Can Your Stereo System Handle True Digital Audio?

Special! Hands-On Test of Sony's Top Home VCR

Annual Pop Music Forecast—Cloudy, With 100% Chance of Video

A Classical Faceoff—Can Splashy Music be Classy Too?

We Test 10 Brand-New Components!

Sherwood's Spiffy Receiver
Astatic's Super-Smooth Pickup
8 More In-Depth Lab/Listening Reports
have won Pioneer acclaim throughout the high fidelity industry.

Pioneer's engineers have designed an exclusive ID MOS FET transistor for the front end of the SX-7's tuner. It allows you to tune in stations with weaker signals without worrying about stronger stations causing distortion due to front end overload. That's what keeps the SX-7 virtually free of RF intermodulation.

But no matter how free a receiver is from all forms of distortion, it must be able to keep the station you select perfectly tuned for hours. Pioneer's quartz-PLL digital synthesized tuning does this by making drift virtually impossible.

Pioneer's exclusive Non-switching™ amp also eliminates distortion caused by output transistors switching on and off thousands of times a second in response to music signals. This is one of the reasons that the total harmonic distortion of the SX-7 is no more than 0.009% (continuous average power output of 60 watts per channel minimum at 8 ohms, from 20Hz to 20,000Hz).

And Pioneer's high-gain phono preamp section allows the use of either MM or low-output MC cartridges selectable by a front panel switch. There's even a Subsonic filter you can use to do away with very low frequency interference caused by record warps.

Now if you think all these features sound great in print, listen to them in person at your nearby Pioneer dealer. He'll demonstrate the SX-7 and an entire new line of Pioneer receivers. And you'll quickly see that we've done everything humanly possible to give you more music for your money.

That's what made Pioneer No. 1 in receivers. And that's what's going to keep us there.
You'd expect a new receiver from the leading manufacturer of stereo receivers to be packed with exciting features. As you can see, it is. But Pioneer didn't get to be No. 1 in receivers by doing the expected and stopping.

So we developed the SX-7 using a unique engineering concept we call High Fidelity for Humans. It makes the SX-7 as superb to live with as it is to listen to.

At the heart of the receiver is a microcomputer that's been programmed to operate controls electronically. It affords the owner of the SX-7 operating convenience unlike any previously available in conventional receiver designs.

For example, the microcomputer's prodigious memory allows you to preset up to eight FM and eight AM stations and recall them instantly. Once set, all stations are directly accessible via “Station Call” buttons. And you can even recall them at the preprogrammed volume level because the microcomputer electronically controls volume setting.

What's more, with just the touch of a button you can search out the next station up (or down) the AM or FM tuning band. Stations are brought in perfectly tuned every time. And you can select any station by tuning it manually or scanning the entire band automatically sampling five seconds of each station.

But these human engineering features aren't all that make the SX-7 such an extraordinary receiver. It also offers features that

**INTRODUCING THE PIONEER**
NO OTHER RECEIVER OFFERS ALL THESE FEATURES.
Computerized Push Button Controls:
Pioneer has programmed a microcomputer to operate controls electronically for improved accuracy, reliability and convenience.

Quartz PLL Digital Synthesized Tuning:
FM "Drift" is eliminated by this incredibly accurate tuner.

Station Scan:
Touch this control and you'll hear five seconds of every station strong enough to meet the mute threshold.

Station Search:
Touch this control and move to the next station up, or down, the band.

Subsonic Filter:
This control lets you do away with ultra low frequency distortion caused by record warps and such.

Touch Volume:
The SX-7 will digitally display and recall any of 32 volume levels at the touch of a button.

Eight AM presets, eight FM presets:
The SX-7 will memorize eight of your favorite FM and eight of your favorite AM stations and retrieve them instantly.

Non-Switching Amp:
Pioneer's patented amp design gets rid of transistor switching distortion once and for all.

High-Gain Phono Preamp:
Allows the use of either MM or low-output MC cartridges.

ID MOS FET Front End:
This exclusive transistor circuitry tunes in weak stations as clearly and quickly as strong stations.
The moving coil replacement from Stanton Magnetics...the revolutionary 980LZS!

Now from the company to whom the professionals look for setting standards in audio equipment comes a spectacular new cartridge concept. A low impedance pickup that offers all the advantages of a moving magnet cartridge without the disadvantages of the moving coil pickup. At the same time it offers exceedingly fast rise time—less than 10 microseconds—resulting in dramatic new crispness in sound reproduction—a new "openness" surpassing that of even the best of moving coil designs. The 980LZS incorporates very low dynamic tip mass (0.2 mg.) with extremely high compliance for superb tracking. It tracks the most demanding of the new so called "test" digitally mastered and direct cut recordings with ease and smoothness at 1 gram.

The 980LZS features the famous Stereohedron stylus and a lightweight samarium cobalt super magnet. The output can be connected either into the moving coil input of a modern receiver’s preamps or can be used with a prepreamp, whose output is fed into the conventional phono input.

For "moving coil" audiophiles the 980LZS offers a new standard of consistency and reliability while maintaining all the sound characteristics even the most critical moving coil advocates demand. For moving magnet advocates the 980LZS provides one more level of sound experience while maintaining all the great sound characteristics of cleanliness and frequency response long associated with fine moving magnet assemblies.

From Stanton—The Choice of The Professionals.
For further information write to: Stanton Magnetics, Terminal Drive, Plainview, N.Y. 11803

Actual unretouched oscilloscope photograph showing rise time of 980LZS using CBS STR112 record.

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NUMBER 1
JANUARY 1982

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SOUND SO GOOD IT KEEPS THE BAD AWAY.

FUJI AUDIO CASSETTES.
Sound, pure and perfect. To take you where you want to be... anytime you want to be there.
No other cassette deck looks, loads, records, or plays like the new Dual 828.

There’s more hands-on involvement with a cassette deck than with any other component. Much more. That’s why you should take a long, hard, critical look at any deck you’re considering. Put it through its paces, get the feel of its controls, the smoothness of its transport. And, of course, listen to tapes recorded on it.

Now, we’d like to tell you a little about what you’ll experience with the Dual 828. And no other decks.

Direct Load and Lock system

Switch the 828 on and a protective shield swivels away from the tape heads. To load the cassette, simply place it in the open compartment — there’s no door in the way.

The cassette locks automatically in perfect alignment with the tape heads. You can always remove the cassette instantly — even if the tape is in motion. Photo-electric switches stop the tape the instant your fingers interrupt the beam.

We call this system Direct Load and Lock. And it’s a Dual exclusive.

Four-point tape guidance system

Good tape-to-head avoids crop-outs and achieves extended high-frequency response. In the 828, four precisely aligned tape guides make sure the contact is perfect.

One-button record ready

To set up for recording, simply press the record button. That action automatically activates pause. Then to begin recording, press play. (Makes sense, doesn’t it?)

You’ll quickly come to appreciate the computer logic that lets you change mode and tape direction as fast as you like. And if a faulty cassette should ever jam, an electronic sensor stops the tape in a fraction of a second. The tape just can’t tangle, stretch or snap.

Automatic reverse

The 828 provides automatic reverse when recording and playing. Thus, a C-90 cassette can actually give you 90 uninterrupted minutes in both modes. Plus continuous repeat in playback.

Equalized meters

Not so immediately evident are the advantages of Dual’s equalized metering system. You may be surprised to learn that although all decks add a high-frequency boost to the incoming signal, only Dual’s equalized meters indicate this boost. The others put more high-frequency signal into the record head than their meters show. And that can lead to overload and distortion.

But with Dual, you can safely record at a level that produces optimum dynamic range. The result: superb recordings every time.

An exclusive experience

You can’t have anything like the same experience with any other deck. Because nearly everything we’ve described is a Dual exclusive.

That’s why we doubt that any other deck can satisfy you like the new Dual 828. Especially at its price: less than $500.

For complete information, write to United Audio, 120 So. Columbus Ave., Dept. H, Mt. Vernon, NY 10553.


Letters

Expanding on CX

In his article about the CX process ("Sound Views," October 1981), Robert Long is understandably perplexed as to what CBS means by "...sound the same as standard records." However, in his hypothesis about going back to the original tapes of Boulez and the New York Philharmonic and remixing them "without any compression," there is an implication that offends me.

The inference that compression was used in those mixes of the Boulez recordings is not only inaccurate, but underlines once again the popular misconception that "black deeds" are going on all the time in the production of a record.

I produced almost all of those recordings, and I can tell you definitively that no compression was ever introduced in the mixing of a Boulez/New York Philharmonic recording. The same is true, of course, for the Mehla discs. In fact, because most of Boulez material was released in quad, the protective circuits in the disc-mastering equipment were turned off.

It is worth noting that I have never encountered an instance where compression even approached CX's 2:1 over most of the dynamic range.

Andrew Kazdin
Jamaica Estates, N.Y.

Mr. Long replies: It's encouraging to know that Mr. Kazdin, at least, has a healthy disdain for compression, even if it means that my choice of the Boulez example (doubtless conditioned by the prominence of Boulez/Philharmonic releases in Columbia's last "big technological push"—for SQ-encoded quadrophonics) was inappropriate. But my ears tell me that black deeds do go on frequently, if not "all the time," in symphonic and operatic recordings.

Certainly, however, it is obvious that the degree of compression involved in CX (2:1 over the upper portion of the dynamic range) is considerably greater than anything normally visited on such material. That's exactly why there remains a question about the ultimate "compatibility" of CX classical recordings played on systems that have no decoder.

A substantial amount of misinformation seems to have been directed toward the public and the industry lately regarding the CBS CX noise-reduction range-extension system.

The main complaint of the system's detractors seems to center on the issue of compatibility. First, CBS claimed that CX without a decoder was comparable as far as the needs of the average casual listener went. Not those of the critical audiophile. Indeed, the system was designed for the audiophile with a decoder. CBS first demonstrated the system (in undecoded form) to several hundred casual listeners, who found it quite acceptable. We, and I am sure the other licensed CX hardware manufacturers, performed similar tests with individuals whose interest in music ranged from the almost nonexistent to the intense. The results were entirely predictable. The casual listener seemed not to care whether a disc was decoded or undecoded, while serious listeners—by virtue of their listening experience and exposure to advanced music-playback systems—could hear the difference. None of the serious listeners found the projected $100 cost of a CX decoder out of line, particularly in view of the cost of other audio accessories now available, and in view of the fact that CX discs cost no more than conventional discs.

And there are at least two listening situations where the undecoded disc may in fact be desirable. For example, most automobiles—particularly the small, fuel-efficient variety—do not have enough soundproofing to mask much of the road and wind noise. The ambient noise level in most automobiles is so great that a wide dynamic range may not be desirable simply because so much music information will be masked. Many types of music will be substantially more listenable in an automobile if they are recorded on cassette from an undecoded CX signal. And the casual music listener whose interest is simply background music may find the undecoded CX disc desirable in the home, because the compressed signal will allow him to move around the house without missing the music's softer passages.

We believe the public should listen to CX, and—if they like it—vote for it with their pocketbooks. That's better than having a relatively small group of record producers and mastering engineers with bruised egos determine CX's fate. The reaction of engineers to date has been quite different from that of the music listeners, retail audio salespersons, and audio store owners for whom we have demonstrated CX. We suspect the public at large will join the pro-CX camp.

Charles Wood, President
Audionics of Oregon
Milwaukie, Oregon

The October "Sound Views" column is one of the most succinct and unbiased pieces I have recently seen on the subject of CX, a format against which there has been a great deal of "choosing sides" without considering the potential benefits to consumers. Thanks for airing all of the sides and arguments and doing so eloquently.

John J. Bubbers, Vice President
Sound Concepts, Inc.
Brookline, Mass.

Putting in a Plug

In his review of Barry Tuckwell's recording of the Pintino horn concertos (August 1981), R. D. Darrell mentions that he has encountered only one other American Punto recording, a 1976 (Continued on page 10)
You're looking at the heart of a revolutionary new speaker system—the flat honeycomb drivers of Technics' new Honeycomb Disc speakers. A new shape that takes sound beyond the range of traditional cone-shaped speakers to capture the full energy and dynamic range of today's new recording technologies. It's the essence of a true sonic breakthrough.

All conventional cone-shaped drivers have inherent distortion problems due to uneven sound dispersion in the cone cavity. But Technics' new axially symmetric Honeycomb drivers are flat. So "cavity effect" is automatically eliminated. And just as important, phase linearity occurs naturally in Honeycomb Disc speakers because the acoustic centers are now perfectly aligned across the flat driver surfaces.

Technics also added a unique nodal drive system designed to vibrate the speakers in more accurate piston-like motion to reduce distortion even further. The result is an incredibly wide, flat frequency response, broad dynamic range, and amazingly low distortion.

To complete the system, Technics' Honeycomb Disc tweeter with special front-mounted acoustic equalizer extends frequency response to a remarkable 35 kHz.

Technics offers a complete new line of Honeycomb Disc speakers, all enclosed in a rich rosewood-grain cabinet.

Now that you've seen what a sonic breakthrough looks like, listen to Technics—and hear what one sounds like.
The first time you see Pioneer LaserDisc™ in action, you’ll know it’s different. It actually puts a picture on your TV with 40% more video resolution than home video tape. (Viewed side by side with tape, the difference is staggering.)

The first time you hear Pioneer LaserDisc, you’ll have a tough time believing your ears as well. Instead of hearing mono with that picture, you’ll hear honest-to-goodness stereo.

This combination of sight and sound creates a sensation you’ve simply never experienced at home before. A reality of performance, a sense of “being there” that makes watching a movie or concert at home finally worth staying home for.

Having created all this picture and sound fidelity, it seemed only logical to offer pictures and sounds worth seeing and hearing. Software that would live up to the hardware. And that’s precisely what we’ve done.

Academy Award winning movies like Ordinary People, The Godfather, Tess, Coal Miner’s Daughter.

Comedies like Airplane, Animal House, Cheech and Chong.

When you have the ability to play back in stereo, it makes sense that you offer music. So there are movie musicals like Grease, Saturday Night Fever, All That Jazz. There are Broadway shows like “Pippin.” And there are concerts with Paul Simon, Liza Minnelli, Neil Sedaka, even the Opera.

The sight and sound experience of Pioneer LaserDisc is so remarkable, it seemed to demand a larger scale. Which led us to introduce the Pioneer 50” Projection TV.

The experience is more like being at the movies than like being at home. In fact, for the first time seeing a concert at home offers a...
Then the best pictures.

picture that's every bit as large as the sound. As for the picture quality, well, just look at the picture of Liza below. Hard to believe, it's an actual picture taken right off the screen.

But with Pioneer LaserDisc you don't just sit back and watch. For example, with the "How to Watch Pro Football" disc, you can go backwards, forwards, in fast motion, slow motion, stop motion, study it one frame at a time.

There are discs that teach you golf, tennis, cooking, step-by-step. Then there's The First National Kidisc. For the first time, children learn at their own rate. Unlike television, the disc responds to them. Your kids will love it so much they won't even know they're learning.

The only way to believe all this new technology is to see it. And we've arranged it. Just call us at 800-621-5199, for the store nearest you. *(In Illinois, 800-972-5855.)

Pioneer
We bring it back alive.

Liza 'In Concert'

The Pioneer 50" Projection TV.

The Pioneer LaserDisc Player.

Optional Remote Control.
**Computer Wedding.**

The new Kenwood computerized AM/FM receiver and cassette deck.

We've married two of our most sophisticated audio components into one space-saving unit that makes beautiful music a lot easier to make. And even easier to afford.

The KRX-7 Computerized Cassette Receiver.

With all its computer controlled functions, the KRX-7 can do remarkable things with cassette tapes. Like automatically fast forward or rewind to any cut you tell it. Play the same cut over again. Or even the same side. As many times as you want. It even handles metal tape.

With its computerized receiver, the KRX-7 also has the intelligence to make AM/FM listening easier. It can automatically find the next station on the dial, and lock it in perfectly. It's even smart enough to locate your 10 favorite stations at the push of a button.

For great performance without a great deal of complications, see the new KRX-7 computerized cassette receiver at your Kenwood dealer. And ask about its matching Kenwood turntable, 3-way speakers and system rack. The easy way to put a stereo system together. And keep it all in the same great sounding family.

---

Quad tape performance. I'd like to put in a plug for a much older recording (mid-Fifties?) and another great horn player: On the old Boston label (B 209) there was a marvelous performance of a Punto Horn Quartet in F by James Stagliano, with Ruth Posselt, Joseph de Pasquale, and Samuel Mayes. Not its least interesting aspect is Stagliano's second-movement cadenza, which includes every virtuoso trick, such as producing the chords by humming and blowing at the same time—a technique Punto himself made famous. Naturally, the longtime Boston Symphony first hornist carries this all off with much grace and beauty of tone.

An utterly unrelated point, in regard to Havergal Brian and Aries Records: There was another "legitimate" Brian recording released in this country before the Unicorn disc reviewed by John Canarina [August 1981]—a beautiful recording of Symphonies Nos. 6 and 16 by Myer Fredman and the London Philharmonic on a 1975 Lyrita disc (therefore newer than the Unicorn) that was briefly available in this country on HNH, an excellent but ill-fated label in Evanston, Ill. All praise to Maestro Canarina for exposing Aries (and for championing Brian), but the pirates have a point: How else are we, the less favored, to get at the (legally) unobtainable treasures in the vaults of the "Bees"? The BBC has sponsored festivals of Brian and Bantock and many others, but the grande dame seems to have little interest in vinylizing her noble efforts. The royalties issue aside, Aries' real crime is that of inflicting all those pseudonyms on us collectors. Thank you, Mr. Canarina, for identifying "Colin Wilson." Now, who is the splendid violinist in the Brian violin concerto? Manoug Parikian? In the early Fifties, dozens of pseudonymous artists sprouted on the various "dime-store" labels, and now, many of the real attributions are lost, apparently forever. Aries, fess up, before it is too late!

John C. Swan
Crawfordsville, Ind.

**Refocusing Attention**

In an interview in your October issue of "Loudspeakers: Getting Down to Basics," Andy Petie is said to give "much credit to the pioneering work of Roy Allison, who first focused attention on the importance of room-boundary interactions in work he did at Acoustic Research." My association with AR was long and productive, but I did no work whatsoever on the room-boundary effect while there. Only after leaving AR at the end of 1972 did I have the time for a research program of that magnitude. Technical papers resulting from this research were published in June 1974 and January 1976, and my own company now makes loudspeaker systems with room-matched designs based on the principles set forth in those papers.

Roy F. Allison, President
Allison Acoustics, Inc.
Natick, Mass.

Letters should be addressed to The Editor, HIGH FIDELITY, 825 7th Ave., New York, N.Y. 10019. All letters are subject to editing for brevity and clarity.
THE ONLY THING MORE REVOLUTIONARY THAN AKAI'S NEW GX-77 IS THE TAPE IT PLAYS.

The new GX-77 is the world's first open-reel machine with a special setting for the new ultra-high-density "EE" tapes.

For the uninitiated, "EE" simply stands for extra efficiency. And the innovators at both Maxwell and TDK are committed to it.

For some very sound reasons.

Numbers don't lie.

And what the numbers are saying is this. You don't have to sacrifice performance for economy. Not with a GX-77 and "EE" tape. Because at an efficient 3½ ips, you'll still get the same frequency response, S/N ratio and dynamic range of conventional tape played at 7½ ips.

But see for yourself, below. The specs are spectacular at any speed.

There's sound engineering, too.

The GX-77 also features quick-reverse playback/record, 3 motors, 4 AKAI GX heads and an optional dustcover that's the ultimate cover-up.

Plus a unique, motorized tape-loading mechanism that guarantees virtually perfect tape-to-head alignment. All at the touch of a button.

And all for a relatively modest $775, suggested retail price.

Or, if you prefer the benefits of "EE" tape on a grander scale (including 10½" reels), consider the new AKAI GX-747.

Better yet, audition both at your AKAI dealer's soon. Or write: AKAI, P.O. Box 6010, Compton, CA 90224.

We'd hate to start the revolution without you.

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<td>70 dB</td>
<td>25-25000 Hz</td>
<td>63 dB</td>
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<tr>
<td>Conventional Tape (7½ ips)</td>
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<td>66 dB</td>
</tr>
<tr>
<td>EE Tape (7½ ips)</td>
<td>76 dB</td>
<td>25-33000 Hz</td>
<td>66 dB</td>
</tr>
</tbody>
</table>

AKAI
YOU NEVER HEARD IT SO GOOD
A Gem of a Cartridge

With its $1,200 price tag and tapered, tubular ruby cantilever, the Signet TK-100LC moving-magnet cartridge might seem more at home in a fine jewelry store than in a tonearm. The cantilever is said to have high internal stiffness and low moving mass. Other features of the TK-100LC include Signet's Straight Line Contact stylus and toroidal coils wound with silver wire for high conductivity. Two other models from Signet (the TK-9LCa and TK-9Ea) have tapered beryllium cantilevers. These two moving-magnet designs sell for $295 and $275, respectively.

Circle 142 on Reader-Service Card

Time Machine

Audio Sales Associates' new analog signal-delay unit, the EEM-2000 Time Machine, can generate delays as short as 20 milliseconds or as long as 200 milliseconds. Effects possible with the unit include reverb, slap back, doubling, and discrete echo. The two-channel system also provides independent control and mixing capabilities for microphone and instrument inputs. A remote on/off foot switch is optional. Price is $189.

Circle 146 on Reader-Service Card

Small Size, Big Sound

JBL's L-96 three-way speaker is said to be similar to the large L-112 and L-150A models, but in a bookshelf size. It is equipped with a 10-inch woofer, which uses JBL's distortion-bucking Symmetrical Field Geometry (SFG) magnet. The one-inch dome tweeter is con- (Continued on page 14)
When it comes to the critical bias adjustment, the vast majority of manufacturers won't use anything but TDK Metal Alloy cassettes. TDK metal excels in two different cases. The MA-R has the Reference Standard Mechanism, with a unique metal unibody frame. MA uses the Laboratory Standard Mechanism, designed to deliver the smoothest possible flow of music.

Both MA-R and MA incorporate TDK's remarkable tape formulation, FINAVINX, a metal particle with extremely high coercivity and remanence for high frequency response and low distortion. TDK metal has the widest frequency range and highest MOL of all cassettes rated in an independent test.

It's not easy to get 23 quality deck makers to reach the same conclusion. If you use TDK metal, you'll be in good company.

© 1981 TDK Electronics Corp. Garden City, N.Y. 11530

Circle 10 on Reader-Service Card
constructed of phenolic material coated with aluminum. It’s powered by a two-pound magnet with a one-inch copper voice coil. Midrange frequencies are handled by a 5-inch cone driver. The L-96 sells for $395.

Play It Again, Luxman

An auto-repeat function automatically rewinds the tape and recommences the playback in Luxman’s new K-117 cassette deck. The unit also incorporates solenoid controls, Dolby B noise reduction, a fine bias-adjustment control, fluorescent peak level indicators, and a sendust record/playback head. Other features include a multiplex filter to remove 19-kHz carrier leakage, a mute switch.

Speed of Sound

Rated at 100 watts (20 dBW) per channel into 8 ohms, the Model 200 Reference Amplifier from BRB Systems ($900) uses ring-emitter power transistors, which are said to provide better performance and reliability than conventional bipolar or MOS-FET devices. The company claims that the Model 200’s high speed Class A circuitry achieves low transient and static distortion.

Two-Way Dolby from Mitsubishi

With three heads and two motors, Mitsubishi’s $490 DT-35 cassette deck also offers Dolby B and C noise reduction, dynamically balanced capstan motors, feather-touch controls, metal-tape capability, and a nineteen-segment fluorescent peak-reading meter. A bias control enables you to fine tune the DT-35 for optimum performance with your favorite tapes.

Denon’s Low Cost Moving Coil

Moving-coil performance at a fixed-coil price is the claim for Denon’s $99 DL-300 cartridge. The DL-300 is said to incorporate design principles found in Denon’s top-of-the-line cartridges, such as a single-point suspension system and a
Once again, in the interest of science and for the betterment of mankind, the services of Mus albus rodendus or the white mouse, have been called upon. This time to demonstrate the sheer brilliance of the new Sony STR-VX5 receiver.

When the little chap so much as touches the VX5's "Memory Scan," you'll automatically hear four seconds of up to eight of your favorite AM or FM stations, without having to tune them in separately.

If he chooses our exclusive "Auto Sweep," you'll hear a four-second sample of every available station on the dial. Find a station you like and another feather-touch control instantly locks onto that frequency. There's no drift. No fade. A computer insures crisp, clear, perfect sound.

But that's merely proof that the VX5 possesses the world's most advanced tuning section. Here's proof that it possesses the world's most advanced amplifier section.

Statistically, the VX5 puts out 55 watts per channel with no more than 0.007% total harmonic distortion.* Even your dog can't hear that.

Part of the reason is Sony's unique "Legato Linear" amplifier. This circuitry prevents "switching distortion" from ever intruding on your music. Another part is an incredibly advanced, Sony-developed "Pulse Power" supply. Its transformer alone is but 1/50 the size of conventional transformers and is as quiet as a church mouse.

Of course, there are other outstanding features, from a subsonic filter to moving coil-cartridge capability. And it's all at a price that won't require you to get a second mortgage to purchase it.

The Sony VX5. We used a mouse to prove its genius. But all you really need are good pair of ears.
Hamming It Up
I have trouble with a ham radio operator coming through over my Lafayette LA-84 amplifier when I play records. The interference persists even when I disconnect the turntable leads. How can I get rid of it?—Brian Charles, Great Neck, N.Y.

Since the interference does not go away when you disconnect your turntable, the ham's signal must be being picked up directly by the phono preamplifier circuit in your amp. Unlike most CBers, amateur radio operators are usually both helpful and technically competent. The next time one of your listening sessions is disrupted, try to catch the operator's call letters (e.g., "WLTN"). With that information, you can find out from a publication called The Radio Amateur's Callbook, or from the FCC, who and where he is. Once he understands your problem, he may be able to suggest modifications that will eliminate the interference. If that fails, you may have to look for a new amplifier that is less sensitive to this type of RFI. (This is one instance, by the way, in which you should insist on a home trial.)

Cassette Chaos
Somewhere I read that with a fully adjustable cassette deck, you should check the bias and sensitivity for each cassette you record—even if it's the same brand and type as the last one you used. Although I usually use quality brands and premium tape I have noticed that there are differences between cassettes. Lately I have even noticed differences within the same cassette. Does this mean that I should change the tape settings continuously while I record? How would that be possible?—Eugene Everett, Nashville, Tenn.

No, continuous adjustment is both impractical and unnecessary. The values of circuit components change slightly as they warm up. For example, bias current in a recording head tends to heat the coil winding and raise its impedance, reducing the bias current. As a result, actual circuit behavior may not be quite the same after two hours of use as it was after only a half-hour, and it can certainly be expected to change over the first few minutes of use. (For this reason, I usually leave a deck in the recording/pause mode for at least thirty minutes before adjusting it for a recording I really want to take pains with.)

Also, the metering on some adjustable decks is very sensitive to small changes, at least in the calibrating mode. This makes the adjustment process easier, but it also tends to create the impression that minor misadjustments are major. For the most part, you never need to be within less than ½ dB on most adjustments; finer tuning is unlikely to net you any real improvement.

Adding Delay
My system now comprises JBL L-150 speakers, a Sansui SR-838 turntable with an Empire EDR-9 cartridge, a Technics RS-M95 cassette deck, a JVC SEA-80 equalizer, an RG Dynamics Pro-20 dynamic processor, and a Rotel RT-1010 tuner, Rotel RC-1010 preamplifier, and Rotel RB-1010 power amplifier. The equalizer and dynamic processor are now hooked into the system through the preamp's tape monitor loop. I would like to add a delay line. Would such a device be compatible with my system, and how would I connect it?—D. Bower, Berwick, Pa.

Yes, an ambiance-enhancement unit would be compatible with your present system, but you would have to get a second pair of speakers (preferably ones whose sonic balance is as close to that of your L-150s as possible) and an amplifier to drive them if the delay unit you select doesn't have one built in. Connect the main outputs of your preamp to the inputs of the delay line. Then connect the delay line's front-channel outputs to the inputs of the power amp driving the L-150s. Finally, connect the delay line's rear-channel outputs to the amp driving the ambiance speakers.

KO-ing Crosstalk
When I listen to my cassette deck through my receiver, I hear music from an FM station faintly in the background. Where is it coming from, and what can I do to eliminate it?—Jim Marking, Trumbull, Conn.

It is possible that your cassette deck or your receiver's audio circuits are picking up the station directly as RFI (radio frequency interference). But the more likely explanation is that you are hearing crosstalk from your receiver's tuner section. That is, the audio output from the tuner is leaking into the tape monitor loop, where it doesn't belong. Although this might be the result of a defect in your receiver, I tend to suspect not: crosstalk is a common problem even in equipment that is working exactly as it is supposed to. First, try putting the receiver's selector switch on something other than FM when you listen to cassette. If you still get interference, tune the receiver to a space on the FM dial where there are no stations. That will cause the tuner section to mute its audio output, so there won't be any more talk to cross!
WHY SPEND $200 MORE
ON A BETTER TAPE DECK
WHEN ALL YOU NEED IS $2 MORE
FOR A BETTER TAPE.

No matter how much you spend on a tape deck, the sound that comes out of it can only be as good as the tape you put in it. So before you invest a few hundred dollars upgrading your tape deck, invest a few extra dollars in a Maxell XLI-S or XLII-S cassette.

They're the most advanced generation of oxide formulation tapes. By engineering smaller and more uniformly shaped oxide particles, we were able to pack more of these particles onto a given area of tape.

Now this might not sound exactly earth-shattering, but it can help your tape deck live up to its specifications by improving output, signal-to-noise ratio and frequency response.

Our XL-S cassettes also have an improved binder system, which helps keep the oxide particles exactly where they're supposed to be. On the tape's surface, not on your recording heads. As a result, you'll hear a lot more music and a lot less distortion.

There's more to our XL-S tape than just great tape. We've also redesigned our cassette shells. Our Quin-Lok™ Clamp/Hub Assembly holds the leader firmly in place and eliminates tape deformation. Which means you'll not only hear great music, but you'll also be able to enjoy it a lot longer.

So if you'd like to get better sound out of your tape system, you don't have to put more money into it. Just put in our XL-S tape.
Loran™ is the cassette of the future... but it's here right now. The original and only heat resistant cassette shell and tape that withstands the oven temperatures of a car dashboard in the sun. Testing proves that even TDK or Maxell cannot take this kind of punishment.

With Loran, you'll capture a full range of sound as you've never heard it before. Tape that delivers magnificent reproduction of highs and lows, along with an exceptionally low background noise level. Super sensitive with an extremely high maximum recording level capability. That means you can record Loran at high input levels for greater clarity. As a matter of fact, we recommend it.

Because of our cassette shell, Loran tape can stand up to being accidentally left near a source of excessive heat in your home or in your car. It is indeed the finest quality tape available today.

Loran also has exclusive features not available on any other cassette. Safety Tabs™ (patent pending) prevent accidental erasures. But unlike other cassettes, you can restore its erase and record capabilities simply by turning the Tab screw a 1/2 turn. Our Hub Lock (patent pending) secures the tape to the hub in such a way that the harder it is pulled the tighter it's held.

With all these features, it's no wonder Loran was selected as "one of the most innovative consumer electronics products..." by the Consumer Electronics Show Design and Engineering Exhibition.

Every Loran tape comes with a full lifetime warranty. Listen to Loran. The new generation of cassettes is here right now.

When all others fail...Loran cassettes are safe and sound sensational.

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Audio

Basically Speaking

Audio concepts and terms explained by Michael Riggs

Noise and Distortion

One oft-quoted goal of high fidelity is "clean" sound. This implies the existence of sound of another kind—"unclean" perhaps or, less Biblically, "dirty"—that is presumably easier to come by. And in truth all reproduced sound is at least slightly contaminated with sonic grime picked up as the audio signal passes through the various mechanical transducers and electronic devices essential to the recording and playback processes. This unwanted passenger comes in two basic varieties.

Additions that are independent of the desired signal are called noise. (Strictly speaking, this definition does not include modulation noise in analog tape recording or quantization noise in digital audio, both of which vary according to the signal. We will take up these special breeds separately in later columns.) The commonest forms of noise are hiss and hum.

Hiss is simply a fact of audio life. Tape and all electronics produce at least a little of it. But good engineering can minimize it, taking it below the level of audibility. Very few modern amplifiers, for example, generate hiss at levels high enough to be heard under normal listening conditions.

Hum, on the other hand, can be eliminated altogether by the simple expedient of avoiding AC power. If there's no 60-Hz current coming into the system, no hum can be induced in any of the audio circuits. This is one reason many head amps for moving-coil cartridges are battery-powered. For the most part, though, it's not practical to steer completely clear of the wall socket. And so it is that all audio systems produce at least a smidgen of hum (though again, it may be at a level low enough to be inaudible).

Anything with a coil in it (such as a phono cartridge or a tape head) or that carries low-level signals (phono cables, for example) is a prime candidate for hum pickup; only careful design and installation can minimize it.

Audible noise is annoying because it obscures detail and distracts from the music. When you're shopping for a system, it's important to look for components that add the least noise possible to the signals fed into them. The ratio of the amplitude to the desired audio signal to the amplitude of the component's inherent residual noise should be as high as possible. That is, its signal-to-noise (S/N) ratio should be high.

S/N ratio is expressed in decibels (dB) relative to a specified or standard signal level. A S/N ratio of 80 dB with respect to a 1-volt output means that the component's residual noise is 80 dB less than 1 volt in amplitude. Knowing the reference level is vital when you're comparing components. For example, the above S/N ratio could also be expressed as 86 dB relative to a 2-volt output. Now 86 dB looks better than 80 dB—until you realize that the apparent 6-dB improvement results solely from the higher reference level, not from any change in the actual amount of noise.

Another important thing to look for when comparing noise figures is what, if any, weighting has been applied. Because the ear is more sensitive to upper midrange frequencies than to the extremes of the audible band, it makes little sense to give deep rumble or high hiss as much "weight" as midrange noise.

One of the best, and certainly the most popular, of noise-weighting curves is embodied in the A-weighting curve, which HIGH FIDELITY uses for most noise measurements. Its response approximates that of the ear and therefore yields a better index of audible noise than would a flat, unweighted curve. However, the main thing to remember is that you cannot compare apples and oranges: Different weighting curves will give different S/N ratios for the same component operated at the same reference level. And a weighted S/N ratio will almost invariably be higher than its unweighted counterpart.

Unlike noise, distortion does depend on the input signal. There are two basic types of distortion: harmonic and intermodulation. Harmonic distortion consists of spurious signals at frequencies that are multiples of the frequency of the desired signal. That is, the second-harmonic distortion product from a 1-kHz signal is at 2 kHz, the third-harmonic product is at 3 kHz, and so on.

The rms (root-mean-square) sum of all the individual harmonic-distortion components is called the total harmonic distortion (THD). THD is the single most commonly quoted distortion specification.

Intermodulation (IM) distortion consists of the sum and difference products of two signals. For example, signals at 100 Hz and 1 kHz would yield new sum and difference products of 1.1 kHz and 900 Hz, respectively. Any device that produces harmonic distortion also produces IM distortion, and vice versa. Normally, they're quoted less often than are the ubiquitous THD specifications.

Although distortion figures can be (and sometimes are) expressed in the same way as signal-to-noise ratios—as a ratio of the amplitude of the desired signal or signals to the amplitude of the distortion products—they are usually given as a percentage. For example, "1% THD" would indicate that the rms sum of the amplitudes of all the harmonic-distortion components is equal to 1% of the amplitude of the original signal.

In any component, distortion performance varies according to the frequencies and amplitudes of the signals. The audibility of the distortion depends on the program material and the characteristics of the distortion products. When distortion does reach audible levels, it is usually heard as harshness, added warmth, or some other alteration of tonal balance. With modern components this coloration rarely happens.
Pioneer's New-Look Integrated Amp

Pioneer A-S Integrated amplifier, in metal case.
Dimensions: 16 1/2 by 3 1/2 inches (front panel), 13 inches deep plus clearance for controls and connections. AC convenience outlets: one switched (100 watts max.), one unswitched (200 watts max.).

IN CASE YOU HADN'T NOTICED, Pioneer's current line of components is radically different from that of other brands and from Pioneer's own past models as well. In a relatively simple product such as the A-S integrated amplifier, we would have expected the cosmetics to take a backseat to the usual considerations of value for the dollar; as it turns out, however, the styling is an intrinsic part of the value that the A-S has to offer. It is exceptionally functional: Not only do the various switches and knobs fall comfortably to hand in use, but the front panel expresses graphically what the electronics are ready to do.

Illuminating block schematic diagrams of this sort are not unique. (In August 1977, for example, we tested a Hitachi cassette deck with such a feature.) But never has the idea been as deftly employed, in our opinion. Symbols for the various inputs glow green at the left, depending on which selector button you push, and similar symbols at the right indicate your choice of speaker pair (A, B, both, or neither). Little rectangular lights show when the tone-control circuits and loudness compensation are active (both in green) and when the muting is reducing output by 20 dB (in red). It's all very discreet, yet once you’re used to it you can read its messages from across the room. As a practical operating feature, we think this display is worth any number of "power meter" gizmos, which may look jazzier on a showroom shelf but usually contribute...
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Knollwood Drive, Box 521, Holliston, MA 01746, (617) 429-6706. In Canada, Rockco, Toronto.
Sherwood Combines Old and New

Sherwood S-9600CP AM/FM receiver, in metal case. Dimensions: 171/4 by 41/2 inches (front panel), 131/4 inches deep plus clearance for controls and connections. AC convenience outlets: one switched (100 watts max.), one unswitched (150 watts max.). Price: $480. Warranty: “limited,” three years parts and labor. Manufacturer: made In Korea for Sherwood (Div. of Inkel Corp.), 17107 Kingsview Ave., Carson, Calif. 90746.

LIKE ALL COMPANIES in the component field, Sherwood has changed with the years. In some ways, the change has been wrenching. All the products were manufactured in its Chicago headquarters at one time, while now the offices have been moved to California and the manufacturing is done in Korea. But some Sherwood products (the lowest-priced receivers in particular) had actually been built in the Orient for years, so to this extent the shift was gradual. Perhaps for that reason, there is a thread of continuity that links the modern Sherwood products—like the S-9600CP reviewed here, which stands at the top of its receiver line—to those very different ones on which the Sherwood reputation was founded. Like so many of its predecessors, the 9600 offers good value and what might be called a “modest individualism”; while some of its personality and features set it apart from the crowd, there is no hint of quirky radicalism.

Take the FM tuning, for example. Though the tuner has a digital station-frequency display (instead of a conventional slide-rule dial), it is tuned in the traditional way, via an oversize knob connected through a flywheel to an “old-fashioned” variable capacitor. Unlike fully digital tuners, it won’t go “around the circle” back to 88 MHz when you get to the other end of the band, preventing the overshoot that can occur if you’re not watching the numbers flash by. There is both a signal-strength indicator (with enough segments to be of precious little to the logistics of listening.)

The circuitry that the display represents has more extraneous that you will usually find in such a modestly priced integrated. Not only is there provision for two tape decks, for example, but the independent recording selector enables recording from one source while you are listening to another. (It provides for dubbing in only one direction, but bidirectional dubbing is relatively rare at this end of the price scale.) Also welcome is the TONE DEFEAT, the detented positions of the two tone controls are a hair off of dead flat (which is not unusual in this price range), but response is absolutely flat over most of the range when the controls are defeated.

Diversified Science Laboratories made its measurements (as always) with the volume control set for standard IHF input and output levels. You’ll see in the data that, in our sample, this results in a slight rolloff at the extreme high end. Actually, response remained flat within 1/2 dB out to 37 kHz when DSL turned the volume knob up to maximum, and we understand that results are similar even at lower volume settings on later production. The point is moot, however, to the extent that comparatively priced tuners and tape decks are likely to filter out the range in which the test sample rolloff occurs, making aural detection unlikely or impossible. Note that the phono response is almost as flat as that of the high-level inputs. At this price, there is no point in supplying a head amp for moving-coil pickups, and Pioneer offers none; nor, unfortunately, does it have an infrasonic filter to tame record-warps “information.” (If your woofers are given to spastic behavior in response to infrasonics, you should choose your pickup/tonearm combination for its ability to track warps gracefully.) The LOUDNESS action includes a little boost in the extreme treble in addition to the mandated bass boost. Of course, you can alter this to some extent by means of the tone controls, which are of the shelving type and are sensibly limited to approximately 10 dB of maximum boost or cut.

All in all, we’re impressed by the value that the A-5 offers. In its unpretentious way, it supplies all the needs of a modest system, and then some, all wrapped up in what is arguably the most attractive and most functional package available in the price class.

Circle 137 on Reader-Service Card

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High fidelity was born just a generation ago. So was Sansui. In 1947, when the transistor was invented, we began as a manufacturer of high-quality audio transformers. Since then, Sansui's dedication to the sound of music and our extensive R & D have led to countless technological breakthroughs and products that have continually advanced the art and science of high fidelity. Some highlights:

1958: The year of the first stereo recordings also brings the release of our first stereo amplifier.

1965: As hi-fi widens its appeal, we introduce our first stereo receiver, the TR 707A.

1966: Sansui's U.S. subsidiary, destined to be outgrown in little more than a decade by our new headquarters in Lyndhurst, N.J., begins operation.

1970: QS, Sansui's patented 4-channel system, gains worldwide recognition.

1976: No less a leader in broadcast than in consumer audio technology, Sansui introduces two stereo AM systems at the Audio Engineering Society convention.

1978: Psychoacoustic research into the subtle but very real deficiencies in bass and in transient response in music reproduction results in Sansui's introduction of DC amplifiers, the renowned G-series receivers, and our patented DD/DC circuitry. These advanced technologies reduce distortions whose very existence had been questioned until we developed a straightforward measurement technique to verify on a meter what listeners' ears had long told them.

1979: Sansui's patent-pending D-O-B (Dynaoptimum Balanced) method of optimally locating the pivot point results in significantly lower tonearm susceptibility to unwanted vibrations. The same year Sansui introduces the first member of our trend-setting system approach to hi-fi componentry, the Super Compo series.

1980: Developing a theory first suggested in 1928, Sansui presents the first Super Feedforward amplifiers, the realization of a design that eliminates even the last vestiges of distortion that not even negative feedback could combat. This development inaugurates a new era in the reduction of amplifier distortion and firmly establishes Sansui as a world leader in this important work. Eager to maintain its technological leadership, now also in video, in the same year Sansui develops an ultra-compact gas laser-optical pickup, some 40 times smaller than conventional detector systems, that promises to play a vital role in future compact digital audio disc players.

1981: Modulation noise, long a problem in cassette recorders, is reduced to virtual inaudibility by Sansui's patent-pending Dyna-Scrape Filter. Equalization that's simple enough for practical home use is realized with Sansui's computerized SE-9 equalizer, which not only achieves professional results in record or playback, but also permits storing up to four instantly-selectable equalization curves.

At the 1981 NY AES, we presented our major papers outlining breakthroughs in both audio and video engineering, each of which will lead to products to enrich all our lives.

Sansui's story and the story of high fidelity. They are really one ongoing story, and the future is bright for both.

Sansui Electronics Corporation
Lyndhurst, New Jersey 07071, Gardena, CA 90248
Sansui Electric Co., Ltd., Tokyo, Japan

Circle 39 on Reader-Service Card
The performance measurements from Diversified Science Laboratories, however, demonstrate unequivocally that the FM tuner is not in any way old-fashioned. Noise and distortion are extremely low. Frequency response is extremely flat, and there are no disappointments elsewhere to spoil the listening. When DSL measured the sensitivity of the signal-strength display lights, it found that it ranges from 25.4 dBf (a little below the muting and stereo thresholds) at the left-hand element to 48 dBf (approaching "full" signal strength, as represented by the 65-dBf test level mandated for S/N-ratio measurements, among others) at the right. The entire display range is therefore devoted to the area where signal-strength information is most important to users with rotatable antennas; it ignores both weak signals that would be capable of only marginal (and mono) audio quality at best and strong signals that would provide very good reception even with careless orientation of the antenna.

The amplifier section also tests out very well. The 2 dB of dynamic headroom means that the 9600 will accommodate peaks equivalent to 19.4 dBW (2 dB above the rated 17.4 dBW), or some 95 watts. The lab was hard put to find any distortion at 0 dBW; what little existed was toward the frequency extremes and consisted exclusively of second-order products, which are relatively benign. At rated power some third harmonics did appear, but distortion remained minuscule and was mostly confined to the second harmonic.

The preamp and control functions include some surprises. The phono section has fairly low input capacitance. If your pickup is one of the "fussy" ones and prefers a higher value, you can always add it via a pickup-loading kit. (Excessive capacitance can't be lowered.) And the peaky high end that could result if such a touchy pickup were given insufficient capacitive loading would be exaggerated subtly by the very slight upward tilt of the phono response in our sample: a mere 0.2 dB between 1 and 20 kHz, but it's there. Very unusual in today's receivers is the noise filter, with its relatively sharp cutoff above 8 kHz. It therefore makes a material difference when you're straining your ears against very high hiss but audibly subtracts little or nothing from most musical program material. The LOUDNESS introduces a bass rise (leveling off below 50 Hz) at low volume settings; if you require the traditional (but technically discredited) treble rise as well, the tone controls will give it to you. The TREBLE has little influence below 3 kHz or so, while supplying close to its calibrated boost or cut (marked for a maximum of 10 dB) at 10 kHz. The MIDRANGE is properly circumspect, providing a maximum 5 dB boost or cut (despite the "10" calibration) and centering its activity just below 1 kHz. The bass takes over around 200 Hz and is capable of ±10 dB near 100 Hz—with almost 20 dB of boost or cut available at 20 Hz. Again, the calibration means relatively little on this control. Particularly interesting is the action of the switch marked ULTRALOW BASS EQ, which adds about 5 dB of kick to bass response at 30 Hz and then drops off at about 15 dB per octave. Thus it combines a slight bass-response "extension" for your speakers (the peak is said to be tailored to the response of Sherwood's own models) with an infrasonic filter that is down 30 dB at 5 Hz. If you use it only to subdue infrasound from warped records, the added output in the audible bass is not enough to create boominess with wide-range speakers.

Finally, one unusual economy: Sherwood manages bidirectional dubbing between two tape decks with a single switch position. According to the schematic, Sher-
Not many years ago a "high fidelity" amplifier delivered 5 watts with 5% harmonic distortion. Today, distortion levels of 0.05%—or even 0.005%—in amplifiers with hundreds of watts and a much wider frequency range are almost routine.

Reducing harmonic distortion has usually been achieved by using negative feedback. But too much negative feedback can introduce a new kind of distortion, TIM (Transient Intermodulation Distortion) that audibly degrades the musical sound.

To reduce TIM and other forms of residual distortion, Sansui developed its DD/DC (Diamond Differential/ Direct Current) drive circuit. Then, to eliminate the remaining vestiges of high-level, high-frequency distortion in the amplifier's output stage, Sansui engineers perfected a unique circuit which, though proposed years ago, has now been realized in a practical amplifier design. Super Feedforward, the new Sansui technique, takes the leftover distortion products present in even an optimally-designed amplifier, feeds them to a separate, error correcting circuit that reverses their polarity, then combines them so they cancel themselves out against the regular audio signal. What's left is only the music, with not a trace of distortion.

While Super Feedforward circuitry puts Sansui's AU-D 11 and AU-D 9 amplifiers in a class by themselves, all our amplifiers are renowned for their musicality, versatility, and respect for human engineering. Add a matching TU tuner to any of Sansui's AU amplifiers and you'll appreciate the difference 35 years of Sansui dedication to sound purity can produce.

For the name of the nearest audio specialist who carries the AU-D 11 and AU-D 9 or other fine components in Sansui's extensive line of high fidelity products, write: Sansui Electronics Corp., 1250 Valley Brook Avenue, Lyndhurst, NJ 07071.
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The ultimate high is total control. And an ADC Sound Shaper® Frequency Equalizer lets you control your sound and custom-tailor your music with the mastery of a pro.

And no better way demonstrates the benefits of an ADC Sound Shaper than taping. Even without a studio environment, you can recreate your personal recordings by changing the frequency response curve of the source material — making the sound more like the original and more agreeable to your ears.

Our complete ADC Sound Shaper IC line* has an equalizer that is right for you and your system. The SS-110 ten-band full octave equalizer, a step up from our SS-1, features LED-lit slide controls and one-way tape dubbing. If you desire even more control, our twelve-band SS-II and top-of-the-line SS-III include two-way tape dubbing and sub-sonic filters. Our SS-III Paragraphic™ with 24 ancillary switches that enable you to control 36 bands per channel combines the ease and control of a graphic equalizer with the precision and versatility of a parametric. All at a price you can afford.

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With an ADC Sound Shaper and an ADC Real Time Spectrum Analyzer, you can attain a new level of control. And ultimately, isn’t that the musical high you’ve always wanted?

Sound thinking has moved us even further ahead.

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*Sound Shaper is a registered trademark of Audio Dynamics Corporation. *IC indicates new Sound Shaper® series.
Although conventional in appearance, the tuning knob on the S-9600CP incorporates what Sherwood calls a Touch Lock Sensor that engages an automatic fine-tuning circuit when you remove your hand.

Imagine a cartridge that acts and sounds like a moving-coil pickup, but isn't. That's the Stanton 980 LZS—a moving-magnet cartridge in moving-coil clothes. In most respects it is like Stanton's other top cartridges. It uses the company's Stereohedron line-contact stylus (indicated by the "S" in the model number), has fairly high compliance, and tracks at about one gram. Of course, line-contact styli of one sort or another are fairly standard among today's high-end cartridges, regardless of generating principle, but high compliance and low tracking force are decidedly uncharacteristic of moving-coil designs. What does make the 980 LZS resemble a moving-coil pickup is its low output impedance (from whence comes the designation LZ, for low Z, or impedance).

But where a moving-coil has low output impedance pretty much by necessity (because the moving mass—and therefore the coil—must be kept small), it is a matter of choice for the Stanton. The main advantage gained by electing low impedance is that the cartridge's frequency response is essentially independent of capacitive loading. (More typical fixed-coil cartridges with relatively high output impedances are quite sensitive to the amount of capacitance in the tonearm cables and the amplifier's phono input.) The corresponding penalty is a reduction in output, which is usually too low to drive most preamplifiers and amplifiers to full output. This creates a need for an additional stepup transformer or head amp. (We used Stanton's own Model BA-26.)

The 980 LZS has a recommended tracking-force range of 0.5 to 1.5 grams (plus an extra gram to offset its built-in brush). Diversified Science Laboratoroes did indeed find that the cartridge could pass our standard pure-tone tracking torture test at only 0.5 gram. For other measurements, however, a more normal force of 1.0 gram...
**Audio**

New Equipment Reports

Channel separation

- Test record: JVC TRS-1007 Mk. II

**Frequency Response & Channel Separation**

- Test record: JVC TRS-1007 Mk. II

**Affordable**

- Test record: JVC TRS-1007 Mk. II

**Sensitivity**

- Test record: JVC TRS-1007 Mk. II

**Vertical tracking angle**

- Test record: JVC TRS-1007 Mk. II

**Audio**

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**Dual's Functional Affordable**

Dual CS-607 semi-automatable single-play, direct-drive turntable. Dimensions: 11" x 15.5" (base), 5 1/2" inches high with cover closed, additional 10 inches vertical clearance required to open cover fully. Price: $400; with optional Ortofon TK5-SSE pickup, $330. Warranty: "Limited," two years parts and labor. Manufacturer: Dual, West Germany; U.S. distributor: United Audio, 120 S. Columbus Ave., Mount Vernon, N.Y. 10553.

**Speed accuracy** (at 33 or 45 rpm)

- No measurable error, 105-127 VAC, when set exact at 120 VAC

**Speed adjustment range**

- At 33 rpm: +7.5% to -6.4%
- At 45 rpm: +7.7% to -8.1%

**Wow & Flutter**

- ANSI/IEEE weighted peak
- <0.06% average; <0.11% maximum instantaneous

**Total Audible Rumble**

- 64 1/2 dB

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Dual was one of the first (and remains one of just a few) manufacturers to address directly the challenge posed by modern high-compliance cartridges. The problem is that as the compliance of the cartridge (i.e., the flexibility of its stylus cantilever suspension) increases, the frequency of the arm/cartidge resonance decreases (all else remaining equal). If the frequency of the resonance becomes too low — less than 8 Hz or so — it will occur in the same range as most record warps. As a result, the system will tend to overreact to these warps, which are present in great numbers even on discs that appear to be perfectly flat. At best, this will cause the amplifier to waste power as it tries to make the loudspeakers reproduce an inaudible infrasonic signal that is in no way related to the music on the record. At worst, it may cause such severe mistracking that the stylus jumps out of the groove altogether.

There are two avenues out of this difficulty. One is to damp the arm, thereby reducing the amplitude of the resonance; the other is to reduce the effective mass of the arm/cartridge system, which will raise the resonance frequency. In the 607, Dual takes both roads. The 607's lightweight UL (ultra-low mass) tonearm is specifically designed to mate with the low-mass Ortofon TK5-SSE cartridge, the intended result being an arm/cartridge resonance frequency above the treacherous warp region. The arm is also fitted with Dual's tunable antiresonance counterweight, which (when properly adjusted) is supposed to damp the resonance, providing an extra measure of protection.

Other features of the 607 are more conventional and are, as we have come to expect from Dual, straightforward and well thought out. This is a semi-automatable direct-drive turntable. When you move the tonearm from its rest position, the platter begins rotating at either 33 or 45 rpm, as

The BA-26 head amp is designed to boost the signal from a 980 LZS to a level high enough to drive standard phono inputs.
Today, only one high bias tape is able to combine outstanding sensitivity in the critical high frequency range with the lowest background noise of any oxide tape in the world.

That tape is BASF's Professional II. Professional II is like no other tape because it's made like no other tape. While ordinary high bias tapes are made from modified particles of ferric oxide, Professional II is made of pure chromium dioxide. These perfectly shaped and uniformly sized particles provide a magnetic medium that not only delivers an absolute minimum of background noise, but outstanding high frequencies as well.

Like all BASF tapes, Professional II comes encased in the new ultra-precision cassette shell for perfect alignment, smooth, even movement and consistent high fidelity reproduction. With Professional II, you'll hear all of the music and none of the tape. And still that what you want in a tape?

The difference in noise level between PRO II and ordinary high bias tape is greatest where the human ear is most sensitive (2 kHz).

For the best recordings you'll ever make.
TONEARM RESONANCE AND DAMPING
(with Shure V-15 Type III; antiresonance at 111 vertical
5.5 Hz; 10 dB rise
lateral 5.5 Hz; 101/2 dB rise
(with Ortofon TKS-55E; antiresonance set at 14 vertical
13 Hz; 61/2 dB rise
lateral 13 Hz; 11 dB rise

STYLUS-GAUGE ACCURACY
measures 0.2 gram high at 0.5 gram;
measures 0.1 gram high. 1.0 to 3.0 grams

TOTAL LEAD CAPACITANCE 155 pF

determined by the choice of one of a pair of speed-selector pushbuttons on the left front face of the turntable base. A pitch control to the left of the speed selectors makes possible a reasonable amount of variation around the nominal values. And there is a strobe light next to the platter that, in conjunction with four rows of strobe markings on the platter rim, enables you to adjust the turntable to precise speed on both 50- and 60-Hz power lines.

Cueing buttons to raise and lower the arm are located on the right front face of the turntable base. The stylus must first be positioned manually over the lead-in groove of the record; thereafter, the turntable operates automatically, returning the tonearm to its rest at the end of the record and shutting off the motor. The 607 will also turn itself off when the tonearm is manually returned to its rest. To facilitate record cleaning and initial speed adjustment, Dual has thoughtfully included a molded plastic extension on the arm rest, so that you can park the arm without stopping the turntable's rotation.

The tonearm itself is of the dynamic-balance variety, which means that if you adjust it carefully for neutral balance before you set the tracking force (by means of a calibrated dial at the side of the arm gimbal), you need not concern yourself with leveling the turntable: it should function properly in any position—even inverted. Antiskating is set by means of another calibrated dial located to the right of the tonearm on the turntable's top plate. The antiresonance filter is adjusted for individual cartridges by twisting a calibrated dial on the counterweight to the value suggested for that pickup in the Dual owner's manual.

Although an adapter kit is available that enables mounting of just about any cartridge in the 607's tonearm, its use will usually result in a substantial increase in effective mass. This is demonstrated by Diversified Science Laboratories' measurement of the antiresonance frequency with a Shure V-15 Type III installed. The very low frequency of this combination's resonance puts it right in the heart of record-warp territory. With the low-mass TKS-55E cartridge normally supplied with the turntable in place, the resonance frequency rises to a far more palatable 13 Hz—just a shade on the high side of the 8- to 12-Hz range we consider optimum. In both cases, the resonances are fairly well damped with the antiresonator adjusted to Dual's recommended settings (although no more so, as far as DSL could tell, than at any other settings suggesting that this adjustment is not critical to the system's performance).

The 607's behavior in other important performance characteristics is also quite respectable. Speed accuracy is essentially perfect over a wide range of power-line voltages. And flutter and rumble figures, though not the lowest we have seen, are good for a turntable in this price range.

In use, the 607 presents no special difficulties; like most Dual products, it seems to have been designed with the idea that even a tyro should be able to set up and operate the unit with complete confidence. That, combined with its performance and relatively low price, makes it a good value, especially when used with the matching TKS-55E cartridge.

Circle 138 on Reader-Service Card

---

**CONVERSION TABLE FOR POWER OUTPUT**

<table>
<thead>
<tr>
<th>WATTS</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>0</td>
</tr>
<tr>
<td>1.25</td>
<td>1</td>
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<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>
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<td>7</td>
</tr>
<tr>
<td>6.3</td>
<td>8</td>
</tr>
<tr>
<td>8.0</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WATTS</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0</td>
<td>10</td>
</tr>
<tr>
<td>12.5</td>
<td>11</td>
</tr>
<tr>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>32</td>
<td>15</td>
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<td>40</td>
<td>16</td>
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<tr>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>63</td>
<td>18</td>
</tr>
<tr>
<td>80</td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WATTS</th>
<th>dBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>125</td>
<td>21</td>
</tr>
<tr>
<td>160</td>
<td>22</td>
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<tr>
<td>200</td>
<td>23</td>
</tr>
<tr>
<td>250</td>
<td>24</td>
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<tr>
<td>320</td>
<td>25</td>
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<tr>
<td>400</td>
<td>26</td>
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<tr>
<td>500</td>
<td>27</td>
</tr>
<tr>
<td>630</td>
<td>28</td>
</tr>
<tr>
<td>800</td>
<td>29</td>
</tr>
</tbody>
</table>

---

**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.
JBL’s new L96.
Perfect 10.

Having designed and built one of the world’s most accurate and critically acclaimed 3-way 12-inch bookshelf systems (the L112), our engineers focused on a new challenge: creating a smaller system with comparable performance. The result is the perfect 3-way 10-inch system, the new JBL L96.

The world’s best 10-inch woofer is a great place to start. Realizing that no ordinary, smaller-diameter woofer would maintain the true, deep bass performance required to do the job right, we used the world’s best 10-inch woofer—a driver that outperforms many of the much larger models of our competitors.

The L96’s woofer incorporates JBL’s unique SFG (Symmetrical Field Geometry) design. The same huge magnetic structure used in our L112 system to reduce second harmonic distortion to infinitesimal levels.

But that wasn’t enough. So we added something unheard of in competitive 10-inch woofers: a larger-than-usual 3-inch voice coil (edge-wound, of course) to raise the power handling and improve the transient response.

The rest is the best of JBL. The other components of the new L96 speak for themselves. Extraordinary sonic detail from the dome tweeter. A superbly efficient, acoustically isolated midrange. And an electronically sophisticated, high resolution crossover network. All working together to produce an incredibly accurate overall sound—natural and effortless, with no sense of a loudspeaker at all. Of course, every L96 system is built from the ground up in the U.S.A., manufactured to a quality standard that’s become the benchmark of the industry.

Come listen to the new L96. Experience yet another chapter in JBL’s relentless pursuit of loudspeaker perfection, with the help of the audio specialists at your nearest authorized JBL dealer. For the name and address of the dealer nearest you, write James B. Lansing Sound, Inc., 8500 Balboa Blvd., P.O. Box 2200, Northridge, CA 91329.

Circle 23 on Reader-Service Card
Shure supplies a replacement stylus (needle) for virtually every cartridge we've ever made.

No matter which Shure cartridge you own, from today's V15 Type IV all the way back to the M3D, the first true high fidelity stereo cartridge, you can get a Genuine Shure replacement stylus that can bring it right back up to its original performance specifications. Upgrade styli are available to fit some Shure cartridges for performance beyond original specifications.

Even as the performance of the rest of your high fidelity system can be no better than the performance of the cartridge, the performance of a fine Shure cartridge can be no better than its stylus. Cartridges don't wear out—styli do. A worn or damaged stylus can cause irreparable damage to your valuable, possibly irreplaceable record collection. Don't take the chance! Have your stylus professionally inspected at least once a year, and replace it if necessary with a Genuine Shure replacement stylus.

Don't be fooled by cheap imitations. Sophisticated equipment designed by Shure assures uniformity and unwavering adherence to specifications. Insist on the name SHURE on the stylus grip.

Shure supplies a replacement stylus (needle) for virtually every cartridge we've ever made.

... a sound investment in record care & listening pleasure.
A Modern Receiver from Hitachi


FM tuner section

Mono Frequency Response

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>Response (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>+2 - 1/2 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>50</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>100</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>200</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>500</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>1K</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>2K</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>5K</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>10K</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>20K</td>
<td>+20 dB, 20 Hz to 15 kHz</td>
</tr>
</tbody>
</table>

Stereo Response & Channel Separation

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>Response (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>50</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>100</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>200</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>500</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>1K</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>2K</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>5K</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>10K</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
<tr>
<td>20K</td>
<td>+17 dB, 20 Hz to 15 kHz</td>
</tr>
</tbody>
</table>

Frequency response

L ch: +17 dB, 20 Hz to 15 kHz
R ch: +17 dB, 20 Hz to 15 kHz

Channel separation

≥38 dB, 35 Hz to 2.5 kHz
≥28 dB, 20 Hz to 15 kHz

FM Sensitivity & Quieting

<table>
<thead>
<tr>
<th>Noise Level (dB)</th>
<th>Response (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>10</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>20</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>30</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>40</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>50</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>60</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>70</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>80</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>90</td>
<td>stereo quieting (noise)</td>
</tr>
<tr>
<td>100</td>
<td>stereo quieting (noise)</td>
</tr>
</tbody>
</table>

Hitachi's display panel uses LEDs to good effect, indicating which of five inputs has been selected and the approximate power output into a hypothetical 8-ohm load.

The state of the electronic art has advanced to a point where a manufacturer can, with enough monetary and engineering wherewithall, achieve in a receiver virtually any level of performance he wants within the bounds of theoretical possibility. This has taken some of the glitter out of specsmanship, with the result that manufacturers have turned increasingly to features and styling to sell their wares. Again, however, modern electronic technology simplifies the task.

Hitachi's HTA-4000 receiver, for instance, has a digital frequency-synthesis tuning section—as do many current receivers. This eliminates the need for a tuning dial (station frequencies are displayed digitally) and for a channel-center meter. Instead of dominating the top half of the front panel, as in a conventional receiver, the tuning aids—the frequency display, a three-LED signal-strength meter, and a stereo indicator LED—fit neatly into the panel's upper left-hand quarter. Arrayed directly below the tuning display is a row of six station-preset buttons (the receiver can memorize an FM and an AM station for each) and UP and DOWN tuning bars.

Another advantage of digital tuning is that it eliminates the need for a tuning knob, giving a somewhat cleaner look to the front panel. Hitachi has extended this clean look almost to the limit, making the VOLUME the receiver's only rotary control. (We are happy to see this sensible bit of restraint: an ordinary knob is much more convenient for a volume control than the pushbutton systems found on many other recent receivers and amplifiers.) All other controls are either buttons or, for the tone and balance controls, sliders.

The three sliders are in a row below the tuning controls, with separate speaker selectors for two pairs of speakers to the left. The five closely spaced pushbuttons to the right control the infrasonic filter, the tuning mode (auto scan or manual), muting, FM or AM reception, and a one-way tape dubbing feature. The space above these buttons is taken up by a power meter consisting of two columns of five LEDs each, calibrated from 0.01 to 40 watts (-20 to 16...
Denon’s Svelte Cassette Deck

As a company, and despite its pioneering of the digital audio medium, the Nippon-Columbia/Denon image has seldom been tinged with anything that could be called ballyhoo or radicalism. It is best known in this country for products that seek to make the most of existing, recognized formats, rather than pursuing the new for its own sake. The phono input impedance is not a simple resistance in parallel with a capacitance. As a consequence, cartridges that are sensitive to loading may not perform optimally into this complex impedance. Otherwise, we can find little to fault. Noise and distortion are acceptably low, and frequency response (apart from a light rise in the top end of the tuner response) is quite flat. The tone controls provide substantial amounts of boost and cut: 10 dB for the TREBLE, 15 dB for the BASS. And the infrasonic filter is excellent, with a well-chosen cutoff frequency and a steep slope—a real boon if your arm/cartridge combination tends to bounce on warped records. The action of the LOUDNESS is just about what you’d expect in a modestly priced receiver: It is fixed (not adjustable to the sensitivity of your speakers) and boosts both the treble and the bass (rather than just the bass). One particularly nice touch is that all three LEDs in the signal-strength meter come on just at the point where the tuner reaches full limiting (and, therefore, lowest noise). That is typical of the HTA-4000’s operating convenience and certainly is part of what makes the receiver a pleasure to use. It gives you all the basic features you need and stays out of your way when you use them. And that’s what good human engineering is all about. Circle 140 on Reader-Service Card
Deck your walls with a red Lamborghini.

This holiday season, give yourself or someone you love a print reproduction of the $200,000 Lamborghini Countach. It's yours from Alpine Car Audio Systems and participating Alpine dealers.

Just clip the car at the bottom of this page and present it and $1.00 to your Alpine dealer. He'll present you with this eight-color, 19" x 37" Alpine Lamborghini poster. Designed by graphic artist Alan Goodson, it's a limited edition value and offered only while supplies last.

The name of your nearby Alpine dealer is only a toll-free call away: 800-421-1395. In California, call 800-262-4150. See him for the latest in car audio technology, like the new Alpine 7136 electronically tuned radio with phase-locked-loop frequency synthesizer and digital fluorescent display. Your Alpine dealer knows how to put true high fidelity in your car. Just in time for the holidays. Cheers!

©1981 Alpine Electronics of America, Inc., 3102 Kashiwa Street, Torrance, California 90505.
AUDIO  New Equipment Reports


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

<table>
<thead>
<tr>
<th>Hz</th>
<th>0.2</th>
<th>0.5</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>L ch</td>
<td>+1/2, -4 1/4 dB, 40 Hz to 12.5 kHz</td>
<td>+1/2, -4 1/4 dB, 40 Hz to 12.5 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R ch</td>
<td>+1/2, -4 1/4 dB, 40 Hz to 12.5 kHz</td>
<td>+1/2, -4 1/4 dB, 40 Hz to 12.5 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Hz</th>
<th>0.2</th>
<th>0.5</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>L ch</td>
<td>+1/2, -3 dB, 25 Hz to 20 kHz</td>
<td>+1/2, -3 dB, 25 Hz to 20 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R ch</td>
<td>+1/2, -3 dB, 25 Hz to 20 kHz</td>
<td>+1/2, -3 dB, 25 Hz to 20 kHz</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**RECORD/PLAY RESPONSE, TYPE 3 TAPE (-20 dB)**

<table>
<thead>
<tr>
<th>Hz</th>
<th>0.2</th>
<th>0.5</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>L ch</td>
<td>+1/2, -3 dB, 25 Hz to 25 kHz</td>
<td>+1/2, -3 dB, 25 Hz to 25 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>R ch</td>
<td>+1/2, -3 dB, 25 Hz to 25 kHz</td>
<td>+1/2, -3 dB, 25 Hz to 25 kHz</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Hz</th>
<th>0.2</th>
<th>0.5</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>L ch</td>
<td>+1/2, -3 dB, 25 Hz to 20 kHz</td>
<td>+1/2, -3 dB, 25 Hz to 20 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R ch</td>
<td>+1/2, -3 dB, 25 Hz to 20 kHz</td>
<td>+1/2, -3 dB, 25 Hz to 20 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SN RATIO (re DIN 0 dB; RPX, A-weighted)**

<table>
<thead>
<tr>
<th>Type 2 tape</th>
<th>Type 4 tape</th>
<th>Type 1 Tape</th>
</tr>
</thead>
<tbody>
<tr>
<td>without noise reduction</td>
<td>53 3/4 dB</td>
<td>52 dB</td>
</tr>
</tbody>
</table>

**METER READING FOR 3% DISTORTION (333 Hz)**

<table>
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<tr>
<th>LED</th>
<th>0</th>
<th>0.9</th>
<th>1.9</th>
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<th>3.9</th>
<th>4.9</th>
<th>5.9</th>
<th>6.9</th>
<th>7.9</th>
<th>8.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>R ch</td>
<td>+2, -3 dB, 25 Hz to 18 kHz</td>
<td>+2, -3 dB, 25 Hz to 18 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L ch</td>
<td>+3 dB, 25 Hz to 19 kHz</td>
<td>+3 dB, 25 Hz to 19 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Hz</th>
<th>0.2</th>
<th>0.5</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>L ch</td>
<td>+2 1/2, -3 dB, 25 Hz to 20 kHz</td>
<td>+2 1/2, -3 dB, 25 Hz to 20 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R ch</td>
<td>+2 1/2, -3 dB, 25 Hz to 20 kHz</td>
<td>+2 1/2, -3 dB, 25 Hz to 20 kHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Hz</th>
<th>0.2</th>
<th>0.5</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>L ch</td>
<td>+2, -3 dB, 25 Hz to 18 kHz</td>
<td>+2, -3 dB, 25 Hz to 18 kHz</td>
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**ERASURE (333 Hz; re DIN 0 dB)**

<table>
<thead>
<tr>
<th>Type 2 tape</th>
<th>Type 4 tape</th>
<th>Type 1 tape</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 1/4 dB</td>
<td>70 dB</td>
<td>70 dB</td>
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**CHANNEL SEPARATION**

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<tr>
<th>Hz</th>
<th>0.2</th>
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**METER READING FOR 3% DISTORTION (333 Hz)**

<table>
<thead>
<tr>
<th>LED</th>
<th>0</th>
<th>0.9</th>
<th>1.9</th>
<th>2.9</th>
<th>3.9</th>
<th>4.9</th>
<th>5.9</th>
<th>6.9</th>
<th>7.9</th>
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The Denon has both mechanical averaging meters and a set of fast, peak-reading LEDs for monitoring recording levels.

Crucial to the design of any deck that will be used for serious recording, of course, is the metering. That in the DR-330 is effective, though somewhat more complex than average today. (Keep in mind that audiophiles in some parts of the world—notably in Japan—look askance at LED and other "bar graph" primary meters, much preferring the combination of peak LEDs with mechanical meters, as employed here.) The meters are the true averaging type, requiring that signal levels be maintained for at least 115 milliseconds to register within 3 dB of full values. There is some overshoot—a maximum of 2 1/2 dB for pulses lasting 250 milliseconds—but it is not excessive for mechanical meters. The LEDs respond much faster, of course (they need a pulse only about 0.5 millisecond long), and are calibrated very close to the meter values for continuous signals. That calibration puts the metering's "0 VU" about 6 dB below DIN reference level.

This is altogether consistent with the manual's admonition that, with typical signals and tapes, the meters should be allowed to flick past their "0 VU" indication only occasionally, and it agrees with the proposition, less clearly spelled out, that the middle ("+5") LED should be allowed to light from time to time but the top one ("+8") should be kept dark except with a tape of demonstrably excellent headroom. Note, for example, that the level at which midrange distortion exceeded 3% in Diversified Science Laboratories' tests with the ferric Type 1 tape was not only off the top of the meters (which are calibrated to +6), but beyond the threshold of the +8 LED.

The ferric tape in question is one new to us: Denon's own DX-3. DSL also used Denon tape (DXM) for the metal Type 4. Since distribution of Denon's own tapes is just beginning here, however, we were glad that the company suggested one that already enjoys wide distribution, Maxell XL-11S, as one alternative to Denon DX-7 for the "chrome" Type 2, which is used for all measurements where the tape type is not specified. To match the deck to these and the long list of other formulations in the owner's manual, there is both a basic four-position tape-type switch and a continuously variable bias vernier calibrated in arbitrary numbers from -10 to +10 by way of a detented center zero. If you choose a tape from the manual's list, you are given a suggestion for setting this control (usually somewhere in the range between -4 and +2), with due allowance made for the difference between thin (C-90) and thick (C-46 or C-60) versions of the various formulations. If you choose a formulation not on the list, you start out at the zero setting. The manual then urges you to record with the chosen tape and setting, comparing input with recorded output via the monitor switch, and to fine tune the bias control for the sort of sound you want.

Thus Denon inevitably raises, once again, the fascinating philosophical question of enhancement versus replication, of ear versus eye. The Denon approach is devoted to the concept that selecting just the right control setting will subtly enhance the sounds you are recording by tailoring response (and even distortion) characteristics to those sounds. Again, this appears to be an attitude that is particularly popular among Japanese audiophiles—and one that can be realized only in a deck such as this, where the combination of adjustable bias (or bias and EQ) with separate recording and playback headgaps makes it possible to assess aurally the precise effect of the adjustment you are making. The replicationists hold, of course, that any alteration of the sound by the recorder is inherently bad—and, as a corollary, that instrumented bias and EQ adjustment is more precise than aural adjustments and therefore (paradoxically) better calculated to prevent audible change. Recordists must decide which approach they prefer and choose accordingly. Both have their pitfalls. Adjusting by ear can catch an unheralded change in tape formulation that could compromise results in some instrumented, deck-ordained tape-matching schemes; instrument adjustment avoids the intrusion into the process of the ear's notorious ability to fool itself.

We might have counted ourselves the victims of that deception when we came to aural testing but for the DSL response curves. From the replicationist point of view, the recordings tended to be distinguishable from the originals—though, at recommended bias and level settings, we would hard put to characterize (let alone quantify) the difference. Measured response, however, characteristically shows a slight upward shelving of the treble, particularly with the Dolby B noise reduction turned on. All the curves were made with the bias set according to the manual's rec-
A Quick Guide to Tape Types

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

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

Type 1 (IEC Type I) tapes are ferric requiring the same 120-microsecond playback EQ but somewhat higher bias. They sometimes are styled LH (low-noise, high-output) formulations of "premium ferrics."

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

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

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

A Variation on Ortofon’s VMS


A tape deck represents the most personal of equipment choices because it is the component that—of all regular home models—the owner uses in the most active sense; to that extent, it is the one that puts the greatest premium on personal priorities when the time comes to make a choice. The DR-330’ s metering and bias control, among other things, make it plain that this is a model intended for a more-than-casual amateur who really wants to be involved in the recording process. At the same time, the CUE’s little touch of luxury demonstrates that this is a true consumer product, without semipro pretensions. If these characteristics of the deck fit your interests as a recordist, start comparing the fine points, we think you’ll find that there’s no other deck quite like it.

Circle 139 on Reader-Service Card

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The two channels match very closely in frequency response, both remaining almost ruler flat up to 5 kHz, then rising smoothly and gradually to a peak of 2½ to 3 dB at approximately 15 kHz. Separation is more than adequate over the entire audible band and extraordinary in the lower treble. The VMS-30’s square-wave response is also exemplary, showing a single cycle of overshoot followed by a little well-damped ringing. There is virtually no rounding of the waveshape.

On audition, the treble peak is less apparent than the response curves might

in the pause mode when you release it. Very neat! There are two CUE buttons (as Denon’s search feature is called), one for each direction of tape travel. They move the tape somewhat more slowly than the fast-wind buttons and permit a slight murmur of audio output. When they come to an interselection blank, they stop their scurrying, cue up to the blank, and automatically begin playback. We find the search system unusually surefooted and, therefore, particularly welcome.

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CONTRARY TO ITS OWN name, in a sense. Genesis Physics is the youngest descendent of a venerable family. Its founder formerly worked for EPI, whose founder came from KLH, one of whose founders had before cofounded Acoustic Research. Naturally, the histories and products of those companies have diverged over the years, but all have hewed to the line that the best sound is that which is closest to the original.

The Model 210 reviewed here is itself the third generation in a series that started some years ago with the Model 2. It is a large "bookshelf" speaker with a removable black fabric grille that covers almost all of the speaker’s front baffle. Bass is handled by an 8-inch woofer, which provides good dispersion up to the crossover frequency, and a 10-inch passive radiator, or drone cone, which carries most of the load at very low frequencies. Both are manufactured by Genesis. The company chose this approach because it gives higher sensitivity than an acoustic suspension design (which it uses for most of its other speakers) with the same enclosure volume and bass-cutoff frequency. Passive-radiator systems do roll off faster below cutoff than acoustic suspension systems; at the same time, they are more sensitive to infrasonic disturbances from record warps. However, these are not significant drawbacks if the bass cutoff is at a low enough frequency and if you use an infrasonic filter or take care to match cartridge compliance and tonearm mass for a well-placed low-frequency response.

Above 1.8 kHz, a 1-inch inverted-dome tweeter, also of Genesis’ manufacture, takes over. (Contrary to what intuition might lead you to expect, turning the dome inside out does not entail any penalty in high-frequency dispersion, which is determined almost solely by the width of the diaphragm.) Ferrofluid is used in the voice-coil gap to improve power handling.

An inset in the 210's rear panel holds a two-position toggle switch that controls the tweeter’s output level. Response is nominally flat when the switch is in its normal position, and slightly down above 1.8 kHz when it’s at decrease. Below the switch are color-coded spring clips for amplifier connections. Model 210s come in symmetrical pairs for optimum imaging.

Diversified Science Laboratories ran its measurements with the 210s mounted on stands and backed up against the rear wall, well away from side walls. The speaker’s impedance curve lies fairly low and is unusually smooth, ranging from a high of 20.3 ohms at 45 Hz to a low of 4.5 ohms at 130 Hz. This should be an easy load for most amplifiers to drive, but we would not recommend running a pair of 210s in parallel with another set of speakers.

Sensitivity is quite high, as is power-handling capacity: Maximum short-term sound pressure level is 117 dB SPL, which is very, very loud. And distortion is gratifyingly low. At a moderate output of 85 dB SPL, total harmonic distortion remains below 1% all the way from 31 Hz to 10 kHz (the entire range over which DSL makes distortion measurements) and averages less than ½%. At 90 dB SPL, THD still averages less than 1% and reaches a high of only about 1½% in the crossover region, where the tweeter is under maximum stress. For a very loud output of 100 dB SPL, harmonic distortion is still below 4% at most frequencies (even in the deep bass), with a peak to about 7% near the crossover point. The distortion products consist predominantly of the relatively innocuous second harmonic component at all three test levels. For what is essentially a two-way system, these are excellent results—especially in the deep bass, where we are used to seeing considerably larger figures.

Even more impressive is the 210’s frequency response, which is exceptionally smooth and flat. This is especially so on axis, where response is within ±2½ dB from 35 Hz to 20 kHz. Off axis, the plot is

Genesis’ Midprice Masterpiece

Yamaha gives you the silent treatment.

Yamaha's K-960 cassette deck with dbx® gives you what you listen for—music. All the music. With none of the tape noise. The highs without the hiss. The midrange and bass with nothing missing except the noise.

But the K-960 doesn't just eliminate noise. It has the capability of reproducing a full 110db of dynamic range—more than enough to handle the latest advanced-technology software—that other decks, with 50 or 60db dynamic range, squeeze out.

And the K-960 packs a lot more. A pure Sendust head gives you increased musical clarity and exceptional wear-resistance. Even with metal tape. A superior-design two-motor transport system insures fast, smooth tape handling and reduced wow and flutter.

There are also full-logic transport controls. fluorescent meters, optional remote control unit, your choice of silver or black finish and, of course, Dolby® noise reduction.

It all adds up to a lot of convenient listening pleasure in one beautiful package.

But enough noise about the Yamaha K-960 cassette deck with dbx. Just get into your music with it. At selected Audio Specialty Dealers now.

For more information, write to Yamaha Electronics Corporation, USA, P.O. Box 6663, Buena Park, CA 90622.

Yamaha. For the music in you.
Although Astatic has been in the phono pickup business for almost half a century, the new Moving Flux line is its first assault on the component high fidelity market. The four cartridges, ranging from the MF-400 to the top-of-the-line MF-100 reviewed here, are all based on a variant of the familiar moving-magnet principle. In a conventional moving-magnet cartridge, a tiny magnet is attached to the end of the stylus cantilever. The magnet is situated in the cartridge body so that it is surrounded by a set of iron pole pieces, around which wire coils are wound. As the stylus wriggles its way along a record groove, its motion is transmitted by the cantilever to the magnet. The movement of the magnet causes variations in the magnetic flux density in the vicinity of the pole pieces, which in turn induces a voltage in the coils. It is this constantly changing voltage—the electrical analog of the mechanical groove modulation—that is picked up and boosted by your amplifier.

What distinguishes Astatic's MF pickups is their lack of pole pieces. Instead, they have specially designed coil assemblies that detect the flux variations directly through their windings. The company says that this approach results in cleaner, more efficient transduction. In addition, the MF-100 uses a tapered cantilever tube, for low mass combined with high rigidity, and a Shibata stylus, for improved high-frequency tracing.

For both lab and listening tests we used a tracking force of 1.25 grams—the mean of Astatic's recommended range of 1.0 to 1.5 grams. At that setting tracking ability is excellent, and distortion (both harmonic and intermodulation) is quite low by cartridge standards. Indeed, Diversified Science Laboratories found that the MF-100 could negotiate all the bands of our test record, but it is often not as evident with other fixed-coil cartridges, which usually have high coil inductances and therefore somewhat restricted ultrasonic bandwidth. Astatic claims a very low coil inductance of only 90 millihenries for the MF-100.

The MF-100's channel balance is virtually perfect, and its sensitivity is about average for a moving-magnet design. Measured by the twin-tone IM method, both vertical tracking angle and stylus rake angle appear to match the DIN-standard value of 20 degrees almost exactly. This is exceedingly rare in our experience; many cartridges we have tested measure 10 degrees or more above that figure.

Astatic claims very high compliance for this cartridge, and DSL's measurements confirm it. In the SME 3009 Series II Improved tonearm (which has an effective mass of approximately 9 grams), the main arm/cartridge resonance occurs at a frequency just slightly below the range we consider optimum. This suggests that you should use a very low-mass or well-damped arm to extract the highest possible performance from the MF-100.

The Astatic's frequency response is extraordinarily flat and almost identical for the two channels up to 10 kHz. Separation is also excellent, even at very high frequencies. Square wave photos show some overshoot and considerable ringing. Some of the ringing is present on the test record, but it is often not as evident with other fixed-coil cartridges, which usually have high coil inductances and therefore somewhat restricted ultrasonic bandwidth. Astatic claims a very low coil inductance of only 90 millihenries for the MF-100.

One benefit of low coil inductance is that it tends to make the cartridge relatively immune to capacitive loading. During our listening tests, we varied the load capacitance on the MF-100 from 180 to 530 picofarads without affecting any significant audible change. The sound itself is superb—clean, well balanced, and free of harshness or strain on even the loudest, most complex musical passages. A number of our listening panel were especially impressed with the transparency of the MF-
A Light and Lively Headset from Koss


APPARENTLY “PRO-4 QUADRUPLE-A” is more of a mouthful than Koss thinks people can handle. We are inclined to agree. In any event, it has decided to retire the venerable “A” designation, trotting out in its stead a rookie from the other end of the alphabet. And the Pro-4 series, which goes back a lot of years, rolls merrily on in the tradition of its illustrious predecessors.

This is not to say that there have been no substantive changes: The Pro-4X is in many respects a completely new design. The most important technical innovation is in the transducer system. Unlike previous Koss headphones, which have relied on a single driver to reproduce the entire audible range, the Pro-4X incorporates both a light-weight moving-coil woofer with a four-square-inch diaphragm and a piezoelectric tweeter. (Perhaps the “X” in the model number is meant to signify the presence of a crossover network.) Piezoelectric drivers differ from conventional designs in that they have no voice coil. Instead, they use a ceramic element that flexes in response to an electrical voltage, such as an audio signal from an amplifier, thereby generating sound waves.

The Pro-4X is also lighter than previous models in the series, weighing only about two-thirds as much as its immediate predecessor, the Pro-4AAA. The result is much greater comfort in prolonged listening sessions. This is an especially important consideration because, like all Pro-4 headphones, the Pro-4X is of the high-isolation school. Its earcups seal tightly around the outside of the wearer’s ears—an arrangement that can easily lead to discomfort, even pain, if the headset is too heavy and the cushioning inadequate. The main advantage of the circumaural cups is that environmental distractions are reduced to a minimum. Such isolation is a real plus if you live in a noisy home and virtually a necessity for monitoring during on-location recording.

An added benefit of the sealed-cup approach is extended bass response. In this respect, such headphones normally perform much better than the now more common open-air variety. The Pro-4X is no exception. Indeed, its firm, robust low end is probably its most appealing sonic characteristic. Subjectively, the overall frequency response is smooth over a very wide range. Some of our listening panel did note a tendency to brightness, which gives cymbals and especially violins a slightly metallic quality. However, we find that we can easily achieve a more natural balance by backing off on the amplifier’s treble control.

Clarity is outstanding, even in the bass, where many headphones start sounding mushy. Free of the muddling effects of room reflections, every recorded detail comes through unobscured. These phones are fairly sensitive, and therefore tend to make amplifier noise more prominent than it usually is through loudspeakers. But in practice, such noise is almost always masked by the program. The Pro-4X also is capable of reproducing very high levels without strain. (Our ears give out before the phones do.)

Comfort is judged by most of our panel to be excellent, although one dissenter finds that the cups pinch around the earlobes. This kind of disagreement is the norm where headphones are concerned: One size rarely fits all. It’s always a good idea when headphone shopping to try before you buy, lest you run afoul of some discrepancy between a designer’s notion of how human heads and ears are shaped and how yours actually are.

All in all, the Pro-4X is a fine product that sells for a reasonable price. And it demonstrates once again that Koss is still a strong contender in a market it had a large part in originating.

Circle 134 on Reader-Service Card
Meeting the Digital Challenge

Is your system ready for the dynamic range of fully digital recordings?

by Robert Long

Every generation has its super-buzzwords. I suppose, and ours is no exception. In audio, these days, the word is “digital,” and you encounter it in brochures for tuners and receivers, in documents dealing with all sorts of mass communications plans, in anything involving timekeeping, and, of course, on record jackets. And more digital recordings are made every month as we wend our way toward the promised “digital revolution.”

The big question is: Where will you stand, come the revolution? Will you be ready for the new order—or, more precisely, will your stereo system be ready? The question is both more complex and less intimidating than it sounds. That is, there is no need to be alarmed by the threat of instant obsolescence (despite extravagant advertising, particularly by loudspeaker makers, implying that some products are uniquely digital-ready), but there is plenty of reason to expect digital recording techniques will materially affect the way we listen to music and the equipment we use in the process.

It’s largely a question of the limiting factors. As long as the dynamic ranges of LP records, prerecorded tapes, and FM radio all were limited to about 60 dB—which has been true, more or less, for the last generation—that figure defined a frontier of sonic refinement for regular home listening. Naturally, equipment designers liked to provide as much elbow room beyond that limitation as possible to keep their designs from imposing their own constraints. Phono pickups or preamps, for example, might otherwise distort on the loudest recorded passages, chipping away the very top of the recorded dynamic range; or a poorly shielded transformer might increase the hum level, stealing from the bottom of the dynamic range. But all this was well understood and, as the levels that each element in the music-reproduction chain would be asked to handle became more and more standardized, the chances that the playback equipment would ever be the limiting factor for dynamic range became progressively fainter.

In some respects, this magic 60-dB figure already represented an ideal that defied realization in practice. Stereo FM found it more difficult to achieve, particularly in the beginning, than mono FM had; and though AM receivers with 60-dB signal-to-noise ratios can be built,
The dynamic range of most currently available program material seldom exceeds 40 dB.

The second is a superb loudspeaker, with minimal distortion both at extremely loud and extremely soft levels plus extraordinary transient response—the sort of loudspeaker you'd like to buy—and could buy right now, if you were willing to stretch your budget. The third is a good, low-noise preamp.

Unless your amplifier is already skinny by today's standards, it probably has low enough noise and high enough headroom to manage all but the most aggressive digital sound. Still, if you like to knock visitors' socks off, you'll doubtless pine for a bit more unclipped punch on the peaks. To make taped copies of these recordings, you'd presumably need a digital recorder, though that might require "translation" from one digital code to another. But FM could no longer be called a high fidelity medium in the digital context without a radical change in broadcast technique: the present 60-plus dB dynamic range of good stereo reproduction simply can't be stretched to 90 dB.

Before you prepare your tuner for donation to the Salvation Army, however, consider the implication of what I've just said. The capabilities of current FM technology may well become a limiting factor for a long time to come: if the dynamic range of recordings is so great that they can't be played successfully on FM, recording companies will change the recording technique before they'll sacrifice the free publicity of air play. Then, too, there's the question of the dynamic range that actually will be useful in a typical home—let alone in a moving car. So in improving the dynamic range in典型 home-reproduction media by 30 dB, we are only removing this specific limitation; the freedom is welcome, but it won't necessarily be used to its fullest because limiting factors are bound to show up elsewhere.

To put the subject into perspective, consider that the DBX disc also has a dynamic range of about 90 dB, and that it has impressed audiophiles everywhere (including us). Yet it hasn't created a major change in the way recordings are made. On the contrary, it was only the shift to digital recording in the studio that provided the DBX discs with program material worthy of their capabilities. In theory at least, digital disc players promise even more—freedom from the effects of tracing distortion and record warps, for example—but (at least initially) at considerably higher cost than the DBX decoders. Once again, audiophiles doubtless will be delighted. But there is a limit to how far in the audiophile direction recording companies and broadcasters can go as a practical matter. We will doubtless have new limiting factors to set our sonic standards, but it remains to be seen how different they will be.
The worst warped record in your collection can lead to the best investment you ever made.

If you have a record in your collection that’s too warped to play and too valuable to discard, we have a suggestion for you. Bring that record to your audio specialist and ask him to play it on a Dual ULM turntable. You will hear the music the way it should be heard. Because the ULM tonearm will track that record as if it were perfect.

ULM is Dual’s exclusive Ultra Low Mass tonearm system, with total effective mass of 8 grams. That’s less than half the mass of conventional tonearm and cartridge combinations. And there’s no mistaking the difference ULM makes in what you hear.

That difference has been confirmed by the independent test labs that tested ULM with warped records as “real-life” test instruments.

...tracked the most severely warped records in our collection, usually so well that we heard nothing wrong? —Stereo Review

“Navigating the worst warps we could find, the Dual/Ortofon combination proved very agile indeed, with nary a mistrack.” —High Fidelity

“Even a severe warp that would normally throw the pickup into the air will usually give no more than a slight ‘thump’...and most warps are undetectable by ear.” —Popular Electronics

“The Dual takes dead aim at the fiend of disc reproduction—the warped record—and response to record warps practically is eliminated at the source.” —Stereo

One lab also listened to a favorite unwarped record played by the same ULM tonearm and cartridge system. Its reaction:

“There is no way measurements, or mere words, can describe the acoustic presence...highs are crystalline, with a purity we haven’t heard before. The bass is so clean that one can hear new sounds from records, such as the harmonic vibration of unplayed strings on the double bass...overall definition and transient response were outstanding.” —HiFi/Stereo Buyers’ Guide

Now just think about all the records in your collection you can enjoy once again. And all the records yet to be bought.

Then consider the one-time investment in a Dual. An investment that may be less than you think.

For example, the single-play, semi-automatic Dual 508 with Vario-belt drive is less than $160. And the low prices of the nine other new Dual ULM turntables may also surprise you.

For complete information write to United Audio, 120 So. Columbus Ave., Dept. H, Mt. Vernon, NY 10553.
Latest video news and products by Dawn Gordon

A two-piece projection TV system is being offered by Burke Industries, Inc., for less than $2,000. Called the Kolorama, it has a 60-inch (diagonal) washable screen and a projector that is housed in a hand-rubbed walnut case. It uses a single-tube, three-gun projection system with dual fresnel lenses. The 16-key remote control includes random channel selection and volume up, down, and mute. Optional controls are picture, color, tint, and vertical hold. Audio outputs are provided for external speakers. Power consumption, at 70 watts, is said to be only a quarter that of most projection systems.

Front-loading convenience is now available in a low-cost Beta-format VCR. All of the controls for Sony's new SL-5000 ($895) are located on the front panel, with those for recording grouped on the left and those for playback on the right. The VCR has solenoid switching, BetaScan (nine times normal speed in Beta II), pause, and freeze frame. A wired remote-pause control is standard. Recording and playback are available in Beta II and III, playback only in Beta I. The twenty-four-hour timer can be preset to record the same program every day as long as there is tape in the machine (a maximum of five hours in Beta III).

Latest information on Sony's Profeel component televisions details some of the system's specific features. The separate monitors (19- or 25-inch) automatically adjust contrast for room-lighting conditions, and have a Colorpure filter for improved picture detail. On the 25-inch Profeel there is a Velocity Modulation scanning system for increased sharpness and resolution. The separate VTR-1000R Access Tuner is a frequency-synthesized device with a 10-key touchpad that can tune any VHF, UHF, or midband or superband cable channel. You can program the tuner to advance through the channels sequentially or to skip certain ones. Also included are inputs and outputs for program decoders and for external and video sources such as VCRs.

You can choose between two-way speakers that mount on the side of the TV monitor or freestanding loudspeakers, which are then inserted into the monitor). The monitor includes a stereo amplifier. An optional infrared full-function remote control (RM-705) is available. The system also is designed to handle through a special input such services as Teletext, VideoTex, and interactive communications systems. Horizontal resolution is rated at more than 340 lines, compared to the usual 240-line average. Prices for individual models are scheduled to be announced shortly.

A transition-editing circuit is built into the pause control of Magnavox's top-of-the-line Model 8345 VCR. The circuit is said to provide smoother transitions between recorded segments. This cable-ready VHS deck ($1,525) has 105-channel tuning capability and uses a new four-head helical-scan system for increased picture stability. Special effects such as still frame, frame advance, variable slow motion, and double speed are all standard. The deck can be preprogrammed to tape up to seven events over a two-week period. The microprocessor's program memory has one-hour power-loss protection that uses two constantly recharging NiCad batteries. A twelve-function infrared remote control is included.

Coaxial video cables are used instead of pushbuttons on Philmore's Master Video Control ($110) to achieve a rated isolation of 100 dB. The device enables you to select from five different inputs to your TV or VCR. Typical video inputs include VCRs, video disc players, pay, cable, and broadcast TV; and video games and home computers.

A video cassette labeling and titling system is the newest addition to Bib's Videophile Edition series of accessories. The VE-17 ($10) includes a self-adhesive clear pocket that you place on the edge of the video cassette or cassette sleeve. Press-to-apply letters are placed on an index strip, which is then inserted into the sleeve. The kit includes ten self-adhesive title card-holders, twenty index strips, twenty self-adhesive cassette-body labels, two sheets of instant-print letters and numbers, a print burning tool, and an instruction booklet.

For more information, circle the appropriate number on the Reader-Service Card.

Kolorama 152
Sony VCR 153
Sony Profeel 154
Magnavox 155
Sharp 156
Philmore 159
BIB 162
Sony's Versatile Video Recorder

How Sony's top-of-the-line SL-5800 home VCR performs in actual use tests.

by Edward J. Foster

Judging from our mail, the Sony SL-5800 is one of the most popular Beta-format VCRs. Small wonder. It has almost every feature one could want, short of portability. It records and plays at both Beta speeds (2 centimeters per second in Beta II and 1.33 centimeters per second in Beta III), providing recording times of up to three hours and twenty minutes in Beta II or five hours in Beta III. That's very close to the six-hour maximum of the VHS format, even though a Beta cassette is much smaller than a VHS one. You can mix Beta-II and Beta-III recordings on the same tape, and the SL-5800 will change playback speeds automatically. You can also play back (but not record) in the original Beta I format by flipping a rear-panel switch.

The SL-5800 has a fourteen-channel electronic tuner; any one of the soft-touch selector switches can be set for any standard VHF or UHF channel via individual tuning controls. Each control has a switch that enables you to choose the low-VHF band (Channels 2-6), the high-VHF band (Channels 7-13), or the UHF band (Channels 14-83). The VCR is factory tuned for Channels 2 through 13 in sequence; slip-in legends let you reprogram the display at will.

The usual complement of UHF and VHF inputs and outputs are on the rear panel. UHF connections are screw-type twin-lead (300-ohm) terminals; VHF connections are 75-ohm coax fittings. (Adapters are included to convert the VHF connections for use with 300-ohm twinlead.) Rear-panel direct video and audio outputs are provided for use with a TV monitor. The direct video output is a pin jack; direct audio uses a miniature phone jack. Similar jacks at the front serve as direct video (camera) and audio inputs. This audio input is for line-level signals; another jack next to it accepts microphone-level inputs and will override the line-level input if both are hooked up. Another miniature phone jack to the right of the CAMERA/TUNER switch activates the VCR's PAUSE when connected to the camera.

The SL-5800 is, of course, compatible with such Sony video cameras as the HVC-2000, HVC-2010, HVC-1000, and HVM-100, but it can probably be used with a good number of others as well. Since the VCR does not provide power to the camera, it requires an AC adapter such as the CMA-100 or HVA-200. By means of AUDIO DUB, you can add sound to—or rerecord the soundtrack of—a previously recorded cassette without affecting the video.

This deck features four-program two-week unattended taping, using its LCD clock/timer—which, by the way, will maintain correct time during brief (i.e., ten-minute) power outages. Programming is straightforward, which is a pleasant relief from systems that are so complex you have to refer to the manual each time you want to use them. The clock is set by depressing CLOCK SET with a pointed object, pushing the appropriate day button (SUN through
The extensive programming capabilities of the SL-5800 enable you to program up to four events over a fourteen-day period. Among the controls in the detail photo at left are CLOCK SET; the seven day buttons: HOUR, 10M (minute), and M; the four event buttons (A B C D); 2ND WEEK; and CLEAR. Detail at right shows the section that operates the fourteen-channel electronic tuner.
Sony SL-5800
(Continued from page 47)

"soft" side, suggesting a somewhat re-
stricted high-frequency response either in
the VCR tuner or in its RF modulator. The
resolution certainly was acceptable, but not
quite up to the sharpness achieved when the
VCR was bypassed. Since the video band-
width on tape is limited, there seems no need
for any greater response in the RF
circuitry.

The real proof is in the taping, and in
either Beta mode very little signal was lost.
Beta-III's resolution is slightly less than
that of the faster Beta-II, but only a sharp
eye would notice the difference; more
apparent (on our monitor system) was the
reduced audio bandwidth at the slower
speed. But even here the difference was
slight and likely to go unnoticed on most
TV sets, with their limited audio band-
width. The major video playback problem
is common to most VCRs: chroma noise,
which is most visible in large solid-color
areas, especially red ones. In suppressing
such noise, I'd rate the SL-5800 well above
average.

The SL-5800's freeze-frame, slow-
motion, and fast-play performance was
very impressive. Separate tracking controls
for the two sets of heads let you optimize
slow-speed tracking separately from the
normal and high-speed tracking. A BRIGHT-
NESS BALANCE corrects for brightness vari-
ations between frames when the tape is
playing in slow motion or frame by
frame.

Generally, slow-motion and freeze-
frame picture quality is more important than
that at high speed, because you're more
likely to want to watch a slow replay of,
say, a golfer's putt than to see eighteen
holes in double time. Except for a slight
bend at the uppermost part of my 25-inch
screen, the slow-motion performance of the
SL-5800 was superb. In triple play, an
occasional noise bar moved through the pic-
ture, but it generally could be corrected by
adjusting the tracking.

The deck switched from mode to mode
and from speed to speed quickly and deci-
sively. When Beta-II and Beta-III record-
ings were intermingled on a tape, the player
made its speed transition almost impercep-
tibly. Only when switching from BETA-
SCAN FF. OR REWIND INTO PLAY was there
a momentary loss of sync. It rarely lost sync
gone from freeze frame or slow motion
into normal operation.

At $1,400, the SL-5800 is an impres-
sive VCR, and certainly one of the most
versatile on the market. If you need any
more versatility, the companion AG-300
auto changer enables the deck to record,
play back, and rewind as many as four cas-
ettes at a load—even in timer operation.
For the very adventurous, there's an option-
al PCM encoder/decoder that plugs into
the rear and allows you to create your own dig-
tal audio recordings.

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Video
Q. & A.
by Edward J. Foster

Q. I recently copied a TV program that a
friend of mine had recorded on his
VCR and found that the quality of my
recording was noticeably worse than the
original. I understand that there is some
loss in the transfer process, but how can I
minimize it, or is there even some device
that will eliminate it?—Brian Healy,
Woodbury, N. Y.

A. When copying from one VCR to an-
other, you'll lose the least amount of
signal if you patch the video and audio
outputs of the player directly into the
video and audio inputs of the recorder.
This path minimizes the amount of cir-

cuity involved in the transfer, though
typically you can still expect to lose
about 3 dB (the video signal-to-noise ra-

tio will worsen by that amount) in the
transfer. If you instead use the RF con-
nections, the audio and video signals
first must modulate a carrier, which sub-
sequently is demodulated by the
receiver. This modulation/demodula-
tion process inevitably introduces more
noise and degrades the signal quality.

In video, direct connections are al-
ways best. A VCR that's wired straight to
a video monitor will produce a better
picture and better sound than the same
player wired to a standard TV set via the
RF connections. The RF link is provided
only so that a VCR can be connected to
any television set, because most TVs do
not provide direct access to their internal
video and audio circuits. If your set does,
by all means use the direct path.

Devices are available that can help
you make better tape copies. One such
unit is the Detailer I from Vidcraft, Inc.
($149). Usually these devices boost high-
frequency picture information to in-
crease the apparent detail and sharpness
of the picture. Since most VCRs roll off
high-frequency signals and thus tend to
blur detail, such an accessory can help to
compensate. But when the highs are
boosted, video noise is increased, too—
just as the hiss level of a poor audio-cas-
sette recording is emphasized when you
turn up the treble control. Given this,
there's clearly a limit to how much com-
ensation you can apply without intro-
ducing new problems. If you're inter-
ested in such an accessory, we'd suggest
you try one out in the showroom to be
sure you're satisfied with the results.

TubeFood

Home Video & Pay Cable Highlights    edited by Susan Elliott

Video Cassettes

- Contemporary Films
  - Chrysalis Visual Programming: Babylon
  - Electric Video: Legend of the Werewolf, The
  - Ghoul, Persecution, Johnny Got His Gun
  - Family Home Entertainment: Journey into the Beyond (also available in Spanish).
  - The Child
  - MCA Videocassette: Nighthawks, Car Wash, Silent Running, Midway, Airport, Earthquake, Rooster Cogburn and the Lady, MacArthur, The Wiz
  - Video Corporation of America: The Inheritance, The Unseen
  - Classic Films
  - Electric Video: Room at the Top, A Taste of Honey, Battle of the Sexes
  - Magnetic Video: It's a Mad, Mad, Mad, Mad World, The Hound of the Baskervilles
  - MCA Videocassette: Shenandoah, Holiday Inn, Going My Way
  - Arts Programming
  - Electric Video: Le Sylphide (Paris Opera Ballet)
  - TV Specials
  - CBS Video Library: World War II with Walter Cronkite.

Popular Music

- Chrysalis Visual Programming: The Best of Blondie
- Family Home Entertainment: Tom Jones Live in Las Vegas (stereo)
- Thorn/EMI Video: Queen's Latest Flix, April Wine Live in London, The Tubes Video

On Pay Cable This Month

- Feature Films
  - Home Box Office: The Elephant Man, Popeye, Buck Roads, The Jazz Singer, Breaker Morant
  - The Movie Channel: 9 to 5, The Elephant Man, Altered States, Melvin & Howard, First Family, Back Roads, Home Movies, Up River, The Incredible Shrinking Woman, Improper Channels, Breaker Morant, Street Gangs of Hong Kong, The Apple
  - Specials
    - Home Box Office: An Evening at the Moulin Rouge with George Hamilton, and others.
    - Showtime: Dottie West—Special Delivery, Perfectly Frank (with Cloris Leachman).
InFocus

Perspectives on important video events  by Ira Mayer

Bent on Rent, Warner Nixes Sale of Vid-Pics

"WE WILL NEVER SELL another video cas- sette." With that simple statement, made last September by Warner Home Video

president Morton J. Fink, Warner has taken the WHV step toward eliminating your ability to choose between buying or renting a prerecorded video cassette or disc. It's possible that by the mid-'80s, tapes and discs of blockbuster movies, classic TV shows, Broadway musicals, etc. will be available only as rentals. Superman II, for instance, is among the cur- rent Warner cassettes that, once dealers have sold out their current stock, will be available only for rent.

Why has Warner made this radical move? For a number of reasons, the ma-

jor one being that you the consumer have shown relatively little interest in shelling out $60 for a cassette you'll view only several times. Your preference, as reflected in various industry surveys, is to rent, at the more reasonable rate of about $5.00 per night. According to a year-long WHV study, there were at least twelve rental transactions for every sale of a prerecorded video cassette last year. And some store owners insist the ratio is closer to 25 to 1.

Like the home video industry itself, rental is a relatively new phenomenon. It's also a textbook example of consumer demand dictating industry practice. In the late-'70s, local video outlets began renting out their cassettes on a per-night basis, in response to cus-

tomer requests. Though the major film studios, which supply the programming, missed out on the profits from rentals, they pretty much ignored the practice, thinking that rental was little more than a passing fad. But in 1979 Fotomat, with its 3,800 retail outlets across the country, formally asked the studios for licenses to rent prerecorded cassettes to its customers. Realizing they could no longer af-

ford to look the other way, the studios hastened to write clauses into their con-

tracts prohibiting rental altogether, at least until they could figure out a way to share in the profits. Of course, many dealers continued to rent anyway. All they had to do to keep it legal was pur-

chase their tapes from either fellow re-

tailers or distributors (the middlemen who buy from the studios and supply re-

tail outlets). In any case, by 1980 rentals proliferated.

Walt Disney Films' solution was to offer its "authorized" dealers a choice of one of three plans: Sales only, rental only, or sale-or-rent. If you walk into a store that has chosen the last, you'll find a minimum of four copies of each cas-

sette: rental Beta and VHS and sales Beta and VHS. Maintaining duplicate inventories in competing formats might give the customer more options, but it isn't particularly practical for the dealer. Furthermore, a three-month case study published in Video Specialist Newsletter showed that neither the rental-only nor the sale-or-rent plan was very profitable. According to analyst Jim Lahm, if a dealer bought a Disney title from a sec-

ondary source—rather than directly—and then rented it on his own, he could get a 40% return on his investment. But as an authorized dealer following Disney's rental-only rules, his return (based on the same amount of business) would have been 25%. And if he had opted for sale-or-rent, his return would have been only 12%.

There are probably stores in your neighborhood that have a hard-and-fast sales-only policy. That may be inconvenient for you, but look at it from a dealer's standpoint: The number of times he has to rent out a cassette is very high if he's going to make a profit equal to what he could make from a single sale of the same cassette. If, for example, you buy a copy of Ordinary People for $60, the dealer, having bought it from Para-

mount Home Video for $40, will gross a profit of $20 (not counting his overhead and other operating expenses). But if you rent it for $5.00, he's going to have to turn it over eleven additional times in order to make that same profit. That's eleven more in-store transactions and a lot more paperwork to keep track of the case-

tette. On the other hand, for many dealers rental has become the only re-

course since you've proven more willing to pay $5.00 for one night of Ordinary People than $60 for a lifetime of it.

Which brings us back to Warner Home Video. The above set of facts has had an effect in a handful of Texas markets and slated for national implementation by spring of 1982—calls for WHY or its au-

thorized "master licensors" (independ-

ent distributors supplied from six Warner warehouses) to "license" retailers to rent WHY programs on a week-to-week basis. Dealers will be free to charge you what they wish; they in turn will pay a licensing fee that, according to several Texas dealers, will be approximately $8.25 per title in the first week, averaging out to $4.40 by the sixth (consecutive) week.

Initial reaction from video outlets—particularly those that have maintained a sales-only policy—has been negative, to say the least. But when you look at the research, the plan makes sense. In addi-

tion to Warner's 12.1 rental-to-sales ra-

tio data, the International Tape Associ-

ation (ITA) reports that, in 1980, for every sale of a prerecorded video cas-

sette, there were about six blank video

(Continued on page 50)

NO SALE ?
In Focus

(Continued from page 49)

As we go to press, Warner acknowledged in the trade press that it would continue to sell some video cassettes. A Warner spokesman said that it would only be logical to sell cassettes after they had lost their value as a rental property. Included in the “for sale” group would be titles for which the rental demand had diminished and whose nature did not lend itself to reissuing. 

For more information send for a free catalog and an enclosed $2.00 for postage and handling. Order by phone or mail, send money or certified check. Two-week delay on personal checks. When paying by charge include card number and expiration date. Shipping charges will be added on to credit card. Non-resident for typographical errors. Prices subject to change.

As we go to press, Warner acknowledged in the trade press that it would continue to sell some video cassettes. A Warner spokesman said that it would only be logical to sell cassettes after they had lost their value as a rental property. Included in the “for sale” group would be titles for which the rental demand had diminished and whose nature did not lend itself to the rental market.
A Gaffe, a Goof, and a Spoof
by John Culshaw

Longtime Decca/London producer John Culshaw is familiar to many readers from his column "Culshaw at Large," which ran in HF between May 1976 and July 1980. Some will even recall his 1968-69 confrontation over Elektra with HF contributing editor Conrad L. Osborne, reprinted in our 1976 Silver Anniversary Treasury.

At the time of his death, in March 1980, Culshaw had completed most of an autobiography, Putting the Record Straight, which Viking Press will issue next month. Over the next three months, we will print brief edited excerpts from the book; and to pick up where the Osborne affair left off, we'll give Culshaw posthumous spots at HF at this month and next.

In October and November 1949, we were still recording on 78-rpm waxers. and one of the works delegated to me was Prokofiev's Peter and the Wolf, with Frank Phillips, a famous BBC announcer, as the narrator and Nikolai Malko conducting. It was, as usual, necessary to stop every four minutes or so, and at one point we had a succession of faulty waxers, which meant that Phillips and the orchestra had to repeat the segment several times more than usual. I should add that the engineer operating the wax-cutter was required, at the end of each side, to engrave the "run-out" groove, which, as on records today, ended in a circle. (Obviously, this prevents the needle on a domestic player from being driven into the label.)

It was essential to have total silence in the studio during the seconds required to cut the run-out groove, and orchestras and artists were accustomed to the routine; nobody made the slightest sound until the red light went out. But the succession of faulty waxers in Peter and the Wolf finally proved too much for Phillips. The side in question ended with the passage where the bird is at the top of the tree, the cat halfway up the tree chasing the bird, and the wolf prowling round the bottom of the tree in the hope of catching the cat.

After about five attempts it seemed that at last we had a good wax, and I kept the red light on while the engineer began to cut the run-out groove, at which point Phillips forgot that his microphone was still live. Unaware that any sound would be recorded on the run-out groove, he said, loud and clear, "If I'd been that cat, I'd have p--ed on that wolf!"—which meant that we had to do the whole thing again.

Nothing had changed when I went back to Decca in 1953. In May, I was again in Amsterdam to record, among other things, Brahms's First Piano Concerto, with Clifford Curzon as the soloist and Eduard van Beinum conducting. Everything went smoothly until we came to the start of the finale, which opens with the rondo theme played by the piano alone. For some unaccountable reason, Clift...
In the name of "reform," Orff scuttled cherished traditions and substituted manufactured thrills.
by Paul Henry Lang

Carl Orff’s Carmina burana has often been hailed as one of the outstanding works for chorus and orchestra produced in our century, and many have seen in it a solution to contemporary music. Its international success was entirely uncritical; doubting voices did not begin to be heard for some time. Today it is clear that Orff did not travel new paths, and his success does not rest on the creation of a new musical creed. What is proved is that studied simplicity and the immediacy of the ordinary have an easy appeal to an age tired of tragedies and problems, the intricate and the arcane.

Other composers have started twice with an Op. 1, but no other, when well past his formative years, has so radically erased a fairly voluminous previous output. In 1937, at age forty-two. Orff flatly declared, “My collected works begin with Carmina burana,” completed that year. A specialist in music education for children, choreographer, and inventor of new percussion instruments, this well-trained musician reached the stature of musico-dramatist through an unusual detour. He earned his living for a time as an opera coach and conductor in the provinces and reached the conclusion that the development of opera, having ended with Wagner and Strauss, could be revived only by returning to the seminal elements of our musical culture. His goal became “the resuscitation of the musical theater by freeing it from all the exaggerated means of expression at which opera had arrived at the beginning of the twentieth century, and by reducing it to the elementary components from which it was first created.”

This does, at first blush, sound very interesting, like a new Florentine manifesto, but it makes less and less sense as we continue to examine Orff’s aesthetic theories. He was led to his reform of opera through his classroom techniques. The basic assumptions of the Orff method of teaching are, as he puts it, that “by re-creating the various stages in the history of mankind” he can arrive at a pristine style, unencumbered by the polluting accretions visited on music as civilization evolved; music has to be purged of “chromaticism, thematic development, counterpoint,” and other traditional means of composition. But this is tantamount to leaving a poet with a working vocabulary of 200 words.

Orff eschews any and all “standard techniques and elaborations”; harmonic progressions are so minimal as to sap harmony of its inner life, modulation is banished along with chromaticism, meters are seldom varied, and dissonance is rare, occurring—when it does—mostly by chance. His endless repetitions of small phrases are like earthworms. When the worm is cut in several pieces, each piece continues to live. Though there are some tunes—even some corny ones—the melodic element consists largely of meandering melismas that float around like musical plankton. The chief means of construction are repetition and ostinato. In the absence of self-serving expression, individual color nuances do not materialize; Orff does not use a palette, but takes the colors raw from the tubes.

Our severe reformer declares that rhythm could be the salvation of music-drama, an idea obviously derived from the Dalcroze method he used in teaching children. Rhythm, accordingly, is his chief resource, and the vitality and cumulative effect of his obstinate rhythms gives his works their telling effect. Yet rhythm is a term of elusive meaning. Upon examining it outwardly extended connotations, one may find oneself talking loosely of instinct, cosmic force, and heaven knows what vaguely metaphysical notions. But we must not forget that while rhythm is psychophysiological in origin, it must have an aesthetic application before it can convey a “spiritual attitude.” The ceaseless pounding of simple unvarying patterns, certainly a poor specimen of such aesthetic application, cannot remotely touch the savage grandeur—and finessê—of Stravinsky’s or Bartók’s rhythmic power.

This style, devoid of the “standard techniques and elaborations” that made music an art and a spiritual force, presents a pretty barren aesthetic amorality. Listening to it, one cannot help recalling the drunken sailor in The Tempest. He sings a few lines, then stops: “This is a very scurvy tune to sing.” Then he sings another strophe: “This is a scurvy tune too.” In the case of Carmina burana, he could go on and on. Patiently, there is little musical substance here.

Form, too, is wanting; there are only episodes added one after the other, a shortcoming that no amount of archaeological realism can cure. And Orff’s historicism is as calculated as his construction is loose. The medieval spirit is conjured up by pentatonic motifs, modal (Continued on page 54)
or Skillful Effects?

Carmina burana is highly imaginative and—given a certain restraint in the performance—inexhaustibly fascinating. by R. D. Darrell

I've been quick, on occasion, to castigate egregious examples of musical vulgarity, even though—as demonstrated by the indignant reactions to my so categorizing the tonal characteristics of the eminent Soviet trumpeter Timofey Dokschiter—my accusations in this backyard of musical aesthetics are as deplorable as those of any other apostle of the artistic unco guid. Nevertheless, I'm definitely not one of the many listeners, mostly professionals, who harp on the "vulgar" appeals of Carl Orff's scenic cantata Carmina burana while ignoring or belittling its virtues. In fact, it is highly imaginative in its dramatically powerful exploitation of percussive timbres and motoric devices: of ostinato thematic and rhythmic patterns, more sophisticated than primi-tivist; and of solo and choral vocalization that stretches the ranges to their limits.

One reason this music is deemed vulgar, obviously, is that many performers yield to its temptations to indulge in exhibitionistic excesses. In addition, the often violent visceral reactions of listeners prompt them to accuse the composer of cynically exploiting their basest susceptibilities. But all this nonsense aside, of ostinato thematic and rhythmic patterns, more sophisticated than primitive; and of solo and choral vocalization that stretches the ranges to their limits.

The twenty-four Carmina burana selections (the twenty-fifth is a literal repetition of the first) are so varied in both vocal and instrumental characteristics that every performance is as different as the participants and engineering techniques involved. It's no wonder, then, that nearly every version commands at least some devoted fans. But until the latest batch of new and reissued recordings came along, my own top rankings had remained stable for several years. Decisively first was the spectacularly sensitizing 1975 Kegel/Philips version, for its "sheer all-around musicianship as well as galvanic excitement" (Dec. 1976 HF). Next, retained in a special place of honor, was the Ozawa/RCA version recorded in late 1968, in my opinion the first to do as much justice to the music's grandeur as to its sonic sensationalism—although others award that precedence to the 1966 Frühbeck de Burgos/Angel version.

Now all these remain among my preferences. But don't confuse Kegel's Philips version with his 1966 DG/Heliodor broadcast-studio recording, with different soloists, recently reissued in the Resonance series. Even at midprice, that can be commended only to demonstrate how miraculously a conductor's interpretation and execution can improve in less than a decade.

Eurodisc's 1973 recording, released here for the first time, is more rewarding—primarily for its fine soloists, led by Hermann Prey, and to a lesser degree for Kurt Eichhorn's generally orthodox Germanic interpretation. Unfortunately, it is handicapped—fatally in this music—by run-of-the-mill recording. Even in SQ-quad playback the improvement is negligible. And while the disc edition has trilingual program notes, the sonically identical taping has notes in German only: neither format has texts.

Contrariwise, the far more vivid—indeed, truly spectacular—Muti/Angel version, recorded March 1979 in EMI's Abbey Road Studio No. 1, is handicapped by the conductor's exaggerated (Continued on page 55)
passages, monotonous psalmody, and pseudo-Gregorianism. Then when he turns from Latin and German to French, he imitates Adam de la Halle but without the latter's charm.

There once was a queen of Spain who told her philandering king: "I can make princes of the blood without you, but what you can make without me has quite another name." But then Orff does not want to make princes of the blood; he prefers a new line of bastards. In the new Gesamtkunstwerk he thinks he has created, music has no independent existence: unable to stand by itself, it is merely part of the background, of the decor, for his imagination is purely scenic. This is an arbitrary, didactic concept—not artistic, but socioeducational. A glance at the list of his works discloses a quantity of educational pieces for children and laymen, the purpose of which is to make music easily accessible to the largest number. Carmina burana represents the transfer of this socioeducational idea into the realm of art. This concept originated in an era—in the Germany after 1933—when only approved and officially guided formulas and styles were tolerated, and when more "inaccessible" music, such as Hindemith's, was proscribed. One cannot help seeing here the influence of psychosocial changes. Once embarked on this socially leveled art, Orff could not turn back: the sequels to Carmina burana forming the triptych Trionfi consist of the same easily assimilable mixture of raw materials.

Orff's apologists—and he himself—often aver that he returned to the ideals of the Camerata, and specifically to Monteverdi. But the Camerata's spirit was humanistic and aristocratic, and Orff is anything but "elementary"; it makes bold use of the technical refinements of the composer's art and is steeped in very personal, but certainly not orgiastic, emotions. Opera was expressive from the moment it was born; indeed, it was born out of the need to rise above the expressive possibilities of the spoken theater. Even a cool and meticulous classicist like Cherubini could send an audience home deeply moved after a performance of his Medea. Not so Orff. He relies on appeals to the unconscious, a riot of uppercase rock and roll that sets the limbs in motion and the hips swinging. One could argue that this is striking only because it strays so far from our ordinary musical experience; in art music, we are seldom exposed to such crass appeal to primitive instincts.

But then what does the "theatrical triptych" represent? What is its message, its aesthetic, its ideological perspective? Does it call on shared experience? Are these the visions of a lost world, of a saner and simpler past? Orff is a learned man; he knows his Latin poets, both classical and medieval; and he knows the Middle High German poetry of the goliards and vagantes. Yet this is an imaginary, unreconstructed, bookish antiquity and Middle Ages, an archaeology that spawns overdecorated pathos and erotic frenzy. The use of the "dead" languages is fraught with danger because it does not want to make princes of the blood: he prefers a new line of bastards. In the new Gesamtkunstwerk he thinks he has created, music has no independent existence: unable to stand by itself, it is merely part of the background, of the decor, for his imagination is purely scenic. This is an arbitrary, didactic concept—not artistic, but socioeducational. A glance at the list of his works discloses a quantity of educational pieces for children and laymen, the purpose of which is to make music easily accessible to the largest number. Carmina burana represents the transfer of this socioeducational idea into the realm of art. This concept originated in an era—in the Germany after 1933—when only approved and officially guided formulas and styles were tolerated, and when more "inaccessible" music, such as Hindemith's, was proscribed. One cannot help seeing here the influence of psychosocial changes. Once embarked on this socially leveled art, Orff could not turn back: the sequels to Carmina burana forming the triptych Trionfi consist of the same easily assimilable mixture of raw materials.

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Orff does not use a palette, but takes the colors raw from the tubes.

(Continued from page 52)
If Orff's arguments are valid, we must conclude that our music need never have evolved its complex life. Such determined aloofness from everything we love, value, and admire in the art can easily turn into a parody of what it wants to represent, an anatomical specimen with no skin or flesh, just bone and teeth. Orff has not created a school. To turn Schweitzer's famous words about Bach upside down, "nothing leads to him and nothing issues from him": he stands apart from the mainstream of the history of music.

Yet to those who do not understand modern music, he has become the modern composer. His success and his attraction for the public are undeniable; as Sherlock Holmes said to Dr. Watson: "We have done very well indeed; it is true that you have missed everything of importance, but you have hit upon the method." If there is nothing here of real artistic imagination, the whole still has a fantastic effect.

As we look at what Orff has made from the remnants of our millennial art, we are both intrigued and repelled. He succeeds in engaging the attention, and somehow his music comes across on first hearing. The unfamiliar textures, the hypnotic effect of the rattling and pulverizing ostinatos, the obsessively repeated melodies, and the percussive din of his unconventional orchestra cause a certain slippage in the brain, carrying the fresh observer away. Indeed, *Carmina burana* and its sequels can be made into a dazzling show. But with further acquaintance, Orff's intensity is felt to be self-conscious, and the flesh refuses to creep.

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**Orff: ... or Skillful?**

(Continued from page 53)

tempos and dynamic extremes and his often heavy-handed pretentiousness. The choral parts are sung routinely, the solo ones with more personal relish. But the prime appeal here is sheerly sonic; perhaps even more sensational than the Kegel/Philips version. Mit's is certainly a dazzling example of the optimal sumptuousness, solidity, and power of analog technology. I haven't yet heard the cassette edition, but it's sure to lack the disc's notes and texts (with Mann's English translation).

Despite my objections to Mit's reading, I keenly regret that his is not the version Mobile Fidelity chose for its deluxe "Original Master Recording" series, rather than EMI/Angel's earlier one. Prev's 1975 Kingsway Hall recording. I never could share the wild enthusiasm of many British and American Previnites for that reading, even though I had fewer objections to his reading then (July 1976 HF) than I do now. Mobile Fidelity's half-speed remastering and the JVC pressing effect striking improvements in sonic clarity as well as surface quietness—yet they mainly enhance the overall amiability of a performance that dilutes the work's dramatic thrills while rarely suggesting its potential grace or grandeur. And even the sound, though markedly cleaner, is still no match for the very best in the Muti and Kegel analog recordings, to say nothing of the first two digitals.

A more rewarding choice for half-speed remastering is the uninhibitedly spectacular if excessively idiosyncratic— even eccentric—Thomas/CBS version recorded in the fall of 1974 (May 1975 HF. May 1976 "Tape Deck"). The remastering improvements are again unmistakable—if somewhat less startling. Where the original disc pressing was more satisfactory to begin with. Thomas' fans may find this deluxe—yet inexplicably textless—reissue well worth its premium price; however, even they may find the stereo sound-source localizations disconcerting. And those of us who lament the passing of quadrophony can find no substitute here for the surround-sound tiillations of the old SQ-encoded disc edition and discrete four-channel taping, even though the latter was barbarously shorn of all strophic repeats.

Shaw's digital recording (November 1980 in Atlanta's Memorial Arts Center Symphony Hall), though marginally earlier than Mut's (December 1980 in Kingsway Hall. London), was not released until a couple of months later. It impressively reinforces Shaw's matchless reputation as a choral conductor. His Georgian forces give a first-rate performance, with undoubtedly the best enunciation of any choir to date. His solos do well, too, particularly the fast-rising Swedish baritone, Häkan Hagegård; tenor William Brown, relatively unfamiliar on records, brings ample voice to the plaint of the roasted swan, too often a pinched falsetto; and soprano Judith Blegen, who also appears in the Thomas/CBS version, is brilliant dramatically and tonally if again too tremulous for my taste or for full atmospheric (Continued on page 97)
A Bubble Close to Bursting

Sophisticated Ladies, spread very thin on vinyl, still offers considerable pleasures. Reviewed by Matthew Gurewitsch

The recording of Sophisticated Ladies gives rise to a curious proposition: The more completely a show relies on its songs and dances, the less of what matters will make the transfer to disc. As plot and dialogue make way for a proliferation of "numbers," original-cast albums start spilling over onto second LPs, producers evidently subscribing to the notion (and convincing their public) that an untextually faithful documentation of every blessed sound will convey the full theatrical experience.

Producers and the public are all deceived. In a musical comedy worthy of the name, songs serve many purposes. They may set a tone, as "Willkommen, bienvenue, welcome" does in Cabaret, or sketch a character, like "I'm Just a Girl Who Can't Say No" from Oklahoma! Lyric, reflective, or effusive, they may edge into quasi-operatic "arias" like West Side Story's "Maria." They may lend wings to key moments in the action (My Fair Lady's "The Rain in Spain") or even propel the story along (The Music Man's "Trouble in River City"). Whatever the function, they are a show's epiphanies, the spots of highest poetic concentration, blossoms on the organizing trellis (however flimsy) of the plot. Frankly anthologized, cut free, they still carry a memory with them; and heard with no context beyond the one their sequence and juxtaposition create, they float and flower (like tight, pressed-paper buds from Japan when tossed in water) into a bouquet that distills the essence of their native setting. Such is the magic of the right excerpt.

An all-singing/all-dancing diversion like Sophisticated Ladies may hold the stage perfectly well, even brilliantly, and still spread very thin on vinyl. It has no tale to tell and no governing idea. That it is composed (with negligible lapses) of music by Duke Ellington is merely a pretext for a show, not a structure. The shape of the evening is the creation of director Michael Smuin (a choreographer immeasurably more valuable for his unerring showmanship on the popular stage than for his tawdry contributions to the High Art of classical ballet, which claims his chief efforts). Its excellence lies equally in the staging of individual numbers, the variety of the material, and the deft pacing through the course of each music-filled "act." But unlike the composer and lyricist of a musical comedy, an assembler like Smuin cannot decree, by introducing a song, that a chosen juncture of the show shall carry a heightened charge. When songs are everything, the special accents must be invented by other means, some of them inevitably nonmusical and unsusceptible to the microphone.

The dissatisfactions for a listener at home come both from things that are not seen and from things that are heard. A good song, well and simply delivered, may stand quite comfortably on its own. Listening to it on records, one resigns oneself to the loss of any incidental felicities of dress, lighting, and gesture. Full-scale production numbers, however—those Lucullan confections whipped up (most often) around songwriters' slightest bonbons—are apt to prove intractable. An orchestrator may have labored hard and long to pull a minute's theme into gaudy billows of variations but theatrically the results are of value only to the degree that they second the spectacle, preparing swirling entrances and exits, flashing in harmony with bespangled wardrobes, scattering stardust around the soloists as they break free from the shifting vistas of the chorus, going wild for the glamorous tempest of a finale. At the theater, whether the score can stand on its own merits is a question that does not arise. At home, with nothing to look at but a cardboard sleeve, it is the only question. And since the music is being judged there by standards it was never designed to meet, the answer is generally negative.

Certainly this album could have benefited from trimming. Mercer Ellington, the Duke's son and the show's music...
Still, song by song, the album has its not inconsiderable pleasures. Judith Jamison, formerly of Alvin Ailey's dancers the nonpareil, makes her bow as an entertainer and carries the day with her infectious high spirits. Her cakewalks are prizewinners, as in days gone by. Her gifts as a singer, tested here for the first time, are modest and appear completely unimproved. Her rich, throaty also encounters little snags and catches throughout her register and is no more than approximate in matters of pitch. But Smuin fans her spark into a four-alarm fire. She is spared the exposure of a full-out vocal solo and is dealt nothing but up-tempo, good-time numbers ("Music Is a Woman," "Love You Madly," "I Let a Song Go out of My Heart," and "I'm Beginning to See the Light"), where what counts is her happy ease onstage and her delightful rapport with her colleagues and the enchanted audience. The pretentious class-act manqué, in which she coils grandly in the spotlight while Priscilla Baskerville keens "Solitude," strikes the single sour note in Jamison's ebullient-performance. (On the album, the keening alone is trial aplenty.)

Gregory Hines, whose name appears with Jamison's above the title, partners her amiably in her romps, but his assignment also calls on his slickly precise tap and his smoky cocktail-lounge parlango. It is he who evokes in song the worldly "Sophisticated Lady," unmasking her urbanity as hollowness, disappointment, and self-deception. None of the other men in the cast has a chance to display such range. Onstage, some of the dancers, notably Hinton Battle, know how to take charge, but on the record, only Gregg Burge, the radio voice of the pilot in the hypnotic "Caravan," is worth recording for. The insinuating, androgynous tones of featured artist P. J. Benjamin drip, no matter what the material, with sleazy traveling-salesman chumminess, and his songs are best forgotten quickly.

The leading ladies, on the other hand, are memorable indeed. Phyllis Hyman and Terri Klausner join forces as the show draws toward its close for a double consisting of "I Got It Bad and That Ain't Good" (Hyman) and the indispensable "Mood Indigo" (Klausner). The album cut is captivating, in its way, for the ladies' singing is sumptuous, nowhere more so than where, just bars from the end, their voices blend with elegant urgency. And yet, there is something missing. At the theater, Hyman steps out, sheathed in ruby sequins, to glitter and lament by the footlights, and, having finished her lyric, turns to see a brighter glow pick out Klausner, her twin in sparkling sapphire, high on the staircase that leads from the bandstand. "You ain't been blue long enough..." Klausner softly begins, and her triumph, tranquil despair floods the house like a tropical moonrise eclipsing the evening star. In live performance, the bridge is electrifying and feels purely musical. On the recording, the smooth, sudden, breathtaking change in the emotional weather simply does not occur.

In the life cycle of a soap bubble, there is a first instant when the film in the pipe shudders into gleaming spherical perfection. It does not last. A dry dullness quickly spreads over the surface until only tiny patches of the first gloss remain. Then... At the theater, Sophisticated Ladies is just such a bubble, fresh from the pipe. On records, it has extended dull spots. Its decay is advanced, but not quite so far that it bursts.

Not one of the numbers has been rethought for the recording.
From Beethoven's Workshop, an Unperfected Masterpiece

Reviewed by Harris Goldsmith

EVEN AMONG PROFESSIONAL musicians and critics, there are precious few who can hear the classics incessantly and still listen to them as the miracles they are. Repetition tends to dull rather than enhance perception, and often a masterpiece, though recognized as such, is nevertheless taken for granted.

Every now and then, however, something comes along to stimulate our senses and jog our memories. Several years ago, the pianist and musicologist Denis Matthews sponsored a fascinating series of records that explored the sketches in Beethoven's notebooks; and along similar lines but with greater ballyhoo, the young Leonard Bernstein gave a televised lecture on the gestation of Beethoven's Fifth Symphony.

Recently certain conductors—Erich Leinsdorf and Lukas Foss among them—have been espousing concert performances of Schumann's D minor Symphony in its original 1841 version. (What we know as his Symphony No. 4, Op. 120, is a reworking of a decade later.)

Now Laurel presents a fine edition of Beethoven's hitherto unrecorded String Quartet in F, the work that later evolved into his Op. 18, No. 1. (He titled it "Quartet No. 2," since, as his contemporaries attested, the D major Quartet, Op. 18, No. 3, came first.) As with the Schumann symphony, this earlier draft of a thoroughly revised composition not only sharpens our perception of the definitive score, but—with its sundry divergences of detail and development—sheds much light on the labors required for musical perfection.

When this quartet was composed in 1799, Beethoven, still basically a fire-eating keyboard virtuoso, was conquering new worlds as a composer. With several notable keyboard sonatas already behind him (including the Pathétique, the heroic Op. 7, and the six from Opp. 2 and 10), the twenty-eight-year-old titan was about to take wing as a symphonist. He was also honing his skills as a writer of string quartets. Toward that goal, he had first fashioned the String Trios, Opp. 3, 8, and 9; for all their mastery, they must have been regarded as steps in a long apprenticeship, since he never wrote another string trio once he had written a quartet. And even after he had completed Op. 18, he undertook a revealing transcription of the Op. 14, No. 1 Piano Sonata for string quartet.

Some second thoughts are merely different, not better.

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The present, unfamiliar version of the Op. 18 F major survives in a set of manuscript parts that Beethoven sent to the violinist Karl Amenda on June 25, 1799, as a gesture of friendship. But by the summer of 1801, with the publication of Op. 18 imminent, the composer wrote to Amenda again. "Do not lend your quartet to anybody, because I have greatly changed it; for only now have I learned to write quartets properly, as you will observe when you receive them."

The Amenda version by no means represents Beethoven's first thoughts on the subject; his sketchbooks contain many earlier partial drafts. Interestingly, a few of the sketches give the famous opening theme in 4/4 rather than triple meter! Although he undoubtedly improved the score in its Op. 18 manifestation, the Amenda version nevertheless ranks as a bona fide masterpiece.

What did Beethoven change? For one thing, the voice-leading and partwriting; the earlier essay tends to be cruder, more "contrasty" in its alternations of dynamic extremes and strategic deployment of violins against viola and cello. When he revised the work, he obtained a richer, more integrated sonority and at the same time wrought many substantial improvements in the tonal balance. One example deserves mention: At the end of the finale, he extended the climactic final bars and doubled second violin with viola. The earlier form, with its more densely scored first-violin part, had the second violin and viola exchanging their material (itself somewhat changed in the new version); this presented severe problems of balance, solved in this recording only by arti-
officially increasing the volume of the two inner voices.

Beethoven made other alterations in the material, and interestingly, these most often occur at points of transition and development. He omitted certain motivic imitations that seem redundant alongside the later, stronger, economy. But in a few cases, the second thoughts are merely different, not better. The altered intervals in the first movement’s second subject represent a case in point.

Also noteworthy is the double repeat in the first movement, omitted in the later version of this quartet but retained in other comparable works—Op. 18, No. 6, and even the later Op. 59, No. 2. Beethoven must have had qualms about double repeats, a device held over from the early, one-movement sonatas of Scarlatti; he similarly deleted a second repeat from the first movement of the Waldstein Sonata. This equivocation is worth pondering at a time when so many literal-minded performers make a fetish of slavishly observing every last repeat.

The differences in tempo indications are interesting but probably less significant; although the present performance underlines the contrasts, Beethoven probably made the revisions only in the hope of better conveying the precise mood he imagined. But certainly, the quicker finale (“Allegro”) in the later version makes a far better effect than does the original “Allegretto.”

Laurel’s attempt to link the Pro Arte Quartet to its famous Belgian namesake is a bit specious. (After the death of Alphonse Onnou in 1940, the group reorganized and took up residence at the University of Wisconsin; its present members are Norman Paulu, Martha Francis Blum, Richard Blum, and Parry Karp.) But the new Pro Arte plays handsomely, with sure stylistic sense, patriotic musicianship, and pure intonation.

Laurel’s recording tends toward large-auditorium reverberation (accentuating the contrasty quality of Beethoven’s writing), yet balance and detail are exemplary, and the pressing (on virgin American vinyl) is superb. Extensive comparative score excerpts are included, and the whole presentation shows class. This is a truly valuable recording, which every Beethoven lover should own.


Pro Arte Quartet. [Herschel Burke Gilbert, prod.] LAUREL LR 116. $7.98 (Laurel Record. 2451 Nichols Canyon, Los Angeles, Calif. 90046).
BACH, C.P.E.: Concertos for Harpsichord and Strings: in A, Wq. 8; in D, Wq. 18.


BACH, C.P.E.: Six Symphonies, Wq. 182.


BACH, C.P.E.: Concertos for Flute and Strings, in A minor, Wq. 166; in B flat, Wq. 167.

Stephen Preston, flute; English Concert. Trevor Pinnock, dir. [Gerd Ploebsch and Andreas Holschneider, prod.] ARCHIV 2533 455, $10.98. Tape: 3310 455, $10.98 (cassette).

BACH, C.P.E.: Sonata for Violin and Harpsichord, in B minor, Wq. 76. BACH, J.C.: Sonatas for Violin and Harpsichord, Op. 10: No. 1, in B flat; No. 2, in C; No. 5, in F.

Carol Lieberman, violin; Mark Kroll, harpsichord. [Ralph Doppmeier, prod.] TITANIC TI 90, $9.00.

There has been an extraordinary wealth of C.P.E. Bach on record recently; this selection only touches the surface.

The two harpsichord concertos have a curious history as part of a manuscript unearthed in a Toronto bookshop in 1937 by violinist Adolf Koldofsky. It contained several concertos, in whole or in part, which Koldofsky subsequently prepared for performance: Wanda Landowska broadcast seven of them on CBC in 1943. The manuscript is now at the University of California, Berkeley, and Malcolm Hamilton has made new editions for his recent performances and recordings. The works are not really discoveries, since Wotquenne listed them in his famous C.P.E. Bach catalog; but the process by which an eighteenth-century manuscript ended up in Toronto (via, at one point, a Salvation Army shop) gives them special interest.

These both date from Emanuel's early years in Berlin, and though not exceptionally original or important, they have charm and brilliance (plus a toughness that distinguishes them from the work of Johann Christian Bach). The performances are lively and forthright, yet there is something very artificial about the sound of Hamilton's (unidentified) harpsichord against the cushioning smoothness of the Los Angeles strings. This music surely requires some-thing more incisive. The racy last movement of the D major Concerto is a success, and both first movements are pleasing. But the inner weight of the intense slow movements is only hinted at; the sound is static and unmoving.

The two recordings of the Op. 18 Symphonies, Wq. 182, provide—for the first time—I think—direct competition between the two leading English baroque orchestras. It would be interesting to know how many players appear in both performances. Trevor Pinnock's sturdy, vivid performances win without doubt. Bach's surprises flash off the strings and bounce suddenly into silence, and his slow movements are wiry and tense. But Christopher Hogwood's recorded acoustic is preferable. Too many of Pinnock's Archiv discs inhabit a large, bland space in which the playing loses much of its detail; Hogwood's is closer and crisper. In this case, that only reveals a certain roughness in the playing and a lack of real conviction. The carefulness and unwillingness to take risks that have marked all too many Academy of Ancient Music recordings (including its much-lauded Messiah) is again in evidence.

Pinnock's accounts of the two flute concertos with Stephen Preston have real zip and stylistics: the acoustic here catches Preston's woody, soft flute sound, and projects it well.

Finally, an outstanding chamber-music record from Titanic: three of J.C. Bach's smallish, pretty sonatas and a huge, magnificent work by Emanuel at his most mature. There is surely an echo of J.S. Bach's B minor Flute Sonata in the involved, powerful argument of the first movement. Harpsichordist Mark Kroll's solo statements are strongly projected, and Carol Lieberman's thin, crisp violin tone complements his playing admirably.

N.K.

BACH: Secular Cantatas (5).

Edith Mathis and Arleen Augér (No. 208). sopranos; Peter Schreier, tenor (Nos. 208, 209, 211); Theo Adam (Nos. 208, 211-212) and Siegfried Lorenz (No. 209). basses; Berlin Soloists, Berlin Chamber Orchestra. Peter Schreier, cond. [Bernd Runge, prod.] ARCHIV 2533 269*, 364*, 453*, $10.98 each. Tape: 3310 269*, 364*, 453*, $10.98 each (cassette).

Cantatas: No. 36c. Schwingt freudig euch empor!, No. 208. Was mir behagt, ist nur die muntre Jagd!, No. 209. Non sa che sia do-

Reviewed by:
John Canarina
Scott Cantrell
Kenneth Cooper
R.D. Darrell
Kenneth Furie
Harris Goldsmith
David Hamilton
Dale S. Harris
R. Derrick Henry
Nicholas Kenyon

Allan Kazinn
Paul Henry Lang
Irving Lowens
Karen Monson
James R. Oestreich
Conrad L. Osborne
Andrew Porter
Patrick J. Smith
Paul A. Snook
Susan T. Sommier
CRITICS’ CHOICE

The most noteworthy releases reviewed recently.


BARTOK: String Quartets (6). Tokyo Quartet. DG 2740 235 (3), Nov.


CARTER: A Symphony of Three Orchestras; A Mirror on Which to Dwell. Boulez, Davenny Wyner, Fizt. CBS M 35171, Aug.


MENDELSSOHN: Chorale Cantatas (3). Osterzug, Wehner. Fono FSM 68 101, Nov.


Turner*: No. 211. Schweigt stille, plaudert nicht (Coffee)*. No. 212. Mer halten en neue Oberkeet (Peasant)*.

BACH: Cantata No. 210, O holder Tag, erwünschte Zeit.


Over the last few years, Archiv has been issuing new recordings of Bach’s secular cantatas to replace the ponderous old versions by Karl Richter. Peter Schreier, the tenor on most of Richter’s Bach recordings, leads the Berlin Chamber Orchestra and a small chorus of Berlin soloists in his first major project as a conductor. Cantata No. 213 was released here only recently, and these three records bring us rather more up to date. The Peasant and Coffee Cantatas were recorded in 1975: the Hunting Cantata, No. 208, dates from 1976, the other disc from 1979.

Bach evidently thought highly of his secular cantatas: he reused much material and refashioned it for sacred works. Now a clear distinction can be made between the two genres, as these discs illustrate. At their best, these works are glorious. The opening Sinfonia of Non sa che sia dolore, with its flute solo, is among Bach’s most ingenious instrumental movements —yet I still cannot persuade myself that the Telemannesque final aria of the same cantata, with its crude harmonic progressions and part-writing, is really Bach’s work. No matter; Edith Mathis proclaims the work with operatic splendor, and if her milieu seems to be Mozart rather than Bach, that gives the cantata only a slight feeling of overinflation. Her phrasing is always supple and her tone smiling: the rhythms dance, and only in the smooth orchestral phrasing is there a hint of complacency.

This disc, the best of the batch, contains another interesting work, a birthday cantata for a Leipzig worthy that later became a birthday work for two other people and an Advent church cantata: One lovely aria features the viola d’amore, and there is a cheerful bass aria of celebration, in which the Berlin players phrase with typical modern pertness, with their undiomatic slurs and bouncing staccato all nicely unanimous. The opening chorus strains the resources of the singers, and the final joyful Gavotte is heavily undancelike. But the arias are well done by Mathis, Schreier himself, and Siegfried Lorenz.

Some people find the Peasant and Coffee Cantatas funny, and to them I can recommend the Schreier versions, except for Theo Adam’s lugubrious bass. I find Mathis’s endless cheerfulness and the orchestra’s jolly Germanic swagger a little hard to take; the only accounts I have heard that bring the requisite grace and lightness to these (I am sorry they?) heavily-handled parodies are those of Eilly Ameling, Siegmund Nimsgern, and the Col legium Aureum, on German Harmonia Mundi 151-99687/8.

The Hunting Cantata, the largest of these works, receives a successful performance. Mathis gives an ethereally beautiful account of the famous “Sheep may safely graze” aria. (Yes, that’s where it comes from!) And Arleen Auger is splendid in the aria that sounds as if it’s going to be “My heart ever faithful,” but isn’t. (It uses the same ground bass; this performance omits the glorious little trio-movement on the same bass that can be attached to either aria.) As in all these accounts, Schreier draws crisp, well-tuned playing from his orchestra, but articulation and phrasing are distinctively modern, and the choral singing is not always secure.

The sound of Nonesuch’s new version of Cantata No. 210 is quite different, and very refreshing: a tiny, domestic ensemble, one to a part, with the gentle, warm solo voice of Judith Nelson. O holder Tag, adapted from earlier pieces as a wedding cantata in 1741, contains beautiful writing for solo oboe d’amore and flute as well as a very demanding vocal line. Nelson does not always sound at ease at the extremes of her register; she blurs the text and sometimes misses the long sweep of Bach’s phrases, yet her quietly affecting singing captures the heart of the music. The playing is competent technically (the oboe d’amore is outstanding), though it often becomes somewhat lumpy and stolid in rhythm, characterful for the first few bars of a number but thereafter predictable. Joshua Rifkin directs firmly but without any special feeling for the large-scale structure of each movement. There are many original-instrument ensembles giving fine Bach performances in this country (Asson Magna. Concert Royal, Banchetto Musicale, the Levin Baroque Ensemble). I hope Nonesuch spreads its net wider for future releases.


Sonatas: for Violin and Harpsichord Obbligato, in D minor. S. 1036: for Two Violins...
The Buxtehude pieces, though brilliantly virtuosic, are a little predictable. The real find is the Pachelbel repertoire—full of a fire and fantasy one does not always associate with German music. The first movement of the E minor Partie, with its slow introduction and set of free variations, is a winner; and the extraordinary sonority of the A major Variations for violin with two gambas (reconstructed by Goebel from an arrangement based on the lost autograph) is most striking. At the end of this side comes the infamous "Pachelbel Canon," shorn of all Münchinger-induced heaviness and grandeur and restored to its original form as a sparkling, sprightly dance for three solo violins.

The Rosenmüller, far graver music, and the Schenck, far more elaborate (for solo gamba with continuo), make an equal impact—but only I. suspect, because the ensemble's style is so carefully thought out in each piece. Each composer's rhetorical language is allowed to speak with its own accents. This music could not convince if played with twentieth-century expressiveness on modern instruments; Bach can survive, perhaps because we are used to it, but his predecessors need the Cologne ensemble's understanding and advocacy to make their music come alive.

Throughout, the tuning is impeccable; the continuo work deftly effective. The recording is splendidly clear and immediate; and the pressings are excellent. Buy it.


CAST
Heavenly Voice Claire Caugnan (s)
Marguerite Yvonne Minton (ms)
Faust Placido Domingo (t)
Méphistoèphélès Dietrich Fischer-Dieskau (b)
Brandr Jules Bastin (bs)


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ment, etc., does not flow consistently, and rhythmic tension in the \"Fée\" is surprisingly low. The Love Scene doesn't maintain its stature. Though the \"Queen Mah\" Scherzo is neatly played, the wild violin phrases in \"Romeo at the Tomb of the Capulets\" are far too cautious and bland. Matters improve with the return of the chorus, and Bastin, only a serviceable voice (especially by comparison with Ozawa's José van Dam), makes a vigorous and effective Friar Laurence. Minton and Araiza do their small bits with reasonable effect.

Barenboim's recording of the Requiem is problematic in a different way. Here he espouses some curious interpretive ideas. At several spots in the opening movement where Berlioz' concept clearly involves sharp dynamic contrasts or overlaps, the fortissimo entries are telegraphed via premature crescendos. In the Dies Irae, at \"Quantus tremuit fons et origo\", where the onset of motion is doubled, the pulse should stay the same—but Barenboim speeds up, undercutting the steady buildup to the \"Tuba mirum\". Exaggerated dynamic touches cutting the steady buildup to the \"Tuba mirum\" are fussily accentuated in detail than Barenboim's recording.

Some similar stodginess is encountered in \textit{Roméo et Juliette}—where, of course, the vocal parts are less crucial. \textit{Roméo seul} doesn't flow consistently, and rhythmic tension in the \"Fée\" is surprisingly low. The Love Scene doesn't maintain its stature. Though the \"Queen Mah\" Scherzo is neatly played, the wild violin phrases in \"Romeo at the Tomb of the Capulets\" are far too cautious and bland. Matters improve with the return of the chorus, and Bastin, only a serviceable voice (especially by comparison with Ozawa's José van Dam), makes a vigorous and effective Friar Laurence. Minton and Araiza do their small bits with reasonable effect.

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Leopold Simoneau is the ideal tenor soloist, performing \textit{\"live\"} just as impeccably as in the studio (with Munch, RCA Victor VICS 6043), in liquid, unobtrusively "right," both in the literal sense of conformance to Berlioz' score and trajecta. It is recorded with great clarity and impact, and also with a sense of space in the climaxes that I have rarely found in digital work.

Musically, such tricky matters as the accelerando and subsequent return to the original tempo in the \textit{\textit{Requiem}} are handled with rare security and naturalness, and the tempos are consistently within reasonable distance of Berlioz' metronomes. Just about everything in this performance is simply and unobtrusively "right," both in the literal sense of conforming to Berlioz' score and vision, and in the equally significant sense of adding up to a coherent statement in its own terms. Only the ever-troublesome tenor solo disappoints—albeit, believe it or not, I find Robert Tear's nasal, effortless singing, recorded at a decent distance, easier to take than Domingo's misplaced proclamation

In this movement, the digital sound gives us wonderfully subdued but tangible bass-drum and cymbal strokes. Many of the special effects benefit from the clarity and solidity of the sound, and there are musical rewards as well—you can distinctly hear the changes of harmony in the organ and bass lines. The trumpet solo at the opening of the \\
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Brandenburg Concerti (6), S.1046/51
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Harmonicon, Con. Mus. † Bran. 2, 4
Tel. 642063 (D); □
No. 2 in F, S.1047
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No. 4 in G, S.1049
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Soelsscher (guitar) (F & Fugue in g. S.1000) † Sor
dG 2535011
Sonatas (3) and Partitas (3) for Violin Unaccompanied, S.1001/6
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Stokovszky (see Coll. Violin)
DG 2535017

Bartók, Béla
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Shifrin, Lukas Schoenfield † Rhapsodies; Roumanian Sonatas
2-None. 79021 (D); □
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Hungarian Peasant Songs (15)
Kraus (see Piano Music) Van. 71249
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Ranki (see Piano) Tel. 642282 (D)

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Luca, Schoenfield † Contrasts: Rhapsodies; Roumanian
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3-Sera. S-6122

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12-Lon. CSP-11 ($95.76)

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No. 5 in e, Op. 67
Klemperer, Phil. Orch. † Over. (originally released as S.35843)
Ang. RL-32032; □
No. 9 in d, Op. 125, “Choral”
Norman, Fassbuehner, Domingo, Berry, Bohm, Vienna Phil. St. Op. Cho. (G)
2-DG 2741009; □ 3382009 (D)

Borodin, Alexander
Prince Igor:Polovtsian Dances
Rozhdestvensky, Orch. Paris † Musorgsky: Night; Rimsky-Korsakov: Capriccio: Russian (originally released as S.36889)
Ang. RL-32043; □

Carulli, Ferdinando
Guitar Music
Lukowski & Lemaigre (2 guitars): Serenade; La polacca † Sor
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Polonaises
Malcyzinski (Nos. 1-6) (originally released as S.33728)
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Even late in life, Cherubini's genius did not wane.

from Renaissance polyphony to the work of his French colleagues. Like Lully before him, he was a Florentine who settled in Paris, where he lived for more than half a century, attaining the most coveted honors and positions: upon his death he was given a state funeral. Unlike Lully, he did not become entirely Gallicized; his Italian melodic sense never left him, nor did the completely absorbed style of Viennese classicism—though he also had a Romantic streak. Still, his music has a definite and always recognizable individuality. He was one of the outstanding connoisseurs of the French lutenists, and his work was not supervised by the company's exigencies. Lamberto Gardelli has done so, and with care. Lamberto Gardelli has the utmost respect for the liturgic spirit of the Mass. He gives the reviews of the piece by the Deutscher Grammophon's release of the work. Although Igor Markevich has an even better chorus, which is always solidly on pitch, Stein shows much more feeling for the liturgic spirit of the Mass. The D minor contains dozens of begats. D minor 2535 404. $6.98. Tape: 3335 404. $6.98 (cassette).

CHERUBINI: Requiem in C minor.

Austrian Radio Chorus and Symphony Orchestra. Lamberto Gardelli, cond. 9500 715, $10.98. Tape: 7300 805. $10.98 (cassette).

CHERUBINI: Requiem in D minor.


Arthur Lima, sometimes identified as Arthur Moreira-Lima, is a Brazilian pianist in his early forties, trained in Paris and Moscow (by Marguerite Long and Rudolf Kehrer), who won prizes at Warszaw (1965), Leeds (1969), and Moscow (1970). He made some digital recordings in Japan (Denon OX 7118-ND, December 1978) and herewith commences the "Chopin Project," a subsidized recording of the complete music for solo piano.

Lima has many natural attributes for the Chopin style—a big technique, a velvety, caressing touch, and an instinctive feel for atmosphere and subjective drama. He is particularly adept at gauging some of the feathery pianissimo endings: the arpeggiated close of Op. 15, No. 1, is an eloquent case in point. He also senses the passion that pervades the middle part of the same nocturne, and his clean, grandly paced octave roulades, combined with a huge dynamic range, are impressive in the central episode of the funeral Op. 48, No. 1.

But "instinctive feel" is also the very quality that, at least for me, makes Lima's playing so utterly distasteful. Granted, the age-old "tradition" of Chopin performance provides a carpet under which many musical indiscretions can be swept (with impunity!), and Lima is only doing "what comes naturally." But there is no earthly reason why Chopin's rhythmic pulse must be constantly interrupted and distorted: why his clearly drawn (though sometimes intriguingly subdivided) phrases have to be manipulated and fragmented. Lima is obviously sensitive in a vague sort of way to the beauties inherent in this superb music; precisely that sensitivity, in fact, probably accounts for his restless desire to "do something." But since he apparently doesn't grasp the harmonic underpinning, much of his "interpretive" striving sounds aimless and contrived. The flowing opening phrases of Op. 9, No. 1, for example, loiter rather thanlinger: the stormy central climax of Op. 27, No. 1, is crippled by a strained vertical as-sault on every downbeat that banishes the requisite horizontal sweep and line. This very talented pianist should reconsider his whole musical approach before proceeding farther in this formidable assignment.

The digital sound, somewhat variable, is at its round, mellifluous best in some of the later works, such as Op. 55, No. 2, and Op. 62, No. 1; in some of the others—the three works of Op. 9, for example—the piano tends toward cluttery hollowness: the pianissimos are bloodless, the fortissiimi seemingly off-mike, with a sharp attack but no full-bodied warmth or focus to offset the reverberant diffuseness. Surfaces are excellent. Most integral editions of the nocturnes, however—even those that include the post-

Arthur Lima: disappointing Chopin

huminous pieces, as this one does—occupy two, rather than three, discs. n.g.

HARBISON: Concerto for Piano and Orchestra.* STOCK: Inner Space.


These two works were played by the American Composers Orchestra in the last concert of its 1979-80 season: the Harbison subsequently won the 1980 Friedheim Award. It is too easy to take for granted CRI's valuable work in making such pieces quickly and (given its policy of no deletions) permanently available on record. In England, most major new orchestral works go unre-corded (except by the BBC, whose tapes are not commercially available). The Arts Council of Great Britain has only just, tentatively, begun a system of subsid-ry for recordings of contemporary music: in this field, America is way ahead.

In the last few months, I have been able to acquaint myself with first-rate music by figures as diverse as Tobias Picker (CRI SD 427), Lou Harrison (SD 455), Ralph Shapey (SD 428), and William Albright (SD 449). There have been recordings of prizewinning pieces by Robert Starer and Daniel Perlongo (SD 453). John Harbison's woodwind quintet and George Rochberg's Slow Fires of Autumn (SD 436); and reissues of important works of the 1950s by Roger Ses- sions and Benjamin Lees (SD 451). William Bolcolm's oddball piano quartet has just appeared alongside Ross Lee Finney's Piano Trio No. 2 (SD 447).

All these performances give a critic

the opportunity to get to know a work instead of making a snap judgment after one performance. When I heard Harbis-

son's piano concerto in concert, I thought it attractive but formally insecure. On record, and on closer acquaintance, this matters less. The work's two-movement form—free fantasy, three-section sequence of march, can-

zona, and dance—works well. The writ-
ing for piano blossoms with a natural, impulsive lyricism (and is beautifully played here by Robert Miller, the work's dedicatee).

What suddenly strikes a record listener, without the visual presence of an orchestra, is that the irritations of orchestral sound in the first movement are curi-ously irrelevant to the substance of the piece. There is little dialogue: the pi-

ano's eloquent, straining melodies are their own justification. In the perkiest sec-

ond movement, the give-and-take is more firmly established but the result less original.

The concerto still seems an experi-

ment that doesn't quite succeed, but it is always lovely to listen to. Harbison has an acute ear and a real sensitivity to the outline of each phrase and harmonic se-

quence. If his large-scale planning doesn't yet convince, he nevertheless brims over with ideas and has the ability to communicate them: that's what counts.

David Stock's Inner Space sounded on one hearing a well-played jubilee: on renewed acquaintance, there's even less to it than meets the ear. The noise is im-

pressive and holds the attention for a while, but eventually one desairs of hearing a clearly expressed musical thought. Both performances are very fine, and they sound well recorded. Through the strong forward placing of the piano in the Harbison makes the orchestra sound even more irrelevant than it is.

N.K.

HINDEMITH: Symphonic Morphosis on Themes by Weber—See page 53.

MASSENET: Werther.

CAST:

Sophie...Isobel Buchanan
Charlotte...Frederica von Stade
Werther...José Carreras
Johann...Paul Crook
Alber...Thomas Allen
Schmidt...Malcolm King
Le Bailli...Robert Lloyd
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CLASSICAL Record Reviews

Obratzsova, Domingo, Chailly
DG 2709 091
Troyanos, Kraus, Plasson
Ang, SCZX 3894

This is an attractive performance, not least for its lively and sympathetic framework. Colin Davis' conducting, broader than Georges Prêtre's though not as drawn out as Michel Plasson's (both on Angel), is unfailingly sensitive to the circumstances and needs of the characters. His work may be less alertly articulated than Prêtre's, less illuminating than Riccardo Chailly's (DG), and less characterful than Jésus Etcheverry's (in the first stereo Werther—never released here, but recently available in France as Adès 7025), but it all plays. The Covent Garden orchestra and Philips recording team contribute their best efforts.

The supporting cast is of a quality to give British singing a good name. While the Balli is pretty much a can't-miss role, Robert Lloyd is as good a one as I've heard—strong yet affectionate, and pleasantly free of the traditional buffo trappings. (For an uncommonly persuasive "standard" Bailli, check out Adès' Julien Giovanetti.)

Good Sophies and Alberts are harder to come by. Isobel Buchanan's full, pretty lyric soprano makes for an attractive Sophie as we've had since the young Mady Mesple (Adès and Prêtre/Angel), and Thomas Allen has another impressive outing with his bright high baritone and sympathetic involvement—though heavier-weight casting can make Albert a more commanding presence, as witness Gabriel Bacquier in his younger years (Adès). Even the comedy team of Schmidt and Johann is humanly rendered here, though Paul Crook minces more than I'd have expected or liked.

But you're no doubt getting impatient. What, you ask, about the principals? Well, generally speaking, they're both good. More specifically, however, they fall into the standard pattern of the stereo recordings: a satisfying Charlotte (of one sort or another) and a problematic Werther.

Where the title role is concerned, the discographic situation can be described simply: There's Georges Thill, and then there are the others. At every turn, Thill not only produces the richest and most beguiling sounds, but finds the urgency of Werther, the poet who wants to belong to his community but can't make himself fit. Placido Domingo's DG recording is an honorable start toward the first-rate Werther I think he has in him. And yet, lovely as much of his work is, it's still too externalized to set the character into compelling action. Surprisingly, the post-Thill Werther who comes closest is the Australian Albert Lance (Adès). Which is not to say that even he comes close, really.

Of course the role can be cast more lightly, but the record companies haven't done so very successfully—though Alfredo Kraus might have been worth hearing ten or fifteen years before the Plasson/Angel recording. Philips' José Carreras is currently hard to type vocally, which is part of the problem with his performance. There's hardly any audible trace of the voice's former lightness and ease, but at the same time the darker tone seems to have no really solid core. If the result tends to jangle the nerves, there is at least plenty of energy in his performance.

I have no real complaint about Frederica von Stade's Charlotte, which is appealingly direct and attractively sung, within the voice's basic limitations of size and color. Of the lighter-weight Charlottes, Tatiana Troyanos (Plasson/Angel) is the most imposing vocally—the set is almost worth having just for her—while Ninon Vallin (with Thill) and Vitoria de los Angeles (Prêtre/Angel), although less consistent vocally, are more touchingly personal.

My own preference is for a heavier voice, especially useful for the emotional turmoil of the later scenes. Elena Obraztsova (DG) scores some points, but her voice isn't in terribly good focus here. This leaves us with Rita Gorr (Adès), and she is something special. Even if the singing isn't as smooth as Troyanos', her poise and presence aren't duplicated elsewhere on records.

If I could have only two Werther recordings, they would probably be the Vallin/Thill and the Adès. A case could be made for any of the others, however, and you can mix and match to suit your preferences. For once, the diverse listings represent some real choice.

K.F.


MUSSORGSKY: Pictures at an Exhibition (orch. Ravel), Night on Bare Mountain (arr. Rimský-Korsakov).

Czech Philharmonic Orchestra, Sviatoslav Richter, cond. [Franklin. SM 42495, $12.98 (digital recording). Tape: SM 42495, $12.98 (cassette).]


With these two digital recordings, Ravel's 1922 orchestration of Mussorgsky's 1874 piano suite Pictures at an Exhibition has overtaken Stravinsky's Firebird as the favorite showpiece for the new technology. The earliest of the four digital Pictures, Louis Frémaux's 1972 account, shows its age. It is by far the least refined of the group, in both sound and...
execution, and Frémaux's conception, despite several attractive details, cannot hold its own with the distinguished recordings of, to name just some, Ansermet, Cantelli, Giulini, Karajan, Koussevitzky, Kubelik, Leibowitz, Mackerras, Muti, Reiner, and Toscanini. Telarc's 1978 version with Lorin Maazel and the Cleveland Orchestra, on the other hand, has been acclaimed as a landmark in the history of recorded sound. (I disagree, but more on that later.) Maazel's interpretation, though certainly interesting, is distressingly humorless and inconsistent and not very subtle either.

Colin Davis' recording—to the best of my knowledge, his first—proves disappointing in almost every respect. It is fussy and extremely leisurely—downright eccentric, in fact. The solo trumpeter plays his opening theme with soupy vibrato; Davis exaggerates the tenuto in "The Old Castle" and is further hindered by a bland saxophonist; and in "Tuileries," his hesitations at the ends of phrases are distracting. Of course, there are effective moments, too: "Gnomus" is amply grotesque. "Chicks" emerges delicately, with lots of detail, and "Catacombs" should frighten most anyone. But Philips' sonics are a mess. Balances are awry; each orchestral section (often each instrument) emanates from its own spatial world; the strings sound glassy and deficient in tonal weight (hardly characteristic of the Concertgebouw); and indeed, the orchestra as a whole lacks body—a disastrous shortcoming in such a resplendent piece. Night on Bare Mountain suffers from similar sonic anomalies, fortunately not so ruinous there. Though thrillingly well played, with exceptionally precise articulation and great momentum, Davis' reading misses the devilish abandon that Giulini, Leibowitz, Reiner, Svetlanov, and others have brought to Night. Nonetheless, it is infinitely preferable to the stiff, rather pallid Maazel/Telarc account.

Georg Solti's Pictures (apparently his first, too) aroused high expectations. For one thing, the Chicago Symphony has a rich recorded tradition with the piece. Rafael Kubelik's 1951, single-mike monaural disc still wins praise for its stunning sound; audio writer and pioneering record producer Bert Whyte calls it "the first hi-fi landmark of the LP era." Fritz Reiner's RCA recording from the late '50s, though deleted, remains one of the finest examples of early stereo. And Carlo Maria Giulini's 1977 account, while not a comparable sonic milestone, preserves an equally persuasive performance. Then, too, Pictures would seem to be an ideal vehicle for both Solti and his orchestra, now more dazzling than ever, as well as for London Records, the company that has probably brought us more sonic spectacles than any other.

Predictably, then, Solti's Pictures is a decided success. The key word is "big": This is a bold, theatrical reading of enormous power and excitement. The brass playing is absolutely stunning; listen to the deep, dark tone in "Catacombs." He proves no less felicitous in the lighter portraits: "the Old Castle" flows expressively. "Chicks" cackles along with beguiling humor. "Limoges" conveys tremendous bustle. Only in the final picture does he disappoint. After a fierce "Baba Yaga," the "Great Gate" is exceedingly deliberate; the intent is obviously to extract every last ounce of drama and grandeur, but the result is rather heavy-handed.

London's recorded sound is brilliant and full, with some bone-chilling bass and a panoramic stereo spread if little depth. Though the balances on the Telarc classic are more natural, London's timbres seem much less artificial (cf. the opening trumpet solo), and one has the impression of far greater immediacy and life. All four digital Pictures are recognizably digital; all manifest the familiar aberrations of space and timbre.

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Tombeau proves to be a questionable choice for Solti.

Of the 1959 Dorati/Minneapolis Symphony recording in Mercury's fabled Living Presence series (SR 90217; I haven't heard the current remastering). Simply for performance, my current favorite is Giulini's sharply characterized reading, coupled with an equally distinct Prokofiev Classical Symphony, in quite good sound. For a combination of very good sound and performance, the high-powered 1979 Muti/Philadelphia version (Angel S 37539) is a reasonable choice. (I'd recommend the EMI pressing over Angel's 45-rpm mastering.) For the budget-minded, there are two desirable alternative recordings. First, Eckoed, Ansermet's poetic account (London Treasury STS 15475) and Leibowitz's galvanic rendition (Quintessence PMC 7059). Finally, no lover of Pictures should be without Mussorgsky's original, if only to more readily appreciate Ravel's accomplishment. My present preference is for Beroff (Angel S 37223). But for the really strapped, there is a superb bargain on the Internet. (Listen, if you need convincing, on a top-notch moving-coil cartridge and first-rate electronics.) But if you insist on a digital Pictures, Solti's is your best bet.

There are of course many other options. For "you are there" realism, I've heard nothing to match my ancient copy of the 1959 Dorati/Minneapolis Symphony recording in Mercury's fabled Living Presence series (SR 90217; I haven't heard the current remastering). Simply for performance, my current favorite is Giulini's sharply characterized reading, coupled with an equally distinct Prokofiev Classical Symphony, in quite good sound. For a combination of very good sound and performance, the high-powered 1979 Muti/Philadelphia version (Angel S 37539) is a reasonable choice. (I'd recommend the EMI pressing over Angel's 45-rpm mastering.) For the budget-minded, there are two desirable alternative recordings. First, Eckoed, Ansermet's poetic account (London Treasury STS 15475) and Leibowitz's galvanic rendition (Quintessence PMC 7059). Finally, no lover of Pictures should be without Mussorgsky's original, if only to more readily appreciate Ravel's accomplishment. My present preference is for Beroff (Angel S 37223). But for the really strapped, there is a superb bargain on the Internet. (Listen, if you need convincing, on a top-notch moving-coil cartridge and first-rate electronics.) But if you insist on a digital Pictures, Solti's is your best bet.

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This *Ivan* is possibly Slatkin’s finest recording.

been available on its own for some time (August 1978 HF). It is certainly a worthy version, even if some of Slatkin’s tempos are questionable, such as the beginning of the finale, taken at the same pace as the first chorus despite its faster marking. Reiner’s version (RCA AGL 1-1966) is altogether more vivid and characterful. I’m not as bothered as some that it is not in Russian; rather English sung with feeling from Russian obviously learned by rote. In any case, two sections are in Latin.

In short, though more exciting and idiomatic versions can be found among other individual releases, this is an attractive package, with very agreeable performances. J.G.

**RAVEL: Le Tombeau de Couperin—See Mussorgsky.**

**STOCK: Inner Space—See Harbison.**

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**SUBOTNICK: Axolotl*; The Wild Beasts*.**

Ivan is late Prokofiev, much of the brilliant and pigant orchestral writing is reminiscent of the contemporaneous Fifth Symphony (1944) of the recent *Nevisky* (1938), but of the much earlier *Love for Three Oranges* (1919).

Where Stasevich failed, however, was in deciding to include a totally superfluous and distracting narrator, who describes some of the action and doubles in the role of Ivan. After all, Prokofiev didn’t need a narrator for *Nevisky*; nor does Nevisky himself appear in that work.

This *Ivan* is more detailed and less generalized than Leonard Slatkin’s previous efforts for Vox—possibly his finest work on discs. Claudine Carlson is a very affecting soloist, both here and in *Nevisky*; Samuel Timberlake sings his brief solo with great gusto. The choral and orchestral performance is exemplary.

That said, it must be noted that Muti gives a more biting, more compelling, more “terrible” reading, aided by a more vivid recording. Just as the presence of a narrator is detrimental to the work, so is Arnold Voketaitis’ extremely pompous and oratorical delivery a drawback of the Vox performance. (The narration is in English; the singing in Russian.) Muti’s narrator, Boris Morgunov, speaking Russian, is more expressive and less pretentious than Voketaitis, more understated at times, and ultimately more dramatic. Muti and Morgunov render the particularly beautiful and moving section entitled “Ivan’s Illness” with great impact. If we must have the narration, surely that is the way to do it.

Were *Ivan* to be slightly abridged (it runs about sixty-eight minutes) and shorn of narration, it could easily become as popular as *Nevisky*. I would not, however, want to decide which numbers should be excised. Slatkin, in fact, adds one not included by Stasevich: a polonaise from the original film score.

Richard Freed’s interesting and informative annotations argue that *Kiseleh*, rather than *Kije*, is the proper name for Prokofiev’s lieutenant, the accent on the second syllable. Slatkin’s recording offers the vocal versions of the second and fourth movements, a practice previously adopted only by Erich Leinsdorf in his two recordings, one of which is still available (Seraphim S 60209). In his element here, Voketaitis redeems himself with powerful and idiomatic singing, full of character and bravado in the sleigh ride, very sensitive in the Romance. Slatkin gives a rhythmically alert reading, though the wedding music, a trifle sedate, lacks the needed satirical bite provided by Fritz Reiner (RCA AGL 1-3881). George Szell (CBS MS 7408), and Leinsdorf.

As for *Nevisky*, this recording has mixed into a strange sonic brew with pianistic tinklings and janglings.

Ungenerous as these descriptions may sound, it’s not the collection of odd timbres that I find distasteful. Rather, underneath the ear-tingling surface sheen, the raw material—the instrumental writing—is absolutely threadbare. The players are given a mere handful of effects, which it doesn’t take long to squeeze dry. The “ghost electronics” keep these effects artificially alive, briefly, by heaping other effects on top of them. In the end, it’s like throwing different-colored lights onto a blank canvas—all very nice, but it hardly disguises the absence of a picture.

Should we expect a picture? To judge from Subotnick’s past work, his annotations for these pieces, and indeed, his penchant for zoological titles, he does seem to aim at musical representation, however abstract. Sometimes he is delightfully successful, as in his last electronic piece, *A Sky of Cloudless Sulphur* (Nonesuch 78001, November 1979). *Wild Beasts* comes close to evoking its subject matter—but that’s too easy, isn’t it? *Axolotl* couldn’t be farther from the mark. An axolotl is a Mexican salamander, “a transparent and delicate creature,” according to the composer. Yet this aggressive, abrasive score brings to mind the hallucinatory scenes from *Alice in Wonderland*: transparent, perhaps, but never delicate.

Juilliard Quartet cellist Joel Krosnick, who commissioned *Axolotl*, attacks his lines—such as they are—with an extraterrestrial passion: trombonist Miles Anderson and pianist Virko Baley sound equally enthusiastic if, ironically, somehow less vigorous in *Wild Beasts*. The “ghost electronics” make it difficult to judge the recording and pressing—the whistling sound in *Axolotl* is presumably a desired effect—but there does seem to be some crackling that travels at a steady 33⅓ rpm.

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**VERDI: Un Ballo in maschera.**

CAST:

Amelia — Katalia Ricciarelli (s)
Oscar — Eduita Gruberova (s)
Ulrica — Elena Obraztsova (ms)
Riccardo — Pauito Domingo (t)
Chief Judge — Antonio Savastano (t)
Amelia’s Servant — Gianfranco Manganotti (t)
Renato — Renato Bruson (b)
Silvano — Luigi de Corato (b)
Samuel — Ruggiero Raimondi (bs)
Tom — Giovanni Fioni (bs)
La Scala Chorus and Orchestra: Claudio Abbado, cond. [Rainer Brock and Michael Horwath, prod.] *DEUTSCHE GRAMMOPHON* 2740 251. $32.94 (three discs, manual sequence). Tape: 3378 111. $32.94 (three cassette series).

**COMPARISONS:**

Callas, Di Stefano, Votto Sera IC 6087 Price, Bergonzi, Leinsdorf RCA LSC 6179
Nilsson, Bergonzi, Solti
Lon. OSA 1328
Arredo, Domingo, Muti
Ang. SCI X 3762
Tebaldi, Pavarotti, Bartoletti
Lon. OSA 1398

If you enjoyed the hard-edged glint of Abbado’s Macbeth (DG 2709 062) and Simón Boccanegra (2709 071), you may be disappointed by his Ballo, which is no less fastidiously executed but is less ostentatiously so and begins to show some interest in the human origins of notated melody and rhythm, the sort of intangible that makes music expressive. Although this development seems still in an early stage, with the result that the performance operates within an exceedingly narrow emotional range, the existence of any range at all represents a breakthrough for Abbado, who may finally have discovered how limiting it is to treat performance strictly as a matter of execution.

Fascinating as it is to hear such a precise rendering of Verdi’s articulation and phrase markings (legato, nonlegato, staccato, accents), the result is not automatically expressive. Consider the conspirators’ characteristic staccato murmurs: Abbado has secured excellent execution of his perfectly sound decisions with regard to tonal weight, attack, and balance: what he hasn’t done is to back up and figure out what human need might be expressed by these rhythmic patterns. The result is a statement about musical notation, a statement that is intelligible but cut off from the emotional stakes of the conspirators.

I’m curious to hear what might happen if Abbado were to let himself go, yank his nose out of the score, from which he has long since learned to wring every drop of usable juice, and draw on his human reserves. There are encouraging signs here that he has human reserves. In “Eri tu,” for example, the textual fullness of the introduction begins to suggest some connection to Renato’s rage, and the flute statement of “O dolce zeffiretti” begins to show some connection to Renato’s aria. This isn’t it, though. Except for a rather humdrum account of the big Act III scene, his performance is respectworthy but less pleasing to the ear than Pavarotti (Bartoletti/London) or Peerce (with Toscanini) or Bergonzi (Solti/London and RCA), less involving than the crueler work of Di Stefano (Seraphim) or Gigli (Seraphim IB 6026, recently deleted). Bojerling (MET 8, the 1940 broadcast performance issued by the Metropolitan Opera and reviewed last June) is in another class.

(Quoted text)

The rest of the cast is listenable and unmemorable. Ricciarelli’s Amelia is more interestingly recorded, or maybe just less edgy than, her Luisa Miller (DG 2709 096, October 1980) or Tosca (2707 121, November 1980). Once again, she can make a pretty lyric effect when the music lies in her midrange at a comfortable tempo and dynamic. Once again, however, she is overtaxed when the music moves out of these bounds, as it almost always does. Both of her arias start well but then fall apart. Or listen to her lovely “Ahi sul funereo letto” in the Act II duet, and hear what happens when she has to rise to a fortissimo high A (“Che non m’è dato in seno”). This is music for a Callas (Seraphim) or Price (RCA) or Milanov (in the Met broadcast set) or Caniglia (in the deleted Seraphim set) or even a Nilsson (Solti/London).

Bruson is an earnest, conscientious Renato, and the voice stretches more plausibly up to F sharp and G than it did in the DG Luisa Miller, though this seems to be managed at the expense of middle-octave solidity: at times the voice verges on the hollow-core sound I associate with Aldo Protti. As suggested earlier, Bruson and Abbado work together nicely in “Eri tu,” and the preceding recitative has some distinctive dignity. This is a more listenable Renato than the recent competition, but that’s not much of a standard. Even with Betti’s ferocious performance out of the catalog, we can enjoy the superior singing of MacNeil (Solti/London) and Merrill (RCA) and Minnelli (Bartoletti/London), while Gobbi (Seraphim) turns in one of his most finished performances.

Obraztsova’s dramatic mezzo is the right sort of voice for Ulrica, but it’s not nearly as well focused, or as Apart as its tendency to wildness on top. After a rather generalized invocation, she becomes more interesting in the dialogue with Amelia and Riccardo—amazing what a difference some sound dramatic involvement can make.

Gruberová balances out neither better nor worse than the recorded competition. (I’m beginning to think that Oscar is an impossible role.) The upper part of the voice is quite listenable and has considerable cutting power—listen to her ride the big ensembles in the Ulrica scene. The lower part of the voice, however, is quite unattractive, and there’s not much personality beyond the usual stock pertness. “Volta la terred” suffers from one of Abbado’s more extreme instances of obsessive rhythmic delineation. By the time he’s finished dotting and slurring and otherwise fussing, the song has more or less disappeared.

The Samuel and Tom are on the weak side. De Corato has plenty of voice for Silvano but is hamstrung by another instance of Abbado’s making musical decisions that exclude any other considerations. His grievances are declared in a chipper allegro brillante that passes without any intimation of what this all means to Silvano. For Pete’s sake, the guy is spilling his guts.

The sound is satisfactory, the packaging adequate. For students of the score, this is a useful recording. For the experience of Ballo, the clear choice still seems to me the Seraphim set, with the RCA a good stereo alternative or supplement.

K.F.

VERDI: Requiem.
Montreal Caballé, soprano: Bianca Berti, alto: Placido Domingo, tenor: Paul Plishka, bass: Musica Sacra Chorus, New York Philharmonic, Zubin Mehta, cond. [Da-

Abundo stresses precision at the cost of expression.
The Musica Sacra Chorus, though not ideally blended in sound, sings with enthusiasm, and the New York Philharmonic is in good form. CBS's digital sound seems far too clinical for this kind of large-scale, warm-blooded music. There is some pre-echo, and surfaces are somewhat prickly. Texts and translations into English, French, and German are supplied.

D.S.H.

**Recitals and Miscellany**

**LILI KRAUS PLAYS KEYBOARD FANTASIES**


Vanguard's splendid audiophile press, with extraordinarily quiet surfaces, gives an imposing, burly weight to Lili Kraus's sonority, which on other occasions has seemed slightly brittle and insensuous. She is not, and never has been, a colorist in the Myra Hess tradition; yet in her own inimitable way, she conveys the tensions, mysteries, and grandeur of these fantasies—only one of which (the Mozart) she has recorded previously.

Kraus is a keyboard expressionist; the shaggy edges and heavy black Rouault outlines she gives the Bach impart a power and scope that will have purists up in arms but less prejudiced listeners enthralled. If memory serves, her mentor, Artur Schnabel, played this exceptional work in a similar manner. The Haydn is not as refined and jewel-like as some have made it sound, but its playfulness and sparkle are replaced by a blunter energy and a no less high-spirited bro. (Some will call this interpretation Beethovenian.) To Schubert's treacherous Wanderer Fantasy (which I once heard Kraus murder in concert), she brings more than adequate technical command and a compelling stormy rigor. It's an interpretation of inconceivable strength and knowledge, cognizant of the latest textual scholarship. (Note the D natural in the slow movement's closing measure.) Only in the Mozart, where she vehemently overrides the "pathetic," meditative qualities, is the pianist slightly brusque and ill-tempered, lacking patience as well as poetry. Still, this is a marvelous record. H.G.
EYE OF THE NEEDLE. Original film score by Miklós Rózsa.

Nuremberg Symphony Orchestra, Miklós Rózsa, cond. [Tom Null and Chris Kuechler, prod.] VARESE SARABANDE STV 81133, $8.98.

The unflagging creative vitality of Miklós Rózsa—at seventy-four, unquestionably the dean of practicing film composers—never fails to astonish. Here, for a World War II spy-thriller-cum-love-story, he serves up another taut, brooding, vibrant score, which harks back in tone and manner to his glorious “film noir” scores for Spellbound and the Mark Hellinger trilogy, Naked City, Brute Force, and The Killers.

Though perhaps not as “major” and dramatically forceful as those classics—or the gaudier, more expansive 1979 score, Time after Time—the music for Eye of the Needle is central to the film’s absorbingly paced, efficiently tailored narrative. This is particularly true during the protracted and harrowing life-and-death struggle between the two protagonists. At once romantic lovers and mortal enemies, they have come to a dual catharsis so typical of his idiom. His use of solo strings is very telling; often a violin or viola is paired with cello to create pungently mournful duo passages.

The Nuremberg Symphony turns in an adequate performance, though of course, it’s no match for the resplendent Royal Philharmonic, with which Rózsa has so successfully collaborated of late. No doubt the music would come across more with profile and panache if the recording had greater presence and bite. Pressing and surfaces are excellent, yet the production falls short of Varèse Sarabande’s high standards; a good deal of brightness seems to have been lost in the transfer to disc.

Nonetheless, even a comparatively minor Rózsa effort indifferently reproduced stands head and shoulders above the common run of today’s film-music mediocrities.

HEAVY METAL: Original film score by Elmer Bernstein.

Royal Philharmonic Orchestra. Elmer Bernstein, cond. FULL MOON/ASYLUM 5E 547, $8.98.

Elmer Bernstein’s recent, unlikely affiliation with the National Lampoon crowd and their associates (in Animal House, Airplane, and Stripes) has cast him in a subsidiary role as a composer: for the most part, he merely purveys brief cues of bridge or tension music, often in a parodic mode. But his voluntary subservience in this collaboration finally pays off in handsome fashion with this flamboyant, tumultuous score for the animated “adult” space-opera Heav Metal.

Bernstein’s achievement may very well go unheralded or even unremarked by the soundtrack-buying public, however, because Warner Brothers—Asylum’s parent company—has released a two-disc album of disco-type music also identified as a soundtrack to the film. Yet the segregation proves fortunate in the end, since it allows the serious movie-music fan to enjoy Bernstein’s intermittent contributions to the film in uninterrupted splendor.

Best described as Bernstein’s “Star Wars,” the score has all the traits of his unmistakably personal idiom: boyish forthrightness, tender modality, syncopated lullabies, bluesy inflections, and an overall rhapsodic exuberance. This large-scale, copious, well-integrated symphonic tableau contains many captivating ideas that exemplify Bernstein’s free-flowing melodic fancy and flair for dramatic evocation. And the strain of whimsicality that runs through the score makes it all the more irresistible.

The immaculate orchestrations by Christopher Palmer, David Spear, and David Bernstein, continuously on target, recall the shimmering and sonorous instrumentations of Bernstein’s erstwhile Hollywood collaborators. Leo Shuken and Jack Hayes. The Royal Philharmonic plays with customary flamboyance and panache. and the lucid, full-bodied sound is absolutely dazzling. This near-perfect recording joins Raiders of the Lost Ark as the best of 1981’s film-music releases.

SOPHISTICATED LADIES—See page 56.
CLASSICAL

The Tape Deck

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

Recyclings

Reissues—usually invitingly cheaper reprints—of once celebrated but now aging recordings have long been common. The latest wrinkle, inspired by the success of premium-price audiophile specials, introduces deluxe reissues at higher rather than lower cost—complete technological revivals of onetime sonic spectacles via half-speed disc remastering or superchrome tape processing. The new RCA Red Seal 0.5 series offers just such metamorphosed "legendary performances," on superchrome music cassettes (Prestige Box, $15.98 each) as well as on remastered discs pressed by German Teledec.

The first tape examples I've heard feature Van Cliburn and Kirill Kondrashin in their famous 1958 Tchaikovsky First Piano Concerto (ATK 1-4099): Fritz Reiner and the Chicago Symphony in their pioneering stereo Strauss Heldenleben from 1954 (ATK 1-4100) and their 1959 Respighi Pines and Fountains of Rome (ATK 1-4040); and Berl Zakharov, Charles Munch, and the Boston Symphony in a milestone Saint-Saëns Organ Symphony also from 1959 (ATK 1-4039)—certainly all most worthy choices for technological rebirth.

Needless to say, the sound, fine originally, now seems even more impressive, for quite apart from possible aural enhancements, the state-of-the-art processing works wonders. Cliburn's Tchaikovsky is still arresting, even if his piano seems unduly prominent by today's standards, and his reading somewhat stiffly constrained for all its dazzling bravura. The Reiner readings wear far better. Even his Respighi tone poems, which originally struck me as too objective, now seem eloquently persuasive: of course, they are eclipsed by the incomparable grandeur of the Strauss tone poem magnificently interpreted and performed. A historical landmark for Leslie Chase's experimental audio engineering.

The Saint-Saëns is a special case: in theory, as author of the reprinted program notes, I'm enjoined from reviewing it. But after so many years, that restriction now seems pointless, and whatever favorable bias I may have doesn't preclude reservations about the reprocessing. Whereas in Heldenleben a touch of original high-end tininess has been tamed with no significant loss of brilliance, the Saint-Saëns now reveals a bit less blazing incandescence and some low-end strengthening that, though fine for increased organ-pedal weight, shifts the overall spectrum balance. However, all this shows up only in direct comparison with the original disc: heard by itself, this taping makes the memorable performance even more grandly moving than ever.

- Non-premium-price reissues are still with us, of course: no fewer than three brand-new midprice series have appeared recently: CBS Masterworks' "Great Performances" (price at dealer's discretion); Angel's "Red Line" ($6.49 each); and Deutsche Grammophon's "Special" ($6.98 each). Nothing from CBS has come in yet. The two Red Line music cassettes I've heard (from an initial release of twenty-five) testify potently to that series' resources: Otto Klemperer's mighty 1962 Schubert Ninth Symphony with the Philadelphia Orchestra (4RL 32001) and one of my favorite Handel programs, the 1976 Neville Martin/St. Martin's Academy Double Concertos Nos. 1 and 3, plus the Agrippina and Arianna Overtures (4RL 32016).

The DG Specials, unlike most reissues (including DG's Privilege and Resonance series), are "easy-listening" anthologies of favorite pieces and movements excerpted from programs that date mostly from the '60s: Romantic piano music by Wilhelm Kempff, Tamás Vásáry, Emil Gilels, et al. (3335 608, 3335 639); a Bach organ recital by Karl Richter (3335 611): a Karajan/Berlin Philharmonic waltz collection (3335 607); and two other orchestral miscellanies, "Music of Grieg and Sibelius" (3335 635) and "Enchantment" (3335 637).

Latest HiTech Debuts. Aesthetic Audio offers its first British Merlin Fidelity + "direct-to-stereo" recording duplicated in real time on BASF II chromium tape. George Malcolm's 1978 Bach Suites Nos. 3 and 4 (S. 1068 69, with the New Chamber Soloists (MFC 789. $15.95 plus $2 shipping, Aesthetic Audio, P.O. Box 478, Carlin, Nev. 89082). When one gets past the extravagant technical claims and inadequate notes, the tape actually delivers superbly airy, ringing sonics, and unlike so many boringly ceremonial performances of the suites, these "chamber" readings are among the most delightfully I've ever heard.

Sine Qua Non's new superchrome recordings ($9.98 each) of Digitech digital recordings feature offshoots of the Boston Symphony, The Empire Brass Quintet, alone with a larger ensemble, combines technical bravura and anachronistic arrangements in "Renaissance Brass" (SCR 002) and "Digital Hits of 1740" (SCR 001). And the Cambridge Chamber Orchestra, led by Empire trumpeter Rolf Smedvig, is heard in Vivaldi's Seasons (SCR 007): despite Emanuel Borok's virtuosic fiddling, I find scant stylistic authenticity in these heavy-handed, overinsistent readings. More suitable stylistically, and better calculated to display the series' processing merits, is a grippingly bravura Empire program (SCR 005) that features the little-known Op. 3 Sextet by Oskar Böhme, plus shorter pieces by Hindeleith, Hovhaness, and Dvořák.

Phileas/B-C open reels ($10.95 each, except as noted) continue to expand three outstanding Colin Davis series. From his peerless London Symphony Berlioz cycle, there's the belated taping of the Symphonie funèbre et triomphale, a rhetorically grandiloquent but fascinating work, coupled with the Hunter Marche funèbre and Trovres Prelude (c. 1770; G 802 913). From his Boston Sibelius symphony series, there are the Sixth and (my favorite) Third (c. 1977; G 9500 142). And from his current Concertgebouw Haydn symphony series, we get exceptionally vital versions of Nos. 101 (Clock) and 102 (G 9500 679). Then, from the Concertgebouw's more extensive catalog under its regular conductor, Bernard Haitink, there are the profoundly moving 1971 Mahler Seventh (R 6700 036, double-play, $21.95) and—not to be missed—a Debuffy program that won a 1980 Gramophone engineering quality award, combining Jenufa with a magical Nocturnes (G 9500 674).

The first recording of Verdi's Stiffella, noted here in its cassette edition in December 1980, sounds even more warmly sonorous in a double-play reel edition (S 6769 039, $22.95). And while Claudio Abbado's vividly recorded Chopin nocturnes (S 6747 485, double-play, $22.95) are just a bit too stiffly formalistic for my taste, they valuably add two posthumous works to the usual nineteen (Barclay-Crocker, 11 Broadway, New York, N.Y. 10004).

HF
Tales from Famous Producers School
Down home at the studio with Bill Szymczyk, Part 2.
by Crispin Cioe

While his track record with the Eagles and Bob Seger (see Part I, November) might indicate otherwise, producer Bill Szymczyk has been very much involved in the albums of lesser-known artists. So far, through his Pandora Productions, Ltd., he has brought drummer Joe Vitale and Jefferson Starship lead singer Mickey Thomas to Elektra Records. Vitale's album, "Plantation Harbor," was released last summer; "Alive Alone," which came out in the fall, represented Thomas' solo debut.

Vitale plays with Eagle Joe Walsh's band; he also toured with the Eagles last year and plays on John Entwistle's "Too Late the Hero" (see story, December). With all of that activity, squeezing in recording sessions for his own album was not easy (it ended up taking two and half years to complete), particularly when they had to fit into Szymczyk's equally full schedule. To record the appropriately titled Theme From Cabin Weirdos, the two men met at the producer's cabin retreat near Mount Mitchell in North Carolina. Vitale drove south with his drums in his van and Szymczyk drove north from Coconut Grove, Florida (home base for his Bayshore Studio), with a twenty-four-track console.

"I made a control room in the bedroom," Bill recalls, "and a vocal booth in the hallway; the living room was the studio. We set the drums up on the porch, facing the mountain across the valley. Then we set up a mike in the woods below the porch, for what you might call 'room ambience.' " The instrumental, as one might guess, has an extremely spacious drum sound.

Szymczyk has known Vitale since 1972 when he produced "Barnstorm," the eponymous debut album of a group Vitale and Walsh put together in Colorado. The drummer describes his producer as "very, very musical for a non-musician. In the studio he's like the fifth member of a four-piece band. He won't let you cheat yourself out of a track. We in the band may think we've got a song..."
Szymczyk, Joe Vitale, Mickey Thomas: "I'm not a dictator in the studio."

Szymczyk with Pete Townshend: "I really missed having band feedback."

Szymczyk: "It was a lot more detached than I would have preferred, especially once the basics were done. Peter [Townshend] came in with completed song demos that he'd done at home with a rhythm machine, synthesizers, and all sorts of overdubs. He brought in twenty songs, we cut fifteen, and nine were released. We cut the basics live, and Peter was, of course, the most involved. But to a certain extent I was left to my own devices on the overdubs, and when it came time to mix, which I did back here at Bayshore completely on my own. I really missed having band feedback and being able to play mixes for them."

The album was recorded in England, which also presented some problems. "I'd never recorded outside of America before. I'm used to an attention to detail here that's not always found in European studios. But I took along my assistant and sometimes coproducer Allan Blazek, who kept me from going nuts about the different way they run studios in England.

"We were all quite pleased with the

down solidly, and then he'll make us do it one more time. Often, knowing that you've already got one excellent take will make you that much more relaxed for the last one, which for that very reason, may come out as the keeper.

"In general, I'd say Bill's approach is very much like a musician's, in that his sound is so recognizable. His characteristic snare sound, for instance, is dead and fat and prints very well on tape and vinyl. Some drummers might want to hear more echo on the snare, but Bill hears things way in advance of the various processes in the recording chain, and he knows exactly how to make that drum really cut in on the record's final state and, ultimately, come through on the radio. And let's face it: his records sound absolutely great on the radio."

"When it's time to mix, I go in alone, get one down, and play it back for the artist. I want him to react to it, and anything he wants to change, I'm going to do it. Nirvana, of course, is to play the mix for him and have him freak out and say, 'That's it!' But 90 percent of the time there's some little thing that he'll feel needs changing, so I'll do it again. I want to walk out of there knowing that artist and producer both agree and can honestly say to each other, 'That's it, we nailed that sucker!'"

His less-than-enthusiastic recollection of his work on the Who's "Face Dances" begins to make sense. "It wasn't exactly what I had expected," says

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"I wanted a living room that was 100 percent technology."

The studio: drum booth is in the foreground, control room on the right.

results nonetheless; the Who wanted to get into more production and layering on the vocals, which we accomplished, and I got my little funky licks in on songs like Another Tricky Day, where I went directly back to Motown for the breakdown feel. When they listened back to that the first time, Peter said, "That's real dance music, then, isn't it?"

Townshend had initially contacted Szymczyk because he was impressed with the producers' work on the Eagles' "Hotel California" (see Part 1). That album was one of the first to be recorded in its entirety at Bayshore, which opened its doors in 1977. The studio was built to Szymczyk's specifications under the supervision of Rudy Bruer, who has designed over sixty professional recording studios, including L.A.'s Record Plant. "Rudy told me he'd build Bayshore for X amount of dollars," remembers Bill, "in X amount of time. He was a day early and twenty dollars under budget.

"Basically, I wanted a living room that was 100 percent technology," he continues. "I wanted the place to be homey and relaxed, so there's lots of green and plants and sofas around. And I like the idea that the studio is slightly off the beaten path; even though it's in town here, you've got to look to find it." I can verify that: Bayshore is in a motel complex behind a clump of palm trees. It's virtually impossible to identify from the road.

The studio is a long rectangle with the drums at one end, surrounded by a low wall of baffle boards. The grand piano is completely encased in wood for isolation, and the glass-walled vocal booth sits next to the control room, "so the singer can see both me and the band," says Bill. The room is heavily carpeted and curtained, making it dead acoustically. "I don't like real 'live' rooms," says the producer. "because if you want to get a warm, close sound you have to baffle your brains out. I like being in control of sound; I like to close-mike the instruments and use out-board gear to get any spaciousness I might need. Of course, I won't get a Led Zeppelin drum sound in here, but the room is perfect for most of the five- and six-piece bands I produce.

"In terms of echo and delay, my new baby is the Lexicon 224, which I used for mixing 'The Long Run.' I haven't used another echo chamber since, although I have 3 EMT plates and an AKG unit here as well. I also like to double rhythm parts a lot as a separate effect." The console is a 36-input MCI, a unit that Bill became attached to when he was working at Criteria studios in Miami. The MCI design engineers did much of their field-testing at Criteria, "and they asked us what we wanted in a board, and I loved that," he says. "There are other good boards too—the Neve has a nice sound that I could live with, but by now I'm completely acclimated to the MCI."

It's now 10 p.m., and we're back at the studio about to begin an informal listening session. Bob Seger is here, having come to Bayshore to finish mixing his then-upcoming live LP. ("I'll probably listen to the mixes at least two-hundred times before we release the album," he said at one point.) Also on hand is Seger's old friend and Eagle member Glenn Frey who, with Allan Blazek, is producing his own solo LP. Frey has been waxing poetic about a singer named Lou Ann Barton, whom he's co-producing with Jerry Wexler at Muscle Shoals Sound Studios in Alabama. "She can do anything," he says, "and to be producing an album with Jerry Wexler, one of the great r&b producers, is like a dream come true." Blazek suggests that we listen to a track from Thomas' "Alive Alone" album. Written by Frey and Don Henley, the song is titled Too Much Drama, Mama (and Not Enough Rock & Roll). It sounds like an FM radio classic.

A small grin starts to pass over Frey's face: it's his first time hearing the song fully recorded, and he starts nodding his head in time with the music. When the tune's finished and all agree it's a "smoker," Seger says, "Okay, we've got a roomful of seasoned professionals here. Listen to this segue on our live album between Nine Tonite and Trying to Live My Life Without You and tell me if you think it works." We sit and listen as the ferocious groove from the first song does a beautifully synchronized downshift to the next one. Now Szymczyk is smiling too, and quietly contemplating his artists at work.

Later in the evening we go to a Coconut Grove nightclub, where a local band is well into its second set. As the group launches into an REO Speedwagon tune, a few patrons ogle the visiting rock luminaries bending elbows at the bar. Szymczyk surveys the scene benignly as we talk about heroes. "I guess my two biggest idols are Ted Turner and Sterling Hayden. Turner because he has broken all the rules and made it anyway. They told him he could never turn a local TV station into a national cable network, and he went ahead and did it. Sterling Hayden because he started as a fisherman in Maine, landed in Hollywood as an actor, and then quit to write books and sail around the world. Now he makes movies occasionally so he can continue to write. Creatively, he's done exactly what he wanted to do."

I ask Bill if he ever thinks about producing some of the new bands on the scene today. "Well, there are some I like a lot: the Police, the Pretenders... I guess if the right one came along and I had the time, I'd be interested. And I love great pop/r&b groups like Earth, Wind & Fire and the Commodores, but they certainly don't need me to produce them. Besides, r&b is the only kind of music that I can just listen to and enjoy (Continued on page 97)
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TASCAM CREATIVE SERIES
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Music and Recording in 1981: Bottom-Line Blues

Seasoned veterans enjoy yet another season as labels struggle to stay afloat.

by Steven X. Rea

What year was this? The Doors sold well over a million albums, their singles Light My Fire and People Are Strange receiving heavy radio play: the Kinks and the Rolling Stones released new records and toured the states, playing to screaming, frantic fans: the Who had a platinum LP; the Four Tops scored a Top 10 single, as did British pop star Lulu, the Moody Blues, Gary U.S. Bonds, the Bee Gees: Why Do Fools Fall in Love soared high on the charts; I Heard It Through the Grapevine was a giant r&b seller: Cliff Richards and the Beach Boys both had smash singles. Was it 1967? 1968? Or maybe even 1970?

Guess again. It was 1981, a year dominated by seasoned veterans and—in the case of the Doors—by a dead man. Styx, a heavy metal outfit formed in the early Seventies, unleashed "Paradise Theatre," an album that sold in excess of three million copies. REO Speedwagon's tenth LP soared up Billboard's Hot 100, going multiplatinum in the process. Performers with pop music histories of close to a quarter of a century dominated sales and airplay: Kenny Rogers, Kim Carnes (both of whom started with the New Christy Minstrels), Diana Ross (the Supremes), Marty Balin and Jefferson Starship (Jefferson Airplane), Smokey Robinson (the Miracles), Steve Winwood (the Spencer Davis Group). Bob Seger, Carly Simon, Santana... Even the Chipmunks logged in a hit.

There was so little new blood in 1981 that it would have been difficult to give a transfusion to a bunny rabbit. Only a half-dozen newcomers—relative newcomers, that is—came to the fore: Canadian group Loverboy, country/pop crooner Juice Newton, Boston rocker Billy Squier, r&b performers Teena Marie and Luther Vandross, and L.A.'s chirpy girl combo the Go-Go's. Hard hit by double-digit inflation and a sluggish market, record companies and radio programmers chose to play it safe, opting for megaplatinum rock dinosaurs and mainstream pop purveyors, rather than chasing new talent and new ideas. But that policy didn't improve the numbers: According to the National Association of Recording Merchandisers (NARM), retail sales in the U.S. remained as soft as they were in 1980, rising only 4.9% in cash volume during the first six months of '81. In other words, sales didn't keep pace with inflation.

"I know one recording artist," reports Crispin Cioe, "who was dropped after his debut failed to take off. [Historically, it has taken at least two LPs to "break" a new act.] The company president told the singer's manager that the money was needed to support the label's roster of established acts." The same story runs throughout the industry, with labels abandoning a new record at the first sign it isn't selling. "That's very scary," offers Sam Sutherland. "What it tends to do is penalize bands that really do take chances." One temporary solution could be the four- to six-track mini album, which, at $4.99 and $5.99 list, offers an affordable means by which a record label can "test" a new artist. A&M tried this with Jef Left, Sire with the Unknowns. Lene Lovich. Billy Idol. and the Plasmatics all released mini-LPs this year, as did the Pretenders and the B-52's.

Like the nation, the record business has taken a conservative turn, and it's a conservatism that reinforces itself. Album-oriented rock stations stick with the likes of Journey, Foreigner, and Pat Benatar: that's what people hear so that's what they buy. At the same time, adult contemporary stations—the ones whose playlists include Christopher Cross. Air Supply. Barry Manilow. Olivia Newton-John—are enjoying an evergrowing share of the market.

"Everybody sits there and tries to figure out what the problem is," continues Sutherland, "both within the business and with sales. The best explanation I've heard—and there have been all kinds, from the state of the economy to consumer resistance to price points and so on—was from one industry executive who said, 'Hey, it's boring. The music is boring.'"

Despite that downbeat (albeit accurate) comment, 1981 offered a few glimmers of hope. Several acts and albums received nearly unanimous acclaim from Backbeat's critics. Squeeze's "East Side Story" was mentioned several times as one of the year's best efforts. The Rolling Stones' "Tattoo You" was a solid surprise, and the twenty-year-old rock supergroup's (all concert tour (which grossed an estimated $45 million) proved to be an invigorating, memorable experience. Tom Petty and the Heartbreakers' "Hard Promises" received plaudits, as did the Police's "Ghost in the Machine." Tom Verlaine's "Dreamtime," and Smokey Robinson's "Being with You." Other favorites included Arthur Blythe's "Blythe Spirit." James Blood Ulmer's solo debut "Free Lancing," reggae outfit Black Uhuru. Steve Winwood's "Arc of a Diver." and "It's a Condition" by San Francisco's Romeo Void.

Rickie Lee Jones's "Pirates" also emerged as a favorite and, at last count, was headed toward platinum sales status without the benefit of any substantial airplay, which is almost unheard of these days. That disc was wisely marketed through a print and media campaign that concentrated on college and urban
markets. Elvis Costello took time off to do a country record, though his place at the forefront of rock & roll remains assured. And Bruce Springsteen spent most of the year giving concert-goers on two continents their moneys' worth; his return to the studio is imminent.

Country music continued to go for the broader audience in 1981. Slick TV-oriented entertainers like Crystal Gayle, the Oak Ridge Boys, Barbara Mandrell, Eddie Rabbitt, et al. monopolized the market, crossing over into m.o.r. and adult-contemporary spheres. What good country fare there was came from a small circle of players: Nashville-based John Anderson, Texan Guy Clark, husband and wife Rodney Crowell and Rosanne Cash. Emmylou Harris (whose late-year release "Cimmaron" was a deft, delightful work), and Ricky Skaggs.

Black music fared far better. Its market share increasing slightly in the past year to about eighteen percent of total record and tape sales. And successful new artists in r&b easily outnumbed the pop newcomers. Roger's funky voice-box reading of "I Heard It Through the Grapevine" became a huge r&b smash. Luther Vandross switched from making commercials to making music. Prince and Teena Marie came into their own: Rick James made the switch from r&b to rock without alienating too many of his old fans. Solar Records, the Los Angeles-based custom label, switched distribution from RCA to Elektra/Asylum and in the process finally broke their flashy acts Lakeside and Shalamar. Rap music, which came out of the New York street scene and was heartily embraced by a phalanx of rock critics as "the next big thing," failed to catch on with the public. Blondie scored a hit with "Rapture" and Kurtis Blow continued to hold his own, but they were about it.

Everyone wonders what the problem is. It's the music; it's boring.

As for jazz, Don Heckman reports that "The single event that stands out for me is the return of Miles Davis, both to recording ("The Man with the Horn") and to performing." Former CBS Records president Bruce Lundvall launched his jazz-oriented Elektra/Musician label by announcing the January '82 release of albums by James Blood Ulmer, Freddie Hubbard (with a digital disc), Lenny White, Chick Corea, Eric Gale, and a 1953 Charlie Parker recording. And the Warner Bros.-distributed ECM label continued to prove itself both economically and creatively, issuing albums by, among many others, Pat Metheny, Keith Jarrett, and Gary Burton.

The current recession seems to be taking its toll on the recording studio business. Top outfits like New York's Electric Lady and L.A.'s Cherokee are no longer booked solid the way they were in the mid-Seventies. Most studio owners are adapting pretty well, though, adding video capability to their bag of tricks, streamlining expenses, and offering more competitive rates. More hard hit by the slowdown in studio activity are session musicians, with even toptip players reportedly taking on demo sessions and other jobs they would have turned down a few years ago.

Mobile Fidelity Sound Lab, Inner City, CBS Mastersound, and Audible Images all released the industry's first pop audiophile cassettes in 1981. And the Police's "Ghost in the Machine" marked the first time ever that a record was released simultaneously in both conventional and audiophile formats.

But the year's loudest technological noises came from the world of home video and cable, which—from a growth perspective—seems to be picking up where the music industry left off several years ago. Such programming outfits as Warner-Amex Satellite Entertainment Company, USA Network, and even Home Box Office have been cablecasting tapes of both established and new rock acts. WASEC's Music Television (MTV) boasted 2.4 million subscribers (not including New York and Los Angeles) by year's end, an impressive figure given the fact that MTV has only been available since August. Record retailers in the areas in which MTV is on cable have reported a direct correlation between the sales their customers are buying and the rock acts that appear on MTV. A&M executives cite breakthrough sales for Squeeze in Oklahoma, Indiana, and other midwestern regions following the airing of a Squeeze video tape. The Tubes' "Completion Backward Principle" experienced a similar sales upswing after MTV exposure.

As to artistic impact cable and home video will have on the music industry, that remains to be seen. But there are signs that a whole new medium is on the rise, what with the involvement of such performers as Devo, Michael Nesmith, Todd Rundgren, David Byrne, Brian Eno, and others. Clearly, the music industry has to take a new course if it is to stay healthy. Whatever course that may be, you can be sure it will be strongly shaped by video.

The author wishes to thank Don Heckman, Mitchell Cohen, Crispin Cowe, and Sam Sutherland for their help in preparing this story.
The Police: Third World Rock & Roll

"Ghost in the Machine" is their finest hour.
Reviewed by Crispin Cioe

The Police: Ghost in the Machine
The Police & Hugh Padgum. producers.
A&M SP 3730

The Police were faulted for sticking too closely to their reggae-rock formula on their last LP, "Zenyatta Mondatta." By contrast, "Ghost in the Machine" is filled with fresh, often adventurous ideas, a much more spacious rock production sound, and some overtly humanistic lyrics.

More than any other contemporary rock unit, this band has absorbed and mastered a variety of Third World rhythms and compositional techniques, and a large part of its charm lies in its adroit cross-pollination of these elements. One World (Not Three) combines drummer Stewart Copeland's heavily bouncing reggae beat with Andy Summers' reverberating, exemplary rhythm guitar, creating a sound that is very much in the Jamaican "dub" style of dance music. Anchoring these elements are Sting's solid bass lines: riding high above them are his authentically braying, Ivory-Coast-style saxophones. (Sting recently took up the sax.) The song's chantlike chorus mirrors its music: "One world is enough for all of us...."

The Police's song form, first established on the band's hit single Roxanne, remains intact: Verses are usually built around a half-time reggae lilt, with the chorus breaking into a doubled-up rock & roll backbeat. The innovations on this album are mostly vertical. Intricate synthesizer parts are totally integrated in the harmonic fabric rather than glitzily tacked on: on Every Little Thing She Does Is Magic they sound like Andean flutes floating behind the chorus hook. Keyboardist Jean Roussel has been added to the lineup, his contribution fitting perfectly into the trio's elemental, pared-down rhythmic precision. The level of songwriting here is impressive, with complex instrumental counter-melodies constantly interweaving with the vocals. A couple of tunes sound a little cluttered - Demolition Man's excess verbiage steps on the music more than once. But Spirits in the Material World and Hungry for You are among the best songs the Police have recorded: memorable melodies married to equally solid dance grooves. Indeed, "Ghost in the Machine" is the trio's finest hour yet.

Mike Batt: Six Days in Berlin
Mike Batt, producer.
Epic FE 37665

Mike Batt is the composer/creator behind the Wombles, those furry little creatures that became the rage of the kiddie set in the U.K. five years ago. Since putting the Wombles to pasture, he has written some misty-eyed ballads for Art Garfunkel, and he released three oddball solo albums, the latest of which, "Six Days in Berlin," is a grandiose conception that, to be kind, isn't very good.

Which is too bad, because Batt has demonstrated a lot of promise as a songwriter and performer. Two tracks from his 1977 L.P. "Schizophonia," are minor pop classics: the wry, whimsical It Seemed like a Good Idea at the Time, and Railway Hotel, which suggests Squeeze if Squeeze wrote ballads. There is nothing that comes remotely close to those on "Six Days." In fact there aren't even any songs - just Part One through Part Six, each "part" rife with sweeping orchestral flourishes, incessant African-inspired percussion, and recurring Middle Eastern motifs.

Flanked by drummer Kurt Cress, bassist Frank MacDonald, guitarist Mats Bjoerklund and Ray Russell, pedal steel player B. J. Cole, saxophonist Mel Collins, and the Berlin Opera Orchestra, Batt comes on like some would-be Jeff Lynne. His nasal whine invokes a Beatlesque specter as he sings and mumbles about "the sweet innuendo of the rain" and "the arithmetic of love" and rhymes "pharoahs" with "boleros." Occasionally a good idea emerges, like the Parisian accordion melody Batt plays in Part One (he also plays piano and synthesizer). When the Berlin Opera Orchestra is left to its own devices (i.e., when it is not joined by Batt's busy rock septet), the results are mildly diverting: Part Two is a
kind of stirring Prokofiev-meets-Ketelbay interlude. But mostly "Six Days" is ponderous rock-symphonic noodling at its dullest.

Why Batt's record company keeps financing his fuzzy, overblown extravaganzas is beyond me—they certainly haven't been selling. Somebody should make this guy sit down and write some real songs. He's quite capable of it.

—STEVEN X. REA

Lindsey Buckingham: Law and Order
Lindsey Buckingham & Richard Dashut, producers. Asylum 5E 561

Lindsey Buckingham's solo debut opens with a dismaying loopy parable of dread called Bwani. It boasts among its several charms a parenthetical summary of its author's musical character as revealed on Fleetwood Mac's "Tusk." Against a jaunty bass line, music hall chorals, and nervous piano arpeggios, the Mac guitarist croons, "We all have our demons, and sometimes they escape." In Buckingham's case, that's cause for celebration.

"Tusk" was the most ambitious and least understood work by the Anglo-American pop quintet, and much of its quirky charm, as well as virtually all of its stylistic ground-breaking, could be attributed to Buckingham. His familiar assest as instrumentalist, writer, and singer were augmented by a new sense of daring as an arranger. In that role, his forays into intricately layered studio epics were clearly influenced by the Beatles, the Beach Boys, Stevie Wonder, and other daunting models.

"Law and Order" initially seems more compact and less formal by comparison, yet much of the antit vice that powered "Tusk" shines through. Buckingham can still summon the chiming guitar harmonies and stately gait of his "Rumours" days, as demonstrated on such affecting midtempo ballads as "Trouble and I'll Tell You Now." And his power as a stinging rock stylist rings true. Trouble and I'll Tell You Now. And his power as a stinging rock stylist rings true.

What sets Buckingham apart from his safer Californian peers however, are the unexpected vocal and instrumental twists he grafts onto his rich pop arrangements. No guitar player has ever placed such a preferred emphasis on drum tracks as he does here, and as a singer he regularly risks on-the-edge stylistic tics that generally work: On I'll Tell You Now, his reserved reading of the final chorus lapses into a murmur of choked sobs beneath the elegant fade: his manic delivery of the frenzied lyrics on That's How We Do It in L. A. verges on a shout: and in an unexpected, blues-drenched cover of Maxwell Anderson and Kurt Weill's September Song, he emotes with early rock authenticity.

That he can turn that venerable '30s
Elvis Costello and the Attractions: Almost Blue
Billy Sherrill, producer
Columbia FC 37562

Pity the poor marketing people at CBS faced with explaining Elvis Costello’s maverick path through modern rock. Between the eclectic classicism of his “Taking Liberties” anthology and the rhythm flavored “Get Happy,” both released in 1980, rock’s Next Big Thing has managed to gaze backwards as well as ahead. Now comes this startling collaboration with Nashville hitmaker Billy Sherrill, nothing less than a gourmet anthology of country chestnuts performed in generally authentic (and by 1981 standards that translates to downright austere) settings.

Costello isn’t George Jones, one of the influences shadowing this effort, but the equation works. Like Gram Parsons, the other pole steering both the topical focus and interpretive vision behind this album, Costello’s rough-edged vocal attack and brutal candor gets close to the bone, bringing forth the true power of Southern white music. Hints of his affection for earlier records have been visible from his earliest records, first surfacing on Stranger in the House, a bonus single released overseas with his second album and later covered by Jones himself in a duet with Costello.

The Attractions hammer together lean, convincing arrangements which Sherrill adds such initially incongruous subtleties as we’ve come to expect from Fleetwood Mac itself, and while a few of the album’s more whimsical tracks—like the aforementioned Johnny Slew and the rockabilly Love from Here, Love from There—don’t really work, “Law and Order” still has to be rated one of the year’s most original and successful pop essays.

—SAM SUTHERLAND

Merle Haggard: Big City
Lewis Talley & Merle Haggard, producers. Epic FE 37593

There isn’t much on “Big City” that’s unfamiliar to the contemporary country milieu: yearning to break away from urban life and flee to “the middle of Montana,” mourning the absence of traditional patriotic values, some soggy sentiment, the names of several Texas cities, shattered dreams, etc. There are no drinking songs, which is probably unfortunate since Merle Haggard’s “Serving 190 Proof” was the toughest album...
from what can be called his MCA period. He's now on a new label, but “Big City” doesn't mark a significant departure for Hag. It's a likable, midlevel work. About on a par with such LP's as “It's All in the Movies.” Even so, Haggard at less than his best is nothing to moan about.

Unlike most of his contemporaries and the younger breed of conspicuously crossover country artists with names like Kenny, Eddie, and Ronnie, Haggard has a band that swings, and he's not afraid to give its members room to solo. The Strangers, particularly the fiddlers, horn player Don Markham, and pianist Mark Yeary, keep him from getting too slack. Furthermore, as tired as the themes are behind Big City, Good Old American Guest (which deals with freight-train fever) and I Always Get Lucky with You. Haggard's sincere baritone somehow lifts the songs above the mundane.

“Big City” does contain more professionalism than inspiration, and My Favorite Memory and This Song Is Mine are the kinds of ballads that Haggard should stay away from. The latter is an ill-written song-for-you song, and there never has been a good one of these. Also too hard, and the strain doesn’t become Hinze until he comes to that line of employment? If this is his attempt at a wish Nixon hadn’t “lied to us all on TV.”

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The Knack: Round Trip

Jack Douglas. producer
Capitol ST 12168

The Knack's last album not only drew critical acclaim for its attempt to plagiarize mid-60's British pop, but it failed to repeat the popular success of the band's debut LP. So for “Round Trip,” the clever Los Angeles quartet went back to the drawing boards, teaming with crack producer Jack Douglas for what promised to be a careful and ambitious revision of style.

Careful it is. but the ambitions here are ironically not as nostalgic as the band's original Fab Four impersonations. In an eerie studio confection that draws nearly all of its musical inspiration from late-60's psychedelia and early heavy metal. the band plies an array of familiar studio effects as if discovering them for the first time. Druggy vocal harmonies, plump horn parts, jazz-derived rhythm arrange-

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has a pronounced rhumba feel: his right-hand rhythms tumble, twist, and turn into triplets and unexpected grace notes. He hangs slightly behind the beat, creating a tension that immediately conjures up Mardi Gras dancing and festivities. His singing voice is a pleading, high-pitched blues wail that rides high above the musical maelstrom.

As reflected in the disc's sequencing, Byrd gradually moved to larger national labels like Mercury and Atlantic. The production on some of the late-'50s sides—"Tipitina," "Moody"—is quite modern compared to the earlier jump-combo settings. The tunes use such first-rate arrangers as Fats Domino's longtime collaborator Dave Bartholomew and his young disciple Wardell Quezergue. Also included here is "Baby Let Me Hold Your Hand," first released in 1957 and based on an old folksong; it was later rewritten as we're treated to endless repetitions of guitar figures, and lyrics of stupefying banality. The situation hardly improves, as we're treated to endless repetitions of Miller's favorite interjection, term of endearment, and rhythmic accent, "mama," some soulful choral noodling, and more wake-me-when-it's-over guitar soloing.

What he never quite achieves is a complete song. And that's the real tragedy here. At his best, this blues-rocker has managed to span both conceptual pop/rock and affable, more informal country and blues contexts. At either extreme, he excelled at memorable melodic hooks and infectious arrangements. For now though, fans would be best off seeking "Anthology," a first-rate double-disc history Miller assembled during an earlier dry spell. Come to think of it, maybe the artist himself would profit from a fresh listen: a bald recycling of those songs would cut these false starts and indifferent riffs easily.

-CRISPIN CIOE

The Steve Miller Band:
Circle of Love
Steve Miller, producer
Capitol ST 12121

The long silence since Steve Miller's last album isn't the first hiatus in his career, merely the longest—and, on the evidence of "Circle of Love," the most perplexing. Following a commercial peak with 1977's "Book of Dreams," the guitarist, singer, and veteran rock prankster retreated to his Oregon farm where he built an ambitious recording/rehearsal complex and reportedly began cutting, then shelving, entire LPs. Yet after four years, the arrival of what he has deemed an acceptable set proves to be a collection of the most inconsequential material he has ever committed to vinyl.

In the past he has been guilty of threadbare songs, pallid arrangements, and vocal readings that verge on afterthoughts. Yet he has elevated them with sheer check, with a jiving tone and wise-cracking lyrics that reassured fans that at least he knew he was fooling around. Even at its worst—an eighteen-minutes-plus grand statement titled Mucho City—this latest project never quite dips to the low ebb reached a decade ago on "Rock Love." What's ominous about the new album is that, if his early '70s recordings included pratfalls, they came in the wake of withering popularity and personal problems. Here, he is appearing after achieving his broadest success and attaining relative contentment in his private life. It's hard to fathom how he could finally re-emerge with material that's so limited in scope.

The set's first single, "Heart Like a Wheel" (a new Miller song unrelated to the Anna McGarrigle work popularized by Linda Ronstadt), epitomizes the carelessness of the entire LP. A crisp acoustic rhythm guitar leads into an embarrassingly off-pitch vocal, sleepy lead guitar figures, and lyrics of stupifying banality. The situation hardly improves, as we're treated to endless repetitions of Miller's favorite interjection, term of endearment, and rhythmic accent, "mama," some soulful choral noodling, and more wake-me-when-it's-over guitar soloing.

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-SAM SUTHERLAND
for an album, but it's in keeping with Prince's tactics of provocation. Prince, in his early twenties, is a musician who relishes outrage. His ego is enormous—the billing on the record jacket reads "produced, arranged, composed, and played by Prince," and the package includes a huge portrait of the artist in a shower. That ego is nearly matched by his talent. It's as though he put the last fifteen years of adventurous black music in a compressor (not only black music—sometimes you can hear Ian Whitcomb's You Turn Me On in Prince's falsetto panting) and made the message explicit, to say the least. This is very spunky funk.

"People call me rude/ I wish we all were nude," he sings on the title track, which deals playfully with his confused public image. As Prince pronouncements go, that's pretty tame. More lascivious is the epic Do Me, Baby: he squeals, screams, and talks ("What're you gonna do, just gonna sit there and watch?!") his way through the throes of passion while the music builds up. holds back, builds up again, and deflates. And Sexuality manages to deal with revolution, black illiteracy, and rampant tourism and still return to his basic theme. "Sexuality is all we ever needed."

Prince makes the mistakes of casting a woman as the anti-Christ figure on Annie Christian, of getting too silly on Ronnie, Talk to Russia, and of quoting the Lord's Prayer, but he's capable of irresistible black pop tunes like the Moby-Dick-influenced Private Joy and the adolescently titled Jack U Off. This last song on the LP is a hip-shaking romp that describes Prince's inextinguishable sexual generosity: He satisfies his partners in cars, movie theaters, restaurants, and almost parenthetically, bed, before expecting reciprocation. The Moral Majority may not be amused, but the performance is a brazen combination of rock & roll urgency, rockabilly impudence. Hendrix guitar, and the confidence of a kid who thinks he can get away with anything.

—MITCHELL COHEN

Carly Simon: Torch

Mike Maineri, producer
Warner Bros. BSK 3592

Torch singing can be a shaky undertaking, as messy as the most ill-fated love affair. Without a strong emotional underpinning, without a technique that encompasses both agony and irony, authority and vulnerability, heartbreak can sound shallow. Few vocalists have the gift to pull off the sound of passion-on-the-rocks. Carly Simon, who attempts on "Torch" to wed her way into record racks somewhere to the left of Sinatra's "No One Cares," isn't really equipped to enter the terrain of Rodgers & Hart and

Carlly Simon: faltering flame

Hoagy Carmichael. She's no Billie Holiday, or Lee Wiley, or Ella Fitzgerald.

So "Torch" is a failure. but it is an honorable one, with good intentions and some good music. After all, with sensitively scored versions of songs as distinguished as I'll Be Around, I Get Along Without You Very Well, and Stephen Sondheim's stirring Not a Day Goes By, how bad can it be? Producer/arranger Mike Maineri varies the instrumentation to give the songs sympathetic colorings. "Body and Soul" features Phil Woods on alto sax and Maineri on vibes. Spring Is Here, orchestrated by Marty Paich, gets a mournful violin solo. But Simon's readings of the album's pre-Truman classics are awkward—her line endings on I'll Be Around are especially inelegant—and the more contemporary rambles, What Shall We Do with the Child and her own From the Heart, are inappropriate to the flame format.

She falters on Duke Ellington's pop-blues I Got It Bad and That Ain't Good and on Jon Hendrix's jazzy Pretty Strange. But she belts out Sondheim's stirring I'll Be Around, I Get Along Without You Very Well. and Stephen Sondheim's stirring Not a Day Goes By, how bad can it be? Producer/arranger Mike Maineri varies the instrumentation to give the songs sympathetic colorings. "Body and Soul" features Phil Woods on alto sax and Maineri on vibes. Spring Is Here, orchestrated by Marty Paich, gets a mournful violin solo. But Simon's readings of the album's pre-Truman classics are awkward—her line endings on I'll Be Around are especially inelegant—and the more contemporary rambles, What Shall We Do with the Child and her own From the Heart, are inappropriate to the flame format.

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Neil Young & Crazy Horse: Re-Ac-Tor

David Briggs, Tim Mulligan & Neil Young, producers. Reprise HS 2304

There are two Neil Youngs: the wacked-out rocker with the reckless, turbulent guitar that cuts to the bone with the steely force of a butcher’s knife; and the loopy folksinger with the plaintive Mickey Mouse voice. The keen knack for twisted metaphor, and the ability to craft some of the purest, most memorable melodies in modern popular music. “Re-Ac-Tor,” his sixteenth solo album, easily falls into the former category. This is Neil Young and Crazy Horse at their most exuberant and sloppiest, putting forth manic, all-out gritty garage rock.

“Re-Ac-Tor” sounds like it was not only recorded in a garage, but recorded in one straight take, from the thundering opening bars of Opera Star (Born to Rock) to the final wry, lean Notes of Shots. In between, Young whines and wails with querulous abandon, singing blues songs and rock & roll with joviality. Behind him is Crazy Horse—Frank Sampedro (rhythm guitar), Billy Talbott (bass, vocals), and Ralph Molina (drums, vocals)—thrashing out the kind of fiery rhythms that have become this band’s trademark.

Young is decidedly out for a good time, as is made particularly clear on the thundering rock-out blues T-Bone and his quirky homage to the American-made automobile. Motor City. The former is a long, guitar-solo showcase whose entire lyrical content is “No mashed potato” and “Ain’t got no T-bone.” The singer repeats both umpteen times with an intense demonic glee that is the aural equivalent of Jack Nicholson’s acting. On Motor City, a spry, twangy country rocker set off by buzz-saw lead-guitar lines. Young poses the all-important question, “Who’s driving my car now?”

Neil Young has delivered more dangerous, neurotic rock than the eight tracks on “Re-Ac-Tor.” (Danger Bird from “Zuma.” Like a Hurricane from “American Stars ‘n Bars.” And Hey Hey, My My from “Rust Never Sleeps” come immediately to mind.) But the venerable California-based singer/songwriter has rarely handed in such a strident, enjoyable collection as this one. Young is so “out there” that whatever he’s up to—spooky, beautiful folk songs or rabid, rollicking rock—seems right for the times. —STEVEN X. REA

Jazz

Toshiko Akiyoshi-Lew Tabackin Big Band: Tanuki’s Night Out

Toshiko Akiyoshi & Lew Tabackin, producers

Jazz America Marketing JAM 006

There aren’t many big bands around these days; certainly there will never be...
as many as there were back in the Thirties and Forties. But those that are on the scene have begun to reach into areas only dreamed of by Fletcher Henderson and Chick Webb. At the very top of the list is the continually remarkable collection of players led by pianist Toshiko Akiyoshi and saxophonist/flutist Lew Tabackin. Following in the footsteps of the earlier, but equally progressive Thad Jones-Mel Lewis ensemble, Akiyoshi has demonstrated a capacity for big band scoring unrivaled by anyone since Jones was actively involved with his own group a decade ago.

"Tanuki's Night Out" is, quite simply, a brilliant album. It is also a stunning collaboration. Side 1 highlights Akiyoshi's scoring and piano playing, while Side 2 is devoted to Tabackin's mini-history of the tenor saxophone, with three successive tracks devoted to his compositional interpretations of the music of Don Byas, Sonny Rollins, and Tabackin. All the pieces were composed by Tabackin and arranged by Akiyoshi. Now that is a marriage made in heaven.

Among the virtuoso cornucopia of goodies are Steve Houghton's sterling drumming, especially on the title track; Akiyoshi's lovely, shimmering piano on "Falling Petal;" Gary Foster's alto saxophone on Lew's Theme; and, throughout the album, the overwhelmingly creative tenor work of Tabackin. He is one of those rare players (Bix Beiderbecke, Coleman Hawkins, and Sonny Rollins also come to mind) who can simultaneously trigger the emotions and the intellect. In the past decade or so, we have become quite accustomed to the great technical proficiency with which West Coast ensembles can play. Often, however, the music is clouded by its emphasis on sheer mechanics. The Akiyoshi-Tabackin band manages to have it both ways. To cite only one example, the roaring ensemble sections at the close of Lew's Theme are performed by musicians who not only can play fast but who can play with the sheer joy of making music. A record not to be missed, and, without question, one of the best of the year.

Bob Brookmeyer: Through a Looking Glass
Norman Schwartz, producer
Finesse FW 37488

Bob Brookmeyer's dark, gruff valve trombone is one of the more ingratiating voices in jazz. If any instrument has a tone that is worn, experienced, and suggestive of depths of knowledge, it is Brookmeyer's. While in the past it has usually been heard as a bit of bosky col-

High Fidelity

Pete Christlieb: Self Portrait
Pete Christlieb Records PC 1
(P.O. Box 2085, Canoga Park, Calif. 91306)

Historically, studio musicians make less-than-exciting solo albums. Too often the music lacks direction and commitment and sounds either too slick and technically flashy or like a thrown-together, last-minute jam session. That said, Pete Christlieb's "Self Portrait" is an unexpected pleasure. Christlieb is a tenor sax player in Doc Severinson's Tonight Show band, and he has played several memorable solos on Steely Dan's albums. In fact, several years ago Becker and Fagen produced "Apogee," a duet LP featuring Christlieb and West Coast tenor vet Warne Marsh. Christlieb's tone is full and modern, somewhat in the same post-Coltrane mode as Mike Brecker's, but with a driving melodic sense that is all his own. For this disc he has surrounded himself with L.A. studio players Nick Ceroli and Joe Porcaro on drums and percussion and Lou Levy on piano.

Charquet & Co.: Crazy Quilt
Bob Erdos, producer
Stomp Off S.O.S. 1008
(549 Fairview Terrace, York, Pa. 17403)

Nobody can accuse Charquet & Co. of recording the same old stuff. Except for Sam, the last and least interesting number here. "Crazy Quilt," is a program of virtually unknown pieces: Candy Lips (I'm Stuck on You), a Clarence Williams favorite; Crazy Quilt, recorded by Charles Creath, the Goofus Five, the Tennessee Tooters, and others; and Tiny Parham's Black Cat Moan. Most of the material comes from the mid-'20s, except Willie the Lion Smith's lively Streamline Gal, which he recorded in 1935.

The group got its start in 1967 with a repertory drawn from the New Orleans bands of the early '20s; within two years it had shifted its focus to the Chicago bands of the later '20s. It was first named Reverend Sharkey's Congregation (after New Orleans trumpeter Sharkey Bonnano), then changed to Sharkey and Co., and finally Charquet & Co.

The nine-piece group is comprised of three brass, three reeds, with piano, bass, and tuba as the rhythm section—no drums. On fast numbers, Charquet & Co. bounces with the elasticity once common to English trad bands, its two full-size horn sections providing an offsetting ensemble punch. On slower numbers, the voicings are rich and invitingly smooth, seasoned with some rasps and growls from cornet and trombone. If there is any one guiding light here it is tuba player Clarence Williams, who contributes several fine tunes and some lugubriously walking solo lines. Tuba player Gerard Gervois is another one of the consistently excellent solo horns. Others are clarinetist Alain Marquet, who bursts with bubbling energy; band leader/cornetist Jean-Pierre Morel, who has a flair for muted muttering phrases; and Jack Cadieux, a trombonist in the great tradition of broad, brash smears and vitality with no suggestion of labor

High Fidelity

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vising style is showcased in various settings. Marsh joins him in a masterly, half-unaccompanied duet on their own So What's Up, Marsh's cool, Getz-ish tone and long, flowing passages floating beneath Christlieb's alternately bluesy and boppish runs. Their superbly sensitive interplay suggests a deep musical friendship. Lament, which Christlieb describes in his liner notes as a "kind of 'giant steps' approach to How High the Moon," moves quickly through its steeply ascending chord changes, the saxatones allowing his formidable technique and liquid fluency to overshadow emotional melodic content.

At his best, Christlieb brings new fire and passion to the relaxed, unbut- toned West Coast jazz school. Here's hoping he keeps recording and developing his approach: he's a player who needs to be heard more often.

—CRISPIN CIOE

Albert Collins: "Frozen Alive!" Bruce Iglauer & Dick Shurman. producers. Alligator AL 4725 Live blues albums are hit-or-miss affairs and depend very much on how loose the band felt during recording. Blues is the only pop genre where passion always counts more than precision. The sloppy, notes a blues guitarist goes for are usually just as important as the ones he executes flawlessly. Albert Collins' new live album is the work of a seasoned master who is full of idiosyncracies and stylistic quirks and who can project his every emotional nuance even in a rough-house bar—in this case, the Union Bar in Minneapolis.

Collins is originally from Houston, Texas, where he had some blues hits in the '50s. Over the next two decades he made several uneven albums but, his first for Chicago's Alligator label in 1978, "Ice Pickin'," was an outright masterpiece. On it, his sound on Fender Tele-

ducer matches a clean attack and de-

layed fast tempo to which we have be-

come accustomed, but with an easy, re-

layed swing; it features some gorgeous

saxist's playful runs: their superbly sensi-

tional voice appropriately sets up his

rough-hewn and quite serviceably emo-

tional sweet and sad guitar solo.

Besides his unobtrusive technical control and unfflagging vigor on guitar, Collins has a nice formal sense, juxtapos-

ing icyly precise, bluesy cascades of notes with long, held notes, his eerie vi-

brato always commanding attention. Never-vender (Cold Cuts) an original funk instrumental with minimal vocals. features two exceptionally well con-

structed solos, as well as some fine sup-

port and solo bass playing from Johnny Gavden. "Frozen Alive!!" is unmitigated bar blues with all the coarse production sound such music implies, but it's also the unadorned work of a blues master in his prime.

—CRISPIN CIOE

Duke Ellington: Sophisticated Ellington Ethel Gabriel, producer RCA CPL 2-4098 (two discs) As its title suggests, this two-disc set is based on the Ellington material used in the current Broadway musical Sophisti-

cates. (See listing in the original cast album, see page 56.) With such works as I Got It Bad, Perdido, and Mood Indigo listed, it initially looks like a collection of the obvious. But the listening reveals otherwise.

Mood Indigo, for example, is a rela-

tively recent (1966) recording, and the original instrumentation has been re-

voiced and reharmonized to give the piece a totally new texture. Perdido is the original 1942 recording, played not at the driving fast tempo to which we have be-

come accustomed, but with an easy, re-

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—CRISPIN CIOE
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Dick Hyman: Cincinnati Fats
OVC-ATOS LP 101 (O.V.C. Recordings, Emery Theater, 1112 Walnut St., Cincinnati, Ohio 45202)

Fats Waller was fascinated by pipe organs. Although he recorded a pair of piano solos in 1922 when he was eighteen years old, his recording career really got its start in 1926 and '27 when he did some sessions for the Victor Talking Machine Company on a church organ in Camden, N.J. It was also around that time that he was the organist at the Lincoln Theater in Harlem, providing accompaniment for silent movies. Bill Basie (later known as Count) would sit in back of him watching his fingers and, on invitation, would crawl down under the organ and press the foot pedals with his hands.

In the early Thirties, Waller was on staff at Cincinnati radio station WLW, playing mood music at night on a program called Moon River and livelier fare during the day on a show called Doodle Socker.

On “Cincinnati Fats,” Dick Hyman plays the theater pipe organ in the Emery Theater at the University of Cincinnati. (The instrument used to be in that city's RKO Albee.) Essentially a tribute to Waller the organist, the program draws on two of his 1927 church organ recordings and several of his piano tunes (Yacht Club Swing, Black and Blue, Squeeze Me, Viper's Drag), which Hyman adapts to Waller's organ style. It also includes Jitterbug Waltz and Bond Street, which Waller recorded first on piano and later on electric organ.

Hyman is such a brilliant musical chameleon that one can trust his organ versions of Fats's piano solos. And, with a mighty Wurlitzer, he has more opportunities than his source did with the Camden church organ: For instance, on Yacht Club Swing—one of Waller's 52nd St. classics of the late Thirties—Hyman uses a piano keyboard effect and backs it with what could be big band riffs. They were not doing that in church in Camden in 1927.

—JOHN S. WILSON
ORFF: SKILLFUL?
(Continued from page 55)
 mage. Overall, Shaw's reading is remarkably idiomatic, admirable in its avoidance of excess, and while his instrumentalists are not the most precise or tonally refined in the Carmina burana discography, they respond well to his assured yet intense direction. The Soundstream digitalism—never as overtly spectacular as the best analog recordings—is most satisfyingly big, lucid, and powerful.

The German Teldec pressing has the added advantage of being spread over three rather than the usual two disc sides: the grooves are less cramped, especially for the thirty-plus minutes that usually fall on the second side. This may well be worth the extra cost to audiophiles passionate in their quest for perfectionism, but the inclusion of another work is a more dubious attraction. Hindemith's somewhat labored and self-consciously jolly jule d'esprit on Weber themes is colorful enough to profit from the full resources of digitalism, but these expose only too candidly some tonal coarseness in the orchestra, and Shaw seems less sure of himself here. Even the rare Hindemithian wry humor (particularly in the raggy fugato of the Scherzo) is not a true indication of Shaw's technical command, but the technology here will triumphantly reassure you—or nothing can.

ORFF: Carmina burana.
Sheila Armstrong, soprano: Gerald English, tenor; Thomas Allen, baritone; St. Clement Danes Grammar School Boys Choir, Cleveland Orchestra, Andre Previn, cond. [Christopher Bishop, prod.]; MOBILE FIDELITY MFSL 1-506 (half-speed remastered from ANGEL S 37117, 1976) [price at dealer's discretion].

Judith Blegen, soprano; Kenneth Riegel, tenor; Peter Binder, baritone; Cleveland Orchestra, Cleveland Boys Choir, Cleveland Orchestra, Michael Tilson Thomas, cond.; CBS MASTERWORKS HM 43172 (half-speed remastered from CBS M 33172, 1975) [price at dealer's discretion].

ORFF: Carmina burana.* HINDEMITH: Symphonic Metamorphosis on Themes by Weber.
Judith Blegen, soprano*; William Brown, tenor*; Hakan Hagegård, baritone*; Atlanta Symphony Orchestra and Chorus, Robert Shaw, cond.; [Robert Woods, prod.]; TELEFAX DG 10056/7, $21.95 (digital recording; two discs, manual sequence).

COMPARISSONS—Orff:
Kegel/Leipzig (1975) Phi. 9500 040
Kegel/Leipzig (1986) DG Rec. 2535 275
Ozawa/Boston RCA AGL 1-4082
Muti/Philharmonia Ang. SZ 37666
Frühbeck de Burgos/New Phil. Ang S 36333

BILL SZYMczyk
(Continued from page 80)
without analyzing it. Whenever I hear rock & roll on the radio or records, I always pick it apart and try to figure it out. If I produced rock & roll, I'd listen the same way and, frankly, I wouldn't enjoy it as much.

Now the band is really rocking; the dance floor is full and it's just another rock & roll night in America. "You know," says Bill, "I can't describe how I do what I do. I don't know how I arrived at this point. Up until a few years ago, I was still a little paranoid about telling musicians what to do when I can't actually play an instrument myself, although I have sung backup on some of the albums I've produced. And Joe Walsh once bought me a guitar; a beautiful Martin, and tried to teach me to play. But I guess I am to a large extent a professional listener." He pauses to reflect on the scene around him. "Just as importantly, I really like the artists and music I produce. In a way we're all alike—Midwestern boys who went to the city...and kept on rockin'."

BACKBEAT REVIEWS
(Continued from page 96)
Kid Ory's Creole Jazz Band: 1954
Reissue. Lester Koenig, producer
Good Time Jazz L. 12004

One of the great merits of this reissue is that it clears the mind of a lot of fuzzy memories and incorrect notions. Kid Ory's classic Muskrat Ramble, for example, is usually played with heller-skeller abandon. But on these 1954 sessions with his Creole Jazz Band, Ory takes it at a strutting, stately tempo, with Minor Hall's drumming and Ed Garland's big, booming bass providing solid underpinning. The disc also proves that, far from being a huff-and-puff, oomph-oof trombonist, Ory had a broad, bristling, and lusty tone, even at the age of sixty-eight. He was an equally capable support player, filling the background with soft murmuring sentiments or light shades of contrast.

Also on hand here is pianist Don Everly, who brings to mind the laidback mode of Jelly Roll Morton, particularly on his floating Yellow Dog River solo. Alvin Alcorn's trumpet is crisp and workmanlike. George Probert's clarinet is quite adequate. Ory's early-'50s band had a relaxed style that avoided the sprawling rush of some of the traditional bands. His huge, burry trombone, Ewell's light and lively piano, and the solid rhythmic teamwork of Garland and Hall lift the music far from the general run of traditional jazz.

—JOHN S. WILSON
**HIGH FIDELITY NEWS**

(Continued from page 14)

A cross-shaped coil armature. Low mass (4.2 grams) is attained by using a polyester-reinforced glass fiber body. The DL-300's relatively high output (0.3 millivolt per centimeter per second) is attributed to the high efficiency of the magnetic system. Price is $99.

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**Audionics Goes CX**

Availability of the DX-1 CX decoder for LPs using the CBS dynamic-range extension system has been announced by Audionics. The final unit has separate front-panel calibration controls for each channel, and its switching will enable decoding of tapes dubbed from CX-processed recordings. Presence of the tape switch enables insertion into a tape-monitor loop without losing use of that loop for a recorder as well. The DE-1 sells for $125.

**Circle 167 on Reader-Service Card**

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**Rack-Mount Reverb**

The latest in the Master-Room series of reverberation systems from Micmix Audio Products is the XL-121, a single-channel unit in a compact, rack-mount case. It includes a preamp gain control to tailor it to a wide variety of input levels, three-band equalization of the reverb signal, a built-in reverb/direct mixer, an output-level control, and provision for front-panel aux connections. The XL-121 sells for $450.

**Circle 170 on Reader-Service Card**

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**Atlantis for Autos**

Atlantis Corporation has entered the automotive sound field with two three-way speaker models, a booster amplifier, and two booster/equalizer combinations.

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**Realistic Synthesizer—by Moog**

Norlin Industries, maker of Moog synthesizers (named after Robert Moog, who founded both the company and the industry), is supplying the Realistic MG-1 synthesizer, sold through Radio Shack stores. Its TONE-SOURCE section offers various waveforms and octave controls plus a DETUNE control for partial or full interval pitch offset. The MIXER and MODULATION sections include effects ranging from bell tones and polyphony to vibrato, tremolo, and glide. FILTER and CONTOUR sections further refine the tone quality and time characteristics. The catalog number of the MG-1 is 42-2000, and it sells for $500.

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**Wire Rostrum for Stand-Up Speakers**

An airy design in speaker stands is available from Omni Research and Development. The stand, which both decouples the enclosure from the floor to reduce bass boominess and tilts it 6 degrees back to aim the treble toward the listener, is available in two sizes. The larger, Model One (right), sells for $30, the Model Two for $26.50.

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