The Digital Audio Disc Arrives
First U.S. Lab Tests of a Digital Disc Player

First Lab Tests: Carver TX-11 FM Tuner
First Lab Tests: Polk SDA-1 Speaker

Other Equipment Tests:
- Benchmark ARU Ambience Access System
- Technics SL-Q30 Turntable
- Kyocera D-801 Cassette Deck

Disc Specials:
- Aretha Franklin
- Marty Stuart
- Bruce Springsteen
- Billy Joel
- Cleo Laine & Dudley Moore
- Jermaine Jackson
- Mel Tormé
- Pump Boys and Dinettes
- James Galway
- Earl Wild
- Georg Solti
- Three Shostakovitch Symphonies
- Four Saints in Three Acts

Is this 12-cm digital disc the record of the future?
The Only Receiver Built Like A Mitsubishi.

On the subject of receivers, we can perhaps be accused of a bit of priggishness.

Having established certain standards in our components, we aren't about to put our name on a receiver if the receiver doesn't measure up.

Which brings us to a receiver in our 25/30 series, the R-25. It owes a great deal to developments incorporated in our separates.

The R-25 features Quartz Synthesized tuning for hair-splitting tuning accuracy. And if you have greater tuning accuracy you're going to have less distortion and noise, and maximum stereo separation.

Each station is illuminated on a fluorescent digital display. Tap the control bars and it proceeds to lock on to the first available station. Hold the bars down and it will scan up and down the band.

You can pre-select up to seven AM and seven FM stations for storage in memory.

To combat noise—the high-frequency variety that FM stereo falls prey to when stations are weak or far away—the R-25 has an Automatic Hi-Blend feature. It blends stereo signals into monaural in the noisy high-frequency ranges. But it leaves the undisturbed low-frequency signals in the stereo mode.

This removes almost all the perceived noise while preserving...
the broadcast in stereo.

Having solved the noise problem, we moved on to that of signal strength.

Strong signals, by nature, will bully the weak ones, drowning them out, pushing them aside.

Our automatic IF (Intermediate Frequency) switching circuit solves this problem by narrowing the tuning window, thereby excluding interference.

However, since narrowing the window increases distortion, this switching function is introduced— with laudable discretion— only at that precise point where the increased distortion is a lesser evil than signal interference.

As a result, the best possible signal is delivered automatically.

The R-25 Pre-Amp section features a continuous loudness control of ten settings. Rather than the usual single on or off loudness mode, this lets you contour the low and high frequency ranges at low volumes for much richer tonal balance.

Built into the pre-amp section as well is a moving coil amplifier. A simple push of a switch and you're ready to use a high-grade moving coil cartridge without any other external unit.

Meanwhile, back in the amplifier, crossover and switching distortion is reduced to negligible levels by a linear switching circuit.

A rather ambitious array of features for a receiver.

And on the subject of distortion, High Fidelity (March, 1982) commented, "At low power...the distortion barely reaches 0.01%—the threshold below which we consider distortion altogether negligible."

They also had another nice thing to say about Mitsubishi: "The flimsy and the tacky are as inconceivable from its design studios as a pianissimo is from Ethel Merman."

Or, as we like to put it, if it says Mitsubishi, it's got to sound like a Mitsubishi.
Radio Shack's New Linear-Tracking Turntable

Plays Records the Same Way They Are Cut. Microprocessor-Controlled For Zero Tracking Error.

Radio Shack's finest-ever turntable, the direct-drive Realistic LAB-2000, uses a tiny, built-in computer to monitor and control its low-mass tonearm. This means the stylus is always tracking at the correct angle, so you get superior sound and reduced wear for longer record life. The microprocessor also gives you simple, error-proof operation. You simply press soft-touch buttons to move the arm—at slow or fast speed—to any point on the disc. Select totally automatic play or continuous repeat of one disc. With the LAB-2000, you never touch the tonearm.

Out-front LEDs indicate operating modes at a glance. An electronic pitch control and countersunk neon strobe make it easy to get absolutely accurate 33⅓ and 45 RPM speeds. It all adds up to sonic precision and preservation of your valuable records. But don't take our word for it. Bring your most demanding disc and test-play the LAB-2000 today. We know you'll be impressed, especially when you consider that the state-of-the-art LAB-2000 comes ready to use with a hinged dust cover and a Realistic Audio Technica dual-magnet cartridge. Only 259.95

Radio Shack
A Division of Tandy Corporation / Over 8500 Locations Worldwide

Retail price may vary at individual stores and dealers
Equipment

NEW PRODUCTS
Roundup of the latest audio equipment and accessories

TAPE TALK
Fine-Bias Adjustments, Damage Queries, Cassette Durability, Timer Safety

TECHNICAL TALK
An Advance in FM Tuners

EQUIPMENT TEST REPORTS

GIFT LIST
An array of accessories to put under an audiophile’s tree

DIGITAL DEBUT
A user’s first impressions of the Compact Disc digital-audio system

Music

BEST RECORDINGS OF THE MONTH
Marty Stuart: “Busy Bee Cafe”
Berlioz: La Damnation de Faust
Aretha Franklin: “Jump to It”
Thomson: Four Saints in Three Acts

POPULAR MUSIC
Billy Joel: “The Nylon Curtain”
Cleo Laine & Dudley Moore: “Smilin’ Through”
Jermaine Jackson: “Let Me Tickle Your Fancy”

CLASSICAL MUSIC
J. S. Bach: Three Trio Sonatas
Janáček: The Cunning Little Vixen
Stokowski: Symphonies Nos. 2, 3, and 10
Earl Wild: “The Art of the Transcription”

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COVER: Design by Borys Patchowsky; photo by Bruce Pendleton. Shown almost actual size, the Compact Disc was provided by PolyGram Classics.
When it comes to music, Stevie Wonder and TDK are perfectionists. Stevie’s perfection lies in his talent. TDK’s perfection is in its technology. The kind of technology that makes our newly reformulated SA-X high bias cassette the cassette that Stevie depends on to capture every note and nuance of every performance. SA-X cassettes give Stevie a new dimension in high bias recording with sound performance which approaches that of high-energy metal. The exclusive TDK double-coating of Super Avilyn particles provides optimum performance for each frequency range. And SA-X’s super wide dynamic range and high MOL handle high signal levels without distortion or saturation. Last, but not least, TDK’s Laboratory Standard Mechanism gives Stevie unsurpassed cassette reliability, for a lifetime.

TDK SA-X—it’s the machine for Stevie Wonder’s machine. Shouldn’t it be the machine for yours?
NEW TECHNOLOGY undergoing research and development by TDK Corporation of Japan includes an optical/magnetic film and a method of high-density data storage that uses vertically polarized magnetic particles on tape. Combining these developments could produce a tape or disc that would be recorded and erased magnetically but would be read optically by lasers the way some video discs and digital audio discs are read. But this technology is still far from the marketplace, so don't hold your breath for a video or digital audio disc recorder.

LEONTYNE PRICE AND MARILYN HORNE open the second season of "In Concert at the Met" on December 3. Videotaped last March, the show will be televised over stations of the Public Broadcasting Service with FM stereo simulcast available in some cities. Major funding was contributed by Pioneer Video, Inc.

FIRST DIGITAL MESSIAH! RCA beat its competitors to market with the first digital recording of Handel's Messiah, a performance by Musica Sacra under Richard Westenburg issued in September. CBS Masterworks is expected to come in second with its digital Messiah, one conducted by Jean-Claude Wire that is due for release before Christmas.

"CLASSICAL CATS" from London Records is an album of music celebrating the feline. Selections range historically from early (Scarlatti) to late (Copland) and socially from the very top drawer (Saint-Saëns's Introduction and Royal March of the Lion) to the lowly domestic (Britten's I Will Consider My Cat, Geoffrey). List price on disc or cassette: $8.98.

MEMO TO PIRATES: The Piracy and Counterfeiting Amendment, signed into law earlier this year by President Reagan, stiffens the penalties for audio and video piracy, which has been "upgraded" from a misdemeanor to a felony. In the piracy of audio recordings, a first-time offender who reproduces or distributes fewer than a hundred unauthorized copies during a period of 180 days faces as much as a year in prison and/or a $250,000 fine. Getting caught with more than a hundred copies, but less than a thousand, can put you in the slammer for two years, a thousand or more for five years--and/or the same whopping fine.

PITTSBURGH PIRATE WILLIE STARGELL, retiring from an illustrious career in baseball, will make his concert debut next month at the Kennedy Center in Washington with the Eastman Philharmonia under David Effron. Stargell will narrate a text by Martin Luther King, Jr., in the world première of New Morning for the World by Pulitzer Prize winner Joseph Schwantner. RCA will record the piece with Stargell.

NEW CASSETTE LINES: "Two on One" is a new series of Warner/Elektra/Asylum cassettes, each containing two albums by an individual artist and priced at $10.98....For travelers EMI/Angel has launched a "Miles of Music" series, each offering ninety-plus minutes of music from the Capitol Classics line with future releases coming from the EMI catalog. Price: $7.98...."Victrola Classical Cassettes" have been launched by RCA with fifty titles from the Red Seal vaults. Price: $3.98.

TECH NOTES: A new radio service will enable its subscribers to tape musical programs from coded broadcasts in the middle of the night. The Codart Company has developed the system, requiring a specially equipped tape recorder or an accessory Codart decoder. A subscriber orders a program via telephone, and he is given a code number to enter into the recorder and is told what night to set the machine. When the program he wants comes on, the decoder activates the recorder. Panasonic has agreed to manufacture tape machines incorporating Codart circuitry as well as outboard decoders. National Public Radio is expected to begin Codart broadcasts to its affiliates by satellite next year. Codart states that the cost of taping an album will be "considerably less" than buying one.

December 1982
HIGH ART, HIGH TECHNOLOGY

My father was born on a Southern farm near the end of the nineteenth century, and he lived until 1980. It occurred to me during his last illness that he had had a rather hard life, but he seemed not to think so. Shortly before he died, he reminded me that his life had spanned the transition from the age of the kerosene lamp and the horse and buggy to the age of laser beams and space travel. Technology fascinated him, and he felt lucky to have lived during what was surely the most interesting period in human history.

My generation has been somewhat less enthralled by technology for its own sake, but one subject that interests me greatly is the artistic fallout from certain technological advances originally made with no artistic goal in mind. For example, last year the soprano Kiri Te Kanawa sang at the wedding of Charles, which was telecast around the world by satellite and got a lot of attention. For her services she was given an honorary title and became Dame Kiri Te Kanawa. Stretching a point, you might say that she is now Dame Kiri because scientists learned how to put satellites in orbit.

On December 4, the Met matinee performance of Lucia de Lammermoor, broadcast on the Texaco-Metropolitan Opera Radio Network, marks the beginning of the forty-third season that Texaco has sponsored those broadcasts. When I was growing up in North Carolina, I got my musical education from the Saturday opera broadcasts and the ones of the New York Philharmonic on Sunday. I eventually settled in New York because I was drawn here by the Saturday ones of the New York Philharmonic on the Met, and I drifted into this area of journalism because of my interest in music. In a way, then, I hold my present job because radio was used for artistic purposes back in the Forties.

The Spanish tenor José Carreras once said to me, "Any singer who tells you he hates to make records is lying. We all love it. Recordings represent a combination of technology and art that is endlessly fascinating."

This morning I started listening to an eight-disc collection of art-song recordings, an EMI import called "Schubert Lieder on Record, 1898-1952." The technology was so primitive in the early years that I found the first four sides all but unlistenable. I wondered how the record industry ever got off the ground. For contrast I put on the new Telarc digitally mastered recording of Beeethoven's Fourth Piano Concerto with Rudolf Serkin and the Boston Symphony under Seiji Ozawa. The quality of the sound alone was thrilling.

Digital mastering for analog playback can produce good results, but it is not yet the ultimate in recorded sound. In the cover story for this issue my colleague David Ranada makes some wonderfully strong statements based on his first impressions of the new Sony/Philips digital-audio-disc system and what it may do for the art of music.

Home reproduction of music has benefited from other combinations of art and science. New applications of the study of psychoacoustics to the design of hi-fi equipment have resulted in improved stereo imaging. In this issue the Hirsch-Houck Lab's tests of the Polk SDA-1 speaker show that it does indeed add a new dimension to stereo sound. And the new Carver TX-11 FM tuner, also tested this month, represents dramatic advances in noise reduction in FM stereo reception.

It all makes me very glad that the combination of radio, Texaco, and the Metropolitan Opera put me in my current place. I feel very lucky to be living in this most interesting period in human history.
HOW CAN SANSUI CLAIM THE WORLD'S ONLY DISTORTION-FREE RECEIVER?
SIMPLE. WITH SUPER FEEDFORWARD DC AMP.

Creating technological breakthroughs is nothing new to Sansui. One of our most recent innovations, the unique Super Feedforward DC power amplifier system routs all types of distortion—harmonic, intermodulation, transient intermodulation, switching—you name it. And it's the reason we can claim that Sansui's new top-of-the-line, 120-watt Z-9000 receiver is truly distortion-free.

Simply stated, the Sansui Super Feedforward circuit is the perfect marriage between negative feedback and feedforward. As a result, you're never bothered by any type of distortion. You hear precisely what's on the records, tapes and broadcasts. Nothing added, nothing lost—just pure music.

**7-band graphic equalizer for greater tone control.**

Unlike receivers with conventional two or three tone controls, the Z-9000 provides total flexibility with a state-of-the-art 7-band graphic equalizer that helps balance the sound in your listening room.

**Extravagant improvements with Super Feedforward**

Improvement with Super Feedforward

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Digital Quartz-PLL tuning is more precise.

While Super Feedforward alone is enough to outperform most receivers, the Z-9000 adds the pinpoint accuracy of drift-free digital Quartz-PLL tuning. To make sure it's as easy to use as it is precise, there's microprocessor-controlled pushbutton pre-selection of eight FM and eight AM stations. Plus automatic scanning to recall each preset station at the previously programmed volume level. Each time you touch the tuning button you can scan or go up and down the FM and AM bands, bringing in perfectly tuned stations even when they're a hairline away from each other.

**Extras add more pleasure to your listening.**

The Z-9000 is loaded with high technology refinements that let you experiment with sound the way no other receiver can.

The built-in reverb unit with its own display can make your finest tapes and recordings sound even more magnificent by adding natural depth, extra brilliance and sound realism. The exclusive quartz/timer clock with three independent memory functions can be programmed to wake you up, lull you to sleep, and tape a broadcast in your absence. There are also high and subsonic filters and a preamp that handles both moving magnet and moving coil cartridges.

If the new distortion-free Sansui Z-9000 sounds too good to be true, satisfy yourself with an audition at your audio specialist. Or write today for additional details.

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

Putting more pleasure in sound
CIRCLE NO. 42 ON READER SERVICE CARD
High-End Hi-Fi

- I want to commend Alan Lofft on his October article, "Sense and Nonsense in High-End Hi-Fi." I am not a stereo freak but a consumer, and I do enjoy good music reproduction. About two years ago I bought some very high-end equipment because I could afford to indulge myself. Every word of technical jargon was used to convince me that what I was buying was the best. The truth of the matter is that I did not understand a word of it and still don't. I bought the equipment because it sounded good to me. The industry would do itself a favor by having salespeople and reviewers speak English instead of technical gobbledegook.

LOUIS HILDEBRAND
New York, N.Y.

- I think Alan Lofft's article is a rather shrewish and mean effort. Certainly there are people who pay too much, foolishly, but they are few. Stereophile has helped me immensely, and I have learned from it vastly more than I could ever have picked up on my own, starting as I did in the Forties. In those days everyone used the Australian RCA tube guide and welcomed the first issues of Audio.

I subscribe to your magazine because I respect Julian D. Hirsch and find an occasional record review. All the articles about Japanese stuff interest me about as much as the Greater East Asian Co-Prosperity Sphere, if you remember that. Too many butions and mediocre sound.

EDWARD H. BENNETT, JR.
Chicago, Ill.

- Thanks for Alan Lofft's article on high-end hi-fi. It was hilarious and long overdue. You are to be commended for your courage. I expect that some tweak manufacturers will protest. Two years ago a local audio salon offered a "Bespoke" system for $12,000. When I expressed skepticism about the cost/value balance, the store owner responded: "That's our rich-idiot system."

JEFFREY ASHER
Montreal, Quebec

- Alan Lofft is obviously biased against high-end audio since he didn't say much (if anything) good about it in his article. He implies that some esoteric components are overpriced or work on the imagination, but does he prove it? Not at all; he just gives incomplete evidence from tests that are probably not scientifically valid.

Mr. Lofft concentrates on the "mysticism" of the high-end people. But they are opposed to measurements because the mass market concentrates on irrelevant measurements. The underground people tend to be rather illogical, but the mass market isn't any better. They are almost totally deaf and concentrate on meaningless data—for example, a steady-state total-harmonic-distortion measurement made under ideal conditions of stable current and voltage, easy and steady load, and low frequencies.

What is lacking in standard audio reproduction is music. Very few people, including the high-end folks, know what music sounds like. The best way is to go to a real, live, well-done concert, especially a symphony concert. Judge a hi-fi system like a performance. What can be heard can be measured—but only if the correct thing is measured. And measurements must answer to the sound. Audio has barely progressed in twenty years. Let's get some meaningful measurements!

BRETT MARTIN
Moline, Ill.
One of the best cassette decks you can buy happens to be a Walkman.

Introducing the Walkman Pro.

Don’t judge our cassette deck by its size. Judge it by something a lot more meaningful.

Our specs: Dolby* noise reduction. Manual record level. LED recording meter. Playback speed control. Signal-to-noise ratio of 58dB with metal tape. Sendust and Ferrite head for frequency response of 40-15,000Hz, ±3dB. Disc drive system for wow and flutter of less than 0.04%. And quartz-locked capstan servo, for speed accuracy of ±0.3%.

As you can see from our list of specifications, the Sony Walkman Pro offers you more than many cassette decks ten times its size. So when you connect it to a full-size stereo system, you can expect full-size sound.

In fact, it sounds so good you’ll want to take it with you everywhere you go.

Which you can easily do.

(Remember, it happens to be a Sony Walkman.)

With our featherweight stereo headphones, you’ll be able to enjoy the same incredible sound outdoors that you do in your favorite easy chair.

© 1982 Sony Corporation of America. Sony and Walkman are trademarks of Sony Corporation.
Model shown: WM-Pro. *Dolby is a registered trademark of Dolby Laboratories
Lesley Ann Warren

- No doubt Lesley Ann Warren is the surprise of the soundtrack album of Victor/Victoria, because she certainly was the surprise of the movie, but shame on Peter Reilly for identifying her (in his October review of the album) as "the original Cinderella in the Rodgers and Hammerstein musical of that name." Yes, Warren was in an early production of that TV musical (1965, I believe), and she was most assuredly awful, but the first Cinderella, in 1957, was none other than Julie Andrews, a/k/a Victor a/k/a Victoria.

Paul D. Lehman
Boston, Mass.

Lesley Ann Warren

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Paul D. Lehman
Boston, Mass.

Component "Sound"

- In answer to Julian Hirsch's question, "Does everything have a 'sound'?” (September "Technical Talk"), I must say, emphatically, yes! Only a dumberheaded lum-

Polk Audio Loudspeakers

Incredible Sound at Every Price

Seven Models — One is Right For You

Polk Audio has established its worldwide reputation for excellence by building the best sounding loudspeakers for the money available on the market. The revolutionary new SDA-1 is crossing new frontiers of loudspeaker design and performance. All the critically acclaimed Polk monitors, 7 models from about $100-$500 each, share a common heritage, as well as many components and design concepts with the Grand Prix winning SDA-1 (about $850 each). There is certainly a Polk speaker system which is the right choice to satisfy your sonic needs at a price you can afford. You give yourself the pleasure of experiencing the state-of-the-art in loudspeaker performance. Visit your nearest authorized Polk dealer soon and use the reader service card to receive their location as well as information on our loudspeakers.

Polk Audio, Inc. 1915 Annapolis Rd., Baltimore, MD 21236

WILLIAM F. BLINN
Worthington, Ohio

The Thompsons

- Thank you for the recent coverage of Richard and Linda Thompson (September "Best of the Month"). It's a real shame that artists of their ability don't make the charts or sell enough records to be really successful. I hope that Steve Simels's review of "Shoot Out the Lights" will serve to initiate curious new listeners to the Thompsons' remarkable talents. It reassured us old followers that we're still on the right track.

Terry D. Schmidt
Lufkin, Texas

Porter's Pronunciation

- The reason Cole Porter "always insisted on pronouncing" Peru, Indiana, as "Pee-ru" (as noted in Peter Reilly's October review of "Rosemary Clooney Sings the Music of Cole Porter") was because that's the way it's pronounced.

James Chiesa
Culver City, Calif.

Furniture and Dust

- Consider a hypothetical audiophile, gurgling gleefully at the prospect of hearing his five-record set of Gregorian chants, as he shuffles toward his stereo cabinet in a pro-

CIRCLE NC 140 ON READER SERVICE CARD
The purpose of a turntable is to remain quiet. It should contribute no noise or vibration to the sounds picked up by the cartridge.

That's why our new T-Series turntables all use belt drive. The belt drive provides acoustic isolation from motor vibrations. It literally separates the motor from the platter and spindle. This avoids the noise problems inherent in direct drive where the motor is connected directly to the platter.

A belt design, of course, requires more careful engineering to achieve a constant platter speed. But we considered it well worth the effort.

In fact, we went to great lengths to make the T-Series among the finest turntables you can buy. Doing so required using massive platters; wooden bases that provide isolation from room vibrations; as well as disc stabilizers and vibration-absorbent platter mats.*

We also used low-mass tone arms to handle warped records, and capacitance trim to electrically match your cartridge and receiver.

And even though Harman Kardon's new T-Series delivers features found only on the world's most expensive turntables, we haven't made ours expensive. Harman Kardon turntables start at less than $200. You can see them at quality audio retailers. But you certainly won't be able to hear them.

*Available on T40 and T60 models.

TO KEEP A TURNTABLE QUIET YOU HAVE TO GIVE IT A BELT.
For the first time a computer that "hears" has been used to design a music system.

Traditionally the design of music systems has been based on measurements of sound waves produced by loudspeakers. These measurements tell us about the operation of the speakers and other components, but they say little about how people really perceive sound. Thus, traditional measurements are not very useful in designing better sounding music systems.

Now we have found a way around this fundamental problem. From research on the hearing process, we developed a computer that "hears." The computer receives signals from microphones in the ears of a mechanical head. It then processes these signals using knowledge of human hearing mechanisms.

With this computer we can evaluate and design music systems in a completely new way. Just one example: instead of a listener trying to describe where sounds appear to come from, the computer draws a "map" of sound localization. We can then adjust the placement and orientation of the four speakers so the sound is perceived as a panorama across the car. And, we do a unique design for each automobile model.

How much difference does our "hearing" computer make to your enjoyment? When you visit your GM dealer* and experience the Delco-GM/Bose Music System, you will know. Just try not to get excited!

* Available as a factory-installed option on Oldsmobile Toronado, Buick Riviera, and Cadillac Eldorado and Seville.

A totally new class of music systems from Delco-GM.
common one. Such cabinets provide less protection for the most delicate element of sound reproduction—the record—than an open-air rack, since any use of any part of the system requires that the door be opened and closed at least once, as described above. Yet Carl Spencer's October article on hi-fi furniture mentions records hardly at all, while the esoteric problem of dusty transistors (!) is considered significant.

DOUGLAS L. HOUSER
Linwood, N.J.

Jennifer Holliday

I totally disagree with Chris Albertson's comments on Jennifer Holliday's singing in his October review of the Dreamgirls album. Her "grotesque vocal contortions" are from her heart! If you want Aretha Franklin, go buy Aretha Franklin records!

MIKE ADAMS
Bayshore, N.Y.

Headphone Lows

In October "Letters," J. W. Cole calls the July Stereo Review cover "a very pleasant innovation . . . a picture of a beautiful woman enjoying her music!" I grant that Carly Simon is a beautiful woman, but look what she's doing with her hands in that picture. She's pressing the headphones to her ears, evidently to keep from missing the low-bass notes. Every pair of the new mini headphones (designed for Walkman-type cassette players) that I or my friends have ever tried has required this most awkward posture to appreciate the lows! If we can put a man on the moon . . .

DON FREEMAN
Springfield, Md.

Sippie Wallace Blues

You guys have committed a crime, and I feel you're obligated to get me out of your fix. I bought "Sippie" because of the October "Best of the Month" review, and now all my friends think I have a rare leg disease—my feet keep tapping, and I want more, but, as a child of the Beatles and the Stones, I don't have any idea where to start.

KEN HUBICK
DeKalb, Ill.

Joel Vance replies: Alas, many of the most interesting and pleasurable early blues recordings are out of print. Your best bet is "Jazz Odyssey: The Sound of New Orleans 1917-1947" (Columbia Special Products 3-CSP JC3L-30), a three-disc set that includes the work of nearly everybody who was anybody in the golden days of Crescent City hot jazz. "The Louis Armstrong Story" (Columbia CL 851-854) is also indispensable. Another major figure was Jelly Roll Morton. Search in specialty record shops for RCA's "The King of New Orleans Jazz," now deleted, which contains Morton's best recordings with the Red Hot Peppers from 1926 to 1929.

The NAD 7120 Receiver

for under $300 (sugg. retail price)

NAD (U.S.A.) INC.
675 Canton Street
Norwood, MA 02062
(617) 769-7050

CIRCLE NO 33 ON READER SERVICE CARD

Available at most JCPenney stores with Home Entertainment Electronics

High-End Audio Made Affordable:

Before you spend more than $300 on any receiver or amplifier/tuner combination, be sure you hear the new NAD 7120. It combines a digitally-synthesized tuner, a state-of-the-art preamplifier and a surprisingly powerful amplifier—all in one, affordable component. You can spend a lot more money, but we don't think you'll get anything that sounds noticeably better than the NAD 7120.

To find out more about how we make high-end audio affordable, send us the coupon. Thanks.

DECEMBER 1982
Marantz Receiver
Has CX Circuits

Marantz’s SR620CX AM/FM stereo receiver has CX decoding circuits for dynamic-range expansion of CX-encoded records. Other features include eight FM and eight AM presets in the digital-synthesis tuner section, light-touch tuning-scan controls, a switchable low-frequency filter, a 20-dB muting switch, switchable loudness compensation, and connections and switching for two tape decks and two speaker systems. Rear-panel input and output jacks are gold-plated.

The SR620CX has a rated output power of 55 watts per channel with no more than 0.06 per cent total harmonic distortion into 4-ohm loads. 1HF intermodulation distortion is 0.05 per cent; damping factor is 50. The R1AA equalization accuracy is given as ± 1.5 dB; phono signal-to-noise ratio (S/N) is 80 dB. The FM-tuner section has a usable mono sensitivity of 10.2 dBf (1.8 microvolts, or µV) and a 50-dB stereo quieting sensitivity of 38.3 dBf (45 µV). Stereo distortion at 1 kHz is 0.1 per cent, frequency response is 30 to 15,000 Hz +0.5, -1 dB. Stereo separation at 1 kHz is 45 dB.

Both decks use a laminated-Sendust, hyperbolic-contour record and playback head designed to minimize low-frequency response aberrations (called “head bumps”) caused by the “contour effect.” A double-gap ferrite-core erase head is said to provide an excellent erasure ratio even with high-coercivity, high-remanence metal tape. Playback head-gap loss, which usually leads to a fall-off in treble response, is compensated for by the decks’ playback equalizers. The playback preamplifiers use a discrete-transistor circuit with low-noise transistors whose characteristics are matched to those of the record/playback head. A low-noise operational amplifier is used in the recording preamplifier for extended dynamic range. Bias and recording levels are factory adjusted separately for each channel and each tape type.

Each deck has a microprocessor-controlled transport with independent capstan and reel motors and a cam-controlled transport-actuation mechanism. The decks are both capable of unattended recording and playback using any accessory timer. They have a memory-stop feature for zero tape-counter settings. The BX-1 has a three-digit mechanical tape counter. The BX-2 has a four-digit electronic readout controlled by a microprocessor as well as a memory-play feature, a record-mute switch, and an output-level control. The principal difference between the two decks is that the BX-2 offers both Dolby-B and Dolby-C noise reduction, the BX-1 only the former. The BX-2 also has a switchable multiplex filter; the BX-1’s is permanently in-circuit. Both models are available in black or silver finishes.

Frequency response for both decks is given as 20 to 20,000 Hz. Signal-to-noise ratio (S/N) with metal tape and Dolby-B is greater than 62 dB; with Dolby-C, the BX-2’s S/N is better than 68 dB. Total harmonic distortion is less than 1 per cent at a 0-dB recording level at 400 Hz with metal and ferric tapes and less than 1.2 per cent with chrome-type tapes. Wow-and-flutter is less than 0.11 per cent (weighted peak) or less than 0.06 per cent (weighted rms). Erasure ratio is given as better than 60 dB, as is crosstalk. Separation is greater than 36 dB. Dimensions for both are 17 x 4 1/4 x 9 1/8 inches. Prices: BX-1 $299; BX-2 $430.

Circle 121 on reader service card

Symmetric Sound’s
Graphic-Equalizer Kit

The Symmetric Sound Systems’ Model EQ-3 single-channel graphic-equalizer kit features twenty-four frequency controls equally spaced from 27 to 20,000 Hz. Odd-numbered bands are in an independent circuit from the even-numbered ones, eliminating interaction between adjacent controls for easier room and speaker equalization. Adjustment range is nominally ± 10 dB in each band. There is a front-panel by-pass switch. Distortion is given as under 0.02 per cent at 1,000 Hz, and the signal-to-noise ratio exceeds 88 dB at the 2-volt rated output. Maximum output level is 8.5 volts. The EQ-3 measures 10 x 3 3/16 x 4 3/8 inches. Price: $495.

Circle 120 on reader service card

Lower-Priced
Nakamichi Cassette Decks

Incorporating fewer special features than their more expensive predecessors, the new two-head Nakamichi BX-1 (top) and BX-2 (bottom) stereo cassette decks still have enough “bells and whistles” to satisfy demanding audiophiles. Both, for example, accommodate metal, chrome, and ferric tape formulations (top) and BX-2 (bottom) stereo cassette decks still have enough “bells and whistles” to satisfy demanding audiophiles. Both, for example, accommodate metal, chrome, and ferric tape formulations. Both decks feature a microprocessor-controlled Dolby-B and C equalization for extended dynamic range. Bias and recording levels are factory adjusted separately for each channel and each tape type.

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Circle 121 on reader service card
EVEN AT FACE VALUE, THERE’S NOT ANOTHER DECK LIKE IT.

AKAI flies in the face of convention.

Again. This time with the incomparable GX-F91. A bold new design that looks—and performs—like no other cassette deck in the world.

It is literally the face of the future. No knobs. No keys. And no clutter. Instead, a polite presentation of just the basics.

But press the “door” button and, almost by magic, the faceplate automatically lowers to reveal the main control panel.

Now, insert a cassette.

Two microcomputers take charge, first automatically setting the bias. Then, executing a 64-step "tape tuning" analysis that makes sure the GX-F91 gets the maximum from any tape.

For superior frequency response and dynamic range, the GX-F91 is also endowed with a 3-head design, record-cancel that virtually guarantee professional quality recordings.

In short, it’s the proud flagship of our entire 10-deck AKAI family. A family that now includes three outstanding auto-reversing record/playback designs.

So audition the new GX-F91 at your AKAI dealer’s soon. And come face-to-face-to-face with the future.

AKAI
Super GX Heads and Dolby* B & C systems. Plus operational features like auto-fade, auto-mute and auto-

*TM Dolby Labs, Inc.

AKAI Hi-Fi & Video
New Products

Acoustical Physics Labs' Two-Way Speaker System

The Acoustic Image Model I from Acoustical Physics Laboratories is a two-way, floor-standing loudspeaker. Computer-aided design emphasizing "time-domain reproduction accuracy" is said to make the system capable of precise musical imaging. A long-exursion polypropylene-cone 8-inch low- and mid-frequency driver crosses over at 3,500 Hz to a 1-inch soft-dome tweeter. The tweeter, phase aligned with the woofer cone, is mounted in free air and is designed for a response out to 22,000 Hz. Overall frequency response is given as 36 to 22,000 Hz ± 3 dB. Maximum power-handling capability is 125 watts. Nominal impedance is 8 ohms. The enclosure is finished in a hand-rubbed walnut veneer. Price: $450 per pair. Acoustical Physics Laboratories, Dept. SR, 151 6th Street, Atlanta, Ga. 30313.

Circle 124 on reader service card

Linear-Tracking Sansui Turntables

Sansui's P-L50 linear-tracking automatic turntable (shown) offers computerized programming for playback of up to seven musical selections per side in any order. The Compu Edit feature simplifies copying of discs when the turntable is used with several recent Sansui cassette decks, both the turntable and the cassette unit go into operation at the press of appropriate buttons, with the turntable playing a preselected sequence of cuts. (The decks' microcomputer can stop and start a tape during turntable cycling or whenever discs require changing so that gaps between recorded selections are uniform.) The turntable's microcomputer also controls all tone-arm movements and other operations. During tone-arm ascent and descent a muting circuit prevents noises from being heard (or recorded). Cueing provides interruption (up/down) and indexing (left/right) movements of the tone arm with the dust cover closed. The P-L50 has an FG-controlled direct-drive motor, and its wow-and-flutter specification is 0.03 per cent (rms). Signal-to-noise ratio is given as 72 dB (weighted).

The second-in-line P-L40 has an optical disc-size sensor that allows automatic selection of record size and playing speed. It does not have Compu Edit and the other programming features. Audio specifications are the same as for the P-L50. Both models are available in either matte-black or silver finish. Suggested retail prices: P-L50, $360; P-L40, $265.

Circle 123 on reader service card

JVC's Tape-Matching Cassette Deck

JVC states that its DD-99 direct-drive cassette deck has been designed "to rival the performance of the best open-reel decks." The unit's tape-transport capstan is an extension of the motor shaft. The brushless, coreless, and slotless motor is controlled by a crystal-regulated servo system. JVC's B.E.S.T tape-matching system automatically compensates for differences in tape bias, equalization, and sensitivity, choosing from sixteen possible values for each of the three parameters. The process takes about 30 seconds.

The DD-99 has three heads, with the record and play heads mounted in a single housing. Other features include Dolby-B and Dolby-C noise-reduction systems, a four-digit tape counter and elapsed-time clock, a tension-stabilizing loop for improved tape-to-head contact, and two switchable peak/VU vacuum fluorescent meters. Specifications include a frequency response (at a -20-VU recording level) of 25 to 18,000 Hz ± 3 dB with metal and chrome tapes, 25 to 17,000 Hz ± 3 dB with ferric tape. Signal-to-noise ratio is given as 60 dB (weighted, metal tape) without noise reduction. Wow-and-flutter is 0.019 per cent (rms). Harmonic distortion is 1 per cent with metal tape at a 0-VU recording level. Dimensions are 17½ x 4½ x 12¼ inches. Weight is about 17 pounds. Price: $800

Circle 125 on reader service card

Conductart Processor For Mono Recordings

The Owl 1 mono-sound restoration module from Conductart provides for the correct playback of all monophonic recordings, regardless of age, as well as being an effective noise-reduction filter. Designed for home or studio use, with particular emphasis on ease and simplicity of operation, the processor allows any collector with stereo playback equipment to obtain a remarkable improvement in sound quality from any mono recorded source, whether cylinders or Edison discs, acoustical or electrical 78's, non-RIAA-equalized LP's, or hissy tape recordings. (The unit will not function properly with a mono phono cartridge.)

The front panel contains controls for input selection (phono cartridge or line-level auxiliary input, plus a bypass position), mix-down mode (allowing monitoring of left or right channels, horizontal or vertical groove modulation), turnover (for correct bass emphasis with any source), rolloff (to provide correct treble response), rumble filter (with adjustable cutoff frequency), and a high-frequency notch filter. Other features include dual outputs to avoid having to change connections when switching from stereo to mono disc playback and dual output levels to compensate for changes in playback levels from different programs. Instructions regarding the correct combinations of Owl settings for all types of sound material are provided.

Specifications include a frequency response of 20 to 20,000 Hz ± 1 dB with all controls set to flat. A-weighted hum and noise is 85 db below full output (RIAA settings). Phono-input impedance is 47,000 ohms; auxiliary-input impedance is 10,000 ohms. Phono-input overload level is 300 millivolts. The rumble filter's cutoff frequency is continuously variable from 20 to 110 Hz with an 18-dB-per-octave slope. The high-frequency notch filter's frequency is variable from 5,000 to 24,000 Hz with a maximum cut of 30 dB; bandwidth is 1.5 octaves. The wood-enclosed unit measures 4
Vertical Driver Alignment provides the most useful horizontal and vertical sound dispersion patterns.

S-Stop Overload Protection Circuitry makes the 105.2 virtually damage-proof, even with the highest power amplifiers.

LED Listening Window/Peak Power Indicator provides a visual indication of optimum listener positioning and signals when peak input levels are reached.

Switchable Peak Indicator from 50-200 watts triggers front LED to help avoid distortion due to amplifier clipping.

Directable, phase-compensating mid-range treble enclosure is adjustable in both horizontal and vertical planes to provide further control of dispersion.

Every 105.2 individual driver is computer matched to within 1/2 db to its mate and to the other drivers in the enclosure to guarantee absolute unit-to-unit and side-to-side consistency.

3 point shock-mounted bass driver prevents any possible twisting of the basket or transmission of unwanted vibrations to the speaker enclosure.

Advanced Bextrene polymer drive units exhibit far less sonic coloration than conventional paper or other plasticized materials.

An advanced crossover network designed with aerospace quality components (tolerances to within 1%) provides smooth, rapid roll off between drivers for the absolute minimum interdriver interference.

Each 105.2 full system is matched to its mate to within 1/2 db to assure absolutely precise stereo imaging. (A slight variation at one frequency spreads, or smears the sound.)

Each separate piece of the carefully selected woods on every 105.2 is precisely matched to its mate to achieve a level of cabinet finish rarely found on the finest furniture.

MODEL 105.2

In Olde English, the word "compleat" is used to connote the most exhaustive, comprehensive study of a given subject.

Unlike manufacturers who would try to convince you that one form of technology or product feature solves all acoustic problems, KEF engineers address every minute aspect of loudspeaker design. The result is a level of balanced performance that exceeds the overall quality level thus far achieved by any loudspeaker currently on the market. This explains why KEF is the favorite choice of professional musicians, equipment reviewers, and serious music lovers worldwide. They don't listen to sales pitches; they listen for music that sounds real. And they know that there is no substitute for thorough engineering.

KEF Electronics, Ltd. 425 Sherman Avenue, Palo Alto, California 94306

CIRCLE NO 23 ON READER SERVICE CARD

The Compleat Loudspeaker.
New Head Material in Teac Cassette Deck

- Teac's V-66C stereo cassette deck has a cobalt-amorphous record/playback head that is claimed to handle the high bias requirements of metal tape without incurring the low-level magnetic nonlinearities introduced by most ferrite and Sendust head materials. The deck includes both Dolby-B and Dolby-C noise-reduction systems and has switching for ferric, chrome, and metal tapes. It has light-touch controls and solenoid transport operations, two twelve-segment fluorescent record-level displays, and a three-digit tape counter. A d.c. servomotor drives the capstan, and a second d.c. motor drives the tape hubs.

- Frequency response is given as 30 to 19,000 Hz with either metal or chrome tapes, 30 to 17,000 Hz with ferric tapes. Wow-and-flutter is rated as 0.035 per cent. Signal-to-noise ratio without noise reduction is 59 dB; with Dolby-C it is 74 dB. Price: $280.

More Plug-In Phono Cartridges from Shure

- Shure's new M96LT (shown) and M94LT plug-in moving-magnet cartridges were designed for use in turntables with "P-mount" tone arms. The M96LT has a telescoped stylus-shank structure and a lightweight magnet for flat frequency response and high tracking ability in the mid and high frequencies. The M94LT has a low-mass aluminum-tube stylus cantilever. Both cartridges have elliptical diamond stylus tips and are designed to track at 1/4 grams. Prices: M96LT, $80; M94LT, $45.

Stylus Treatment from The LAST Factory

- "Stylast" stylus-treatment fluid is a molecularly engineered chemical claimed to increase stylus life by as much as ten times, to preserve the cantilever-suspension elastomer, and to increase stylus tracking ability. In the process, it is also said to reduce playback distortion and to help maintain stylus cleanliness.

- The solution should be applied before each playing. Stylast acts as an "acoustic coupler at the vinyl-stylus interface." The treatment is said to work by changing "the local concentration of shock waves below the [groove] surface so as to reduce the minor movements [caused by the shock waves and prevent sound degradation from this process."

- The solution will also slowly migrate up the stylus cantilever to the cartridge's elastomer suspension to help preserve it. A bottle said to be sufficient for thousands of applications costs $19.95. The LAST Factory, Dept. SR, P.O. Box 41, Livermore, Calif. 94550.

New Products

x 11 1/2 x 5 inches. Price: $300. Conductart/ Owl, Dept. SR, P.O. Box 616, Ansonia Station, New York, N.Y. 10023.

Circle 126 on reader service card

Niles Audio's Speaker Switcher

- The HDS-1 "High Definition Speaker Selection System" from Niles Audio was designed to accommodate large-gauge "high-definition" speaker cables. The unit will switch up to four pairs of speakers so that any combination of pairs can be played simultaneously. An impedance-protection switch ensures that the amplifier will have a safe operating load when the overall system impedance falls below 4 ohms. Speaker connections are made by banana plugs and jacks. The switcher has separate left- and right-channel grounds for those amplifiers that must have floating outputs. Power-handling capacity is 500 watts per channel. The black metal chassis comes with wood side panels; rack-mounting brackets are optional. Price: $129.95. Niles Audio Corp., Dept. SR, P.O. Box 160818, Miami, Fla. 33116.

Circle 128 on reader service card

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Circle 129 on reader service card

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Aiwa's High-Speed Cassette-Dubbing Deck

- Said to be the first cassette deck capable of simultaneous double-speed copying of both sides of a tape, the Aiwa WX-11 reduces copying time to a quarter that of the conventional method. (A C-60 cassette, for instance, can be dubbed completely in only 15 minutes.) Other features include Dolby-B and Dolby-C noise reduction, microphone inputs, and a bias fine-adjust control for ferric tape formulations. When used for normal-speed playback and recording, the deck's specifications include wow and flutter of 0.05 per cent, frequency response of 20 to 18,000 Hz (metal tape), and signal-to-noise ratio of 76 dB (Dolby-C operating). Price: $430.

Circle 130 on reader service card

Circle 131 on reader service card

Sidereal Akustic's Floor-Standing Speaker

- Sidereal Akustic's new Model Four loudspeaker is a floor-standing system designed to deliver flat power response at all audible frequencies in real listening environments. The system has an 8-inch polypropylene woofer in an acoustic-suspension enclosure. The midrange driver has a moving mass of 1.31 grams and a suspension said to be capable of handling a wider bandwidth than is required. The highest frequencies are reproduced by a flat-ribbon tweeter with a diaphragm weighing only 0.0765 gram. The tweeter's etched-aluminum voice coil makes possible an overall flat

Circle 130 on reader service card
New. And different.

Till today, ADS has been famous for superb speakers. And digital delay systems. And automotive audio.

Now for something completely different. What you see below are the first of the new ADS "Atelier" audio components.

Each of them, the record player (P2), the receiver (R1), the cassette deck (C2), is about as thick as a Michener novel.

An audiophile will be comfortable buying one, or all, on performance specifications alone.

But the refinements that make them so easy to live with, and the future we have planned for them set these handsome instruments forever apart.

While they can be bought separately, the case for buying all is almost irresistible. When each unit is cabled to its neighbor, all cables are hidden by hinged covers on the back of the units. They can be stacked, placed side-by-side, or placed on and plugged into the optional pedestal shown below.

It's the first audio arrangement that can be neatly placed on a table, shelf, or in the middle of any room or decorating scheme, at your discretion.

And other components housed in modules of the same size and shape are on the drawing board, which is to say that what you see on this page is the beginning of a system which can someday soon satisfy all your audio dreams.

"Atelier" components are at your ADS dealer's now. To find the dealer nearest you write us.

Analog & Digital Systems, Inc.,
234 Progress Way, Wilmington, MA 01887.
Or call 800-824-7888 (in CA 800-852-7777)
Operator 483.

ADS. Audio apart.
New Products

1) The high performance Samarium Cobalt Cartridges that Stanton is famous for. 981HZS, 980HZS, 881S, 880S

Its patented moving stylus system features the exclusive Stereohedron Diamond mounted in an ultra-low mass Samarium Cobalt armature (0.2 mg) that enables the 981HZS to track at the highest levels found in any of the newest high tech records used in all kinds of professional applications around the world.

Comprehensive literature now available

2) The revolutionary low impedance Samarium Cobalt Concept - "a step beyond the moving coil" 981LZS, 980LZS, 885LZS, 785LZE

A moving magnet cartridge that because of its unique design works directly into the moving coil input of most receivers and integrated amplifiers and provides extended frequency response well beyond 50kHz. It offers the best features of the moving coil with the technical soundness of the Stanton Samarium Cobalt design concept.

Send for Comprehensive literature

From now on, no matter what type of cartridge you need...you can use

response up to 45,000 Hz with nearly 160-degree dispersion from 30 to 20,000 Hz.

The crossover is a computer-design-derived, phase-coherent, quasi-second-order configuration with 6-dB-per-octave slopes. Crossover frequencies are 400 and 4,000 Hz. The cabinet has been designed for diffusion- and reflection-free sound propagation. All its decorative surfaces are of solid hardwood. Solid oak with a hand-rubbed oil finish is standard; other woods and finishes are available as options. Rated impedance is 6 ohms. Minimum recommended amplifier power is 20 watts per channel. Sensitivity is 86-dB sound-pressure level at 1 meter with a 1-watt input. Dimensions are 11¾ x 10½ x 40 inches. Price: $1,295 per pair. Sideral Acoustic Audio Systems, Inc., Dept. SR, 4035 Oceanside Boulevard, Unit G57, Oceanside, Calif. 92054.

Circle 132 on reader service card

Record-Cleaning Brush From AKG Acoustics

The AKG RCB-1 record-cleaning brush uses about one million "aerospace-quality" carbon-fiber filaments. Each side of the brush contains half a million filaments, so with each revolution of the record each groove is cleaned by about a thousand filaments. Each filament is 8 micrometers (0.0003 inches) in diameter and can closely follow the profile of the record groove to remove dust particles. The natural electrical resistance of each fiber is low, allowing static charges to be dispersed and grounded through the aluminum housing. The holder can be wall- or table-mounted, and it automatically cleans the bristles each time the brush is moved onto and off it. Price: $15.

Circle 133 on reader service card

Realistic Receiver Has Graphic Equalizer

The Realistic STA-790 AM/FM stereo receiver (Radio Shack No. 31-2067) has a built-in seven-band graphic equalizer. Control bands are centered at 50, 150, 400, 1,000, 2,400, 6,000, and 15,000 Hz; up to 12 dB of boost or cut is possible with each. An equalizer-bypass button instantly restores flat response, and a 30-Hz filter reduces infrasonic noise and interference.

Other features include two ten-segment output-power indicators, a stepped volume control, an FM-muting defeat, a five-segment AM/FM signal-strength indicator, a switchable loudness control, and connections and switching for one tape deck and two pairs of speakers.

The receiver is rated at 45 watts per channel into 8 ohms from 20 to 20,000 Hz with no more than 0.04 per cent total harmonic distortion. Sensitivity of the FM-tuner section is given as 1.9 microvolts (10.8 dB) for 30 dB of quieting in mono. The tuner's alternate-channel selectivity is 53 dB; image rejection is 60 dB. Dimensions: 4¾ x 18½ x 10½ inches. Price: $5359.55.

Circle 134 on reader service card

Speaker Systems from Israel's Morel Acoustics

Israeli-made Morel speakers range from bookshelf-sized to floor-standing and cost from $260 to $1,200 per pair. All drivers in the speakers are made by Morel and have large hexagonal-cross-section-wire voice coils for efficiency. Midrange and tweeter drivers are ferrofluid-cooled. The MLP-307 (shown) is a linear-phase two-way system with a ¾-inch-voice-coil dome tweeter and two 9-inch woofers. Power-handling capacity is 200 watts; nominal impedance is 7.5 ohms. Frequency response is 33 to 25,000 Hz ±3 dB. Finish is walnut or black lacquer. Dimensions are 13¼ x 23½ x 12½ inches; weight is 32 pounds. Price: $600 per pair. Morel Acoustics, Dept. SR, 414 Harvard Street, Brookline, Mass. 02146.

Circle 135 on reader service card

NOTE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturers, who will respond directly to reader requests for further information. Domestic inflation and fluctuations in the value of the dollar overseas affect the price of merchandise imported into this country. Please be aware that prices quoted in this issue are therefore subject to change.
The 79 Cent FM Problem

Don't blame your FM tuner if the stations you try to tune in are hissy and have sound that seems to break up.

Radio signals move fast. They travel at 186,000 miles per second. The same as the speed of light.

Just like light, radio signals travel only in straight lines. But unlike light, they are reflected and distorted by buildings, hills and even passing airplanes.

So, if your FM tuner is engulfed in a veritable echo chamber of reflected and distorted radio signals.

The fact is, your FM tuner can't tell a distorted signal from the real thing.

Nor can it stop a distorted reflection from mixing in with the original.

That's why many of the FM stations that you try to tune in are hissy and the sound appears to break up.

FREE HELP

You can solve part of the problem for free. Check the piece of wire, worth just about 79 cents, called a dipole antenna that came with the receiver. Is it simply junked behind your receiver or is it nicely spread out like a big 'T' on the wall.

If your dipole wasn't already stretched out, you'll immediately notice a significant improvement in both the background noise level and distortion in your music.

In fact, the improvement on many stations will be enough to make you very glad you read this ad.

So much for the free help. Your dipole is directional. It is most sensitive to FM broadcasts that are coming at it directly. Through the wall it's mounted on.

If you are receiving some stations now that you only hear with so-so quality, you are probably picking up the distorted signals that are being reflected at you from distant buildings rather than the direct beam of the radio station.

It's a pretty good bet that you can dramatically improve the bad stations by repositioning your antenna at a different angle so that it is aimed at the station you want to receive. You'll improve the sound for 2 reasons. 1) You'll be aiming at the real signal. 2) Your antenna will reject the reflected signals coming at it from different directions.

The problem is that once you re-aim your antenna to pick up a station that was weak, the stations that were strong will now most likely be weak.

Here's the story of a new component that doesn't look in the slightest like an antenna, but will let you electronically aim your antenna where the signal is best, snuff out distorted reflected signals, and add up to 16 times the selectivity to the particular station that you want to tune in.

THE LAST COMPONENT

B.I.C. has invented (and patented) an FM antenna so revolutionary that it looks like a new HiFi component.

It's called the Beam Box. It actually contains 4 separate antenna elements.

You electronically aim the elements as you switch a directional control switch on the front panel. Unlike the dipole antenna which picks up signals from only 2 directions (front and back), the Beam Box can be aimed in all directions.

The dipole antenna at left pulls in signals only from the front and back. The Beam Box covers all points of the compass while it snuffs out distorted reflections from other directions. Something your tuner can't do alone.

You can easily tell when you've aimed properly as your signal strength meter will rise. Plus, you'll hear the sound quality go up and distortion go down.

You'll get a brighter, cleaner sound and the receiver can produce a brighter cleaner sound. When you're making cassette copies from FM broadcasts, you'll really appreciate the clean sound.

IN FRONT OF YOUR TUNER

FM radio waves vary in size from 9 feet to 11.1 feet in length depending on their frequency. Other antennas have to make a compromise as to their sensitivity to the different sized frequencies.

Once you tune in a station on your tuner, you can dramatically improve the sound by switching in the Beam Box's 4 gang tuning capacitor. It's just like the one you'll find in most FM tuners. It matches the antenna to the exact frequency of the station you select.

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IN FRONT OF YOUR TUNER

FM radio waves vary in size from 9 feet to 11.1 feet in length depending on their frequency. Other antennas have to make a compromise as to their sensitivity to the different sized frequencies.

Once you tune in a station on your tuner, you can dramatically improve the sound by switching in the Beam Box's 4 gang tuning capacitor. It's just like the one you'll find in most FM tuners. It matches the antenna to the exact frequency of the station you select.

FREE HELP

Your FM tuner is engulfed in a veritable echo chamber of reflected and distorted radio signals.

You can solve part of the problem for free. Check the piece of wire, worth just about 79 cents, called a dipole antenna that came with the receiver. Is it simply junked behind your receiver or is it nicely spread out like a big 'T' on the wall.

If your dipole wasn't already stretched out, you'll immediately notice a significant improvement in both the background noise level and distortion in your music.

In fact, the improvement on many stations will be enough to make you very glad you read this ad.

So much for the free help. Your dipole is directional. It is most sensitive to FM broadcasts that are coming at it directly. Through the wall it's mounted on.

If you are receiving some stations now that you only hear with so-so quality, you are probably picking up the distorted signals that are being reflected at you from distant buildings rather than the direct beam of the radio station.

It's a pretty good bet that you can dramatically improve the bad stations by repositioning your antenna at a different angle so that it is aimed at the station you want to receive. You'll improve the sound for 2 reasons. 1) You'll be aiming at the real signal. 2) Your antenna will reject the reflected signals coming at it from different directions.

The problem is that once you re-aim your antenna to pick up a station that was weak, the stations that were strong will now most likely be weak.

Here's the story of a new component that doesn't look in the slightest like an antenna, but will let you electronically aim your antenna where the signal is best, snuff out distorted reflected signals, and add up to 16 times the selectivity to the particular station that you want to tune in.

THE LAST COMPONENT

B.I.C. has invented (and patented) an FM antenna so revolutionary that it looks like a new HiFi component.

It's called the Beam Box. It actually contains 4 separate antenna elements.

You electronically aim the elements as you switch a directional control switch on the front panel. Unlike the dipole antenna which picks up signals from only 2 directions (front and back), the Beam Box can be aimed in all directions.

The dipole antenna at left pulls in signals only from the front and back. The Beam Box covers all points of the compass while it snuffs out distorted reflections from other directions. Something your tuner can't do alone.

You can easily tell when you've aimed properly as your signal strength meter will rise. Plus, you'll hear the sound quality go up and distortion go down.

You'll get a brighter, cleaner sound and the receiver can produce a brighter cleaner sound. When you're making cassette copies from FM broadcasts, you'll really appreciate the clean sound.

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Once you tune in a station on your tuner, you can dramatically improve the sound by switching in the Beam Box's 4 gang tuning capacitor. It's just like the one you'll find in most FM tuners. It matches the antenna to the exact frequency of the station you select.
Fine-Bias Adjustments

Q Many tape decks provide bias-adjustment controls but do not include a bias-calibration oscillator. Is there a simple way to trim the bias for a given brand of tape, or are these controls basically worthless? How would I best hook up an external test generator—if that would work?

B Resnow
San Luis Obispo, Calif.

A Frankly, as you suspect, bias-trim controls without some way of calibrating the measurements are of dubious value. If you’re going to experiment with a test generator, you will need a meter with a decibel scale, flat audio response, and a full-scale sensitivity of about 0.1 volt a.c. (The deck’s own record-level meters are unlikely to be sensitive enough.) Set the generator to a 1,000-Hz sine wave, and set its level to produce a record level of 0 dB on the deck’s meters. Then reduce the generator level by 20 dB and make a series of frequency-response measurements throughout the treble range, using the factory bias setting and a top-brand manufacturer-recommended tape. This gives you a baseline—and something to get back to if things don’t work!

Now put on a sample of the tape for which you wish to adjust and repeat the measurement procedure above, either recording the 20-dB signal on the tape and then playing it back for measurement or making the measurement simultaneously using the monitor head. If the shape of the playback frequency-response curve is within ±2 dB of your original out to, say, 15 kHz, the factory bias setting is about as close as you’re likely to get. If you’re out by 4 or 5 dB at the high end, a little trimming may be in order. Lowering the bias level slightly will increase the high-frequency response, increasing the bias will tame an overbright top end. Unless your machine has three heads, so that you can hear the effect of a small bias change immediately, this is going to be a time-consuming process, but if you really want to use that tape, it may be worthwhile.

This is by no means the only way to optimize bias, of course, but it is minimal in its equipment requirements. One final note: if you find a tape that’s radically out—down perhaps 10 dB at the high end—don’t try to use a bias-trim control to correct it. Give it away or throw it out.

Damage Queries

Q Ads for at least one tape-head cleaner seem to imply that alcohol may be injurious to the heads. Is this true? Also, I’ve found that playing back normal-bias tapes with the CrO, button pressed in makes them sound sweeter, less shrill. Am I hurting either the head or the tape by doing this?

Ralph Kitts
Duarte, Calif.

A I’ve used isopropyl alcohol (obtainable in an “NF” purity at any pharmacy) to clean tape heads and pinch-rollers for years and haven’t hurt a one. It’s not quite as efficient as trichlorotrifluoroethane (Freon), but both are certainly safe. My only caveat here would be to avoid rubbing-alcohol compounds, which often contain a skin lubricant (usually glycerin) that can leave a slight residue that might get transferred to a tape.

As for playing your ferric cassettes with CrO, equalization, you certainly won’t hurt either the tape or the head any more than you would do by turning your amplifier’s treble control down slightly—for, in effect, that’s all you’re doing with the CrO, button (in playback). Some brands of tape have slightly “hot” high ends, which you perceive as shrill. You could try a different tape, of course, but if your present practice gives you satisfying sound, stay with it.

Cassette Durability

Q After only a few years some of my prerecorded cassettes give me the distinct feeling that they have a finite shelf life. What is your impression of cassette durability?

G Philip Johnson
Rochester, Mich.

A Provided that good-quality materials are used in their manufacture, there should be little problem with cassettes
Sony is about to widen your ideas of audio tape.

Sony’s revolutionary UCX-S has the widest dynamic range of any high-bias tape; it has expanded recording capacity. We call it Wide Fidelity Sound™. With UCX-S, you can record at higher volume levels with less distortion than any other high-bias tape.

UCX-S has unsurpassed frequency response in the low and middle ranges. And at the very delicate high frequency ranges, its enhanced responsiveness gives exceptionally beautiful high notes. The incredible specifications include Retentivity and Squareness higher by far than any other high-bias tape. Retentivity: 1800 Gauss. Squareness: 93%, an astounding figure.

But the real test comes when you lean back and listen. You’ll hear everything with more clarity than you’ve ever heard before on a high-bias tape. On Sony UCX-S, with Wide Fidelity Sound.
When the Hollywood Bowl chose a new sound system, they took the speakers right out of your living room.

The world's leading acoustic engineers chose BES home speakers for the Hollywood Bowl's new $250,000 sound system—the world's finest. BES speakers propagate a 360° wavefront uniformly in all planes—horizontal and vertical. Its planar diaphragm creates less voice-coil excursion; therefore less distortion. Truly great music in the round. So, just close your eyes. And you're at the Bowl.

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Music in the round.

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CIRCLE NO. 14 ON READER SERVICE CARD

"wearing out." I have a number of prerecorded demonstration cassettes that date from the introduction of CrO₂ tape and Dolby-B, and they appear to be as good today as they were then.

On the other hand, most commercially prerecorded music cassettes are made more for immediate profit than for long-term performance. Low-grade plastic shells may deform with age, particularly if they were molded poorly and the two halves joined imperfectly. The adhesive in the splicing tape that holds the leader and even the glue that holds the pressure pad in place may also gradually lose their tenacity. This isn't going to happen overnight, of course, but if a given recording is really important to you, it may be worth the trouble of dubbing it onto a high-quality cassette or transferring the tape into a high-quality shell (not an easy task).

Two signs of cassette degradation to look for are a tendency of old tape to "cup" (bow) slightly across its width and increased mechanical noise when the tape is wound at high speed.

Timer Safety

Q My new cassette deck has an external timer-control feature, but I remember reading once that it is bad to leave a tape transport's rubber pinch-roller pressed against the capstan for any length of time because it could develop a flat spot that would cause wow and flutter. Am I safe in using the timer to record broadcasts when I'm not at home?

Gary Whyte
Chicago, Ill.

A Definitely. When today's decks provide a timer-control feature, the pinch-roller is not pressed against the capstan until the machine is electrically turned on by the timer. This was not necessarily the case with some older recorders.

Akai Motor Replacement

Q In 1970 I bought an Akai X-360 stereo open-reel recorder, which I wish very much to keep. Unfortunately, the main hysteresis-synchronous three-speed capstan motor burned out, and both Akai in Japan and their main distributor in California tell me that no more replacements exist. Do you know of anyone who has such a motor or of an electrical lab that might be able to rewind the existing one?

Nigel Froome
Freeport, Bahamas

A While I don't normally run this kind of question in "Tape Talk," I don't know how to help you, and perhaps one of my readers does. Please send any information to Craig Stark, Stereo Review, One Park Avenue, New York, N.Y. 10016.
Come close. Fill your ears with clear, enticing sound. Feel the precise beauty of our MCS® cassette decks. Shown here, model 3555 cassette deck with Dolby® Noise Reduction System and fluorescent record level meters, 219.95. Model 3554 cassette deck with Dolby® Noise Reduction and soft touch transport buttons, 189.95. Model 3575 computer-controlled cassette deck with electronic touch controls, preset playback and random-search programming, 299.95. All feature metal tape capabilities.
Achieve Mitsubishi in an electrifying new sports coupe
In the Mitsubishi Cordia, sophisticated, state-of-the-art technology has at last achieved sheer driving fun. This car is more than exciting. It's electrifying!

Cordia performance lights up the road with an aerodynamic, arrow-front that slips through the wind at the amazingly low drag coefficient of 0.34. (And a high pleasure quotient.)

Because of front wheel drive, MacPherson front struts and an advanced U-shaped rear suspension, Cordia handles beyond your expectations.

Then, there's the brilliance of innovative features like the MCA-Jet engine, our advanced 4+4 Transmission (or if you prefer, our unique, electronically controlled, automatic transmission or 5-speed), Dual Engine Stabilizers to reduce engine vibration, and the illuminating Liquid Crystal Display on the Cordia LS, which makes even reading your tach a thrill.

Your new Mitsubishi Motors Dealer will give you the full rundown. And a test drive. And only that will tell you how much fun it really is.

Mitsubishi takes you where you've never been before.

Call 800-447-4700 for the new Mitsubishi Motors Dealer nearest you. In Illinois, call 800-322-4400.
The world's quietest tape is like no tape at all.

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 isn't 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 (20 kHz) to 63 kHz, where crystal clear sound is heard.

GUARANTEE OF A LIFETIME
All BASF tape cassettes come with a lifetime guarantee. Should any BASF cassette ever fail—except for abuse or mishandling—simply return it to BASF for a free replacement.

Mobile Fidelity Sound Lab
BASF Professional II was selected by Mobile Fidelity Sound Lab for their Original Master Recordings™. High Fidelity Cassettes. These state-of-the-art prerecorded cassettes are duplicated in real time (1:1) from the original recording studio master tapes of some of the most prominent recording artists of our time.

For the best recordings you'll ever make.

CIRCLE NO. 6 ON READER SERVICE CARD
Technical Talk
By Julian D. Hirsch

- An Advance in FM Tuners -

For many years, the "advances" in FM tuners, apart from purely cosmetic changes, have derived from new semiconductor devices, which have reduced manufacturing costs and generally improved stereo separation and distortion characteristics, and from digital-synthesis local oscillators, which afford high stability and tuning precision. The actual effective tuner sensitivity, however, has not changed for decades, being limited by the FM broadcast standards and particularly by the stereo transmission system adopted first in this country and later throughout the world.

A fundamental weakness of our stereo FM broadcast system is its inherent degradation of signal-to-noise (S/N) performance. The "difference signal," often referred to as \( L - R \) (which contains the audio information needed to provide a stereo signal), is transmitted on a 38-kHz amplitude-modulated suppressed carrier that forms a part of the composite transmitted FM signal. The S/N of this part of the program is 23 dB worse than that of the "sum" \( (L + R) \) or mono signal component. That is why a stereo broadcast is almost always heard with more "hiss" than a mono broadcast (unless the signal at the antenna is very strong and the tuner is very good), and it is why pressing the "mono/stereo" button on a tuner (which kills the noisy \( L - R \) signal) removes virtually all the hiss—together with the stereo, unfortunately.

Until recently, the most common treatment of this problem has been through the use of "high blend" switches on tuners and receivers that mix the left and right channels at high audio frequencies. Although such blending can greatly reduce the stereo effect, the noise is also reduced in direct proportion to the diminution of channel separation. A few receivers have featured a blend system that operates automatically for weak signals.

Bob Carver, who has been responsible for many innovative audio designs, has been working on the problem of stereo-FM noise for some time. Recognizing the \( L - R \) signal as the source of most FM noise, he studied its characteristics carefully and found that a large part of the \( L - R \) signal duplicated the \( L + R \) signal; that is, they contained roughly the same frequency components, although their relative levels were different. The audible difference between the two signal components was largely in the ambience, or sense of space, that is characteristic of a stereo program (plus, of course, the 23-dB-higher noise level of an FM \( L - R \) signal). Carver's goal was to make an FM tuner that would receive stereo broadcasts with virtually the same noise level as mono, but with subjectively full stereo channel separation and ambience, even for relatively weak signals that would be too noisy for stereo listening with conventional tuners. He reasoned that, because of the considerable similarity between the \( L - R \) and \( L + R \) signals, it might be possible to synthesize a difference \( (L - R) \) signal within the tuner from the relatively quiet mono \( (L + R) \) component. If that could be done, the way was open to quiet stereo FM reception.

The first commercial realization of Carver's work on FM noise is the Model TX-11 FM tuner, reviewed in this issue. As might be expected, there is a great deal more going on in this tuner than a mere derivation of one signal component from another, but that is at the heart of it. The TX-11 employs a multipronged attack on the noise problem.

The bandwidth of an FM detector is usually made wide enough to handle a fully modulated stereo signal, although much of the time the actual transmitted bandwidth is much less than the allowable maximum. Excess detector bandwidth here, as in any signal-carrying circuit, contributes unwanted noise. The quadrature detector of the TX-11 is what Carver calls a "variable-Q" detector, whose bandwidth varies with FM signal strength. With weak signals, the bandwidth narrows correspondingly to reduce noise (distortion also may increase somewhat under this condition, but that is a minor problem compared with the noise in a weak stereo FM signal).

The variable-Q detector is able to reduce the noise by only about 3 dB, far short of Carver's goal of around 23 dB. All the other signal processing done by the Carver circuits takes place in the audio section of the tuner, following the multiplex decoder. The \( L + R \) signal is passed through a "randomizer" consisting of two charge-coupled devices (CCD's) used as delay lines with different delay times. The randomizer's output is a "scrambled" signal that has much of the ambience but not the discrete-position information of the original \( L - R \) signal. The derived signal, after spectral shaping

Tested This Month
Polk SDA-1 Speaker System • Technics SL-Q3C Turntable
Carver TX-11 FM Tuner • Kyocera C-801 Cassette Deck
Benchmark Acoustics Model ARU Ambience Access System
The circuit is intended to detect the effects of multi-path distortion (multipath reception can introduce large amounts of amplitude and phase modulation on an FM signal). Although the tuner's multi-path rejection conditions within the tuner, since that cannot be done in an audio-frequency processor. What it can do is reduce some of the unpleasant effects of multi-path distortion on a stereo signal. Severe multi-path can degrade mono FM reception as well, and the Carver tuner has no effect on mono performance.

The front-panel marking of the tuner ("Asymmetrical Charge Coupled FM Detector") must not be interpreted literally. So far as I can see, these terms have no particular significance in relation to the tuner's operation. The charge-coupled devices are used in synthesizing the difference signal, but they are not involved in any way with an FM detection process. And the importance of "symmetry" in this matter escapes me.

Bob Carver is not the only one who has been working on the FM-noise problem. On a parallel, though independent, course is the work of Larry Schotz, a talented engineer who was responsible for the Sherwood (later Draco) Micro-CPU tuner—one of the finest FM tuners ever made—as well as some recent products from other well-known manufacturers. Schotz is now developing tuners for NAD/Proton, employing variable-bandwidth detectors and other circuits to achieve FM noise reduction. I hope in the near future to be able to report on a new NAD receiver employing the Schotz circuit.

Test reports begin on page 32
For the person owning records from Abba to Zappa.

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In recent years, several manufacturers have developed electronic products to enhance the "imaging characteristics" of stereo reproduction. In general, the effect of such image enhancement is to extend the apparent stereo "stage" beyond the limits defined by the speaker positions and to fill in the region between them, presenting a broad, realistic sound image to the listener.

Anyone who has listened to music through headphones knows that the experience is very different from conventional listening using loudspeakers. If the program material was recorded binaurally (as distinguished from stereophonically), the headphone listening experience can truly approach absolute realism. One of the reasons for this is the left-right isolation afforded by stereo headphones (as distinguished from stereophonically), the headphone listening experience can truly approach absolute realism. One of the reasons for this is the left-right isolation afforded by headphones (each ear hears only the corresponding channel). With speakers, each ear hears the sound from the speaker nearest to it, followed a short time later by the sound from the opposite speaker (the time interval required for the sound to travel around the head to the opposite ear, about 0.5 millisecond).

If this delay effect is eliminated, the resulting sound takes on the spaciousness that most people find desirable. This can be accomplished by providing a compensating signal that arrives at each ear with the correct level and timing to cancel the unwanted sound. The compensation can be done electronically, as in the Carver "Sonic Hologram" or Sound Concepts’ Image Restorer, or acoustically, as in the new Polk SDA-1 speaker system.

Matthew Polk set out to achieve the listening qualities of electronic image-enhancement devices in a purely passive system of novel design. The first commercial realization of the Polk invention is the Polk Audio Stereo Dimension Array, Model SDA-1. It is a fairly large floor-standing speaker system, measuring 43½ inches high by 16 inches wide by 12 inches deep and weighing 85 pounds. The front of the walnut-veneered wooden cabinet is covered by a plain black cloth grille. In the rear of the cabinet, the bass module is twin binding-post terminals (spaced to accept the standard dual banana-plug configuration), separate tweeter fuses for the two high-frequency drivers, spare fuses, and a socket that accepts a special cable joining the two speaker cabinets.

Removing the grille reveals an array of six drivers and a large, 12-inch, flat "cone" passive radiator for the bass drivers. There are actually two separate speaker systems, sharing a common bass section, within each SDA-1 cabinet. They are designated the "stereo" and the "dimension" subsystems. Like previous Polk speakers we have tested, the SDA-1 bass section uses two 6-inch cone drivers located about midway up the front of the speakerboard above the passive radiator.

Above each bass driver is a driver of similar size that handles the frequency range from 125 to 2,500 Hz, and above these are two newly designed 1-inch dome tweeters.
with light plastic domes driven by low-loss "litz wire" voice coils. The left and right midrange driver and tweeter each make up a subsystem, the two being isolated from each other acoustically and electrically.

In operation, the two speaker cabinets, a mirror-image pair, are placed (typically) about 6 to 8 feet apart and at exactly equal distances from the rear wall. For best results, the listener should be seated equidistant from the speakers, which should form an angle of about 45 degrees with the listener. In each cabinet the innermost pair of drivers forms the "stereo" section and the outermost drivers the "dimension" section.

The left and right speakers are connected to the amplifier in the usual manner. The amplifier must have a common ground between its left and right output terminals. (Most amplifiers meet this requirement; check your amplifier's instruction manual for warnings about the use of external speaker switches or accessories that require an output circuit with a common ground.) A special cable, supplied with the SDA-1, interconnects the two speakers. In the left speaker, the dimension section carries the L - R signal, while in the right speaker it carries the R - L signal (the inverse of the L - R signal, 180 degrees out of phase with it).

When the speakers are installed correctly, the output of the "dimension" section on each side is delayed by the period needed for it to cancel the sound reaching the ear on that side from the opposite channel's "stereo" section. The actual operation of the Polk SDA system is somewhat more involved and depends to a considerable degree on the Haas (precedence) effect, which causes the earliest arrival of a sound to establish its apparent direction of origin.

Most of the specifications for the Polk SDA-1 speaker system, as listed in its instruction manual, deal with its driver and crossover characteristics. However, the manual does state that the midrange drivers operate as fourth-order vented systems, with their small vent openings located just above and between the drivers. The rated impedance of the system is not given in the usual manner, but its d.c. resistance is rated at 5 ohms. The recommended price of the Polk SDA-1 is $850 each, but they are normally sold only in pairs at $1,700.

- **Laboratory Measurements.** Evaluating the performance of the Polk SDA-1 obviously involves more than merely measuring its frequency response, distortion, and other conventional properties. This is an unconventional speaker, and—even more than most speakers—its overall performance can only be judged subjectively. Nevertheless, we made extensive measurements of its acoustic performance, if only to establish its standing relative to more conventional speaker designs.

First, we drove the speakers (left and right) individually, with no connection between them, and measured their acoustic properties as though they were ordinary speakers. The smoothed and averaged room response was quite uniform over most of the audio range, within ±2.5 dB from about 150 to 12,000 Hz. There was a tweeter resonance at about 13,000 Hz, which created an output peak of about 5 dB at that frequency. The bass output, combining the contributions of the two 6-inch drivers and the 12-inch passive radiator, was exceptionally strong down to the lowest frequencies. Combined with the room curve, it produced an overall system response of ±4.5 dB from 20 to 20,000 Hz.

The electrical impedance of the SDA-1, measured on a single system, was a minimum of 5 ohms in the vicinity of 100 Hz and varied between 5 and 12 ohms over the full audio range. In a normally operating system, the program characteristics may cause the amplifier to "see" a load as low as 2.2 ohms. But, in spite of the SDA-1's rather unpredictable dynamic impedance, it is unlikely to load any reasonably good amplifier or receiver unduly, and its special imaging properties make it highly improbable that anyone will ever attempt to drive two pairs of the systems simultaneously.

The Polk SDA-1 is an unusually sensitive (efficient) speaker, delivering a sound-pressure level of 95 dB measured at 1 meter when driven by 2.83 volts of band-limited pink noise. When we came to measure its bass distortion, it was difficult to decide what drive levels to employ. We finally used the "8-ohm equivalents" of 1 and 10 watts, although they undoubtedly corresponded to higher drive levels for these speakers.

When plotting the distortion (for frequencies below 100 Hz), we used the readings taken at the passive radiator below its effective crossover frequency of 50 to 60 Hz and at the driven cone above that frequency. The "1-watt" distortion was less than 2 percent over the full range and actually reached its maximum in the 1200- to 1500-Hz range, near the middle of the 6-inch driver's effective operating range. Increasing the drive to "10 watts" resulted in rather high distortion readings, nearly 10 percent, at about 75 Hz, dropping to just over 1 percent at 40 Hz and still only about 6.5 percent at 30 Hz.

The FFT quasi-anechoic axial response measurements of the system showed it to be very flat, typically within ±3 dB or better up to 15,000 Hz and sloping off gradually to about ±10 dB in the vicinity of 22 or 23 kHz. The system's phase response was very good, with a group delay of only 0.02 millisecond from 2 to 20 kHz. An interesting measurement was made with both left and right speakers driven in phase and with their interconnecting cable installed. The microphone was located in the recommended listening position. The time display showed two pulses arriving about 0.4 millisecond apart, corresponding roughly to the typical interaural spacing of 6 inches. The frequency spectrum of this measurement was a classic "comb filter" display, the type of result usually obtained with any of the electronic time-delay signal-processing accessories used to enhance the spatial properties of a program.

- **Comment.** As we had anticipated, conventional measurements on the Polk SDA-1 showed it to be a good, though not necessarily unusual, speaker system. Only through listening would we be able to confirm the claims made for it.

Briefly, a properly installed pair of Polk SDA-1 speakers produces a broad, precisely defined sound stage, not only between the speakers, but extending appreciably beyond them laterally as well. The effect is very similar to that achieved by all-electronic imaging systems, although the exact listening position is not quite so critical with the Polk speakers. When listening in other parts of the room, the full breadth of the stage is diminished, but the detail is always better than would be achieved with conventional speakers. The degree of "dimension" enhancement, as with the electronic imaging systems, is very much a function of the recording itself. With certain vocal or small-ensemble recordings, it borders on the spectacular; with some large-orchestra recordings (Stravinsky's Firebird Suite on Telarc, for example), it merely enhances an already recorded sense of spaciousness; and with some stereo recordings (and all mono recordings), it does nothing to modify spatial properties of the sound.

The sound of the Polk SDA-1 is beautifully balanced, with a total lack of bass...
Since the very beginning, there's been an enormous gap between the feeling of being at a concert and the feeling of its reproduction. Stereo could give you great sound, but the picture was missing. TV could give you the picture, but with sound never worth listening to.

At last, picture and sound come together in Pioneer LaserDisc. It's stereo as good as the best conventional audio records made today. It's a picture as good as if you were in the TV studio itself. It's a remarkable combination of sight and sound that gives you a sense of performance, a feeling of being there you've simply never experienced at home before.

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*In Illinois, 800-972-5855*
Since their introduction a couple of years ago, the Technics "linear-tracking" turntables have become so popular that the specially designed plug-in cartridges required for use in their short, low-mass tone arms (originally available only from Technics) are now offered by many other cartridge manufacturers. The so-called "P-mount" cartridge is fitted with a four-pin plug that mates with a connector in the end of the arm. It is required to have a weight of 6 grams and a center of gravity meeting Technics' specifications, and it must track at the 1.25-gram force for which the linear-tracking turntables are designed. In most other respects, each manufacturer is free to use whatever design principles and proprietary processes he chooses (although the unique design of the Technics playback system places some constraints on the designer's freedom of choice). The P-mount cartridge format has become very popular in Japan, where other manufacturers are already beginning to produce compatible record players.

To encourage a wider acceptance of the P-mount system, Technics has now augmented its linear-tracking turntable line with a series of conventional turntables whose pivoted arms accept only P-mount cartridges. One of these is the Model SL-Q30, a quartz-controlled direct-drive two-speed automatic record player. The arm terminates in a socket that permits a direct plug-in insertion of a P-mount cartridge. Because of this, its counterweight can be adjusted only through a limited range to set the vertical tracking force between 1.0 and 1.5 grams (1.25 grams being the nominal tracking force for the system). The antiskating dial next to the arm base is adjustable over the same range of forces.

The die-cast aluminum platter of the SL-Q30 has stroboscopic markings cast into its rim, where they are illuminated from below the motorboard. Feelers below the platter emerge through holes in the rubber mat to contact the record and control the arm indexing diameter and turntable speed according to the size of the disc. This system also protects the cartridge from damage by preventing the arm from descending on an empty rotating platter.

The operating controls of the Technics SL-Q30 are all on the top front of its base, where they are accessible with the hinged plastic cover lowered. A small button turns on the power, and a large rectangular button initiates the START and STOP cycles. Rectangular buttons select either the 33⅓- or 45-rpm speed (for use with non-standard records), and another engages the automatic-repeat mode of operation. The oil-damped arm lift and descent (cueing) are controlled by a sliding lever. The SL-Q30 has a silver-grey plastic base, about 17 inches wide and 14⅜ inches deep, and is 4⅝ inches high with the cover closed. It weighs 13¾ pounds. Price: $220.

Laboratory Measurements. We tested the Technics SL-Q30 with a Shure V15 LT P-mount cartridge installed in its arm. The V-15 LT is a functional equivalent of the Shure V15 Type IV, although it lacks the Dynamic Stabilizer of the latter. Unlike conventional record players, the SL-Q30 can be set up and put into operation by anyone in only a few minutes without making any critical adjustments or sacrificing any of its potential performance. Even the counterweight is factory-mounted on the arm and adjusted for a 1.25-gram tracking force; the antiskating dial is also set to that force. Besides placing the platter and mat on the motor shaft, all that is

(Continued on page 40)
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needed is to plug the cartridge into the end of the arm and insert its retaining screw. The arm and cable wiring capacitance from each channel to ground was 149 picofarads, and the interchannel capacitance was too low to measure (less than 1 picofarad). The total effective mass of the arm and cartridge was 14 grams, which resonated with the stylus compliance at a nearly ideal frequency of 9 Hz.

The actual tracking force was very close to the calibrations on the counterweight (it was only 0.02 gram high at 1.25 grams and nearly that accurate at the limit settings). The arm’s tracking-angle error was very low, less than 0.33 degrees per inch for radii between 2.5 and 6 inches. The anti-skating compensation was quite accurate, and the arm did not drift significantly during an up/down cycle with the cueing control. The automatic start cycle required 12 seconds (a typical figure) from pressing the START button to the beginning of play, and the STOP cycle required 10.5 seconds after it was tripped before the motor shut off. However, the platter appears to be electronically braked after the motor shuts off, coming to a near stop in about 1 second. The operating speeds were exact.

The turntable rumble was a low —39 dB unweighted and —60 dB with ARLL weighting. Most of the rumble was concentrated around 5 Hz, with a secondary peak at 30 Hz. The weighted-rms flutter (JIS) was 0.06 per cent, and with DIN (quasipeak) weighting it was 0.08 per cent. The flutter spectrum was mostly below 12 Hz, with its peak at 8 Hz.

The base isolation from conducted vibration was about average for a direct-drive turntable. Most of the transmission through the mounting feet was below 100 Hz, with peaks at 25, 40 and 85 Hz.

**Comment.** The Technics SL-Q30 operated perfectly in our use tests. It is in most respects a conventional turntable, but the combination of a P-mount cartridge and a low-mass arm eliminated one of the most onerous and critical procedures in setting up a hi-fi system and virtually guarantees optimum record-playing performance. And if one prefers to cue the arm by hand, it can simply be lifted from its rest with the finger lift, which automatically starts the motor. When the earlier Technics P-mount turntables appeared, there was some resistance from audiophiles who preferred not to be limited to a couple of Technics cartridges that were relatively unknown (in this country at least). Now, with P-mount cartridges available from several manufacturers, only the most avid “tweak” will be able to criticize the supposed incompatibility of these record players with truly top-quality cartridges.

In our view, the P-mount cartridge deserves a place in the hi-fi market because of the considerable advantages it offers in installation and operation, to say nothing of a nearly ideal arm-resonance frequency and outstanding tracking of warped records. Although adaptors are available which permit a P-mount cartridge to be installed in a standard EIAJ four-pin tone-arm socket, we see no possible advantage to such an installation. The extra mass of the headshell and the adaptor, plus the (usually) greater mass of a typical conventional tone arm, can only degrade the overall performance of the system.

Even without considering the advantages of the P-mount cartridge, the Technics SL-Q30 proved itself to be a fine product at a reasonable price.

—Julian D. Hirsch

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Clearly, the Audio-Technica AT155LC excels in just about every area of cartridge performance, and it came as no surprise to find that it was as silky smooth and "forgettable" when playing music as its measurements would suggest. We would have difficulty describing the "sound" of the cartridge, since it contributes so little of itself to the final sonic quality. Good records often sound superb when played with the

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and 75-ohm antennas and the audio output jacks. The tuner's dimensions are 17½ inches wide, 3½ inches high, and 12½ inches deep, and it weighs 11½ pounds. Optional rack-mounting hardware is available. Suggested retail price: $540.

- **Laboratory Measurements.** Our initial measurements of the Carver TX-11 were made with its special signal-processing circuits turned off so that we could judge its performance as a basic FM tuner. Then subsequent tests were repeated with the signal processing in operation.

With the **Wide i.f. bandwidth**, the usable sensitivity was 11 dBf (2 microvolts, or µV) in mono and 17 dBf (4 µV) in stereo. The **interstation muting threshold** was -70 dB (2.5 µV) and 35.6 dBf (33 µV). Using the **Narrow i.f. bandwidth**, we found the various sensitivity readings to be somewhat poorer than with the **Wide bandwidth**, although there was some evidence that the **Narrow i.f. section** was not correctly adjusted in our test sample.

When we engaged both noise-reduction buttons (without the wide bandwidth setting), there was, as expected, a negligible effect on the mono operation of the tuner. In stereo, however, the effects were dramatic. The **Stereo 50-dB quieting sensitivity** measured 22 dBf (7 µV), an excellent and totally unprecedented figure in our experience with stereo tuners.

The other tuner performance parameters were affected only slightly by the noise-reduction process. The frequency response, flat within 0.5 dB overall from 30 to 15,000 Hz in normal operation, varied about ±1 dB from 30 to 5,000 Hz and was down only 1.5 dB at 15,000 Hz when we used the noise reduction. Clearly, Carver's FM noise reduction does not depend on frequency-response modification. The channel separation, about 34 dB at 30 and 15,000 Hz and 52 dB at 1,000 Hz without signal processing, increased moderately, to 26 dB at 30 Hz, 36 dB at 1,000 Hz, and 19 dB at 15,000 Hz. Apparently, as claimed by Carver, the benefits of his circuit do not involve any significant loss of stereo separation. The audio output level, which is not adjustable, was slightly over 0.5 volt. The IHF 1M-distortion measurements of the TX-11 produced some expected results as well as some unexpected ones. With the signal generator modulated 100 per cent by equal-amplitude 14- and 15-kHz signals, the audio output of the tuner was analyzed up to 20,000 Hz with a spectrum analyzer. In mono, the 1,000-Hz difference component was 75 dB below 100 per cent modulation at 1,000 Hz. No third-order distortion (at 13 or 16 kHz) was detectable down to the **-90-dB measurement floor.**

In stereo, the 1,000-Hz component was increased to -52 dB, and third-order component was -54 dB (relative to the high-frequency-tone levels). As is usual in stereo tuners, there were a number of additional distortion or "beat" products at levels between -70 and -80 dB (these cannot be heard, or at least identified, in a listening test). This was the "normal" part of the test results.

The surprise came when we switched in Carver's special circuit, engaging both buttons. The 1,000-Hz distortion product dropped to -71 dB, the third-order distortion disappeared from the analyzer screen, and the other spurious products dropped to levels between -80 and -90 dB. In other words, the Carver circuit made the various stereo tuner-distortion products (most of which originated before the point where the TX-11's special circuits came into action) almost as low as in mono reception. Apparently these distortions are largely associated with the L - R stereo-subcarrier signal component, which Carver processes and "cleans up" in his circuit.

Most of the other tuner operating parameters are not affected by the signal-processing circuits. The capture ratio was a good 1.38 dB at 45 dBf (100 µV) input, and the AM rejection was an equally good 67 dB at the same signal level. The spurious-image rejection of this tuner was extraordinary, exceeding our measurement limits. Carver rates it at 110 dB; our maximum measurement capability is 106 dB, and there was no sign of an image level at that point.

The **Wide i.f. alternate-channel selectivity** was 44 dB, not a particularly good figure if station interference is a problem, but one which is compatible with good stereo reception. The adjacent-channel selectivity was 51 dB. When we used the **Narrow i.f. bandwidth** of the tuner, the alternate-channel selectivity improved to a good (though not outstanding) 68.5 dB, but the adjacent-channel measurement (for 200-kHz channel spacing) was an extraordinary 37 dB.

We cannot recall having measured that degree of selectivity on an FM tuner in the past. Also, with the **Narrow i.f. bandwidth** came the expected degradation of capture ratio (to 4.5 dB).

The tuner's interstation muting threshold was 30 to 35 dBf (16 to 30 µV), and the lock light operated at 33 dBf (25 µV). The 19-kHz pilot-carrier leakage into the audio outputs was -65 dB, and the power-line hum was a very low -75 dB (all at 180 Hz). Unlike almost all other FM tuners, the Carver TX-11 has no "mono/stereo" switching, either manual or automatic. The entire point of the tuner's special circuits is to make stereo sound as good (in noise level) as mono, so that such a switch becomes unnecessary. To the same end, there is no minimum signal level for stereo operation—the tuner delivers stereo outputs down to less than a 1-microvolt antenna input.

We have saved the matter of the tuner's noise levels for the end of this section, since this is the most striking claim made for the Carver circuit. We made a series of spectrum-analyzer scans of the tuner output under different conditions of signal modulation and control settings. As is pointed out in the "Technical Talk" column, the moment-to-moment action of the Carver circuit is dependent on many factors in the broadcast signal reaching it. These include signal-modulation level as well as carrier level and local multipath effects. Thus, depending on the test conditions one sets up almost any result can be obtained. Carver uses them to prove his claims, while detractors need only measure the tuner under different conditions to "prove" otherwise.

In the "worst case"—with a totally unrealistic test signal of 100 per cent modulation by a 1,000-Hz L - R difference signal—the noise reduction, across essentially the full audio spectrum, was approximately 6 dB. When the signal generator was modulated by an L + R (mono) signal with a pilot carrier present—equivalent to, say, a mono disc being broadcast in "stereo"—the noise reduction was about 20 dB over most of the audio range. Finally, modulating only the left channel (L) yielded 25 dB of noise reduction.

- **Comment.** From the measurements we made, the Carver TX-11 appears to be fully as remarkable as its designer claims it to be. However, the proof of any audio product must lie in the listening experience. The procedure we followed was to connect the TX-11 into our regular listening system, using the poorest antenna we could devise (a simple dipole tacked to the wall and oriented for the noisiest or most distorted reception). In addition to being auditioned by itself, the TX-11 was compared with several other tuners we had on hand, using similar antennas.

With both noise-reduction buttons in their "out" (off) positions, we could pick up a number of unacceptably noisy stereo stations. Pressing in either button always re-

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This is not as hyperbolic a claim as it might seem. In our area, we can pick up some fifty FM signals even with indoor antennas, but as a rule at least a dozen are too noisy for enjoyable listening. With the TX-11 every station we could hear was listenable, and most were fully quieted. Incidentally, the "signal strength" lights on the panel can be misleading, and the markings which imply 10-"dB" intervals between them should not be taken too literally. The first five lights came on at intervals of 2 to 6 dB, but the final one required a huge 40-dB increase over the preceding light (from 70 µV to 7,000 µV). We never saw it light on any received signal. There is also no provision for labeling which preset button belongs to which station, a real problem with sixteen presets.

Our conclusion is that the Carver TX-11 represents a major advance in the reception of weak stereo FM signals. Its noise reduction for stereo signals ranges from appreciable to tremendous. It makes the majority of stereo signals sound virtually as quiet as mono signals, yet it does not dilute the stereo effect. That is what Carver claims for it, and that is what it does.

In the past, I have advised readers who could not find a tuner capable of giving low-noise stereo FM reception on stations they wished to hear to put up a large rhombic or other high-gain antenna, since I knew of no possible way to achieve the same results from any tuner circuits. Now there appears to be a reasonable alternative for cases where such antennas are not feasible. Judging from our laboratory and listening experience, we think that the Carver TX-11 tuner can solve many listeners' problems with noisy signals. If not, we cannot imagine any other that will.

-Julian D. Hirsch

Benchmark Acoustics Model ARU Ambience Access System

BENCHMARK ACOUSTICS calls its Model ARU system "The Other Half" because it is designed to restore the sense of spaciousness, sonic richness, and bass fullness one regularly enjoys in a concert-hall performance but almost never experiences in home music reproduction. Good stereo systems today can cover the entire audible frequency range with minimal distortion and adequate sound-pressure levels, but they cannot compensate for the vast differences between the acoustical character of the concert hall and that of the living room. Since a great part of the sound we hear in a concert hall reaches the ear indirectly—bounced off distant ceilings, walls, balconies, and the like—a means of re-creating the acoustical ambience of the concert hall must be found if home music systems are to give us that "you are there" sense of authenticity in relatively smaller home listening rooms.

Recognizing this, a number of manufacturers have introduced a variety of time-delay and ambience-enhancement accessories in recent years. Most such units have utilized the principle of reverberation synthesis, that is, the creation (by digital or analog methods) of an ambience signal that is reproduced, wholly or largely, by additional speakers in the listening room. The incorporation of multiple time delays to help simulate the random character of natural room reverberation has produced very impressive results from some of these devices.

Benchmark Acoustics has taken a somewhat different approach. The Model ARU (it was originally called the Ambience Recovery Unit, but, while the company liked the initials, somebody decided the name was too medical-sounding) does not try to create the reverberation upon which its effect relies. Rather, it operates on the ambience or "hall sound" that is captured by the microphones during the original performance. Though not effectively reproduced with conventional stereo systems, this natural reverberation information is already stored on discs and tapes. The ARU provides access to and psychoacoustic processing of this otherwise hidden ambience. The system requires at least one and preferably two pairs of additional speakers (for the sides and rear of the listening area) and their corresponding amplifiers.

The main control unit of the Model ARU contains setup controls for balancing the rear and side ambience channels and for comparing the effect of listening to front, side, rear, or all speakers. A ten-segment LED display, labeled CROSS CORRELATION, indicates the relative amount of reverberant information in various recordings, and a null-type control maximizes the system's sensitivity to reverberation. Once set, these controls should rarely need readjustment.

The main unit is connected by a 25-foot cable to a smaller sub-unit used to control both overall system volume and the relative loudness of the rear and side ambience contributions. While the choice of listening position is no more critical when using the ARU system than it is for hearing conventional stereo, different recordings may require slightly different reverberation settings for optimum results. The sub-unit also contains a switch that permits instant comparison between front-only and full-system reproduction, together with a LO FILL control that dramatically increases the perception of the bass power present in the original recording.

Following the manufacturer's instructions, we installed the main control unit between the output of our preamplifier and the input of our power amplifier. The ARU may alternatively be connected via a tape-monitor loop if one's receiver or amplifier does not provide separate access to the power section, but this compromises the theoretical signal-to-noise ratio slightly and necessitates more frequent adjustments when overall volume levels are changed. We then added the rear and side channels' amplifiers and speakers, which are fed from additional output jacks on the Model ARU.

Apart from adding a master volume control, the ARU does not modify the front-channel signals in any way, making it possible, if desired, to incorporate an "image" (as opposed to "ambience") processor—which we later did, with excellent results.

The rear- and side-channel signals, which contain the reverberant information, are delayed by 30 milliseconds (ms) and, in the...
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rear, are fed to the speakers out of phase. The 30-ms delay is not itself intended to recreate the reverberation in the concert hall; that is supplied by the recording itself. Rather, it simply ensures that all the ambient sound to be reproduced will arrive at the ear after the directly radiated sound, late enough not to interfere with localization of the normal stereo image, yet not so much delayed that it could be perceived as a separate echo.

The out-of-phase wiring of the rear channels maximizes the random character of the reverberant sound, and that can be emphasized by mounting the ambience speakers so as to reflect off walls, ceiling, etc. at odd angles. This necessitates some experimentation in tailoring the speech of rear and side speakers at locations that combine optimal sonic advantage with acceptable room decor. The side speakers and amplifier may, according to Benchmark, be omitted in some listening situations, though we found them highly desirable in our room to fill the gap between the rear-originating ambience and the front-oriented stereo image.

In addition to recovering ambience, the rear channels are designed to augment the very low-bass frequencies of the ambience, which then conveys a sense of power much greater than measurements of its actual loudness would suggest. In the Model ARU this calls for more than a simple bass control, for the standard practice in the record industry is to combine left and right deep-bass signals (L + R), making an analog disc easier to track. This would leave no ambience component (L — R) for the Model ARU to detect and augment, so at these very low frequencies special circuitry is employed to restore the original signal condition before the boost provided by the LO-FILL control is applied.

The ARU's main control unit measures 134 x 7 x 2 inches, and the remote sub-unit measures 5¾ x 8 x 2 inches. The ARU Ambience Access System costs $949. To this must be added the cost of one or two sets of extra speakers and amplifiers. While the requirements for these are less demanding than for one's regular system, the overall investment is likely to fall in the $1,500 to $2,000 range.

Laboratory Measurements. Although test measurements certainly do not constitute an adequate basis for evaluating a unit such as the Benchmark ARU, we did check its basic specifications. The frequency response of the front channels, measured at a 1-volt input/output level, deviated by less than 0.1 dB from 10 Hz to 20 kHz and was within 1 dB out to 55 kHz. Gain through the front channel was 6 dB, as specified, and THD measured 0.055 per cent (primarily second-harmonic), better than the rated 0.1 per cent. Referred to 1 volt, the A-weighted noise was —84 dB, slightly less than the —87-dBA specified, but so low that the difference is inconsequential. Maximum input level—a problem with a number of reverberation units—was an excellent 6 volts, and maximum output measured 9.6 volts, far more than any consumer power amplifier requires.

Frequency response from the side and the rear outputs (with the LO-FILL control turned fully down) was flat up to 1.6 kHz, above which it declined gradually to —4 dB at 10 kHz. Benchmark notes in its literature that the treble ambience component in a concert hall gradually drops off, which is true. Above 10 kHz, however, the ARU's treble rolloff is extremely steep, reflecting the presence of an anti-aliasing filter used with the 30-ms delay line. The need for such a filter is common to most ambience systems, and, unless one turns off the main speakers to listen to the reverberant signals only, it passes unnoticed. Side and rear outputs measured 0.28 and 0.29 per cent THD, respectively, meeting their 0.3 per cent specification. Overall available gain was 13 and 15 dB, and maximum input/output levels were 6 and 9.6 volts (side), 4.5 and 3.6 volts (rear), again more than adequate. Rear- and side-channel noise, which has plagued some other reverberation systems, was an excellent —78 dBA. The graph
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shows the action of the LO FILL control, measured as a simple bass boost. As indicated in our description, however, the actual circuit operation is more complex. The nominal input and output impedances (100 kilohms and 220 ohms, respectively) permit proper operation with all typical consumer audio amplifiers.

**Comment.** One of the objections frequently made about ambience-enhancement devices is that they seem to call for endless and often complicated readjustment. Our experience with the Benchmark ARU was quite the contrary; what became our "normal" settings of the controls rarely needed touching up, nor did they impose any listener seating restrictions beyond those of regular stereo. Another criticism often leveled at other units is that while they add a liveliness and spaciousness to the music in an FM broadcast, when the announcer comes on he appears to be speaking from the inside of a steam bath. The Benchmark ARU was free of this sonic aberration as well.

For the majority of classical recordings we listened to, from FM, disc, and tape, the effect of using the Model ARU was essentially to produce a realistic-sounding enlargement of the apparent listening space, an enlargement in which the perceived "air" around the instruments permitted them to blend naturally into a cohesive whole. This is rarely achieved by even the finest competing units. Judicious use of the LO FILL feature increased the palpable quality of bass reproduction of cellos and double basses far more, it would seem, than the actual increase in radiated power would explain. Enhancement of popular and rock music was less consistently successful, for many of these recordings are so closely mixed in the studio that there is little "hall sound" on which the Benchmark ARU can operate. Even here, however, some recordings—especially those made "in concert"—profited from treatment by the ARU.

We have used many ambience restoration/enhancement devices, and we have so far found none that seems to add so little of itself while adding so much to the natural quality of music. The ARU's price, of course, is more than many can bear, but having lived with the system for several weeks we find it hard to bear the thought of doing without it. The Benchmark ARU is the closest we've come to realizing a concert hall at home, and it is well worth serious consideration by any audiophile who can afford it.

—Craig Stark

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BERNARD: Essay No. 3 for Orch. Tjeknavorian, LSO (Chaltont) P5.1034

BEETHOVEN: Symphony No. 5. Giovann, Dallas Symphony Orch.

BARBER: Essay No. 3 for Orch. Tjeknavorian, LSO (Chaltont) P5.1034

PROKOFIEV: Piano Sonata No. 7. Giovann, Dallas Symphony Orch.

JOHANNS, Dallas Symphony Orch.

The upper curves indicate overall record-playback response at the manufacturer's indicated 0-dB recording level using the tapes designated on the graph. In the center are the same measurements recorded at -20 dB relative to the upper curves, a level conventionally used for tape-deck frequency-response measurements. Bottom curves show playback response from calibrated test tapes and indicate performance with prerecorded tapes.

switches set the deck for memory rewind-to-stop or replay. Finally, a three-position switch sets the time-consuming counter function for C-46 (large-hub), C-60, or C-90 cassettes.

The rear panel of the Kyocera D-801 contains the usual line input/output jacks, the Dolby-calibration access controls, and an unswitched, 200-watt a.c. outlet. No provision is made for external timer activation or remote control. Overall, the D-801 measures 18 1/4 inches wide, 5 1/4 inches high, and 12 1/4 inches deep and weighs a little over 17 1/2 pounds. Price: $590.

Laboratory Measurements. The manual for our sample of the Kyocera D-801 did not make any cassette recommendations, but test data included with the sample indicated that the deck had been originally adjusted using TDK D (ferric), TDK SA (CrO₂-type), and TDK MA (metal). While these tapes performed perfectly satisfactorily, we also tried a wide variety of alternatives: TDK UD and XLI-S (helix); Memorex MRX-I, and TDK AD; Maxell UD XL-11 and XL-11S, Sony UCX-S, and TDK SA-X; Maxell MX and Fuji FR. Results were quite similar, and they could be brought even closer— with instruments—by using the FINE BIAS control. As this is impractical for most audiophiles, however, we selected the tapes (TDK AD, TDK SA-X, and Fuji FR) shown in the graph above on the basis of their performance with the factory-set bias position.

Playback-only response, measured with our BASF test tapes (the new IEC standard) was within +0.5 and -2 dB from 31.5 Hz to 18 kHz. An overall record-playback basis, at the usual -20 dB measurement level, response was within +2 dB from 30 Hz to 20 kHz with either TDK SA-X (CrO₂-equivalent) or Fuji FR (metal); with the ferric TDK AD, +2.5-dB response extended out to 18 kHz. Increasing the recording level to 0 dB showed the extremely high treble capacity of Fuji FR metal, with typical high-frequency capacity for the other two tapes. Dolby calibration was exact, and tracking error at -20- and -30-dB levels was within ±1.5 dB using Dolby C and even more accurate with Dolby-B noise reduction.

At an indicated 0-dB recording level the third-harmonic distortion of a 315-Hz tone measured 0.65, 1.5, and 1.1 per cent for TDK AD, TDK SA-X, and Fuji FR, respectively. The recording level had to be increased to +3, +2, and +2.5 dB, respectively, to reach the 3 per cent distortion point used to make signal-to-noise ratio measurements. On an unweighted basis, with no noise reduction in use, S/N's were 53.8, 54.6, and 55.2 dB for the three tapes; adding Dolby-B and CCIR/ARM weighting increased the signal-to-noise-ratios to 65.7, 66.5, and 66.8 dB, respectively. Switching in the more powerful Dolby-C system (CCIR/ARM weighted) produced S/N's of 75.5, 76.3, and 76.6 dB for TDK AD, TDK SA-X, and Fuji FR. This is very good performance.

The wow and flutter of the Kyocera D-801 were extremely low, measuring only 0.022 per cent on the customary w rms basis and 0.034 per cent according to the DIN peak-weighted standard. A line-level input of 0.08, 0.04, and 0.02 volt produced a 0-dB recording level, which corresponded to a line output of 0.52 volt. Microphone sensitivity was 0.42 mV, with overload starting at 45 mV, which is typical though not overly generous. Fast-forward and rewind times for a C-60 cassette were a rather rapid 73 seconds.

Comment. While no two-head deck allows instantaneous A-B comparison between incoming and recorded signals, the D-801 did an excellent job of dubbing from LP's and FM. At recording levels of -10 dB and below it could even record and playback "FM hiss" without audible change in character—a particularly severe test. Dolby-B reduced background tape hiss to the gentlest of whispers, and Dolby-C completed the process at any volume level we found comfortable. Wow and flutter were particularly low. The deck is sturdily built, and, except for the gentle click of the transport solenoids, it is mechanically quiet as well. In all, the Kyocera D-801 represents an auspicious beginning for a company we should be seeing more of in these pages.

—Craig Stark
Because Sony redesigned the car stereo, the auto makers don’t have to redesign the car.

The interior of an automobile is designed with a lot of purposes in mind. Unfortunately, great stereo sound reproduction isn’t one of them.

Fortunately, Sony did more than just tackle this problem. They actually solved it. By designing a stereo system that meets the acoustical challenges inherent in a car.

INTRODUCING THE SONY SOUNDFIELD™ SYSTEM.

As the very name of our system indicates, we started with the acoustical sound field itself by treating the entire front of the car as a stage. The very directional high-end and mid-range frequencies emanate from this stage in an accurate stereo image.

So the highs come across clear and soaring. The midrange, natural and accurate.

The bass frequencies below 100Hz actually are directed from the rear of the car, where the Super Woofers are placed. However, since these frequencies are omnidirectional, they seem to be coming from the proper “stage” location.

The result is richer, fuller, and more dramatic bass.

CONVERT WITH COMPONENTS.

The optimum SoundField System consists of a powerful amplifier (XM-120) driving a pair of 8” Super Woofers (XS-L20), along with a medium-powered amplifier driving the front speakers. This means full-range speakers can be used without risk of modulation distortion.

But you can begin to enjoy the SoundField System simply by adding one of our lower powered amplifiers and the Super Woofers to the car stereo you already have. Then you can slowly build up your system, adding a higher powered amplifier, more speakers, and an equalizer.

A SOUND THAT TAKES A BACKSEAT TO NONE.

Although the technology of the Sony SoundField System is complex, the reason for it is simple.

It will give you high dB levels with very low distortion, extremely precise stereo imaging, and an amazingly broad frequency response. In addition, you’ll be pleasantly surprised at just how easily a SoundField System can be installed in your car.

So come into your local Sony dealer and ask to hear the next generation in autosound systems.

One listen and you’ll know why the auto makers don’t have to redesign the car.

Sony

THE ONE AND ONLY
Marlboro
Menthol


16 mg "tar," 1.1 mg nicotine avg per cigarette, by FTC method.
The big menthol taste from Marlboro Country.
You get a lot to like.
Going on Record

By Christie Barter

Music Editor Barter with Vera Zorina (Mrs. Goddard Lieberson) and M. Richard Asher, Deputy President, CBS Records Division

HOW AUTHENTIC CAN YOU GET?

BRITISH conductor Christopher Hogwood has been engaged in one of the most exciting projects to be undertaken in the recording of classical music in many years. For L'Oiseau-Lyre he is recording all the symphonies of Mozart in performances by his Academy of Ancient Music that reflect the latest findings on eighteenth-century performance practices. The records have been widely hailed not only for the musical revelations they embody, but also for the high order of musicianship Hogwood brings to bear on this extraordinary body of work. Anyone who is reluctant to invest the sizable amount it costs to buy one of Hogwood's Mozart sets should take advantage of the recent release of a single LP that couples his performances of the Linz and Haffner Symphonies (reviewed in this issue), otherwise available only in a four-record box for about forty dollars.

The authentic-performance-practice industry has been around for years, devoting itself chiefly to Baroque and pre-Baroque music. The excitement surrounding the Mozart series on L'Oiseau-Lyre derives in part from the fact that these records extend the concern for authenticity well into the Classical period.

"I've given up crumhorns," Hogwood said on a visit to New York this summer to conduct a couple of performances in the Mostly Mozart Festival. He had just come from conducting Handel's Messiah and Haydn's The Creation at the Hollywood Bowl—not the most congenial home, you might think, for an early-music specialist. "But in both pieces," Hogwood said, "I tried to approximate what those original eighteenth-century audiences heard, using an orchestra of sixty or so for the Haydn and about thirty-five for the Handel with a chorus of seventy—boys and men for Messiah, including eight counterenors [!]. But whether you're talking about one of these big works or one of the early Mozart symphonies, it's a matter of getting the scale and the place right, like placing a jewel in the right setting." And so it is. Hogwood would like to extend his horizons even further, beyond the eighteenth century to Brahms, Schubert, and Mendelssohn. Simply stated, he aims to "put right some of the wrong notes" that persist in performances today of music by these composers. But the ardent striving for authenticity in performance practices, a good thing in itself, must be tempered with the realization that "authenticity" is an elusive goal. There is nothing authentic about the dimensions of Carnegie Hall as applied to much of the music performed there. The cultivation and training of even one castrato these days involves certain risks.

In his excellent, and accessible, new book Baroque Music: Style and Performance (Norton, $10.95 paperback), specialist Robert Donington says, "We should never assume that there can only be one right and authentic way: that never was and is not now the case. Flexibility is of the essence of good baroque interpretation." It is also of the essence of a lot of good music making, as Bach and Mozart would be the first to agree. There is no single right way to perform a piece or standard from the jazz repertoire, nor would we want there to be. It was not until the introduction of the phonograph that a "record" of a performance ever existed, much less the notion of a definitive performance.

THERE are, to be sure, questions of style and the observance of certain conventions that were, and continue to be, part of the creative process itself. The authenticity of a performance depends a good deal more on the style in which a piece of music is played than on the instrument or instruments playing it. And who's to say that we must at all times limit our way of performing a piece to a single style? See Stoddard Lincoln's review in this issue of the Bach trio sonatas performed by James Galway and others for RCA. We would also be poorer if we denied ourselves the anything-goes art of the transcription, which Richard Freed describes in his review, also in this issue, of the Earl Wild recital for Audiofon.

Authenticity in music is a matter of perspective, understanding, and taste combined with sheer guts and conviction. Remember, when you stand gathered around your Uncle Ted's upright piano this Christmas singing carols, you too are engaging in authentic performing practice.

STEREO REVIEW
A unique solution to a serious turntable problem: Technics introduces turntables with the P-Mount system.

Unfortunately, standard turntable design has left too much to chance in terms of cartridge mounting and performance.

Technics turntables with the patented P-Mount tonearm/cartridge system change all that. By providing complete compatibility between tonearm and cartridge to achieve the optimum tonearm resonant frequency, the level at which bass frequency interference is minimized. For the accuracy and fidelity conventional turntables can deny you.

In addition, P-Mount is a plug-in system. You’ll get outstanding performance without struggling to install the cartridge. There’s nothing to wire. There’s no longer a headshell. There’s no more fumbling to calibrate overhang or stylus position. In addition, tracking and anti-skating adjustments have been virtually eliminated.

Just plug any P-Mount cartridge into a Technics straight, low mass, high performance tonearm, and tighten one locking screw. With Technics, your records are now virtually immune to the groove wear, poor channel separation and distortion caused by improper cartridge-to-tonearm mounting.

And Technics standardized all key specifications with manufacturers of P-Mount cartridges: cartridge weight, external dimensions, connector shape, stylus position and more. So you have a wide range of cartridges to choose from.

The P-Mount plug-in cartridge system. Just one of the many advances you’ll find in the new line of sophisticated Technics turntables. From belt-drive to direct-drive to quartz-locked.

The turntable revolution continues at Technics.
Gift List

By Gordon Sell
If you really want to make an audiophile happy at any time of year, give him a few thousand dollars and let him have the pleasure of upgrading his sound equipment. But if you are merely looking for a Christmas gift for an audiophile friend, you should be able to find something that will please him in the array of accessories and musical items under this tree.

But what about you? Your absolute favorite audiophile is most likely yourself. To get your choice of the things you want or need from this selection, you might try dropping hints to friends or family members—but unless they are as involved as you are in good sound reproduction and music, you cannot expect them to respond reliably to mere hints. Well-meaning friends and relatives are likely to present you with a bottle of record-label protection fluid or center-hole polishing compound.

Our advice, therefore, is to buy yourself a few presents from among the recommended items here. And if it seems too selfish to put yourself so prominently on your Christmas shopping list, regard these purchases as gifts for your hi-fi system. Just think of all the pleasure it has given you over the past year.
Gift List

Among the products that are very useful if your system includes a cassette deck are the various tape-care accessories. The Allsop 3 Ultraline wet-cleaning system (1), $15.95, uses a cassette shell containing three gears and an eccentric which rub a fluid-soaked pad back and forth over the heads. It is particularly useful for hard-to-reach heads on portables and car stereos. If you would rather give some of the parts a little more direct attention, there is the Koss Total Cassette Machine Care kit (2), $5.99, with a nonabrasive cleaning cassette, inspection mirror, cleaning tool with replaceable pads, and bottle of cleaning fluid.

Demagnetizing is another critical task that needs to be done every now and then. The TDK HD-01 head-demagnetizer cassette (3), $24.99, does it if you insert it in the tape well and press play for a few seconds. For those who find it annoying to have to wait for a tape to rewind before being able to record or play another tape, a new device of interest is the Maxell EW-340 cassette rewinder, $25.99 (it arrived too late to get into our photo).

If your tape system is in good repair, maybe your phono stylus or records could use some TLC. The Stanton RCP record cleaner (4), $16.95, uses a no-residue cleaning and antistatic fluid and has a brush with bristles that all slope in one direction. The Sound Guard Total Record Care System (5), $21.95, is a two-step record cleaning and preserving kit complete with liquids, spray pumps, and brushes. Another popular way of cleaning records is with a vacuum cleaner—not the push-back-and-forth-on-the-rug variety but a unit designed to suck all the grit and grime out of record grooves. The VPI Industries HW-16 (6), $335, has a normal-sized turntable that rotates the disc, after a cleaning fluid has been applied, past a vacuum-cleaning assembly mounted in the lid that sucks off all the fluid and dirt. The Benjamin-Robins Vac-O-Rec (7), $65.85, while not quite in the same class, has a dry vacuum-cleaning system that is easy to use.

If your stylus needs frequent cleaning, the battery-powered Signet stylus-cleaning vibrator (8), $29.95, has a built-in light and inspection mirror. To help keep your records from getting messed up in the first place, Discwasher's DiscHandler (9), $10, enables the user to slit open the shrink wrap on an album, remove the record from the inner sleeve, and place it on the turntable without ever touching fingers to vinyl.

To ensure that records stay firmly in place during play, and to make it easier to play warped records, Audio-Technica's AT66EX Vacuum Disc Stabilizer (10), $295, uses a hand pump to create a vacuum between the disc and the turntable platter.

If you are into VCR's in a big way, you'll probably appreciate the Nortronics VCR-130 head-cleaning kit (11), $30, which has a nonabrasive tape system and cleaning fluid.

If your hi-fi system has problems that can't be solved by cleaning your stylus, records, or tape heads or by demagnetizing the tape heads, then perhaps you need to check it out with the Stereo Review SRT-14A test record (12), $9.95. It has twenty bands with various test signals to help you evaluate phono cartridge, turntable, and tone-arm performance and loudspeaker output. (Order from Test Record, P.O. Box 278, Pratt Station, Brooklyn, N.Y. 11205; price is $11.95 for orders outside the U.S.) An interesting product that could be used together with the test record's frequency-response sweep signal is the Radio Shack Sound Level Meter (13), $39.95, which uses either A or C weighting. (It's also good for collecting evidence on how noisy your neighbors are.)

If your hi-fi system seems happiest playing a big, dramatic classical work, then the UHQR version of Telarc's digitally mastered Tchaikovsky 1812 Overture (14), $50, with the Cincinnati Symphony under Erich Kunzel, may be just the thing to show it off. "UHQR" stands for Ultra High Quality Recording and refers to records pressed by JVC on extra-thick vinyl. Mobile Fidelity Sound Labs also uses it for some of their releases, and they've put out a fourteen-disc UHQR set of Beatles albums (15), $325, remastered from the original master tapes. The set includes a Geo-Disc cartridge-alignment tool.

Among the products that are very useful is "Ghost in the Machine" by the Police (17), $14.95. The title does not refer to the dbx noise-reduction system needed to play the tape.

Stereo Review readers who want to keep their back issues in good condition and available for easy reference will want storage binders or boxes (20), $7.95 and $6.95 each, respectively. (Order from Stereo Review, P.O. Box 5120, Philadelphia, Pa. 19141. Add $1 per order for postage and handling; write for information about quantity discounts.) If you still need more shopping tips for Christmas, Stereo Review's 1983 Stereo Buyers Guide and Tape Recording and Buying Guide (21), $3.95 and $3.50, respectively, on newsstands, include detailed descriptions of thousands of audio components and accessories. (These can also be ordered from Stereo Review, P.O. Box 640, Holmes, Pa. 19043; add $1 per order for postage and handling charge.)

Most of the other products shown will be available from local hi-fi dealers, record shops, or bookstores. If it is not on display, the dealer will probably order it for you.
Give your friends something they never expected. A whisky that’s exceptionally smooth. Surprisingly light. Seagram’s V.O.
Always be moderate when you drink. But indulge when you give. Because it isn’t just the thought that counts.
To send a gift of Seagram’s V.O., call this toll-free number: 800-528-6148.

Break away from the ordinary. Give an extraordinary gift.
DESIGN INTEGRITY:
The performance that comes closest to our $8000. Separate...
Pure Class-A, Non-NFB PRA-6000 Preamplifier and POA-8000 Amplifiers.

...comes in our $450, PMA-750...
Direct-A Integrated Amp with OdB, Real-Drive, Super-EQ, and Real Time Circuitry.

...and our $399, DRA-400.
Non-Switching A AM/FM Receiver with MC Head Amp and Digital FM.

The pure Class-A and Real Drive operation of the PRA-6000 and POA-8000's safely extracts the full performance potential of transistor technology. The elimination of Negative Feedback (Non-NFB) removes the principal cause of Transient Intermodulation and Time Delay Distortions and represents the very latest in contemporary audio design.

Virtually all of this technology is incorporated into the PMA-750. To keep its transistors operating optimally, yet safely, it employs Direct-A OdB circuitry (capacitorless, non-negative feedback and non-switching). Real-Drive Distortion measured at the speakers is reduced to 1% (50% - 1000 Hz) and Real-Time (passive) tone control. The sound quality is only surpassed by Denon separates costing 13 times as much!

Non-switching A circuitry can also be heard in the DRA-400 AM/FM Receiver, in addition to its built-in Moving Coil Head Amp and Digitally Synthesized FM tuning. With the DRA-400, Denon has made a new standard of listening quality available to those demanding economy and operating convenience in a compact package.

Denon products share more than name alone.

Denon
Imagine what we'll do next.
First Impressions of the Compact Disc System

By David Ranada

It now seems certain that discs and players for the Sony/Philips Compact Disc digital playback system will be generally available in the United States by the middle of next year. No event in recent audio history has been so eagerly awaited. In this field only four developments that have come since Thomas Edison made his first recording rank equally with the digital audio disc in importance—electrical recording, the analog tape recorder, the long-playing 33 1/3-rpm record, and stereo. Besides changing the way music was recorded (and, indeed, the types of music that were recorded), each of these developments has marked a new era in the quality of reproduced sound. The Compact Disc system—digitally encoded, played by laser—has that potential too.

Through the courtesy of Sony and Hitachi, I have been able to audition and experiment with pre-production samples of their first CD players (Sony's CDP-101 and Hitachi's DA-1000) and a small number of CD recordings. I've also participated in an informal laboratory test of the Sony unit at Hirsch-Houck Laboratories. Without much fear of overstatement, I'm prepared to say that the Compact Disc system has the best potential sound.
Digital

Stereo Review

Mastered CD selections had analog discs and tapes, the digitally mastered CD selections did not have. Unlike some of the CD's in Japan, PolyGram plans to inaugurate its CD program in Europe with two hundred titles in March 1983 and to release thirty more per month thereafter. Of course, not all of the same CD's will be released in the United States. The price here is expected to be $18 to $20 per disc.

Sound Quality

I had four CD's to listen to, three PolyGram sampler discs from Europe containing classical and popular selections and a disc of Mozart symphonies specially obtained in Japan. In every case I could hear no sonic problems that stemmed from the CD system. Compressed, equalized, raucous-sounding popular selections recorded on hissy multitrack analog tape machines sounded compressed, equalized, raucous, and hissy. The classical selections that were recorded directly onto a two-channel digital master tape were uncannily quiet, with stupendous dynamic range, wide and smooth frequency response, and rock-steady imaging.

It's easier to cite the sonic problems the Compact Discs did not have. Unlike analog discs and tapes, the digitally mastered CD selections had:

1. no ticks, pops, rumble, or "ocean roar;"
2. no wow or flutter;
3. no modulation noise;
4. no end-of-side distortion;
5. no variation in frequency response with time or signal level;
6. no breakup, no mistracking distortion in loud passages;
7. no sense of strain during heavily modulated music, and
8. no pre-or post-echos.

The analog-mastered CD selections were easy to distinguish from the digitally mastered ones, primarily by means of the higher analog-tape hiss level. Several of the selections said to be digitally mastered had more hiss than the others, probably because of noisy mixers or microphones used in the original recording sessions.

Some of the performances on the CD sampler were also readily available in this country on commercially released analog discs (this category includes the so-called "digital recordings"; see "Nomenclature" box on page 64). When I made direct A/B comparisons between a Compact Disc and its analog-disc equivalents, the CD playback was invariably quieter, a property that was especially noticeable as I increased playback volumes to live levels.

I was surprised, however, at the close match in basic sound quality of equivalent CD and analog-disc recordings. This means two things. First, that analog-disc cutting and pressing can provide an extraordinary match to a digital master tape, provided good analog-disc playback equipment is used. Second, that a master tape that sounds bad is not made any better by having it available in a digital playback system.

In theory, at least, CD players utilizing similar operating principles—like the Sony and Hitachi units—should sound almost exactly the same. And, in fact, these two did sound the same. I was not able to make a direct A/B comparison between them because I couldn't obtain two copies of any of the Compact Discs. I did, however, record the outputs of the two units playing the same CD on a two-track analog open-reel machine running at 15 ips. After much tape splicing to link together short excerpts of both players' sound, immediate "A/B" comparison was possible. Within the resolution and accuracy limits of this experiment, they sounded identical.

This is good news for the average music lover, since if most CD players sound the same, the consumer's choice is simplified to deciding which one has the features he wants at the right price.

This result may also be bad news for CD-player manufacturers (and their advertising agencies), who must find some way to differentiate their products from those of other makers.

Philips, co-developer of the CD system, has described a novel digital-to-analog conversion process utilizing specialized signal-processing techniques. This system, when and if it becomes available, stands the best chance of sounding "more different" from the Sony and Hitachi units.

The Record Itself

A Compact Disc is a small, shiny, entrancing object. Just 12 centimeters in diameter (a little less than 4 3/4 inches) and 1.2 millimeters thick (about 1/16 inch), it fits conveniently in the open palm of one hand. The CD shown on
The laser beam in a Compact Disc player is aimed at a spiral track of "pits" impressed on the signal surface. (They are manufactured as "pits," but the laser scans them from the other side and sees them as "bumps.") These pits are incredibly tiny, about 0.5 micrometer wide, and they vary in length, depending on the signal, from 0.833 to 3.56 micrometers. (A micrometer, or micron, is abbreviated μm and is approximately equal to 1/25,000 of an inch.) The successive rotations of the spiral are only 1.6 μm apart; sixty CD tracks would fit in the average analog-disc groove. The "information density" of a Compact Disc is from thirty to one hundred times higher than that of a conventional analog disc.

A CD track runs from the inside of the disc to the outside. As seen from the label side, the disc turns clockwise, but from the laser's "viewpoint" it spins counterclockwise. Its spin rate slows from about 500 rpm to about 200 rpm as the laser scans outward. This slowing keeps the track passing over the laser at a constant rate, since the digital-audio track contains a constant amount of information per unit of its length. With analog discs, which spin at a constant rate, the information content per unit of traveled groove increases toward the inside of the record, placing stringent de-

"I'm prepared to say that the Compact Disc system has the best potential sound quality yet to be offered to the home consumer."

The flat, plastic folding box the disc comes in contains a mounting hub that supports the disc so that it doesn't touch any other part of the package. The box measures 57/16 x 47/8 x 3/8 inches. It is slightly more unwieldy than a typical tape-cassette box.

Perhaps the most surprising aspect of the disc, aside from its size, is the playing surface. First of all, there is only one—the other side is covered with the label. The playable side will hold more than 60 minutes of nonstop music, and there are hopes of extending the playing time to around 75 minutes. As a Sony engineer told me, one of the informal requirements for the system was that one disc had to be able to hold Beethoven's Ninth Symphony, which runs slightly over an hour. This is a rare and laudable instance of old art influencing new technology.

The recorded information is carried on an aluminized "signal surface" that lies within the disc. It is protected on the unplayable side by a thin layer of plastic and the disc's label, on the other by a much thicker layer of plastic. This thick layer not only protects the signal surface from scratches, chemicals, and other damage but also reduces the deleterious effects of such damage by keeping it relatively distant from the signal surface inside. To the scanning laser focused on the imbedded signal, minor surface defects are out of focus and have little effect on the quality of the scanned signal.

The cover of this issue is almost exactly full-sized. A CD weighs about 1 ounce and is stiffer than a typical 12-inch analog disc. The CD center hole is 15 millimeters across (about 5/8 inch), a diameter that seems to have been chosen to let a CD fit easily on a finger. Although holding the disc surfaces with one's fingers causes no damage, the easiest way I found to hold a CD was either slipping it on a finger or gripping the center hole and disc edge with one hand. There is no need to touch the disc surface, even for someone with small hands.

The laser's "viewpoint" of the CD channel is about five inches from the center of the disc. The channel is free of dust, scratches, cracks, and other surface defects by the mechanism of a suspended stylus aimed at the spiral track of "pits." The "channels" are incredibly tiny, each one sixteenths of a micron wide, and they vary in length, depending on the signal, from 0.833 to 3.56 micrometers. The "information density" of a Compact Disc is from thirty to one hundred times higher than that of a conventional analog disc.

As yet unutilized are six additional channels of digital subsides. These might eventually be used to carry text, lyrics, librettos, and other graphic or verbal information for display on a TV or computer printout. (For you personal-computer hackers, the R-W subcode channels will each support a maximum data rate of 7.35 kilobits per second. If this rate is completely utilized, a large amount of text can be put on a 1-hour CD: about four million words, assuming no data redundancy is used for error correction.)

Using a CD Player

Player operation, depending on the model, is very much a cross between using a normal analog turntable, a computer-controlled tape deck, and a video-cassette recorder with advanced picture-search capabilities. The Sony CDP-101 and Hitachi DA-1000 have several features in common that lead me to make that statement.

Both units have cueing facilities un-
Digital

matched by any previously available audio medium. At the push of a few buttons a user may "access" any selection ("band" or "cut" in analog-disc terminology) on a Compact Disc. The whole operation takes no more than five to eight seconds regardless of the number of selections on the disc or what is playing when you change selections. The cueing is exact; the audio outputs are muted until the selection starts. Pausing while playing is no problem, and, unlike analog-disc players with their relatively inexact tone-arm cueing mechanisms, releasing a CD player from pause starts the music where it left off.

Skipping forward or backward to the next or a previous selection is also possible with the Sony and Hitachi front-panel controls. The players have slightly different auto-repeat functions. The Sony unit allows repetition of all or any part of a disc; the Hitachi seems to allow repetition only of whole selections or sequences of selections.

Both players display elapsed time in minutes and seconds. The timing starts over with each new selection, but front-panel buttons allow momentary display of the elapsed time from the beginning of the disc. The selection number is also displayed, changing as the recorded sections pass by.

The players both have headphone outputs, Sony's having an independent level control. Their rear-panel output phone jacks are driven at a standard audio-component line level to feed into a stereo system's auxiliary inputs. Hitachi's headphone output is controlled by a pushbutton-volume control, which also affects the level of one pair of its four output jacks.

The description "compact" applies to both the Sony and Hitachi players. The former measures 12¾" x 13½" x 4 inches and weighs 15 pounds. The Hitachi's dimensions are 9 x 12¾" x 5¾ inches, and it weighs 13 pounds. In bulk these players are smaller than most analog turntables or cassette decks, though they weigh about as much.

To load a disc into the Sony CDP-101, one presses the OPEN/CLOSE button on its front panel. A drawer then slides forward to receive the CD. The CD is placed face down, label up in the tray, the OPEN/CLOSE button is pushed again, and the tray slides back into the player. With the Hitachi DA-1000, pressing its OPEN/CLOSE button causes a door in the center of the unit's front panel to swing down. The disc is then inserted into a slot in the door, when the OPEN/CLOSE button is pressed again, the door closes and holds the disc ready for playing.

The Sony player has two features the Hitachi player does not: fast and slow backward and forward scanning. These controls are similar to the fast-forward and rewind functions on an analog tape deck, but using them to scan a Compact Disc does not produce a high-pitched squeal as on a tape deck. Instead, you hear brief, low-level snippets of the passing music at normal pitch but greatly increased tempo. These search controls, together with Sony's pause control, allow very rapid cueing of individual musical phrases if desired. The Sony unit comes with an infrared remote-control unit duplicating all the front-panel functions except the OPEN/CLOSE button. The remote control also allows direct entry of a selection number on a numerical keyboard.

As if to compensate, the Hitachi DA-1000 has an interesting feature the Sony does not: programmable playing sequence. If you want to hear the selections on a disc in scrambled order, possibly repeating some too, you can enter the sequence on the Hitachi's front-panel controls.

From the variety of different features on just these two units you can see the potential the CD system has for a myriad of convenience features. Each year's CD-player models will probably have a different array of features, as has happened with videocassette recorders. So if you can't find a feature you want on the initial offerings, hang around.

A Look Inside

Incredible as the discs themselves are, I am even more impressed by the technological achievement represented by the Compact Disc players. These machines must extract and transform all that digital information into usable form. A look at the inner works of two CD players has convinced me that, electronically speaking, these are probably the most sophisticated and complex devices ever made available to the audiophile.

That sophistication starts with the CD equivalent of a phonograph stylus:

"... electronically speaking, these are probably the most sophisticated and complex devices ever made available to the audiophile."

NOMENCLATURE

The commercial introduction of the Compact Disc system will expose a problem only slightly hidden since the release of digitally mastered recordings began about five years ago. What do you call those 12-centimeter silver discs? I'd say: Compact Discs. But many in the audio industry seem to refer to such objects as DADs (digital audio discs). While that is certainly correct, I prefer to use the term DAD for all disc-based digital-playback-only media. This would include the Sony/Philips Compact Disc and JVC's still-to-be-announced AHDP (Audio High Density) grooveless digital discs. Where the 3 x 5-inch digital-audio cards of Soundstream's yet-to-be-demonstrated AudioFax system fit in is yet another question.

In terms of usage, the phrase "CD disc" is redundant, "CD record" only slightly less so. "CD recording" is perhaps the best description of the "software." (In computer lingo, the correct term for all program-carrying physical objects is "firmware," "software" being reserved for the programs themselves.)

The nomenclature problem becomes more acute when one contemplates how to distinguish between a program available on a CD from the same material on an "analog" pressing (as will happen to most "software" during the early years of the CD system). The other side of the same question is what to call a CD containing material from an analog master tape. These combinations result:

1. a CD digital recording (a digital disc derived from a digital master);
2. a CD analog recording (a digital disc derived from an analog master);
3. a hybrid recording (an analog disc derived from a digital master tape, unfortunately now called a "digital recording" by the media and the public);
4. an analog disc (an analog pressing of an analog master tape).

How this mess will be sorted out only time will tell. If the proponents of the Compact Disc have their fondest wishes fulfilled, only the CD categories will eventually remain, for the analog disc will have passed by then into technological oblivion.
LAB TESTING A CD PLAYER

It was with considerable anticipation that I bundled up the Sony CDP-101 player and took it to Hirsch-Houck Labs for its first independent lab test (I had already had to return the Hitachi unit). Sony lent us, for a very short period, a copy of the same test record used by CD-player manufacturers to verify the performance of their products. As with most other aspects of the CD system, the testing pointed out the unusual nature of digital audio.

First, the test disc was totally different in manufacture from conventional analog test records, even aside from its being a Compact Disc. The signals recorded on the test disc we used (Type YEDS 2, Serial No. 179) were not taken from a collection of laboratory oscillators or signal generators. Instead, they were generated by a digital computer programmed to produce sine waves, square waves, 1-MHz distortion test signals, and the like. The frequency of the recorded test signals is 99,999999 per cent, which means that any measurements of a CD player which do not meet the theoretical limits are characteristic of the player, not the test disc. As it turned out, the limitations we encountered during the test came from the test equipment.

Frequency Response. The test disc did not have a swept tone over the whole of the audio band (which we would have preferred) but only selected frequencies from 100 to 20,000 Hz. Both channels were within ±0.05 dB of the standard 1-kHz recording level from 100 to 1,000 Hz. Much of this variation might be due to the limited accuracy of the test equipment. From 7,000 Hz on up, the frequency response of both channels slowly rose, to about +0.5 dB at 20,000 Hz. In all, the player exhibited a response that would do any amplifier proud, let alone a playback transducing system.

Distortion and Noise. These two characteristics are intimately related in digital audio. What sounds like noise in digital-audio playback and what looks like noise on a spectrum-analyzer plot may actually arise from distortion processes in the digital-to-analog converters rather than from the quantum-mechanical phenomena that cause noise in analog-only systems. The spectrum-analyzer trace in Figure 1 shows the “noise floor” of the player at about ~90 dB relative to the full-scale 1-kHz tone (the second peak from the left). Just visible toward the center of the picture is the player’s major distortion component (at 2,000 Hz), with a level of ~87 dB. This corresponds to a total-harmonic-distortion level of about 0.0045 per cent. There has been considerable speculation that the “sound of digital” stems from the rise of distortion percentages as the level of the recorded signal falls. The test disc conveniently provided a series of 1,000-Hz tones recorded at successively lower levels, and we used these to check out this theory. Sure enough, as the recorded level of the 1,000-Hz tone fell, the distortion components rose slightly above the noise—different components according to the level of the signal. However, none of the distortion components were ever higher than ~82 dB (which is why we didn’t show the 2-kHz distortion plot). At recorded signal levels of ~80 and ~90 dB, the distortion was lost in noise. While distortion only 22 dB below its fundamental signal is high (7.9 per cent), remember that the original signal in this “worst-case” situation is already 60 dB below maximum output level. At any normal playback level, even if you could hear the original signal the distortion components 22 dB below it would probably be masked by room noise.

There was a distortion component at ~82 dB that intermittently appeared at around 15,000 Hz as the 1,000-Hz tone fell in level. Julian Hirsch suggested that it was only an artifact of the spectrum analyzer’s operation. It may also, however, have been added distortion caused by the error-concealment circuits performing linear interpolation on not-so-linear portions of the 1,000-Hz sine wave.

Channel separation at 20 kHz is at least 90 dB. At 20 kHz, as Figure 2 shows, it was still an incredible 78 dB. In any case, one channel’s signal should never show up in the other’s because a CD player has two separate streams of digital data, one for each channel. The decrease in separation at 20 kHz is probably due to capacitive coupling in the player’s analog output circuitry. Such great channel isolation means that it should be possible—though, I fear, rather unlikely—to put two separate mono recordings simultaneously on a CD. Toscanini’s recordings of all nine Beethoven symphonies could be made to fit on only three Compact Discs!

Square Waves. The square-wave response of digital-audio systems has also been a matter of some controversy. Most digital-audio systems exhibit square-wave “ringing.” This comes from the ultra-sharp-cutoff filters used in recording to eliminate aliasing distortion and in playback to restore flat frequency response and filter out ultrasonic frequencies. With 1-kHz square waves the CDP-101 showed ringing at the expected frequency (the filter-cutoff frequency of about 20 kHz). Overshoot was about 10 to 12 per cent, and the ringing was well but not completely damped. Whether this effect is generally audible we could not say, since the 20-kHz component was too low in level not to be masked by the harmonics of the square wave—and 20 kHz is hard to hear in any event.

While we were limited in time and choice of test signals, the results of this informal test show that the Compact Disc system lives up to its promise technically. The results also show, to paraphrase Julian Hirsch, that if all CD equipment performs as well as the Sony CDP-101, equipment reviewers might be put out of business.
Digital

a solid-state laser. Similar in operating principle and construction to a light-emitting diode (LED), the laser used in a CD player emits a small, invisible beam of light in the near-infrared (wavelength = 780 nanometers). At the outer surface of the disc the beam is about 0.8 millimeter wide. By the time the beam reaches the signal surface, the combination of player optics and the light-bending properties of the disc's thick plastic base have focused the spot down to a 1.7-µm diameter.

This tiny spot of light must follow the spinning track of pits without benefit of a guiding groove. In both the Sony and Hitachi playing mechanisms, the coarse positioning of the laser beam is accomplished by a motor-driven assembly that carries the complete laser/optics portion of the player. Fine beam positioning is controlled by two small magnetic coils. Working like loudspeaker voice coils, they position the objective lens that aims the beam; one coil keeps the beam centered over the center of the pit track, and the other coil keeps the beam focused on the signal surface.

The exact process by which the laser tracking/focusing system operates is a fascinating study in electromechanical servo systems. Much of the circuit-board space in the two CD players examined here is devoted to the laser tracking controls. The pit-tracking servo utilizes two auxiliary laser beams derived from the main beam and works to balance their reflections from the signal surface. The focusing servo monitors the shape of the reflected main beam and moves the objective lens until the reflected beam makes a circular spot on the player's "pickup," a light-sensitive device called a photodiode.

When the laser beam falls on a flat portion of the signal surface, it is reflected directly back into the optical system and onto the photodiode. If, however, the beam hits a passing pit (seen by the beam as a bump, remember), the beam is scattered and little light returns to the photodiode. These invisible "light" and "dark" flashes, corresponding to the presence and length of the pits scanned by the laser beam, generate in the photodiode circuits the "on" and "off," "one" and "zero" pulses of the recorded digital signal. This is a CD player's transduction stage.

From the output of the photodiode until just before the final audio outputs of the player the signal path becomes very complicated. You can get a feeling for the complexity of the operation from a bald statement of what must be done: a digital bit stream with a data rate of 4.3218 megabits per second must be converted to two "analog" audio signals of high quality.

First the photodiode signal is amplified. Then "clock regeneration" circuits lock onto the bit stream in order to synchronize the rotation of the disc with the crystal-controlled digital signal-processing circuitry. The next step of the process is "demodulation" of the bit stream; digital circuits convert the data from one digital code to another (from 14-bit to 8-bit "symbols").

In the demodulation process, the sub-channel signals discussed above are isolated and sent to the player's control and display circuitry. What's left is the encoded digital-audio signal together with its error-detection and correction data. Data errors caused by disc damage are then found and, if possible, corrected (see box on page 70). If the errors from a damaged disc are too numerous for exact correction, error-concealment circuits interpolate approximations of the missing data. These "cleaned-up" binary numbers are then demultiplexed to separate the left- and right-channel information. This is the final all-digital step.

Digital-to-analog converters then receive the digital information for each channel and convert it into varying audio voltages. These signals are separately filtered to remove ultrasonic frequencies and fed to the player's audio-output jacks. Music at last!

But no short summary can do justice to the circuits involved. The multitude of different signals coursing through the digital-decoding and servo-tracking circuits would be daunting to experienced computer designers. In fact, the Sony and Hitachi players contain computers in the form of specially programmed microprocessors. Directed by the front-panel controls, these microprocessors intercede between the human operator and the maze of signals within the player. Considering what goes on there, the astounding thing is not that CD players work so well, but that they work at all.

Compatibility

Given the wide dynamic range possible with the CD system, concern has switched to take on Compact Discs."

"Surely any home system that is now capable of handling CX- and dbx-encoded discs will be able to
If you're familiar with Maxell UD-XL tapes you probably find it hard to believe that any tape could give you higher performance.

But hearing is believing. And while we can't play our newest tape for you right here on this page, we can replay the comments of Audio Video Magazine.

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How does high bias XL II-S and our normal bias equivalent XL I-S give you such high performance? By engineering smaller and more uniformly shaped epitaxial oxide particles we were able to pack more into a given area of tape. Resulting in a higher maximum output level, improved signal-to-noise ratio and better frequency response.

To keep the particles from rubbing off on your recording heads Maxell XL S also has an improved binder system. And to eliminate tape deformation, XL S comes with our unique Quin-Lok Clamp/Hub Assembly to hold the leader firmly in place.

Of course, Maxell XL II-S and XL I-S carry a little higher price tag than lesser cassettes.

We think you'll find it a small price to pay for higher performance.
Listen to the difference. The difference titanium carbide domes and pure spruce pulp woofers make in Yamaha's new NS-T speakers. Through a special chemical vacuum deposition process, Yamaha has succeeded in creating light, yet rigid titanium carbide speaker domes for unheard-of transient response, extended frequency response, and ideal directional characteristics.

Pure spruce pulp was chosen for the woofers to provide a warmer, more natural response in the low frequency range. After all, spruce is the wood chosen for the finest Yamaha piano soundboards.

All this advanced chemistry and acoustic science results in richly detailed, warm, natural-sounding speakers. At a price you don't have to be rich to afford. Compare other speakers costing the same or more than Yamaha's NS-T's. Your ears will tell you the chemistry is right.

For more information, write Yamaha Electronics Corporation, USA, P.O. Box 6660, Buena Park, CA 90622.

For the music in you.

YAMAHA
Digital

been expressed about the compatibility of the system with typical home stereo components. Stereo Review has already published an article on this subject ("Superdiscs," December 1980) in which it was generally concluded that most home systems with reasonable output power and reasonably efficient speakers will be compatible with the output from a CD player. Surely any home system that is now capable of handling CX- and dbx-encoded discs will be able to take on Compact Discs.

The wider dynamic range of CD playback did not encourage me to play music any louder than I play analog-disc recordings. Instead, I found that setting the same volume for digital- and analog-disc playback uses the low-noise properties of the CD medium to best advantage. If you are concerned about having enough amplifier power for the high peak levels a CD can generate, take a look at your amplifier's dynamic-headroom rating. This specification gives an idea of an amplifier's short-term peak-output ability. A high dynamic headroom (above 2.5 dB) will greatly reduce the chance of overload with CD playback.

Most conventional loudspeakers should have no trouble absorbing the high peak levels generated in CD playback, provided the system is played no louder than with analog discs. Of course, you can always use headphones, plugged directly into a CD player's headphone outputs (which all manufacturers should provide). Headphones will also protect your neighbors, if not your ears, if you do yield to the perfectly natural inclination to turn the volume up to louder-than-life levels.

Problems

Compatibility with present-day audio systems is actually the least significant obstacle to the success of the Compact Disc. The true problems with the Compact Disc system, all of which can greatly influence the record-buying habits of the audiophile or music lover, are subject to very little control by the consumer.

It is reported that the manufacturing costs of Compact Discs are very high, at least three times those of equivalent analog pressings. A CD mastering system costs about $1.8 million, not including the necessary digital playback equipment. A specialized CD manufacturing facility can cost many times that amount. These factors will certainly make it hard to keep CD costs down, but if the prices of CD's cannot be kept within the levels currently projected—15 to 20 per cent higher than today's analog "audiophile" pressings—widespread adoption of the system will be slowed.

Software availability will probably be a significant problem for at least the first few months of the system's commercial life. At present there are only two CD pressing plants in operation, CBS/Sony's in Japan and PolyGram's in Germany. Two more are scheduled to go "on-line" soon, Denon's and Toshiba/EMI's, both in Japan. However, the United States consumes more than a third of the world's recordings, and at press time there were no announced plans by any U.S. company to start a U.S. pressing operation. Depending on the system's popularity in this country, the problem of software availability will range from severe to critical, at least at the start.

One of the reasons CD costs are higher than those of analog discs is that manufacturing problems have been keeping down the "yield" of usable discs. The CD's larger brother, the LaserVision videodisc, has been scandalously difficult to manufacture. CD's are smaller and have the advantage of a very comprehensive error correction and concealment system, but neither PolyGram nor Sony has released any PolyGram samplers. But they did not.

Digital recording combined with digital playback creates a sound-reproduction chain that is unequaled in clarity. I hope recording producers and recording engineers will quickly learn to produce master tapes made with the intent of capturing a realistic sound quality in order to realize the full sonic potential of the CD system.

The Future

With these problems in mind, and with the schedule for U.S. introduction of CD players and software not established beyond being sometime in the first half of next year, it is too early to speculate on the system's ultimate success in the audio marketplace. By its

"The main musical problem with the Compact Disc is not its sound quality... [but] the large number of fine recordings of the recent past that will never make it to the new medium."
Dash mounting. (The mechanisms seem to be stable enough; fairly violent shaking of the players while they were playing caused no audible trouble.)

The IC's used in portable and car CD players will have to draw less current than those in the home-use models seem to do. The analog laser-tracking circuits will also have to be simplified or turned into easily integrated digital form before such uses for a CD player become practical. All these considerations pale in comparison with the question of whether 90 decibels of dynamic range is useful, or even desirable, in a car. This area, however, is one in which digital signal processing can make an important contribution by way of programmable compressors, and Sony is known to be working on such devices.

Digital signal processing, operating directly on a CD player's digital signals before they are turned into audio outputs, may eventually substitute computer programs for a home stereo's volume, tone, balance, equalization, imaging, and ambience controls. Digital loudspeakers and microphones are also not impossible, so there might ultimately be an all-digital signal chain from recording-studio microphones to home listening-room speakers.

Less speculative are the control advancements possible with the CD system. The precise cueing, programmable sequencing capability, and the predictable, repeatable output levels of CD players make them ideal for radio-station use, though few stations in the world can (or want to) broadcast a signal close to the quality possible from a CD player. The front-panel readouts of what they should be, a process called "error concealment." This process, unlike error correction, can have audible side effects, for the estimated numbers are not necessarily the same as the originals, but as long as error concealment is used relatively infrequently there should be no audible problems.

If the maximum burst-error length that can be concealed (as opposed to corrected) has been exceeded (about 12,000 bits, or 8.5 milliseconds of pit track), a CD player stands a good chance of either emitting very strange sounds or muting altogether. And that is just what happened in my listening tests. I made a very thin wedge of laser-opaque adhesive tape and affixed it to the surface of a CD, pointing the laser beam at it. As the disc played on, there were audible jumps in the signal, as if a very bad splice had passed by—which, in effect, is what had happened. Eventually, both players muted the widening tape wedge degraded the signal further. Trying to play the widest portion of the wedge caused the players to go into their ultimate rejection modes. The Sony player stopped and its disc drawer opened, encouraging me to remove the offending rec

TO ERR IS DIGITAL?

T
two factors determine the sound quality possible from a digital-audio system: (1) the accuracy and resolution of the analog-to-digital and digital-to-analog converters at either end of the recording chain, and (2) the preservation of the numerical audio data through the various recording, duplicating, or transcription processes. A significant amount of a CD player's integrated circuitry is devoted to the latter task.

As the "bit stream" emerges from the scanning-laser circuitry, the "ones" and "zeros" bearing the digital-audio information are not all correct. Some ones have been changed to zeros, and vice versa, by damage to the CD's outer or signal surfaces. To eliminate possibly horrible-sounding results from such errors being interpreted as "good" data, a CD carries redundant information for error detection and correction.

This extra information is used by a CD player to decide which bits are incorrect as they come off the disc and to restore the erroneous bits exactly to their rightful values. But the limited (25 per cent) redundancy of the CD error-correction system cannot cope with an unlimited number of errors. The main reason error correction is used is to compensate for minor disc damage (scratches, fingerprints) and to relieve CD pressing plants of the nearly impossible task of making "bit-perfect" CD's.

Sometimes the number of bits known to be in error will exceed the system's ability to correct them. A burst error (sequence of wrong bits) up to about 3,500 bits long can be exactly corrected in the CD system. This corresponds to a total loss of data from 2.5 milliseconds of pit track. For longer burst errors, specialized computer circuitry takes over and replaces the incorrect bits with calculated estimates of the analog laser-tracking. As the disc played on, there were audible jumps in the signal, as if a very bad splice had passed by—which, in effect, is what had happened. Eventually both players muted the widening tape wedge degraded the signal further. Trying to play the widest portion of the wedge caused the players to go into their ultimate rejection modes. The Sony player stopped and its disc drawer opened, encouraging me to remove the offending rec

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As a final check on the error-correction and error-concealment circuitry, I poked around on a circuit board of the Sony CDP-101 with an oscilloscope, looking for a certain IC chip whose signals would tell me how often error concealment was occurring. I eventually found the chip, thanks to papers that Sony and Philips have presented at Audio Engineering Society conventions, and I monitored its output on the scope. I watched for the telltale digital pulses that indicated failure of the error-correction circuits and the need for error concealment. With a brand-new record, unscathed as far as I could see, the apparent concealment rate was far in excess of the Sony/Philips estimate, which is once in 5,000 years of playback (with a typical "symbol error rate of 10^-8"). I saw error-concealment indications averaging a dozen per minute in frequency. Sometimes, with a very scratched disc, there would be a short burst of many concealment indications, showing severe disc damage. Except in such cases, I could attribute nothing I heard to the operation of the correction or concealment circuits. Though the concealment rate seems greater than the Sony/Philips prediction, it is far lower than I had expected and should be adequate for all conceivable CD applications.

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Finale

That's all in the future. Within a few months the audiophile and music lover will be able to buy, at high but not unreasonable prices, a playback system and recordings that will together provide audio quality superior to anything available at present from any consumer-level system. The Sony/Philips Compact Disc system does indeed inaugurate a new era in the history of sound reproduction, the age of home digital playback. In the CD system the technological arts have given us a masterpiece of carefully considered engineering. I hope the Compact Disc's potential will be realized in a way that benefits the art form for which it was developed: music.
We travel back. Blue Angel’s president drove to the airport, bought a ticket and flew to Germany. After negotiations, the deal was hammered out. Blue Angel gets what nobody else gets. Another shot in the arm of the prestigious, the Who Collection. Following the rather generous rules of supply and demand, Pochio International raised their price to a good deal, so we have to ask $59.99 for the 11 LPs we told. We, of course, never ordered the heavy little boxing container at the bottom of this ad.

What’s to be done now? If you always wanted that famous fervent collector’s item, then get it now while we have it! We already have a long list of orders for the Who set and we honestly doubt whether we will get yet another shornom of this phalanx of the pressing eager. Cut off from the free market, a collector will probably try his best to buy the heavy container from us. We won’t get a better price from anyone than you do, but it’s much less than they used to pay. So read the description of the Who Collection and call 1-800-446-7964 or dial toll free number 1-909-468-1604 or write the handy little coupon at the bottom of this ad.

The Story of Tommy, in collaboration with Richard Barns, Pete Townsend compiled every thing about writing Tommy about filming Tommy and about the people who saw the world’s first rock-pops. The book is full of the torn speechlines, in color, photographs, newspaper clippings and memoirs. This is the most complete documentation of Tommy we have ever seen. Whoever likes the rock-'n'-roll needs this book. Softcover. 9.5 x 15 cm. 304 Pages. Only $19.90 (1-800-446-7964).
The Kyocera D-801
Cassette Deck with 3 motors
and a direct driven dual capstan...

With only 0.02% WRMS wow and flutter.

If you think 3 motors impress you, think o' what they can do for tape performance. One drives our dual capstans to insure constant and highly accurate speed with remarkable low wow & flutter of 0.02%. A second motor drives both the take-up and feed reels while the third motor gently positions the record/playback head against the tape surface. An innovative approach resulting in accurate head-to-tape positioning and optimal head azimuth alignment.

But motors alone do not insure top performance. That's where both Dolby* B and C noise reduction circuits come in, along with a Sendust alloy tape head, electromagnetic braking on both take-up and feed reels, selectable bias and equalization for all types of tapes; 30-20,000 Hz response range; full LED function indication; feather-touch controls; APMR for automatic program search; auto stop, auto repeat, memory and a full bank of operational controls concealed behind a flip-down access panel; plus the convenience of a 4-digit LED electronic timer/counter for precise elapsed time, remaining time, stopwatch and memory stop and registering time and/or counter reference of recorded programs... and more.

But our most impressive feature awaits at your local audio retailer... a demonstration of the D-801...it's just one of a very impressive list of distinguished audio components and systems from Kyocera...where the future is now!

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Marty Stuart’s Debut: An All-Acoustic, All-Star Album with Aesthetic Heft

All-Star albums that give Doc Watson a large role usually succeed, and Marty Stuart, a young sideman in the Johnny Cash band, did that and more for his debut album. He got his boss, Big John, to sing a couple of numbers, Merle Watson to play some slide guitar, Earl Scruggs on banjo on a couple of tunes, a good supporting cast, and a good mixture of old and new songs—and he got himself a success, aesthetically, with some heft to it. “Busy Bee Cafe,” on Sugar Hill, is an all-acoustic but modern-sounding, traditional but fresh new album that has as one of its asides a major flat-picking explosion.

Doc Watson, who plays or shares the
Blues; Busy Bee Cafe; Down the Road; Hey Porter; Boogie for Clarence; Get in Line Brother; Soldiers Joy; Long Train Gone.

MARTY STUART: Busy Bee Cafe. Marty Stuart (vocals, mandolin, guitar); Doc Watson (guitar, harmonica, vocals); Johnny Cash (vocals, guitar); Earl Scruggs (banjo); Merle Watson (guitar, slide guitar), T. Michael Coleman (bass); other musicians. One More Ride; Blue Railroad Train; I Don't Love Nobody; Watson's
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Hear what you’ve been missing.
"King of Thule": the duet with Faust and the Romance at the beginning of Part Four are livelier. Her big problem is the language. In fact, the entire cast is guilty of that mealy-mouthed mumble that passes for international operatic French these days. Truth to tell, this is not a very French Damnation, but it more than makes up for its shortcomings in this domain by its excellence in every other (Berlioz was always more successful abroad than at home anyhow). Not the least of its triumphs is the dazzling, full-color digital recording, which captures every thrill and chill to perfection.

By the way, has anybody ever noted that in Berlioz's version of this story Faust quite knowingly and intentionally sacrifices himself to eternal damnation to save Marguerite? "Take me, not her," he says, and Mephistopheles agrees that he's the better catch. Heterodox theology, but great music drama! —Eric Salzman

BERLIOZ: La Damnation de Faust. Kenneth Riegel (tenor), Faust; Jose van Dam (bass), Mephistopheles; Frederica von Stade (mezzo-soprano), Marguerite; Malcolm King (bass), Brander Glen Ellyn Children's Chorus; Chicago Symphony Chorus and Orchestra, Sir Georg Solti cond. LONDON O LDR 73007 three discs $38.94, © LDRS 73007 $38.94.

Aretha Franklin's Remarkable "Jump to It": Glamour and Magic from The Queen of Soul

Aretha Franklin has never released a bad album in her twenty-two years as a major artist; even her relatively mediocre sets crackle with an exciting vocal intensity. In the late Seventies, however, she seemed to have gone into a decline, and some of us who had followed her career since she was a chubby teenager feared that she might have lost her magic along with a lot of weight in her quest for glamour.

But since she signed with Arista Records in 1980, Franklin has paced herself more slowly, and her first two fine albums on that label suggested that she had moved into a new and quite remarkable phase of development. Last year's "Love All the Hurt Away" (AL 9552) was a STEREO REVIEW Record of the Year award winner, and there could be no more suitable sequel to it than her newest album, "Jump to It."

The vocal pyrotechnics are a bit restrained on this third Arista release. Franklin achieves her effects more subtly here, with no straining. She plays freely with phrasing and allows herself a few perfectly placed mini-raps edged with a refreshing humor ("Just tell her to come see Sugar Ray Aretha . . ."). The highlights of each song emerge naturally from the way she toys with the words and bends the notes, holding back when necessary and then building to taut climaxes.

The consistent quality of the new album is especially remarkable because several of the songs are undistinguished compared with the best of Franklin's past selections. The title track is fashionably cute and trivial, but it's memorable for her unexpected excursion into scatting. Other, similar songs by producer Luther Vandross—a multi-talented artist but not one of the best composers around—would also be quite forgettable aside from Franklin's very special treatments of them.

When the song and the artist are perfectly matched, however, as they are here on at least half the tracks, the result is musical magic. If She Don't Want Your Lovin' sizzles with sexual innuendo, and the Isley Brothers' It's Your Thing is totally rejuvenated by Franklin's reworking. Her deft handling of Smokey Robinson's shimmering Just My Daydream reaffirms both his standing as a pop-music poet and her own interpretive sensitivity. The biggest knockout on the album is her

Aretha Franklin: subtler effects and a promising new direction
own I Wanna Make It Up to You, a duet with Levi Stubbs, lead singer of the Four Tops, with the remaining Tops providing some of the best back-up singing I've ever heard.

With "Jump to It" it's clear that Aretha Franklin is well launched on a new and very appropriate course. We can anticipate her future albums with all the enthusiasm we once felt during her very best period in the past.

—Phyl Garland

ARETHA FRANKLIN: Jump to It. Aretha Franklin (vocals); vocal and instrumental accompaniment. Jump to It; Love Me Right; If She Don't Want Your Lovin'; This Is for Real; (It's Just) Your Love; I Wanna Make It Up to You; It's Your Thing; Just My Daydream. ARISTA AL 9602 $8.98, © TC 9602 $8.98.

First Complete Recording of Virgil Thomson and Gertrude Stein's Four Saints in Three Acts

"How many saints are there in it?" asks St. Teresa I in Act Two of Virgil Thomson's Four Saints in Three Acts, his first opera, with a libretto by Gertrude Stein. "There are very many many saints in it," answers St. Teresa II—some thirty in all according to the scenario that the painter Maurice Grosser prepared for the original staging with the advice and consent of the librettist and composer. And there are actually four acts. But until recently there has been only one recording of the work, a much-abridged version that RCA recorded in 1947 under the composer's direction with the re-assembled cast of the opera's short Broadway run in the mid-Thirties. Now Nonesuch has released a beautifully performed and, for the most part, stunningly engineered digital recording of the complete opera with the cast of the concert performance given in Carnegie Hall on Thomson's eighty-first birthday in November 1981.

Four Saints in Three Acts was first produced in Hartford, Connecticut, in 1934. The cast was all black. John Houseman directed, Frederick Ashton was the choreographer, the cellophane scenery was designed by Florine Stettheimer, and Alexander Smallens conducted. The original audiences were baffled but bemused by this most unconventional religious work with its scenes shifting from the steps of a cathedral to a country picnic, from a vision of the Holy Ghost ("Pigeons on the grass, alas") to a storm that overtakes the company of saints in their solemn "expiatory procession" as a kind of preview of the Last Judgment. The finale is the hymn-like When This You See Remember Me, followed by the reassuring pronouncement, "Last act—which is a fact."

From Hartford Four Saints went to Broadway for sixty performances, a record engagement for a contemporary opera. It has occasionally been revived over the years and increasingly admired by both critics and the musical public. Last year's Carnegie Hall performance was not especially well received, but in this studio recording the cast, again all black, performs with exceptional verve and polish. Betty Allen, who has sung the role of the Commère before, shines most brightly in each of her appearances, and her colleagues acquit themselves admirably. (I do think that some of the singers might have been miked a bit more closely.) The chorus, under Lawrence Weller's direction, resounds impressively, and the thirty members of Joel Thome's Orchestra of Our Time (one for each saint) play Thomson's music in a way that should delight him, especially the interludes and dances.

The whole release is a splendid package, with a reproduction of a 1930 Stettheimer painting of Thomson surrounded by saintly attributes on the album cover; essays by the composer, Grosser, and Eric Salzman; a complete libretto; and a bibliography. Four Saints in Three Acts is a sui generis work, indescribable and incomparable, and for those of us who have been waiting some thirty-four years for a complete recording of it, its belated arrival is an event to celebrate. —Paul Kresh

THOMSON: Four Saints in Three Acts. Betty Allen (soprano), Commère; Benjamin Matthews (bass-baritone), Compère; Arthur Thompson (baritone), St. Ignatius; Clamma Dale (soprano), St. Teresa I; Florence Quivar (alto), St. Teresa II; William Brown (tenor), St. Chavez; Gwendolyn Bradley (soprano), St. Settlement. Chorus: Orchestra of Our Time, Joel Thome cond. NONESUCH 79035-1 two discs $23.96, © 79035-4 $23.96.
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THE Chipmunks—Alvin, Simon, and Theodore—broke into show business in 1958 with The Chipmunk Song, a Christmas novelty number that had sold 4½ million copies just seven weeks after its release. The song has become a perennial favorite, and, though the trio has moved along with the times, keeping a furry paw on the musical pulse of the Eighties with releases like "Chipmunk Punk," "Urban Chipmunk," and "Chipmunk Rock," they have not forgotten tradition. "A Chipmunk Christmas" (RCA AQL1-4041), released last year and still available, contains The Chipmunk Song and more traditional Christmas songs pitched so high you might think you're playing the disc at the wrong speed.

Novelty recordings always do well at holiday time, and the best of them become standards. Three of the best, and best loved—Rudolph the Red-Nosed Reindeer, Frosty the Snowman, and Here Comes Santa Claus—were made by Gene Autry, once known as "the singing cowboy." Today Autry is a highly successful businessman, with holdings in radio and TV stations, record and publishing companies, movie studios, and, most visibly, the California Angels baseball team. His career has the makings of show-business legend. From his discovery by Will Rogers in the mid-Twenties until he abandoned show business for big business in the late Fifties, Autry has made about 100 films, written over 250 songs, and starred on radio and television with his own program, Melody Ranch (the TV series lasted through the Sixties, though Autry's main interest lay elsewhere by then). Autry recorded a number of songs that became permanent parts of the country-pop catalog, including Back in the Saddle Again and Buttons and Bows. Although his public appearances are infrequent (he appeared last September on the David Letterman TV show), you can still hear him and the tale of Rudolph the put-upon reindeer in supermarkets and elevators everywhere all through December.

Autry still has a number of records in print, including "Twelve Hits of Christmas" (United Artists LW 669) and "Christmas with Gene Autry" (Republic 6018). CBS has an excellent album, "Gene Autry," in the Columbia Historical Editions series (Columbia FC 37465). The best-selling Christmas single of all time is not a novelty number, but its sales statistics are certainly unusual. Bing Crosby's version of White Christmas had sold 141,318,944 copies in the U.S. and Canada alone as of June 1982. First recorded by Crosby in 1942 for the movie Holiday Inn, its immediate success was a complete surprise to its composer, Irving Berlin. Berlin first wrote the song in 1939 and tossed it aside as a minor effort, pulling it out three years later to stitch into the film. It suited Crosby perfectly. Not only did he develop a proprietary relationship with the Christmas classic, but Decca/MCA did as well. The recording company, with superb foresight, stipulated in Crosby's contract that he could not record it with any other label.

Crosby’s White Christmas is available this holiday season on “A Christmas Sing with Bing” (MCA 15018) and "Merry Christmas" (MCA 15024). While browsing through my neighborhood record store recently, I was pleased to find that Columbia Records, in its infinite corporate wisdom, has repackaged the first two Byrds albums, "Mr. Tambourine Man" and "Turn Turn Turn," as a low-budget twofer (CG 33645). While browsing through my neighborhood book store a day later, I was even more pleased to find that John Rogan’s Timeless Flight: The Definitive Biography of the Byrds is now available in this country. Published by Dark Star/Scorpio in England in 1981, the book more or less lives up to its title. Rogan tracked down just about everybody everybody ever connected with these influential American rockers, as well as talking at length with nearly all the living ex-band members (notable exception: original drummer Mike Clarke).

The results are fascinating, if predictable. Myths are skewed, old grievances are rehashed, and the extensive quotes give all concerned a chance to hang themselves. (David Crosby, in particular, comes off as truly arrogant.) Still, though I miss a sense of the historical milieu (the mid-Sixties pop scene was a lot more turbulent than you'd gather from Rogan's account), this is mostly exemplary work that fills a long-standing gap. It's not exactly Too Much Too Soon, but it will do nicely. Complete with terrific photos, a comprehensive discography, and bootleg listings. S.S.
DECEMBER 1982

Disc and Tape Reviews

By CHRIS ALBERTSON • NOEL COPPAGE • PHYL GARLAND • PAUL KRESH
MARK PEEL • PETER REILLY • STEVE SIMELS • JOEL VANCE

AMERICA: View from the Ground. America (vocals and instrumentals); vocal and instrumental accompaniment. You Can Do Magic; Never Be Lonely; You Girl; Inspector Mills; Love on the Vine; Desperate Love; and four others. CAPITOL ST-12209 $8.98, © 4XT-12209 $8.98.

Performance: Pastel rock
Recording: Very good

America is down to only two full-time members, Gerry Beckley and Dewey Bunnell (the hired vocal help here includes Christopher Cross, Carl Wilson, and Russ Ballard), and they now have Air Supply to contend with and no George Martin arranging things. Not that it matters much; the economy can apparently support more than one soft-rock band of this sort at a time, and a couple of things here should grab some airplay. Inspector Mills, written by Beckley, is the only song that interests me, although You Girl sounds more like the old America—Sweden in the current sound is generally more straightforward. The duo's main problem is still the same, though; most of their songs have very little to say and not much of a tune. Of course, Air Supply's in the same boat, and it hasn't hurt their sales any.

MD

JON ANDERSON. Animation. Jon Anderson (vocals); vocal and instrumental accompaniment. Olympia; Animation; Surrender; All in a Matter of Time; Unlearning; and four others. ATLANTIC SD 19355 $8.98, © CS 19355 $8.98.

Performance: Good
Recording: Very good

The first thing to come to grips with here is Jon Anderson's voice. It's always been like nails on a blackboard to my ears, and if you share this aversion nothing his new album does will reconcile you to it. But for the legions of Yes fans who obviously don't share my taste, and for others who can tolerate that voice, "Animation" contains some surprisingly good, if uneven, music.

One surprise is that there is a strong rock undertone beneath the album's conscious artistic ambitions, at least on the first side. Laced through the spacy, dream-like synthesized textures and cherubic harmonies are a bracing rock beat and propulsive, rhythm guitar playing that give the music drive where it might otherwise have merely drifted. A second surprise is that Anderson's songwriting is less pretentious and more straightforward than I've come to expect from the creator of Olias of Sunhillow. The songs on side one range from the intensely personal (Animation is a euphoric meditation on his own childhood and on being present at the birth of his daughter and seeing perception awaken in her eyes) to the unbelievably naive (Surrender suggests that by writing to our leaders we can convince them to gather up all the weapons on earth and detonate them safely above the atmosphere). But whether personal or political, the songs show considerably more sincerity and less icy obscurity than Anderson's previous work.

Unfortunately, the second side of "Animation" falters, disintegrating into confused rhythms, piecemeal electronic effects, and stillborn thematic ideas. The fragments pull together into a coherent whole only on the final track, All Gods Children, and then you wish they didn't. It is the only truly wretched piece on the album, a disastrous collision of gospel and MOR. Anderson has done some interesting work with Vangelis, and "Animation" gives further evidence of his growth beyond Yes, but it also suggests that he needs a steady guiding hand to toughen up the soft spots.

MP

AVERAGE WHITE BAND: Cupid's in Fashion. Average White Band (vocals and instrumentals). Easier Said Than Done; You're My Number One; Theatre of Excess; Reach Out I'll Be There; Love's a Heartache; and five others. ARISTA AL 9594 $8.98, © ACT 9594 $8.98, A8T 9594 $8.98.

Performance: Average
Recording: Very good

Back in the Seventies, a reader asked, in a letter about a review I did of a record by the
BILLY JOEL'S LATE-Seventies records have revealed a songwriter with a fair amount of wit, a tough, unsentimental view of generational and class concerns, a real gift for the melodic hook, and a not-inconsiderable skill as a bandleader. If he sold records in slightly smaller quantities, I have no doubt the critics would have made him a cult figure on the order of, say, Warren Zevon. The unforgivable sin of his vast popularity notwithstanding, it should be obvious that, compared with his commercial competition—the Styxx, REO Speedwagons, and Journey—that glut our airwaves and pretty much define mainstream above-ground rock—the guy comes off as a genius. Or at least an honest, respectable craftsman.

That said, Joel's new Columbia album, "The Nylon Curtain," feels like something of a throwback to his earlier, dismissable work. (The songs that made his initial reputation—"Piano Man" and the like—seem overheated and faintly embarrassing now.) The admirable Long Island bar-band rocker who had emerged in his recent work is strangely muted here, as is the social diarist, and in their place at times seems to be at least another cabaret artist. The songs, when they're not weighted down with shameless and inexplicable references to the Beatles' "Sgt. Pepper," are vague and far too personal. They're not annoyingly confessional in the usual manner of the nakedly emotional singer/songwriter; they're simply cryptic. Instead of sketching specific incidents and personal events we've all had, they pile on so many specific, seemingly unconnected details that they become unintentionally surreal. Scandinavian Skies, for example, is basically just another band-on-the-road song, but Joel has tricked it up to the point where I defy anybody who wasn't along for the ride to know what the hell he's talking about.

Other songs that might have worked are scuttled by their length. Laura, a potentially interesting portrait of a desperately unhappy girl of a type we have probably all known, goes on longer than War and Peace (well, perhaps it just seems to). And some are simply overambitious. Goodnight Saigon, for example, tries for a large-scale statement about the horror of the Vietnam War but collapses in a confused welter of irony and secondhand period scene-setting that suggests its author OD'd on home viewings of Apocalypse Now.

There are two marvelous exceptions, however. Pressure is a satisfyingly hip put-down song in the great tradition (an upwardly mobile Like a Rolling Stone, perhaps) in which the singer sneers at a young woman whose world view seems limited to college psychology courses and Time magazine. Musically, it's a neatly executed mix of New Wave electronics and a kind of de-mented nineteenth-century classicism, and it makes a splendid single. Even better is Allentown. Over a great, chugging instrumental track (complete with some discreet factory sound effects), Joel recounts a story as contemporary as the morning paper, a story of broken promises and fading dreams in America's industrial heartland. It rings utterly true, evoking a genuine mood of contemporary despair without once lapsing into mawkishness or cheapjack cynicism. It's a grand song—and the most overtly rock-and-roll cut on the record, which may not be coincidental.

While "The Nylon Curtain" is not a great album, or even a topflight Billy Joel album, it has to be accounted a partial success for these two songs. Their presence is all the more laudable in an era when the musical mainstream is deliberately bland and the "avant-garde" is recycling devices from fifty-year-old Dada manifestos.

—STEVE SIMELS

BILLY JOEL: THE NYLON CURTAIN. Billy Joel (vocals, keyboards); instrumental accompaniment. Allentown: Laura; Pressure; Goodnight Saigon; She's Right on Time; A Room of Our Own; Surprises; Scandinavian Skies: Where's the Orchestra? COLUMBIA TC 38200, © TCT 38200, © TCA 38200, no list price.

Average White Band, "Why do we need a white band trying to sound black when there are so many black bands around?" In 1982 there aren't very many true r.& b. black bands around, most of them having been swept away by neo-disco and other electronic glop with a maddening, automated beat. The Average White Band, however, has altered its style very little, so while it's something of an anachronism, it sounds good compared with the "getdown" performances of megabuck pop-soul groups.

That doesn't mean I've become a fan of the Average White Band. I still think that its riffs and rhythms and close-harmony singing are appropriated, its funk is cosmetic, and its songs are formular amalgams of black styles. The rendition here of the Four Tops' oldie Reach Out, I'll Be There is bleached so white it's featureless. The Average White Band deserves credit for really being a band these days, but the rest of the name is all too apt.

J.V.

BAD COMPANY: Rough Diamonds. Bad Company (vocals and instrumentals); Mel Collins (horns). Electricland; Untie the Knot; Nuthin' on the TV; Painted Face; Kickdown; and five others. SWAN SONG 900001-1 $8.98; © CS 90001-1 $8.98.

Performance: Zzzzzzzzz
Recording: Okay

When Bad Company first appeared in 1973, it provided a much needed shot of basic rock-and-roll energy at a time when the music was at its lowest ebb since just prior to the British Invasion of 1964. (It didn't hurt, of course, that lead singer Paul Rodgers was one of the most soulful vocalists ever to come out of England.) Unfortunately, the band never lived up to its initial promise, instead hitting on a formula of brainless macho posturing and lethargic heavy metal and milking it past all human sympathy. Although Bad Company's moment has long since passed, you'd never know it from this new album, the first in three years. It finds them as mired as ever in mid-tempo, blues-based meanderings that sound as if they were recorded while everyone was asleep.

S.S.

CHRIS BARRETT: Just Ballads. Chris Barrett (vocals, piano); Buddy Weed (piano). Memory: A Quiet Thing; My Ship; Eres Tu; Lucky to Be Me; My Funny Valentine; and seven others. WANDON WMC-2082-2 $10 (plus $2 postage and handling from Wandon Music Company, P.O. Box 5197, New York, N.Y. 10150).

Performance: Pleasant
Recording: Okay

Chris Barrett's debut album features extremely lightweight but pleasant singing, and on most of the tracks Barrett accompanies himself with equally unobtrusive, tinkling piano playing. The repertoire he's chosen—songs by Weill, Rodgers, Sondheim, and so on—is perfect for the kind of small New York clubs he's already had some success in. What's missing here, however, is a light buzz of conversation and clinking of glasses to fill in the occasional gaps when the unassertive Mr. Barrett seems to be singing to himself.

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RUTH BROWN: The Soul Survives. Ruth Brown (vocals); instrumental accompaniment. Fine Brown Frame; This Bitter Earth; Honky Tonk; Be Anything; 5/10/15 Hours; and six others. FLAIR PG 8201 $8.98, @ PGC 8201 $8.98.

Performance Not up to snuff

Recording Fair remote

It was almost thirty years ago that singer Ruth Brown scored her first hit with a rhythm-'n-'blues single called Mama, He Treats Your Daughter Mean. Since then there have been other hits and numerous albums on almost as many labels, but Brown never really became a star. "The Soul Survives," her latest album, was recorded in three nights last February at Blues Alley in Washington, D.C., for a new label, Flair. A collection of mixed quality, it starts with a very ungracious rendering of the Nellie Lutcher hit Fine Brown Frame, moves with varying success through a seepsaw of moods, and ends with a new but not improved version of Mama, He Treats Your Daughter Mean. There is some very pleasant, smooth sailing here (especially on parts of Be Anything and Looking Back), but every selection has a hitch somewhere, and the uptempo ones are marred by drummer "Tootsie" Bean's heavy-handed thrashing. This may account for Brown's corresponding roughness, but there are also bumps for which there can be no such excuse, as when the singer follows up a glorious vocal sweep with inappropriate sandpapery utterances.

The crowd at Blues Alley obviously had a good time, and guitarist Billy Butler had some inspired moments, but whatever roused the audience eluded the recording equipment. Ruth Brown clearly has the equipment and experience to rise above the mediocrity that today seems to float to the top so easily, but she needs direction. Someone should tell her how dreadful she sounds when she strives for a soulful ending (as on Be Anything), and someone should make sure that she never again appears with a drummer of Bean's insensitivity.

C.A.

PAUL CARRACK: Suburban Voodoo. Paul Carrack (keyboards, vocals); other musicians. Lesson in Love; Always Better with You, I Need You; I'm in Love; Don't Give My Heart a Break; and seven others. Epic ARE 38161, @ AET 38161, no list price.

Performance By the book

Recording Fine

Paul Carrack is one of the better-kept secrets of English r.-&-b. That was his voice on the wonderful mid-Seventies Ace hit How Long (Rod Stewart recently revived it) and also on Squeeze's great near-hit Tempted. He's got soul and grit galore, and he sounds the way Michael McDonald of the Doobie Brothers tries to sound but with much more success. Unfortunately, "Suburban Voodoo" suggests that Carrack's songwriting is strictly pro forma, computerized retreats of various Sixties Motown clichés that add up to nothing more than stylish genre exercises. Producer Nick Lowe gives the project his usual quirky all, but nothing catches fire—proving, I guess, that a great voice and a solid grasp of craft do not necessarily a great album make. S.S.

(Continued on page 86)
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STANLEY CLARKE: Let Me Know You.

Stanley Clarke (vocals, guitar, bass, synthesizer); vocal and instrumental accompaniment. You Are the One I Love; New York City; Play the Bass; I Just Want to Be Your Brother; and four others. Epic FE 38086. © FET 38086, no list price.

Performance: Skilful
Recording: Very good

I used to think of Stanley Clarke as one of the defectors, a jazz man drawn away from his art by the waving of the green. Now I am inclined to think that I did Clarke an injustice by placing him in the same boat as Herbie Hancock. There is an eleven-year difference in their ages, which means that Clarke was still in his teens when the music he allegedly defected to was actually taking shape. Unlike Hancock or, say, Donald Byrd, Clarke owes no debt to jazz for establishing his name, and it might be said that jazz is fortunate that he took its path at all. That some of us wish he had stayed on it a little longer is another matter.

Clarke's new album is unpretentious, au courant pop. He sings pleasantly, plays flawlessly, and has had the good sense to frame his pop art with the work of such notables as Carlos Santana, Paulinho da Costa, and Leon "Ndugu" Chancler together with a fine back-up vocal group that includes David Lasley. One could wish for more original material, and surely Clarke is too creative to have to take credit for an arrangement (The Force of Love) that was in fact lifted from the Bob Carter and Junior Gismonde chart for the latter's hit single Mama Used to Say. Nonetheless, this is a good album, if not an exciting one.

STEVE CROPPER: Night After Night.

Steve Cropper (vocals, guitar); other musicians. Night After Night; Sad Eyes; There Goes My Baby; 634-5789; Heartbeat; and four others. MCA MCA-5340 $7.98, © MCAC-5340 $7.98.

Performance: Good
Recording: Good

Steve Cropper, best known for his guitar playing, has a pleasant voice in the middle of the scale, roughly parallel to Ry Cooder's in range. Here he's assembled a horn-punctuated rock band that knows its stuff, although the material he's given it to play is spotty. My favorite is his own Sad Eyes, blues-derived but with a light touch, slower and quieter than the others and considerably more tuneful. The whole thing is nimbly monotonous, and the lyrics are dumb more often than not, but the instrumentalments keep the album respectable. N.C.

LARRY DAVIS: Funny Stuff.

Larry Davis (vocals, guitar); Oliver Sain (piano, organ, saxophones), Phil Westmoreland (bass, guitar); Billy Gayles, Don Smith (drums); Jimmy Hinds (bass, drums); Johnnec Johnson (piano); Eugene Johnson (bass). Funny Stuff; Teardrops; Worried Dream; Since I Been Loving You; Find 'Em, Fool 'Em, and Forget 'Em; Toot; and four others. ROOSTER BLUES R 2616 $8.98 (from Rooster Blues Records, 2615 North Wilton Avenue, Chicago, Ill. 60614).

Performance: Good
Recording: Good

Larry Davis began as a drummer and bassist in Little Rock, Arkansas, and in St. Louis, joining B. B. King's touring band in the late Fifties. On his own he recorded for local labels and had regional hits, then took a gig with Albert King's group in the mid-Sixties. Davis suggested that King record As the Years Go Passing By, which turned out to be one of the classic sides. In return, King taught Davis some lead-guitar tricks. Meanwhile B. B. King (he and Albert have been arguing for years over whether they are cousins) started his own label, where Davis traded two of the best numbers, the title tune and Since I Been Loving You. Davis paid tribute to B. B. with Worried Dream and to Albert with Got to Be Some Changes Made, from their respective songbooks. Davis is, as you might have guessed, mightily influenced by them both in vocal and guitar style, but he is also charming and convincing in his own right. A fine album.

J.V.

TOM DICKIE AND THE DESIRES: The Eleventh Hour.

Tom Dickie and the Desires (vocals and instruments). Victimless Crime; Stolen Time; Gone to Stay; Our Eyes; So Mystified; Twisted Years; and five others. MERCURY SRM-1-4055 $8.98, © MCR-1-4055 $8.98.

Performance: Crisp
Recording: Lease-buster deluxe

If you value your hearing, turn the volume knob down before you put this sucker on. The average recording level is pretty high given the broader-than-average dynamic range of this band. Not quite categorizable, it shows the influences of both the New Wave and, of all things, the old progressive-rock school. Or maybe it's just that Tom Dickie sounds a little like Ray Davies. In any case, he's a more interesting singer than one expects in this kind of music, and his band is crisp and punchy. The material is just passable, but the programming mixes it together well. I'd like to hear what they could do with some real tunes. N.C.

ARETHA FRANKLIN: Jump to It (see Best of the Month, page 75)

MICKEY GILLEY: Put Your Dreams Away.

Mickey Gilley (vocals, piano); vocal and instrumental accompaniment. Talk to Me; Don't Be Foolin' with a Fool; I Really Don't Want to Know; Put Your Dreams Away; Texas Heartache Number One; The Beginning of the End; and four others. Epic FE 38082, © FET 38082, no list price.

Performance: Subdued
Recording: Good

Compared with most Mickey Gilley records, this one is slow-tempoed and soft-voiced, with Gilley apparently trying, a time or two, to be gentle with a song. He still sings everything in a series of casual...
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EARLYTIMES
SINCE 1860

Dunhill Farm, Lexington, Kentucky
Although Cleo Laine and Dudley Moore have known each other since 1958—when Moore met Laine and her husband, John Dankworth, at an Oxford May Ball—their new album, "Smilin' Through," on the small Finesse label is, incredibly, their first collaboration. They got it together musically with all the zesty skill of a couple that has worked together all their performing lives. This wonderfully lighthearted, lighthearted romp by two of the most elegant performers around is sheer joy from beginning to end. A deliberately small-scaled, meticulously crafted, and beautifully performed album, it was obviously made for lovers of the particular kind of classic pop-jazz that Moore and Laine delight in. And the quality of execution shows a respect for potential listeners that is all too rare in the record industry nowadays.

From the opening medley of I Don't Know Why (I Just Do) and Love Me or Leave Me, with its silky interplay between Moore's piano and Laine's soaring voice, the whole album is a delight. The music itself counts now. This seems to be a hard concept for the big record companies to grasp, but a number of smaller labels, like Finesse, with a custom-work approach to their products are prospering.

"Smilin' Through" should only add to Finesse's reputation. It is the kind of album that must come as something of a mystery to the fast-buck men in the industry, accustomed as they have become to merchandising their products as if they had the "shelf life" of salad dressing or sardines. The work of Dudley Moore and Cleo Laine needs no "freshness" label to tell us when it will be too stale to be enjoyed. It should be delighting listeners for many years to come, and its release is one of the loveliest examples of one direction the record business will have to take if it's not to disappear altogether.

—Peter Reilly

Cleo Laine & Dudley Moore:

Smilin' Through. Cleo Laine (vocals); Dudley Moore (piano, vocal on Soft Shoe); Ray Brown (bass); Nick Ceroli (drums); John Dankworth (soprano saxophone on Soft Shoe). I Don't Know Why (I Just Do); Love Me or Leave Me; When I Take My Sugar to Tea; I'll Be Around; Strictly for the Birds; Before Love Went Out of Style; Soft Shoe; Smilin' Through; I Can't Give You Anything But Love; It's Easy to Remember; Play It Again Sam; Be a Child. Finesse FW 38091 $8.98, © FWT 38091 $8.98.

THE GRASS ROOTS: Powers of the Night. The Grass Roots (vocals and instrumentals). Powers of the Night; Here Comes That Feeling Again; Try Me; Keeps On Burning; Mirage; and five others. MCA MCA-5331 $7.98, © MCAC-5331 $7.98.

Performance: Monotonous
Recording: Good

The Grass Roots is a name we haven't heard much in several years, and its reappearance will help you mark the backward progress of radio rock over that span. The Grass Roots have changed but not matured—they're still playing bubblegum with a heavy beat—yet a competent rock
INTRODUCING A TURNTABLE THAT KNOWS A GOOD SONG WHEN IT SEES ONE.

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band does stand out a bit these days. I never did associate this band with great tunes, but those here are particularly lifeless, and they're programmed so that the beat, if not the tempo, will bore the bejavers out of you. Still, although its forced "excitement" shows through in several places, the band does show a spark here and there and kicks Bobby David's I'm Not Gonna Cry Any- more through some snappy changes. That's not much of a song, but it stands out here. It's all relative, as I was saying.

N. C.

THE INK SPOTS: Just Like Old Times.
The Ink Spots (vocals and instrumentals); vocal and instrumental accompaniment. Into Each Life Some Rain Must Fall; For Sentimental Reasons; Once in a While; On the Sunny Side of the Street; Till Then; It Had to Be You; Autumn Leaves; and five others. Open Sky OSR 3125-6 $8.98, © OSR 3125-6 $8.98.

Performance: Not like old times
Recording: Okay

This album should never have been released. At first glance, I assumed it was a collection of the greatest recordings by the Ink Spots, one of the most golden of oldie male quartets, whose first big hit was If I Didn't Care in 1939. No other group ever sounded quite like them. Their style, marked by Bill Kenny's quivering, honey-sweet high tenor and Orville "Hoppy" Jones's spoken basso musings to "Honey Chile," reflected the romanticism of the Thirties and Forties, and their sound was so recognizable that they became a favorite of night-club impressionists.

But this is a new recording, and I'd rather remember the Ink Spots as they were. No original members of the group remain; the current lead singer, Gene Miller, joined in the early Fifties, replacing Kenny's silken vibrato with a sad shadow of a tenor voice. Everything else here similarly testifies to the dissolution of a singular singing unit.

I have a battered, time-worn, ten-inch LP of the old Ink Spots singing their finest songs: If I Didn't Care, Java Jive, We Three, I'll Never Smile Again, and the ever-lovely Until the Real Thing Comes Along. Despite all its scars, it sounds as beautiful today as when it was recorded decades ago. What a truly lovely sound the Ink Spots had! This new album presents different men singing different songs and they do justice to neither the music nor their namesakes. It certainly is not "Just Like Old Times." Sometimes it is best to let the past alone.

P. G.

THE ISLEY BROTHERS: The Real Deal.
The Isley Brothers (vocals and instrumentals); instrumental accompaniment. Are You with Me?; Under the Influence; Stone Cold Lover; All in My Lover's Eyes; and three others. T-Neck FZ 38047, © FZT 38047, © FZA 38047, no list price.

Performance: Dependable
Recording: Very good

The Isley Brothers have been around for more than two decades, but they have not lost the power that originally thrust such singles as Shout and Twist and Shout to the top of the charts and made them stars. They are not the most innovative group around; there is a certain predictability about their music, but its quality is also predictable. You can rely on the Isleys for a good, solid beat, expert musicianship, and just enough novelty to justify buying each new album. And that's not a bad deal.

C. A.

DAVID JOHANSEN: Live It Up. David Johansen (vocals); vocal and instrumental accompaniment. Ex-New York Doll lead singer David Johansen finally has a hit on his hands with the Animals medley from this new live album, and I'm happy for him. Anybody who has paid as many dues for as long as he has deserves a payoff. However, as heretical as this may sound considering I live in Manhattan, where Johansen is widely beloved as a Local Boy Who Made Good, I have never really understood what the fuss is all about. He's a likable enough performer, I suppose, offering a not uncharming goofy parody of Mick Jagger. It's just that in my old high school there were at least six kids who could...
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do Jagger as well. As a singer Johansen's got the voice of a fifty-year-old frog, and I don't mean a Frenchman. Some of his tunes are pretty good, though, and on this album he does some of the best of them, along with the kind of Sixties soul oldies he cut his teeth on. His band, featuring Huw Gower of the Records, is excellent and backs him to the hilt. The result is an engaging party record that has, well, gusto, if no great substance—which seems to have been the idea.

S.S.

NICOLETTE LARSON: All Dressed Up and No Place to Go. Nicolette Larson (vocals), instrumental accompaniment. I Only Want to Be with You; Just Say I Love You, Nathan Jones; I Want You So Bad; Two Trains; and five others. WARNER BROS. BSK 3678 $8.98, © M5 3678 $8.98.

Performance: Weak script
Recording: Very good

Producer Andrew Gold has achieved a nice light-metal sound for this album, and Nicolette Larson has more than enough vocal savvy for anything here—but there isn’t much of anything here. Well, there are three fair songs: Lowell George’s Two Trains, which is given a busy but imaginative treatment; Leonard Caston and Kathy Wakefield’s Nathan Jones, with a derivative but nice flattened resolve; and I’ll Fly Away (Without You), which occupied a powerhouse trio of songwriters—Jackson Browne, Craig Doerge, and Rosemary Butler—but turned out only passable. The rest is a morass of clichés, verbal and melodic, licking the boots of Luv. Blechhh. N.C.

LORDS OF THE NEW CHURCH. Lords of the New Church (vocals and instrumental). Russian Roulette; Eat Your Heart Out; Li’l Boys Play with Dolls; Holy War; and six others. I.R.S. SP 70029 $8.98.

Performance: Energetic monotony
Recording: Good

Ex-Dead Boy Stiv Bator (formerly Bators) put together this group between New York and London in hopes of playing something more ambitious than the orthodox sloppiness of punk. It’s not an unaccomplished band—about as good as Grand Funk Railroad was ten years ago. There’s a lot of energy here, but the sound is monotonous. The lyrics are monotonous, too, amounting to yet another kiddie-commando push-pen assault on the mean old world, with all the rich masochism of disaffected youth trembling in smarmy little tantrums about the prospect of Armageddon while half yearning for it. A turn-off.

RANDY MEISNER. Randy Meisner (vocals); other musicians. Never Been in Love, Darkness of the Heart; Jealousy; Tonight; Strangers; and four others. EPIC FET 38121, no list price.

Performance: Good
Recording: Good

This is considerably more muscular and considerably more impressive than Randy Meisner’s last album. The back-up musicians are more animated, and the songs are better. Of course, they’re still not great—Still Runnin’ is an awful bore, and several others are sketchy—but you can play along with most of them and not get too bored. Darkness of the Heart, written by David Palmer, and Strangers, by Elton John and Gary Osborne, are the best ones. The back-up sound is L.A. beefed up a bit, with some hot piano players—headed by Nicky Hopkins—filling the holes. It’s kind of an old-time West Coast rock record, and not bad.

N.C.

RONNIE MILSAP: Inside. Ronnie Milsap (vocals, piano, synthesizer); vocal and instrumental accompaniment. Any Day Now; Inside; Carolina Dreams; Wrong End of the Rainbow; He Got You; Who’s Counting; and four others. RCA AHKL-4311 $8.98, © AHKL-4311 $8.98, © AHSL-4311 $8.98.

Performance: Detached
Recording: Very good

If Ronnie Milsap shows the slightest iota of an emotional commitment to anything here, it’s too subtle for me. This sounds like an album for people who don’t want music to make them feel anything—which, by my definition, means they don’t want music, and I don’t think this is music. Technically, everyone is going through the right motions, (although there are too many motions at a time, too many strings and horns cluttering things up), but it’s cold, calculated—an ex-

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N.C.

ANNE MURRAY: The Hottest Night of the Year. Anne Murray (vocals); instrumental accompaniment. The Hottest Night of the Year; Fallin' in Love (Fallin' Apart); Easy Does It; Hey! Baby!; Heart on the Line; Song for the Mira; and four others. CAPITOL ST-12225 $8.98, © 4XT-12225 $8.98, © 8XT-12225 $8.98.

Performance: Good
Recording: Good

The amazing thing here is that they found this many listenable happy songs. Funny songs are one thing; happy songs tend to be as annoying as early-morning disc-jockeys (or early-morning anything), especially those about being happy with one's mate. Most of these are in that genre, and of them only Fallin' in Love (Fallin' Apart) has any real dash to it, but the others are decent. Anne Murray still manages to sound as if she's challenged by this sort of thing; it's hard to see how she can be. Although her last album was a little sad where this one is a little happy, she's been making basically the same album over and over for years now and seems well on her way to becoming yet another fine voice stuck in elevator music.

Meanwhile, there is some sprightly singing here if you want to wade out into the middle of the road to get it.

N.C.

THE NIGHTHAWKS: Times Four. The Nighthawks (vocals and instrumentals); other musicians. Ubangi Stomp; Mystery Dance; Boppin' the Blues; Off the Wall; Claudette; and eleven others. ADELPHI AD 4130/35 two discs $10.98.

Performance: Very good
Recording: Very good

This double-disc album comprises broadcast airchecks from club dates in Canada and Maryland and studio out-takes, including an early-morning jam with visiting pals. All of the material, recorded in the late Seventies, is previously unreleased, and most of it is solid.

Among the surprises are the combo's departure from its hot-blues format for forays into country and rockabilly. Bassist Jan Zukowski and guitarist Jim Thackery team vocally on Claudette, taken at a powerhouse pace. Mark Wenner's vocal on Hank Williams' Mind Your Own Business (which Steve Goodman cut on his debut album) features Thackery playing Hawaiian slide style but making his guitar sound like a pedal-steel model circa 1949. The sessions with Luther "Guitar Junior" Johnson, formerly of the Muddy Waters band, are relatively weak. Johnson's rendition of Magic Sam's All Your Fault is fine, but he's hazy on the lyrics for Mystery Train and How Many More Years. The 'Hawks play boiling blues behind him, though. In some ways, this compilation is more satisfying than their more formal recordings, on which they occasionally become too cautious. Here it's a jolly free-for-all.

J.V.

TED NUGENT: Nugent. Ted Nugent (vocals, guitars, bass); vocal and instrumental
accompaniment. No, No, No; Bound and Gagged; Tailgunner; Ebony; Habitual Offender; We’re Gonna Rock Tonight; Can’t Stop Me Now; and three others. ATLANTIC SD 19365 $8.98, © CS 19365 $8.98, © TP 19365 $8.98.

Performance: Surprisingly tame
Recording: Loud

Ted Nugent, who is supposed to be one of the wilder men of rock, is surprisingly tame this time out. Oh, there are still the thunderous hard-rock sounds, the frantically down-with-it performances, and the “I’m gonna rip your face off, man” attitude, but the lyrics often sound oddly wimpy. Brief example from Bound and Gagged, about the hostage crisis in Iran: “Take a look at our Constitution/We must demand us some retribution/How the hell did they take our embassy?” Brute force, old chap, brute force.

FRED PARRIS AND THE SATINS. Fred Parris and the Satins (vocals); instrumental accompaniment. I’ll Be Seeing You; Memories of Days Gone By; Didn’t I (Blow Your Mind); Breaking Up; and two others. ELEKTRA 60152-1 $8.98, © E4-60152-1 $8.98.

Performance: Good, but ...
Recording: Good

Fred Parris was the lead singer of the Five Satins in 1956 when he wrote and they recorded In the Still of the Night, regarded (in New York at least) as one of the all-time golden oldies. Like many another doo-wopper, Parris suffered eclipse through most of the Sixties until Richard Nader’s Rock ‘n’ Roll Revival concerts put the Satins back on stage. Parris subsequently toured, continuing to record sporadically, but with no major-label push until this Elektra disc featuring three new Satins. I’ll Be Seeing You, the old Five Satins standard that Parris has used in concert for years, is extended and gussied-up here with unnecessary orchestration. Memories of Days Gone By is a medley of doo-wop anthems from the Fifties, and Didn’t I (Blow Your Mind) is a near facsimile of the original hit by the Delfonics. The three other selections were written by producer Marty Markiewicz and mechanically conform to bland pop norms. Parris sails through the surrounding mediocrity with all the grace and aplomb of his long experience, a sure sense of phrasing, and a gift for entertainment. His abilities should have been better served.

RECORDING OF SPECIAL MERIT

TEDDY PENDERGRASS: This One’s for You. Teddy Pendergrass (vocals); vocal and instrumental accompaniment. I Can’t Win for Losing; This One’s for You; Loving You Was Good; This Gift of Life; Now Tell Me That You Love Me; and three others. PHILADELPHIA INTERNATIONAL FZ 38118, © FZT 38118, no list price.

Performance: Exceptional
Recording: Very good

While any event that cuts short a fine performer’s career is sad, the case of Teddy Pendergrass, who was paralyzed in an auto accident last year, is particularly tragic. He had turned several important corners since

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leaving the Blue Notes to strike out on his own. Unlike many former group singers who achieved only moderate success, if that, after going solo, Pendergrass had become firmly established as a male sex symbol who belted out his funky amorous entreaties with a raw virility that set many female libidos a-quiver. At first, his macho posturing seemed enough to ensure packed houses and healthy record sales, but his later albums indicated that he had developed some depth as well. Increasingly, he was able to set aside his club and joie de vivre to sing tenderly. The combination of growing masculinity and abrasiveness with a crooner's sensitivity was right on target, enabling him to expand his audience, reaching both those who like sweetness and those who prefer swagger.

This album shows the range he had achieved. He handles Gamble and Huff's slow-drag This Gift of Life with as much facility as McFadden and Whitehead's up-tempo I Can't Win for Losing. He demonstrates true mastery of the ballad style on Barry Manilow's This One's for You, easily one of his best efforts to date. His ability to manipulate more subtle emotions and apparent sincerity in delivering the ultra-sensitive lyric make you want to cry all the bad things you ever thought about him. It is the performance of a real master.

**RECORDING OF SPECIAL MERIT**

**THE PERSUASIONS: Good News.** The Persuasions (vocals). Ain't that Good News; Cupid; Swanee River Medley; Let the Good Times Roll; Message from Maria; I'll Come Running Back to You, and four others. ROUNDER 3053 $7.98.

Performance: Excellent
Recording: Excellent

Every new Persuasions album is a treat made sweeter by their mere survival on records. The market for an a cappella pop group is minimal, but the Persuasions have made a noble effort on a number of large and small labels for twelve years. Talk about rock-'n'-roll survivors!

Jerry Lawson's lead singing is a mystical blend of gospel passion and pop savvy. His vocals have the tension and elasticity of a rubber band. Just when you think he's going to snap from excess, he bounces back to cool professionalism. Only a very accomplished musician can take that kind of risk. Lawson's fondness for Sam Cooke is evident on Ain't That Good News and Cupid. The two most effective group efforts are a wonderful version of All I Have to Do Is Dream, from Ain't That Good News and Cupid. The re-recordings are a glorious anachronism in this era of mediocrity. The Persuasions' professionalism. Only a very accomplished

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**JERMAINE JACKSON**

__TIME has proved Jermaine Jackson to be the most musically gifted of the original Jackson Five, though Michael remains the most flamboyant and electrifying performer. Since setting out on his own, Jermaine has established an impressive reputation as a singer, composer, arranger, and multi-instrumentalist. His contribution to each successive album keeps increasing. On his latest, "Let Me Tickle Your Fancy," he wears a number of hats, rather like Stevie Wonder, whose indirect influence he felt throughout. Jermaine wrote or co-wrote all but one of the songs, did the rhythm arrangements, co-produced with Berry Gordy, and plays keyboards, synthesizers, bass, drums, congas, and percussion—besides singing!

The songs vibrate with youthful exuberance and the rough edges of soul from so much else we hear today by the imagination that has marked every stage of their development, from conception to the final mix. Jermaine Jackson clearly disdains the modish but mind-numbing minimalist approach to composition, with everything based on two or three chords and a single catchy riff repeated ad nauseam. Instead, he seeks out unexpected changes, carving out captivating melodies and underscoring them by harmonies that sometimes border on the atonal and rhythms that range from stomp-down dance tempos to the truly off-beat.

One of the most interesting selections here is There's A Better Way, whose biting social commentary is accompanied by a thunderous, Latin-flavored beat that is almost martial in its insistence. Other songs are just so pretty that they bear comparison with the lyrical outpourings of Jackson's most distinguished predecessors at Motown, Smokey Robinson and Stevie Wonder. Examples include I Like Your Style, You Moved a Mountain, and, the loveliest of all, You Belong to Me, which Jackson shares with Syreeta, an artist who deserves far more recognition than she has received. Her vocal here delights the heart and ears.

All around, "Let Me Tickle Your Fancy" is an excellent album by a young artist who has already earned a great deal of respect.

---Phyl Garland

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**JERMAINE JACKSON: Let Me Tickle Your Fancy.** Jermaine Jackson (vocals, keyboards, synthesizers, bass, drums, congas, percussion); vocal and instrumental accompaniment. Let Me Tickle Your Fancy; Very Special Part; Uh Uh, I Didn't Do It; You Belong to Me; You Moved a Mountain; Running, Messing Around, This Time, There's a Better Way, I Like Your Style. MOTOWN 6017ML $7.98, © M75-6017 $7.98, © M8-6017 $7.98.

Performance: Nostalgia at its best
Recording: Excellent

While I have never been one to wallow in nostalgia for its own sake, this record does summon up memories of long-gone years when sweet singing was dominant in popular music, when hit tunes were not expected to reflect the turbulence of modern life. How much simpler everything seemed back then! The remarkable achievements of the Platters might be overlooked without a closer examination of the ambience of the Fifties, when they emerged as major artists. Before black was considered beautiful, it was invisible, for black music was commercially acceptable only when presented by white artists. But the Platters and their founder, Buck Ram, were smart enough to turn the tables. Here was a black vocal quintet singing such all-American standards as Smoke Gets in Your Eyes as well as compositions of their own (Only You and The Great Pretender among them) that tapped the sentimentality underlying all those crewcuts.

The Platters sold ten million records and, in the background. It wouldn't seem quite so special without the extraordinary lead vocals of Tony Williams, whose voice is so full and fluidly melodic that it transcends time and style. When he breaks up the syllables of Only You into "Oh-ho-on-ly you," he gives all contemporary singers a valuable lesson in how to make lyrics work for them.

---(Continued overleaf)
The engineering on this assemblage is outstanding; the originals could not have sounded so crystalline. "Platterama" is an elegantly refurbished period piece.  P.G.

BILLY SQUIER: Emotions in Motion. Billy Squier (vocals, guitar); vocal and instrumental accompaniment. Everybody Wants You; Emotions in Motion; Learn How to Live; In Your Eyes; Keep Me Satisfied; and five others. CAPITOL ST-12217 $8.98, © 4XT-12217 $8.98. Performance Stylized Recording: Good

A lot of people will like Billy Squier simply for the influences he's absorbed. "Emotions in Motion" evokes the raw, vaguely sleazy power of Led Zeppelin and its most notable imitator, Foreigner, as well as a bit of the swagger of Rod Stewart and the boogie of Bob Seger. These are all heavy hitters, and Squier knocks them off easily, with a slashing, cocksure guitar slung fiercely over a thumping rhythm and his throaty, controlled scream, which draws, at various times, from all the above-mentioned sources for its phrasing and color (or what little can be detected underneath the shouting), and you get music as stylized as the album's Andy Warhol jacket—and just about as affecting as Warhol's overexposed work is once you've gotten the idea.

The album's deficiencies are, like its strengths, generic. The music fights to be more than an afterthought to Squier's facile guitar and simpering vocals, with dull melodies slammed out to an achingly monotonous beat. In a nod to the times, many of these tunes offer a bar or two of synthesizer effects, perhaps as a warning, before the pounding begins. As a lyricist, Squier misses the obscurity for sophistication. But a sure grasp of the basic technique of his genre—offensive stereotyping of women—comes across in spite of his awkward writing. There are more female "types" on this album than you or I are likely to meet in a year of heavy social activity. And more run-of-the-mill heavy-metal too.

MARTY STUART: Busy Bee Cafe (see Best of the Month, page 73)

RECORDING OF SPECIAL MERIT

SWOLLEN MONKEYS: After Birth of the Cool. Swollen Monkeys (vocals and instrumentals). Ralph's Cheese; Cielito Lindo; Höse-Anna; Elephant Sex; Ghost in Hollywood; Bandera Roja; I Can't Come; and seven others. CACHALOT CA 128 $8.98.

Performance: Totally crazed Recording: Excellent

When these nine eccentric musicians associated with the Waitresses, Tin Huey, the B-52's and Carla Bley decided to record on their own, it had to be an album of polkas, Mexican dances, and novelty tunes. You were expecting maybe Beethoven's lute string quartets? But "After Birth of the Cool" is more than just a forty-minute musical joke; it's like crashing a stag party at an asylum for psychotic jazz musicians. One minute you're being serenaded frantically by a mob of drunk with the Mexican restaurant classic Cielito Lindo. Moments later you're moved to tears by the sad tale (narrated in a baleful monotone) of an unfortunate suburban soul who lives only to water his wife's lawn. Before you've had time to recover, you're mortified by the squawks, grunts, and blubbery blasts of Elephant Sex. As pachuco parodists, the Swollen Monkeys inhabit the same limb of music's evolutionary tree as Spike Jones and the Uncle Meat-vintage Mothers of Invention. And, like their lunatic forerunners, the Monkeys bring a formidable musicianship to these insane proceedings. Not that it makes a bit of difference, but there's some mighty hot blowing here, even if it is about as organized as a high-school election. Besides being the most significant contribution to the polka tradition since Who Stole the Kishka?, "After Birth of the Cool" is an unjacketed good time.

M.P.

RECORDING OF SPECIAL MERIT

TOMPALL AND THE GLASER BROTHERS: After All These Years. Tompall and the Glaser Brothers (vocals, guitar); instrumental accompaniment. Rosali; Naked Emotions; Happy Hour Blues; Oh, America; and six others. ELEKTRA 60148-1 $8.98, © E4-60148-1 $8.98.

Performance: Graceful Recording: Very good

The first Glaser-reunited album ("Lovin' Her Was Easier") was nice but relied...
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When times get tough, someone once observed, entertainment gets sloppy, but in the case of Bruce Springsteen, the once and future Bard of Asbury Park, New Jersey, we may have to amend that: when times get tough, entertainment gets grim. At least that is one implication to be derived from "Nebraska," Springsteen's new all-acoustic—dare I say it?—folk-music album. Another is that the record business is even worse shape than I thought. Since the production costs of what sounds like the bleakest record of the year must have been the production costs of what sounds like the bleakest record of the year must have been.

Springsteen has ever done. In some ways, the industry's utter decrepitude, not to mention artistic bankruptcy. I prefer to think of it as an example of rock's resiliency. All-giving, all-embracing, rock loves each of its children and finds a market for every gimmick no matter how ugly or misshapen. For the grisly "Abominog," that market will be those who like their music as loud as they can stand it, or louder. Beyond the two dimensions of dynamics and duration, it ceases to exist. But rock will survive these note-crunchers whose imagination seems to have given out as soon as they found a name for themselves.

Most Southern rock bands like to wail, but Uriah Heep, generally recognized as the worst successful rock band in history, at a time of unprecedented economic hardship for the record business as evidence of the industry's utter decrepitude, not to mention artistic bankruptcy. I prefer to think of it as an example of rock's resiliency. All-giving, all-embracing, rock loves each of its children and finds a market for every gimmick no matter how ugly or misshapen. For the grisly "Abominog," that market will be those who like their music as loud as they can stand it, or louder. Beyond the two dimensions of dynamics and duration, it ceases to exist. But rock will survive these note-crunchers whose imagination seems to have given out as soon as they found a name for themselves.

THE JOHNNY VAN-ZANT BAND: The Last of the Wild Ones. The Johnny Van-Zant Band (vocals and instruments). Too Scared to Run; On the Rebound; Chasing Shadows; Prisoner; Sell Your Soul; and five others. POLYDOR PD-1-6355 $8.98, © MCR 4-1-4057 $8.98.

Performance: Abusive Recording: Good

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BRUCE SPRINGSTEEN: Nebraska. Bruce Springsteen (vocals, guitar, harmonica). Nebraska; Atlantic City; Mansion on the Hill; Johnny 99; Highway Patrolman; State Trooper; Used Cars; Open All Night; My Father's House; Reason to Believe. Columbia TC 38358, © TCT 38358, © TCA 38358, no list price.

My Father's House; Reason to Believe. Columbia TC 38358, © TCT 38358, © TCA 38358, no list price.

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through the whole song, gradually the overdriven amplifiers take over. But if you want this sort of thing done, it is done fairly well here. Johnny Van-Zant sings quite a bit better than the average rocker, and these are better than average heavy-metal songs—which, as we all know, aren’t real songs. But what the heck—maybe this isn’t the real world either.

JOHN WAITE: Ignition. John Waite (vocals); vocal and instrumental accompaniment. White Heat; Change; Mr. Wonderful; Going to the Top; Desperate Love; and five others. CHRYSALIS CHR-1376 $8.98, © CCH-1376 $8.98, © 8 CH-1376 $8.98.

Performance: Calculated
Recording: Good

It’s hard to tell whether a performer is more interested in music or money, but I suspect that ex-Babys leader John Waite regards music as just a meal ticket. “Ignition” is an album of calculated bravura—the kind of relentlessly aggressive rock-and-roll that’s dominated late-night TV “concerts” for years, music seemingly designed solely to make a quick impression between commercials. Strident and self-absorbed, Waite asks you to buy his posturing in return for a succession of recycled heavy-metal riffs and lines on love you wouldn’t be caught dead using in a strip joint. As far as I’m concerned, it’s no deal.

M.P.

THE WHO: It’s Hard. The Who (vocals and instrumentals); other musicians.

Athena; It’s Your Turn; Cooks County; It’s Hard; Dangerous; Eminence Front; and six others. WARNER BROS. 1-23731 $8.98, © 4-23731 $8.98, © 8-23731 $8.98.

Performance: Limp
Recording: Good

“How weary, flat, stale, and unprofitable . . .” observed Hamlet, words that spring to mind after a couple of hours with this new Who album. So does “boring,” which is the last adjective I thought I’d ever use about an LP from these guys. There are no ghastly lapses of taste like the pseudo-coc- tail-jazz touches that marred “Who Are You,” and the return of producer/engineer Glyn Johns does seem to have banished the sterile, California-style blandness that afflicted “Face Dances.” Superficially, “It’s Hard” at least sounds like the Who. But there’s no getting around the unpleasant fact that it’s full of the most undistingu- ished, tuneless, and preachy manifestos Pete Townshend has ever concocted.

The songs address all sorts of serious sub- jects (nuclear holocaust, post-macho male behavior, the hypocrisy of the politically powerful), which is supposed to clue you that Townshend is that rare bird, a thought- ful pop star. But they make their points in only the most obvious ways, and they are couched in the most graceless language I’ve come across since . . . oh, since Townshend’s last solo record. John Entwistle’s contribu- tions, meanwhile, are solidly in the vein of his other recent work, which is to say they’re unmelodic and unbecoming seri- ous. The only relief in all this, surprisingly, is offered by Roger Daltrey. He sings his colleagues’ drivel with as much conviction as he can muster in a very pleasant imitation of his vocal style circa 1965.

I’ve been a Who fan since, as a high- schooler, I first saw them smash their gui- tars on Shindig, so I’m not ready to count them out yet, which may say more about my own perverse stubbornness than anything else. On the basis of “It’s Hard,” though, if anyone else were inclined to dis- miss them, I’d have trouble arguing.

S.S.

RECORDING OF SPECIAL MERIT

STEVE WINWOOD: Talking Back to the Night. Steve Winwood (vocals and instrumentals). Valerie; Big Girls Walk Away; And I Go; While There’s a Candle Burning; Still in the Game; It Was Happiness; and three others. ISLAND ILPS 9777 $8.98, © MS 9777 $8.98.

Performance: Elegant
Recording: Fine

Any discussion of Steve Winwood ultimately comes down to That Voice, as thrilling an instrument as can be found in all of pop mu- sic. Where once he sounded like a teenage Ray Charles, by now age and experience have rendered him unique. This new album lacks anything as immediately grabby as some of the stuff on Winwood’s last (come- back) effort, “Arc of a Diver,” but it is an impeccably rendered, often affecting collection of modern, largely electronic r-&-b
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with vaguely confessional lyrics that say little but do so with an unpretentious sincerity. Whatever you think of the songs (I'm quite taken with Still in the Game), there's no denying that Winwood sings the very trousers off all of them. Highly recommended, especially to those who think Phil Oakey is a vocalist and that the Human League is the be-all and end-all of synthesizer pop.

S.S.

FRANK ZAPPA: Ship Arriving Too Late to Save a Drowning Witch. Frank Zappa, Moon Zappa (vocals); vocal and instrumental accompaniment. Valley Girl; Drowning Witch; Envelopes; No Not Now; and two others. BARKING PUMPKIN FW 38066 $8.98.

Performance: Moon's show

Recording: Good

Five of the songs on this album are standard Frank Zappa tirades about almost anything and everything delivered with his usual Satire. The sixth, however, Valley Girl, is a lightly wicked piece of genuine satire. Performed by Zappa's daughter, Moon, it is a marvelous satire about the important things in the life of a typical girl living in California's San Fernando Valley. Shopping is, of course, her main concern, but other fronts are the length of her toenails, her plans for the eventual removal of her teeth braces, and the dating behavior of her boy friends. All of this is relayed by Moon in a torrent of exclamatory clichés using that peculiar aluminum-diction that real Valley Girls find so distinguished. A truly funny, mordant piece of record making.

S.S.

FRANK ZAPPA: The Envoy. Warren Zevon (vocals, guitar, synthesizer, piano); J. D. Souther, Graham Nash (vocals); Waddy Wachtel, David Landau, Danny Kortchman (guitars); Rick Marotta (drums); other musicians. The Envoy; The Overdraft; The Hula Hula Boys; Jesus Mentioned; Let Nothing Come Between You; and four others. ASYLUM 9 60159-1 $8.98, © E-4-60159 $8.98.

Performance: Hit and miss

Recording: Good

This is an interesting enough record, more consistent than Warren Zevon's last studio set but lacking the surprises of "Excitable Boy," as audacious an album as any in recent years and probably an impossible act to follow. In his lyrics Zevon remains obsessed with violence, excess, and death; he can still be weirdly funny and sometimes even outrageous. But musically the new stuff lacks the unpredictable jukebox eclecticism of his best efforts, and the occasional bows to the New Wave by producer/guitarist Waddy Wachtel sound just a trifle forced.

There are some very fine things here, though, in particular Let Nothing Come Between You, one of those good-natured, joky-but-sincere love songs Zevon occasionally concocts, and Charlie's Medicine, an effectively grim tale of a murdered drug dealer rendered with chilling ambiguity. It's just that these songs don't reach out and shake you by the lapels, which is what one wants from Zevon. Perhaps a change of scenery would do his writing a good of good.

S.S.
RECORDING OF SPECIAL MERIT

CHET BAKER/LEE KONITZ: In Concert.
Chet Baker (trumpet); Lee Konitz (alto saxophone); Michael Moore (bass); Beaver Harris (drums). Airerin; Body and Soul; Au Privave; Willow Weep for Me; Walkin'.

RECORDING OF SPECIAL MERIT

INDIA NAVIGATION IN 1052 $8.98.

RECORDING OF SPECIAL MERIT

HOAGY CARMICHAEL: Star Dust, 1927-1932. Hoagy Carmichael (vocals, piano, celeste); Tommy Dorsey (trumpet, trombone); Glenn Miller (trombone); Jimmy Dorsey (clarinet, alto saxophone); Arthur Schutt (piano); Manny Klein (trumpet); Gene Krupa (drums); other musicians. Star Dust; The Best Things in Life Are Free; March of the Hoodlums; Walkin' the Dog; Rockin' Chair; High and Dry; Barbaric; and five others. HISTORICAL HLP-37 $7.98 (from Historical Records, Inc., P.O. Box 109, Canaan, N.Y. 12029).

C.A.

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If you are in a hurry for your catalog please send the coupon to McIntosh. For non rush service send the Reader Service Card to the magazine.
WHERE were you on the night of March 27, 1982? If you were in a Manhattan club called Marty's, consider yourself most fortunate indeed. If, however, like most of us, you were elsewhere, good luck has not entirely eluded you, because the musical proceedings on that special night have been superbly captured on an album entitled "Encore at Marty's, New York."

Tormé is now to ballad singing what Sinatra was some years ago: the quintessence. Of course, Tormé has never been less than very good, but the years have distilled his artistry to perfection, and nowhere is it more stunningly preserved than on this album. A worthy trio featuring Mike Renzi on piano supplies just the right accompaniment, and the program is a wonderful collection of some of the most memorable songs ever written. Tormé breezes through it all with awesome grace, skill, and invention. It's sad to say, but even the very best records are eventually taken out of circulation. This one, on the new MCA-distributed Flair label, has "collector's item" written all over it. Get it while you can.

—Chris Albertson

MEL TORMÉ: Encore at Marty's, New York. Mel Tormé (vocals); Mike Renzi (piano); Jay Leonhart (bass); Donny Osborne (drums). Lulu's Back in Town; Looking at You; That Face; I'm Gonna Miss You; Medley—A Tribute to Fred Astaire; What Are You Doing the Rest of Your Life?; Sophisticated Lady; Stormy Weather; When the Sun Comes Out; Autumn Leaves; Pieces of Dreams; I Like to Recognize the Tune; Day In, Day Out; Watch What Happens. FLAIR PG 8200 $8.98. © PGC 8200 $8.98.

BOB JAMES: Hands Down. Bob James (piano, synthesizers); vocal and instrumental accompaniment. Royal Garden Blues; Lil' Darlin'; I'll Die Happy; Good Ol' Lady; Angel Eyes; and five others. MUSE MR 5258 $8.98.

Performance: Disappointing
Recording: Fair

Remember Lambert, Hendricks, and Ross? Well, if you do, I suggest you leave it at that and not bother with "Love," a new Muse release on which Jon Hendricks attempts to capture jazz instruments with voices as he did so well two decades ago.

There are five singers in the new group, including Hendricks himself, his wife, Judith, their daughter Michele, Leslie Dorsey, and Bob Gurland. While they all do a decent job—and Gurland's vocal "trumpet" is as marvelous as anything Baby Cox cooked up in the Twenties—they simply fail to generate the old excitement. I'm afraid that the time has passed for this sort of thing.

MUSE MR 5258 $8.98.

Performance: Disappointing
Recording: Fair

BOB JAMES: Hands Down. Bob James (piano, synthesizers); vocal and instrumen-
jazz musicians of New Orleans from 1890 to 1930. The songs were written by such local legends as Al Bernard, William J. Braun, Abbie Brunies and his brother Merritt, N. J. Clesi, Robert Hoffman, Irwin Percy Leclere, Armand Piron, Joseph Virges, and others, and they are beautifully performed here, with meticulous respect for the period styles, by the New Leviathan Oriental Fox-Trot Orchestra under the direction of Bruce Pollack and Mel Rogers. George Schmidt plays banjo and does all the vocals, which are always mellow and never mumbled. To add to the delight of hearing such treasurable songs as Birmingham Papa Your Memphis Mama's Comin' to Town, there's a booklet with cartoons, maps and photographs of old New Orleans, and exquisitely detailed biographies of all the composers. P.K.

RECORDING OF SPECIAL MERIT
OSCAR PETTIFORD: Blue Brothers. Oscar Pettiford (bass), instrumental accompaniment. My Little Cello; Straight Ahead; Laverne Walk; Willow Weep for Me; and four others. JAZZ MAN JAZ 5036 $8.98.

Performance: Eloquent
Recording: Good

Bassist Oscar Pettiford took up residence in Denmark in 1959, and, although he died there only fifteen months later, he made a

NEW LEVIATHAN ORIENTAL FOX-TROT ORCHESTRA: I Didn't Mean Goodbye. New Leviathan Oriental Fox-Trot Orchestra (vocals and instruments). Angry; I Didn't Mean Goodbye; My Wonderful Tropical Girl; Triangle Jazz Blues; Don't Leave Me Daddy; and twelve others. CAMBELLACK 19328 $6.98 (plus $1 postage and handling from Leviathan Productions, 632 Julia Street, New Orleans, La. 70130).

Performance: Nostalgic
Recording: Excellent

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was generally pathetic. But there is nothing pathetic about this fine jazz in the so-called "soul" style of the pre-Beatles Fifties and Sixties. C.A.

TONY SCOTT: Golden Moments. Tony Scott (clarinet); Bill Evans (piano); Jimmy Garrison (bass); Pete LaRoca (drums). Walkin'; Free and Easy Blues; I Can't Get Started; and two others. MUSE MR 5230 $8.98. Performance Flashback Recording Wanting Clarinetist Tony Scott carved out his niche on the jazz scene during the early days of bop, and it was none too soon. Before long his instrument, once a major jazz voice, would be as passé as the kazoo and the washboard. Scott's clipped notes on this album of previously unreleased private recordings made in 1959 sound almost sneaky, giving credence to the notion that the clarinet is ill suited for the bop genre. I suspect this set was finally released because of the participation of the late Bill Evans, who does have some golden moments here. The sound quality is decent enough, I suppose, considering the circumstances, but this is more for historians or collectors than the average jazz fan. C.A.

CLARK TERRY: Color Changes. Clark Terry (trumpet, flugelhorn); Jimmy Keysper (trombone); Julius Watkins (French horn); Yusef Lateef, Seldon Powell (reeds); Tommy Flanagan, Buddy Johnson (piano); Joe Benjamin (bass); Ed Shaughnessy (drums). Brother Terry; La Rive Gauche; No Problem; Flutin' and Fluglin'; and three others. JAZZ MAN JAZ 5046 $8.98. Performance Good Recording Excellent When Clark Terry's "Color Changes" was first released, on the Candid label in 1961, rock-and-roll was still a pretty recent innovation and funk was an acoustic finger-snap- ping experience. Produced by Nat Hentoff, the creative force behind Candid, "Color Changes" is indeed a palette of varied, tastefully blended sound colors, which comes as no surprise when you look at the names involved. The set owes much to some arrangements by Al Cohn and Yusef Lateef, and there are excellent individual performances by Terry, Lateef (switching effortlessly among tenor, English horn, flute, and oboe), trombonist Jimmy Knepper, French hornist Julius Watkins, and pianist Tommy Flanagan. Time has done no more to these sides than give them an enhancing patina. C.A.

CAL TJADER/CARMEN McRAE: Heat Wave. Cal Tjader (vibraphone); Carmen McRae (vocals); other musicians. Bésame Mucho; Evil Ways; Speak Low; The Visit; Love; All in Love Is Fair; and four others. CONCORD JAZZ CJ-189 $8.98. Performance Good match Recording Excellent Although it was a good idea to team Carmen McRae and Cal Tjader, "Heat Wave" turned out to be Tjader's last album, so we shall never see the partnership develop any further. That is really a shame, for the combination works very well. McRae, who reverted to Spanish for Bésame Mucho, proves to be comfortable with any Latin beat. There is a variety of them here, some in character with the material, others not, and even Duke Ellington's Do Nothing Till You Hear From Me sounds good in Latin dress. I have heard better recordings by both artists, but this is a fine, curiously different display of their artistry. C.A.

RECORDING OF SPECIAL MERIT

GLEN ZOTTOLA FIVE: Secret Love. Glenn Zottola (trumpet, flugelhorn, alto saxophone); Harold Danko (piano); George Masso (trombone); Butch Miles (drums); Reggie Johnson (bass). Struttin' with Some
Barbeque, Lush Life, Change Partners, Blues March, and three others. FAMOUS DOOR HL 141 $9.50.

Performance: Very good
Recording: Good

Trumpeter Glenn Zottola is one of the few horn players today who takes his inspiration from Louis Armstrong. Though he's equally at home in both traditional and contemporary jazz, for commercial reasons his recording dates have been confined to one style or the other and have seldom given him a chance to display how well he can blend the two. This 1981 date is in the contemporary mold, but it leads off with Armstrong's Struttin' with Some Barbeque, a strong tune easily adapted to current forms. Zottola and his excellent group transform it from an all-out New Orleans shout number into a wry, quizzical statement laced with intrinsic humor.

Zottola is also an excellent alto saxophonist (has there been anyone since Benny Carter who doubles so well on horn and reed?) and features that instrument on Billy Strayhorn's Lush Life. Benny Golson's comical Blues March, and his own Blues for Rick. This is a fine album by one of the most promising young jazz talents around. J.V.

COLLECTION

RECORDING OF SPECIAL MERIT

CONCORD JAZZ ALL STARS: At the Northsea Jazz Festival, Volume I. Warren Vaché (cornet); Al Cohn, Scott Hamilton (tenor saxophones); Cal Collins (guitar); Dave McKenna (piano); Bob Maize (bass); Jake Hanna (drums). Just You, Just Me; Blues March; and three others. CONCORD JAZZ CJ-182 $8.98.

Performance: No-fault jazz
Recording: Very good remote performance

Last year, for the third time, Concord Jazz took some of its most articulate regulars to Holland's Northsea Jazz Festival. One result of that transatlantic trek is this spirited album; once you have experienced it you will be happy to note the promise implied in the "Volume I" printed on the cover. While this is definitely the FINEST pickup Shure has ever made, which makes it one of the finest ever made, period." — High Fidelity, July, 1982

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Pump Boys and Dinettes

The announcement that Pump Boys and Dinettes had just signed for a recording by CBS was made from the stage of New York's Princess Theatre one night last May, at a point when the musical was well into its continuing successful Broadway run, and I remember thinking at the end of the evening that this might well be one of those instances where the recording would be even better than the show. And it is. In fact, the show really has nothing by way of a book, just a situation involving four gas-station pumpers who pass a good part of their time tossing off beers at a roadside establishment called the Double Cupp Diner, located "on Highway 57, somewhere between Frog Level and Smyrna" and run by (you guessed it) the Cupp sisters. They sing a lot, and that's about all. But it's enough.

The songs, most of them real stompers with a good-time country spirit, are the work of the cast members themselves, the chief contributor being lead pump boy Jim Wann. They celebrate the simple joys of life, like "making love and watching color TV." And some days that is enough. A nice record. —Christie Barter

PUMP BOYS AND DINETTES. Original Broadway-cast recording. Jim Wann, Mark Hardwick, John Foley, John Schimmel, Cass Morgan, Debra Monk (vocals); instrumental accompaniment. CBS FM 37790, no list price.

some Dolbyzed Bayreuth. The cast members, even the mega-talented Carol Burnett as Miss Hannigan, never get clear of all the trappings, with the result that they seem semi-anonymous performers without much vitality. A couple of new songs written for the movie by Charles Strouse and Martin Charnin don't liven things up. Stick with the Broadway-cast album. P.R.


Performance: Florid
Recording: Good

This soundtrack from Claude Lelouch's three-hour epic, Bolero (we had the short version here—in France it ran six hours), is a disappointment considering the talents involved. Such previously capable old hands as Michel Legrand, Francis Lai, and Alan and Marilyn Bergman contributed music for this tale of three couples and their lives in Europe. The florid portentousness of their material is reflected in some of the song titles. How about Les Violons de la Mort? Or Ballet Apocalypse? The pits are reached, however, in a seemingly endless performance of Ravel's Boléro—sung by Christiane Legrand. P.R.

DAVID BOWIE: Songs from Bertolt Brecht's "Baal." Excerpts from the television soundtrack. David Bowie (vocals); orchestra. RCA CPL-1-4346 $6.98.

Performance: Dismal
Recording: Good

Baal was one of Bertolt Brecht's earliest works, and it was intended as a parody of the excesses of the Expressionists. Who would have thought it would have ended up these many years later as a self-parody by David Bowie? Although there's less than twenty minutes of music on this album derived from a TV adaption by Alan Clarke and John Willitt, it's still a dismal example of reaching far beyond one's grasp. P.R.

CHANGE THE WORLD: IT NEEDS IT (Bertolt Brecht—Hanns Eisler). Sylvia Anders (vocals); D. Justus Noll (keyboards, bass clarinet); the Stephen Roane Quartet (instruments). LABOR © LAB-14 $9.98.

Performance: Good
Recording: Good

The only really noteworthy thing about this release of syncopated harangues by Berlolt Brecht with music by Hanns Eisler is the U.S. introduction of Sylvia Anders. She is a true cabaret artist with a sharp, sly attack that reminds me of Laura Betti or even of the great Lotte Lenya. The material here is violently political, and Anders punches it across with appropriate scorn and sorrow.

Brecht wrote most of these proletarian call-to-arms after Hitler rose to power, many during the composer's wartime exile in (where else?) Hollywood. I imagine that they made quite an impression on the socially conscious producers, starlets, and screenwriters of the time. There's no question that Bertolt Brecht was a genius, but he could also be a bullying bore. Anyway, here's welcoming Ms. Anders. P.R.

DIVA (Vladimir Cosma). Original-soundtrack recording. Wilhelmine Wiggins Fernandez (vocals); Hubert Varron (cello); Vladimir Cosma (piano); London Symphony Orchestra, Vladimir Cosma cond. DRG SL 9503 $8.98.

Performance: Okay
Recording: Very good

Diva is a movie about a black American soprano named Wilhelmine Fernandez (she plays herself) who refuses to make record-ings. A messenger boy who is one of the opera singer's fans manages to smuggle a tape machine into a concert hall in Paris so he can take her voice home with him, and all sorts of comic complications ensue. This record features Fernandez singing the aria from Cailiani's La Wally—she sings it beautifully, but it doesn't mean much out of context—along with a couple of jaunty piano pieces and some vague rock passages composed and conducted by Vladimir Cosma. The movie won the 1982 Cesar award from the Academy of French Cinema for the best original motion-picture score. It's hard to fathom why. P.K.


POLTERGEIST (Jerry Goldsmith). Original-soundtrack recording. Orchestra, Jerry Goldsmith cond. MGM © MG-1-5408 $8.98, © CT-1-5408 $8.98.

Performances: Excellent
Recordings: Excellent

Steven Spielberg's latest entries in the sci-fi movie sweepstakes. E.T.: The Extra-Ter-
restrial and Poltergeist, have already totted up such enormous box-office receipts that success for the soundtrack albums certainly seems assured. Whether they are any good as records is another matter. E.T., with its dreamlike story of a lonely ten-year-old who finds a wonderful friend from outer space, seems to take up where Close Encounters of the Third Kind left off, and the same is true of John Williams's music, which still leans heavily on the kind of grandiose themes and effects he originally invented for Star Wars. Though these are much toned down here, E.T. isn't a terribly interesting score and, at times, seems scarcely distinguishable from the others in the series. You might as well just play the Star Wars record again as put this one on the turntable.

Jerry Goldsmith's music for Poltergeist, with its spooky plot about a suburban family harassed by a group of unfriendly ghosts, has a fresher appeal. Its lullaby-like opening, full use of electronic effects, echoing laughter of children, and sudden, slashing interruptions of sweet melodies by ominous chords, though occasionally predictable, make more interesting listening. This music might not scare you much, but it won't leave you yawning either. Both scores are very well played. The Poltergeist recording is another matter. It seems assured. Whether they are any good as records is another matter. Both scores are


Performance Unbelievable Recording Good

Never was a film more aptly named. The Pirate Movie is not only an inglorious ripoff of The Pirates of Penzance, but it was also slapped together to try and beat to market the forthcoming movie of the Joseph Papp production, which was filmed in England. This one was filmed in Australia, and justifiably left there. Among the disasters: the "original" songs by Terry Britten, Kit Hain, Sue Shifren, and Brian Robertson; the "singing" of Kristy McNichol and Christopher Atkins; the interpolated musical interludes, such as the chase music, Pirates, Police, and Pizza, by Peter Sullivan (no relation to Sir Arthur, thank heaven); and Kool and the Gang's performance of Stand Up and Sing. The list goes on and on. I've never been much of a Savoyard, but if I were, I think I'd be in a coma. P.R.

TRON (Wendy Carlos). Original-soundtrack recording. Journey (vocals and instrumentalists); Wendy Carlos (synthesizers); London Philharmonic Orchestra, Douglas Gamley cond. COLUMBIA SM 37782, © SMT 37782, no list price.

Performance Very good Recording Highest quality

Wendy Carlos writes to order like no other composer today. When called on to introduce the Moog synthesizer, Carlos delivered "Switched-On Bach," an album of clever, energetic interpretations of Bach that fully exploited the sonic and rhythmic capabilities of the new musical technology. When Stanley Kubrick needed an appropriate musical backdrop for his grim vision of the future, Clockwork Orange, Carlos came through with a brilliant, menacing assemblage of Beethoven, Broadway, and brooding electronics. Now Wendy Carlos gives us the soundtrack to Tron, and it's clearly known what they wanted—nothing profound, just something electronic, but different. From the recycled Holst that John Williams keeps turning out. And that's just what Carlos gave them: background music for playing Pac-Man or Space Invaders. M.P.

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This fall British Decca and London Records in the U.S. are honoring the seventieth birthday of Sir Georg Solti and the thirty-fifth anniversary of his association with these labels. The celebrations will include the release of four major new recordings. In these Solti conducts the three orchestras he has worked with closely in those three and a half decades: the Vienna Philharmonic in a recording of Schubert’s Ninth Symphony, the London Philharmonic in a set of Haydn symphonies and Mozart’s The Marriage of Figaro, and the Chicago Symphony Orchestra and Chorus in Haydn’s The Creation.

As these albums were appearing in record bins last month, Solti was scheduled for broadcast live via satellite from Chicago’s Orchestra Hall—over what the producer, radio station WFMT, describes as “the largest radio network ever assembled for any cultural feature”—to a total of 374 stations countrywide.

In the same series Rafael Kubelik is conducting an all-American program this month (December 2), and Erich Leinsdorf will conduct scenes from Die Meistersinger on March 10. The final live broadcast, on April 18, will be a complete Das Rheingold, which Solti and the Chicago Symphony will perform on tour at Carnegie Hall in New York City.

These broadcast concerts via satellite form part of the Chicago Symphony’s regular weekly taped series (heard as far afield as China and the Soviet Union). The broadcasts are now in their seventh consecutive season under the auspices of Standard Oil Company (Indiana) and its Amoco Companies.

With the release of the MGM film Yes, Giorgio, operatic superstar tenor Luciano Pavarotti has become a movie star, and film critics have not gone out of their way to be kind. One of them referred to Yes, Giorgio as a “bow-wow” of a picture. When Stereo Review talked with Pavarotti back in 1974, he said: “It is not very difficult for a singer to act well enough for the stage. Nobody expects him to be Laurence Olivier. It is a mistake to give too much attention to acting.... You must try to sing beautifully and musically and with feeling. You have to excite the audience. You must really touch them.”

Although a lot has happened to Pavarotti’s career since 1974, his ideas about acting don’t seem to have changed much. But then the writers of the script for Yes, Giorgio didn’t provide many ideas that were different from the scripts for movies of this kind made by tenors John McCormack (1884-1945) and Mario Lanza (1921-1959). No matter what one thinks of Pavarotti’s acting in the movie, his voice sounds wonderful, and despite the corniness of the picture he manages at times to be quite touching.

The music from the film is available on the soundtrack album “Yes, Giorgio” (London PDV 9001). It includes excerpts from the operas Rigoletto, La Gioconda, Tosca, and Turandot, among others, a few Neapolitan songs, and the song If We Were in Love, which has lyrics by Alan and Marilyn Berger and music by John Williams.

In an unusual reversal of the order of things, the music of Mozart for the soundtrack of the forthcoming motion-picture version of Peter Shaffer’s play Amadeus will be recorded before the actual filming, set for January 1983 on locations in Czechoslovakia and Italy. The man in charge of the musical aspects of the production will be Neville Marriner, music director of the Minnesota Orchestra, who will edit and conduct the music to be used. The end result, according to Marriner, will be a score integrating the several excerpts from Mozart’s works into a unified musical form—in essence, a suite. And a natural as a soundtrack album.... Meanwhile, a good deal of the music used in the
Britten Sherrill Milnes triumphed in the title role of the New York City Opera’s production of Thomas’s Hamlet this fall, giving the company its first hit of the season. Opposite him as Ophelia, the young soprano Ashley Putnam sang and acted with confidence and considerable flair, making a lovely mini-drama of the extended Mad Scene. When Milnes records Hamlet for Decca/London next spring, his Ophelia will be Dame Joan Sutherland.

Dame Joan opens the fifty-third consecutive season of the Texaco-sponsored Metropolitan Opera broadcasts in Lucia di Lammermoor on December 4. Her husband, Richard Bonyng, is the conductor. Emanuel Rosenthal conducts the French triptych Parade on December 11. On December 18, Milnes portrays another Shakespearean character, the title role in Verdi’s Macbeth, with Renata Scotto as Lady Macbeth and James Levine conducting. Hansel and Gretel will be performed on Christmas Day with Frederica von Stade and Judith Blegen, respectively, in the title roles and Rosalind Elias as the Witch. Thomas Fulton conducts. This performance of Hansel and Gretel will also be telecast in Texaco’s Live from the Met series on the Public Broadcasting Service.

**Disc and Tape Reviews**

**By RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH • STODDARD LINCOLN • ERIC SALZMAN**

**RECORDING OF SPECIAL MERIT**


Although Carl Philipp Emanuel Bach’s Essay on the True Art of Playing Keyboard Instruments (1753) is the most important document on the subject, its fame rests more on hearsay than actual familiarity with its contents. And the same goes for the sonatas and sonatinas the composer wrote to demonstrate his method. The reason, largely, is that the essay is geared to the clavichord, an instrument so intimate and tiny in sound that it is rarely played in public. Now that more musicians are exploring early instruments, however, more listeners and performers have come to appreciate the hushed beauty and subtleties of the clavichord. It will never become a concert-hall favorite, for its voice is simply not large enough, but its delicate sonorities can be caught on records by skillful engineers. Christopher Hogwood’s readings of these sonatas and sonatinas are a true realization in sound of what Bach’s essay is all about. Applying the composer’s lengthy and detailed instructions and admonitions, Hogwood produces some fine clavichord playing, revealing the beauty and intensity of the music and bringing us closer to an understanding of C. P. E. Bach’s keyboard style.


This is an example of a careful twentieth-century performance of Baroque music that does not quite come off. The playing by Isaac Stern, Pinchas Zukerman, Richard Killmer, and the St. Paul Chamber Orchestra is technically quite good, though no show is made of virtuosity. Every note is played exactly as it is written on the page, and the lines are classically simple. But a Baroque concerto should be a gutsy, virtuosic affair. Bach is indestructible, of course, but the Vivaldi depends on a certain animal drive and an almost vulgar showmanship that are lacking here. The result is impeccable but boring.


These two suites are to the flute repertoire what Cav-and-Pag are to opera. And why not? They make a splendid pair, as is amply proved by this robust new recording. Julius Baker is, of course, a thoroughly seasoned musician, and his supple playing is fortified by a mellow maturity that lends depth to his interpretation. The Madeira Festival Orchestra, a relatively recent organization, gives full-blooded, stylist support under the direction of Anthony Newman.

BEETHOVEN: Piano Concerto No. 4. in G Major, Op. 58. Rudolf Serkin (piano); Boston Symphony Orchestra, Seiji Ozawa cond. **Performance: Mellow Recording: Very fine**

Those expecting this release to have the same interpretive fire and magnificent sonorities that made the earlier Serkin/Ozawa/BSO recording of the Emperor Concerto for Telarc such a stunning success may be disappointed. The sound has a slightly veiled quality, which is perhaps appropriate to the more restrained nature of the music, and there is a very deliberate pacing of the opening movement, for which Serkin and Ozawa require a full three minutes more than Pollini and Böhm on Deutsche Gram-
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Mop. It is almost as though Serkin were mediating on the music instead of forthrightly projecting it as in many of his past readings.

The celebrated slow movement is quite another matter, however. It is as eloquently played here as I have ever heard it, and the tonal beauty of piano and orchestra is ravishing. The finale also comes across with bracing élan. Special compliments to Harris Goldsmith, by the way, for his illuminating liner notes.

D.H.

BERLIOZ: La Damnation de Faust (see Best of the Month, page 74)

RECORDING OF SPECIAL MERIT

BRUCKNER: Symphony No. 9, in D Minor
- Dresden Staatskapelle Orchestra, Eugen Jochum cond. ANGEL S-37700 $9.98, @ 4XS-37700 $9.98.

Performance: Intense, poetic
Recording: Very good

Those who find the granitic approach to Bruckner's Ninth Symphony a bit much will welcome this third recording of the work by Eugen Jochum. While paying due respect to the symphony's epic grandeur, Jochum also conveys its poetic essence. His treatment of the opening movement is notable for the timing of the pause just before the initial unison tutti, the intensely communicative reading of the lyrical episodes, and the highly dramatic handling of the development. His pacing of the great scherzo is just right for my taste, with enough weighting of the rhythm to provide impact without ponderousness.

Intense fervor also marks Jochum’s reading of the tragic yet glorious slow movement that closes this unfinished masterpiece. As in the opening movement, the conductor leavens the thunderous brass proclamations with loving attention to lyrical details along the way. Special praise, by the way, is due the Dresden first-chair flutist, whose solo work displays exceptionally lovely phrasing and tone. The only flaw in the otherwise superb orchestral performance concerns the brass intonation in some of the larger climaxes. The recording itself is excellent!

D.H.

CHOPIN: Nocturnes. Daniel Barenboim (piano). DEUTSCHE GRAMMOPHON 3741 012 two discs $25.96, @ 3382 012 $25.96.

Performance: Distinguished
Recording: Sumptuous

The photographic of Daniel Barenboim on the jacket of this record makes him look suddenly a good deal older than we are accustomed to seeing him, and it is indeed the quality of maturity—occasionally to an almost oppressive degree—that characterizes his approach to the nocturnes. That is to say, his playing is informed with a patrician dignity and a tendency toward deliberate pacing that at times get in the way of, or simply cancel, the sense of poetic freedom that is the libelude of this music. Dignity is surely not out of place here, and of course Barenboim does provide a great deal of exceptionally beautiful playing, some of it ecstatically touching. Indeed, throughout the set, which includes the two "Op. posth." pieces as well as the nineteen with opus numbers, Barenboim’s handsome tone and lack of orientation are welcome qualities, all the more welcome in the sumptuous digital recording. But Arthur Rubinstein breathes more life into the basic nineteen nocturnes (RCA LSC-7050), allowing them to soar, to sing, to embrace the listener, though he’s perhaps a little too frisky in some of the more thoughtful pieces. I would still recommend his recording over this one from Barenboim.

R.F.

RECORDING OF SPECIAL MERIT

CHOPIN: Seventeen Polish Songs, Op. 74
- Eugenia Zareska (mezzo-soprano); Giorgio Favaretto (piano). HELIOS @ H88001 $7.98.

Performance: Deeply felt
Recording: Good mono sound

Chopin was a natural writer of songs, and it is a pity that he wrote so few of them. Set to words by contemporary poets, the songs here were published posthumously in 1855. The best of them rank, in my view at least, with the best of his piano miniatures. Except for one deeply moving lament for dead patriots, they are all brief—tender romances, elegies, drinking songs—frequently in mazurka rhythm.

There have been several mediocre recordings of Op. 74 over the years (as well as Maria Kurendo's excellent renditions long ago). It needs a penetrating and evocative artist such as Eugenia Zareska to reveal the emotional range and coloristic variety inherent in these little gems. It is a pity that this gifted Polish singer has recorded so little. (She is the Marina in Seraphim's 1952 recording of Boris Godounov.) With her warm, full, but malleable tones, attractive temperament, and nice sense of rubato, she makes an ideal interpreter. As a vocalist, she is not absolute perfection, but neither was Jennie Tourel, nor are Galina Vishnevskaya and Elisabeth Soderstrom, and Zareska is in their class. She is excellently supported by her accompanist, and the sound of the 1955 recording is thoroughly enjoyable.

G.J.

RECORDING OF SPECIAL MERIT

COUPERIN: Concerts des Goûts Réunis Nos. 6, 7, 11, and 14
- Michel Pigueau (oboe); Martin Derungs (harpsichord); Pere Ros (bass viol). HARMONIA MUNDI HM 1070 $11.98 (from Harmonia Mundi USA, 2351 Westwood Boulevard, Los Angeles, Calif. 90064).

Performance: Exquisite
Recording: Beautiful

Some of the most exquisite melodic writing of the French Baroque is found in François Couperin's Concerts Royaux and Les Goûts Réunis. Basically dance suites for unspecified instruments and basso continuo, they were written for the refined ambiences of the king's intimate Sunday afternoon musicales in the royal chambers. Intricate, heavily ornamented, and extraordinarily subtle, they require a superb musician who can project their underlying simplicity. Michel Pigueau is such a musician; his phrasing and articulation are clarity itself, his ornamentation is impeccable and kept within the structure of the phrase, and his use of
French rhythmic alterations is musically logical and simple. Add to this a rhythmic control that allows for flexible tempos and a refined use of rubato, and the result is music making of the highest order.

Another noteworthy aspect of this album is Piguet's oboe, a three-keyed instrument built in Brussels by Jean-Hyacinthe-Joseph Rottenburgh (1672-1765). The full-throated, reedy sound is perfect for this music, and the subtle support of Martin Derung's continuo, riding above Pere Ros's supple handling of the basse de viole made by Guy Derat, creates a ravishing sonority. This recording demonstrates beyond a doubt that historical instruments, superbly played, bring more to early music than modern instruments ever can.

DEBUSSY: La Mer; Prelude à l'Après-midi d'un Faune; Dances Sacrée et Profane. Frances Tietov (harp, in Danses); St. Louis Symphony Orchestra, Leonard Slatkin cond. Telarc DG-10071 $14.95.

Performance: Good to outstanding Recording: Gorgeous

These are the first digital recordings of La Mer and the Danses Sacrée et Profane, and certainly, with their wealth of detail and inner textures, they are works that lend themselves to digital technology. Except for one tiny glitch at the beginning of Faune, the sound is clean and sumptuous throughout. The immensely gifted Leonard Slatkin is, of course, taking on the most formidable conductors of past and present in this repertoire, beginning with Beecham and Toscanini. Slatkin's treatment of the Prélude à l'Après-midi d'un Faune is appropriately languorous without becoming oleaginous, and the Telarc recording helps all the way. The La Mer performance, highly creditable throughout, is best in the middle movement, "Play of the Waves," where the details are tellingly set forth. The storm-tossed finale is less effective, suffering to some extent from rather matter-of-fact phrasing of the recurring "big tune."

The real treat here is the relatively minor but appealing Danses Sacrée et Profane, composed by Debussy to exploit the newly developed chromatic harp. St. Louis Symphony harpist Frances Tietov does wonderfully well in these delicately scored pieces, and the solo harp sound is simply gorgeous. Slatkin keeps a careful hand on the string dynamics while at the same time achieving a sensuous tone quality.


Performance: Affectionate Recordings: Good

RECORDING OF SPECIAL MERIT

DVOŘÁK: Symphony No. 9, in E Minor, Op. 95 ("From the New World"). Chicago Symphony Orchestra, James Levine cond. RCA © ATCI-4248 $15.98, © ATKI-4248 $15.98.

Performance: Highly charged Recording: Spectacular

With the Eighth, Eugene Ormandy completes his traversal of the last three Dvořák Symphonies; all three are among his most honored artists and performances are the standard of excellence on ANGEL RECORDS & CASSETTES.

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symphonies for RCA. His view of this work might best be described as affective and leisurely, and his treatment is most effective in the lilting sousedská-style third movement. On the other hand, the dramatic episode preceding the final reprise of the second movement is tasteful and unobtrusive. 

Particularly interesting here is the Sonata in G Major (BWV 1038). Bach wrote two versions of it, one for gamba and harpsichord, one for two flutes and continuo. In the former version the balance usually suffers because the gamba dominates the harpsichord, and in the latter the use of two similar instruments confuses the contrapuntal writing. The use of violin and flute, though never suggested by Bach himself, is the perfect solution, allowing both parts to be heard. And what a delicious performance it is! Bach does, indeed, speak to us clearly on modern instruments—when they are in the hands of fine musicians.

With all the recordings nowadays of Baroque works played on early instruments according to historically authentic performance practice, it can still be refreshing (and reassuring) to hear these works beautifully played on modern instruments in a thoroughly twentieth-century style. On an excellent RCA recording of three of J. S. Bach's trio sonatas, flutist James Galway and violinist Kyung-Wha Chung spin out long legato phrases that a Baroque performer would break up into minute articulations. Their phrasing, however, is so supple and carefully contoured that the counterpoint is clear and the overall effect exquisitely lovely. Moray Welsh plays the cello continuo parts in the same style, and harpsichordist Phillip Moll's contribution is tasteful and unobtrusive.

In James Levine's reading of the New World Symphony, it is clear from the cracking tension of the first allegro attack following the slow introduction that this is to be no mere run-through. Orchestra and conductor give their all from start to finish, and the result is comparable in pacing and musical excitement to the memorable 1953 Toscanini recording. Indeed, allowing for Levine's first-movement repeat, his performance for the first, third, and fourth movements are almost identical to Tosca-
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prouch, the fourteen performances here are all so richly satisfying that I found myself happily drawn back to them again and again.

Dacher's quite clearly has a flair for this music, he has real insights into Liszt's objectives and the means of achieving them, and, by no means least important, he has the taste as well as the physical control to realize the not inconsiderable musical value of pieces too often written off as mere virtuoso "vehicles." There's lots of brilliant pianism here (unequivalently called for) but no stunts, nothing to compromise the provocative and frequently poetic beauty of the quiet pieces, the joyous abundance of the Gounod fantasy, or the majesty juxtaposed with the visceral wallows in the chau.

There's something undeniably Dieter's flair, nothing in least sterile or de-limiting in his fastidiousness, he shows us the solidity as well as the fizzle in this music. In a word, we take him there we want to go. And Philips, for its part, has offered a really realistic sound that also goes far beyond what was achieved in the 1977 sessions. Let's hope these wonderfully enjoyable records will lead to more. R.F.

**MAHLER: Symphony No. 1. in D Major**

**Performance: very fine**
**Recording: very fine**

Claudio Abbado's well-earned status as a Mahler interpreter, and in particular his recent Deutsche Grammophon recording of the Sixth Symphony with the Chicago Symphony Orchestra (2707 117), could only lead one to expect from him an outstanding reading of the First. In the event, this is a very fine performance and recording of this much-recorded symphony, and it must surely be added to the list of the half-dozen or so choice versions, but perhaps nearer the bottom than the top of that list. Tempos are well chosen throughout, phrasing is sensible and not unfussy, momentum is maintained not only within individual movements but with the work as a whole, and the great orchestra plays with its customary distinction. In short, this is a cogent, satisfying performance and then some, but it lacks, I feel, that last degree of inner tension and inspiration that can make this work so much more than merely "satisfying." The truly outstanding, the truly memorable and indispensable recordings continue to be Klaus Tennstedt's (Angel S-37508) and the in-\8\-cendable remakes by Rafael Kubelik (DG Resonance 2535 72) and Jascha Hor-\8\-enstein (Noneschul H-71240). R.F.
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RECORDING OF SPECIAL MERIT

MARTINŮ: String Quartets Nos. 4 and 6, Panocha Quartet. SUPRAPIION 1111 2845 G
$9.98 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101)
Performance Excellent
Recording First-rate

Supraphon, the Czech record company, a few years ago launched the project of recording all the major works of Bohuslav Martinů, a composer whose music is too little heard nowadays. Having covered all six symphonies with Václav Neumann and the Czech Philharmonic, and all the concertos as well, the project directors have turned their attention to the seven string quartets, assigning them to the superb young Panocha Quartet. Following last year's initiation of the quartet cycle with a disc pairing Nos. 5 and 7 (1111 2675 G), the second installment is an even more attractive pairing of Nos. 4 and 6, a release that can only make us wonder why these works are not part of every performing foursome's repertoire.

The Quartet No. 4, composed in 1937, Klaus Tennstedt's new recording. Among other currently available readings, I would put Solti's (London LDR 72006) squarely in the modern category and Walter's (Odyssey Y2 30848) decidedly in the Romantic one. Much in Tennstedt's reading is akin to Walter's, especially in the opening movement where the "Totentanz" (funeral rites) aspect is dominant. As always with Tennstedt, there is marvelous sensitivity to timbre and detail, but it never becomes merely fussy. The digital mastering helps in this respect, and the entire production is marked by a spacious ambiance that does not sacrifice tonal body.

Lyrical sweetness characterizes the Ländler-style andante, and Tennstedt rather soft-pedals the menace implicit in the minor middle section. The pizzicato reprise is a special delight—again, digital recording with its freedom from background noise is a factor—and the coda comes off in ravishing fashion. Tennstedt emphasizes the scherzo's kinship with the Konnerwunderhorn song on which it is based. St. Anthony's Sermon to the Fishes. Inner voices in the fugato development are beautifully limned, and the coda has a true "oceanic" feeling.

Doris Soffel treats the famous Urlicht song with tender loving care, if not with quite the mystic rapture that Janet Baker acquires herself beautifully. The solo violin work in this movement is notably excellent, particularly in the handling of Mahler's portamento. In the apocalyptic finale, Tennstedt is not out to bring down the universe à la Bernstein; line and proportion are emphasized instead, though one might question the fast pacing of the march episode and the softening of the satanic element in the preceding section. But the final pages are treated musically here rather than cinematically, and the result is a different sense of fulfillment from what is experienced in a "blockbuster" type of recording. I think that the score allows both approaches, and I am glad that Klaus Tennstedt is around to espouse his particular and equally valid interpretation.

D.H.
The Cunning Little Vixen

Known only in scholarly circles outside his native Czechoslovakia at the time of his death in 1928, more honored than performed, Leos Janáček has risen to extraordi

nerous posthumous fame during the last three decades. Several of his operas, long thought to be hopelessly resistant to exportation, are now established on foreign stages. Virtually all of them have been recorded, and, to top it all, The Cunning Little Vixen has just been honored with a second release within the same year.

The Vixen is a particularly endearing example of Janáček’s unique musical world, in which shimmering webs of sound are punctuated by sharp and cool sonorities, catchy melodic fragments, and surprising timbral combinations. The melodies are mosaic-like, briefly stated rather than unfolding in an arch, yet held together in a continuity in which mercurial touches of orchestration illuminate the opera’s action. In the end, Janáček achieves the seemingly impossible: a philosophical statement without preachiness, with humans and animals interacting as if it were the most natural thing to do.

In Janáček’s pantheistic vision, life and death are both necessary components of nature’s cycle of renewal. He shows compassion for the frailties of all living beings—humans are by no means “superior” to animals in this work—without sentimentalizing them. In the admirable new London recording, Sir Charles Mackerras (pupil of Václav Talich and an old Janáček champion) captures the composer’s objective view. He keeps the music going at a brisk pace, stressing its vitality, imparting a great deal of energy to the brief ballet episodes and creating a truly sensuous atmosphere for the love scene between the Fox and the Vixen in the second act.

The singers are perhaps a shade better than we usually find in recordings of Czech operas. It is delightful to discover Lucia Popp, a refined interpreter of Handel, Mozart, and the Strausses, in an earthy role, singing in her native tongue. Her Vixen—bashful, flirtatious, now playfully wicked, now angrily defiant—is charming throughout. Eva Randová is her effective foil as the gallant Fox. If the various human and animal characters are not always brought to life in the most endearing tones imaginable, they most certainly are brought to life. Dalibor Jedlička’s baritone is better suited to the Gamekeeper’s tessitura than Richard Novák’s bass in the earlier recording on Pro Arte (PAL 2012), but, truth to tell, neither singer can do full justice to the eloquent and meaningful closing apostrophe, which calls for a first-class Hans Sachs type.

The Pro Arte set, which I reviewed here in May 1982, is, in fact, highly commendable. Its cast is quite good, conductor Václav Neumann matches Mackerras’s authority, and even the sound comes close to London’s digital marvels. The smoothness of London’s overall production, however, makes its recording clearly superior technically. There is an effective spatial-and-ambient illusion despite the orchestra’s tendency to cover the voices. —George Jellinek

JANÁČEK: The Cunning Little Vixen. Dalibor Jedlička (baritone), Gamekeeper; Eva Zigmundová (mezzo-soprano), Gamekeeper’s Wife/Owl; Vladimir Krejčík (tenor), Schoolmaster/Mosquito, Richard Novák (bass), Priest/Badger, Václav Zítek (baritone), Harásta; Beno Blachut (tenor), Innkeeper; Libuše Marová (mezzo-soprano), Dog; Lucia Popp (soprano), Vixen/Young Vixen; Eva Randová (soprano), Fox. Vienna State Opera Chorus, Vienna Philharmonic Orchestra, Sir Charles Mackerras cond. LONDON LDR 72010 two discs $25.96, LDRS 72010 $25.96.

The performances are more than persuasive, the sound is first-rate, and the pressings themselves give impressive evidence of how close the Czechs have come in approaching the standards of their neighbors to the west.

R.F.

RECORDING OF SPECIAL MERIT

MOZART: Piano Concerto No. 11, in F Major (K. 413); Piano Concerto No. 12, in A Major (K. 414). Todd Joselson (piano); Norwegian Chamber Orchestra, Todd Joselson cond. TURNABOUT TV 34780 $5.98, CT 4780 $5.98.

Performance Gorgeous

Recording: Musical

On records certainly, and probably to a good extent in concert too, Todd Joselson has made his reputation in the powerhouse repertoire: Prokofiev (lots of it), Tchaikovsky, Liszt, Rachmaninoff, the bigger Chopin, etc. This, then, is a particularly important record for him, for it shows a whole new side of his musicianship. It is also an important record for the Norwegian ensemble, moving here into a highly competitive area of the repertoire where familiarity with a particular national idiom (as in Grieg) is beside the point. Nice for everybody that it turned out so well.

This is chamber-music playing of a sort we don’t often hear, even in Mozart concerts. Rather than an opposition of forces, there is an empathy of utterance that is, at
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times, absolutely spellbinding. Joselson plays more quietly than one would think a virtuoso could (or would), and the orchestra supports him with grace and charm. Sensual simplicity is the aim, and nowhere is it realized more fully than in the largetto of the F Major Concerto, which goes to be one of the most beautiful accounts of a Mozart slow movement ever captured on records. There are moments of inaccuracy in ensemble here and there, but this is music making of a superior order and should not be missed.

—James Goodfriend

MOZART: Mass in C Minor (K. 427, "The Great"). Barbara Hendricks, Janet Perry (sopranos); Peter Schreier (tenor); Benjamín Luxon (bass); Vienna Singverein; Berlin Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON #2532 028 $12.98, © 3302 028 $12.98.

Performance: Overblown
Recording: Bombastic

Perhaps the heavy-handed playing of the Berlin Philharmonic is fine for Brahms and Mahler, but it certainly transforms the clarity of Mozart’s orchestral writing into chaotonic noise. The Vienna Singverein, with its hoity sounds, swoops, and inarticulate coloratura (not to mention going flat every now and then), contributes to theiasco. Neither Janet Perry nor Barbara Hendricks has the range or technique for the two soprano parts, though Hendricks does bring off the "Et incarnatus est" with some lovely sotto voce singing and fine phrasing. Peter Schreier and Benjamin Luxon are simply drowned out by the orchestra. Herbert von Karajan’s reading is a study in grandiosity. In short, a record to be avoided.

S.L.


Performance: Spacious
Recording: Dazzling


Performance: Stylish
Recording: Good

Turning his attention more and more to Mozart, Nikolaus Harnoncourt is convincingly demonstrating that the performance practices of the eighteenth century need not be restricted to early instruments but can also be effectively applied to the modern orchestra. Such is the case in his new reading of Mozart’s Prague Symphony, returned here to its full dimensions with all the repeats and rendered spacious by moderate tempos. Especially interesting are Harnoncourt’s slight tempo changes within a movement, particularly in the second theme of the first. His chief contribution, however, is in bringing clarity to the inner voices. By scrupulously observing Mozart’s sforzandi and detailed dynamic markings, he returns the music to its original vitality and increases its stature and depth.

The disc by the Academy of Ancient Music under Christopher Hogwood is drawn from Volume 5 of the Academy’s complete Mozart symphonies. The clarity and purity of sound produced by the authentic instruments are very striking; they do naturally what Harnoncourt has to force out of the Concertgebouw Orchestra. Moreover, Hogwood prefers rather quick tempos, and they work well in all but the slow movement of the Haffner, which lacks repose. All told, though, these discs both offer fine performances in an authentic style.

S.L.


Performance: Intense, but . . .
Recording: Very good

I looked forward with the keenest anticipation to hearing this digitally mastered recording of Carl Nielsen’s Fourth Symphony by Herbert von Karajan and the Berlin Philharmonic. Having lived with it for a month or so and compared it with the half-dozen other disc versions at hand, as well as my memories of live performances under Thomas Jensen, Sixten Ehrling, and others, I must confess disappointment.

The post-Brahmsian first movement starts off with a bang, and it looks as though we’re in for a real experience. The handling
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DECEMBER 1982
PUCCINI: Turandot. Katia Ricciarelli (soprano), Turandot; Placido Domingo (tenor), Calaf; Ruggero Raimondi (bass), Timur; Barbara Hendricks (soprano), Liù; Gottfried Hornik (baritone), Ping; Heinz Zednik (tenor), Pang; Francisco Araiza (tenor), Pong; Siegmund Nimsgern (baritone), Mandarip; Piero di Palma (tenor), Emperor. Vienna State Opera Chorus; Vienna Philharmonic Orchestra; Herbert von Karajan cond. Deutsche Grammophon 2741 013 three discs $38.94, © 3832 013 $38.94.

Performance: Misguided
Recording: Rich but uneven

What must have seemed a lustrous Turandot in the planning turns out to be a disappointing realization of Puccini’s last opera. The outcome, however, is not really surprising. Katia Ricciarelli is a fine lyric soprano, but she cannot project massive volumes of sound or cope with the relentlessly high tessitura of Turandot’s music. Herbert von Karajan tries to accommodate her frighteningly high singing with a sort of falsetto, that is, he suavizes Karajan’s vocal efforts in “In questa reggia,” but it is a hopeless endeavor. Karajan’s rendition of Puccini’s music simply cannot fail: the end of Act I and Act II are stunningly, but the balances are inconsistent; sometimes the voices are overpowering, sometimes they are covered by the orchestra. A haze of artificiality seems to hang over the enterprise. It seems to be a case of unconditional artistic surrender to the Big Star, an approach that occasionally pays off. Here it does not.

G.J.

RIMSKY-KORSAKOV: Capriccio Espagnole, Op. 34; Le Coq d’Or, Bridal Procession (see Tchaikovsky)


Performance: Stresses color
Recording: Very good

On the jacket of this album, annotator Max Harrison aptly quotes Rimsky-Korsakov to the effect that Antar is more a suite than a symphony. The work certainly does not have the sustained vitality of Rimsky’s orchestral masterpieces of 1887-1888, and it is not surprising that he revised it four times between 1868 and 1903. Nonetheless, Antar makes a fine vehicle for orchestral and sonority in its first three movements, and the richly sensuous finale, which contains the best music, offers a fine English horn solo in this recording.

David Zinman and the Rotterdam Philharmonic give a well-considered and well-wrought account of the music and are blessed with a particularly happy acoustic ambience. On the whole, Antar comes off more effectively here than the more familiar Russian Easter Overture. There is considerably more solemnity than joyousness in Zinman’s reading of the latter, and I prefer the version by Barenboim and the Chicago Symphony on Deutsche Grammophon.

The Philips recording job is excellent. There are some impressive tam-tam sounds in both works, and the bass line throughout is very solid indeed.

The Four Last Songs were, of course, Richard Strauss' farewell to the world, and few creative artists have been privileged to produce such a poignant and eloquent vaudeville.

Surely there is nothing else in Strauss' legacy to equal the serenity of these songs with their exquisite blend of radiant vocal lines and magical orchestration. Kirsten Flagstad was the soprano chosen by the composer to introduce the songs, and her performance with Wilhelm Furtwängler conducting the Philharmonia Orchestra, a sonically faded yet remarkable memento, is preserved on Turnabout THS 65116.

Sylvia Sass, a highly gifted though hitherto rather inconsistent artist, need not defer to these illustrious predecessors on vocal grounds. She pours lovely tones over this rapturous music with brilliant ease in the top notes and skilful management of the few tricky low notes the composer seems to have thrown in to keep sopranos on their mettle. She also has abundant breath support to cope with the long-spun legato ending of the second song in the cycle (September). Unfortunately, Sass' pronunciation is unclear, and this shortcoming will lessen the appeal of her performance for those who value the poetry of the Four Last Songs. Still, soprano singing of such security and tonal beauty is too rare nowadays not to be appreciated for its own sake.

Lisa Bengtsson, Gundula Janowitz, and Leonie Rysanek have recorded the cycle, nearly all with remarkable results.

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Lisa Bengtsson, Gundula Janowitz, and Leonie Rysanek have recorded the cycle, nearly all with remarkable results.
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make up the less interesting half of the program. The long, sensuous, and Wagnerian Verführung (with which I was not previously familiar) sounds extremely effective in its orchestral guise. The better-known Carélia, one of the most fervent Strauss songs, also seems to thrive in a lush orchestral setting. Das Rosenband and Meinem Kinde, on the other hand, are probably more effective with piano accompaniment.

The Hungarian State Orchestra provides glowing sound throughout, with fine violin and horn solos, and the conductor laudably resists drawing out the leisurier songs to the point where momentum is lost. Herbert von Karajan and the Berlin Philharmonic (DG 2530 368) may bring more transparency and dynamic nuance to this music, but the readings here are excellent.

G.J.


Performance Rich and ravishing

Recording Excellent

Once upon a time the composers of Russia were allowed to travel far and wide, escaping the bleak skies of their homeland for sunny Spain and Italy. After they came home, they would make the most of what they had seen and heard abroad, turning it into spectacular tone poems for orchestra. Thus Tchaikovsky paid tribute to the beauties of Italy in his Capriccio Italien and Rimsky-Korsakov converted folk tunes of Andalusia and Asturia into a sensational extravaganza. With each new advance in the technology of recording, such works have shown off their colors with increasing brilliance, and these lush interpretations by the Philadelphia Orchestra under Eugene Ormandy (originally released on Columbia MS 6917) glitter more sanitously than ever in this half-speed remastering and "audiophile pressing." For a bonus there is the alluring waltz from Eugene Onegin and the ornate Bridal Procession from Le Coq d'Or. Warhorses, one and all, but shining here like old masters freshly restored.

P.K.

TELEMANN: Suite in A Minor for Flute and Strings (see J. S. BACH)

THOMSON: Four Saints in Three Acts (see Best of the Month, page 78)

RECORDING OF SPECIAL MERIT

VIVALDI: Chamber Concertos in A Minor (RV 108), D Major (RV 84), G Major (RV 102), and D Major (RV 89); Sonata in D Minor (RV 63, "La Follia"). Musica Antiqua Köln. ARCHIV 2533 463 $10.98, © 3310 463 $10.98.

Performance Wonderful

Recording Wonderful

Scored for various combinations of two or three treble instruments and continuo, Vivaldi's chamber concertos combine the sonorities of the sonata with the format and virtuosity of the concerto. The light textures bristle with brilliance in a cascade of joyous sound. The seven members of the Musica Antiqua Köln perform them magnificently.
and the timbres of their old instruments create an arresting sound that is opulent in its ensemble blend yet crystal clear in the individual parts. This is a wonderful recording in every respect: music, performance, and sonics.

S.L.

VIVALDI: Concerto in A Minor for Two Violins and Orchestra, Op. 3, No. 8 (see J. S. BACH)

WEILL: Brecht Songs (see Collections—Robyn Archer)

COLLECTIONS

ROBYN ARCHER: Brecht Songs. Weill: Alabama Song; The Ballad of Sexual Obsession; Benares Song; The Drowned Girl; The Song of Surabaya Johnny; Solomon Song; Brecht (arr. Muldowney): Benares Song; Eisler: Some of the Stimulating Impact of Cash; Easter Day; Ballad on Approving of the World; Madama's Song; On Suicide; Hollywood Elegies; Song of a German Mother; The Flower Garden. Dessau: The Song of the Girl and the Soldier. Trad. (arr. Muldowney): Ballad of the Pirates. Robyn Archer (soprano); Dominic Muldowney (piano); Members of the London Sinfonietta, Dominic Muldowney cond. ANGEL S-37909 $9.98, © 4XS-37909 $9.98.

Performance: Good
Recording: Good

Robyn Archer is no Lotte Lenya, certainly, nor even a Teresa Stratas (who thrilled us last year with "The Unknown Kurt Weill"), but this Australian singer and entertainer does know her Brecht. Her "Brecht and Company" recital brought down the Sydney Opera House a few years ago, and this album is a result. What defeats it as a consistently interesting listening experience is not Archer's performing style, which is entirely suited to the material and frequently quite moving and persuasive, but the weakness of too much of that material. When she is singing Kurt Weill—the Alabama Song, the Ballad of Sexual Obsession, the Epitaph from The Berlin Requiem, Surabaya Johnny, and so forth—the tunes are so haunting that she is able to light them up in an exciting way. And even Brecht's own version of The Benares Song, written in 1926 before Weill supplied his unique setting, uses There Is a Tavern in the Town and Un Bel Di from Madama Butterfly to telling satirical effect.

But when the composer is Hanns Eisler, who shared Brecht's political views and wrote tuneless music as bleak as the East Germany where so much of it has been played, the results are dismal. In part this is due to John Willet's translations, which handicap the singer with mouthfuls of words she is simply unable to manage. This happens in the bitterly satirical Song of the Stimulating Impact of Cash, the Ballad on Approving of the World, and just about everything else here by Eisler except the Hollywood Elegies, with its withering remarks about the West Coast city Brecht referred to as "the Swamp." Despite the austere music, Brecht's stinging lyrics manage to hold attention. The ballad The Song of the Girl and the Soldier by Paul Dessau has a certain searing quality, but it is still not up to Weill. If you want to put over Brecht's messages in song, it helps to have good music to do it with. There's just not enough of that here to make me wholeheartedly enthusiastic about this disc. P.K.


Performance: Good
Recording: Very good

Here is an opportunity to get a closer view of a rising Greek mezzo whom we have encountered in a number of important recordings during the last few years. Agnes Baltsa has sung Amneris and Eboli under Karajan, and she was mezzo soloist in the Verdi Requiem under Muti and in the Beethoven Missa Solemnis under Karajan, whom she justly regards as her principal mentor. She is an artist of the first rank; there is no doubt of that. She is well schooled, her voice is of average size but under good control,
Shostakovich: Populist and Personal Symphonies

The relatively unfamiliar Second and Third Symphonies of Dmitri Shostakovich—newly recorded by the London Philharmonic Chorus and Orchestra under Bernard Haitink—were composed in 1927 and 1929, respectively. They can be viewed as musical counterparts of the brilliant and powerful Soviet poster art of that era, before the expulsion of Leon Trotsky in 1929 and the definitive ascendance of Stalin and his insistence on artistic conformity. In his early twenties Shostakovich was avidly soaking up populist avant-garde influences from the West, then freely accessible, and these two “propaganda” symphonies display an eager and wide-ranging, if not altogether disciplined, imagination at work. They are both, in essence, one-movement hybrids of symphony and cantata.

The Second Symphony is the briefer and more effective of the two. The slow opening could have come straight out of Charles Ives. The ensuing allegro molto passage is a kind of manic movie music like that in Shostakovich’s ballet The Bolt (he earned his living at the time playing piano accompaniment for silent films). There are also lyrical elements in the score that hark back to pages of the First Symphony (1926). Following an extended lyrical episode, the low brass sounds a “factory whistle” (in F-sharp) that ushers in a unison choral proclamation in praise of the October Revolution. This soon expands through polyphonic elaboration to a fully harmonic texture; the accompanying orchestral material anticipates some of the finale of the Seventh Symphony, which was to come sixteen years later.

The last pages are highlighted by choral speech in unison before the crashing orchestral conclusion.

The Third Symphony is a good ten minutes longer than the Second and is anything but symphonic in the usual sense. Rather, it is a kind of musical “newsreel” evocative of springtime festivities with a political obbligato—a concluding Revolutionary chorus. The most striking passage is the orchestral declaration that follows the motoric scherzo, in which speech rhythms are punctuated by bass drum. The concluding choral section is relatively brief but accompanied by considerable contrapuntal elaboration in the orchestra, again looking forward to analogous episodes in the later Shostakovich symphonies.

Bernard Haitink and his British forces are intensely committed and conscientious in their performances of the Second and Third Symphonies, but in the choral episodes of both works the suspended animation for silent films. There are also his living at the time playing piano accompaniment (for silent films). The composer’s use of his musical initials, D-S-C-H, warily in the third movement but with fierce assertion in the closing pages, marks this as an intensely personal work.

The first movement bespeaks an almost oppressive sadness, the satanic four-minute scherzo absolute evil on the rampage. The “return to life” and reassertion of self in the finale has led some to describe the Shostakovich Tenth as “an optimistic tragedy.”

Of the dozen or so recorded performances of the Tenth, beginning with those of Dmitri Mitropoulos with the New York Philharmonic in 1954 and Efrem Kurtz with the Philadelphia a year later, none has been less than good, and a few have been truly distinguished. In the latter category are both recordings Herbert von Karajan has made of the work with the Berlin Philharmonic, one in 1967 and a recently issued digital one. The readings are substantially the same. The 1967 version is marginally faster in the first three movements, but the new version has a slightly faster finale, more taut and exciting, and more full-bodied sound and greater clarity of inner detail throughout.

Nevertheless, while the new recording is almost overwhelming in its presence (which makes the slow movement seem even gloomier and more oppressive than usual), I prefer the ambience of the older one. It was presumably recorded in the more brilliant and spacious Jesus Kristuskirche in Dahlem, the locale generally used by Karajan and the Berlin Philharmonic before the Philharmonic hall was built. Comparing these two recordings of the same music with the same performers in two different locales tends to confirm my impression that the Philharmonic’s acoustics are rather harsh and unyielding, and the effect of the digital process is, if anything, to emphasize those characteristics.

—David Hall


and the smoldering temperament she effectively displays in the Macbeth aria here is kept within musically bounds. Above all, her intonation is dependable. I like many things about her singing, but when an artist chooses to display her talents in a bravura showcase, she invites an appraisal by bravura standards. Hence my reservations about this record.

We may have in Baltsa another of those modern mezzos who someday will opt to become a soprano. The upper half of her register is impressive indeed, but the relative weakness of her low notes is revealed in "Non più mesta." The Mercadante aria (welcome to records even if it shows little originality) calls for expert trills that are not within Baltsa's command. In general, her technique is sound, but her Rossini runs are not on the Horne or Berganza level of ultimate smoothness.

I admit that these are carping observations about an impressive album that I wish had been even better. The same applies to the contributions of Heinz Wallberg and his Munich orchestra. Previous recordings have shown them both to better advantage. G.J.


Wolfgang Brendel, the leading baritone of the Munich Opera and a singer with an established international reputation, has a lot going for him. He is young (thirty-five), handsome, and evidently the beneficiary of sound training. A spectacular top register (there's a ringing A-natural offered here by way of demonstration) is one of his great assets, but the voice itself has a rich and attractive timbre. Yet, although he is never downright unidiomatic, I cannot say that he has truly mastered all the challenges of the diverse repertoire represented here. Not surprisingly for a German artist, he is quite effective in the declamatory Falstaff aria, but a piece such as "Il balen," with its bel canto foundation, shows up the seams in the artist's technique. And, while his intonation is generally secure, I still miss the dead-center sound of the best Italian singers in his tones.

Nevertheless, these are very decent renditions of these familiar arias. It is not Brendel's fault that my ears resound with memories of too many greater ones. Aside from isolated moments of slackness, the accompaniments are fine, and the recorded sound is outstanding. G.J.

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SERIOUSLY TOO.

accordion, so I don't think it's funny at all.

duced a record of Argentine tangos with the
dion is funny, but I've written a major solo

to think that the mere presence of an accor-
d to be a comedy team. Some listeners seem

Performance: Virtuoso

Recording: Not live but lively

The photo on the cover of this album was
shot at the end of my block on the Brooklyn
Heights Promenade; the recording, howev-
er, was apparently made in London and

Handel: Gigue, La Réjouissance. Rossini: The
Silken Ladder: Overture. J. S. Bach: Double
Concerto in D Minor. Largo. Boyce: Symphony

Young Swans. Vivaldi: The Seasons, Win-


Dance of the Blesssed Spirits. Praetorius:

KHATCHATURIAN: Sabre Dance. Some au-
dressing the Cambridge Buskers, I think people

laugh at them because pretending not to

take their stuff seriously gives serious music
lovers an opportunity to listen to, and enjoy,
a lot of music they are not supposed to listen
to or like. You might say that laughing at it

is a furtive way of enjoying it! The other
point is that this is a pair of wonderful mu-
sicians. Recorded wherever. If you liked the
Cambridge Buskers' first album, "A Little
Street Music," you'll love this one. E.S.

RECORDING OF SPECIAL MERIT

PLACIDO DOMINGO: Bravissimo, Dom-
ingo. Mascagni: Cavalleria Rusticana: Mamma! Quel
vino è generoso. Leoncaval-
lo: I Pagliacci: Vesti la giubba. Cilea:

Adriana Lecouvreur: L' anima ho stanca. Puccini: Tosca: E lacrav le stelle. La
Bøhème: Che gelida manina. Manon Les-
caut: Tu, tu, amore? Tu? (with Leonyne
Li. Verdi: Il Trovatore: Di quella pira. Un
Ballo in Maschera: Teco io sto (with Katia
Ricciarelli, soprano). La Traviata: De' miei
bollenti spiriti. Aida: Celeste Aida. Don
Ricciarelli, soprano).

Luisa Miller: Quando le sere al placido. La
Forza del Destino: Ohi tu che in seno agli
angeli. I Vespri Siciliani: Giorno di pianto. Rigolet-

Per-

s考察 a great deal of emotional

interpreters. Dramatically, Domingo is un-

powerful on the tenor arias and comparative
weaker on the coloratura. artist. Although the present collection em-

braces recordings made over an extended
period, the level of excellence is remarkably
consistent, the singing always involved,
intelligent, and honestly felt. In the relatively
carly Luisa Miller aria we find a meltingly
lyric cantabile quality that is no longer
present now that his voice has taken on a

high tessitura and the end is not in sight.

Versatility and productivity are not, how-

ever, the only qualities that distinguish this
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lyric cantabile quality that is no longer
present now that his voice has taken on a

high tessitura and the end is not in sight.
happ the peak achievement here is a truly inspired Improviso (Andrea Chénier), which is undiminished by the artificial fadeout necessitated by excerpting the aria from the complete recording.

I have often remarked in these pages that Domingo's most frequently equaled his vibrant theatrical impact. In this set, the Tosca, Trovatore, and Norma excerpts approximate the ideal, in the Cavalleria, Rigolletto, and a few other excerpts the voice is distant, with a foggy, bottled-up quality I cannot identify with the singer. Interestingly, the thinnest sound as such (the Bullo duet, of routine Italian studio provenance) yields a fairly faithful tonal image of the tenor, which makes me think that the reverberance modern recordings so lavishly employ is not necessarily flattering to a voice of Domingo's characteristics.


Performance: Very good Recording: Very good

Although I would have thought it unnecessary by now to catalog or segregate composers by their sex, I don't think any fancier of piano music will be disappointed by this charming program of works written by four American women and played by a fifth.

The best-known of these composers is Amy (Mrs. H. H. A.) Beach, a child-prodigy pianist born in New Hampshire in 1867. She has been coming into her own on records in recent years, with a piano concerto, a trio, a quartet and a quintet for strings, a violin sonata, various piano pieces, and a number of songs all currently listed in Schwann. Her musical language has an accent reminiscent of Franck, Debussy, and Fauré, but her self-taught compositional style has an agreeable individuality. The nature studies on this disc—tone pictures suggesting shimmering waters, fluttering birds, and spring flowers—are especially winning. In a similarly romantic-impressionist vein are the miniatures by Marion Bauer (1897-1955), who spent many years championing modern music as a teacher and lecturer but in these pieces of her own nature studies on this disc—tone pictures not somehow managed to make musically quite persuasive. The songs by Hugo Weigall, based on tender lyrics by Adelaide Crapsey, are somewhat austere for their subject matter but at the same time impressive; Lee Hoiby catches the same poet's verses in a lighter, freer way in settings that are more felicitous if less sophisticated. The texts by Peter Viereck, Richard Hughes, and Edgar Allen Poe are unsuited to the simplistic style of Jack Beeson; his setting of Poe's El dorado is particularly disappointing. Ernst Bacon fares better with seven poems by

(Continued on page 135)


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Imagine an entire Carnegie Hall recital made up of piano transcriptions of brief pieces originally composed for orchestra, organ, or voice! It would just about have to be Earl Wild who would undertake such a program, and that is exactly what he did in November 1981. Fortunately for those of us not lucky enough to have been there, Audiofon has now released a two-disc live album of the recital entitled “The Art of the Transcription.” Wild’s affection for that art, and for the particular examples of it here, is more than apparent throughout the four brilliantly recorded sides.

And what a heady succession of little gems this is! There is very little in the way of thundering, even in Moszkowski’s incredibly effective version of the Liebestod or Thalberg’s fantasy on Semiramida, and the delicacy in Liszt’s transcriptions of Chopin songs and Rachmaninoff’s of the Kreisler Liebestod and the Mendelssohn scherzo is sheer enchantment. The Rameau/Godowsky pieces are here, as are the Bach/Tausig Toccata and Fugue in D Minor and even Wild’s own version of the Dance of the Little Swans from Swan Lake. The recital opens with the once-ubiquitous Sgambati setting of the Dance of the Spirits from Gluck’s Orfeo ed Euridice and closes, appropriately, with the otherwise forgotten Schulz-Evler’s famous “Concert Arabesques” on The Blue Danube.

There is not a perfumy bar among these performances, nor a phrase without affection or without style. There is a lot of coughing during the Gluck/Sgambati, but otherwise the audience makes its presence felt only in the applause and cheering between numbers. In all, the recital is a delightful experience, and in no small way an illuminating one too. The recording, the pressings, and the documentation are all first-rate. I hope now that Wild will find enough similarly appealing transcriptions for a follow-up volume.

In the meantime, Audiofon has also issued a studio-recorded disc on which Wild steps outside the Gershwin/Rachmaninoff/Liszt and “Romantic Revival” categories that have largely dominated his discography to have a go at some staples of the French piano repertoire: Ravel’s Gaspard de la Nuit, Franck’s Prelude, Chorale, and Fugue, and Faure’s Third Barcarolle, in G-flat. It is a very successful go. The Ravel in particular is a most insightful and magnificently realized version of a fascinating and difficult work. Each section is superbly characterized, and the whole is brought off with almost chilling intensity and a sense of bizarre terror that is the more telling for never being overdrawn. In the Franck, there is a great sense of the grand design and unburied building toward the climax. It is high time we heard Earl Wild in this sort of music, with a start has been made, some more Ravel (starting with Le Tombeau de Couperin) would be even more welcome than another package of transcriptions. What a marvelous pianist he is, and how good it is of Audiofon to have thought of recording him in this repertoire—and recording him so well. —Richard Freed


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