. The earliest of the fully mature concertos, K. 271 in E flat, may be among the most revolutionary of all, but as Perahia sees it, that work still keeps elements of the galant style, notably in its finale. He marvels at the intensification of the symphonic argument as the scale of the concertos increases, with huge paragraphs using subtly related motifs. Perahia likes to draw a distinction between the great large-scale concertos toward the end of the cycle—K. 466, 467, 491, and, not
least, 533—and two that he regards as primarily lyrical, not quite so symphonic in their long melodic lines. K. 488 in A and the last of all, K. 535 in B flat. Though he finds a mood of resignation in the first two movements of K. 395, he doesn't like "performances that put a huge tear on it." He counters my suggestion that K. 537 is something of an interloper, arguing that it counters my suggestion that K. 537 is something of an interloper, arguing that it is far more ambitious than is often realized, with its contrapuntal passages, but that Mozart "didn't quite achieve what he set out to do."

Perahia heard his first Mozart concertos as a child of five or six, when he would go with his father to Carnegie Hall. George Szell was conducting the Cleveland Orchestra with such soloists as Rudolf Firkusny, Robert Casadesus, and, of course, Rudolf Serkin, who many years later would be one of Perahia's mentors at Tanglewood (and with whom he would play Mozart four-handed, both the two-piano Sonata in D and the piano-duet Sonata in C). But Perahia did not have the opportunity to play a Mozart concerto until much later. Jeannette Hainen, who taught him from the time he was six until he was seventeen (not just the piano, but theory, harmony, and ear training), never let her pupils play in public. Coming from a Sephardic Jewish family in The Bronx, Perahia occasionally would appear in events at the synagogue, but that was the most he was allowed to do during those years. When he won the Leeds International Pianoforte Competition outright (in 1972 at the age of twenty-five) and was launched on a big career, he was still primarily concerned with playing chamber music.

At the Mannes College of Music in New York, Perahia had studied conducting, and one of his first Mozart concerto performances was not as pianist but as conductor of the Clarinet Concerto. After leaving college, he directed in Baltimore a Mozart piano concerto from the keyboard—his first essay at doing that—and received a blistering notice from a local critic. He was glad the orchestra rallied to his support. It was quite different a year or so later when, after winning Leeds, he was asked to play and direct the English Chamber Orchestra in K. 449 at a concert from which Pinchas Zukerman had withdrawn. Notices were ecstatic, and after performing the work several more times on a tour of Spain with the ECO, Perahia was asked by Paul Myers (then of CBS) to record it and the more challenging K. 491 in C minor. The disc was a success, which led to another being made, coupling K. 467 in C (nowadays subtitled "Elvira Madigan") and K. 271. That release was an even greater success. It was then that a plan to record the complete cycle was agreed upon, arriving almost by stealth. Perahia insisted that it should not be done in a hurry, and so it evolved.

Perahia finds the recording process very taxing. He rarely is entirely satisfied with the results (a version of Beethoven's Appassionata now due for release is an exception, he confides), yet he treats the job with the keen care and analysis he brings to all his musical preparation and tries also to enjoy himself. Perahia likes to do two or preferably three complete takes of any movement he is recording. Then he allows "patching," and though he often finds that difficult, he never resorts to the practice of his friend Radu Lupu, who insists on going back "to the top" for every single take. Much as he loves playing with Lupu (another and earlier Leeds prizewinner), a recording session with him usually involves more repetitions than Perahia can cope with.

Last summer at the Maltings, CBS recorded their live performances of Mozart's two-piano Sonata in D (K. 448) and Schubert's piano-duet Fantasy in F minor, given as part of the Aldeburgh Festival (of which Perahia is now one of the principal artistic directors). The aim was to make a commercial recording with the help of extra studio sessions, but since then it has been touch and go whether Lupu would finally approve.

What certainly will be appearing is a coupling of Mozart's and Beethoven's quintets for piano and winds, recorded in a very similar fashion. Perahia did the Mozart with the wind soloists of the English Chamber Orchestra (Neil Black, Thea King, Graham Sheen, and Anthony Halstead) at the Maltings in 1983; the Beethoven followed a year later. When I saw him, he was delighted to find that the greater part of the Beethoven side will be taken from the live performance.

The big project now starting is a set of the Beethoven piano concertos with Bernard Haitink and the Concertgebouw Orchestra, to be recorded in Amsterdam—again not in a rush, but over five years. In September 1983, Perahia did the Second Concerto, and last October he turned to the Fourth (these works will be coupled on disc). It is a measure of his concern over getting the best possible results that the recording sessions for the Fourth Concerto were planned to come immediately after a set of three live performances with Haitink and the Concertgebouw, not to mention another performance in the Royal Festival Hall in London with Sir Charles Mackerras and the ECO.

Rather shamefacedly, Perahia admits that for quite a time—ending about ten years ago—he didn't enjoy Beethoven. Part of the problem was that he had studied the composer's works so much in his years with Jeannette Hainen, who had been a pupil of Artur Schnabel. Perahia found Beethoven very aggressive and unsympathetic and felt much closer to Schubert, Mozart, and Bach. Eventually, in part because of his enjoyment of listening to chamber music on records, his love of Beethoven was restored and reinforced: "I came to see [his drive] not as aggression but as positive assertion from a man who had been through everything and suffered." Still, with the Fourth Concerto, Perahia doesn't like performances that are "too hard-edged, where tension is dominant." He prefers to find the poetry, to allow himself "a somewhat subjective view." The name Wilhelm Kempff comes up in that context, though one knows that Perahia, however much he admires a particular pianist of the past or present, will keep his own individual view—always his own man.

A complete Beethoven sonata cycle is unlikely to emerge in the foreseeable future, though Perahia has already recorded three of the most ambitious of the early works: Opus 7 and Opus 22 are on one disc, and Opus 10, No. 3, is coupled with the Ap

(Continued on page 87)
1985: A BANNER YEAR IN MUSIC

HANDEL

With this issue, HIGH FIDELITY commences a series of special features marking the anniversaries in 1985 of several significant composers. Our plans call for a wide range of birthday tributes, including spot and feature reviews and recommended discographies, plus a few surprises. Among the honoraries this year are George Frideric Handel, Johann Sebastian Bach, and Domenico Scarlatti—all of whom were born in 1685—as well as Heinrich Schutz (1585) and Alban Berg (1885).

To begin, we second Beethoven's famous remark and "bend the knee to Handel," who was born on February 23, 1685. Handel enjoyed many pleasures, and he always made certain his music gave pleasure to those who heard it. This most professionally accomplished of musicians was the prolific composer of dozens of operas and oratorios and a man of lively wit, penetrating intelligence, rare cultivation, unshakable integrity, good humor, and good sense. More than that, he was an artist of the highest rank, the most cosmopolitan and eclectic, as well as the most famous, of his age.

In his youth, Handel absorbed completely the elements of the German, French, and Italian styles of the mid-Baroque; after his arrival in England, he acquired that country's language and musical culture as well. Handel's range as a composer—his mastery of a variety of forms and techniques and his ability to draw on them at will—has never been surpassed. Although he was by temperament and training primarily a composer for the theater, he created works of lasting value in every important musical genre. Among all the other composers of the 18th century, only Mozart achieved similar, lasting success in so many fields.

The discography that follows is offered as a guide for acquiring a basic library of Handel's music, as represented on recent recordings by informed interpreters. Collectors should note that new digital recordings of Messiah by Colin Davis and Georg Solti are slated for release in 1985 and that a number of bargain-price reissue packages featuring the composer's most popular works are on the way. Reviews of these and other important Handel releases will appear in forthcoming issues of HIGH FIDELITY.

Theodore W. Libbey, Jr.

OPERAS

Ariodante. Mathus; Bawoons; Baker; Bowman; Ramsey; English Chamber Orchestra and Chorus, Leppard. Philips 6769 035 (A). Or (42): 769 112.

Rinaldo. Catruba; Scorzetti; Watkinson; Eno- wood; Brett; Cold; La Grande Ecurie, Mulgrave; CBS Masterworks MJ 34591 (A). Or (4): 769 5383.

ORATORIOS AND ODES

Hercules. English Baroque Soloists, Monteverdi Chorus, Gardiner. Archly 272-004. (Distributed by Deutsche Grammophon.)

Messiah. Marshall; Robin; Rolle-Johnson; Hare; Brett; Quince; English Baroque Soloists, Monteverdi Chorus, Gardiner. Philips 6769 07 (A). Or (4): 765 107. O 111 041.2.


Ode for St. Cecilia’s Day. Gomez; Tor; English Chamber Or- chestra, King’s College Chorus, Led- ger. Vanguard ZA 2509 (D).

Semele. English Baroque Soloists, Monteverdi Chorus, Gardiner. RCA Erato STU 71145 (A). Or.

CONCERTI GROSSI


VOCAL WORKS, SACRED


FOR MORE INFORMATION ON ANY OF THE DISCGRAPHICAL MATERIAL PRESENTED HERE, PLEASE CONTACT THE RESPECTIVE LABELS FOR ADDITIONAL DISC INFORMATION AND SUGGESTED LIST PRICES.
In this issue

BACH:
Keyboard Suites

BARTÓK:
Piano Concerto No. 1; Sonata for Two Pianos

BRAHMS:
Double Concerto, Op. 102; Tragic Overture

HAYDN:
"Military" and "London" Symphonies

MENDELSSOHN:
Piano Works

MOZART (after J. C. Bach):
Plano Concertos, K. 107

PUCCINI:
Manon Lescaut

PUCCINI:
Turandot

SCHRÖTER, J. S.:
Plano Concerto, Op. 3, No. 3

SCHUBERT:
Symphony No. 9

SIBELIUS:
Symphonies Nos. 4, 7

SIBELIUS:
Symphony No. 6; Suite from "Pelléas et Mélisande"

VIVALDI:
Chamber Works

WAGNER:
Der Ring (excerpts)

WAGNER:
Lohengrin (excerpts)

WEBER:
Symphonies Nos. 1, 2

Recitals and Miscellany

ARBÓS/MADRID:
Spanish Program

GIDON KREMER:
Waltzes and Polkas

A Magnificent 'Turandot' From Vienna

Eva Marton (left) is an electrifying Turandot, and José Carreras a luxuriant Calaf.

PUCCINI:
Turandot

If you are a Turandot fan—as I am, without reservation—you will be thrilled about almost every aspect of this new entry in the growing Turandot lists. My first reason for breaking out the champagne is the presence of the magnificent Hungarian soprano Eva Marton in the title role. A few weeks after singing in this September 1983 live performance in Vienna, Marton sang the role with Sarah Caldwell's Opera Company of Boston and simply stopped the show.

Among the sopranos I have heard sing Turandot was Rosa Raisa, the first of all of them and still, in my view, the greatest. But I have also heard Maria Jeritza, who damaged her voice in the role; Eva Turner, who was magnificent but not Raisa's equal; Inge Borkh, a rather hard-sounding contestant; and of course Birgit Nilsson. Certainly Nilsson was formidable in the part. But her voice was Northern in its textures, and in crucial moments, it lacked the quality and depth of feeling that Raisa—and now Marton—have found. I also heard Maria Callas record Turandot in La Scala in the summer of 1957, a brilliant performance that is still available on Angel 3571. There is little to be said in favor of the more recent recorded performances of the role by Montserrat Caballé, Joan Sutherland, or, most disastrous of all, Katia Ricciarelli, the Liu of the present set.

Those who do not believe that the role of Turandot is a challenge do not assess correctly the hurdles the Princess must meet with her very first singing (which does not occur until the middle of the second act). Then, with little enough orchestral support, she must launch into a series of high B's and C's that are far more taxing than Brünnhilde's opening cries in Die Walküre. These
notes were never hard for Nilsson, who once said that when she had finished Turandot, she was just warmed up for Isolde. But they are clearly intended to be trumpeted out, and they demand a true heroic soprano in the line of Raisa, Turner, Callas (who did not sing the role that often in public), Nilsson, and now, it is safe to say, Marton.

In Marton’s background, there is a combination of Middle-European birth and early years spent in the Italian repertory that parallels Raisa’s beginnings. Raisa, born Rosa Burchstein in Bialystok (in what became Poland again in 1918), studied in Italy and enjoyed her first triumphs largely in Italian houses. Marton, born Eva Heinrich, included among her early roles Maddalena in Andrea Chenier, Donna Anna, Manon Lescaut, Tosca, five Verdi heroines, and Mathilde in Rossini’s Guillaume Tell. Her voice is remarkably even throughout her wide range, with no audible shifting of gears through the top octave. What becomes increasingly treasurable as she moves into the third act of Turandot is the velvety quality of her soft singing—first in her pianissimo repetition of the word “L’amore,” echoing Liù, then in her replies to the Prince, as she sings, “ma l’amara è la sola!”, and most of all in her final capitulation on the phrase “E l’alba!,” on the third repetition of which she suggests the deepest ecstasy, in a way no Turandot since Raisa has done. With her Ortrud this season at the Met and the promise of large Wagnerian roles to come—which until now she has avoided, as Nilsson did until she reached the same age—Marton is the most promising true heroic dramatic soprano of our time.

Marton is matched handsomely in this recording in nearly every detail. That “near-ly” is not intended to suggest that any element fails to achieve its goal. But this is a live performance, which is at once an advantage and a disadvantage. On the plus side, it conveys a sense of urgency that intensifies the dramatic situation. You can almost see the crowd moving restlessly about the stage; the voices are clearly coming from various distances, on and off stage. What is lost, on rare occasions, is impact; the distant microphones simply cannot provide it. On the whole, however, I prefer the feeling of being present in the house on a great night.

When this recording was made, Lorin Maazel (who has made notable contributions to the operatic catalog in recent years) was serving as general director of the Vienna State Opera. He is in top form here: The orchestra, chorus, and principals are all in inspired shape and perform thrillingly. José Carreras, who for a time seemed to be stretching his voice beyond its limits, sounds comfortable, even luxuriant, as Calaf. He takes some liberties with the notes as printed, but he stands up to the challenge of Marton’s electrifying singing. It is impossible to mention Ricciarelli’s Liù without recalling her tragic attempt at the title role under Herbert von Karajan’s baton, one of the most ruinous treatments of a once lovely voice in history. Her Liù has real beauty, but undoubtedly it would be more beautiful had she never even thought of singing Turandot.

John-Paul Bogart is an astonishing Turandot—astonishing because he sounds as if he really were an old king, and yet not too many years ago, he was the boy alto soloist in Leonard Bernstein’s recording of the Chinese Psalms (CBS MS 6792).

Kurt Rydl and Wlademar Kmentt do all that the Mandarin and the aged Emperor Alucrant need do. And the lovely trio of Ping, Pang, and Pong is skillfully handled by Robert Kerns, Helmut Wildhaber, and Heinz Zednik, although their scene is one of the times when a touch more presence nearer the microphones would have been welcome.

This recording uses the customary edition, for which, at Toscanini’s request, Franco Alfano wrote the ending, using some of Puccini’s material and some of his own. It has been a serviceable closing during the years since the night of the premiere, when Toscanini stopped and said to the La Scala audience something like “At this point, Giacomo Puccini broke off his work. Death on that occasion was stronger than art.”

Recently, however, a more extended conclusion has come to light, one in which Alfano made greater use of Puccini’s ideas. It was heard in London in 1982 and again shortly thereafter at the New York City Opera. It would be appropriate and welcome if yet another Turandot were to be recorded with this alternative conclusion. Should that happen, I hope that Marton will again assume the title role. There was to have been a final curtain at the Met, but we shall never hear it this side of heaven.

Paul Hume
"London" symphonies are performed by a medium-size orchestra (about 40 players) with period instruments and a fortepiano continuo. According to Hogwood's literate program notes, he consulted not only the autograph scores but original performing and rehearsal materials in order to assemble the most accurate possible editions of these symphonies. His loving concern is evidenced in almost every measure by sensitive phrasing, crisp articulation, and the scrupulous observation of dynamics.

But there is more to these readings than mere faithfulness to the scores. The size of the Academy restores the proper balance between strings, woodwinds, and brass; no longer are the winds swamped by an over-sized string section. The result is that every musical line stands out in relief, to be conveyed with a clarity and soloistic flair we are more accustomed to find in chamber music recordings. "London" symphonies would have immense musical and historical importance. In the meantime, it is a banner decade for Haydn symphonies by brisk tempos and have surprising strength; anyone who still thinks that "original instrument" is a euphemism for "intimate" or "timid" need only listen to these performances.

I hope that this release is only the start of Hogwood's efforts on Haydn's behalf, for complete sets of the "London" and "Paris" symphonies have much to gain from such fortunate events.

Christopher Hogwood was a harpsichordist of the old instruments or the purity of line, but in Hogwood's hands, Haydn's surprises us with period instruments, more pre-Romantic than I have ever heard them sound before. The interpretations are characterized by brisk tempos and have surprising strength; anyone who still thinks that "original instrument" is a euphemism for "intimate" or "timid" need only listen to these performances.

I hope that this release is only the start of Hogwood's efforts on Haydn's behalf, for complete sets of the "London" and "Paris" symphonies would have immense musical and historical importance. In the meantime, it is a banner decade for Haydn symphonies on original instruments, with Derek Solo-instrument Academy of Ancient Music and, more recently, as a guest maestro for more conventionally equipped orchestras. His 1982 Oiseau-Lyre recording (D 261D-2) of selections from the Fitzwilliam Virginal Book, on which he played a variety of instruments, was an impressive reminder of how skilled a keyboardist he is. His new survey of Bach's French Suites (plus the comparably constructed B.W.V. 818a and 819/819a) puts him in the category of the best in the business—the technique is flawless, the ornamentation is deft and pointed, the never-very-straightforward rhythmic treatments are charged with dynamism and vitality. This is an exquisitely performed and produced recording, made all the more interesting because a different 18th-century tuning system is used for each of the eight suites. Hogwood explains the details of the temperament in his liner-note essay, but he's not terribly informative about the manuscript sources on which he bases his musical texts.

James Wierzbicki

BACH:
French Suites, in D minor, C minor, B minor, E flat, G, and E, B.W.V. 812-817; Suite in A minor, B.W.V. 816a; Suite in E flat, B.W.V. 816/819a.

Christopher Hogwood, prod. Oiseau-Lyre 811-811-1 (D, E.). (Distributed by London.)
the four-movement work, which seems strongest in its graceful, interestingly developed first movement (Allegretto) and its venturesome third movement, a Beethovenian recitative that is worked out contrapuntally. But the sonata bogs down with excess octave and scale bravura in the finale (imagine a Wunderer Fantasy on a less interesting theme), and here even Murray Perahia seems to lose interest and indulge too much in matter-of-fact pounding. Otherwise, only the prominence of bass sonorities disturbs the piece, creating a harshness that fortunately can be adjusted via the tone controls.

Perahia's finest gifts—grace, color, restraint—make him an ideal Mendelssohn interpreter. This record is also a welcome addition to a catalog that hardly abounds in the composer's piano works. Its highlight, of course, is the Mendelssohn every pianist wants to play: the estimable Variations sérieuses. Perahia plays them hauntingly from the first lingering A of the opening theme. His quiet, insightful approach suffers only occasionally from a neglect of voicing or a lack of tension in the agitato passages. Equally satisfying are the works balancing Side Two: The usually overwrought Rondo capriccioso has never seemed so lovely or fresh.

Lesley Valdes

**SCHUBERT:**

* Symphony No. 9, in C, D. 944
  ("Great").

(D) 00

Schubert died in 1828 without ever having heard more than a run-through of this great work the year before; not until 12 years later did Felix Mendelssohn conduct its world premiere with Leipzig's Gewandhaus Orchestra. At the time, some donkey complained that the work had Längen (which Anglo-Saxons usually translate as longeurs), and that impelled Robert Schumann to defend it as "von himmlischen Längen!"; ever since, we have known it as Schubert's symphony "of heavenly length."

That length seems also to have irked James Levine, for—calculated by his tempos here—he has cut 6:30 out of the first movement and 3:45 out of the last simply by declining to repeat sections Schubert wanted played. As Schubert wrote it, the Ninth ought to last, at Levine's tempos, about three minutes over an hour. If that presented a problem to the recording staff, they should have solved it in some other manner. Musically, neither they nor Levine should expect any more critical grace than the impatient pianist who chooses to ignore the repeats in Schubert's opus posthumous B flat Sonata.

This great orchestra plays superbly and sounds wonderful, but I have numerous musical bones to pick with Levine. Presumably invoking "tradition"—may God damn it—he takes the opening eight-bar unaccompanied horn call at 72 beats per minute, then jumps...
three full metronome stops faster when the orchestra joins in. Six bars before the shift into allegro, ma non troppo, he jumps the gun by accelerating gradually, thus sliding into a different tempo instead of changing it. At the movement's end, he makes a whoppings, unauthorized ritard. Some grace notes—consistently—sound on the beat, some before. I could go on this way through the whole work, but the worst violations come in the fourth movement, which Levine seems to relish in the way a flashy piano virtuoso relishes, say, Liszt's twelfth Hungarian Rhapsody. With Levine's one fast-beat-to-a-bar, it becomes a tarantella, maybe even a saltarello. Nineteenth-century Vienna? It reminds me more of the Eighth Avenue subway's open-windowed A train on that non-stop stretch between 59th Street and 125th. If you like your Schubert to sound like Berlioz's Roman Carnival Overture, you may well find this hyperactive interpretation right down your alley.

Paul Moor

**PUCCINI:**

*Manon Lescaut*

Freni, Domingo, Brusca, Rydl, Gambill, Pann- baender; Philharmonia Orchestra and Chorus, Sinopoli. Gunther Brest, prod. Deutsche Grammophono 418 89J-4 (D, 2)

With only nit-picking reservations, I regard this as surely the finest overall recorded performance of young Puccini's flawed but irresistible masterpiece. Certainly the magnificent engineering sets it apart: Sonics here have optimum immediacy, clarity, and sense of proper stage space, and no doubt the CD issue of it should be even more revelatory of the score's felicitous beauties.

Though the cast is almost state of the art as far as contemporary operatic performing is concerned, the true star of the proceedings is conductor Giuseppe Sinopoli, whose reading of the orchestral score is by far the best I have heard, live or recorded. Sinopoli injects a consistent sense of breathless, almost adolescent energy into every measure, yet he does not neglect the spacious romance the wonderful melodies deserve. Even more important, his exposure of the orchestral fabric's myriad details is amazing (though I wonder if they would sound so clear in an opera house, without the boon of miking), and he is able to keep the structure paramount, which is quite a job in a score so full of false climaxes.

I am especially impressed with the almost Wagnerian underlining of the various brief motives that permeate the work, such as the four-note "Ma-non Les-caut" phrase that recurs innumerable times in various guises. Although Sinopoli's concept is decided-symphonic, he is always sympathetic to the singers, not in muting any of the orchestral sounds, but in allowing the accompaniment to fully support the soloists and inspire them to give their very best.

Mirella Freni's performances of Manon at the Metropolitan Opera last fall (as a replacement for Katia Ricciarelli) came as an irredecent revelation to many people who witnessed them. The plummy, Tebaldi-esque richness of her lyric spinto voice is a perfect match for the role, while the fierce demands in range of note, color, dynamics, and emotions hold no terrors whatsoever for her, given her exquisitely schooled technique.

In addition, Manon is a role in which Freni's unusually pensive, inward-looking interpretative manner can really shine. With her, Manon is at the outset a character afraid of the world, who then furtively accepts the protestations of love from Des Grieux and ultimately resigns herself first to her sugar daddy, Geronte, and then, fully knowing her eventual doom, once again to her lover. The tragedy of her downfall and death in the final two scenes becomes even more affecting than usual. It is to Freni's credit that even without seeing her stage performance, her characterization still springs to febrile life as one sonates to this recording.

Domingo previously recorded Des Grieux with Montserrat Caballé for Angel—a curiously neutral rendition that was not helped by conducting considerably below Sinopoli's level. Here, Domingo—his singing characterized by a purely ringing of tone—is at his absolute, impassioned best, at one with Puccini and the rest of the cast. In cumulative effect, this is one of his most riveting performances, particularly in the groove-melting duets with Manon in Acts II and IV.

(The record, he whispers out a stunning high C in the latter scene.)

Renato Bruson has often been a proscenium performer on recordings (his Enrico on the recent Angel Lucia is a case in point), and while he doesn't capture all of Lescaut's devil-may-care ebullience or fully convey his two-faced attitude toward Manon, he sings sturdily and gives a competent portrayal. (Moreover, those wrestled a's of his, which often sound like fingernails on a blackboard, are seldom apparent.) Kurt Rydl is a sonorous, appropriately sinister Geronte; Robert Gambill, a bouncy Edmondo, offering a welcoming youthful sound not often encountered in this role; and Brigitte Fassbaender handles the little second-act madrigai (which Puccini purloined from the Agnus Dei of his early Mass) most pleasingly. The chorus—particularly the student group in Act I—sings with great vitality.

In short, this version of *Manon Lescaut* is, in all musical, dramatic, and technical aspects, as close to definitive as one can rightfully expect in our time.

**Bill Zakariasen**

**BARTÓK:**

*Concerto for Piano and Orchestra, No. 1; Sonata for Two Pianos and Percussion.*

The next time you want to get vicious in a game of musical trivia, defy your opponent to name the person who conducted for Pia Bartók when he unveiled his barbaric first piano concerto at the International Society for Contemporary Music's 1927 festival in Frankfurt. (The answer's at the end of the review.)

The French like to apply the word *brut* to this kind of music (they also apply the adjective to what we call primitive art). It makes one feel certain that Carlos Chávez thoroughly assimilated this concerto, as well as Bartók's second, before composing his own piano concerto a decade or so later. The Bartók work's pile-driver energy and its dissonances—minor seconds, major sevenths, and augmented octaves, not to mention two-hand partial clusters with multiple adjacent semitones—sound harsh enough even today; they must have really shocked the pants off earlier auditors.

This extremely difficult work demands performers with a rhythmic sense as solid as the Rock of Gibraltar; in this outstanding recording, it gets them. Vladimir Ashkenazy manages force and brilliance without becoming martellato or bouncy, and Georg Solti guides his Londoners through all those jagged meters with an absolutely sure hand. The ensemble leaves nothing to be desired.

The album notes tell us nary a word about Vokka Ashkenazy, the other pianist in...
the sonata. Since mutual Moscow friends call Vladimir Ashkenazy "Vova," I wondered at first whether he had resorted to diabolical electronic trickery of the sort Jaseh Heifetz once used to record Bach's Double Concerto with himself. No, I decided, not at these tempos, which considerably exceed those Bartók indicated in the two fast movements—and, unfortunately, actually interfere with the rhythmic articulation of the quarter-plus-eighth-note groups in the first movement and the dotted-eighth-plus-sixteenth-note groups in the last. Less self-destructively breakneck tempos would have benefited those two movements greatly. Also, the recording of the sonata at times fails to pass muster: For example, at measures 62-63 in the slow movement, the snare drum drowns out the second piano's high-B octaves almost entirely, and at 70, the first piano's 18 successive slow glissandos in thirds are simply inaudible. The two Ashkenazys (Incidentally, Vovka is Vladimir's son—Ed.) otherwise play almost too brilliantly, and David Corkhill and Andrew Smith perform prodigies with three tympani, a xylophone, side drums (both with and without snares), suspended cymbal, crash cymbals, bass drum, triangle, and tam-tam.

So who did conduct the world premiere of Bartók's first concerto? Wilhelm Furtwängler.

Paul Moor

SIBELIUS:


Sibelius:


Paavo Berglund's recording is the first installment in his second recorded cycle of the Sibelius symphonies. The first cycle was made for HMV with the Bournemouth Symphony Orchestra during the early 1970s, and the venture proved quite successful with Sibelian audiences and critics. However, only Nos. 1 and 5 were issued in this country (on Seraphim and Angel, respectively).

The current Angel single actually contains Berglund's third recording of the Fourth—he first recorded it about 15 years ago with the Helsinki Radio Symphony on Finnish Decca. I don't have that version at my disposal, but comparisons between the two Angel editions are rather striking. The Bournemouth Fourth is notably expansive throughout—in fact, many Sibelians found it much too expansive in the last movement, where the allegro molto in Berglund's hands begins at the indicated tempo, but by the end slows to a crawl.

The Helsinki version adheres far more closely to the score in this section, while the other three movements are marginally brisker than before. However, while taking note of the greater "correctness" of the later performance, I don't find it possesses the individual character heard in Bournemouth, where one gets the feeling of suspended awe and almost monumental desolation. This is strictly a personal reaction, and it must be
said that veteran collectors who remember the old Rodzinski-New York Philharmonic-Columbus 78-rpm set with affection will no doubt approve of Berglund's near carbon copy of it. (The "near" qualification is used because Rodzinski used bells in the last movement, whereas Berglund opts for the more frequently heard glockenspiel; controversy still reigns over what Sibelius really wanted when he wrote "glocken" in the score.)

When Berglund first recorded Symphony No. 7 in Bournemouth, he stated in the liner notes that he had made numerous corrections to the Wilhelm Hansen score that were based on the original 1924 manuscript. Presumably he used the same edition in Helsinki, but for these ears, the differences are infinitesimal. The performance, as before, is just in tempo and grand in expression—certainly a thoroughly competitive reading—though I find the delivery of the last few measures surprisingly perfunctory. The sonorities, at any rate, are commendably clear and full of impressive impact in the climaxes. Berglund's succeeding installments in this series ought to be interesting.

With the Bis No. 6, Neeme Jarvi and the Gothenburg Symphony continue their generally imposing traversal of Sibelius's complete orchestral works—tone poems, incidental music, et al., in addition to the seven symphonies—and the results here are quite satisfying. The Sixth is an especially tricky piece to bring off: Its transparent, often frighteningly exposed instrumental writing creates many pitfalls, while the fragmented nature of the themes and their development can contribute to an incoherent performance. Jarvi's long-breathed, yet tightly knit rendition seems to sew up most, if not all, of the myriad seams, and the orchestra is in excellent fettle. The strings in particular (who must often echo the a cappella choral writing of such Renaissance masters as Palestrina) have a wonderfully airy tonal quality, and the undulating counterpoint is exposed with complete technical assurance.

The recording (like others in this series, of a live performance in the Gothenburg Concert Hall) is free, clear, and open (the sound of the harp particularly so)—exactly what this sort of music deserves. The record's surface—and the audience—are commendably silent.

These virtues carry over to the flip side, which contains the customary nine-move-

ment suite taken from the 1905 Pelléas et Mélisande incidental music. Jarvi's presentation is alert and affectionate, and though this music is of little more than marginal importance in the Sibelius catalog, the sympathetic, atmospheric charm of the writing always makes for pleasant listening, particularly when delivered as well as it is here.

Speaking of Sibelius's incidental music, one hopes that it won't be too long before Jarvi tackles the complete music Sibelius wrote for the 1926 Swedish Theater production of Shakespeare's The Tempest. Thus far, only fragmentary suites have been available, but Sibelius actually wrote over 90 minutes of music—including vocal solos and chorus, all of it with instrumentation of extreme elaborateness—which makes it the largest work of his in any form.

Bill Zaltaniasen

MOZART (after J. C. Bach sonatas):
Concertos for Piano and Strings,
K. 107: No. 1, in D; No. 2, in G; No. 3, in E flat.

SCHRÖTER, J. S.:
Concerto for Piano and Strings, in C,
Op. 3, No. 3.

BRAHMS:

Thomas Hathaway

The concerto receives a splendid performance—broad, powerful, yet consistently lyrical in expression—that is mirrored in recorded sound of admirable depth and focus. Janos Starker's mastery of the cello needs no special pleading, and he is in top form here—his tone prevailing full and suave, his virtuosic technique completely in tow. Emmy Verhey is comparatively little-known in these parts, but she has apparently made quite a name on the Continent (among her teachers was David Oistrakh, and in 1966 she became the youngest violinist to win the Tchaikovsky Competition in Moscow). The beautifully shaded, technically commanding playing she offers here obviously places her in the big leagues.

Verhey and Starker work with admirable unanimity of purpose. The balance between their two instruments is excellent throughout, and the teamwork carries through to their collaboration with Arpad Joó and the orchestra. Joó's probing of detail (for instance, hear the subtle underlining of
WAGNER:

Lohengrin (excerpts).

Hofmann, Armstrong, Vogel, Ross, Connell, Wurtz, Bayreuth Festival Chorus and Orchestra. Nettl, Rudolf Weller, prod. CBS Masterworks M 38988 (A) 50c


It has finally occurred to me why Germany's handsome young heldentenor Peter Hofmann enjoys such extraordinary popularity in this country. If you thought that Little House on the Prairie and Lohengrin have nothing in common, think again. When Americans look at Peter Hofmann, they see in their imaginations Michael Landon in Lederhosen.

Some heroic tenors, like the great Lauritz Melchior, brought to their roles all the sex appeal of an oil drum. Particularly in Lohengrin—where at the hero's first appearance (Act 1, Scene 3), the chorus drools for 13 full measures over how schön he is—that lack of sex appeal presents a contradiction. But when someone like Hofmann comes along with both an attractive voice and manly beauty—bingo!

Germans call this sort of disc a Querschnitt (cross section)—in this case, of the 1982 Bayreuth Festival performance recorded live. These excerpts comprise, in full or in part, the first act's three scenes and the third act's latter two. The conductor here seems to be the recording's weakest feature. I gave up on him completely in Act III, Scene 2; when Wagner writes molto tranquillo, Woldemar Nelsson chooses that very mea-

Overture possesses similar virtues. Despite sharply honed discipline of the more famous bassoons at the beginning of the finale) pays homage to the present issue is definitely competitive.
that he is Parsifal's son, Lohengrin.

CBS's text department, as usual, has fallen down on the job. It says that the opening cut starts with "Gott grüsst Euch," sung by King Heinrich, when in fact it starts at the very beginning, where the Herald gets things going with "Hört! Grafen, Edle, Freie von Brabant!" CBS inserts a trilingual page that summarizes the story in exceptionally large print. It would have served purchasers better by devoting that space to small-type excerpts from the libretto.

Freie von Brabant!

WEBER:

Bavarian Radio Symphony Orchestra, Sawallisch. F. Ariz-Meleur, Dieter Seif, and Dietrich G. Wunder, prod. Orfeo C091-411 (D). (Distributed by Harmonia Mundi, U.S.A., CBS Masterworks 1M, Los Angeles, Calif. 90063.)

In a period of six weeks prior to his twenty-first birthday, Carl Maria von Weber wrote both of these symphonies, then abandoned them. Although he adored Mozart and Haydn (and disapproved of Beethoven as a dangerous radical), Weber imitated no one. If the opening movement of his First Symphony (the finer of the two works) recalls Mozart's Abduction from the Seraglio, it more startlingly anticipates Rossini, Donizetti, Bellini, and Schubert—the oldest of whom was fourteen at the time. Perhaps there was musical pollen in the air. Neither symphony is a historic plaque (or even a road marker) on the high road to Romanticism, but the First is every bit as ingratiating as those by Arriaga, Vorššek, and Bizet, while the Second, which Weber ends with a throwaway coda that fails to make its mark, nonetheless reveals a remarkable sense of fantasy.

Not only is conductor Wolfgang Sawallisch a conscientious and intelligent musician, he's a native Münchener in the bargain, meaning that the Bayerische Radio Symphony Orchestra knows him as London orchestras knew Sir Adrian Boult, quirks and all. Paced by an excellent solo oboe, they manage to play in tune and almost all of the time together. Sawallisch divides the violins, praise be; behind the firsts are cellos and double basses, behind the seconds, violas. As Orfeo recorded the winds, two bassoons sit left of center, next to them a single flute, and then a pair of oboes, all in a single row. Two trumpets play to the right of rear-center timpani, with a pair of French horns banished to the far-right corner.

The sound on CD, while not shrill or strident, fails to define a more specific chamber compass doesn't go beyond day-in, month-out standards on NPR, the tone is thickish. Just now, Orfeo is the only CD version with a U.S. distributor. However, while this review was being prepared, Academy Sound and Vision Ltd. in England published a CD of Neville Marriner's dashing 1982 performances with the Academy of St. Martin-in-the-Fields, licensed last year by the Musical Heritage Society and, I assume, the same ones that Vanguard offers on LP. When this reaches our shores, either in metropolitan import stores or on one (or both?) of the two U.S. licensing labels, Orfeo will likely have to forfeit first place, assuming the sound is as vivid on Compact Disc as the MHS cassette counterpart implies it can be.

Roger Dettmer

CRITICS' CHOICE

The most noteworthy releases reviewed recently

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


BEETHOVEN:

DEBUSSY:
Preludes, BK. 1 and 2; Reflets dans l'eau, from "Images," Set 1; Estampes.

Egorov: "Angel" DIS 2864, Jan.

HANDEL:
Concerto grosso, Op. 6, Nos. 5-8, 9-121.


HAYDN:
Symphonies Nos. 26, 41, 43, 44, 49, 52; Overture to "Le Pescatori," in C.


HONEGGER:
Symphonies Nos. 3, 5.


MAHLER:
Symphony No. 4, in G.


PROKOFIEV:

KODÁLY:
Suite from "HÁRY JÁNOSS.


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

St. Louis Symphony Orchestra, Städt. "RCA" ARC 1-5005, Jan.

ZAPPA:
Orchestral and Chamber Works.


MUARICE ANDRÉ:
Trompetissimo.


VIVALDI:
Concertos for Oboe, Strings, and Harpsichord: R.V. 447, 453, 457, 461, 463.

osity of the five soloists and three continuo players and their full realization of the music's sheer joy of living make this an album almost everyone except incorrigible Vivaldi-haters can cherish.

What a delight to hear such a small ensemble play works like these without orchestra! Although I recognize Heinz Holliger as not only an oboist of world renown but also one of Switzerland's leading avant-garde composers, and I can report that Felix Ayo has a solid, musicianly reputation in Europe, otherwise—since the album notes deal exclusively with the music—I can tell you nothing more about these remarkable artists. They obviously work together ex aequo, since they all share equal billing; and to judge from these sparkling performances, they may well get together just for the fun of it. This becomes apparent in the finale of R.V. 95, 101, and 108) amount to full-fledged, if short, concertos for recorder plus accompaniment. Her recorder has a cool, sexless timbre, free of all vibrato and reminiscent of a boy soprano. And no matter what length recorder she plays (including one in the piccolo register), Petri handles this elemental, almost primitive instrument with astonishing dexterity.

Included here are nine works on four LP sides. Listen to them individually; don't overlook it by playing an entire side at a time, let alone all four sides in succession! I think you'll find this set to be just as much fun as I do—and lovely, joyous music into the bargain.

Paul Moor

WAGNER: Der Ring des Nibelungen (excerpts)


Oh, yes, I thought, when this record came my way, Richard Wagner's Greatest "Ring" Hits, yet. I apologize for such a stupid first reaction, and I urge you not to have it, too. For one reason or another, Wagnerian excerpts like these have nearly vanished from American symphony programs, so in a sense, this record fills a gap. The Orchestre de Paris, ably conducted and thrillingly recorded, plays them about as well as you can expect to hear them anywhere.

I can never hear the first two Götterdämmerung excerpts without recalling Joachim Herz's inspired production at the Leipzig Opera during the Ring centennial year, when he caajoled—or possibly bullied—the conductor into letting him use this purely orchestral music for a pantomime on stage.
WHY PAY MORE?  COMPARE PRICES.

TOLL FREE 800-356-9514

Sansui S-517  $52
Floor-Standing 3-Way

Clarion Specials
8500  $65 pr
300EQB3  $99
SE980  $65 pr
4500  $99
8100  $129
6900  $149

Teac V-99  $319
CLOSE-OUT • BELOW DEALER COST

Why You Should Buy From WDS
1. Professional Audio and Video Consultants
2. Lowest DELIVERED Prices on Stereo's, VCR's, R/T's, Tapes, and Accessories
3. Over $10,000,000.00 Inventory
4. All Factory Fresh with U.S. Warranties
5. We Ship Complete C.O.D.
6. All Products Carry Our Famous Buyer Protection Plan
7. We Dare You To Compare

Mon-Thurs 8-8
Friday 9-8
Saturday 10-5

SANSUI S-517
8500  CALL FOR NEW LOW PRICE

3-HEAD AKAI GX5X
B&C + dbX  BRAND NEW

$179

CLOSE-OUT • BELOW DEALER COST

Mon-Thurs 8-8
Friday 9-8
Saturday 10-5

WDS WISCONSIN DISCOUNT STEREO
2437 w. badge rd. madison w 53713
C.O.D.

FREE McIntosh STEREO CATALOG and FM DIRECTORY

Get all the newest and latest information on the new McIntosh stereo equipment in the McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.

SEND TODAY!

McIntosh Laboratory Inc.
East Side Station P.O. Box 96
Binghamton, N.Y. 13904-0096

NAME
ADDRESS
CITY STATE ZIP

“Siegfried’s Rhine Journey” came off as rather trite, but the “Funeral Music” accompanied the defeated Wotan—the half-blind, exhausted old marauder—as he slowly proceeded, alone, between the columns of a kind of allée, making a slight gesture of farewell to each one of the symbols of his past glory. It provided one of the most touching moments in all my opera experience, and Daniel Barenboim’s realization of that superb music, with its grief exploding into outcries that challenge the very heavens, does it full justice. The opera’s finale gets off to an oddly tentative start here, interrupted by a succession of musical commas, but eventually its polyphonic weaving together of an almost endless leitmotif series raises it to the generally high level of the rest of these performances.

Paul Moor

RECITALS AND MISCELLANY

ARBOS/MADRID SYMPHONY: Spanish Program.


This quintessentially Spanish symphonic music is so familiar that it’s difficult, if not impossible, for youngsters to realize what an electrifying revelation of exoticism it was to those American concertgoers who first heard it over a half century ago, authoritatively conducted by Enrique Fernandez Arbo during his guest appearances in this country.

Arbo (1863–1939) was not only a close colleague of the four composers represented here but their most influential proponent. I’ve never forgotten my own first entranced encounter with most of these works on January 18, 1929, in Boston Symphony performances led by Arbo himself—scholar-spectacled and bearded like the pard. That experience was soon reinforced by hearing domestic releases of the Spanish Columbia recordings Arbo had made earlier with the Madrid Symphony to commemorate his twenty-five years as its director.

Reappearing in miraculous Barton Wim-
ble rejuvenations (by now almost expected from him), these same recordings again serve as paradigms of how this music should be inflected and colored—stylistic essentials that some of today’s star conductors have never fully mastered, least of all with the magisterial assurance of Arbos. I no longer have the original discs for direct comparisons, but rereading my 1929-30 Phonograph Monthly Review evaluations suggests that the present real-time chrome-tape processings have actually improved the 78-rpm shellac sonics, especially in lifting the veil that then somewhat diffused their full sonorities.

In any case, if you don’t know the extent to which tonal fidelity could be achieved in the late Twenties, you’re likely to be flabbergasted by the present documentary evidence. I’m convinced that the most significant improvement that the latest technologies can achieve is not in the musical sound itself but in more expansive acoustical ambience and more vivid apparent presence.

R. D. Darrell

GIDON KREMER: Waltzes and Polkas.

KREMER, Guth, Knikianian, Horningel. Philips 110.956-1 (D) E39

Maybe you can figure out this release; it sure beats the hell out of me. Here we have Gidon Kremer, first-prize winner in Moscow’s International Tchaikovsky Competition and one of today’s most impressive violon virtuosos, joined by three distinguished colleagues, and what do they offer us? Would you believe Viennese coffeehouse music? Note, too, that you don’t even get Johann Strauss, The Waltz King—you get his father.

Since Kremer, born in Riga, left the Soviet Union to settle in Munich, he has become known as what my old Texas friend John Henry Faulk would admiringly call “one o’ them ined-godamn-pendent sonofabitches.”

He makes concert managers all but froth at the mouth, not only by steering clear of the tried-and-true repertory, the old favorites that act upon audiences like magnets, but by using his position as a lever to insinuate into almost every recital at least one sizable score by such composers as Karlheinz Stockhausen and John Cage, whose works act upon most audiences like stink bombs.

I can’t help suspecting that this recording is some sort of quid pro quo, owing its (anonymous) production to some bit of genteel blackmail. The scholarly album notes, devoted entirely to chronicling the evolution of early 19th-century Austrian dances such as these, gives us no clue. I listened closely, all the way through, half expecting Kremer to come up with the musical equivalent of a whoopee cushion, an unexpected punch line to make the joke clear, but so help me, they play it all absolutely straight—no frills, no fireworks, nothing. If you happen to like this sort of stuff, though, you certainly will never hear it played better.

Paul Moor
Les Blank is in dog heaven. He’s comfortable in Poletown. He has been seen sucking beers in Lafayette, Louisiana, with Zydeco accordion king Clifton Chenier and his extended family. You might find him being his quiet self at a Serbian lamb-roast outside of Chicago. Blank is a highway patrolman on the remaining American folk-ways, and this forty-nine-year-old film maker knows the map about as well as anybody. He has visited Cajuns and Creoles, Texas bluesmen, Mexican-Americans, and polkaphiles from coast to coast and come back with their music, their recipes, and their stories. Regional cultures caught in the act of being themselves—that’s what he puts on film. In the process, he subverts time. As these lifestyles disappear, Blank records them reverently, playfully, so that things like New Orleans rhythms or the ruminations of an old man can mean something to spectators like us.

But if the work of time is central to Blank’s films, so is the philosophy of enjoying yourself to the max before time runs out. Talking on the phone from his El Cerrito, California, office, Blank told me that his pictures were, among other things, “a good excuse to go to a great party.” You could perhaps sense this simply from their titles: Spend It All, Always for Pleasure, In Heaven There Is No Beer? Though he’s a superstar at independent film festivals and his work is shown on public television and in museums all over the country, he’s not thrilled with either the fund raising or the production end of the business. But the movies—and the parties—leave one to wonder. Somebody was having a blast.

Blank inserts lots of empty spaces into his movies, moments when nothing much happens while a river bubbles across the screen or a car rattles down a flat road. But music is the organizing constant. Blank’s images of rural folk at work and play are set into the music, inlaid in a rambling, intuitive soundtrack that would never travel well as a mere album. He’s after an intense, quasi-mystical synthesis of picture and...
sound, and when he gets it, he makes you think you’re seeing an America you never knew before.

Originally from Tampa, Blank took advantage of getting the boot from a New England prep school to see a few things. After a couple of tries at college, his travels included a jaunt on a freighter and an extended stay in San Francisco. He wrote fiction and poetry, but he was never able to publish any of it. Deciding on a film-making career, he told me, was “a process of eliminating all the other things I wanted to do but couldn’t. I liked movies a lot. It didn’t seem like a person could know how to do all the things you had to do to make a movie.”

Blank made industrial and educational films, at first, and shot commercials for accounts like Smuckers and Holly Farms. This work, he says, got him interested in cooking. Some people say that Blank’s movies are even more about food than about music. This is heresy in my view, but Blank admits, “Any excuse I get to film food, I’ll take it.” After our interview, he was going to a festival where he was showing his love song to garlic, “Garlic Is As Good As Ten Mothers,” in “AromaRound”. Blank actually cooks 20 heads of garlic in a toaster oven as the film’s running.

Burden of Dreams, his 1982 documentary about the making of friend Werner Herzog’s Fitzcarraldo, was at the same time one of Blank’s most widely distributed and atypical films. An admirer of Herzog’s work, Blank was also influenced by directors John Ford, Fellini, and documentary maker Robert Flaherty (Nanook of the North). But two movies by Yugoslavian film maker and polemicist Slavko Vorkapich had a major effect on him: Fingal’s Cave and Forest Murmurs. Both sought to upgrade the value of music in a film, to make it carry as much information as the images do. Vorkapich worked in “a third stream,” he says, “making a fusion that becomes a new element.”

Blank is comfortable using music to help tell the story of a person’s life or in a non-narrative, ambient way. A Well-Spent Life is an account of seventy-five-year-old Mane Lipscomb, a blues musician who had never been recorded until an anthropologist stumbled onto him ten years before Blank made his film. Lipscomb’s blues are freighted with pain and loneliness, and they need no interpretation when he tells of his brutal sharecropper’s life in Natchitoches, Texas. Shot at and beaten, Lipscomb says, “Well, we was bound down and couldn’t do nothing but take it.”

But if the mournful music of A Well-Spent Life informs the murmured injustices of Lipscomb’s story, there’s nothing so clear about the music in Sprout Wings and Fly. What are we to make of the whacky, other-worldly yelp of seventy-eight-year-old Blue Ridge Mountain fiddler Tommy Jarrell? The film is dance-like, robust, and full of surprises. And if it’s laden with evocative concrete details, as in a scene in which a woman tells the story of her family as she peels layer after layer of plastic cloth off a weathered picnic table, the music at its center seems a little bit evasive, nonspecific.

While none of Blank’s films rely on song-by-song concert footage, set-piece scenes of artists at work stand among his best moments. In The Blues Accordin’ to Lightnin’ Hopkins guitarist Hopkins is Somehow monumental just being his relaxed self, when he picks up a guitar and begins to sing, the results are pretty extraordinary.

Spend It All begins Blank’s Louisiana trilogy, focusing on the Cajuns, descendants of 18th-century French-Canadian émigrés who live in remote bayous and whose language is a pidgin French that has survived primarily through oral tradition. The same year that Blank surveyed the Creoles in Dry Wood, he tracked Cajun accordionist Clifton Chenier in Hot Pepper.

The film follows Chenier through some heated performances and equally torrid Louisiana afternoons. There’s a marvelous montage of the master singing a blues lyric about being “a hog for you,” cutting to shots of Chenier chasing said animal along a riverbank. Hot Pepper is languid and playful, but it gives real dignity to the at-ease satisfactions of the people it films.

Always for Pleasure is the most riotous film Blank has ever directed. It’s built around the New Orleans Mardi Gras celebration, showcasing the “Indian tribes” (more like social clubs) who try to outdo rival tribes each year with the most sparkling and extravagant costumes. As the festivities begin, local legend and rhythm and blues singer Irma Thomas offers her recipe for red beans and rice, the incredible Wild Tchoupitoulas strut, and the even more incredible Professor Longhair—New Orleans’s greatest rock and roll piano player—holds forth. Later, octogenarian bandleader and trumpeter Kid Thomas Valentin expounds, “You know what a man once said: ‘If I’da known I was gonna live this long, I’d’a taken better care of myself.’ But you know, when he said it, he died.” In Always for Pleasure, the antidote to Valentine’s tale is to march in the streets as throngs of blacks and whites revel togeth-

Polka bandleader Renata Romanek, from In Heaven There Is No Beer

RJ Smith writes about music for The Village Voice and Creem.
er, too busy to see what time it is.

When I asked Blank how he got people to be so comfortable in front of the camera, so at ease with him, he claimed not to know. "Yeah, people ask me that, and I really don't know what to tell them. I just hope—hope like hell the people I film will act naturally, just emanate that feeling that looks good when it's on the screen."

"I'd like to think that after seeing a blues film of mine, white people might come out of the theater and not be so racist," Blank said. If the peaceful coexistence of youth and elders, whites and blacks found typically in Blank's tableaux is slightly unreal, it's not by accident. "We are the American people," a black barber proclaims in Hot Pepper, and the scene is both like a campaign ad in search of a candidate and a splendid statement of what Blank is about. He is such an effective assembler of documentary footage that he effortlessly leads you to believe you're really seeing the heartland rather than his fantasy of it.

For all the hand-held camera work and figures only partially captured within the frame, Blank isn't going for a verite style. He may well work, as he says, in a trance state. "I drink a lot of beer," he told American Film, "just to obliterate the . . . self-conscious self." But if the films have the look of anthropological studies, there is an unscientific aesthetic at work in them, as Blank pictorializes and emblematizes the lives of these folk. His fantasy is that peripheral cultures with their vanishing lifestyles are the heart and soul of America. In the classic role of documentarian, Blank preserves that which is passing; yet the progress that's crushing folk life (such as videocassette recorders on which we watch these films now) also makes Blank's work possible. Would that Blank also addressed this contradiction in his work.

There is also much weirdness and good humor in these films that isn't folkloric—strange, sometimes poetic going-on that are accidental. Moreover, Blank isn't just a preservationist; he makes you realize how the wisdom, foolishness, and fun of the cultures he films are present in today's urban world. Some things, he says, do not pass. "I think my films accomplish [a preservationist function], but I wouldn't call myself a preservationist. I like to think my films make people . . . feel good about their own lives. Whether it's the fact that jalapenos are a good thing or the fact of Mance Lipscomb's strength, the satisfaction Blank provides isn't just local color.

His last music film, In Heaven There Is No Beer? (1983), was a departure that perhaps points in a new direction. Focusing on polka bands and festivals and featuring stellar performances by Lil' Wally, the Mrozinski Brothers' Aleatoric Ensemble, and Renata Romanek and her Girls, Girls, Girls, In Heaven does not trip lightly. Where other Blank films balance the funky with the spiritual (he might accompany a blues performance with shots of birds flying and then cut to bodies grinning on the dance floor), this one is all funk, as over-stuffed with oom-pah as the sausages we see squirting unappetizingly into casings. This must be the first food scene by Blank that destroys your appetite.

The scores of dancers at the Polkabra- tion in New London, Connecticut, aren't somewhat mythical folk icons; you'd have a hard time seeing these pageants as salt-of-the-earth celebrations, because if anything, Blank accentuates the scene's hokiness. But polka people seem more real than other Blank subjects, their pleasures probably more like yours and mine. One critic called In Heaven "Les Blank's trip through hell!" I think, though, that it signifies his discovery of ordinary white people. If they are less interesting than his subjects usually are, their values project more honesty, that is, they come with less romanticizing on Blank's part. One of his next projects will be a movie about another group of white ethnics: Serbian-Americans.

Other upcoming films include one about Cajun chef Paul Prudhomme and one on gap-toothed women (reputed to be very sexy), as well as a music-related subject he declined to discuss. But before any of these projects is completed, Blank will have gone into debt. Financing his way out will involve a lot of savvy marketing after each picture is made. And then he'll start others.

"It would be nice if time would disappear altogether and leave us alone," Blank once said to a writer friend. But he knows better, and he knows how to cope; he was, after all, the guy who filmed the Mardi Gras high-stepper who said, "You'll be here today, you'll be gone tomorrow... I like people to have a nice time. And when I go, I want a little hand behind me. But for now, I'm having a little fun before I'm in the ground." Blank pounds the pavement for backers.
In this issue

Pop

ALPHAVILLE:
Forever Young
EUROGLIDERS:
This Island
THE JUDDS:
Why Not Me
JERRY LEE LEWIS:
18 Original Sun Greatest Hits
LOS LOBOS:
How Will the Wolf Survive?
REBA McENTIRE:
My Kind of Country
REPLACEMENTS:
Let It Be

Los Lobos
The House

Los Lobos
Rock
The House

Arriba Los Lobos: Perez, Loranzo, Berlin, Rosas, and Hidalgo.

Jazz

TOSHIKO AKIYOSHI:
Ten Gallon Shuffle
AMMONS & LEWIS:
Complete Blue Note Recordings
CHET BAKER:
Once Upon a Summertime
HAMIET BLUIETT:
Ebu
FREDDIE HUBBARD:
Classics
ART PEPPER:
Winter Moon
PORT OF HARLEM JAZZMEN:
Complete Recordings

Los Lobos:
How Will the Wolf Survive?
T-Bone Burnett and Steve Berlin, prod. Warner Bros. 25171.1

The exciting irony of Los Lobos’ debut album is that this east Los Angeles quintet’s bracing mix of Chicano rock ‘n’ roll and wired Spanish ballads constitutes the finest work yet from any of the new traditionalists. The ability of “American roots music”—the Blasters, the Del Fuegos, and Rank and File, for example—to acknowledge rock history in the wake of punk’s fast-forward acceleration is admirable, and their emphasis on boogie guitar in the flood of rarefied electronics may seem reassuring. But it’s hard to ignore the dubious conservatism or even the implicit jingoism of these bands. After all, who ever said that guitars were more patriotic than digital sequencers? Or, more to the point, that the early r&b beloved by these revivalists has more moral force than the modern r&b pillaged by the white pop dandy of your choice? For the supposed leaders of the pack, the Blasters (whose saxophonist Steve Berlin is now a full-time Lobo), the future presents itself as a vacuum: Even their most astute political songs feel like genre pieces set in some dim, neon past.

Los Lobos rely upon the familiar guitars and sax we associate with bar-band rockers; they also revel in the accordion and bajo sexto of Spanish traditionalists. But this band escapes being pegged as an artifact in a couple of ways. Their Hispanic heritage has provided them access to colors and rhythms beyond the reach of most white trad rockers, while their tenure (ten-years-plus) means that their sense of pop history is lived-through rather than heard-about. White bands that play rock and roll this unencumbered have always acted as emissaries of a foreign (i.e., black) culture—think of Presley with ’50s jump blues, the Stones’ guided tours of the Deep South. But Los Lobos’ richness—and their distinction—lies in the fact that, as self-conscious inheritors of Chicano music tradition, they can work both sides of the fence. They act as both exemplars and assimilators. Not only are they ca-
pable of vibrant, first-hand Spanish tunes like Cesar Rosas's "Corrida #1," their rockers (the crushing opener, "Don't Worry Baby") and country plaints (the quietly bitter "The Breakdown") are effortless incorporations of those Spanish roots.

Listening to How Will the Wolf Survive?, you often wonder if the foursquare conventions of rock and roll can be renewed only by cultural outsiders. In a sense, Los Lobos' bravest move—their commitment to Hispanic numbers like "Serenata Noriegana" and "Corrida #1," with their snapping, polka-like beats, breezy accordion, and (in the first case) non-English lyrics—is also their simplest coup on purely musical terms; they aim only to electrify a known (if unfamiliar) form. What puts these songs across is the defiant pride with which they are played, a pride of heritage that's absurd to most cynical rock audiences. When vocalists David Hidalgo and Cesar Rosas tear across the maniac, ito-pah workout of "Serenata Noriegana" with the same verve that they rip through "Don't Worry Baby," they mean to test rock and roll's open-door policy politely and not-so-politely.

Los Lobos' deeper and subtler work occurs when they jolt American commonplaces with their native rhythms, thus eluding the pinched beats that limit most '50s-based rockers. "Evangeline," a biting tribute to a "queen of make-believe" that's worthy of Chuck Berry, and "I Got to Let You Know" with their snapping, polka-like beats, breezy accordion, and (in the first case) non-English lyrics—is also their simplest coup on purely musical terms; they aim only to electrify a known (if unfamiliar) form. What puts these songs across is the defiant pride with which they are played, a pride of heritage that's absurd to most cynical rock audiences. When vocalists David Hidalgo and Cesar Rosas tear across the maniac, ito-pah workout of "Serenata Noriegana" with the same verve that they rip through "Don't Worry Baby," they mean to test rock and roll's open-door policy politely and not-so-politely.

Los Lobos' deeper and subtler work occurs when they jolt American commonplaces with their native rhythms, thus eluding the pinched beats that limit most '50s-based rockers. "Evangeline," a biting tribute to a "queen of make-believe" that's worthy of Chuck Berry, and "I Got to Let You Know" with their snapping, polka-like beats, breezy accordion, and (in the first case) non-English lyrics—is also their simplest coup on purely musical terms; they aim only to electrify a known (if unfamiliar) form. What puts these songs across is the defiant pride with which they are played, a pride of heritage that's absurd to most cynical rock audiences. When vocalists David Hidalgo and Cesar Rosas tear across the maniac, ito-pah workout of "Serenata Noriegana" with the same verve that they rip through "Don't Worry Baby," they mean to test rock and roll's open-door policy politely and not-so-politely.

Los Lobos' deeper and subtler work occurs when they jolt American commonplaces with their native rhythms, thus eluding the pinched beats that limit most '50s-based rockers. "Evangeline," a biting tribute to a "queen of make-believe" that's worthy of Chuck Berry, and "I Got to Let You Know" with their snapping, polka-like beats, breezy accordion, and (in the first case) non-English lyrics—is also their simplest coup on purely musical terms; they aim only to electrify a known (if unfamiliar) form. What puts these songs across is the defiant pride with which they are played, a pride of heritage that's absurd to most cynical rock audiences. When vocalists David Hidalgo and Cesar Rosas tear across the maniac, ito-pah workout of "Serenata Noriegana" with the same verve that they rip through "Don't Worry Baby," they mean to test rock and roll's open-door policy politely and not-so-politely.

Los Lobos' deeper and subtler work occurs when they jolt American commonplaces with their native rhythms, thus eluding the pinched beats that limit most '50s-based rockers. "Evangeline," a biting tribute to a "queen of make-believe" that's worthy of Chuck Berry, and "I Got to Let You Know" with their snapping, polka-like beats, breezy accordion, and (in the first case) non-English lyrics—is also their simplest coup on purely musical terms; they aim only to electrify a known (if unfamiliar) form. What puts these songs across is the defiant pride with which they are played, a pride of heritage that's absurd to most cynical rock audiences. When vocalists David Hidalgo and Cesar Rosas tear across the maniac, ito-pah workout of "Serenata Noriegana" with the same verve that they rip through "Don't Worry Baby," they mean to test rock and roll's open-door policy politely and not-so-politely.

Los Lobos' deeper and subtler work occurs when they jolt American commonplaces with their native rhythms, thus eluding the pinched beats that limit most '50s-based rockers. "Evangeline," a biting tribute to a "queen of make-believe" that's worthy of Chuck Berry, and "I Got to Let You Know" with their snapping, polka-like beats, breezy accordion, and (in the first case) non-English lyrics—is also their simplest coup on purely musical terms; they aim only to electrify a known (if unfamiliar) form. What puts these songs across is the defiant pride with which they are played, a pride of heritage that's absurd to most cynical rock audiences. When vocalists David Hidalgo and Cesar Rosas tear across the maniac, ito-pah workout of "Serenata Noriegana" with the same verve that they rip through "Don't Worry Baby," they mean to test rock and roll's open-door policy politely and not-so-politely.

Los Lobos' deeper and subtler work occurs when they jolt American commonplaces with their native rhythms, thus eluding the pinched beats that limit most '50s-based rockers. "Evangeline," a biting tribute to a "queen of make-believe" that's worthy of Chuck Berry, and "I Got to Let You Know" with their snapping, polka-like beats, breezy accordion, and (in the first case) non-English lyrics—is also their simplest coup on purely musical terms; they aim only to electrify a known (if unfamiliar) form. What puts these songs across is the defiant pride with which they are played, a pride of heritage that's absurd to most cynical rock audiences. When vocalists David Hidalgo and Cesar Rosas tear across the maniac, ito-pah workout of "Serenata Noriegana" with the same verve that they rip through "Don't Worry Baby," they mean to test rock and roll's open-door policy politely and not-so-politely.

Competent rock 'n' roll that is both sensitive and harsh isn't as rare as the Replacements and most of their supporters would like us to believe. The rock press, who outside of Minneapolis account for most of this group's fans, have been looking for a way to empathize with the youth and energy of hardcore punk since it caught their attention a few years ago. But the genre frustrated them because they thought it was humorless, too self-involved, and lacking in good musicians. Finally the Replacements came along: an American post-hardcore band they could embrace.

For three LPs, the band delivered chunky, punk-laced hard rock (or is that "rock-hard-laced punk"). That toyed with recklessness, drunkenness, tears, and pure pop. Let It Be does, too. Their rock 'n' roll is loose and natural; everything has the feel of a 3 a.m. set, full of jokes and hastily composed songs. It's certainly not earthshaking—but it doesn't try to be. (Likewise, the Replacements' reputation for soggy, spontaneous, and unpredictable performances is misunderstood. I think that "childish, dis-
In shaping modern jazz to his personal specifications, Charlie Parker had achieved immortality a full decade before his death in 1955. Thirty years later, his harmonic vocabulary still forms the backbone of jazz. Yet Parker himself often seems as phantasmagoric as a Biblical elder. Because his career predated the jazz LP boom of the late 1950s, his work has generally reached modern listeners via haphazard compilations. It wasn't until the mid-1970s, for example, that the alto saxophonist's Savoys and Dials were assembled chronologically on American albums; and the Dial box issued by Warner Brothers in 1977 (when it looked as though Richard Pryor would star in a Parker film bio) is already out of print.

The records that Parker made over the last decade of his life for the Norman Granz-affiliated labels (that eventually became Verve) have met with a kinder fate over the years. And now they have been collected in one lavish ten-record boxed set, which lists for a whopping $100. Since all the Parker Verves, including copious alternate takes, have been reissued numerous times in a variety of formats, nothing in this set will be new to Parker completists. They'll probably want it anyway, if only for the crisp remastering, the quiet Japanese pressings, and the easy-to-read 24-page Parker discography that lists even air checks and clandestine private tapes only rumored to exist. More important to the general listener, however, this surfeit of Charlie Parker lends to his uneven Verve recordings a focus they have always seemed to lack.

Despite their greater availability, Parker's Verves have never enjoyed the cachet of his earlier Dials, which is easy to understand. Thirty years after the fact, one can still berate Norman Granz for mortgaging Charlie Parker's genius to string orchestras, vocal choirs, unsympathetic percussionists, and unproductive all-star jams. Even so, one comes away from these records admiring Parker's resourcefulness in hurling every obstacle strewn in his path. If the Savoys and Dials captured Parker at his most innovative (and in the most hospitable surroundings), the Verves captured him at his most insouciant. He slices through the strings, soars above the cooing voices, blasts his way out of a rhythmic impasse with the Latin percussionists, picks up steam from Buddy Rich's overly eager drumming on the famous 1950 reunion with Dizzy Gillespie, and at the jam sessions finds in the blues the common denominator in bop and swing.

The Jazz at the Philharmonic donnybrooks, which consume the first five sides of this collection and represent its only departure from strict chronology, would be valuable if only for contrasting Parker's rhythmic values to those of such swing-era lions as Coleman Hawkins, Roy Eldridge, and Lester Young. The pandemonium going on around Parker didn't prevent him from fashioning at least two solos that can be studied as masterpieces of harmonic paraphrase: the choruses of "Embraceable You" and "Oh, Lady Be Good." Parker's soulful choruses on "Funky Blues" (a studio confrontation with Johnny Hodges and Benny Carter) also stand up close inspection, although it is tenor saxophonist Ben Webster who walks away with top honors here. Strings and voices clearly represented an attempt to domesticate Parker for mass consumption, but his balladeering on these tracks is positively luminous, particularly on a reading of "Just Friends" that is reportedly the only one of his own recordings he would admit to liking.

Since Parker's natural habitat was the small group, it is not surprising that the best sides he made for Verve were the many featuring members of his working bands, including trumpeters Miles Davis, Kenny Dorham, and Red Rodney; pianists Hank Jones, Al Haig, and John Lewis; bassists Ray Brown and Percy Heath; and drummers Max Roach, Kenny Clarke, and Roy Haynes. Parker's finest recorded performances of "Confirmation" and "Lover Man" are here, along with remakes of "Now's the Time" and "KC Blues" that compare favorably to the originals. Parker was an inconsistent player toward the end of his life, but in retrospect, his very last studio date (devoted to the music of Cole Porter) emerges as one of his most prophetic. His tone had darkened and thickened and become playfully strident by 1954, and it is this teasing approach to standards that served as the model for countless hard-bop saxophonists.

As with any great artist, there is major Parker and minor Parker, and Charlie Parker on Verve includes its share of both. But minor Parker is still great jazz if only because his every phrase is still being echoed a thousand times over.
courteous, and self-defeating" is a more apt description of them.)

However, these guys really can connect on vinyl when they drop their loud, inebriated, and sloppy pose. You see, primary Replacement Paul Westerberg (vocals, songwriting, rhythm guitar, and various other instruments) has a lot of talent and soul; he may not be original, but he does possess true style. Accordingly, the band works best when he's running the show, his heart and voice straining, out front, calling the shots: the moaning melodrama of "Unsatisfied," "Sixteen Blue," and "I Will Care." for example. Or "Answering Machine," where he handles all the instruments—a neat piece of guitar-ensemble composition passing as pop.

But when Westerberg brings the bottle and his tail-chasing buddies into the picture, we've got a cliché-ridden bunch of reactionaries who, although spirited, are little more than guitar-wielding clowns. "Seen Your Video" is an okay but (mostly) clumsy instrumental track with the refrain, "Seen your video/We don't wanna know!" Who the hell are these guys to consider themselves above MTV? In their own way, the Replacements may not be original, but he does possess true writing, rhythm guitar, and various other instruments at the helm, are strong and communicative. Knight can come across like a rough-and-ready rock crawler with a Kim Carnes growl, yet she delivers legato melodies with a sure, resonant sound and adept phrasing. In "Heaven," when she sings after a well-timed pause, "I don't want to live in this place," you really must believe her earnestness. Unfortunately, she and Lynch are guilty of occasional garbling.

The integration of synthesizers and instruments is another strength of the ensemble. A lot goes on, and as a result many cuts follow. The side ends with the haunting "Cold Comfort," sung by Grace Knight.

All the vocals, including backup by the band, are strong and communicative. Knight can come across like a rough-and-ready rock crawler with a Kim Carnes growl, yet she delivers legato melodies with a sure, resonant sound and adept phrasing. In "Heaven," when she sings after a well-timed pause, "I don't want to live in this place," you really must believe her earnestness. Unfortunately, she and Lynch are guilty of occasional garbling.

The integration of synthesizers and instruments is another strength of the ensemble. A lot goes on, and as a result many cuts follow. The side ends with the haunting "Cold Comfort," sung by Grace Knight.

Among the songs, including backup by the band, are strong and communicative. Knight can come across like a rough-and-ready rock crawler with a Kim Carnes growl, yet she delivers legato melodies with a sure, resonant sound and adept phrasing. In "Heaven," when she sings after a well-timed pause, "I don't want to live in this place," you really must believe her earnestness. Unfortunately, she and Lynch are guilty of occasional garbling.

The integration of synthesizers and instruments is another strength of the ensemble. A lot goes on, and as a result many cuts follow. The side ends with the haunting "Cold Comfort," sung by Grace Knight.

All the vocals, including backup by the band, are strong and communicative. Knight can come across like a rough-and-ready rock crawler with a Kim Carnes growl, yet she delivers legato melodies with a sure, resonant sound and adept phrasing. In "Heaven," when she sings after a well-timed pause, "I don't want to live in this place," you really must believe her earnestness. Unfortunately, she and Lynch are guilty of occasional garbling.

The integration of synthesizers and instruments is another strength of the ensemble. A lot goes on, and as a result many cuts follow. The side ends with the haunting "Cold Comfort," sung by Grace Knight.

All the vocals, including backup by the band, are strong and communicative. Knight can come across like a rough-and-ready rock crawler with a Kim Carnes growl, yet she delivers legato melodies with a sure, resonant sound and adept phrasing. In "Heaven," when she sings after a well-timed pause, "I don't want to live in this place," you really must believe her earnestness. Unfortunately, she and Lynch are guilty of occasional garbling.

The integration of synthesizers and instruments is another strength of the ensemble. A lot goes on, and as a result many cuts follow. The side ends with the haunting "Cold Comfort," sung by Grace Knight.
mother-and-daughter duo, are perfectly suited to the shimmeringly simple songs they sing on their debut LP, Why Not Me. Their mild, unornamented voices float over acoustic instrumentation with a mere hint of the grit and pathos that so often characterize country songs. Neither Wynonna nor her mother, Naomi, is as distinctive or emotive as, say, Tammy Wynette, but their music imposes different demands than hers, demands that they meet effortlessly.

"Mama He's Crazy," the album's first single, has a clever melodic twist and just a suggestion of rowdiness. Its follow-up, "Why Not Me," was, frankly, '84's best country song: a heartrendingly pure voice (Naomi or Wynonna? It's impossible to tell) framed by a bare-bones acoustic arrangement. Every cut is marked by similar qualities: ease, grace, and understatement. McEntire, on the other hand, is a well-known star. A former rodeo barrel racer and '84's Country Music Association Female Vocalist of the Year, she's one of the first veteran performers to hop on the new-traditionalist bandwagon.

Establishing herself as one of country's dominant artists, McEntire has released albums featuring love songs with the syrupy strings and background vocals that used to typify the Nashville sound. Just a Little Love, her last LP and a commercial breakthrough, relied on strong material and an easy-listening approach. My Kind of Country leaves the syrup behind to show Reba at her most powerful and sincere. She's still somewhat slicker than the Judds, but acoustic instruments are emphasized in these quite wonderful bluegrass-oriented melodies, and McEntire controls each song completely. She has never been as self-assured as on these tracks.

Country music sounds as down-home today as it did when Hank and Lefty ruled the jukeboxes. If the new traditionalism continues to produce acts like the Judds and seduce old ones like Reba McEntire, even Kenny Rogers will wind up singing over fiddles. 

Crispin Sartwell

JERRY LEE LEWIS: 18 Original Sun Greatest Hits.

Jerry Lee Lewis, the notorious "Killer" of rock and country legend, recorded his most brilliant, most incendiary, and most commercially successful work for Sam Phillips's equally legendary independent, Sun Records. These primary texts, constituting a fragmentary rock 'n' roll creation epic, were cut in Memphis between November 1956, just a year after Phillips had sold Elvis Presley's contract to RCA, and August 1963, when the Sun was clearly setting. Of Lewis's more than 50 Sun sessions, roughly 40 were taped in the cramped, chronically impure and clinically hopeless studio at 706 Union Avenue where a few extremely loose and lubricious country boys—of whom Jerry Lee was the loosest and most lubricious—changed the course of modern music.

Today this minuscule downtown studio is a tourist-bus stop. You can buy a T-shirt and marvel at how grossly inadequate the room and equipment were to any musical purpose. Which is why, when I heard about this CD, I thought it was a joke. Rock's gorgeous equivalent of the coffee-table gift book, the 12-record boxed set entitled Jerry Lee Lewis: The Sun Years (Charly Sun Box 101), had already documented each session exhaustively with what I took to be the best reproduction of Lewis's "Pumping Piano" and Phillips's unique slapback echo that anyone might ever achieve—or want. After all, if one of Jerry Lee's scratchy 45s could rouse any roomful of sentient beings anywhere, who needed this laboratory overkill? Transfer to Compact Disc seemed an ill-conceived digital disaster—at very best, a violation of the rudest-of-the-rude-boys spirit that hovered over the Sun sessions.

But high technology hasn't de-raunched Jerry Lee Lewis. Nothing could. Instead, the familiar keyboard-pounding and sly vocal intimations of "Whole Lotta Shakin' Goin' On" have remarkable fullness, with nothing pristine or overfiltered whatsoever. Lewis's heavy breathing on "Breathless" and Roland Janes's jangling guitar on "High School Confidential" have sonic impact beyond anything I might have previously imagined. Janes, who's heard on every track but one, is particularly well served by the CD's clarity and right-in-the-room presence. His solos range from the truly bizarre, on the Lewisization of Hank Williams's "Jambalaya," to the sinuous lines winding through "Drinkin' Wine Spo-Dee O'Dee." Most of all, though, I am impressed by how well such a transparent medium highlights Lewis's spectacular—and relentlessly self-promoted—gifts as an absolutely unique stylist.

Though fewer than half the songs on 18 Original Sun Greatest Hits were even released as singles, the title is appropriate both as a bit of Jerry Lee-style braggadocio and as an apt description of the well-chosen and well-programmed contents. As Lewis declares with characteristic modesty at the end of "Big Legged Woman," "It's a hit!" For me, the technology is a hit as well.

Jeff Nesin

TOSHIKO AKIYOSHI JAZZ ORCHESTRA, FEATURING LEW TABACKIN: Ten Gallon Shuffle.

Composer and arranger Akiyoshi

JAZZ ORCHESTRA, FEATURING
LEW TABACKIN:

LEW TABACKIN:

Composer and arranger Akiyoshi

On Ten Gallon Shuffle, composer-arranger-pianist Toshiko Akiyoshi combines Duke Ellington's elegance, Charles Mingus's intensity, and Count Basie's clarity to achieve her goal: a beautifully conceptualized, well-planned, and exquisitely digestible record.

The sixteen-piece orchestra showcases five originals featuring Akiyoshi's special gift. Her arrangements double and triple instruments that, since Ellington's tenure, have been employed singularly. Indeed, one
of Akiyoshi's compositional strengths lies in her ability to extend the possibilities of a big band while remaining within its traditional boundaries.

This is the third album the leader has re-formed the big band. In an attempt to improve their plight, Akiyoshi and her co-leader, husband Lew Tabackin, moved from Los Angeles to New York and

The exemplary "Jamming at Carnegie Hall," begins with her lively, hammering, melodic piano, whose pace gradually increases and is accentuated by teenage drummer Scott Robinson's cymbal and snare patterns. The ten-minute cut features six consecutive solos, each buoyed by Robinson's relentless yet subtle percussion work. Frank Wess's flute is a standout, as is the son's relentless yet subtle percussion work.

Temperaments are distinctly altered during "Fading Beauty" and "Happy Hoof," A slow, sumptuous, full-bodied piece. Ten Gallon Shuffle and the album's most boppish, exuberant tenor sax solo. The ten-minute cut features six

The introspective epic "Blue Dream" explores many moods. Two delicate, enticing, interrogative piano all lure the listener's interest. "A slow, sumptuous, full-bodied piece."

FREDDIE HUBBARD:

Freddie Hubbard and Ed Michel, prods. Fantasy F 9635

FREDDIE HUBBARD:

Typical. All in all, a great album.

Jonathan W. Poses

MARCH 1985
number of Freddie Hubbard releases during the past few years, why did Fantasy feel compelled to milk a third volume out of the trumpeter's quite recent but by no means historic '81 Keystone Korner date? And given the dearth of new original domestic releases from Chet Baker, why reissue a record that was just out on Artists House four years ago—and release it sans the original informative liner notes and any indication that the record's a reissue?

Usually, the best a reviewer can do with the unexceptional but basically respectable mainstream jazz release is routinely describe how tenor man A does that which he generally does, quite well once again, while trumpet B does this which is his wont, and a generally good job at that. Meanwhile, the justifiably bored reader skips ahead to the Ally good job at that. Meanwhile, the justifiably bored reader skips ahead to the David Murray or Shannon Jackson review, thinking here, at any rate, may be something to hold my attention. Enough problems, then, without the record being a retreat as well. Problems, too, for the jazz fan who isn't obsessive and/or well-heeled enough to be a completist . . .

True, the Hubbard is superior to some of his more embarrassing "commercial" studio efforts like Splish and Ride Like the Wind, but Classics still isn't much different from its predecessors Keystone Roll and A Little Night Music. This time there's one cut to a side, the alleged classics being "Red Clay" and "First Light," modest hits from Hub's early Seventies (CTI) period. Again the trumpeter shares the front line with tenor saxist Joe Henderson and vibist Bobby Hutcherson, and at 20 minutes a cut, everybody gets a chance to stretch. Fortunately, all three musicians are up for it, even though Henderson bogs down somewhat in his personal clichés on "Red Clay." The rhythm section—Billy Childs, piano; Larry Klein, bass; Steve Houghton, drums—sounds a mite muddily, the piano and drums being overmixed to the detriment of, mainly, Hutcherson and Klein. The bassist's solos, however, are exemplary: chops, imagination, a talent to watch.

True, too, that the Baker date is a successful change of pace for the trumpeter. Recorded in '77 and featuring the late tenor saxist Gregory Herbert, pianist Harold Danko, bassist Ron Carter (mixed, in the modern manner, as though he were on the front line; with Carter that's a plus), and drummer Mel Lewis, it's a more aggressive-ly swinging album than is customary from Baker and is recommended to those who might have (unfairly) classified him in their minds under Romanticist: limp. For those who find the Miles influence in Baker's playing a bit off-putting, a strong individual voice can be heard here on, ironically, an uptempo rendition of Miles's "ESP": Only on the 11-minute title cut do we get the cool sadness that Baker is most associated with.

All true, but still one wonders why these records were released, set loose in the already glutted and woefully small jazz marketplace and doomed, no doubt, to a long life in the cutout and resale bins.

Richard C. Wala

ART PEPPER:
Winter Moon.

The success of most jazz-with-strings albums depends on the soloist's ability to interact without becoming submerged. Winter Moon, a overlooked release from 1960, features alto saxophonist Art Pepper, a jazz rhythm section, and violins and cellos arranged by Bill Holman and Jimmy Bond. Pepper's hirsute sweet tone, tensely involved phrases, and tough-minded swing offset the sweet textures and conventional phrasing of his accompaniment. Two cuts are near masterpieces: the blues "That's Love" and the title cut, Hugy Carmichael's rarely played ballad. The rest is almost up to this standard, including Pepper's clarinet feature, "Blues in the Night."

The Compact Disc brings out more clearly the clever accenting of the strings. The arch introduction to "That's Love" begins with four bars of tentative, attenuated strings; then, with the first notes of Pepper's solo over Cecil Mcbee's grand and bluesy bass, the song falls into a rich, loping groove. It's like having a scratchy black-and-white movie turn suddenly into Technicolor.

The original LP's slight boominess in the bass is gone, replaced by a sound that's warm as well as solid, and Pepper's alto is more accurately portrayed. The expanded sonic range of the Compact Disc changes the texture of the performances in minor ways: one example, the greater prominence of the drummer's snare brushes at the beginning of "When the Sun Comes Out," I find distracting. Howard Roberts's guitar solos—especially on "That's Love"—are appealing, as is Stanley Cowell's piano. But the reason to listen is Art Pepper, here at his most lyrical.

Michael Ullman

ALBERT AMMONS AND MEADE LUX LEWIS:
The Complete Blue Note Recordings.

The multidimensional value of Mosaic Records, the reissue project organized by Michael Cuscuna and Charlie Lourie, is made brilliantly clear in these two sets. They contain a number of exceptional performances; a few are jazz classics, and almost all are of unusual historical interest. Most of them, recorded during the 78 era, have never before been collected on LP.

Alfred Lion heard pianists Meade Lux Lewis and Albert Ammons at Carnegie Hall in John Hammond's "Spirituals to Swing" concert on December 23, 1938. Two weeks later, Lion had them in a recording studio cutting 17 solo sides and two duets. Lewis and Ammons appeared on both sides of 16 of the first 23 records released by Blue Note as soloists, as a duo, or as members of the Port of Harlem Jazzmen and its various offshoots.

The two pianists inspired a brief boogie-woogie fad, and most of their Blue Note records reflect that fact. Six LP sides might seem like more piano boogie-woogie than anyone would ever want to hear, but not once you get into the Complete Blue Note set and discover the differences between the players as well as the variations they developed within a limited form.

The Port of Harlem Jazzmen were basically a four-man rhythm section with trumpeter Frankie Newton, trombonist J. C. Higginbotham, and, on two numbers, Sidney Bechet on soprano sax or clarinet. But the group also broke down to three quintets led by one of the horn men. Ammons was the pianist on one of their two sessions, Lewis on the other. Higginbotham is wonderfully rugged and mesular here, and the almost forgotten Newton plays with subtlety and warmth. The most celebrated performance in this collection, however, is Bechet's "Summertime," which made him a star again.

John S. Wilson

(Continued on page 87)
1-800-431-3232
B&O ** audio-technica ** AKG ** Ortofon
Dynavector ** Grace ** PICKERING ** Stanton
We quote pro advice ** lowest price
24 hr. Shipment on all our equipment
C.O.D.'s are Okay, call us, don't risky
P.O. Box 37, Brooklyn, NY 11204 (718) 436-6400

HARMAN/KARDON, NAKAMICHI, CROWN, CARVER, HAFLER, THORENS, TANDBERG, REVOX, NAD, LUXMAN, DCM, DBX, ELECTRO-VOICE, VANDERSTEIN, AND OTHER QUALITY COMPONENTS. BEST PRICES - PROFESSIONAL SERVICE, EAST (804) 262-4000, WEST (818) 840-0978.

NOTICE TO REVOX BUYERS: Unauthorized dealers are selling Revox products not designated for sale in the USA. STUDER REVOX AMERICA CANNOT BE RESPONSIBLE FOR ANY WARRANTY SERVICING OF PRODUCTS SOLD BY THESE DEALERS. For the location of your nearest authorized Revox dealer, call or write: Studer Revox America, 1425 Elm Hill Pike, Nashville, TN 37210 (615) 256-5561.


BANG & OLUFSEN FULL LINE, ADS, B&W AND BOSE SPEAKERS AND OTHER QUALITY PRODUCTS AT REASONABLE PRICES. SOUNDCREST, INC., (201) 756-4856.

PEOPLE WHO KNOW STEREO BUY THEIR SOUND DIRECT. Now you can buy the finest in High Fidelity components, including esoterics and autosound, at unheard of prices. DIRECT SOUND MARKETING provides sensible expert advice, in-house service facilities and factory fresh components on an in-stock basis. Discover America's best kept audio secret. Send $1.00 for our informative catalog to DIRECT SOUND MARKETING, Dept. H, 3095 Bolling Way, Atlanta, GA 30305, or call 404-233-9500. M/C, VISA and AMEX accepted.

FACTORY ORIGINAL DIAMOND NEEDLES & PHONO CARTRIDGES. MOST POPULAR LINES AT DISCOUNT PRICES. FOR FREE CATALOG SEND SELF ADDRESSED STAMPED ENVELOPE. USA, Box 6h, Brooklyn, NY 11218. CALL TOLL FREE (800) 221-0906, N.Y. (718) 871-3303. VISA/MC.


ACOUSTAT, COMPACT DIGITAL PLAYERS, MITUBISHI, SAE, HAFLER, NAKAMICHI, KLIPSCH, THORENS, FRIED, ADCOM, MIRAGE, PS, GRADO, more. Immediate, FREE Shipping! READ BROTHERS STEREO, 593-C King Street, Charleston, South Carolina 29403. (803) 723-7272.

EXCEPTIONAL AUDIO REPRODUCTION SYSTEMS... REASONABLY PRICED! E.A.R.S., P.O. Box 658-H, West Covina, CA 91790. 618/961-6158. EVENINGS. WEEKENDS. STAMP BRINGS MONTHLY SPECIALS. MC/VISA.

CALL US! HARMAN-KARDON, PERREAX, SAE, STAX, ADCOM, KLIPSCH, HEYBROOK, PYRAMID, AUDIO PRO, VSP LABS, HAFLER, NAD, AMBER, DENON, TANDBERG, ADS, DCM, CONRAD-JOHNSON, GRACE, DBX, PS AUDIO, OHM ACoustics, GRADO, DYNAVECTOR, INFINITY, NITTNY GRITTY, MONSTER ALPHA, AKG, CELESTION, AUTOMOTIVE, SOMY, THORENS, KENWOOD, ZAPCO, CRIMESTOPPERS SECURITY, MORE! FRIENDLY, EXPERT CONSULTATION. FAST, FREE SHIPPING! MC/VISA.

REFERENCE AUDIO SYSTEMS, 18214 DALTON AVENUE, GARDENA, CA 90248. (213) 398-4205, (213) 391-2679.

Tapes & Records
AMPEX PROFESSIONAL SERIES AUDIO TAPE SALE! High Quality Open Reel 1800' or 2400' on 7" reels. Used Once. Case of 40, $450.00, 105, $360.00 and Cassette. MC/VISA. Vtech Electronics, Box 6-H. Richboro, PA 18954 (215) 322-4866.

ORGAN AND CHORAL RECORDS. For catalog write Gotlic Records, P.O. Box 1576 A Tupin. Cafl 92681.

LOW PRICE TAPE RECORDER CARTRIDGES. DISC Set of 10 for $2.49. Write for Discontinued Models. 444 South Victory Burbank, California 91502 (213) 869-4771.

MURRAY PERAHIA
(Continued from page 60)

passionata. He is also recording Les Adieux and has no doubt that other sonatas will find their way onto disc. Other recent sessions include a Mendelssohn recital [see review this issue], Schubert’s late G major Sonata (though not the great B flat, which amazingly he has yet to learn), and the Wanderer Fantasie, which is due to be coupled with Schumann’s C major Fantasy. Perahia is reluctant to talk about additional projects, but when I mention Bach and, in particular, The Well-Tempered Clavier (with which he likes to start each day at the keyboard), he grins in anticipation: “The idea hasn’t escaped me!”

Perahia and his wife, Ninette, live in a comfortable, totally unostentatious house in a leafy suburb of West London, complete with the smallest possible English Ford parked in front. Their first child, Benjamin, “is eleven months, incredibly adorable, and has five teeth,” the proud father reported. “What more can I tell you?” Yet for all this domesticity, Perahia remains an international animal. Every year, he spends a great deal of time and energy planning the Aldeburgh Festival. He and the young composer Oliver Knussen have together come as near as anyone could to replacing the irreplaceable Benjamin Britten, who founded the festival, with Sir Peter Pears, they have restored much of the Old Magic. At the same time, Perahia is quietly but firmly pursuing a career that, for up to six months a year, takes him back to the United States, where his links are still very strong. Even so, he can hardly wait until this summer, when (after the Aldeburgh Festival) he will begin a six-month sabbatical.

In the autumn of 1986 Perahia will conduct Mozart’s Cosi fan tutte at the Maltings with a cast made up of postgraduate students from the Britten-Pears School, which is part of the Maltings complex. This is the sort of “local” opera performance that Matslavek Rostropovich, another Aldeburgh Festival director, has been conducting with just such students in the same place. Perahia furiously denies that he has any long-range conducting ambitions, but—if we remember his training at Mannes College—fate could well be taking him in a new direction.

BACKBEAT REVIEWS
(Continued from page 84)

HAMIET BLIUETT:

Ebu.
© Sunnari Rukandrir, prod. Soul Note SN 1088.

One of the most attractive qualities of the jazz musicians who arrived in the ’70s and have matured in the ’80s is their high seriousness and sense of purpose. Each of their moves seems calculated, from unorthodox group settings to ambitious compositions and rigorous arrangements. But whereas the previous decade was marked by shot-in-the-dark daring or airtight formal preoccupations, the ’80s are signaling a reinvestigation of tradition. A backward glance now accompanies every stylistic advance.

Ebu is baritone saxophonist Hamiet Bluiett’s turn to mine an old form, the “blowing session.” Perfected in countless dates throughout the mid-Fifties, these loosely constructed studio encounters offered players the opportunity to escape confining arrangements and concentrate on unencumbered and, hopefully, inspired soloing. Bluiett doesn’t mess with the 30-year-old ingredients: a tireless horn man, a rough-and-ready rhythm section, and The Three B’s—bop, blues, and a ballad.

Usually Bluiett thrives on the difficult. After all, he is the foundation of the World Saxophone Quartet, and his own projects have covered everything from solo horn recitals to big-band extravaganzas. In comparison, the blowing session seems too easy.

But what the album lacks in conceptual refinement it makes up for with adrenaline-pumping excitement. Bluiett has a sharp melodic sense as well as a staggering command of his instrument, levitating it to alto range or submerging it in elephant roars. The main catalyst for Ebu’s diesel-fueled swing, though, is the hard-driving elegance of pianist John Hicks. Bassist Fred Hopkins, with his burgundy tone, is also exceptional.

There are a few rough edges. The blues “New Bones” and “Vegetarian Gumbo” are mere skeletal riffs, “Things Will Never Be the Same” is a grand title for an almost disposable theme, “Nu Tune”’s slapdash ending is unsatisfying, and the bop warhorse “Night in Tunisia” is an unimaginative choice at best. Only the title ballad lingers as a distinctive composition. But writing is for another album, meanwhile, savor Ebu.

Steve Futterman
Many manufacturers who advertise in HIGH FIDELITY offer additional literature on their products free of charge to our readers. For more information on specific products advertised in this issue, drop a postcard, care of Dept. HF-385 unless otherwise noted, to the addresses listed below. If an address does not appear, literature is available through the company’s dealers only.

Advertising

Index

ADS 12
Audio 33
Audiovox Corp. 29
BES 18
Blaupunkt 9
Carver Corporation 19
Crutchfield Corporation 20
DALI 10
Fujitsu Ten 18
Harman Kardon CVR II, I
Hitachi Sales Corp. 40
Illinois Audio 71
International Book & Record Dist. 67
International Hi Fi 83
J&R Music World 69
Jensen Car Audio 34
Kenwood Electronics 16
Kloss Video Crop 11
Labelle Camera & Stereo 74
McIntosh Laboratory, Inc. 72
Parasound 12
RCA Consumer Electronics 6, 7
Sansui Electronics Corp. CVR IV
Sanyo 39
S&W Electronics 83
Sherwood 3
Shure Brothers Inc. 8
Sony Corp. of America 15, 17
Stereo Corp. of America 73
Studer Revox 65
Tandberg of America, Inc. 25
Technics 5
TDK Electronics Corp. CVR III
Wisconsin Discount Stereo 72
Yamaha 31

International Book & Record Distributors,
40-11 24th St., Long Island City, N.Y. 11101, 212-781-3129,
Attn. Dept. HF 385

International Hi Fi,
Marvista Industrial Park, 6330 Franklin Ave., Baltimore, MD 21206,
Attn. Dept. HF 385

J&R Music World,
23 Park Row, New York, N.Y. 10038,
Custom Service Dept. HF 884

Jensen Car Audio,
4136 N. United Parkway, Schiller Park, Ill. 60176, Attn. Dept. HF 385

Kenwood,
1315 East Warren Center Rd., Carzin, CA 90345, Attn. Dept. HF 385

Kloss Video Corp.,
640 Memorial Drive, Cambridge, MA 02139, Attn. Dept. HF 385

Labelle Camera & Stereo of Maine,
155 Main Street, Biddeford, ME 04005, Attn. Dept. HF 385

McIntosh Laboratory, Inc.,
P.O. Box 96, Binghamton, N.Y. 13904, Attn. Dept. HF 385

Parasound, Inc.
680 Beach St., San Francisco, CA 94109, 415-673-4146
Attn. Dept. HF 385

S&W Electronics
6000 Stanton Ave., Reseda, CA 91335
Attn. Dept. HF 385

Shure Brothers Inc.,
Attn. Dept. HF 385

Sony Corporation of America,
187 Ross Street, Brooklyn N.Y. 11211, 212-855-8900. Shigetoshi Kamei.
Attn. Dept. HF 385

Technics
One Panasonic Way, Secaucus, N.J. 07094, Attn. Dept. HF 385

Wisconsin Discount Stereo,

Yamaha Electronics Corp., USA,
6000 Stgantshane Ave., Evunax Park,
Capture all the dynamics of digital performance on your cassette deck. TDK HX-S blasts through the sonic barriers with high powered digital sound!

Its exclusive metal particle formulation reproduces a wider dynamic range and a higher frequency response to handle digitally-enhanced music sources on any cassette deck with a Type II (High-Bias) switch.

With four times the magnetic storage ability of any tape in its class, TDK HX-S virtually eliminates high frequency saturation, while delivering unsurpassed sensitivity throughout the audio spectrum. Additionally, HX-S excels in retention of high frequency MOL, which no other Type II formulation attains.

And to maintain its dynamite performance, TDK HX-S is housed in our specially engineered, trouble-free Laboratory Standard cassette mechanism for durability and reliability—backed by the TDK Lifetime Warranty.

So for optimum results with Type II (High-Bias) and digitally-sourced recordings on your cassette deck, get the only super-duper. TDK HX-S.
Hear how we’re making our competition face the music.

Sansui does it again! You’ll love what you’re about to hear, but the competition won’t. No other system comes close to our new Intelligent Super Compo for pure sonic pleasure, pure operational convenience—and total programmability. That’s because Sansui never compromises on sound quality or features: like our flexible parametric equalizer, and graphic equalizer with “multi-dimensional” sound.

Hear, see and touch what you’ve been missing all these years—up close with Sansui’s exclusive One-touch Compo switching system—or from the comfort of your favorite chair with our amazing 26 button remote. It’s micro-computer controlled and lets you operate the graphic equalizer with pre-set memory—from anywhere in the room.

But don’t get up yet. You can even play both sides of a record without turning it over; thanks to Sansui’s exclusive programmable dual linear tone arm turntable. And, switch instantly from turntable to tuner to tape deck to digital disc player; skip, scan, edit, review, record, rewind, and replay—at the touch of a button—with Sansui’s computer control system. Then lay back and relax with phenomenal sound from superior Sansui speakers.

No other system matches the pleasure and convenience of new Intelligent Super Compo—even remotely. You’ll know why we’re first, the second you hear us.

For the name of your nearest Sansui dealer, write: Sansui Electronics Corporation, Lyndhurst, N.J. 07071; Carson, CA. 90746; Sansui Electric Co., Ltd., Tokyo, Japan.