RECORD OF THE YEAR
AWARDS FOR 1981

BENNY GOODMAN
The King of Swing Is Still Too Young to Retire

JAPAN AUDIO FAIR
Product Trends for the Eighties

EQUIPMENT TEST REPORTS
- Cosmostatic Model 577 Speaker System
- Kenwood KA-600 Integrated Amplifier
- Mitsubishi DA-R15 Stereo Receiver
- RG Dynamics X-15 Dynamic Processor
- Teac C-3RX Cassette Deck

INTERVIEW
The Incomparable LENA HORNE

DISC SPECIALS
Lindsey Buckingham • Pieces of a Dream
King Crimson • The Police
Ashford & Simpson
Armstrong & Bechet
BACH: Anna Magdalena’s Notebook
TIPPETT: Fourth Symphony
Francisco Araiza
Bartók for Orchestra
Introducing Pioneer Syscom: A totally new kind of high fidelity component system.

If you're in the market for true high fidelity sound, a pre-matched system is a good way to get it. Because it offers the sound quality of separate components and saves you the trouble of having to buy them piece by piece.

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Syscom, on the other hand, is the high fidelity system built by the people who are famous for every thing that goes into one. Pioneer. In fact, today Pioneer is the leading maker of virtually every kind of high fidelity component.

What's more, Syscom's components aren't merely...
matched. They're built for each other by Pioneer audio engineers. This maximizes the system's performance and results in sound quality often not even found in systems costing twice as much.

There's a wide variety of Pioneer Syscom groups available in vertical and horizontal arrangements. One of them is perfectly suited to the way you live.

So why would you even consider buying a high-fidelity system from a manufacturer who knows how to build some of the components, now that you can buy one from the people who've perfected them all. Pioneer.

We bring it back alive.
Five Reasons You Should Step Up to Our New Realistic® Digital Receiver

1. Digital Synthesized Tuning System
Tuning takes just a touch of the feather-action bar to go up or down to the exact center of every AM or FM channel. A search feature tunes up or down automatically, stopping on the next station. No pointer, no dial, no tuning meter — there's no need for them! Instead, a precision quartz crystal, like the ones used in computers, locks in each station. The STA-2290 can't drift or be mistuned. You get pure music, not distortion.

2. Computer Control
Up to 12 stations — six AM and six FM — can be programmed into the microprocessor-controlled memory for instant, pushbutton recall. Memorized frequencies are automatically protected for up to an hour in case of power loss. And with dual-gate MOSFET tuning and CMOS LSI frequency synthesis, you get superb FM stereo listening.

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There's plenty of power to reproduce the most demanding music without distortion — even through two pairs of speakers! The 90-watt amplifier delivers a wide dynamic range so the depth and "live" quality of your music is recreated with stunning clarity. Protection circuitry prevents damage from overload or thermal problems.

4. Human Engineering
All controls and indicators are designed for convenience and ease of operation. You get bright color-coded LED function indicators, LED signal strength and power meters. And what versatility! — you can add two tape decks with monitoring and dubbing capabilities, two turntables and an aux source.

5. Priced Right
The computerized STA-2290 brings music to your ears for only $599.95. And it's designed, engineered and built by us — the company that also builds the world's best-selling computer line — TRS-80®.
NEW PRODUCTS
Roundup of the latest audio equipment and accessories

AUDIO QUESTIONS AND ANSWERS
Speaker Switching, Digital Car Stereo, Headphone Attachment
LARRY KLEIN

TAPE TALK
HX: A New Approach to Recording Bias
CRAIG STARK

TECHNICAL TALK
Speaker Efficiency and Sensitivity
JULIAN D. HIRSCH

EQUIPMENT TEST REPORTS
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JULIAN D. HIRSCH

AUDIO FAIR IN TOKYO
A report on design trends soon to have their effects on the American market
LARRY KLEIN

BENNY GOODMAN
The King of Swing is one more exemplar of the American dream
CHRIS ALBERTSON

RECORD OF THE YEAR AWARDS—1981
STEREO REVIEW'S critics and editors select the recording industry's top artistic achievements

INTERVIEW: LENA HORNE
"I had to make one Lena out of two people"
PETER REILLY

BEST RECORDINGS OF THE MONTH
Lindsey Buckingham: "Law and Order"
Francisco Araiza: Opera Recital
The Notebook of Anna Magdalena Bach
Tippett: Symphony No 4
Pieces of a Dream
King Crimson: "Discipline"

POPULAR MUSIC
Ashford & Simpson: "Performance"
The Police: "Ghost in the Machine"

CLASSICAL MUSIC
Bartók: Works for Orchestra
Schubert: Die Freunde von Salamanka

BULLETIN
WILLIAM LIVINGSTONE

SPEAKING OF MUSIC
WILLIAM ANDERSON

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106

COVER: Caricature of Benny Goodman by Al Hirschfeld (see page 10).
For over 25 years, the Harman Kardon legend has been built on dedication to a single objective. Musical truth. From tape decks and turntables to receivers and separates, Harman Kardon represents the ultimate in sonic quality. And pictured above is the ultimate in Harman Kardon electronics. The hk775X2 dual mono amplifiers were created for the music lover who demands the sonic improvements that come from assigning separate high-powered* amplifiers to each stereo channel. Among the many leading design concepts they incorporate are three of particular note.

1. High Current Capability allows the hk775X2 to deliver nearly unlimited instantaneous power under heavy, low impedance loads. Low frequency transients, such as the beat of a kick drum, are reproduced with their tight, solid attack and full dynamic power completely intact.

2. The use of Low Negative Feedback puts total TIM distortion at less than .007% for noticeably smoother, dramatically more open highs.

3. Ultrawideband frequency response keeps phase shifts well outside the audible spectrum, for an incredibly transparent, solid stereo image.

Finally, the hk715 offers Digitally Synthesized Quartz-Locked tuning for accuracy and 8 presets for convenience. Like all Harman Kardon components, the hk700 series achieves its extraordinary openness and depth through attention not only to bench test specs, but to how the designs sound while reproducing music. Because ultimately, what must sound real is the music.

For your nearest dealer, call toll-free, 1-800-528-6050, ext. 870.


*130 watts RMS per amplifier, into 8 ohms, 20Hz-20kHz, with less than .03% THD.
DIGITAL STANDARD: 3M has announced its support for the 48-kHz digital audio sampling-rate standard proposed at a recent convention of the Audio Engineering Society. The company said that the 48-kHz rate has sufficient acceptance by both technical study groups and users of digital-audio equipment. While still believing a 50-kHz rate is superior for technical reasons, a company spokesman conceded that the 48-kHz rate "is very workable and presents no real sacrifice in audio quality, our principal concern." This support means that some 3M digital recorders may have to be modified.

"WORKING CLASS DOG," an RCA album by Rick Springfield, has been certified platinum by the Recording Industry Association of America. Gold-album status has been certified by the RIAA for "Something Special" by Kool and the Gang (De-Lite), "Never Too Much" by Luther Vandross (Epic), and "Songs in the Attic" by Billy Joel (Columbia).

WHAT OPERA NEEDS IS MORE T-SHIRTS. According to figures released by the directors of the Hartford Civic Center, four performances of Verdi's Aida were outgrossed (in at least one sense of the word) by only two concerts by the Rolling Stones. The Aida performances by the Connecticut Opera Company brought in $595,000 in ticket sales and $26,000 from various concessions. The Stones, however, raked in $445,000 in tickets, $24,000 in food and drink, and a whopping $275,000 in T-shirts.

AWARDS: The 1981 Grand Prix given by the Japan Record Academy has gone to Elly Ameling's Philips recording of all the Haydn songs (released in the U.S. in January).... The much recorded soprano Jan DeGaetani has been made an honorary Doctor of Music by Mount Holyoke College in South Hadley, Mass.

OZZY OSBOURNE, of Black Sabbath fame, is the biggest thing to hit Jet Records. His first album, "Blizzard of Ozz," has sold more than 800,000 copies, and the second, "Diary of a Madman," released last October, has gone gold and is still selling fast. Osbourne is now on a $2-million, four-month U.S. tour to promote the album. His show, described as a living horror movie, requires a road crew of twenty-five technicians, and Ozzy, who has bitten off the heads of live birds, boasts that this is "the grossest show ever." Printed on the concert tickets is the warning: "No Normal People Admitted."

A MASTER'S DEGREE IN MUSIC CRITICISM is now offered by McMaster University in Canada. According to the initial announcement of the M.A. program, it is "designed for those interested in historical, theoretical, and practical aspects of music criticism." This is thought to be the first time a degree in this subject has been offered in North America. Write Chairman, Music Department, McMaster University, 1280 Main Street West, Hamilton, Ontario, Canada L8S 4M2.

"A TRIBUTE TO JOHN LENNON," a show performed in Cincinnati, Ohio, Newark, Delaware, West Point, New York, and at Radio City Music Hall in New York City, has been recorded by the Moss Music Group for release on the MMG label in February. The artists include the Cincinnati Pops Orchestra conducted by Erich Kunzel with David Clayton-Thomas (formerly of Blood, Sweat, and Tears) and Roberta Flack.

BEETHOVEN'S BIG ON THE LITTLE SCREEN. While some Public Broadcasting Service stations are still rerunning a series of TV performances of the Beethoven symphonies by the Detroit Symphony Orchestra under Antal Dorati filmed back in 1977, a new series of the nine symphonies plus the Missa Solemnis and miscellaneous short works conducted by Leonard Bernstein is currently being shown on PBS stations Monday nights at 9:00. Beginning on January 25 with the First Symphony, the eleven-part series continues this month with Nos. 2 through 5. The orchestra is the Vienna Philharmonic. Actor Maximilian Schell hosts, and Bernstein himself provides musical commentaries.
Speaking of music...

By William Anderson

CLASSICS IN THE VERNACULAR

I DON'T know about you, but I'll never forgive Groucho Marx for what he did to poor Margaret Dumont. Thanks to art-movie reruns and TV's Late Show, even those of you who weren't born yet will remember that it was she who was the butt of Marx's crude and often cruel railery in such Thirties comedies as Duck Soup, Night at the Opera, and Day at the Races.

She, and probably any other bemused dow—

ster, or pretentious she would have deserved what she got, but she was merely being her
guage unlucky enough to step into the line of fire, was a fair target those days because we were in the depths of the Great Depression, and it was a well-known fact that all our miseries had been caused by the idle rich. I said "fair target," but that was not really so: the Dumont character was the real artist. The grade-school puns to Bach's Morpheus. The grade -school puns to Liszt's Rhapsody from Hunger(y) or Offenbach's Morpheus. The grade-school puns to the contrary, there is nothing intrinsically silly about this music, and the target is really those who like it.

Classical music is other vernacular uses besides being a whipping boy in the class wars, as any number of treacly love songs ripped out of Russian piano concertos can testify. A recent example of this "a good tune is where you find it" approach to music (and record) making is "Hooked on Classics" (RCA AGLI-4194, reviewed by Paul Kresh in this issue). Containing everything from Tchaikovsky's Piano Concerto No. 1 to the Poet and Peasant Overture ruthlessly discofied down to a relentless background music for God knows what activity, it is a machine-tooled artifact designed solely, and utterly without malice, to make money (it will: U.S. album sales have already hit six figures, so disco is not yet dead).

But there is a third way to approach the classics "from below," and it is demonstrated in a corder of a new release called "A Little Street Music" (Deutsche Grammophan 2536 414). Two young English street musicians called the Cambridge Buskers (see page 90) offer a loving tribute, via flute and an accordion little larger than a concertina, to Mozart, Rossini, Brahms, Bach, Chopin, and Boccherini, among others. The simple "charts" have been put together by ear (one of the duo doesn't even read music), and it is remarkable how fresh, how endearingly, undeniably musical it all is. Mozart, with his already light-filled textual clarity, comes off brilliantly in four selections, but Michael Praetorius' Bourree is for me the greatest success. The whole program gets my hearty recommendation, and I plan to dedicate every playing to the memory of Margaret Dumont. She would have understood it perfectly.

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STERO REVIEW
Loran™ is the cassette of the future... but it's here right now. The original and only heat resistant cassette shell and tape that withstands the oven temperatures of a car dashboard in the sun. Testing proves that even TDK or Maxell cannot take this kind of punishment.

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

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

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

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

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

WHEN ALL OTHERS FAIL... LORAN CASSETTES ARE SAFE AND SOUND SENSATIONAL.
LETTERS TO THE EDITOR

Dolby-C

- The opening line of the test report on the Sony TC-FX6C cassette deck in the December 1981 issue makes a statement that may confuse readers. The report states that the Sony deck is "the first generally available recorder to include, in addition to the usual Dolby-B circuits, the recently developed Dolby-C noise-reduction system." In fact, Pioneer was the first major manufacturer to incorporate Dolby-C in its cassette decks, and our line of Dolby-C-equipped recorders has been on dealers' shelves since early fall 1981.

Further, in conjunction with Dolby Laboratories, Pioneer has developed the industry's first and only single-chip Dolby-C integrated circuit. Other manufacturers are still using two strapped Dolby-B chips in their Dolby-C-equipped decks. Pioneer's single-chip approach is far simpler and far more accurate.

PETER DORBIN
U.S. Pioneer Electronics Corp.
Moonachie, N.J.

Bob Dylan

- Noel Coppage remains the popular-music critic I most admire. Nevertheless, his December review of Bob Dylan's "Shot of Love" album would have been better titled "Semicircular Coppage" than "Semisecular Dylan," for he gave only half the story. Perhaps Mr. Coppage and other Dylan fans (myself included) would like more "jokes and fairy tales," but one must take stock of the psychology and recent experiences of the artist and not just resort to wishful thinking.

As one who experienced a religious conversion eight years ago, I can well understand what Dylan is going through. I too envisioned a wrathful God, and did so for a number of years. I have relatively recently come to accept a more benign, even jovial, God. It is difficult to explain why you have faith in something or someone whose existence cannot be empirically proved, and it has made me angry at times that I couldn't explain my reasoning (or lack of it) to others. Perhaps my belief in a wrathful God was a direct consequence of that anger.

Dylan's experiences may not mirror mine, but I empathize with his present situation and assume he will mellow with time. "Shot of Love" may not be the same album you would have liked it to be, but yes, Noel, we might just encounter mayonnaise again—and perhaps a different Dylan concert that I attended are any indication, it may be sooner than expected.

CHRISTOPHER P. DUNN
Milwaukee, Wis.

Turntable Mats

- I take offense at one statement in Peter Mitchell's otherwise very informative November article on turntable shopping. Referring to accessory turntable mats, Mr. Mitchell says, "You'll also find harder materials such as ceramic and even glass used by a few audiophiles who apparently prefer extraneous vibrations." This is highly misleading and untrue. The reason audiophiles purchase such mats, including the Soundisc manufactured by my firm, is that they allow the listener to extract the maximum amount of audio information from a record, information that is often lost through using a compliant mat, much as information can be lost because of compliant turntable or tone-arm bearings. In addition, a glass mat when properly used can allow one to enjoy outstanding reductions in acoustic feedback, as has been demonstrated in various laboratory tests of our product. And these differences in sound quality are hearable by the "man on the street," not only by the audio elite.

ALEC WEIL
Director, Dudley Sound, Inc.
Chicago, Ill.

Peter Mitchell replies: The existence of extraneous vibration in disc records and the efficacy of soft turntable mats in absorbing such vibration have been documented in several published experiments. If Mr. Weil can cite any evidence showing that the "information" lost through use of a compliant mat is part of the original musical signal (Continued on page 10)
...and then came the “Z” Receivers.

There was a time when you had to buy separate components to enjoy the control flexibility and power needed for true high fidelity music reproduction.

Not anymore. Sansui now has developed its “Z” series receivers.

Whether you choose the super-powered 9900Z, the modestly-sized 3900Z, or any of the four models in between, you get the full-frequency benefits of Sansui’s DC-servo amplifier technology. And distortion-free FM is assured by genuine digital-synthesized tuning, with the added accuracy of quartz PLL circuitry in our three top models. Twelve convenient instant-tune presets bring in your favorite FM or AM stations (6 of each) at a button’s touch.

Real-time spectrum analysis that lets you see the shape of the sound you hear is included in our three most advanced units, along with Dolby FM decoding in the 8900ZDB. A but one of the “Z” receivers include LED displays that instantaneously show you just how much power is going to your speakers. Touch-button FM tuning and volume controls, two-deck dubbing facilities, dual phono capability and multi-system speaker switching are all to be found, in various combinations, in the “Z” receivers. You'll also find all the additional features you've come to expect from a company that has pushed high fidelity to its limits from its beginnings.

And for all their technological sophistication the six Sansui models in the “Z” series will appeal to your eye no less than to your ear. Visit your nearest authorized Sansui dealer. He'll show you why “Z” stands for the last word in high fidelity receivers.
and not just extraneous disc vibration, I would be happy to examine it.

More on Miking

Thanks for the refreshing lucidity of Andrew Kazdin on multiple miking in November. It has seldom been so well argued that miking is an empirical art and not an exact science. In his role as acoustical consultant to the New York Philharmonic Orchestra, however, Mr. Kazdin has apparently had little influence on the recording techniques used for its broadcast concerts. It is hard to imagine that a diligent application of his approach could not produce better results there than we have been hearing. The tubby bass, fuzzy midrange, and screechy highs are not merely lo-fi at its contemporary worst, they are downright ugly in themselves. Avery Fisher Hall is bad, but it is not that bad.

Having some thirty years of experience in noncommercial broadcasting, I am keenly aware of the budget problem, but I also know that it is possible to make very good recordings in acoustically difficult environments with very simple resources. It comes down to the producer knowing what to do with what he has. Too many radio concert programs sound as if the "producer" were out to lunch, having left in charge dogmatic, hyperpurist engineers who do not much like the music they are working with and who seem to have little or no insight into the psychology of musical perception. If anything, Mr. Kazdin was too soft on this breed in his article.

H D. AMACKER
Los Angeles, Calif.

Associate Technical Editor David Ranada replies: Mr. Amacker apparently does not realize that Andrew Kazdin has virtually complete control over the sound heard on the New York Philharmonic broadcasts. It is Mr. Kazdin who determines when each of the dozen or so microphones are turned up or down during a piece. You wouldn't believe the amount of knob twiddling that goes on. I didn't until I saw it.

But while I don't believe such techniques are musically or technically necessary, I also don't believe they are responsible for the bad sound Mr. Amacker is hearing. In the control room the sound is not tubby, fuzzy, or screechy. It's possible that some equalization has been applied to the tapes sent to radio stations or that the tape-duplication system itself introduces frequency-response errors.

Erratum

In the review of Alban Berg's Wozzeck on page 92 of the January issue, the recording under consideration was erroneously referred to as a Philips release. In the listing at the end of the review the album was correctly identified as the London digital recording LDR 72007.

THIS MONTH'S COVER
is being made available in a limited-edition poster version, 18 x 24 inches, in full color, to commemorate Stereo Review's 1982 award of the Certificate of Merit to Benny Goodman. Send $4 to Benny Goodman Poster, Stereo Review, P.O. Box 506, Murray Hill Station, New York, N.Y. 10016. Remember: it's a limited edition, so first come, first served. Price includes handling, mailing tube, tax, and postage.
Distortion is tough to explain—but you can see it, and you can hear it. For instance, if a poor lens on a fine camera distorts the original image, you end up with a bad picture, even though the rest of the camera does its job. The same with a stereo system: if the stylus creates distortion, the rest of the system can't make up for it, no matter how good the other components might be.

Shure's Hyperelliptical (HE) stylus tip reduces distortion dramatically because it has longer, narrower contact areas (the two areas where the stylus tip actually touches the record groove walls) which closely simulate the shape of the stylus used to cut the master record. The HE tip provides an audible advantage over spherical and elliptical stylus tips, giving you pure natural musical sound without the distortion.

Ask your local Shure audio dealer for a demonstration of the HE difference. It'll bring your music back into focus.

Shure Hyperelliptical Stylus Cartridges
Choose your HE cartridge from a broad selection of tracking forces, prices and features:

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<td>3/4-1 1/2 Moderately priced</td>
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<tr>
<td>M75 HE Type 2</td>
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<td>M75 HE-J Type 2</td>
<td>1 1/4-2 1/2 Heavier tracking force</td>
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Shure Brothers, Inc.,
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Manufacturer of high fidelity components, microphones, loudspeakers, sound systems and related circuitry.
Introducing TDK AD-X. The normal bias tape with Super Avilyn technology.

New TDK AD-X is the first normal bias audio cassette to use TDK's Avilyn magnetic particle—based on the renowned Super Avilyn formulation that has kept TDK the leader in audio and videotape technology.

The Avilyn advantage offered in AD-X is demonstrably clear. You now can record and play back—in the normal bias/EQ position with complete compatibility for any cassette deck over a wider dynamic range and with far less distortion. Even at higher recording levels, the increased headroom in new AD-X can easily handle strong signal input without over-saturation.

When you hear the brilliant playback resulting from the higher MOL and lower bias noise you won’t believe that your deck can “improve” so much.

The new AD-X has truly versatile applications. Its higher sensitivity makes it ideal for all-round home entertainment use and also suitable for any cassette player.

To ensure years of reliable use, AD-X is housed in TDK's Laboratory Standard Mechanism, and protected by TDK's lifetime warranty. With its distinctive packaging, you won’t miss it.

So for high quality recordings in the normal bias/EQ position, snap in the new TDK AD-X. You'll discover that the Avilyn advantage means superior overall performance for you.

©1981 TDK Electronics Corp.
Vacuum-stabilized Luxman Turntable

- The Luxman PD-300 turntable is a two-speed, belt-drive model with a brushless, slotless d.c. motor. The unit's vacuum disc-stabilizer system pumps air from between the record and the 8-pound platter. The resulting partial vacuum holds the disc firmly to the platter. The system is said to reduce wow and flutter dramatically and to eliminate low-frequency rumble completely. The quoted signal-to-noise ratio is 72 dB, and wow-and-flutter is rated at 0.03 per cent (wrms). To aid in acoustic isolation, the turntable chassis is insulated from the cabinet by natural rubber. The 4-mm-thick dust cover is non-resonating. Turntable weight is 39 1/2 pounds. Dimensions are 19 1/2 x 15 1/2 x 8 inches. Price: $1,000 (without tone arm).

Circle 120 on reader service card

A Feature-filled Questar Preamplifier

- Questar Electronic Design's Model 7 preamplifier accepts both moving-magnet and moving-coil cartridges at its two phono inputs, which have adjustable cartridge-loading switches. Bass and treble tone controls are of the Baxandall type and are realized with passive circuitry. The unit's power supply is in a separate enclosure and is tightly regulated to reduce hum, noise, and radio-frequency leakage. The output stage utilizes circuitry claimed to reduce radio-frequency leakage into both the preamp and any attached power amplifier.

The Model 7 also has a built-in electronic crossover for a subwoofer, an input-switch position for the audio output of a videodisc or videotape machine, connections and switching for two tape decks, and an adjustable headphone output. A muting switch temporarily lowers the output by 20 dB. For listening situations in which the speakers are close together, the Model 7 has "Environmental Enhancer" circuits which, through time- and phase-shifting techniques, expand the sonic image, creating the "sonic equivalent to a holomorphic projection." The loudness control follows the standard Fletcher-Munson frequency contours and also has a position to compensate for the restricted bass capabilities of many small speakers by providing a mild boost from 40 to 100 Hz while rolling off below 40 Hz. The Model 7 is also switchable into a summed-bass mode to reduce the audibility of out-of-phase turntable rumble.

Specifications include a frequency response of 10 to 60,000 Hz ± 0.5 dB, total harmonic distortion of 0.025 per cent maximum, and a 77-dB A-weighted signal-to-noise ratio through the phono inputs. Dimensions are 3 x 17 x 8 1/2 inches; color is black and silver. Price: $399. Questar Electronic Design, Dept. SR, 2210 Cemo Circle, Rancho Cordova, Calif. 95670.

Circle 121 on reader service card

Lowboy Audio Cabinet From O'Sullivan

- O'Sullivan Industries has added a new lowboy audio cabinet to its line of home-entertainment furniture. The contemporary-style cabinet features side-by-side compartments with shelves for three components and record-storage space behind clear glass doors. The twin tempered-glass lift lids on top open to reveal a turntable area on one side and a cassette-tape storage tray on the other. The tray can hold up to thirty-six cassettes in a neat, easy-access arrangement. The cabinet, available in either Bartonwood or rosewood-grain vinyl laminate with chrome trim, measures 41 3/4 x 28 1/4 x 18 3/8 inches. Price: $259.95. O'Sullivan Industries, Inc., Dept. SR, 19th and Gulf Streets, Lamar, Mo. 64759.

Circle 122 on reader service card

Audio Control Equalizer Has CX Decoder

- Audio Control has incorporated a CX decoder in its new D-10X ten-band equalizer so that users can enjoy the wider dynamic range of CX-encoded records without needing to buy a separate decoder unit. The D-10X comes with a CX calibration record that enables the high and low parameters to be set once and then left alone; readjustment is necessary only if the user changes his system's preamplifier or phono cartridge. The D-10X offers ±12 dB of boost or cut in bands centered at 31.5, 63, 125, 250, 500, 1,000, 2,000, 4,000, 8,000, and 16,000 Hz. There is also a separate infrasonic filter. Specifications include 0.015 per cent total harmonic distortion, 90-dB signal-to-noise ratio, and frequency response from 3 to 100,000 Hz ± 1 dB. Price: $179.

Circle 123 on reader service card

Two Compact Monitor Speakers from IMF

- The IMF CM2 and CM3 "Compact Monitor" loudspeakers are designed, according to the manufacturer, for phase co-
New Products
latest audio equipment and accessories

herence and absence of coloration. The two- and three-way speakers are bass-reflex designs with a tuned port at the bottom of each front panel. The two-way CM2 has a 1-inch soft-dome tweeter and an 8-inch laminated woofer/midrange driver. It is said to have a frequency response of 38 to 20,000 Hz ±3 dB. Its dimensions are 18 3/4 x 8 3/4 x 10 3/4 inches.

The three-way CM3 has a 1-inch dome tweeter, a 4-inch plastic-cone midrange, and an 8-inch plastic-cone woofer; crossover frequencies are 375 and 3,000 Hz. Its rated frequency response is 30 to 20,000 Hz ±3 dB. Both speakers have a nominal impedance of 8 ohms and are capable of handling up to 200 watts of input. The speakers are finished in American walnut veneer, with a light-beech trim optional. Prices: CM2, $467 per pair; CM3, $669 per pair. IMF Electronics, Dept. SR, 5226 State Street, Saginaw, Mich. 48603.

Computer-controlled 120-watt Receiver
From Kenwood

Exception for three rotary knobs controlling the volume-preset level, stereo balance, and microphone-mixing level, all the operations of Kenwood's KR-1000 receiver are controlled by pushbuttons and pushpads. The knobless front-panel appearance is complimented by various displays that indicate the unit's operating status graphically. They show the input selected, peak power output, time, radio-station frequency, speakers selected, relative volume level, and the settings of the built-in seven-band equalizer. Built-in microprocessing keeps track of a multifunction weekly program timer, memorizes up to four different signal paths, and controls the tuner presets.

In addition to having unusual front-panel controls, the KR-1000 is rated at 120 watts per channel into 8-ohm loads with no more than 0.01 per cent total harmonic distortion. The tuner section has a usable mono sensitivity of 9.8 dBr (1.7 microvolts) and a mono signal-to-noise ratio of 74 dB. The equalizer section provides up to 10 dB of boost or cut in bands centered at 60, 160, 400, 1,000, 2,500, 6,000, and 15,000 Hz.

Other features include connections and switching for up to three pairs of speakers and two tape decks, switchable i.f. bandwidth for the FM-tuner section, and switchable high, low, and loudness filters. Dimensions are 21 3/4 x 5 3/4 x 16 3/4 inches; weight is 35 3/4 pounds. Price: $1,000.

High-performance Record Discs from Mobile Fidelity

Mobile Fidelity Sound Lab has introduced a series of records called UHQR (Ultra High Quality Record) made with a new JVC-developed pressing technology that produces a thicker and flatter disc. This is said to result in reduced surface vibrations, increased channel separation, and improved frequency-response accuracy as well as lower distortion. The company's "Super Vinyl" formulation is also said to have lower wear characteristics than those of conventional discs. Three titles are currently available: "The Dark Side of the Moon" by Pink Floyd, "Crime of the Century" by Supertramp, and "Finger Paintings" by Earl Klugh. Price: $50 each. Mobile Fidelity Sound Lab, Dept. SR, P.O. Box 919, 21040 Nordhoff Street, Chatsworth, Calif. 91311.

Low-cost Six-band Equalizer

The Numark EQ2100 is a low-price, two-channel, six-band graphic equalizer. According to the manufacturer, it provides... (Continued on page 16)
SOUND SO GOOD IT KEEPS THE BAD AWAY.

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You can dramatically enhance your accurate re-creation of the live performance with Fulton audio leads. Designed specifically for audio reproduction, Fulton leads display the subtle harmonic nuances in the music, making them the finest available.

Years of research and development have gone into these head shell leads, shielded phono interconnects and speaker cables to bring you closer than ever to the live performance. Now you can achieve optimum coupling among your components and bring out your system's maximum potential with full, solid imaging. Call or write for the name of your local dealer carrying Fulton audio equipment and accessories.

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CIRCLE NO. 16 ON READER SERVICE CARD

±15 dB of adjustment at 42, 152, 480, 1,520, 4,800, and 15,360 Hz and has a flat-setting frequency response of 10 to 100,000 Hz ±1 dB. Other specifications include a total harmonic distortion of 0.01 per cent at a 1-volt output, hum and noise level of -96 dB with a 1-volt output, output impedance of 100 ohms, input impedance of 100,000 ohms, and maximum input and output levels of 8 volts. There is an equalizer-defeat switch and a tape-monitor switch. Available in black or silver finish. Price: $120. Numark Electronics Corp., Dept. SR, 503 Raritan Center, P.O. Box 493, Edison, N.J. 08818.

Circle 127 on reader service card

Dynavector's High-output Mark 2 Moving-coil Cartridge

Dynavector's DV/10X Mark 2 moving-coil phono cartridge has an output voltage of 2.3 millivolts, obviating the use of a special moving-coil pre-preamplifier or transformer. The unit's armature is of permalloy, the cantilever of aluminum, and stylus shape is elliptical. Recommended tracking force is 1.5 grams. Stated frequency response is from 20 to 20,000 Hz. Price: $126.

Circle 128 on reader service card

Tricks of the Trade: Car-stereo Installation Manual

For car-stereo owners who want a professional-quality installation without having to pay a professional installer, Boldt Publishing Company offers a book that is said to reveal the tricks of the installer's trade. The Car Stereo Manual by Peter van Rijssbergen covers many aspects of car-stereo installation plus equipment selection, basic wiring, antennas, accessories, alarm systems, and maintenance. According to the publisher, the author has designed and installed more than a thousand car-stereo systems over the past five years. The 120-page paperback book contains 110 illustrations. It is available in stereo stores and bookstores or from the publisher. Price: $9.95. Boldt Publishing Company, Dept. SR, P.O. Box 3065, San Rafael, Calif. 94912.

Move up to Fulton and experience the difference!

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 Integra ST difference:

Conventional cartridges suffer from offset angle distortion, as the tonearm sweeps the record.

Integra ST is the first cartridge designed to eliminate offset angle distortion. It's crystal clear throughout the record's play.

Distortion-free

Integra ST adds tracking angle accuracy to all straight tonearms.

You can adjust your tonearm's weight, and anti-skate. But that's where it ends. That's where the ADC Integra ST begins.

Unlike any cartridge before it, the Integra ST's Omni-Plane™ design eliminates all audible tracking angle distortion. Not just at one point, but throughout the record's play.

An amazing achievement for ADC engineers. An even greater improvement for your straight arm turntable.

See the adjustments only the Integra ST's Omni-Plane™ gives you.

All carbon fibre construction.

While the ADC ST gives your straight tonearm more accuracy, its carbon fibre construction gives you less mass. At least 40% less. So it tracks the grooves better, and preserves your record collection longer.

And like our Integra for S & J type tonearms it's easy to install, easy to adjust. A single locking screw does it all.

All carbon fibre construction.

While the ADC ST gives your straight tonearm more accuracy, its carbon fibre construction gives you less mass. At least 40% less. So it tracks the grooves better, and preserves your record collection longer.

And like our Integra for S & J type tonearms it's easy to install, easy to adjust. A single locking screw does it all.

1. VERTICAL TRACKING ANGLE ADJUSTMENT
2. OVERHANG DIMENSION ADJUSTMENT
3. OFFSET ANGLE ADJUSTMENT

Integra ST lowers distortion to raise your whole system's performance.

Because the Integra ST tracks your records the same way the record companies cut them, you get unheard of accuracy and that means unheard of sound quality. Every nuance, every detail will be faithful to the original.

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The new Integra ST and original Integra Series.

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An even better Ruby.

Through the use of its moving coil technology, Dynavector has created the new 23R—reducing the size of its popular ruby cantilever to one-third the size of conventional cantilevers—while dramatically improving performance.

This shorter cantilever—only 2.3mm in length—has several advantages: The problems of frequency dispersion along the cantilever are greatly reduced, while undesirable resonances are minimized, creating more life-like sound.

Because of its shortness and material, the 23R's resonant frequency is well above 50kHz. Rubber damping is eliminated and performance is unaffected by variations in room temperature.

In short, the 23R offers a superb combination of size, shape, material and cartridge technology.

Audition the new 23R Ruby cartridge for its ability to reproduce sound with stunning realism, brilliant tonal balance and exquisite detail.

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Audio Q. and A.

By Larry Klein

With a working prototype of Sony's compact digital-audio-disc player.

Speaker Switching

Q. Why do some manufacturers of the finest audio equipment neglect to include speaker switching in their designs though we find such switching in cheap receivers? I would like to be able to switch between at least two sets of primary speakers (not to mention extensions).

JOHN A. WOLFE
Denver, Colo.

A. The apparent paradox you've noted does have a logical explanation. All switches are rated by their current- and voltage-handling capabilities. An 8-ohm speaker being driven by 40 watts of power will have 18 volts across it and a current flow through it of 2.25 amperes. The voltage is not significant, but the 2.25 amperes approaches the maximum rating of the kind of small slide switch normally used for speaker switching. Depending on how hard you expect to drive your speakers, a 100-watt amplifier may require a 3.5-amp switch and a 200-watt amplifier may require a 5-amp switch. Given these facts, it's not hard to see why manufacturers find it easier to include speaker switching in low-power amplifiers than in high-power ones.

But all is not lost for those who want to switch speakers and whose equipment doesn't have the facility built in. There are a few good high-power switching units on the market. One example is the Adcom GFS-1 (below), selling for $89. The Adcom switcher has a special feature: it can be switched to work with output circuits that don't have a common ground connection. There are a few good high-power switching units on the market. One example is the Adcom GFS-1 (below), selling for $89. The Adcom switcher has a special feature: it can be switched to work with output circuits that don't have a common ground connection. There are a few good high-power switching units on the market.

Digital Car Stereo?

Q. I understand that a car-stereo disc player using the compact digital-audio-disc format is in the works. Can you give me some information on it?

ERIC BUNDY
Tuscaloosa, Ala.

A. I've little information, but lots of opinion: in a word, I think the idea is ridiculous! Given the inherent complexity of the electronics, mechanics, and optics of the format, the CDAD seems to be an expensive Rube Goldberg approach to providing high fidelity in a car, particularly when today's cassettes (and tomorrow's microcassettes) will do exactly the job that's needed.

Not only is the 90 dB or so of dynamic range of the CDAD format wasted in a car, but it is likely to prove a severe inconvenience in a moving vehicle. Even normal wide-range cassettes listened to in a car require constant volume readjustment. In order to hear the soft passages, playback level must be raised above the road noise—and the loud passages must then be turned down to keep them from being too loud. (FM and prerecorded cassettes usually don't have the problem, simply because the program has already been compressed by the broadcaster or tape duplicator.)

Aside from the technical and cost problems, it seems strange to me that anyone would believe that a 4¾-inch disc would be more appropriate physically for car-stereo use than today's standard cassette or a 1¼ x 2-inch microcassette.

Headphone Attachment

Q. I have a better-than-average stereo FM radio in my bedroom that is a fine little unit for its purpose. One problem: its internal speakers are rated at 32 ohms each and only speakers that have at least a 16-ohm impedance are recommended for use.

(Continued on page 20)
The only thing mini about the Mini-Wizard is its size.

Sure, we built a super-compact auto sound system that's easy to install in any vehicle. But we made certain that was the only small-thinking that went into the design of the MINI-WIZARD.

In fact, we used the latest computer age technology to create the ultimate traveling sound—in a very mini chassis. Imagine a stereo driven by 88 watts of power with a frequency response from 30 to 15,000 Hz (± 3 dB). Unique standard features include a five band graphic equalizer that can contour sound to your exact taste and vehicle acoustics. System-wide microprocessor electronics instantly respond to feather-touch controls. And an optional remote control can put the Wizard's magic into everyone's hands—not just the driver.

Experience the luxury of the computerized tuner that automatically scans radio frequencies and pauses at each station for your response. The MINI-WIZARD's memory will retain 5 FM and 5 AM stations. And you won't accidentally miss a favorite radio show while listening to a cassette. Pre-set Program Timing will eject the cassette and your radio program will come on.

The extraordinary microprocessor controlled tape deck includes an APS function which allows you to pre-select songs and skip ahead or back up to five songs.

Inspect the complete and nearly endless list of features. Note the impressive specifications and TEN's advanced circuitry that defines and enhances signal reception, diminishes noise and decodes Dolby* recordings. The MINI-WIZARD meets the demands of an audiophile, within the price range of the discriminating consumer.

In Japanese, TEN means "heaven," the ultimate. In America, TEN is the best you can imagine. In car stereo, TEN—technology is the state-of-the-art. The MINI-WIZARD is a TEN—down to the smallest detail.

It has to be perfect to be a Ten.

* Dolby is a registered trademark of Dolby Laboratories.

FUTSUI TEN CORP OF AMERICA
19231 Pacific Gateway Drive, Torrance, CA 90402

In Canada, Minisco Canada Inc, Ontario
Manufactured by Fujitsu TEN Ltd.
The Mura Hi Stepper™ receivers have become the industry standard for personal FM stereo. Of course Mura already had the headset technology from its Red Set™ line. To the Red Set Mura added a high sensitivity (3 µV for 30dB of Quieting), low current drain (30 ma from AA batteries) stereo receiver. Each channel of the audio section is a 3 stage amplifier with a push-pull output stage—all to drive a headset speaker with 98dB/mW sensitivity! Overkill for only a few milliwatts? Not for the Mura Hi Stepper. Even the Hi Stepper HI-3 (with AM) uses dual can IFT's to squeeze the best frequency response possible out of the AM band.

Whether you choose the FM Stereo Hi Stepper (HI-6) or the AM/FM Stereo Hi Stepper (HI-3) you get audiophile quality in a portable, personal stereo sound system.

The actual impedance of most stereo headphones is substantially higher than the minimum requirement of your radio. Their 8-ohm ratings simply signify that they are meant to be connected, usually through an internal resistor, to the 8-ohm speaker-output terminals of an amplifier. In any case, to be safe, have someone at your hi-fi shop use an ohmmeter to measure the impedance of the phones you are considering. If necessary, you can have 22-ohm, 1-watt resistors installed in series with the appropriate headphone leads.

Over the years, the audiophile's preoccupation with hi-fi equipment has been the butt of many jokes, the subject of much pseudo-Freudian philosophizing, and a contributing factor, I have no doubt, to the disruption of at least a few marriages. (There's the classic, but probably apocryphal, story of the audiophile's wife who when suing for divorce told the judge that her husband's lack of attention had driven her to low fidelity at a high frequency.)

Audiophiles are often characterized as suffering from a severe means/end confusion, in that the means (hi-fi equipment) has become more important to them than the end (music). However, I find no merit in that observation, simply because the same put-down could be applied equally well to those who row boats, ride horseback, hunt, or make love. These activities are now recreational ends in themselves, whereas once they were solely means to such practical ends as transportation, sustenance, and procreation.

My experience is that audiophiles may or may not also be music lovers; I have friends who are as comfortable arguing the merits of various classical conductors as they are discussing the virtues of various semiconductors. On the other hand, we all know—or at least know of—someone who uses several thousand dollars worth of hi-fi equipment mostly to play sound effects and elevator music. And, of course, there are those nonaudiophiles who like music, have good equipment, and care not a whit about how it works or why—just as long as it continues to sound okay.

All this leads me to a definition of the audiophile simply as someone who is especially interested in the equipment and the technical aspects of sound reproduction. The category could be subdivided into Novice, Advanced, and Lunatic Fringe, but that is a subject for another day.
Here's how we kiss the hiss goodbye.

BASF Chrome.
The world's quietest tape.

With BASF Chrome, you hear only what you want to hear—because we "kissed the hiss goodbye."

In fact, among all high bias tapes on the market today, only PRO II combines the world's lowest background noise with outstanding sensitivity in the critical high frequency range for superior dynamic range (signal-to-noise ratio).

PRO II is unlike any other tape because it's made like no other tape. While ordinary high bias tapes are made from modified particles of ferric oxide, only PRO II is made of pure chromium dioxide. These perfectly shaped and uniformly sized particles provide a magnetic medium that's truly superior—so superior that PRO II was chosen by Mobile Fidelity Sound Lab for their Original Master Recording™ High Fidelity Cassettes—the finest prerecorded cassettes in the world.

And like all BASF tapes, PRO II comes encased in our new ultra-precision cassette shell that provides perfect alignment, smooth, even tape movement, and consistent high fidelity reproduction.

So when you want to hear all of the music and none of the tape, turn on to BASF Chrome. It's the one tape that kissed the hiss goodbye.

PRO II—a tape so superior, a cassette so reliable, that it was the one chosen by Mobile Fidelity Sound Lab for their Original Master Recording™ High Fidelity Cassettes.

For the best recordings you'll ever make.

BASF Audio/Video Tapes
CIRCLE NO. 4 ON READER SERVICE CARD
REGULAR readers of this column are undoubtedly familiar with the general idea of recording bias: the ultrasonic signal (generally in the 80- to 120-kHz range) that is fed to the record head of a tape deck along with the audio signal. This ultrasonic addition is used both because it reduces distortion in the recording process and because it increases the amount of audio signal that can be stored on the tape. The many different explanations of just how ultrasonic bias works tend to get rather technical, but its beneficial effect makes high-fidelity analog recording possible.

Most readers also know that the optimum amount of bias varies widely among the basic tape types (ferric, Cr02, and metal) and that even within a single tape type there are minor brand-to-brand variations. And that's why bias/equalization switches are found on nearly every cassette deck and why "bias optimization" adjustments are provided on some advanced models. The minor, brand-dependent tape differences normally show up as variations in high-frequency response. Over a narrow range of bias-level settings, tape distortion and low-frequency information on the tape, while high-frequency content is low, the normal bias level is restored to permit maximum performance (lowest distortion) with bias frequencies. This line of thought led Ken Gundry of Dolby Laboratories to develop the Dolby-HX system, which uses the Dolby-B control signal produced by all Dolby-B circuits to vary bias according to the music's high-frequency content. Since varying the bias also changes the recorder's basic frequency response, however, Dolby HX also involves varying the normal treble boost (record equalization) applied to the audio signal before it goes to the tape.

The HX system certainly does what it is intended to, adding to high-frequency recording capacity while the resulting recording remains completely playback-compatible with all standard tape decks. But the fact that two parameters (record bias and equalization) must be varied simultaneously is, one would think, a disadvantage.

Using a sophisticated analysis of bias effects (results were presented recently in an Audio Engineering Society paper), Denmark's Bang & Olufsens has found a way to implement the variable-bias HX principle without having to vary the recording equalization continuously at the same time. The circuit, called "HX Professional," was conceived by Jorgen Selmer Jensen of B&O and developed with the active cooperation of Dolby Labs, which will help license its use by commercial tape duplicators. Currently the HX Professional system is also being built into the B&O 8002 cassette deck, but other recorder manufacturers may also be licensed to use it.

The key to this new development was Jensen's realization that high-frequency audio signals themselves can act as recording bias for lower-frequency tones. This implies that when a certain level of "fixed" ultrasonic bias is set for flat response with a given tape and deck (using a test signal of perhaps 400 Hz), the actual effective bias level is increased whenever strong treble frequencies are present. Musically, the highest audible frequencies don't tend to be intrinsically very powerful most of the time (electronic music and cymbal clashes excepted).
but the tremendous treble boost provided by typical recording equalization raises their level—as seen from the tape's point of view—very significantly (a boost of 20 dB at 20 kHz is common at the cassette tape speed of 1/4 inches per second).

Oddly, the effect of using a fixed level of ultrasonic bias for recording music may be to produce a continuously varying effective bias, part of which is supplied by the high audio-signal frequencies themselves. Therefore, the way to achieve a truly constant bias level is actually to vary the bias to offset the changes caused by the music.

Jensen reasoned that any frequency at least twice as high as another can (at least theoretically) exercise a bias-like effect on the lower frequency. His measured results, using a third of an octave of pink noise centered at 16 kHz as part of the overall effective bias for the lower frequencies, seem to bear out his contention, though I have not had an opportunity to confirm it myself.

If what B&O is proposing is as good as its promise, an additional 7 dB or more of high-frequency headroom can be obtained, without additional distortion, using regular, high-quality ferric tapes. This is about the degree of improvement provided by the premium-price metal formulations, though metal tapes also benefit to some degree. Perhaps B&O's refinement of HX will serve to overcome the Japanese bias (!) against the circuit—though it may be based more on commercial than on technical grounds.

Home-recording Highs

Q The live recordings I make at home never seem to achieve the same degree of high-frequency clarity I hear on records. The best cassettes seem to strive for flat response. Should I use a non-premium tape with a high-end rise?

ROBERT LAHERGE
Charlesbourg, Quebec

A Some name-brand tapes used to exhibit it—a somewhat elevated treble response when recorded with the bias and equalization settings most deck manufacturers seem to prefer, but my tests of recent samples indicate, as you suggest, a preference for flat response. Moreover, you're not likely to find a second- or third-line tape with an excessively "hot" high end—you'll probably find just the reverse.

It may well be the case that your microphones (or the mike preamp in your deck) simply will not produce the extended high-end output you seek. You will maximize your chances for enhancing the "punch" in the treble range by placing your microphones relatively close to the sound source(s) and by backing off a couple of decibels in your record level. Most cassette decks were not designed for live "master" recording, and close miking it is easy to overload the treble capacity of the tape. When this happens you actually get less high-frequency response than you would by recording at a slightly lower level.

As far as tape is concerned, I recommend you try metal if your deck can handle it, for these tapes have the greatest high-frequency storage capacity.

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CIRCLE NO. 10 ON READER SERVICE CARD
Technical Talk
By Julian D. Hirsch

Speaker Efficiency and Sensitivity

Although most speaker-performance specifications are difficult to interpret in a meaningful way, that does not hinder some people from endowing them with an unwarranted importance. There is one specification, however, that can definitely influence the suitability of a given speaker for any individual installation, and that is sensitivity (or efficiency).

Sensitivity and efficiency are not the same thing, though they are related. A loudspeaker is a very inefficient device for converting electrical energy to acoustic energy. Most home speaker systems have an efficiency no greater than about 1% per cent, often much less. A 1% per cent efficiency means that when 100 watts of electrical power are fed to the speaker from the amplifier, an output of about 1 acoustic watt will be delivered to the surrounding listening environment.

That does not sound like very much, but 1 acoustic watt is, fortunately, enormous. A 100-dB loudness level is heard in a home listening room. More important than the total power radiated from the speaker is the sound-pressure level (SPL) existing at the listener's ears, and this is a function of the room's size and acoustic treatment as well as the program material and the ratings of the reproducing system. In a typical listening room of about 2,000 cubic feet, a 100-dB SPL is obtainable from about 0.3 acoustic watt of power. Even if a peak-to-average ratio of 20 dB is assumed (in order to cope with the anticipated requirements of digital recording techniques), it would seem that this acoustic power level should be adequate for all but the most extreme (or hard of hearing) audio enthusiasts. An average SPL of 80 dB, with occasional peaks of 100 dB, can create a very impressive simulation of a musical performance if the other components of the system (record, amplifier, etc.) are of sufficiently high quality.

A study of speaker ratings will show that few, if any, include an efficiency specification. One might assume, cynically, that no manufacturer would wish to publicize a rating of a fraction of a per cent (other than for a distortion rating), but the real explanation is probably that efficiency is not very easy to measure and is also not terribly informative to the non-technical speaker user.

I stated earlier that it is helpful for the prospective speaker buyer to know how loud a sound will be produced at its listening position for a given electrical input to the speaker. Even though the level cannot be determined with any accuracy except from an in situ measurement, it can be inferred (at least in a relative sense) from the sensitivity rating of the speaker. This rating avoids the rather messy consideration of how much electrical power is really going into a speaker system (the complex impedance of any speaker makes power input a nearly indeterminate quantity anyway) as well as the equally thorny questions of how acoustic power is radiated from the speaker and to what degree it is absorbed by room surroundings before reaching the listener. These (and other) problems make the measurement of actual efficiency a difficult process as well as limiting its usefulness to the consumer.

Sensitivity ratings get around the matter of electrical-power measurement by simply ignoring it. Modern solid-state amplifiers are basically voltage sources (they deliver a nearly constant output voltage, for a given input, over a wide range of load-impedance variation). So, what we really want to know is how loud a speaker will play with a given input, over a range of load-impedance variation. So, what we really want to know is how loud a speaker will play with a given input, over a range of load-impedance variation. So, what we really want to know is how loud a speaker will play with a given input, over a range of load-impedance variation. So, what we really want to know is how loud a speaker will play with a given input, over a range of load-impedance variation.

Since there is no way a manufacturer can predict the characteristics of the room his speaker will eventually be used in, the SPL of the speaker is specified as measured at a standard distance of 1 meter from the center of the front panel, normally in an anechoic environment. It is also customary for this SPL (expressed in decibels, or dB) to be measured with a driving signal of 2.83 volts, which corresponds to 1 watt delivered to a resistance of 8 ohms. Since amplifiers are also rated in terms of their output into an 8-ohm resistance, there is a certain consistency in this seemingly unrealistic choice of conditions even if neither the amplifier nor the speaker is being evaluated rigorously.

Most speaker specifications include a sensitivity rating that can be used to compare different speakers in respect to their relative sound levels in home use. But one should not extrapolate this information too far, because the axial 1-meter SPL measurement is not the same as a total power-output measurement, and because room characteristics plus a speaker's directional qualities...
Right now, you're in the ideal test chamber for a loudspeaker.

The flat response curve claimed by most speaker manufacturers was developed in a free field environment or specialized test chamber. But you don't listen or live in a specialized test chamber. The flat response you actually get from an AR speaker was developed in a real room. The kind you do live in. See your local AR dealer and hear for yourself.

Hear what you've been missing.
The Teac C-3RX is a front-loading, three-head, two-motor cassette deck that includes both dbx and Dolby-B noise-reduction systems. Its tape transport operates under logic-controlled solenoids activated by light-touch pushbuttons. The capstan of the C-3RX is belt-driven by a servo-controlled d.c. motor. A mechanical sensing arm in the tape path responds to tape tension and feeds this information to circuitry controlling the d.c. hub motor. The record and playback head elements are separate units contained within a single case, and the sensing arrangement, together with the pressure pad, helps maintain proper tape-to-head contact.

Cassettes are loaded, tape openings downward, into slides behind the transparent cassette-well door, and rear illumination is provided so the amount of tape remaining on a side can be easily seen. The RECORD, REC MUTE, and PAUSE pushbuttons have LED status indicators. There is a three-position switch (PLAY, OUT, REC) for an external timer and a similar memory-rewind switch (PLAY, OFF, STOP).

(Continued on page 28)
Come to where the flavor is.


16 mg "tar," 1.1 mg nicotine avg per cigarette FTC Report Mar '81
The record-playback indicators of the C-3RX are illuminated, peak-reading meters calibrated from $-20$ to $+5$ dB. While no specific Dolby-level marking is provided, we found it corresponded in both channels to the indicated 0 dB. The left- and right-channel record-level controls are interlocked (behind the front panel) by a gearing mechanism so that turning one (to change the balance between channels) automatically turns the other unless it is firmly held. The single output-level control affects both the headphone volume and the signal at the rear jacks, though not the playback indications on the meters.

Separate three-position bias and equalization lever switches are provided for normal, Cr02, and metal tapes. These work in conjunction with a PRESET/ADJUST pushbutton that permits the user to optimize the record bias and 0-dB record-level indication on the meters for specific tapes using four (two per channel) front-panel screwdriver-adjustable controls. A LED indicates when the ADJUST option has been selected. The adjustment procedure requires the use of an external audio generator (Teac makes a suitable accessory, Model TO-8) and is a little more complicated than most such "optimizing" techniques, but because the built-in dbx noise-reduction system is sensitive to frequency-response variations the procedure should be mastered if you intend to use a wide variety of tape types.

Additional lever switches are used to select between source and tape monitoring; between Dolby, dbx, or no noise-reduction system; and between microphone, line, or test inputs. The TEST input uses the regular rear-panel line jacks but provides the means to read the low-level generation signals used in the bias/level-adjustment procedure. Microphone and line-input signals cannot be mixed without an external mixer.

The rear panel of the C-3RX contains the normal line-input and -output jacks, plus a multi-pin connector intended for use with Teac's RC-90 accessory remote-control unit. Overall, the deck measures 17 inches wide (19 inches with the supplied rackmounting adaptor), approximately 13½ inches deep, and 5⅞ inches high. The feet on the bottom may be removed so that the unit will fit into a standard 5¼-inch rackmounting space. Weight is approximately 21 pounds. Price: $690.

- Laboratory Measurements. Our sample of the C-3RX was not supplied with the specific tapes used in its factory set-up, so we experimented with a wide variety of tapes within each basic type. Among the metal tapes, we obtained flattest response from Fuji Metal, with Memorex Metal IV a close second. Very good performance was also achieved with Sony Metallic and TDK MA. We selected TDK SA-X as the best performer on the C-3RX among the CrO2-type tapes, though Maxell XLII-S was also extremely good. BASF Professional II is a good alternative, and, with bias readjustment, 3M Master II and TDK SA would also yield comparable results. In the ferric ("normal") switch positions, best response was obtained from Maxell XLII-S and TDK AD (a tossup; we chose the former for our reference), with essentially equivalent results being obtained from 3M Master 1, Loran Ferric, Memorex MRX-I, and Fuji FX-I.

Playback response was checked using Teac MTT-216 (ferric) and MTT-316 (CrO2/metal) test tapes. As indicated in the accompanying graph, maximum deviation from ideal response was less than $+2$, $-1.5$ dB throughout the covered range (31.5 Hz to 14 kHz) and was generally much closer still.

Overall record-playback frequency response, measured at the usual $-20$-dB level and using our selected tapes, extended to 20 kHz ($-3$ dB) with Fuji Metal and TDK SA-X, and it was down 3 dB at 16 kHz with TDK SA-X. With all the tapes we tested, the bass rolloff took place in two stages: a gentle drop of about 3 dB in the 100- to 50-Hz octave, followed by a steeper drop for frequencies below about 35 Hz. At the 0-dB recording level the curves for metal, CrO2-type, and ferric formulations show their relative high-frequency storage capacity very clearly. In comparing these curves with those of other decks we have tested, readers should bear in mind that a 0-dB record level on the Teac C-3RX is about 2 dB higher than that used by many deck manufacturers, so the high-frequency rolloffs naturally begin at slightly lower frequencies.

At the 0-dB input level (with no noise reduction), third-harmonic distortion measured 0.86, 0.46, and 0.42 percent with the Maxell XLII-S, TDK SA-X, and Fuji Metal tapes, respectively. The overload margin for the three tapes (the increased signal over 0 dB needed to raise distortion to the 3 percent point) was 7.8, 5.4, and 6 dB. On an unweighted basis, without Dolby or dbx, signal-to-noise ratios measured 57.2 dB for the ferric Maxell XLII-S and 59.0 dB for the chrome-equivalent TDK SA-X and Fuji Metal. Using Dolby-B noise reduction and IEC A-weighting curves resulted in S/Ns of 61 and 62.5 dB, respectively.

As we found on a previous occasion, using dbx noise reduction completely alters the testing profile. Basically a 2:1 linear compressor (compressor-expander), the dbx system reduces a 90-dB dynamic range to a much more manageable 45 dB during recording, then expands it back to the original 90 dB during playback. Since any good-quality tape can handle 45 dB, the stress is...
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placed on the electronics of the tape deck (and those of the dbx system itself) rather than on the tape. It was not surprising, therefore, that even with an input signal level of a little over +17 dB, at which point the C-3RX input stages began to overload, the distortion on the tape itself was barely over 1 per cent. Indeed, at a 0-db level, and with the dbx system switched on, tape distortion for our three representative tape types was less than half that previously measured: approximately 0.2 per cent for the metal and CrO2-type formulations and 0.38 per cent for the ferric-oxide. Noise measurements were similarly difficult to make with the dbx system switched in, for the noise voltage drops to a level close to the internal electronic noise of our test instruments. With dbx noise reduction, the C-3RX produced A-weighted signal-to-noise ratios well in excess of 80 dB from all the tapes we used.

We checked the frequency-response tracking of both the Dolby-B and the dbx noise-reduction systems at levels of -20, -30, and -40 dB. The accuracy of the Dolby system was excellent—within 1 dB—up to 15 kHz, above which it fell off very sharply, probably indicating the presence of a built-in FM multiplex filter. The tracking of the dbx system was far more dependent on the tape's interaction with the C-3RX itself. Where the frequency response was absolutely flat, so was the dbx tracking, but every departure from flat response was magnified by the 2:1 compander ratio: a 50-Hz tone that measured -2.5 dB without noise-reduction would register -5 dB with the dbx system switched in.

An input level (1,000 Hz) of 70 millivolts (0.07 volt) was sufficient to produce a 0-db record-level indication on the meters, and the corresponding output at this level was 560 mV. At the microphone jacks the 0-db sensitivity measured 0.28 mV, and evidence of microphone-input overload required an input level of 31 mV. Wow-and-flutter measured 0.055 per cent (w rms) and 0.07 per cent (DIN peak-weighted) using both TDK AC-342 and Teac MTT-111 test tapes. On short tone bursts the peak-reading meters tended to deflect 1 or 2 dB higher than the true value of the signal, a minor error. Fast-forward and rewind speeds were 77 and 79 seconds for a C-60 cassette.

**Comment.** Sonically, the C-3RX performed every bit as well as its measurements would suggest. With FM and disc sources it was able to make copies so nearly indistinguishable from the original that without the instantaneous comparison its three-head design affords it would be hard to know whether one was listening to the original or to the dub. With extremely wide-range materials the high-frequency limitations of the Dolby-B circuit and of the ferric tape (compared with metal) could be detected, but our experience indicates there is every reason to doubt the significance of even this small audible difference in any normal application.

Using the built-in dbx system so completely eliminates tape noise that any further improvement in that direction would be superfluous. We tried a number of music and noise sources to make the system misbehave, but as long as the frequency response of the tape was flat on the C-3RX (or could be adjusted to be so) we failed. When we used tapes that were not flat, however, the defects were noticeable in A-B comparisons, though in most cases they would probably be inconsequential for normal listening purposes. In short, we found the Teac C-3RX to be an excellent performer that stands up to the most demanding scrutiny.

**Mitsubishi DA-R15 Stereo Receiver**

*The Mitsubishi DA-R15 is one of that company's new line of four stereo receivers. The DA-R15 is rated to deliver 45 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.015 per cent total harmonic distortion. Unlike most receivers, it also carries a 4-ohm rating of 60 watts with no more than 0.05 per cent distortion. The DA-R15 has a digital-synthesis tuner whose frequency is displayed in large (1/2-inch) blue-white digits. Grouped in a "dial window" area on the right half of the panel together with the frequency display are a number of pushbuttons, a large volume knob (marked ATTENUATOR), and a horizontal row of five green LEDs that indicate relative signal strength. At the right of the frequency readout are two flat TUNING buttons (marked UP and DOWN) and a red STEREO light. Below the ATTENUATOR knob are five switches that select WIDE or NARROW i.f. bandwidth, FM or AM reception, HIGH BLEND for noise reduction on weak stereo signals, TUNING mode (auto or manual), and MUTING/MONO. The MUTING/MONO switch is marked for ON/AUTO and OFF/MONO operation. The first (outer) position activates the FM interstation-noise muting and provides automatic switching from mono to stereo when a received stereo signal is strong enough for reasonably good reception. Pressing the button in disables the muting and sets the tuner for mono only. The TUNING switch affects the operation of the UP and DOWN buttons; in MANUAL the frequency steps by one increment (200 kHz for FM and 10 kHz for AM) each time the button is pressed. The*  

(Continued on page 32)
WHY SPEND $200 MORE ON A BETTER TAPE DECK WHEN ALL YOU NEED IS $2 MORE FOR A BETTER TAPE.

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

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

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

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

So if you’d like to get better sound out of your tape system, you don’t have to put more money into it. Just put in our XLS tape.
tuning scans rapidly while the button is held in. With the switch set for AUTO, the tuner scans in the selected direction until it encounters a signal exceeding the muting threshold. Although the muting system does not operate on the AM band when tuning manually, it is effective when scanning AM as well as FM stations.

Below the frequency display is a row of seven PRESET buttons and a MEMORY button. To store the frequency of any station in the receiver's memory, the MEMORY button is pressed and then (within five seconds) one of the PRESET buttons. Subsequently touching a PRESET instantly tunes the receiver to its assigned frequency. Each button can be used for one AM and one FM channel for a total of fourteen stored frequencies. When a frequency is tuned, a red light appears in the center of the selected button.

The rest of the operating controls on the Mitsubishi DA-R15 occupy the left half of the panel. They include detented bass and treble tone controls (with a TONE DEFEAT button between them), a balance control, and a loudness control that operates independently of the volume control (ATTENUATOR) setting. It has eleven stepped positions, and when it is fully clockwise the frequency response is flat. Rotating it counterclockwise reduces the volume, emphasizing the low and high frequencies relative to the midrange. It is designed to give the best results when the listening volume is first adjusted (with the loudness control at maximum) to the loudest one expects to listen to the system. Then the loudness control alone is used to control the level, preserving the psychoacoustic balance between the midrange and the frequency extremes as the volume is reduced.

Pushbuttons control power, two sets of speaker outputs, the LOW and HIGH FILTER, and the STEREO/MONO mode. There are separate program-selector and record-selector knobs that provide independent control of the monitored and recorded program sources. The program-selector positions are marked TAPE 1, TAPE 2, TUNER, PHONO, and AUX. The record-selector positions, in addition to the last three, include two for dubbing from either of two tape decks to the other and an OFF setting that disconnects all tape outputs from the signal channel. There is a headphone jack on the front panel but no pilot light, since the tuner’s frequency reference output was 27 millivolts (mV) at the PHONO input. The amplifier sensitivity for a 1-watt reference output was 27 millivolts (mV) at the PHONO input. The noise level was slightly better than 80 dB referred to 1 watt through either.

The amplifier sensitivity for a 1-watt reference output was 27 millivolts (mV) at the AUX input and 0.1 mV at the PHONO input. The noise level was slightly better than 80 dB referred to 1 watt through either.

*** Laboratory Measurements.*** After the usual preconditioning period, the 1,000-Hz audio output of the Mitsubishi DA-R15 clipped at 60.5 watts per channel into 8-ohm loads. The 4-ohm and 2-ohm clipping power outputs were 81 and 70 watts, respectively. The IHF clipping headroom of the receiver was about 1.3 dB for both 8- and 4-ohm operation. The short-term power output (in the IHF dynamic-power test) was 72.5 watts into 8 ohms and 110 watts into either 4 or 2 ohms. The IHF dynamic headroom was 2.07 dB at 8 ohms and 2.6 dB at 4 ohms. The distortion rate gently from 0.8015 per cent at 1 watt to 0.0036 per cent at 50 watts and 0.024 per cent at 60 watts. The 4-ohm distortion was between 0.002 and 0.007 per cent from 1 to 70 watts, and into 2 ohms it increased from 0.0022 per cent at 1 watt to 0.012 per cent at 50 watts.

When the unit was driving 8-ohm loads at rated power, the distortion was just over 0.002 per cent from about 50 to 1,500 Hz, reaching 0.004 per cent at 20 Hz and 0.01 per cent at 20,000 Hz. At lower power levels the characteristic was similar but the distortion was even lower, measuring under 0.008 per cent of the frequency range and reaching 0.01 per cent or slightly less at 20,000 Hz.

The amplifier sensitivity for a 1-watt reference output was 27 millivolts (mV) at the AUX input and 0.1 mV at the PHONO input. The noise level was slightly better than 80 dB referred to 1 watt through either.

(Continued on page 36)
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The IHF intermodulation distortion was measured with equal-amplitude input tones of 19 and 20 kHz, their combined peak level being equal to that of a 45-watt sine-wave signal. In the outputs, the third-order distortion at 18 kHz was -78 dB referred to 45 watts, and the second-order (1,000-Hz) component was a barely detectable -98 dB. The amplifier was stable with simulated reactive-loudspeaker loads, and its IHF slew factor was 1.5 (slew limiting was visible on the waveform at 30 kHz when the amplifier was driven to rated power). The frequency response at 1-watt output was -3 dB at 165 kHz.

The tone-control response curves were conventional, with the bass-turnover frequency in the 200- to 300-Hz range and the treble curves hinged at 3,000 Hz. The loudness contours boosted both low and high frequencies with a very gradual and progressive action as the setting was reduced, and this prevented the sound from ever becoming undesirably heavy. The low-filter response was down 3 dB at 20 Hz, and the high filter's -3-dB point was 7,500 Hz. Its slope was 6 dB per octave in the audio range, although both filters are rated for 12-dB-per-octave slopes. The RIAA phono equalization was perfectly flat from 20,000 Hz down to less than 100 Hz, rising to +1.5 dB at 20 Hz. When measured through the inductance of typical phono cartridges, the sensitivity of the residue levels in our signal generator.

The distortion at the wide setting (w) was 0.086 per cent in mono and 0.16 per cent in stereo; at the narrow setting (n) the corresponding readings were 0.13 and 0.066 per cent.

The FM frequency response was ±1 dB from 30 to 15,000 kHz. The wide-bandwidth channel separation was almost perfectly uniform across the full audio range, measuring between 38 and 40 dB from 40 to 15,000 Hz and 33.5 dB at 30 Hz. With the narrow bandwidth, the separation actually improved at most frequencies, exceeding 55 dB from 300 to 1,700 Hz and falling to a "worst-case" reading of 32 dB at 30 Hz. The FM tuner's IHF intermodulation distortion was measured by modulating the signal generator with equal amplitudes of 14 and 15 kHz to a 100 per cent modulation level. A spectrum analysis of the audio output (w, mono) showed third-order components at 13 and 16 kHz at 60 dB below the tone levels and a second-order component of 1,000 Hz at -62 dB relative to 100 per cent modulation. In stereo, both the third-order and second-order products were at -56 dB, and there were the usual low-level spurious signals elsewhere in the audio range. The narrow- and wide-band results were essentially the same.

The capture ratio at 45 dB (100 µV) was 1.78 dB (w) and 2.5 dB (n), and AM rejection was a very good 69 to 70 dB in either mode. The image rejection was fair at 45 dB. To our surprise, the alternate-channel selectivity was identical at both settings of the bandwidth switch; an excellent 62 dB. Adjacent-channel readings were also good, with slight differences between the modes (7.6 dB for w and 11 dB for n). The muting threshold was 27 dB (13 µV) in mono and 25 dB (10 µV) in stereo. The 19-kHz pilot-carrier leakage into the audio output was -66 dB (w) and -69 dB (n), and the tuner hum level was a very low -78 to -80 dB. The AM tuner frequency response was typical of that found in receivers: -6 dB at 65 and 3,250 Hz.

For example, the excellent selectivity and low distortion and noise level of this receiver's tuner set it apart from most comparably priced receivers. On the key specifications we checked, only the image rejection was less than excellent. In most areas, very high image rejection is not a major requirement of an FM tuner, and even in our rather congested (spectrally speaking) area we never experienced any interference.

The wide/narrow bandwidth switch had a negligible effect on selectivity—except, for that matter, on anything else. We chose to leave it on wide and forget about it, although the opposite choice would have been just as valid.

The operating smoothness of the controls, and especially of the preset buttons, was striking. And, as usual with digitally tuned receivers, there was no trace of unwanted noise during tuning. The use of a small plastic-cased loop antenna for AM reception (instead of the usual ferrite rod, which is very likely to pick up noise and hum) paid off in unusually quiet AM reception. The AM "fidelity" was, perhaps, no higher than that of many other tuners, but it was far more listenable than most. In the audio section, we must mention the very fine loudness-control system, one of the few really useful ones we have used, and the equally desirable recording-program selector. Overall, the Mitsubishi DA-R15 left us with a very positive impression of a thoroughly designed, well-built, smooth-sounding receiver at a very modest price. It looks as good as it sounds, and it matches both of those qualities with its ease of handling—a rare combination of characteristics.

Circle 141 on reader service card
The Cosmostatic Model 577 is an omnidirectional speaker system using dynamic low-frequency and midrange drivers and an array of eleven electrostatic elements for the high frequencies. Because of the largely reactive load impedance presented by the high-frequency array, it is driven by an integral amplifier that is designed to deliver very high currents at high frequencies. The lower-frequency speakers are driven by the regular system amplifier.

The output of an “omni” speaker such as the Model 577 is almost entirely reflected from various boundary surfaces before being heard, so the resulting sound field is highly diffuse. As a rule the speaker cannot easily be identified as the source of sound since omnidirectional speakers create a broad, softly focused sound stage between them, behind them, and even to their sides. Specific sound-source locations within the stereo stage will therefore not be as definite as they are with more directional speakers, but to compensate there is almost total freedom of movement while listening. It is frequently possible to identify stereo programs (as distinguished from mono) even from another room.

The Cosmostatic is a large, heavy, expensive speaker. It stands 60 inches high, is 21 inches square, and weighs 156 pounds. Fortunately, it is equipped with casters that make it easier to move around. The lower half of the speaker is a walnut-veneer wooden base that contains the bass drivers and the high-frequency power amplifier. Four 6½-inch woofers, mounted on the sloping sides of a pyramid at the top of the base, radiate essentially omnidirectionally in the horizontal plane and over a wide angle vertically since they are tilted upward about 30 degrees. Within the bass enclosure are two 10-inch passive radiators, one facing downward and emitting its sound around the lower edge of the base, the other facing rearward. The two passive cones are in separate vented and coupled compartments.

Above the base of the speaker is an umbrella-like structure containing the eleven electrostatic driver plates, each having a radiating surface measuring about 6 inches square. They face outward and upward, and since they radiate from both sides of each plate they produce a nearly omnidirectional pattern. The electrostatic drivers are powered from a rugged amplifier installed in the rear of the base, and they operate with full effectiveness above about 3,500 Hz. Between 1,000 and 3,500 Hz there is a smooth transition from the woofers to the tweeters, aided by a single 1½-inch dome radiator that faces upward toward a disc reflector that is intended to provide 360-degree horizontal coverage.

Normally, a black grille cloth on a metal frame covers the electrostatic drivers andwoofer cones, which account for slightly more than half of the speaker's total height. On one side of the base is an illuminated rocker switch that turns on the power to the high-frequency amplifier. An electrical interlock prevents the speaker from being powered when the cover is not in place. The amplifier draws only about 7 watts from the a.c. line when idling, but in normal opera-
tion it may consume from 100 to 500 watts depending on program level. Internal drive-limiting circuits keep transient peaks below 1,200 watts to protect the speakers.

On the rear of the speaker are a 4-ampere audio-line fuse and two 10-ampere power-line fuses for the HF amplifier. A high-frequency level control, accessible through a hole in the rear protective cover, is set at the factory and does not require user adjustment. A thermal cutout shuts the amplifier if it becomes overheated from protracted high-level operation. A small light on the front of the base glows when this happens, and a similar light signals the operation of the speakers’ clipping-overload protection circuit.

The Cosmostatic Model 577 is nominally an 8-ohm system rated to deliver a 92-dB sound-pressure level measured at 1 meter with 1 watt of pink-noise input. It can handle up to 200 watts per channel and should be used with amplifiers rated for at least 50 watts output. The rated frequency response is 31 to 22,000 Hz ± 3 dB. The five-year warranty excludes only thermal damage due to improper fuse substitution or abuse from being overloaded by excessively powerful amplifiers. Price: $1,800 each.

**Laboratory Measurements.** Like other omnidirectional speakers, the Cosmostatics should be placed well away from room walls for best results. Because of space limitations in our 15 x 20 foot room (already well furnished with other speakers and equipment), we located them about 3 feet from the nearest wall. The reverberant-field frequency-response measurements showed a gently rising output above 5,000 Hz, which is consistent with the behavior of an omnidirectional radiator. Naturally, the curves from the left and right speakers were virtually identical, since the speaker has essentially no horizontal directivity. The HF level control at the rear of the speaker has a maximum range of about 5 dB between 8,000 and 14,000 Hz. The factory setting was near the upper end of its range.

The close-miked woofer response, including the contributions of the passive radiators, was flat within ±3 dB from 20 to over 1,000 Hz. When it was spliced to the mid/high-frequency curve the overall response was flat within ±2.5 dB from 20 to 10,000 Hz (with the HF control set to minimum, which we found preferable in our room). The output between 15,000 and 20,000 Hz was about 7 dB higher than the average midrange level. Except for a slightly depressed response at about 1,000 Hz, the overall speaker response was unusually flat from the lowest bass to the upper-treble range.

The bass distortion was very low, as might have been expected from the multiplicity of drivers used in that range. At a 1-watt input level the distortion was less than 1 per cent from 100 down to 40 Hz, reaching only 4 per cent at 20 Hz. Increasing the drive to 10 watts yielded distortion readings of 2 per cent or less down to 40 Hz and 6 per cent at 20 Hz. The system impedance reached its minimum of just under 5 ohms at 4,000 Hz. It was about 35 ohms at 57 Hz and 18 ohms at 1,000 Hz; elsewhere the impedance was typically 8 to 10 ohms.

A sound-pressure level of 84 dB was measured at a distance of 1 meter with a 1-watt input of noise in an octave band centered at 1,000 Hz. This is not as inconsistent with the manufacturer’s 92-dB rating as it might seem, however, since our test procedure differs from theirs in several respects. Also, an SPL measurement on an omni speaker fails to include much of its output, which is radiated in other directions and never reaches the microphone.

Our FFT frequency-response measurement system arrived after the tests had been made on the Cosmostatic speaker, but we did make a measurement of its anechoic response in our room for comparison purposes. It showed the assorted peaks and dips (caused by reflections) typical of an omni or any other essentially nondirectional speaker, but in general the results did not conflict seriously with our other test data.

**Comment.** The size and installation requirements of the Cosmostatics speakers made it obvious from the start that they would not be at their best in a relatively small room such as ours. We felt intuitively (and this was confirmed by the manufacturer) that they should be used in a room large enough that the listeners can be well away from them and able to appreciate the size of the sound stage they can create. This was strongly suggested by our listening experience as well, but even if we had such a room available, the size and weight of the speakers would have made much experimentation with their placement unlikely.

At any rate, we found the sound of the speakers to be somewhat heavy and at the same time brighter—with the factory setting of the HF level control—than we would have preferred. With the control at its minimum, the balance was much better (remember, though, that a larger room would absorb more highs and probably accomplish the same results). Like any omni, these speakers sound no louder close up than from a 10- to 15-foot distance (or further, in all probability, if we could have moved back even more). They have no “hot spots” and give a broad sound stage across the end of the room. We played them as loud as we wished (or dared) with a 200-watt amplifier without strain or damage.

Although well protected, the Cosmostatics are not quite “bullet proof.” The manufacturer warns that any significant amount of ultrasonic energy (such as might happen if an amplifier became unstable due to a ground loop or other effect) could damage the high-frequency amplifiers. It is highly unlikely that this would occur in a home installation (the manufacturer says it has never happened under those conditions); but, when working through a speaker comparator as we do or changing signal-path connections under certain conditions, the possibility exists.

Summarizing, the Cosmostatic Model 577 is a speaker built on a grand scale for rooms of heroic dimensions. It is not for use in an ordinary-size room, and it is therefore clearly not “everyman’s” speaker. If you have the room and the money, this is one of the most impressive examples of an omnidirectional speaker we have heard, in addition to its having exceptional bass performance combined with the clarity and transparency that are hallmarks of an electrostatic high-frequency reproducer.

*Comment.* The size and installation requirements of the Cosmostatics speakers made it obvious from the start that they would not be at their best in a relatively small room such as ours. We felt intuitively (and this was confirmed by the manufacturer) that they should be used in a room large enough that the listeners can be well away from them and able to appreciate the size of the sound stage they can create. This was strongly suggested by our listening experience as well, but even if we had such a room available, the size and weight of the speakers would have made much experimentation with their placement unlikely.

At any rate, we found the sound of the speakers to be somewhat heavy and at the same time brighter—with the factory setting of the HF level control—than we would have preferred. With the control at its minimum, the balance was much better (remember, though, that a larger room would absorb more highs and probably accomplish the same results). Like any omni, these speakers sound no louder close up than from a 10- to 15-foot distance (or further, in all probability, if we could have moved back even more). They have no “hot spots” and give a broad sound stage across the end of the room. We played them as loud as we wished (or dared) with a 200-watt amplifier without strain or damage.

Although well protected, the Cosmostatics are not quite “bullet proof.” The manufacturer warns that any significant amount of ultrasonic energy (such as might happen if an amplifier became unstable due to a ground loop or other effect) could damage the high-frequency amplifiers. It is highly unlikely that this would occur in a home installation (the manufacturer says it has never happened under those conditions); but, when working through a speaker comparator as we do or changing signal-path connections under certain conditions, the possibility exists.

Summarizing, the Cosmostatic Model 577 is a speaker built on a grand scale for rooms of heroic dimensions. It is not for use in an ordinary-size room, and it is therefore clearly not “everyman’s” speaker. If you have the room and the money, this is one of the most impressive examples of an omnidirectional speaker we have heard, in addition to its having exceptional bass performance combined with the clarity and transparency that are hallmarks of an electrostatic high-frequency reproducer.

Circle 142 on reader service card (Continued on page 40)
Break tradition.

Drink Ronrico Gold Rum instead.

Ronrico Gold Rum is a lot more than just provocatively flavorful. It's also smooth, mellow, and terrifically mixable.

Try it and chances are you'll be happily forsaking your traditional bourbon, blend, and Canadian—not to mention your Scotch—in virtually no time at all.

Look, it takes some courage to try something just a little bit different, but how will you know what you're missing if you never take a chance?

**RONRICO GOLD RUM & CLUB SODA**

1 1/2 oz of Ronrico Gold
Canadian Dry club soda
Place 2 to 3 ice cubes in an 8 oz highball glass. Add Ronrico Gold. Fill with club soda. Stir lightly. Garnish with a slice of lime.

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RONRICO GOLD RUM
Kenwood KA-900 Integrated Amplifier

The Kenwood KA-900 integrated amplifier is one of that company's "Purist" line of audio components. It is rated to deliver 80 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.005 per cent total harmonic distortion. Its other specifications are of similar high caliber, establishing the KA-900 as one of today's more refined amplifiers.

Except for its power rating and the use of an internal power supply, the KA-900 is almost identical in design and appearance to the top-of-the-line KA-1000 reviewed in STEREO REVIEW for April 1981. Its styling is strikingly distinctive, with the lower half of the "panel" being a smoke-glass, bottom-hinged door that partially conceals the controls behind it. With the glass in place, the only accessible controls are a large rectangular power pushbutton at the left, a horizontal-slider volume control near the center, five thin pushbuttons below it that select TAPE A, TAPE B, AUX, TUNER, or PHONO sources for monitoring, and a large clear-plastic panel at the extreme right. The latter operates an electronic circuit that makes a smooth transition from the volume set by the slider to a fully silenced condition over a period of a couple of seconds. Simultaneously, the blue-green lighting of the FADER panel goes from fully on to off as the volume changes.

Swinging down the glass door reveals slim rectangular bar knobs for the bass and treble tone controls (non-detented) and a switch for selecting SPEAKERS A, B, or A + B (or OFF for headphone listening through the adjacent jack). Another knob is the REC OUT selector, which channels any of the input sources to the tape-recording outputs independently of whatever input is being heard through the amplifier. The remaining knob is the balance control.

The other concealed controls are push-button switches. Between the tone controls are a small tone-defeat switch and separate bass and treble turnover selectors (respectively offering a choice of 200 or 400 Hz and 3 or 6 kHz). The REC OUT control has positions marked AUX, TUNER, PHONO, and OFF and two DUBBING positions for copying tapes from one machine to the other. The remaining small buttons activate the loudness compensation, the SUBSONIC FILTER (with the latter out, the amplifier is direct-coupled from its high-level inputs to the speakers), and the stereo/mono MODE switch. Larger buttons select either of two phono inputs (1 or 2) and switch the phono-preamplifier gain and input resistance for moving-magnet (MM) or moving-coil (MC) cartridges.

On the rear panel of the KA-900, in addition to the various signal-input and -output jacks and a DIN socket for TAPE B, there is a small slide switch that selects a MM phono-input resistance of 33,000, 47,000, or 100,000 ohms. Heavy-duty insulated binding posts are used for the two sets of speaker outputs. A second set of SPEAKER A binding posts, marked S SENSOR, gives a clue to an unusual feature of the KA-900.

The Kenwood Purist Series amplifiers all feature what the company calls Sigma Drive, an auxiliary feedback path taken from the speaker terminals themselves. This enables the amplifier to deliver its rated output and distortion levels at the speaker instead of at its output terminals, compensating for any possible losses in the speaker cables. For this purpose, the KA-900 is furnished with a pair of heavy-duty, 13-foot, four-conductor speaker cables. Two conductors are heavy wires that go from the speakers to the amplifier outputs. The others are lighter-gauge wires that carry the feedback signals to the Sigma-Sensor terminals on the amplifier.

Sigma Drive operates only on the speaker A outputs. Ordinary speaker wires can be used from speaker B to a second set of speakers. If a single pair of speakers is used, connected to speaker A terminals, changing the front-panel switch from A to A + B will disable the Sigma Drive feedback so that its effect can be evaluated in a listening test.

Kenwood engineers believe that eddy currents, induced magnetically in a metal chassis and covers, can create magnetic fields that in turn generate distortion in the amplifier circuits. This effect is very small and entirely measurable in most amplifiers, but, with the ultra-low-distortion of the Purist series, Kenwood felt the need to minimize even this minute source of distortion. Therefore, they have made as much as possible of the structure of the KA-900 of plastic, leaving only the bottom and rear of the chassis, plus the top cover, to be made of aluminum. The plastic portions are satin silver in color and look exactly like the metal portions.

Within the amplifier, the output transistors are mounted on heavy aluminum blocks and heat is conducted from them through fluid-filled tubing to large internal heat-radiating fins. The entire cooling system operates by convection and does not require a fan or external fins. The Kenwood KA-900 is 17 1/4 inches wide, 4 3/8 inches deep, and 14 1/4 inches high. It weighs 22 pounds. Price is $520.

- Laboratory Measurements. The preconditioning period left the top cover of the KA-900 quite hot directly over the heat-radiating fins but comfortable elsewhere. In normal operation it ran only mildly warm. With both channels operating at 1,000 Hz, the output clipped at 100 watts per channel into 8 ohms, 125 watts into 4 ohms, and 120 watts into 2 ohms. The IHF clipping headroom (8-ohm) was 1 dB. With the pulsed IHF dynamic-test signal the maximum output was 120 watts into 8 ohms, 180 watts into 4 ohms, and 164 watts into 2 ohms for an IHF dynamic-headroom rating (8-ohm) of 1.76 dB.

The harmonic distortion at 1,000 Hz was unmeasurable (below the noise level) until the output exceeded 20 watts into 8 ohms. The distortion was 0.001 to 0.0013 per cent from 30 to 70 watts and 0.0016 per cent at 90 watts. The distortion was not very different into lower load impedances. Into 4 ohms it was 0.001 per cent or less up to 50 watts and 0.0013 per cent at 100 watts. Even 2-ohm loads did not materially increase the distortion, which was 0.002 per cent or less up to 80 watts and 0.013 per cent at 110 watts. However, very high-power operation into 2 ohms caused the thermal cutout to shut off the amplifier for a couple of minutes near the end of our high-power tests.

At rated power into 8-ohm loads, the distortion (Continued on page 42)
In our zeal to build superb tape recording equipment in the extreme, we at Teac are sometimes driven to steal. From ourselves.

The extraordinary X-1000R illustrates this very well. In it, we have incorporated professional features originally designed for our TASCAM recording studio equipment.

These include a linear LED counter which measures tape in hours, minutes, and seconds. A Search To Cue (STC) and Search To Zero (STZ) capability. In addition, there’s Auto Reverse in both directions, in play or record.

The X-1000R, as is current professional practice, employs DBX® noise reduction. An exclusive in home reel-to-reel. And also, as in professional recording equipment, full-tension servos guarantee high stability and accuracy. And low wow and flutter specs of just .03% @ 7½ IPS.

All of which add up to an impressive collection of features, we think you’ll agree. And if we happened to borrow a lot of them from our professional designs, well that shouldn’t bother you one bit.

TEAC. MADE IN JAPAN BY FANATICS.
Distortion was very low over most of the audio-frequency range. It was under 0.003 per cent up to 3,000 Hz, increasing to a maximum of 0.013 per cent at 20,000 Hz. At lower power levels the behavior of the amplifier was similar, with slightly lower distortion readings. Below 50 Hz it was not possible to measure the distortion accurately because of the proximity of the distortion frequencies to power-line frequencies. How-
vie, it appeared to be no greater than 0.001 per cent even at the lowest frequencies. We noted that the distortion was mostly second-harmonic, the least objectionable type (not that this matters much when dealing with these nearly unmeasurable levels).

The IHF slew factor was greater than 25, and the amplifier was stable with a complex simulated speaker load. In the two-tone IHF intermodulation test, with inputs of 19 and 20 kHz, the second-order distortion (1,000 Hz) was 93 dB below 80 watts. Odd-order distortion products at 18 and 17 kHz were at −82 and −91 dB. The amplifier rise time was 5 microseconds at IHF standard gain and 1 microsecond at maximum gain.

A high-level input of 18 millivolts produced a reference output of 1 watt, and through the PHONO (MM) input the sensitivity was 0.25 millivolt. The A-weighted noise level referred to 1 watt was −79 to −80 dB through either input. The phono preamplifier overloaded at an input of 300 millivolts at 1,000 and 20,000 Hz and 314 millivolts at 20 Hz (the latter two readings being converted to equivalent 1,000-Hz values). The PHONO (MM) input impedance was 50,000 ohms in parallel with 175 picofarads, and in the MC operating condition the input had a 135-ohm resistance. The maximum deviation from ideal RIAA phono equalization was ±0.25 dB from 20 to 20,000 Hz, and when measured through the inductance of a phono cartridge the response changed to a maximum of +1 dB at 15,000 Hz.

The tone controls (especially the treble control) had very little effect in the first half of their rotation, but the maximum range was complete adequate. When the 200- and 6,000-Hz turnover frequencies were selected, the midrange level was not affected significantly at maximum control rotation. The loudness compensation boosted only the low frequencies at reduced volume settings, and the SUBSONIC FILTER response was down 3 dB at 27 Hz.

**Comment.** Comparing our measurements and comments on the Kenwood KA-900 to those we made on the KA-1000 we tested last year, we find remarkably few differences. The distortion of the KA-900, like that of the KA-1000, is nearly unmeasurable and totally insignificant by any standards. Although our distortion readings at high frequencies exceeded the amplifier’s 0.005 per cent rating, this was because we used the IHF standard gain setting for the measurement. At maximum gain, the distortion met the published ratings (the KA-1000 exhibited the same behavior). Virtually every other measured characteristic was identical for the two units. Interestingly, the major difference was in favor of the KA-900, whose 2-ohm performance was outstanding. Few integrated amplifiers can drive 2-ohm loads to any reasonable power level without excessive distortion or without shutting themselves down.

The FADER control worked smoothly and well, although the slider volume control on our test unit had some free play that was very apparent during our tests but not in use. Although the KA-900 is undeniably handsome, we found it difficult to determine at a glance where any of its controls were set or to identify their functions.

We were unable to confirm the practical... (Continued on page 44)

Vantage pleasures

When you want good taste and low tar, too.

ULTRA LIGHTS: 5 mg. "tar", 0.4 mg. nicotine,
FILTER: 9 mg. "tar", 0.8 mg. nicotine, sv. per cigarette by FTC method.
Test reports

benefits of non-metallic construction or the audible advantages of Sigma Drive. Perhaps because our speaker leads are adequate to start with, numerous A-B comparisons turning the Sigma Drive on and off failed to produce any audible change in sound quality. But, aside from its special design features, the Kenwood KA-900 is a fine, "state-of-the-art" integrated amplifier that can hold its own against competitors.

Circle 143 on reader service card

THE signal expanders manufactured by RG Dynamics are called "dynamic processors" to distinguish them from other varieties of dynamic expanders. They are designed to help restore the dynamics of compressed recorded music (which includes virtually everything ever released in recorded form). Although the primary function of a dynamic processor is expansion of the dynamic range, RG emphasizes other qualities such as peak unlimiting, noise reduction, image enhancement in stereo reproduction, and separate processing of the two channels.

The new RG X-15 dynamic processor is essentially a simplified and less expensive version of their Model Pro-20, which has been on the market for a couple of years (it was reviewed in our sister publication, Popular Electronics, in February 1980). Its operation has been simplified by reducing the operating controls to a single knob, marked DYNAMIC PROCESSING, which selects the degree of range expansion applied to the signal (6, 9, 12, or 15 dB). In its 6-dB position, the X-15 gives a downward expansion (the "soft" signals become softer) for noise reduction of about 6 dB with no upward expansion at higher signal levels. The other settings retain the downward expansion, adding to it an upward expansion (the loud signals become louder) that can be as great as 9 dB (at the 15-dB switch setting).

Next to the knob are two vertical rows of LEDs that indicate, separately for each channel, the amount of expansion in effect at any time. The upper four LEDs (green) indicate expansion while the bottom one (red) is marked NOISE REDUCTION. In the absence of a signal or if the signal level falls below a certain threshold, the red light comes on and shows that up to 6 dB of noise reduction is being applied. The settings of the DYNAMIC PROCESSING knob are linked to the LED indicators and establish the maximum upward expansion of which the unit is capable. The actual expansion, as indicated by the LEDs, is determined by the instantaneous program level in each channel, but it cannot exceed the control-knob setting.

The expansion circuits respond rapidly to level changes, with an attack time of 0.6 millisecond. The decay time, which is affected by the actual program dynamics, varies from 80 milliseconds to as much as 3 seconds to avoid sudden or unnatural level changes. The X-15 is meant to be connected into the tape-monitoring loop of an amplifier or receiver whose tape-monitoring switch functions are duplicated by a button on the panel of the X-15. The rear of the X-15 has tape-recording input and output jacks as well as the main signal inputs and outputs. The remaining front-panel controls are two processing buttons; one inserts the processor ahead of the TAPE OUT jacks (which normally receive an unprocessed signal) and the other bypasses the processor circuits entirely. RG suggests that only the two lowest settings of the DYNAMIC PROCESSING knob be used for tape recording, presumably to avoid tape saturation with cassette recorders, whose dynamic headroom is limited.

The RG X-15 is finished in satin silver. It is 1¼ inches wide, 2½ inches high, and 9 inches deep. Since it consumes only 3 watts from the power line, it can be left on continuously or plugged into a convenience outlet.

A-weighted noise in its output, for any control settings, was less than our minimum 100-microvolt measurement sensitivity.

The harmonic distortion was measured at frequencies of 50, 1,000, and 15,000 Hz as a function of output level from 0.1 volt to clipping and with expansion settings of 6 and 15 dB. The 1,000-Hz distortion and the 15,000-Hz distortion with 6-dB expansion were typically under 0.02 per cent for outputs up to 1 volt or so, increasing to between 0.13 and 0.56 per cent at 6 volts. When the maximum 15 dB of processing was used at 15,000 Hz, the distortion was between 0.05 and 0.1 per cent up to 1 volt, reaching 0.8 per cent at 6 volts.

At 50 Hz, the distortion was considerably greater because the control circuits were responding somewhat to the level variation within each cycle of the signal waveform. (Continued on page 46)
Q. How is it possible for an amplifier as small and as light as the M-400 to deliver so much power and to cost so little?

A. The M-400's size (less than 7 inches) and weight (less than 10 pounds) reflect the advanced technology and the new patented designs used in both its power supply and amplifying stages—and the innovative relationship between them. (Not to mention the incredibly low price that resulted: $399.)

Q. What is different about the M-400's power supply and amplifying stages?

A. In any amplifier, the power supply produces and stores energy for use by the amplifying stages. Conventional amplifier power supplies are very inefficient because they produce a constant high voltage level at all times—irrespective of the demands of the ever-changing audio signal—and even when there's no audio in the circuit at all!

Conventional power amplifier

Solid line: audio output signal
Broken line: power supply voltage
Shaded area: wasted power
Vertical lines: power to speakers

Magnetic field amplifier

Solid line: audio output signal
Broken line: power supply voltage
Shaded area: wasted power
Vertical lines: power to speakers

This inefficient approach demands large and expensive power transformers and electrolytic capacitors. Large heat sinks are also needed to get rid of the heat associated with the constant high voltage of conventional power supplies.

In sharp contrast, the M-400's "smart" power supply produces only the power that the amplifier section needs from moment to moment to handle the signal accurately. In effect, the M-400's power supply is signal-responsive. As a result, overall efficiency is extraordinarily high.

Q. Do I really need 200 watts per channel?

A. Yes! If you want to hear music reproduced with full realistic impact and dynamic range, the musical peaks must be handled without compression, clipping or overload. You'll be amazed at the improvement in openness and clarity when your system is able to deliver the power that music really requires.

When full digital audio arrives, dynamic-range capability will be even more significant. And the M-400's power will be even more necessary—with its ability to deliver 500 watts in mono, 900 watts for brief time periods, and more than 1200 watts on peaks!

Q. Now I understand why the M-400's power capability will improve my system, but can my speakers take it?

A. Speakers with a power rating of 50 watts or so will have no problem with the M-400. That's because speakers are not generally blown out by high, clean power, but rather by low-powered amplifiers pushed beyond their overload points. These low-powered amplifiers "clip", generating speaker-damaging transients.

In addition to providing better sound and sufficient power, the M-400 has special protective circuits that guard both itself and your loudspeakers from almost any conceivable damaging circumstance. These include long and short-term overload, sudden overdrive signals (such as from dropped styli), shorted speaker leads, etc.

Q. How can I get more information?

A. Easily. For literature, test reports and the address of your nearest Carver dealer, circle the number below. For faster response, write to us directly.

Bob Carver explains (briefly) how the Magnetic Field Amplifier works. (Others tell how it sounds.)
resulting in a somewhat squared waveform. With 6 dB of processing, the distortion was in the range of 1 to 2 per cent at most output levels, but it worsened with larger amounts of processing.

A swept-frequency input signal was applied to the X-15 input at a constant level and the output response was plotted for each setting of the DYNAMIC PROCESSOR switch. The output below 200 Hz was relatively independent of the switch setting, rising to a generally flat plateau (between 500 and 20,000 Hz) whose level was a function of the switch setting. This was essentially a plot of the control circuit’s frequency response, showing that it favors middle and high frequencies and has little effect at the lowest frequencies (to minimize the distortion effect noted above). When the BYPASS switch is used, the response is ruler-flat from 20 to 20,000 Hz. Crosstalk was less than −50 dB at 1,000 Hz and below, increasing to −30 dB at 20,000 Hz (evidently the result of capacitive coupling within the unit). In any case, these crosstalk levels cannot be heard under any conditions.

- Comment. The success of a dynamic processor can only be judged subjectively. More important than what it does to the sound is what it does not do to it. This has been the downfall of many dynamic processors and expanders, their action becoming audible as a surging of program levels or a background noise level that fluctuates with program variations.

There are at least two approaches to avoiding these pitfalls: devising very sophisticated (and often expensive) circuits that do their job without becoming noticeable, or limiting the magnitude of the expansion to keep it from calling attention to itself. We assume from the relatively low price of the X-15 that its circuitry is relatively simple (though it is obviously effective), and it is apparent that the selection of operating ranges and other characteristics has been made with an eye (ear?) to keeping its performance subtle.

In our previous experience with the more expensive RG Pro-20, basically similar to the X-15 in its design and ratings, we were impressed with how well it expanded the program dynamics and reduced noise without ever calling attention to its presence. It has a maximum range of 20 dB and a threshold-level adjustment that adds one more knob to the panel. The simplification of the X-15 does not seem to have impaired its usefulness or performance in any way we could hear.

The success of the RG approach is illustrated by the fact that a listener is not likely to be aware of the contribution of the X-15 except by switching it off with the BYPASS button. There was no noise pumping or modulation under most conditions, the major exception being certain combinations of maximum expansion with a solo voice or instrument. The amount of noise reduction achieved is not at all striking—in fact, under most conditions it is difficult to detect except through a critical A-B comparison between the “in” and “out” conditions of the X-15. However, there is some noise reduction taking place.

The claims for “image enhancement” presumably arise from the use of separate left- and right-channel control signals (unlike other expanders, in which a common control signal, derived from a sum of both channels, is used to control the gains of both signal channels). In such a comparison, there can be no doubt that the RG system results in less unnatural shifting of the dynamic balances of the channels (an expanded trumpet blast in the left channel will not cause a crescendo from the strings in the right, for example). But it seems to us that what the RG achieves is really a lack of image degradation rather than any stereo “enhancement” as we understand it.

Overall, the effect of the RG X-15 is to add a modest amount of dynamic range to almost any program with no ill effects that we could hear—just what the unit was designed to do.
EVERYONE
NEEDS A LITTLE COMFORT.

There comes a time when we all want to sit back and get comfortable. And there's no better way than with the fine, easy taste of Southern Comfort.

Inspired in the 1800's in old New Orleans, this world famous liquor is delicious straight, on the rocks, or mixed any way you like it.

It's one of the real comforts of life.

SOUTHERN COMFORT

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“GOOD MORNING, Chris. It’s good to see you again,” said Benny Goodman, greeting me at the door to his New York apartment. It was a clear October morning, the sharp rays of the autumn sun penetrated the large twenty-first-story windows, deflected to every corner of the brightly decorated living room, and played tag among various objects of art and memorabilia. There was also a glimmer of light in Goodman’s eyes. Could he possibly have remembered me from that one brief introduction singer Jimmy Rushing performed almost eighteen years ago? Of course not, I thought, the King of Swing merely assumed that we had met, and this was his gracious way of covering up a much-publicized absentmindedness. When one reaches Goodman’s stature in life, the right to practice such minor deceptions is a given.

As we seated ourselves by the cold fireplace, I told Goodman that we should, by rights, already have been personally acquainted, for I had spent about two months on his payroll in 1962, working in his office just an elevator ride away from the apartment. “Is that so?” he said, appearing both surprised and amused as he searched my face for something to trigger his memory. But I hastened to add that we had in fact not met during that time. He asked me in what capacity I had worked for him and seemed not at all surprised to hear that my main duty had been to sign his signature on countless eight-by-ten glossies, some letters, and an occasional album. “Were you good at it?” he asked. “Yes,” I replied immodestly, adding that I had once been a commercial artist, so that capturing the character of his signature had been a breeze. The Goodman eyebrows arched and I quickly assured him that I had not since had any use for my calligraphic skill in that area.

If working for Goodman did not gain me his acquaintance, it did provide me with solid confirmation of his enormous, ongoing popularity. By 1962 bop and other forms of modern jazz had long since put Swing music on the nostalgia shelf, pseudo folk music was front and center, and the Beatles stood in the wings gearing up to change a lot of things around. Yet I must have fulfilled close to a hundred requests for autographs from, for example, Ghana alone, all in all probably signing Goodman’s name more often than I had my own up until then. The letters poured in from all directions, thanks and adulation from some who remembered and others who had just discovered the very distinct and likable sound of Benny Goodman’s music. Few jazz musicians have enjoyed as large and widespread a following, and even fewer have been able to maintain their popularity for as long as Goodman has. Of course, it all came into full flower during the Swing Era of the Thirties—when some jazz artists, for the first and only time, were accorded movie-star status by clamoring fans—but the seeds of Goodman’s fame had been planted long before then, and in not nearly so glamorous a setting.

On May 30, 1909, in a rough Jewish ghetto of Chicago, Benny Goodman became the eighth of eleven children born to a couple who had immigrated from Poland and Lithuania, respectively, some twenty-five years earlier. A tailor whose meager $20-a-week salary left little or no room for even the most modest frills, David Goodman was determined to see that his children availed themselves of every opportunity for advancement. Accordingly, when he learned that a neighborhood synagogue was offering the free loan of musical instruments, plus lessons for a token fee, he took his cue from a neighbor and marched three of his sons over to the temple. “They gave me a clarinet, because I was the smallest,” recalls Goodman, who was nine at the time. “Harry got a tuba, and Freddy a trumpet—it was kind of haphazard, I guess.”

If the casual choice of instrument proved to be perfect, so did the timing: Chicago, in 1919, was experiencing an influx of New Orleans musicians. Such
men as King Oliver, Freddie Keppard, and Jimmie Noone were introducing Chicagoans to the exciting polyphonic ensemble-playing and syncopated rhythms of a music only recently named jazz, and they were soon to be joined by Johnny Dodds, Baby Dodds, Honoré Dutrey, and Louis Armstrong, artists whose impact on American music Goodman himself would match in a later decade.

But Goodman did not immediately plant himself in the city's fertile jazz soil. At eleven, he became a member of the sixty-five-piece Hull House Settlement Band, playing a repertoire of popular marches and classical warhorses. The following year he also occasionally paraded with the 124th Regiment Field Artillery Band, a job that netted him five dollars a parade and thus brought him into the ranks of professional musicians. It was during this time that young Goodman began to receive formal training from clarinetist Franz Schoepp, a member of the Chicago Symphony, whose students also included Buster Bailey. Looking back on that formative period, Goodman values most highly the two years spent with Schoepp, a German who viewed life from a nineteenth-century perspective, using only German editions of music books because "pretty soon everything will be in German."

Herr Schoepp was more on target when he predicted a promising future for his inquisitive pupil. "He did more for me musically than anyone I ever knew," Goodman acknowledges. "It was my father's idea that I study music formally, and he took me to him [Schoepp] as soon as he felt I showed some promise." Was Schoepp interested in jazz? "No, he did not condone it. He was a rigid classical disciplinarian—I started out with a rather wide scope of musical interest." But, I asked, echoing a common belief, had it not been at the urging of his brother-in-law, record-producer John Hammond, that Goodman later directed his career along a classical bypath? Goodman smiled. "Oh, I don't think so... no... I don't think so. I have, since the early Thirties, had records of the Brahms and Mozart quintets, and it's kind of a natural thing to be drawn toward classical music for the clarinet. Would he have taken the classical instead of the jazz route if the opportunity had been there? "No, because I had that opportunity," he says. "I think I was drawn to jazz pretty quickly when I was a youngster—I think it was much easier and more interesting for me at the time."

Goodman would later preside over the most famous jazz concert of all time, but he nonetheless made his own concert debut in a classical duet. It was a small student affair that took place when he was about ten and already under Schoepp's wing. "This little girl pianist and I performed a Haydn transcription," he recalls, "so you see that classical music was not an afterthought." In early 1920, Goodman took a record that his brother had brought home, and he committed to memory, note for corny note, the Ted Lewis hit When My Baby Smiles at Me. A subsequent performance of the Lewis number earned young Goodman five dollars at a local vaudeville theater, so it may well constitute his first step toward jazz even though Lewis was decidedly a peripheral figure in that music. Among other recordings Goodman studied were some by the Original Dixieland Jazz Band, whose clarinetist, Larry Shields, played in a style that bordered on novelty but which nevertheless contained more jazz substance than Lewis'.

I told Goodman of a book whose author accused him of having stolen his style from Johnny Dodds. "Grand larceny, I suppose," he said, chuckling at the very thought. As anyone with knowledge of the Dodds and Goodman styles will tell you, the notion is ludicrous. Goodman does acknowledge the influence of others on his style, knowing well that it would be folly to assert that he—or anyone else, for that matter—had a wholly original way of playing. Influences, of course, come in various forms, and Goodman's included the bands of Isham Jones, Paul Whiteman, and Roger Wolfe Kahn and the trumpet styles of Louis Armstrong, Bix Beiderbecke, and Red Nichols as well as the styles of some clarinetists. "I was very impressed with Jimmie Noone," he says, with a bow to a New Orleans jazz man who is said also to have made a deep impression on the French composer Maurice Ravel, "and Leon Rappolo was also awfully good, though I never heard him in person." Such admiration has left traces of Noone and Rappolo in the Goodman style, but only traces—the unique Goodman approach is much in evidence even on some of the earliest recordings.

To get an idea of how prolific a recording artist Goodman has been, consider the fact that what is generally regarded as his "early" output exceeds the total lifetime recorded efforts of most artists. If one's collection consisted of every item in the Benny Goodman discography and nothing else, its size would be most impressive. Goodman was seventeen when he launched his recording career under the leadership of bandleader Ben Pollack. It was an inauspicious start: the first three sides—made for Victor in September 1926—were never released, nor were the next efforts, six or seven Edison cylinders (of all things) recorded in the home of trumpeter Earle Baker's mother. Those who have heard these crude, pioneer home recordings claim to be able to
identify Goodman's clarinet even though the surface noise.

Goodman's first commercially released side was When I First Met Mary, made for Victor in December 1926, with Ben Pollack and His Californians, a thirteen-piece group that included Goodman's brother Harry, Glenn Miller, and composer Victor Young. All these early recordings were made in Chicago, but the Goodman-Pollack association actually began the year before, at the Venice Ballroom in Los Angeles. Benny was then sixteen years old. Joining Pollack in California was the first significant step into a musical world Goodman would soon dominate, but he took it less for musical reasons than to experience the much-publicized glamour of California.

What he found did not glitter as advertised. "When I looked around and saw how sleazy the place was," he says, "I began to wonder why I had come, but all wasn't lost, because the band was awfully good." That it was, but it would become even better as more budding stars came aboard. Goodman played with Pollack off and on for three years, moving during this time to New York; there he immersed himself in studio work, building up a reputation as he broadcast and recorded with such stars as Gene Austin, Sammy Fain, Lee Morse, Ethel Waters, Ruth Etting, and even Ted Lewis. "A lot of that work was boring as hell," he later admitted, "so when the opportunity to play some good music came along, one grabbed it." By sheer coincidence, Goodman participated in a transition that saw the greatest of all blues singers exit and the Swing Era's most important vocalist make her entrance: he is barely heard on Gimme a Pigfoot and a Bottle of Beer, from Bessie Smith's famous swan song date, and two days later—ironically, in the same Columbia studio—it is his session that marks the debut of a young, slightly nervous Billie Holiday.

By the end of 1933, Goodman had made numerous recordings as leader, including some produced by Hammond specifically for the growing European jazz market. He also occasionally led a band outside the studio, but these bands lasted only as long as the jobs they were designed for (one was backing singer Russ Columbo), and Goodman found that lending one's name to a band did not in itself guarantee musical freedom. What he needed and soon began to seek was an orchestra he could keep long enough to give an identity to, a smooth-running swing machine that would embody the very essence of hot jazz. The concept was not by any means new; Duke Ellington and Fletcher Henderson had created such bands in the previous decade, but—with the exception of the Casa Loma Band, which had some of the qualities Goodman desired—such organizations were black and therefore victims of a color barrier that had often stunted the growth of American music. This barrier affected
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"...we all had a sense of style. There was a certain elegance one strove for in those days."

white musicians too, for it was impossible to pretend that it did not exist.

Goodman began to get it together around 1934, when he enlisted the aid of John Hammond and set out to form an orchestra that would provide him with the rhythmic drive and fire of bands led by his esteemed black colleagues. Hammond’s background was diametrically opposed to Goodman’s: his mother was a Vanderbilt, his family home a Manhattan mansion staffed by sixteen servants and boasting a ballroom seating 250 people. But the twenty-three-year-old Hammond shared Goodman’s enthusiasm for jazz, and the combination of that interest and wealth paved the way to powerful connections at the business end of the music industry. “Benny had been working steadily,” Hammond recalls, “but the Depression was getting worse, so even musicians of Benny’s skill began having a hard time. I told him I’d do everything I could to find the right musicians, and soon the band began to take shape, even though there was no steady work to be had.” At the suggestion of the concert pianist Oscar Levant, Broadway producer Billy Rose auditioned and hired the new Goodman band as one of two alternating orchestras at his new supper club, Billy Rose’s Music Theatre (the other band was led by Harold Arlen’s brother Jerry). The engagement was cut short after six weeks, some say because Rose was squeezed out by his associates. But Hammond offers a more interesting explanation, citing fierce competition from around the corner: a mob-operated club featuring the bands of Ben Pollack and Don Redman, better food—and a naked girl in a fish bowl.

It was around this time that Goodman met Willard Alexander, a young booking agent with the Music Corporation of America. MCA was the country’s largest booking organization, and it was inconsistent with its past policies to handle an untested, uncommercial band such as Goodman’s, but Alexander was a believer not easily discouraged. He sent the band to audition for a new NBC network radio program called Let’s Dance. The three-hour weekly broadcast—coincidentally sponsored by another NBC, the National Biscuit Company—also featured the more popular fare of the Xavier Cugat and Kel Murray bands, and Goodman’s band was chosen over the competition by a narrow one-vote margin.

The broadcasts ran from December 1, 1934, to the following May 25, but even with national exposure the band had to accept such additional jobs as playing for an Elks Lodge. Following the last broadcast, Alexander booked the band into the Grill Room of New York’s Roosevelt Hotel, but this was the traditional winter home of Guy Lombardo and His Royal Canadians, and neither patrons nor hotel management took well to the change of pace Goodman and his men represented. "They were given their two-weeks’ notice the night they opened," Alexander recalled many years later. Still undeterred by the band’s lack of acceptance, Alexander arranged a tour that was to last almost a year.

But before leaving New York, Goodman established another milestone in his career and, indeed, in the history of jazz: he made the first Benny Goodman Trio recordings. These sides—eight in all, with Krupa and pianist Teddy Wilson—heralded a long and successful series of recordings and live performances featuring small groups playing what has aptly been referred to as chamber jazz. It began rather informally, when the three—all guests of xylophonist Red Norvo and his wife, singer Mildred Bailey—decided to entertain at a party. Later, with the addition of Lionel Hampton, the trio would become a quartet, and, later still, the art of cohesive small-band swing would reach perfection in a series of extraordinary Goodman Sextet performances.

Getting back to early 1935, Goodman’s future did not look terribly gloomy. He was, after all, working at a time when many Americans were not, and he not only had his own band but also a recording contract (with Victor). But as the tour proceeded across the country, heading in the general direction of the West Coast, the band’s morale gradually diminished, hitting rock bottom when the customers of Denver’s Elitch’s Garden demanded their money back and had to be appeased with waltzes. Goodman later described that as the most humiliating experience of his career, and by the time he reached California he had developed a devil-may-care attitude that prompted him to pull out all the stops, unleash the band’s swing power, and let the chips fall where they may. They fell on surprisingly enthusiastic ears when a one-night stand in Oakland turned into a small triumph, but the real turning point came right after that, on August 21, at the famous Palomar Ballroom in Hollywood. “We decided to shoot the works with our best things like Sugar Foot Stomp, Sometimes I’m Happy, and others,” Goodman later recalled. “Actually, we were almost scared to play. But from the moment I kicked them off, the boys dug in with some of the best playing I’d heard since we left New York. I don’t know what it was, but the crowd went wild, and then—boom! That was the real beginning.”

Goodman’s strict training had paid off. The discipline he had learned from Franz Schoepf did not always make him popular with his musicians, but he recalls that in those days his quest for
perfection was usually shared by all the band members. "Musicians don't want to rehearse any more," he laments, "and they don't seem to care how they present themselves, visually, to the public. I always cared a great deal—hell, we all did, we all had a sense of style. There was a certain elegance one strove for in those days. One dressed correctly, with shiny shoes, shiny instruments, and even the music had to have a certain sparkle. There was something called an individual tone by which you could identify all the top players—you just had to hear one note and you knew it was Louis, Lester, Sidney Bechet, or Johnny Dodds." Or Benny Goodman, I added. "Yes, I suppose," he replied with deliberate modesty.

Most leaders would have been totally discouraged by the reception the band got throughout most of that cross-country trek, but Goodman was stubbornly determined to see it through. Had he given up before reaching the Palomar, remarked Gene Krupa in a well-meaned if not well-constructed sentence, "there's little doubt but what many of us who have enjoyed success, prominence, and considerable financial reward since the late 1930's would have ever attained these heights."

Shortly after that historic night at the Palomar, Gene Krupa dubbed his boss "The King of Swing," but he surely could not have foreseen how long and successful the King's reign would be. Goodman did not, of course, single-handedly create the Swing Era, but he did provide the spark that set it all off. The number of fans grew almost exponentially until the whole country seemed to be singing his tune and the whole music industry was taking its cue from his downbeat.

Goodman's contribution was sociological as well as musical, for not only did he set the jitterbugs in motion, he took a whack at the racial barrier in the entertainment world by hiring such black musicians as Teddy Wilson, Lionel Hampton, and the remarkable Charlie Christian. This went against the grain of a music industry seemingly bent on uniting the races only when the public wasn't looking, but it deeply enriched his band. There were also fresh white voices, and the band grew better as lesser talents were replaced by men whose names would become household words: Harry James, Ziggy Elman, Jess Stacy. And as the band grew better, the cheers grew louder. By 1937, the Swing Era was in full flower and the inevitable happened: jazz made its way onto the stage of New York's Carnegie Hall. Would it work? There was certainly no one better equipped than the King of Swing to test the feasibility of presenting jazz in such a hallowed setting. The test took place January 16, 1938, and Goodman brought out the heavy artillery. Besides his own band and small groups, he presented an eminent contingent from the Basie orchestra, in-
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“In many ways he is yet one more exemplar of the American dream.”

including the Count himself (with that superb rhythm section), Lester Young, and Buck Clayton. From the Duke Ellington orchestra he borrowed Cootie Williams, Johnny Hodges, and Harry Carney, and, as if that were not enough, the producer was Sol Hurok. Still, Goodman was not sure he could pull it off, so he asked comedienne Bea
trice Lillie to come in and help “warm up the audience with a few jokes,” an invitation she wisely declined. The con-
cert was an unqualified success. In fact, it made history. Twelve years later a private recording of it became a two-
record Columbia set that still remains in the catalog, as any recording of such historical and musical significance should (see box on page 53).

When asked how long he wanted the concert’s intermission to be, Goodman is said to have replied, “I dunno, how should (see box on page 53)."

As he approaches his mid-seventies, starring Steve Allen in the title role. I asked the real Benny Goodman how he felt about the Hollywood version of his life. “Well, forget it!” he said, laughing as if I had just told a joke. “I didn’t like a good deal of it. I don’t think I’ve seen it more than once or twice; it’s a picture I’m not very intimate with. You know, it’s terribly difficult to make a dramatic story out of a musician’s life when noth-
ing really terribly dramatic has hap-
pended. It was different in the case of Glenn Miller—he got lost, you know.”

The Goodman film was rather... um... bland, I suggested. “It sure was. The Billie Holiday film (Lady Sings the Blues) came out rather well, whether you liked it or not. I mean, it was a commercial success, with all the drinking and drugs and things—it makes more of a story.”

A classical musician plunging into a mad boogie woogie remains Holly-
wood’s idea of the kind of thing people want to see, and the reverse situation is not one they care to explore. Goodman wishes they had shown his classical side instead of dwelling on the old high-
brows-get-down theme. When we met, he had just returned from England’s Aldeburgh Festival, where he per-
formed Mozart’s Quintet for Clarinet and Strings, K. 581, with the Amadeus String Quartet, and Brahms’ Sonata, Op. 120, No. 1, with pianist Clifford
curzon. “And then we had a jazz group,” he adds, smiling.

And so, though Goodman is by no means retired, he is certainly in the rar-
ified category of Elders Statesmen of Jazz. His success over the years has been enormous, his contribution to American music prodigious, and it is only fair that he now reap the honors due a long and rich career. In many ways he is yet one more exemplar of the American dream. The son of immi-
grants, he grew to be a master of an indi-
genous American music. Born to pov-
erty, he became wealthy. Classically trained, he was both individual and in-
novative in jazz and then built a distin-
guished reputation as a classical soloist as well. Himself a Jew, he was a power-
ful force in demolishing the color bar-
rrier in music, allowing blacks and whites to occupy the same stage at the same time and to play the same music, judged only by how well they could play. If there is living proof that democ-

BENNY GOODMAN ON DISC

cal order and contain virtually all com-
mercially released studio recordings made by Goodman’s orchestra and small groups between 1935 and 1939. Volume 8 consists of alternate, previously unre-

- The Famous 1938 Carnegie Hall Jazz Concert. COLUMBIA OSL-160. The concert. An album without which no Goodman collection is serious, no jazz collection complete.

- Benny Goodman, TIME-LIFE RE-
CORDS STL-705. A three-record set in Time-Life’s “Giants of Jazz” series, this}

collection features Goodman samples from six labels, spanning the years 1927 to 1946, and includes an excellent illustrated booklet.

- Solo Flight—The Genius of Charlie Christian. COLUMBIA G 30779. Except for three tracks, this two-record set fea-
tures the legendary guitarist with Good-
man’s orchestra and sextet, and includes several previously unreleased takes.

- Benny Goodman Treasure Chest. QUALITY PAPERBACK BOOK CLUB 71-
0714, © 81-0715, © 91-0716. A three-
record set of 1936-1939 airchecks origi-
nally issued under the same title on MGM (3E9). Available from Quality Paper-
back Book Club, Inc., Middle-
town, Pa. 17057.

- The King Direct to Disc. CENTURY 1150. Yesterday’s recording technique updated and applied to today’s Goodman style.

- MOZART: Concerto in A Major for Clarinet (K. 622). Boston Symphony Or-

- COPLAND: Concerto for Clarinet and Orchestra (1948). Columbia Sym-
phony Orchestra, Aaron Copland cond. COLUMBIA MS-6497.

This latest version contains everything you need to get the fullest, most realistic reproduction from your stereo equipment. Whether you’ve spent thousands on your stereo system or have a more modest setup, the SRT14-A is an indispensable tool for helping you realize the full potential of your equipment. Best of all, you don’t have to be an electronics engineer to use it. You can actually perform a complete stereo system checkup by ear alone.

**A test lab in a record jacket**

Employing the most advanced recording, mastering, and pressing techniques, the Stereo Review SRT14-A is produced to strict laboratory standards. Engraved in its grooves are a series of precisely recorded test tones. Frequency sweeps, and pink noise signals that enable you to accurately analyze and check your stereo system for:

- **Frequency response**
- **Wow and flutter**
- **Stereo separation**
- **Optimum speaker placement**
- **Cartridge tracking ability**
- **Cartridge Tracking Force & Anti-skating**
- **Hum and noise, including**
  - Musical Instrument Tuning
  - Turntable rumble
- **Standards and more...much more.**

And you can do it all without any instruments...by ear alone.

**Step-by-step instructions**

Included with SRT14-A is a detailed instruction manual, complete with charts, tables, and diagrams. This takes you step by step through the testing process. It explains the significance of each test and tells you what to listen for. It clearly describes any aberrations in system response. And it details corrective procedures.

**For professionals too**

The usefulness of the SRT14-A is not confined to the nontechnical listener. Included on the record are a series of tests that call for the use of sophisticated measuring instruments, such as oscilloscopes, chart recorders, and distortion analyzers. These tests permit the advanced audiophile and professional to make precise measurements of transient response, recorded signal velocity, anti-skating compensation, IM distortion, and a host of other performance characteristics.

**SRT14-A record contents**

**CARTRIDGE TRACKING, HIGH FREQUENCY.** Consists of a two-tone signal (16,000 and 16,300 Hz) that repeatedly swoops to a high level and returns to a fixed low level. The level and quality of the audible 300-Hz "difference tone" indicates pickup quality and mistracking.

**FREQUENCY RESPONSE,** 20 kHz to 25 Hz. Uses one-third octave bands of pink noise. Centered on twenty-nine frequencies over the audio spectrum, compared with reference tones at three levels.

**SEPARATION, LEFT-TO-RIGHT.** Uses test tones consisting of one-third octave bands of pink noise recorded in the left channel under reference tones in the right, to check leakage from left to right.

**SEPARATION, RIGHT-TO-LEFT.** Same as Test 3, but with right channel reversed.

**ANTISKATE ADJUSTMENT.** A specially designed signal allows adjustment of anti-skating force for best reproduction of high-level passages.

**FREQUENCY RESPONSE SWEET.** 500 Hz, to 20,000 Hz, LEFT CHANNEL. A steady tone rises from 500 Hz to 20 kHz, allowing evaluation of system electrical response by instrument.

**INTERMODULATION DISTORTION.** A phono cartridge’s inter-modulation distortion can be measured directly using a standard IM meter designed to analyze an SMPTE signal.

**FREQUENCY RESPONSE SWEET.** 500 Hz, to 20,000 Hz, RIGHT CHANNEL. Same as Test 10, but in right channel.

**TONE-BURST.** The test signal is sixteen cycles on, same period off, sweeping from 500 Hz to 20 kHz, allowing evaluation of transient response of phono cartridges.

**STEREO SPREAD.** A series of drum beats recorded out of doors provides a guide to optimum speaker placement for a subjectively satisfying stereo effect.

**STANDARD “A.”** The standard 440-Hz tone is recorded with very high precision for tuning instruments and for checking turntable speed.

**CHROMATIC OCTAVE.** The tones of the "equal-tempered" octave from 440 Hz to 880 Hz are recorded with accuracy better than 0.1 per cent.

**GUITAR TUNING TONES.** The six notes of standard guitar tuning are recorded with accuracy better than 0.1 per cent.

**THE FINAL STEP**

Start getting the most out of your stereo system. Make the SRT14-A your next record purchase. Just complete the coupon and mail it along with your remittance today!
LAST October, I made my sixth not-quite-annual pilgrimage to Japan. Some previous visits were at the invitation of audio manufacturers who had new developments to announce or who wished to impress members of the hi-fi press with their corporate and technological competence. This latest trip, however, was purely a STEREO REVIEW expedition devoted to fact-finding and, as the Japanese phrase it, “exchange of views.” These exchanges usually involved long Q.-&-A sessions on technical and business matters. (As most readers probably know, the technology is doing a lot better than the business these days.)

The trip was planned to coincide with the 30th All-Japan Audio Fair, which was being held in the Harumi exhibition area. Unlike the semi-annual Consumer Electronics trade shows in Las Vegas and Chicago (which it physically resembles), the Harumi show is directed toward consumers and has lots of well-produced technical and musical demonstrations. Numerous small auditoriums, effectively soundproofed and acoustically treated, were built on the floor of the hangar-like structure that housed the show.
HOT TOPIC:  
C-X IN JAPAN

That the CBS Records CX disc-encoding noise-reduction system would be a major topic of discussion with so many of the Japanese manufacturers came as a surprise. They were confused by some of the reports in the American trade press and were anxious to hear our views.

What I said was this: I've had only a few opportunities to hear actual CX discs, but those (non-CBS) industry figures I trust find nothing significantly wrong with CX-encoded discs when they are played back through a proper decoder. Despite Columbia's claim of compatibility, however, there is some disagreement about the acceptability of the sound quality of CX discs played back without decoding. Some engineers feel that the compatibility or lack of it is a very significant matter, particularly in the light of CBS' expressed intention to release all future discs with CX encoding.

My feeling is that the problem has been overblown in view of the realities of both the record and the hi-fi equipment marketplaces. In the United States, classical programming represents perhaps 5 percent of the discs sold, and in Japan it is still only about 10 percent. Everyone seems to agree that CX classical discs will require decoding more than rock discs, simply because CX encoding (like Dolby) is applied only to low-level signals. A highly compressed "loud" rock recording will therefore demonstrate the virtues of noise reduction mostly in its absolutely silent lead-in grooves. (This is not to say that there isn't some rock and popular material that will benefit from noise reduction, but only that the need for it overall isn't quite as intense as it is for classical.) In addition, the undecoded signal-compressed CX disc is not likely to bother a rock listener because much of the musical material that comes his way has already been severely compressed during the production process.

In any case, and whatever the merits of the various positions, the problem is easily solvable. The musical purists who hear a disturbing difference with undecoded CX discs should get a decoder; the improvement in quietness and dynamic range is certainly worth the price. For equipment manufacturers the matter is even simpler to resolve: the cost of installing CX decoding circuitry in a receiver, amplifier, or preamplifier (as soon as the CX ICs are available) will be well under $5. At the retail level that should add at most $2 to the product cost, obviously not a very large price to pay. Thus, manufacturers might at worst make a small commercial mistake by putting CX in their units, but they might make a much larger one by leaving it out.

As a bonus, CX decoding circuitry can easily be modified to provide expansion and compression of conventional program material. The expansion function will enhance the playback of normal program material, and the compressor will serve for background music and (if it is in the tape-output loop) for recording tapes to be played in the car. I suggested to the manufacturers that they put a four-position switch on their new receivers and amplifiers: CX off, CX on, expand, and compress. A year from now the products in the marketplace will tell us how seriously they took my suggestion. —L.K.
An assortment of new equipment: clockwise from top left, microprocessor-controlled programmable receiver with built-in graphic equalizer from Kenwood; digital-audio tape recorders using VHS-format videotape from Akai and Technics; a stack of Sanyo components—a microcassette deck with mixer (top), a tuner/amplifier with graphic equalizer (middle), and a cassette deck (bottom); and a stack of Sony components including (from bottom) a "Flat Roof" turntable and programmable receiver, cassette deck, and timer/control unit.

Open-reel tape is certainly not obsolete, as was evidenced by a number of units shown that are designed for the new EE (Extra Efficiency) tape. Other products that caught my eye or ear at the fair were Kenwood’s microprocessor-controlled receiver, Pioneer’s and Sony’s stackable record players (the turntable platters slide forward out of the chassis to accept discs), and a $7,000 turntable from Nakamichi that automatically corrects for off-center record-spindle holes.

Japanese speaker manufacturers have long been entranced with the opportunities offered by new woofer-cone materials. This year there was evidence that their tweeters were about to undergo a similar technological upgrading. To inject an editorial comment: the problem with Japanese speakers as I hear them has never been flaws in the drivers per se but rather in the systems’ chosen frequency balance—it has not always come down firmly on the side of "flat" or "accurate." In any case, judging from what I heard at the show and on subsequent visits to manufacturers, Japanese speaker systems in general may finally be tilting in the direction of a flatter and more accurate balance.

Before our arrival, Stereo Review’s man in Japan, James Yagi, had already done a splendid job of setting up for us a week’s worth of appointments with a number of Japanese audio manufacturers, and it seems best to present an account of these visits in systematic diary form.

• Tuesday. We returned to the Harumi show for about two hours of private demonstrations and explanations of the new Sony high-technology prototypes and products on display. We went from there to lunch at an excellent Italian (!) restaurant in the Sony Building on the Ginza. For intellectual dessert, a short cab ride brought us to Sony’s main offices for discussion of the compact digital audio disc (CDAD) and its future in...
the marketplace. Dr. Nakijima, Sony's managing director, predicted that in five years the sales figures of CDAD players would catch up to—and then surpass—those of today's conventional analog-disc players. Sony's projected CDAD player price of $800 would not, he felt, significantly dampen market enthusiasm, and the price is in time expected to fall in any case as a result of both improved technology and the cost benefits of mass production.

We also heard impressive demonstrations of Sony's very-high-end Esprit line and got a (nonconclusive) demonstration of the virtues of some special magnetic-suspension modules placed under Esprit amplifiers (!) as vibration suppressors.

- **Wednesday.** In Yokohama we visited one of Toshiba's engineering and production facilities, in particular the production line for the company's popular $100 radio/cassette portable. Production is fully automated and computer-controlled throughout, including mobile robot carts that deliver materials from the warehouses to factory areas. We discussed CBS' new CX disc-encoding system (see box on page 57) with a group including Toshiba's chief engineer, Takeo Yashimoto, and were told that an engineer from CBS was presently touring Japan attempting to persuade manufacturers of the virtues of CX (see STEREO REVIEW, July 1981, page 18).

- **Thursday.** We took an early-morning tour of Denon's recording studios in Tokyo and tried not to get in the way of the working performers and engineers. We were told the studios, an impressive high-technology facility with lots of special Denon-built equipment, are booked well in advance and there's a long waiting list.

It is perhaps not generally appreciated that Denon was one of the earliest proponents of digital (PCM) recording, and they now have over 450 digitally recorded titles ready to be duplicated in the CDAD format when they judge the time is right. We learned that the production cost for a CDAD disc is about 30 per cent higher than for a conventional disc and, unlike the player cost, would not come down with time. We were shown a new DL-1000 phono cartridge (its model number might well represent the U.S. selling price also).

After lunch we visited Sansui's Tokyo office where Mr. Takahashi, general manager of Sansui's Central Research Laboratory, was host. Unlike most other hi-fi companies with single-brand rack systems, Sansui reports that
they are doing quite well with theirs, possibly as a result of their greater installation and marketing flexibility. They demonstrated an interesting turntable which, in effect, has two independently driven counter-rotating platters. The claimed benefit is the virtual elimination of extraneous vibration.

Friday. Almost two hours were spent with Mr. Ishizuka, president of Pioneer, who was very enthusiastic about his company's video enterprises. On display in his office was Pioneer's new component TV system (meant to compete with Sony's Profeel) and their new laser-disc player with CX audio encoding. Played through the latest Pioneer stereo components, it had superb video sound, by far the best I've heard. Pioneer seemed disappointed with the quality and quantity of U.S. production of laser-disc software; they plan to release and ship from Japan about ten discs a month to support the U.S. release and ship from Japan about ten discs a month to support the U.S.

Saturday. This was a free day, so I of course took a break from the steady round of discussions on hi-fi matters to wander around the Akihabara area, the heartland of Japan's electronics retail trade. There is probably more electronic equipment of one kind or another on sale in the five or six square blocks of Akihabara than in all of New York City. You can buy everything from 50 Yen worth of resistors or transistors (from beautifully arranged display stands) to digital watches, video games, and, of course, complete hi-fi systems (also refrigerators, washing machines, ultrasonic room vaporizers, and electric-slipper footwarmers). Late in the afternoon we left, via the bullet train, for Kyoto.

Sunday. For the last twelve centuries Kyoto has been the cradle of the arts, culture, and religion in Japan, and it has some of the most beautiful temples and gardens one could imagine. I spent the day refreshing mind, spirit, and eyes with visits to two of my favorite spots, the gorgeous Kinkaku-ji temple (or Golden Pavilion) and the Zen rock garden of the Ryoan-ji temple.

Monday. Back to reality via the early-morning bullet train to Osaka and Technics. The Technics/Matsushita facility seemed more like a small town than a manufacturing complex; our cab driver had to ask for directions twice when we were already on the plant grounds. The factory we visited under the guidance of manager Ken Suwa was astonishing. GANGS OF COMPUTER-DIRECTED MACHINES WERE BUSY ASSEMBLING CIRCUIT BOARDS WHILE OTHERS WERE PERFORMING COMPLETE ALIGNMENT AND PERFORMANCE CHECKS (DISTORTION, FREQUENCY RESPONSE, ETC.) — ALL WITHOUT HUMAN ASSISTANCE. THOSE PROCEDURES THAT COULD BE DONE ONLY BY HAND WERE PERFORMED MOSTLY BY UNIFORMED YOUNG WOMEN. WE WERE PASSING THROUGH ONE AREA JUST IN TIME FOR A "SEVENTH-INNING" EXERCISE BREAK. ALL THE WORKERS LEAPED FROM THEIR CHAIRS TO GO THROUGH A VIGOROUS ARM-SWINGING, BACK-STRETCHING ROUTINE ON THE CARPETED (!) FACTORY FLOOR.

We heard an impressive demonstration of the Technics CDAD machine and a VHS-format semi-pro digital audio recorder (it should be available in the U.S. by the time you read this). After lunch it was a short train ride to Yamaha in Hamamatsu. We had our usual discussions of the state of the hi-fi marketplace and the role of CX in the U.S. by the time you read this.

We were given a technical explanation and sonic demonstration of Yamaha's newly developed ZDR "zero-distortion-rule" circuitry. Briefly, it works by extracting the distortion component in the audio signal at the amplifier output in very much the same way as a conventional distortion analyzer does. This "pure-distortion" signal is then fed back to the input out of phase with the original signal and, in effect, cancels the distortion. The technique differs from both conventional negative feedback and feedforward. The ZDR circuitry will appear first in an integrated amplifier and a power amplifier.

Another Tuesday. Back to Tokyo to prepare for the 14-hour flight home and the prospect of confronting, through a haze of jet lag, stacks of unanswered mail, a backlog of phone calls, and an appointment with my typewriter to transcribe this Tokyo Diary. But was the trip worthwhile? You bet!
Stereo Review's Record of the Year Awards for 1981

in recognition of significant contributions to the arts of music and recording during the 1981 publishing year

This February issue of 1982 marks the fifteenth consecutive year that STEREO REVIEW has selected and honored what we believe to have been the outstanding records of the previous year. "Previous year" perhaps needs a bit of definition. It refers, of course, to the publishing year, in which coverage of a record usually runs two to three months behind the release date because of our unavoidable publishing "lead time" (these words, for example, are being written the day before Thanksgiving). And that is why it is possible to consider for the 1981 Awards releases that we actually reviewed in the January 1982 issue, which went on sale at the nation's newsstands on December 22.

The voting, by the staff and the contributing editors of STEREO REVIEW, is based entirely on artistic quality as we understand it, and the quality of recorded sound is of course a part of that. But the voting is not based at all on how a record does or is likely to do in the marketplace. No one can deny that there is real talent involved in putting together a best-selling record, but that just isn't what we are interested in here. We like to think that those records we have honored, rather than representing whatever fad was prevalent in their time, have, to an extent, escaped their time and will bring a pleasure beyond that of mere nostalgia to people who listen to them in the future. In a sense, that's what we mean by artistic quality.

If the list of winners looks a bit conservative this year, it still offers some new artists (Rosanne Cash, Voss and Osborne, Dylana Jenson), some well-known names in new incarnations (Stratas as a singer of Kurt Weill, Ashkenazy as a conductor), and some unexpected repertoire (Goldmark's Queen of Sheba). But it is also good to see some established artists—Al Jarreau, Warren Zevon, Bobby Bare, Barbara Cook, Peter Dean—successfully shoring up past reputations and making records not just as good as their previous ones, but better. The list of winners really represents some admirable achievements.

While there is not likely to be any single reader who would find himself enchanted by all the winners, one could do a lot worse than to use this list as the foundation of an all-embracing collection. There were certainly many other excellent records released during the year (and readers are urged to consult back issues for recommendations), but somehow this end-of-the-year summation seems to emphasize the incredible variety of fine music on discs. It offers a means of escape from too specialized listening habits, the opportunity to become aware of some other part of the musical landscape, and the consequent ability to put things into perspective. It is for that opportunity and for the quality involved that we thank those in the record industry who had a hand in the production of these outstanding records of 1981.

—James Goodfriend, Music Editor

24ND STREET (Original Broadway Cast). RCA CBL1-3891.

CHICO FREEMAN: The Outside Within. India Navigation IN 1042.

MONTVERDI: Il Ritorno d'Ulisse in Patria (Frederica von Stade, Richard Stillwell, others; Raymond Leppard cond.). CBS M3 35910.

ROSSANNE CASH: Seven Year Ache. Columbia JC 36965.


ROSSINI: L'Italiana in Algeri (Marilyn Horne, others; I Solisti Veneti, Claudio Scimone cond.). RCA ARL3-3855.

THE ROLLING STONES: Tattoo You. Rolling Stones COC 16052.
Certificate of Merit awarded to

Benny Goodman

for his outstanding contributions to the quality of American musical life

Honoroble Mentions

J. S. BACH: Motets (Stockholm Bach Choir; Concentus Musicus, Nikolaus Harnoncourt cond.). TELEFUNKEN 6.33470 EK.

BOBBY BARE: Drunk and Crazy. COLUMBIA JC 36785.

BERG: Wozzeck (Eberhard Waechter, Anja Silja, others; Vienna Philharmonic, Christoph von Dohnányi cond.). LONDON LDR 72007.

BARBARA COOK: It's Better with a Band. MUSE GROUP D/MMG 104.

PETER DEAN: Where Did the Magic Go? MONMOUTH/EVERGREEN MES 7092.

ELLEN FOLEY: Spirit of St. Louis. EPIC/CLEVELAND INTERNATIONAL JE 36964.

GOLDMARK: The Queen of Sheba (soloists; Hungarian State Opera Chorus and Orchestra, Ádám Fischer cond.). HUNGAROTON SPLX 12179-82.

HELEN HUMES: Helen. MUSÉE MR 5233.

JANÁČEK: Sinfonietta; Taras Bulba (Vienna Philharmonic, Sir Charles Mackerras cond.). LONDON LDR 71021.

AL JARREAU: Breakin' Away. WARNER BROS. BSK 3576.

KID CREOLE AND THE COCONUTS: Fresh Fruit in Foreign Places. SIRE SRK 3534.

MAHLER: Symphony No. 8 (soloists, choruses; Boston Symphony, Seiji Ozawa cond.). PHILIPS 6769 069.

MAHLER: Symphony No. 9 (Berlin Philharmonic, Herbert von Karajan cond.). DEUTSCHE GRAMMOPHON 2707 125.

MARCH OF THE FALSETTOS (Original Cast). DRG SBL 12581.

MOZART: Symphonies Nos. 32-36 (Academy of Ancient Music, Jaap Schröder and Christopher Hogwood cond.). L'OISEAU-LYRE D1714D.

SCHUBERT: Schwanengesang (Hermann Prey, baritone; Leonard Hokanson, piano). DEUTSCHE GRAMMOPHON 253 325.

SCHUBERT: Die Winterreise (Dietrich Fischer-Dieskau, baritone; Daniel Barenboim, piano). DEUTSCHE GRAMMOPHON 2707 118.

SHOSTAKOVICH: Symphony No. 13 (Dimiter Petkov, bass; London Symphony Chorus and Orchestra, André Previn cond.). ANGEL 52-37661.


CARLY SIMON: Tony. WARNER BROS. BSK 3592.

BRUCE SPRINGSTEEN: The River. COLUMBIA PC2 36854.


JANE VOSS AND HOYLE OSBORNE: Get to the Heart. GREEN LINNET SIF 1031.

WAGNER: Parsifal (Berlin Philharmonic, Herbert von Karajan cond.). DEUTSCHE GRAMMOPHON 2741 002.

Kings, 2 mg. "tar", 0.3 mg. nicotine, 100’s, 5 mg. "tar", 0.6 mg. nicotine av. per cigarette by FTC method.
There’s only one way to play it.
No other ultra brings you a sensation this refreshing. Even at 2 mg., Kool Ultra has taste that outplays them all.
Lindsey Buckingham
(Photo: Scott Weiner/Retna Ltd.)
Lindsey Buckingham, Fleetwood Mac's lead guitarist and the man singlehandedly responsible for turning that ineffectual troupe of farm-club English blues musicians into one of the two or three biggest record sellers in the Western world, has done a remarkable thing on his first Asylum album, "Law and Order." Thumbing his nose at conventional wisdom, Buckingham has committed to vinyl a collection (and fragments of songs) that, in the context of a record business made acutely uncomfortable these days by anything to the left of Kenny Rogers, amount to nothing less than a contemporary version of Walt Whitman's barbaric yawp (that's in Leaves of Grass, just in case your undergraduate days are too far behind you). Amazingly, however, because he has such strong pop instincts and because he has such impeccable commercial credentials, Buckingham can have it both ways. He can record music that is far more subversive (and a hell of a lot more fun) than anything the Sex Pistols ever dreamed of and know that it will get played on the radio anyway.

Describing just how Buckingham turns this trick in "Law and Order" is not particularly easy, as you might have guessed. Though it is exceedingly well crafted, it is not slick, it is not designed to spawn a hit single to be sung at weddings, bar mitzvahs, or weenie roasts. It is quirky, occasionally whimsical, often pretty, always original and highly personal—all more or less at the same time. And while it may at first appear as lightweight as any other topical tinsel, there are heavy subtexts lurking beneath the surface glitter. That all this should be the work of a comfortably rich member of the mainstream rock Establishment would be nothing short of astonishing were it not for Fleetwood Mac's earlier "Tusk," on which Buckingham was the dominant force. This, in many ways, is the sequel to that much underrated effort, and we should have seen it coming. What Buckingham has produced in this new album is what Pete Townshend once called "the usual gynormous ego-trip," which is to say, among other things, that with a couple of minor exceptions he played every single note here. That is not, in itself, any big deal. Lots of people (Townshend, for example) have made very good records that way, and lots of people (Todd Rundgren, anyone?) have made very dull ones. Where Buckingham differs from most of those who have gone the one-man-band route is that he isn't trying to fool you into thinking you're listening to five people; this stuff wears its artifice on its sleeve. He wants to make interesting noises, not simulate someone's idea of a rock band, and that gives the whole thing the subtle—and endearing—cast of crackpottery.

The songs, lyrically sketchy and structurally simple, are deliberate means to an end, vehicles for Buckingham's goal of confounding our expectations of what pop music should sound like. Their creative juices come from the unconventional arrangements and oddball mixing decisions, from the oddly placed drums, from the tinkling toy pianos, from the hyper-emotional singing, from the acoustic instruments that pop up where you expected electric ones, and so forth. Some of them are clearly tongue in cheek, and some may be deadly serious—it's hard to tell. Trouble, for example, is an extremely attractive, wistful little song that, done straight, would not have been out of place on "Rumours." Here, however, Buckingham's absurdly breathy vocals and overdubbed chipmunk chorus make it sound strangely paranoid; he's probably kidding somebody, but it's an open question whether it's himself, Fleetwood Mac, or us. The whole album is like that, including, as a bonus, the strangest-ever version of September...
Song; somewhere Walter Huston is turning in his grave.

In rock-absolutist terms, of course, "Law and Order" is a frivolous piece of work: no great issues are addressed, no appeals are made to heart or to conscience, no fabulous new lifestyle vistas are opened. But it's an important record nonetheless because it challenges the prevailing pop climate in ways rock's avant-garde is unwilling or unable to: it communicates actual feelings the average listener can relate to. Yes, it demands that you meet it halfway, but it doesn't assume that you are one of the blessed converted. I think it's an extremely entertaining record, and a very brave one as well. Would you like to take any bets on how this sublime whoopee cushion of a disc will sell relative to Stevie Nicks' recent vial of vinyl valium?

—Steve Simels

At Home with the Bachs: Serene Music With Harpsichordist Igor Kipnis and Friends

Perhaps the most intimate picture of the Bach family's musical life at home is reflected in the "Notebook" of Johann Sebastian's second wife, Anna Magdalena. A professional singer and a fine harpsichordist, she was a well-rounded musician who chose her pieces carefully and copied them out fastidiously. For the harpsichord, she favored French dance music spiced with polonaises, and as a singer she leaned toward chorales and religious arias. Those preferences are manifest in a delightful new two-disc recording of the "Notebook" from Nonesuch.

Harpsichordist Igor Kipnis and his colleagues have caught the intimacy and charm of this music perfectly. In the opening work, the French Suite No. 5, in G Major, Kipnis reveals the kind of supple rhythmic flexibility and inventiveness of ornamentation that have put his playing in a class by itself. Temporal expression is the hallmark of his style, and he is equally at home on the clavichord and the harpsichord. The results are most gratifying: never have minuets been played so graciously or polonaises so proudly.

Judith Blegen and Benjamin Luxon intensify the atmosphere of home music making in easygoing performances that assure us all was serene at home with the Bachs. This is an album to be treasured musically and as a very special insight into the Bach biography.

—Stoddard Lincoln

J. S. BACH: The Notebook of Anna Magdalena Bach. Judith Blegen (soprano); Benjamin Luxon (baritone); Catharina Meints (viola da gamba); Igor Kipnis (harpsichord, clavichord). NONESUCH © DB-79020 two discs $23.96, © DB-79020 $23.96.

Pieces of a Dream: A Teenage Trio Serves Up Gentle Jazz And Polished Funk

I can think of several good reasons to sing the praises of a new group called Pieces of a Dream. First, they fuse jazz improvisations with the hummable melodies and danceable rhythms of r & b so adroitly that they automatically strike a responsive chord in followers of both camps. Second, their material (much of which they compose themselves) is arranged so as to leave ample room for individual exploration without sacrificing a clean and cohesive group sound. Third, there is an immediately appealing freshness to their performances, and though they play with all the bite and drive you could ask for, you are aware of a tasteful restraint too. All this is unusual enough in any musical organization, but what makes this group even more remarkable is that its three artists are still in their teens: drummer Curtis Harmon and bassist Cedric Napoleon are eighteen, pianist James Lloyd sixteen.

The trio started playing together in Philadelphia not long after they got out of rompers, and they quickly built a local reputation that attracted the attention of such visiting jazz giants as Count Basie and Milt Jackson. Fortuitously, one of those so attracted was saxophonist Grover Washington, Jr., who undertook their debut album as his first independent producing venture. Washington, who also plays soprano sax on one of the album's best tracks, a light and lovely ballad called Touch Me in the Spring, engaged fellow crossover artists Ralph MacDonald (percussion) and Dexter Wansel (synthesizer) to lend a hand.

But the lion's share of the honors goes to the youthful trio, for their spirit dominates everything else. Their contributions range from the gently wafted jazz flavor of the title song, Pieces of a Dream, to the polished funk of Steady Glide. I discovered only one flaw: Na—

Igor Kipnis: gracious minuets, polished polonaises

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poleon turns from the bass, which he plays precociously well, to sing his own song, Lovers. The song itself is a little better than the voice, but that doesn't say much for either. No matter, for it is but a small imperfection in an otherwise exceptionally promising album. You'll be hearing more from these kids.

—Phyl Garland

FRANCISCO ARAIZA: shaded dynamics, passion and determination

Francisco Araiza’s Distinguished Solo Debut: Can We Look Forward to Another Tito Schipa?

THE young (b. 1950) Mexican tenor Francisco Araiza has come a long way since his 1973 operatic debut. A great deal of promise was evident in his previous recorded appearances (Fenton in the Philips Falstaff, Belmonte in the Eurodisc Entführung), and in his just-released first solo recital for Eurodisc (fittingly labeled “... at the start of an international career”) he emerges as one of today’s top lyric tenors. I have the impression that his voice is relatively small, and whether it has the carrying power to be effective in a large hall can only be judged by live theatrical evidence. Even so, the listener is left with the pleasant likelihood of witnessing the rise of another Tito Schipa or at least a Cesare Valletti.

Certainly Araiza is both a natural Mozartian and a careful musician, and five of his arias here can stand comparison with performances by any current competitor. He knows how to shade dynamics effectively and how to convey passion (“Un’aura amorosa”) and determination (“Il mio tesoro”) without distorting the musical line. His voice is pure and of pleasant timbre, and though there are occasional hints of strain in the high register, the climactic notes (C-flat and C) in the Richard
BEST OF THE MONTH:
RECENT SELECTIONS
YOU MAY HAVE MISSED

CLASSICAL

☐ Brahms: Piano Quintet in F Minor, Op. 34. HUNGAROTON SLPX 12280. "A youthful vitality, self-assertive work compellingly performed." (December)
☐ Sholto Mintz: Kreisler Recital. DEUTSCHE GRAMMOPHON 2510 305. "A treasure." (January)
☐ Rachmaninoff: Orchestral Works. LONDON LDR 70028. "The finest recording yet of this music." (January)
☐ The Unknown Kurt Weill. NONESUCH D-79019. "An instant classic." (November)

POPULAR

☐ Chick Corea: Three Quarters. WARNER BROS. BSK 3552. "Extraordinary acoustic piano." (November)
☐ Aretha Franklin: *Love All the Hurt Away*. ARISTA AL 9552. "A sensational album by one of the most original singers we have." (November)
☐ Chico Freeman: The Outside Within. INDIA NAVIGATION IN 1042. "The most important player since John Coltrane." (January)
☐ Al Jarreau: Breakin' Away. WARNER BROS. BSK 3576. "A voice beautifully designed to accomplish some unique musical goals." (December)
☐ Nina Kals: *Deep, Dark and Real*. LIFESONG LS 6132. "Working the interface between folk song and art song." (December)
☐ Amanda McBroom: West of Oz. SHEFFIELD LAB 15. "Popular singing with intelligence and humor." (January)
☐ Tom Verlaine: Dreamtime. WARNER BROS. BSK 3538. "May be last year's best rock album." (January)

STereo review

Sir Michael Tippett: no ease for ears or intellect


Tippett's Fourth: Rich and Complex in Kaleidoscopic Color and Dramatic Transformation

LIKE almost every major work that has sprung from Sir Michael Tippett's pen, the Fourth Symphony lets neither the intellect nor the ears lie back and take their ease. The physiological cycle of human life, which is symbolized by an eerie overlay of respiratory sounds at the beginning, the end, and occasionally elsewhere in the...
musical fabric, forms the conceptual essence of the work. That might appear to be a difficult program to convey musically, but, unlike some of Tippett's scores (such as *The Vision of St. Augustine*), which overwhelm the listener with sheer density of texture and event, the elemental motives of this one-movement piece are well defined and readily followed. And unlike Tippett's Third Symphony and oratorio *A Child of Our Time*, there are no references to vernacular music, either blues or spirituals. The much-vaunted virtuosity of the Chicago Symphony, which commissioned the work, is thoroughly put to the test by music as rich and complex in kaleidoscopic color, dramatic transformation, and permutation of its elements as human life itself. It is not only Sir Georg Solti and the Chicago Symphony that are at their dazzling best here; so is London's production staff, which has brought to bear most effectively the high-technology resources of the digital tape-mastering process.

If the Fourth Symphony leaves one stirred, perhaps even somewhat uncomfortable with its intimations of mortality, the 1948 Suite for the Birthday of Prince Charles is a bracing contrast, a charmingly festive score whose five movements are evocative, directly and indirectly, of Scottish, French, and English popular and folk material, drawing as well on the composer's operas *The Midsummer Marriage* and the unpublished *Robin Hood*. I am especially fond of the Bach-like chorale-prelude treatment in the first movement of the Scottish hymn tune *Crimond*. One might wish for just a touch more tenderness and relaxation on Sir Georg's part, but of brilliance there is nothing wanting. In all, a splendid disc, splendidly recorded. —David Hall

TIPPETT: Symphony No. 4; Suite for the Birthday of Prince Charles. Chicago Symphony Orchestra, Sir Georg Solti cond. LONDON @ LDR 71046 $12.98.

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King Crimson's Welcome Return: A Seminal Band Back Better Than Ever

W hen King Crimson sank from sight in 1973, its pioneering music had cleared the way for a wave of art-rock groups that included Emerson, Lake and Palmer, ELO, and Yes. Now, eight years later, King Crimson has surfaced in the wake of a new swell of art-rock activity. The album "Discipline" doesn't make a big splash; it is rather a synthesis of established currents, uniting Robert Fripp's electronic wizardry with avant-garde trends—dissonance, minimalism—as well as Asian tonalities and African polyrhythms. It's a music of extraordinarily strong contrasts, softly impressionistic one minute, jagged and aggressive the next. It moves from dreamy Eastern scales to thundering tribal rhythms, from fluid, meditative guitar lines to crashing war-of-the-worlds cadences hammered out atop thick, ringing sheets of electronic distortion.

Though the album is predominantly instrumental, there are striking lyrical images as well: a young woman asleep in a chair by a window, a band member animatedly describing an encounter he's just had with two muggers. The expected display of Frippertronics is pretty dazzling, but the real virtuoso performance is by Adrian Belew, who sings disjointed, David-Byrne-like chants and soaringly wistful vocals with equal conviction. "Discipline" is not truly a reunion album (it would take a convention hall to hold all the former King Crimson members), for other than founder Robert Fripp, only Bill Bruford was in the band previously. But the new group makes up for what it lacks in nostalgia value with cohesiveness and clarity of vision. "Discipline" is therefore more than the welcome return of a seminal band whose influence is still felt nearly a decade after its initial breakup; it may be the best work "King Crimson" has ever done.

KING CRIMSON: Discipline. Adrian Belew (guitar, vocals); Robert Fripp (guitar, various devices); Tony Levin (stick, bass guitar, vocals); Bill Bruford (batterie). ELEPHANT TALK; FRAME BY FRAME; MATTE KUDASAI; INDISCIPLINE; THETA HUN GINEE; THE SHELTERING SKY; DISCIPLINE. WARNER BROS./E.G. BSK 3629 $8.98, © M5 3629 $8.98.
ALTHOUGH soprano Eileen Farrell has had a great career in concert, opera, and classical recordings, she has always insisted that she has a right to sing the blues, and she has been more successful than most of her colleagues whenever she left her legatum grounds to travel in popular territory. This winter on National Public Radio she is performing in a thirteen-week series called Eileen Farrell's American Popular Singers, and her guests include such singers as Barbara Cook, Bobby Short, Maxine Sullivan, and Marlene Ver Planck. A highlight of Miss Farrell's series this month is the show on which her guest is Mabel Mercer. On the day that show was taped, Miss Mercer, who turns eighty-two on February 3, didn't feel like singing, and what developed was a sort of master class with Miss Mercer reciting lyrics and Miss Farrell singing them. Miss Farrell is a long-time Mercer fan, and everyone who was there says the combination was magical. Miss Mercer also brought along a few of her records that had never been aired before, and she wound things up by reciting Edna St. Vincent Millay's Ballad of the Harp Weaver. The show was intended as a birthday tribute to Miss Mercer, but this month the White House goes country. Star of the current show, scheduled to air on February 7, is Merle Haggard and his young guest is Mark O'Connor, a champion country fiddler and guitarist. Mattacks went on to say that Thompson's rumored collaboration with Gerry Rafferty (see October column) "didn't quite work" and that the new record will be released momentarily before concluding: "Please inform Mr. Joel Vance that Blood from a Clone on the new George Harrison LP is not reggae." Done.

THE TV series In Performance at the White House, new this season on the Public Broadcasting Service, has an unusual gimmick. Each of the shows, introduced by Beverly Sills and hosted by Nancy Reagan, features a famous artist who is invited not only to perform at the White House but also to bring along a young colleague he believes is on the verge of a great career. So far the series has been devoted to classical artists, but this month the White House goes country. Star of the current show, scheduled to air on February 7, is Merle Haggard and his young guest is Mark O'Connor, a champion country fiddler and guitarist.

WHAT kind of man reads Stereo Review? Well, Dave Mattacks, for one. The former Fairport Convention drummer (currently one half of the most respected session rhythm section in England) sent us an impeccably hand-written postcard to tell us that "Richard Thompson (my cult favorite too) has signed to Joe Boyd's Hannibal Records, and with Boyd producing has got a new LP with his regular live band." Mattacks went on to say that Thompson's rumored collaboration with Gerry Rafferty (see October column) "didn't quite work" and that the new record will be released momentarily before concluding: "Please inform Mr. Joel Vance that Blood from a Clone on the new George Harrison LP is not reggae." Done.

O' making rock history books there is no end. Three new large-format paperbacks about the music our parents continue to characterize as "that noise" have just crossed my desk, all of them by English writers, and all reflective of the peculiar perspective the British have on pop (in England, add music to religion and politics as subjects one should never discuss). The worst of the lot is All You Needed Was Love: The Beatles After the Beatles by John Blake (Penguin, $7.95), an account of the misadventures of the Fab Four from the breakup of the band to the assassination of John Lennon. Mr. Blake is, of course, the "author" most recently responsible for co-writing the memoirs of Keith Richards' ex-drug dealer (Up and Down with the Rolling Stones), and charity compels me to admit that he is the possessor of a prose style that will never be dismissed as graceful. He is also a past master of the unverifiable quote (as in "What on earth is she doing?" thought Denny). And a fairly unenergetic researcher, the book tells us nothing that is not included in other books, magazine articles,
or newspaper stories on a subject with which the public is unfamiliar to begin with. The whole thing reads like Paper-Back Writer. Mark Spisher's great fictional biography of the band, but without the jokes. In short, an exploitation piece, a tedious equivalent of the instant books that fast publishers rush out to capitalize on outbreaks of mass suicide or commando raids in Upper Volta. Put it on your list of Things to Avoid.

And add to that list Bob Marley: Soul Rebel—Natural Mystic, by Vivien Goldman with photos by Adrian Boot. (St. Martin's Press, $12.95) Not that Marley doesn't deserve a serious critical and biographical study; he does, but this one doesn't even come close. Goldman is simply overinfatuated with her subject, whom she obviously views as the fount from which all wisdom sprang. Marley was doubtless something of a genius, but he was also too mischievous and cocky; you'd never know that from the way Goldman gushes. Adding insult to injury, her text is written in a style that attempts to duplicate the flavor of Marley's Rastafarian patois, and to say that it's strained and comes off as condescending is a gross understatement. In short, a tract with an unattractive air of radical chic about it.

Finally, we have The Rock Yearbook 1982, edited by Al Clark. (St. Martin's Press, $12.95). This is the second installment in what threatens to be a long series of annuals covering (with a heavy English bias) developments in pop music. Some of the things collected in this edition are worth treading through. The section on the Best and Worst album covers is fun, so are the Quotes of the Year (my favorite is from Nick Lowe: "You have to be an idiot to be in a rock band"), and the fashion photos are nice and exotic (say what you will about English rock fans, they do have their outfits very seriously).

But many of the essays are problematic. On the most basic level, the average American reader won't know what the hell is being talked about, unless you read the English papers regularly and have a lot of money to spend on imports, the music and musicians discussed will be largely unfamiliar. But it's a beautiful book to look at (terrific graphics, and David Hepworth's reflections on Bruce Springsteen's English tour are among the best things anyone has ever written about The Boss. —S.S.

In case you hadn't noticed, the success of "Stars on 45" (reviewed in the November issue) has created a brand-new growth industry. Those of you who haven't been lost in the Amazonian jungle for the last year will recall that the record, a monster international hit, is a montage of snippets from Beatles songs re-created by a soundstage band strung together over a monotonous disco beat. In the wake of "Stars," record companies and musicians who haven't been falling all over each other creating new medleys, no matter how ungainly or unlikely. And so we've had to endure, among others, "Medley USA!" (Creedence Clearwater Revival), "Beach Boys Medley," "Hooked on Classics" by the Royal Philharmonic (!), reviewed in this issue, and Squeeze's tongue-in-cheek "Squabs on Forty Fab".

Latest entry in this goofy sweepsstakes is "Holliedaze," by veteran English hitmakers the Hollies, and as these things go it's far from the worst. But British TV viewers who tuned in to see the group perform the record recently (on Top of the Pops, the U.K. equivalent of our own Solid Gold) got a surprise they hadn't bargained for. Not only was founding member Graham Nash back in the fold (he defected in 1969 to play with David Crosby and Stephen Stills), but so was bassist Eric Haydock, who retired from the music business in 1966 due to ill health. The reconstituted band is currently in the studio recording an album called, not surprisingly, "The Original Hollies." No word as of this writing whether American Epic, which declined to release the group's last two albums in this country, will be making it available. The medley, meanwhile, can be found at stores featuring import records. —S.S.

**Disc and Tape Reviews**

*By Chris Albertson • Noel Coppage • Phyl Garland • Paul Kresh
Mark Peal • Peter Reilly • Steve Simels • Joel Vance*

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**The first listing is the one reviewed. Other formats, if available, follow.**

**JOAN ARMATRADING:** Walk Under Ladders. Joan Armatrading (vocals, guitar); instrumental accompaniment. I'm Lucky; When I Get It Right; Romancers; No Love; and six others. A&M SP-4876 $8.98, CS-4876 $8.98, 8T-4876 $8.98.

Performance: Very good

Recording: Overblown

Joan Armatrading's iconoclastic, quirky songs and formal vocals (she sometimes sings as if she were out to win a prize for elocution) continue to interest me. Her almost aristocratic distance is perplexing. Is her writing autobiographical, or does she observe and write with professional detachment? Are the lovers in her songs real or imagined? The mystery is part of her appeal. On this album, I'm Lucky has a tantalizing melodic construction that keeps you wondering where it's going, and When I Get It Right uses disjointed phrases to tell the story of a fussy lover. No Love ("If I had no love to give I wouldn't give it to you") is an interesting variation on the "I didn't like you at first" theme. Armatrading's songs are delicate but not flimsy. Unfortunately, producer Steve Lillywhite thinks some of them need a big back-up sound, and in the final mix he has boosted the instrumental accompaniment so much that it detracts from the vocal performances. I mean, it's loud. The effect is something like reading a poem by Emily Dickinson accompanied by a marching band. —J.V.

**PATTI AUSTIN:** Every Home Should Have One. Patti Austin (vocals); instrumental accompaniment. Do You Love Me? Love Me to Death, The Way I Feel, Baby, Come to Me, Stop, Look, Listen; and five others.

Owest QWS 3581 $8.98, M3 3581 $8.98, MB 3581 $8.98.

Performance: Finely tuned

Recording: Very good

While Patti Austin has long been one of my vocal favorites, she has hovered on the edge
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played. Highlights are Oceans Apart, a honey of a ballad with a terrific, moody arrangement; This Time You're the Singer, a cynically funny version of the familiar tale of the one who's left behind; and Last Chance Saloon, a view of purgatory (the same idea as the Eagles' Hotel California). Producer John Ryan (Styx, Allman Brothers, Pure Prairie League), who did the group's previous LP with its hit single I Love You, is on hand again and contributes a recorded sound that's as smooth and well balanced as the performances.

J.V.

NATALIE COLE: Happy Love. Natalie Cole (vocals); instrumental accompaniment. The Joke Is on You; These Eyes; Love and Kisses; You Were Right Girl; I Can't Let Go; and four others. CAPITOL ST-12165 $8.98, © 4XT-12165 $8.98, © 8XT-12165 $8.98.

Performance: Mostly unreal
Recording: Lavish

Natalie Cole is still busily concealing the talent that was so audible on her first few albums. She's a musician of real caliber, an exciting vocalist, and a gutsily communicative performer, but all that is totally lost in this spray-lacquer album. The closest she allows herself to get to any kind of musical reality is on You Were Right Girl, in which she loosens her stays a bit and gets down with it. Not too much, mind you, but enough to sing the song the way it was intended. In the rest of the album she assumes the by-now all too familiar mannequin poses. Since Natalie Cole has many, many years of performing ahead of her, I guess we'll just have to be patient until she gets it out of her system. In the meantime, replay her first albums—and hope.

P.R.

ALICE COOPER: Special Forces. Alice Cooper (vocals); instrumental accompaniment. Who Do You Think We Are; Seven & Seven Is; Skeletons in the Closet; You're a Movie; Vicious Rumours; Don't Talk Old to Me; and four others. WARNER BROS. BSK 3581 $8.98, © M5 3581 $8.98, © M8 3581 $8.98.

Performance: Mixed
Recording: Good

"Special Forces" finds Alice Cooper cashing in on the New Wave. From its shamelessly purloined title to the equally brazen machine-gun rhythm track that snakes through it, the album is strictly an assembly-line project. There's nothing surprising about this; Alice Cooper hasn't been ahead of a trend since teen America grew tired of his doll-smashing choreography in the mid-Seventies and moved on to roller skates. About the only thing mildly surprising here is that Cooper's singing is even weaker than you'd expect. Dependent on the kindness of producers even in the best of times, his voice here is a thin growl that's barely audible in the lower register and audibly flat everywhere else. (In fact, it sounds a lot like my neighbor rendering his college fight song, grunts and all, as he hoses down the Oldsmobile.) Still, Cooper's voice hasn't lost any of its old menacing snarl, and it's propped up on solid rock foundations. As usual, his back-up is topnotch; I don't know where his sidemen get the inspiration to create these (Continued on page 77)
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**Le Cube.**

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Le Cube.

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**Ashford & Simpson**

Nick Ashford and Valerie Simpson were never taken very seriously as performers back in their Motown days, but they made their mark as songwriters and producers whose work accelerated the careers of such stars as Diana Ross, Marvin Gaye, and the late Tammi Terrell. Simpson, the better singer of the two, did have a couple of albums as a Motown performer, but they never got the attention they deserved, so it was back into the wings for her. In 1973, however, the pair, now married to each other, defected to Warner Bros., where they have been able to make good use of all their talents. Ashford has even developed as a singer; he now complements his wife's voice rather than detracting from it as he did in the past.

Except for its three closing tracks, their new "Performance" is a live album that represents Ashford and Simpson's farewell to Warner Bros. It is a fitting valedictory, for the material sums up the team's career so far, ranging from such Motown triumphs as 'Ain't No Mountain High Enough and You're All I Need, to the Warner Bros. hits Gimme Something Real and Found a Cure, and on to some studio-recorded new material. The studio tracks take up all of side four of the two-disc set, and I'd say they lie somewhere in the middle of the A&S quality spectrum.

If you have ever caught Ashford and Simpson in person, you know that they put on an energy-filled show, and this set captures them well. It may even beat being there, for a recording does not inflict on us those awful costumes they like to wear, and we are spared George Faison's silly choreography. It does offer a wonderful distillation of sounds that have affected more of us than Ashford and Simpson's middling stature in the music business would suggest.

—Chris Albertson

**ASHFORD AND SIMPSON: Performance.** Nick Ashford, Valerie Simpson (vocals, piano); vocal and instrumental accompaniment. Bourgie Bourgie; Nobody Knows; Medley—You Really All I Need/Ain't Nothing Like the Real Thing/Ain't No Mountain High Enough; It Seems to Hang On; Don't Cost You Nothing; Medley—Landlord/Clouds/The Boss/Is It Still Good to Ya; I Need Your Light; Love Don't Make It Right; Gimme Something Real; Found a Cure; It Shows in the Eyes; It's the Long Run; Come On, Pretty Baby. WARNER BROS. 2WB 3524 two discs $13.98, © J5A 3524 $13.98, © J8A 3524 $13.98.
fusillades of electric guitar, but they're enough to level every 40,000-seat auditorium in the country. Not enough to rescue this decrepit album, though.

M.P.

**DAN FOGELBERG: The Innocent Age.**

Dan Fogelberg (vocals, guitar, keyboards, bass); Russ Kunkel (drums); Norbert Putnam (bass); other musicians. Nexus; The Innocent Age; The Sand and the Foam; In the Passage; Lost in the Sun; Run for the Roses; Leader of the Band; Same Old Lang Syne; and nine others. FULL MOON/Epic KE2 37393 two discs, © KET 37393, © KEA 37393, no list price.

Performance: Very good
Recording: Very good

Dan Fogelberg has muscled his way into what appears to be a dwindling market—his previous albums have gone gold, platinum, gold, platinum, platinum—and his success suggests that the troubadour shall not perish from the earth. Of course, he is the new streamlined-model troubadour, the subtleties of which type can be studied in this double-album “song cycle,” as it is called. The big difference between Fogelberg and such old pros as Gordon Lightfoot and John Prine is that where their lyrics continually refer to concrete things and give you something to picture in your head, Fogelberg's tend to stick with abstract words for long stretches. This encourages mind-wandering in listeners anything like me. His most notorious song by far, Same Old Lang Syne (included here), is an exception, being a vignette. Although he still uses words better than they're generally used in the other pop-music subgenres flourishing just now, he seems a true child of the times since lyrics are being given short shrift all over these days.

But Fogelberg is a good musician who strings chord progressions together with some grace and plays better than average guitar and piano, and his vocals are just distinctive enough to go with his slightly bland approach and still stand out a bit. An unusual number of songs here fall into the “Real Pretty” category. The backing—though Fogelberg rocks a bit harder at times than you expect—is a nice balance of tasteful electric and innocuous acoustic jangle, and there does seem to be some taste behind everything. I think future generations (or visitors from Sirius) are going to be more impressed with Lightfoot and Prine than with Fogelberg, but he should be a good influence on the Eighties. Lord knows we need it.

N.C.

**RECORDING OF SPECIAL MERIT**

**THE FOUR TOPS: Tonight!** The Four Tops (vocals); instrumental accompaniment. When She Was My Girl; Don't Walk Away; Tonight I'm Gonna Love You All Over; Who's Right, Who's Wrong; Let Me Set You Free; and four others. CASABLANCA NBLP 7258 $8.98, © NBL5 7258 $8.98, © NBL8 7258 $8.98.

Performance: A joy to hear
Recording: Good

After twenty-seven years of singing together, the Four Tops are, miraculously enough, still capable of generating deep excitement with the beauty of the sound they

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project when they blend their voices. Add to this their ability to convey a sense of drama even with ordinary lyrics, and it is easy to understand their longevity. Consider the opening track here, When She Was My Girl. It is merely a good though not outstanding contemporary r&b number, but when one of the Tops suddenly shouts out, "She's gone! The big-leg girl is gone," the anguish seems real. Or take Tonight I'm Gonna Love You All Over; the instruments drop away, leaving only four male voices in luscious harmony. Now that's singing! P.G.

**ART GARFUNKEL: Scissors Cut.** Art Garfunkel (vocals); vocal and instrumental accompaniment. Scissors Cut; Up in the World; Hang On In; So Easy to Begin; and six others. COLUMBIA FC 37392, © FCA 37392, ® FCT 37392, no list price.

Performance: Needs Simonizing

Recording: Excellent

Art Garfunkel's temporary reunion with Paul Simon last summer in New York's Central Park brought them an audience of half a million and unstinting acclaim from public and critics alike, and I only wish there were more of Simon's presence on this fifth solo album by Garfunkel. Simon is featured, with salutary results, in the most notable item on the program—Jimmy Webb's In Cars, a tribute to the role of the automobile in young America's love life. The rest of the album, which took a year of work, has only a few outstanding moments to show for it. There is grey in the curly Garfunkel locks by this time, yet he is still aiming that frail and wistful voice at the teenage market, and only rarely with particular panache. Two of the better solo cuts, also Jimmy Webb originals, were written for movies—the somewhat acerbic title tune for Scissors Cut and That's All I've Got to Say for The Last Unicorn. Gallagher and Lyle's A Heart in New York and Mike Batt's Bright Eyes are also passable songs; the other five pieces here are oversweet and undistinguished.

Garfunkel says he is pleased that in this latest album the emphasis is on the vocals and the "production" has been cut down, but a total of twenty-eight instrumentalists, even though they're not all in evidence at once, still seems to me like a lot to back up a simple program of quiet love songs. P.K.

**GRATEFUL DEAD: Dead Set.** Grateful Dead (vocals and instrumental). Samson and Delilah; Friend of the Devil; New Mineglewood Blues; Deal; Candyman; Little Red Rooster; Loser; Passenger; and seven others. ARISTA A2L 8606 two discs $13.98, © ACT2 8606 $14.98, @ A8T2 8606 $14.98.

Performance: Dry

Recording: Middling

This is the electric half of the two-album, four-disc project recorded live at the Dead's New York and San Francisco concerts in October 1980. The acoustic half, "Dead Reckoning," released a few months ago (see review in the August 1981 issue), is much more satisfying because it has most of the
best tunes. In this whole second batch there are only two or three songs I really care about, and my favorite, *Friend of the Devil*, is taken at such a slow, dirge-like tempo here that it makes very little sense. The mediocre production causes more problems in the electric set too. In *Fire on the Mountain* the vocal mike sounds as if it's trying to pick up Bob Weir's voice from half a mile away, while the guitars are right on top of you and the rhythm section is in some muddy middle distance. The Deadheads in the audience seem to be having a good time, but the boys in the band fluctuate between fervor and detachment. Whereas the acoustic set demonstrated the staying power of the Dead, this one suggests that they can get tired doing all that staying. Maybe they should've named the albums "Takes" and "Out-takes."

**N.C.**

**MICHAEL JOHNSON: Home Free.** Michael Johnson (vocals, guitar); instrumental accompaniment. *You're Not Easy to Forget; The Love She Found in Me; Rosalee; The Power; I Can't Get to You from Here; Home Free*; and four others. EMI/AMERICA SW-17057 $8.98, © 4XW-17057 $8.98, © 8XW-17057 $8.98.

**Performance:** Comfortable

**Recording:** Very good

Michael Johnson has an agreeable down-home voice and singing style and a taste for ballads that praise the joys of simple domesticity over the dubious appeal of adventure. In *I Can't Get to You from Here*, for example, he describes himself to a woman out of his past as a "daddy and a voter" who can't be expected to wreck his whole settled life just to see her again. A wholesome, comfortable attitude. Then there's *Home Free* itself, which doesn't have the most memorable lyrics but which comes across when Johnson sings it as a touching tribute to hearth, home, and loved ones. Finally, ending a program as comfortable and cozy as an old pair of bedroom slippers, there's *Let Me Go Back Home*, which kind of sums it all up. Not for rebels.

**P.K.**

**KING CRIMSON: Discipline** (see Best of the Month, page 71)

**THE KINKS: Give The People What They Want.** The Kinks (vocals and instruments). *Around the Dial; Give the People What They Want; Killer's Eyes; Predictable; Add It Up; Destroyer; Yo-Yo; A Little Bit of Abuse; and three others. Artemis AL 9567 $8.98, © ACT 9567 $8.98, © AT 9567 $8.98.

**Performance:** Nice

**Recording:** Good

You can't take the title straight, of course. The irony is that, after nearly twenty years of being determinedly out of fashion, the Kinks have finally made the transition to arena-rock success and platinum albums. This new recording finds Ray Davies (the Kinks being basically a one-man show) coming to grips with the demands that a new, broader audience puts on his writing. So what we get here is lyrical insight and melodic charm cheek by jowl with slogan...

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Johnny Lee was discovered, more or less, at Gilley's, near Houston, but spiritually he belongs in Venice (California) or some similarly notorious mecca of laid-backness. His voice is a pleasant-sounding and technically decent baritone, but it is not very expressive; he gives everything the same semi-casual, low-intensity reading. He also seems to go for songs of a singular fast-walk tempo—you've heard it on both of his hit singles, especially the *Urban Cowboy* theme *Lookin' for Love.* When his voice is perfectly mated to a song, as it is here in Bob McDill's *How Deep in Love Am I,* the result is worthy of anybody's juke box, but most of this album backs and fills over the same narrow stretch of territory.

Loverboy's a young band singing about youthful Angst. It's a rather limiting subject for a young band, but this one has a solid ensemble sound and strong singing going for it, plus a very welcome sense of humor. *It's Your Life,* about a hostile girl who thinks every guy's on the make for her, is backed by the guitarist playing *Hawaiian War Chant* in a transposed minor key. *Emotional* portrays a girl who goes into crying jags because of her boy friend's lifestyle; he responds, "Seven long years of rock and roll/Should show you where I am." As if to underscore the results of those seven long years, Loverboy plays some good, old-fashioned, no-nonsense rock-and-roll. Keep it up, boys.

S.S.
BOB MARLEY: Chances Are. Bob Marley (vocals); vocal and instrumental accompaniment. Reggae on Broadway; Gonna Get You; Chances Are; Soul Rebel; and four others. COTILLION SD 5228 $8.98, © CS 5228 $8.98, © TP 5228 $8.98.

Performance: Good
Recording: Good

This is the first of what is sure to be a long succession of reissues, retrospectives, and basement tapes of the late Bob Marley. Comprising previously unreleased tracks recorded between 1968 and 1972, "Chances Are" is neither a very revelatory nor a very compelling collection. Marley was working with Johnny Nash while trying to establish his own career at the time, and these songs show a decidedly commercial intent (such titles as Reggae on Broadway and Dance Do the Reggae speak for themselves). The production is surprisingly clean, the arrangements are polished and punchy, and Marley's vocals are characteristically excellent, but there is none of the incendiary spirit he achieved with the Wailers. The value of "Chances Are" as a document of artistic development is also diminished considerably by the self-indulgent, uninformatve packaging, which tells nothing about where and when these songs were recorded or what back-up. Apparently written to reach American or European listeners unaccustomed to reggae's raw, primitive sound, the songs on "Chances Are" are reggae/soul hybrids that sound weak next to the passionate, uncompromising music that ultimately earned Marley his devoted worldwide following.

M.P.

MEAT LOAF: Dead Ringer. Meat Loaf (vocals); vocal and instrumental accompaniment. Peel Out; I'm Gonna Love Her for Both of Us; More Than You Deserve; and five others. EPIC/CLEVELAND INTERNATIONAL FE 36007, © FET 36007, © FEA 36007, no list price.

Performance: Dull but theatrical
Recording: Very good

The menu on "Dead Ringer" is virtually unchanged from 1978's unlikely chartbust- er "Bat Out of Hell": Jim Steinman's music and lyrics in a bland and heavy presentation. Steinman's music and lyrics in a bland and heavy presentation by that enigmatic phenomenon Meat Loaf. Neither seems to have budged in the intervening four years. Steinman's songs are still tied securely to such swaggering punch lines as "I don't know who you are, but you're a real dead ringer for love" or "I want you out of my life—but I'll kill you if you don't come back." Then, in case you may have missed the line's cleverness, Steinman piles on every conceivable elaboration, each straining harder than the one before it. As for Mr. Loaf, he's a litmus test of one's charitable instincts. If you're the sort who'll give a guy the benefit of the doubt, you might take his posturing as beefcake parody. If you're among the more skeptical, you could be forgiven for taking him at his word. Whichever, this serving of Meat Loaf is bland and heavy on the palate.

M.P.

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Lena Horne

“I had to make one Lena out of two people”

The question that is always asked whenever Lena Horne’s name is mentioned is: How Does She Do It? We were sitting in her dressing room after a wildly cheered performance several months after her opening, and I looked at her sitting there dressed only in a simple black suit with a makeup towel folded across her throat. She looked even more classically beautiful in person than she did in a new Harper’s Bazaar “glamour” portrait she had casually Scotch-taped to the wall, so I asked her: “How do you do it?”

“Well, I never did smoke. And I’m a very cheap drunk—one drink and I’m spied. And because of all my allergies I have to stay away from night clubs and cafes. And I have my grandchildren and I see them. I read a lot and I walk a lot. After all, New York is my city. I was born right here in Brooklyn. Most of all I like what I’m doing, I’m not bored with it. I’m telling people about my life out there each night. I like to make eye contact. For instance, I was singing Life Goes On the other night, just after my friend Hazel Scott died, and I was looking into someone’s eyes and it seemed as though we were talking to each other, and the enormity and the unfairness of her death seemed to strike us both.”

And what has been her life’s goal? “First of all, I’ve always been a woman who worked. I’ve worked since I was sixteen. I was raised poor, and poor people in my generation always wanted to pay their bills. As a woman, I always wanted to be independent, not to be obligated to anyone. I didn’t want to have to grovel to anybody. So I knew that to keep from groveling I had to work. I’ve always had this old Puritan work ethic—very American, they tell me. Also, I had two babies from a first marriage that was broken and I didn’t think it was fair to ask Lennie [Hayton, her husband of many years] to pay for another man’s children. I tried to give them the best and give them a better life than I had had. But that’s a lot of malarky, you know, because you can’t decide what children want or ought to have. But I did all the proper things—fine colleges, fine educations—and I had to pay for that. Now work is a habit. Now I’m bored when I’m not working, and if I take a vacation I feel guilty. I guess I’m just old-fashioned.”

We went on to talk about her previous recordings. “The first record I made, some time in the late Thirties, was called Love Me a Little, Little, Little. After that was one with Charlie Barnet, Haunted Town and Good for Nothin’ Joe. A little later I made an album for Victor with the Chamber Music Society of Lower Basin Street. Then when I was at Café Society [a famous jazz club of the early Forties] John Hammond took me to Columbia, where I made a few sides with Teddy Wilson. I hated it when I first heard myself on recordings. Even today the recordings I like best are the ones that have been taped while I was performing in front of people: I like ‘Lena at the Sands’ and ‘Lena at the Waldorf,’ where I wasn’t conscious of the recording process. But I detest being in the bare studio, isolated from the orchestra with just that microphone. That’s why I really enjoyed doing this new album because Quincy just came right into the theater and captured, people tell me, the show I’m doing every night. So I didn’t know where the mikes were, I just performed. As to what the record is like, I really couldn’t say.”

Whose albums does she listen to? “I listen to Michael Jackson and Aretha Franklin and Stephanie Mills and Nat Cole’s daughter Natalie and also Earth, Wind and Fire. And I still like to hear Billy Eckstein sing. Carmen [McRae] is still a priestess, so Baby [Vaughan] and Ella [Fitzgerald]. There are a lot of good singers around.”

And who influenced her in the beginning of her career? “I don’t know. I still sound pretty much the same even now. What I’ve learned is how to produce more power. I was very thin voiced. I didn’t know how to sing, but I was
taught by musicians. When I first appeared with Noble Sissle's band, I did a little dance and the band sang! But I picked up from there. When I was coming along, Ella Fitzgerald—she's younger than I am, you know—was someone I listened to a lot and thought was just great.

"I think I learned the most when I was with the Teddy Wilson band. But the timbre of my voice doesn't seem to sound like anyone else's even today. I always had a flair for theater, and the meat of the songs was always much more interesting to me than just making the sounds. But I knew I had to learn the sounds, so I picked up from

Did they feel that her triumphant good looks in some way worked to lessen her seriousness as an artist?

"Well, from the time I was first hired at the Cotton Club, I was never hired because I was talented, I was hired because I was cute [!] I didn't know how to sing and I didn't want to sing. My mother wanted me to be a star. She sent me to some vocal coach uptown, but I couldn't carry a tune in a bucket. But from a very early time, even through the days at the Waldorf, people paid a lot of attention to the way I looked. But I blame a lot of that on my lack of wanting them to get too close to me anyway. You see, for many years I had a problem, tremendous prejudice against a lot of things. Particularly racial. I was prejudiced against the people who gave me the chances when I knew there were twenty million other black women who looked as beautiful and who could sing better than I. It's a natural thing. Nobody likes things that are given to them. I was a token at MGM. I was placed in a position of opening doors so that black people could even come and sit in the audience. I didn't even begin to enjoy my career until I was fifty.

WHEN the Sixties happened, when Malcolm X was killed, I changed. Up until then I had always had two lives, one on the stage and one with my family, and I never let them come together. But when they killed him I suddenly had a terrible revulsion about my life, about how I'd been living it. And I stopped singing for about four years.

"I went South and I visited places where I had lived when I was a little girl and some of the people who had known me. And when I met some of the white people who were involved in the movement at that time—I'm not talking about the ones who thought it was chic, I mean the really honest ones—that terrible coldness within me broke down and I began to feel some love and compassion for others. And that's when my singing began to appeal to people, not just the way I looked. Because that's the first time I ever let someone see inside me. So, you see, I've looked. Because that's the first time I ever began to appeal to people, not just the way I looked. I mean the really honest ones—"

LENAs HORNE: The Lady and Her Music. Original Broadway-cast recording. Lena Horne (vocals); vocal and orchestral accompaniment. From This Moment On; I Got a Name; I'm Glad There Is You; I Want to Be Happy; Copper Colored Gal; Raisin' the Rent; As Long As I Live; Lady with the Fan; Where or When; Can't Help Lovin' Dat Man; Just One of Those Things; Stormy Weather; Love; Push de Button; The Lady Is a Tramp; Yesterday; When I Was Young; Deed I Do; Life Goes On; Watch What Happens; The Swinge with the Fringe on Top; Fly-By-Night; Bewitched, Bothered and Bewildered; A Lady Must Live; That's What Miracles Are All About; I'm Gonna Sit Right Down and Write Myself a Letter; If You Believe. Qwest 20 W 3579 two discs $16.98.
THE new Police album, "Ghost in the Machine," is a capital E Event for a couple of reasons. First, its instant commercial acceptance by the American audience cements the band's reputation as the first British New Wave type to make it to platinum superstar status (no value judgment implied there, I hasten to add, simply a statement of fact). Second, as if to validate that status, the album is the first record ever to be released simultaneously in a conventional, mass-market version and in a half-speed-mastered, virgin-vinyl, audiophile pressing.

Unfortunately, there's not much else to be said for it. For all the band's brilliant playing (strictly as an ensemble, they sound better than ever here, and the added sax stuff is integrated beautifully), and for all the undeniable charm of front-man Sting's languid vocals, they seem unwilling or unready to sustain inspiration in their writing that status, the album is the first record ever to be released simultaneously in a conventional, mass-market version and in a half-speed-mastered, virgin-vinyl, audiophile pressing. For all the band's brilliant phile pressing. unconventional, mass-market version and in a

T he album is extremely well recorded, by the way. The Nautilus audiophile version seems a bit more open and airy than the conventional one, but the two are otherwise indistinguishable.

---Steve Simels

THE POLICE: "Ghost in the Machine." The Police (vocals and instrumentals); Jean Roussel (keyboards). Spirits in the Material World; Every Little Thing She Does Is Magic; Invisible Sun; Hungry for You (J'Aurais Toujours Faim de Toi); Demolition; Too Much Information; Rehumanize Yourself; One World (Not Three); Omega Man, Secret Journey; Darkness. A&M SP-3730 $8.98, © CS-3730 $8.98, © TP-3730 $8.98. NAUTILUS NR40 $14.95.

instrumental accompaniment. The Sailor; Song of Sorrow; Let's Say Goodbye One More Time; The Way It Was Then; Country Boy Saturday Night; Truly Blue, and four others. MERCURY SRM-1-4024 $8.98, © MCR4-1-4024 $8.98, © MCB-1-4024 $8.98.

Performance: Blue period
Recording: Good
Here's an album guaranteed to bring you right down, but with some grace and style. Mickey Newbury has chosen to paint this one almost entirely in shades of blue, but he still wields a mighty brush. There is rare craftsmanship here, real beauty, and some good lines. The opener, The Sailor, concentrates all three. I'm particularly fond of what the narrator's daddy told him: "I never met a stranger till I knew him for a time." Even in Country Boy Saturday Night, when Newbury is describing good times ahead, the tone of voice is subdued if not downcast. And the tempo never picks up much, so you may suffer a little from too much of a good thing. Still, one after another, the songs are exemplary, and Newbury still has the most—perhaps the only—tasteful strings behind him in all of Nashville, thanks to arrangers Bill Pursell and Mike Hanna. You have to be in the right kind of mood for this, and you have to want to stay in it through the whole album. That condition met, you'll bask in the sounds of one of our finest musical craftsmen.

N.C.

RECORDING OF SPECIAL MERIT

PEACHES & HERB: Sayin' Something!

Peaches & Herb (vocals); instrumental accompaniment. Freeway; Red Hot Lover; Bluer Than Blue; Wear You Out; Star Steppin'; Picking Up the Pieces; and three others. POLYDOR PD-1-6332 $8.98, © CT-1-6332 $8.98. Performance: In top form
Recording: Good
This record seems to get better every time I listen to it. At first, it seemed to be just another Peaches & Herb set, good post-disco dance music with boundlessly energetic vo

All styli are not created equal.

When you select a phono cartridge, the cost will be strongly influenced by which stylus design you choose. Least expensive is the UniRadial (spherical or conical). A simple design, simply made. Of course you can opt for better high frequency tracing with a BiRadial (elliptical) tip. Its more complex shape takes longer to make, so costs more. Best performance comes with a Line Contact (Shibata) tip whose shape permits the best high frequency tracing, yet whose long, narrow bearing faces reduce groove pressure for longer record and stylus life. Add a positively-indexed square Shank, plus laser-beam alignment of micro-polished surfaces and you have the finest stylus design available today. Make your choice with Audio-Technica. You'll hear the difference.
RECORDING OF SPECIAL MERIT

BOB SEGER AND THE SILVER BULLET BAND: Nine Tonight. Bob Seger (vocals, guitar, piano); Silver Bullet Band (vocals and instruments), other musicians. Old Time Rock and Roll; Mainstreet; The Fire Down Below; Fire Lake; Betty Lou's Gettin' Out Tonight; Night Moves; Rock and Roll Never Forgets; and nine others. CAPITOL STBK-12182 two discs $13.98, © 4XBK-12182 $13.98, © 8XBK-12182 $13.98.

Performance: Steamy
Recording: Excellent

Over the years Bob Seger and the Silver Bullet Band have earned a reputation as a "hard-working band," a reputation that will certainly be enlarged and solidified by this album. "Nine Tonight" puts Seger's most popular work of the last few years right where it belongs: in front of a hot-wired, high-voltage audience. It's not so much that this recording reveals new, unsuspected angles or nuances in his music; Seger simply gives himself free rein in concert. Night Moves and The Fire Down Below, which are intelligent, well-crafted rockers on his studio albums, here take on a steamy, exultant urgency. Seger swaggers and comes on to the crowd, and they respond to his frank sexual and unapologetically sentimental songs directly and unhesitatingly.

Seger's choice of material on "Nine Tonight" offers few surprises, consisting mainly of his hit singles from the late Seventies and 1980. What counts are the performances and the recording, and there the album succeeds on just about every level. The Silver Bullet Band plays it fast without playing it loose—especially guitarist Drew Abbot, whose dependable lead commands the whole rock vocabulary, and Alto Reed, who brings the house down again and again with Roland Kirk-like double-saxophone solos. And of course there's Seger himself, sounding simultaneously awed and delighted by his own songs and drawing every ounce of feeling from them. The mix is crisp, balanced, and well-defined, and the obligatory crowd noise is kept to the minimum needed to support the you-are-there illusion.

"Nine Tonight" isn't likely to secure any wider audience for Seger; it retraces too much familiar ground. But it does show the best work of one of rock's earthiest, most passionate and intelligent musicians.
perceptive, and most honest performers in a more intense light.

M.P.

TOM TOM CLUB. Tina Weymouth (vocals, bass); Chris Frantz (drums); other musicians. Wordy Rappinghood; Genius of Love; Tom Tom Theme; L'Elephant; and four others. SIRE SRK 3628 $7.98, © MSS 3628 $7.98.

Performance: Trendy drivel
Recording: Excellent

The Tom Tom Club is a studio project of the Talking Heads rhythm section plus a few friends, and if you've ever wondered just who is the brains behind Talking Heads, it isn't these guys. The music here is the kind of currently fashionable intellectual funk that is the Heads' claim to fame, but so bleached out and prissy that it is unintentionally funny, like a conservative Republican in a business suit singing a Bob Dylan protest song. A few of the cuts have been hits in dance-rock clubs, which I can understand, as novelty records go, the Tom Tom Club is at least as good as the Flying Lizards. If this album sells, however, the reason will lie beyond my comprehension. For Doodletown Pipers fans only. S.S.

COLLECTION

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CIRCLE NO. 28 ON READER SERVICE CARD

JAZZ

RECORDING OF SPECIAL MERIT

COUNT BASIE: Warm Breeze. Count Basie and His Orchestra (instruments). S rer B, Warm Breeze, Cookie, C.B. Express; and three others. PABLO TODAY 0 D231213I $9.98.

Performance: Very Basie
Recording: Excellent

I don't think Count Basie could create a grating sound if he tried. "Warm Breeze," a new Pablo release recorded digitally just a few months ago, is an exercise in super-relaxed, smooth, articulate jazz. The arrangements and all but one tune are by Sam Nestico, who seems well acquainted with the Basie groove. I should add that Nestico had a good band to work with: Basic veteran guitarist Freddie Green is on hand to assure the rhythm has that characteristic feathery touch, fellow alumnus Harry "Sweets" Edison makes an appearance as trumpet soloist on How Sweet It Is; and Willie Cook, another fine trumpeter, enhances Cookie and Satin Doll. The Basic band of the early Eighties does not have all the excitement of the band that rocketed Basie to stardom in the late Thirties, but the identity is intact, and there is a great deal to be said for the mellow maturity that makes "Warm Breeze" such a breath of fresh air.

C.A.

ARNETT COBB: Funky Butt. Arnett Cobb (tenor saxophone); Derek Smith (piano); Ray Drummond (bass); Ronnie Bedford (drums). Satin Doll; Got Rhythm; Jumpin' at the Woodside; Isfahan; and four others. PROGRESSIVE 7054 $8.98, © C-7054 $8.98 (from Progressive Records, Inc., P.O. Box 500, Tifton, Ga. 31794).

Performance: Swinging
Recording: Not bad

Listening to Arnett Cobb play makes me think of the gracefully dancing elephants and hippos in Walt Disney's Fantasia. If that sounds like an off-the-wall analogy, consider Cobb's obese, robust tenor sound, then listen carefully to the way he maneuvers it with both dexterity and grace. He does it throughout the eight tracks on "Funky Butt," a recently released two-year-old session that also features the ever-tasteful Derek Smith on piano.

A more sensitive engineer would have gone easier on Ronnie Bedford's drums, but the sound is good (this is the first time I have been able to say that about engineer Fred Miller's work), and that is particularly gratifying when bassist Ray Drummond steps up front—he is marvelous. If you like a slightly rough edge to your jazz, you will find that here too. As they used to say in the streets, it's all very real.

C.A.
The Stan Getz recording of Special Merit mildly. And this is a superb album, to put it perky side are Clifford Brown's Joy Spring late Forties. The music becomes very sub-

With the soft, fluffy sounds Getz has been associated with him. In Evergreen and Killing it's probably best to keep quiet about it. Which goes to show that if you don't have it, why not flaunt it?

The material on this album was recorded which is gently upholstered with the soft, fluffy sounds Getz has been associated with him. In Evergreen and Killing it's probably best to keep quiet about it. Which goes to show that if you don't have it, why not flaunt it?

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The latest in what has been a superb series of jazz reissues from the Smithsonian Collection is a two-record set called "Louis Armstrong and Sidney Bechet in New York 1923-1925." It features the two New Orleans masters, both separately and together in a variety of impressive settings, laying down the ground rules for the budding art of improvisational jazz.

As Lewis Porter puts it in his informative and extensive notes, "What you will hear in this collection is, first of all, Sidney Bechet's virtuosic extension of the New Orleans clarinet tradition, then Louis Armstrong's adaptation of that tradition to the cornet."

These recordings cannot be overlooked by anyone who makes even a half-serious study of the jazz art. They are filled with remarkable ensemble passages that are models of collective improvisation (Texas Moaner Blues is a good example), and they are brimming with stunning solo statements by men who literally breathed music.

Besides Armstrong and Bechet, the album presents many additional stars of early jazz, some who flourished in the decades that followed, others who disappeared only as so-and-so who played on such-and-such a side. There is the early Fletcher Henderson band with Buster Bailey, Don Redman, and Coleman Hawkins, and there are the singing ladies Trixie Smith, Maggie Jones, Eva Taylor, and Josephine Beatty. Josephine Beatty? You never heard of her? Think again—she's none other than Alberta Hunter, who is still very much on the scene but had to use her sister's name back then because Paramount would not have taken it lightly that one of their stars was making records for a rival label, Gennett.

This is the sort of album whose whole books could be written about, but we're all better off just listening to it. So listen—and again and again.

—Chris Albertson

LOUIS ARMSTRONG & SIDNEY BECHET: Louis Armstrong and Sidney Bechet in New York 1923-1925. Louis Armstrong (cornet); Sidney Bechet (clarinet, soprano saxophone, sarrusophone); Coot Grant, "Kid" Wesley Wilson, Alberta Hunter, Maggie Jones, Eva Taylor, Trixie Smith (vocals); Clarence Williams' Blue Five, Red Onion Jazz Babies, Fletcher Henderson's Orchestra, Perry Bradford's Jazz Phools, Trixie Smith's Down Home Synco-pators (instrumental). Wild Cat Blues; Old Fashioned Love; Kansas City Stomp; New Orleans Hop Scop Blues; Of All the Wrongs You've Done to Me; Shreveport Stomp; Texas Moaner Blues; Everybody Loves My Baby; Good Time Flats Blues; Cake Walking Babies from Home; Coal Cart Blues; Santa Claus Blues; I'm a Little Blackbird Looking for a Bluebird; Money Blues; Railroad Blues; Papa De-Da-Da-Da; and sixteen others. SMITHSONIAN COLLECTION © P2 15790 two discs $13.98 (plus $1.25 postage and handling charge from Smithsonian Recordings, P.O. Box 10230, Des Moines, Iowa 50336).
Am I complaining? No. George Lewis is one of the fertile minds and talented lips of the new music, and he is just as likely to turn up somewhere like the Kitchen or the Festival d'Automne as at a jazz club or Studio Rivbea—where this particular album was "originally" recorded.

Lewis, like many of the major figures in post-jazz, is from Chicago, and it is to the Second City that he has dedicated his Slow Dance. The dance in question is, no doubt, the Dance of Life, or, more accurately, the Ritual of Social Life—a slowly unwinding improvisation for live instruments and electronics that he describes as "music for a town meeting" (though what kind of meeting would be hard to say). Side one is a long, somewhat irritating ostinato followed by an eloquent tenor solo. Side two is a bit livelier—lots of flutes having a go at it followed by long stretches of synthesizer and saxophone moaning and ending with a curious little strangled trombone solo that Lewis describes as a benediction. Without benefit of clergy, I assure you. Lovely Music, which operates out of an artists' studio building in New York, describes itself as one of the larger little record companies. It specializes in various sorts of experimental and contemporary music of which this release is a striking and offbeat example.

—Eric Salzman

MARTY PAICH BAND: I Get a Boot Out of You. Marty Paich Band (instrumentals). Moanin', No More, Warm Valley, What Am I Here For/Cottontail; and four others. Discovery $8.98 (from Discovery Records, P.O. Box 48081, Los Angeles, Calif. 90048).

Performance Fine California vintage Recording Good early stereo

You may have seen Marty Paich's name whisk up or across the big screen in a Hollywood movie credit or on the tube in the early days of the Dinah Shore and Andy Williams shows. If you were into jazz some twenty years ago, you probably know the name well, for Paich was part of that West Coast group of studio musicians who turned out slick, "hip" albums that fell into a groove somewhere between Basic and Kenton but lacked the character of either. "I Get a Boot Out of You" is a new Discovery release, but it originally appeared—under the same title—as a 1959 Warner Bros. album (WS 1349). It is a beautiful set, and it speaks well for Paich's arrangements that they sound not the least bit passé after all those years. Of course, it helps that he had some impressive crew members on board: Art Pepper, who excels on Violets for Your Furs; Jack Sheldon, who is handed No More and knows exactly what to do with it; Bill Hood, whose baritone saxophone takes on the Johnny Hodges Warm Valley alto role with splendid results. Other superb players—Russ Freeman, Conti, Candoli, Bill Perkins—also get a chance to express themselves, and I would be remiss if I did not mention bassist Joe Mondragon and drummer Mel Lewis, who give this fine vehicle its wheels. Yes, I like this album. I think you will too.

—C.A.
The combination of flute and accordion has not inspired many composers, so Michael Copley (flute) and Dag Ingram (accordion) have had to transcribe just about everything they play. They are the Cambridge Buskers, who started out playing on street corners in Cambridge, England, a few years ago while they were still university students; they have gone on to become recording artists on a major label—Deutsche Grammophon. The charm of their arrangements and the obvious sincerity of their affection for the classics they perform have made their records hits on at least three continents.

They talked to us when they were winding up their first North American concert tour, which included some small places in North Carolina (Yanceyville and Roxboro) and larger cities in Canada (where they already had an album out)—Toronto, Ottawa, and, of course, Cambridge, Ontario. "Our visa for the United States was delayed," Ingram said, "because someone in the Immigration Service looked up the word 'busker,' found that it means 'itinerant street musician,' and wanted to keep us out. They thought we wanted to play in the streets here."

Ingram has a jazz background and Copley is classically trained. "We've taught each other a great deal," Copley says, "but we play and make our arrangements by ear, which means that we have to listen to records a lot. When we started out on Cambridge street corners, our first pieces were Joplin's 'The Entertainer' and a Russian folk song. We experimented a bit and found that the classics drew the best crowds. We've chosen the obvious ones, pieces that are easy to recognize. What seems to please people the most coming from street musicians are either virtuoso pieces or pieces that have a very pretty melody."

"When we first went abroad," Ingram said, "we tried Paris and then went to Germany, which is ideal for busking. There's no law against playing music in the streets, and the people know the classics and respond to them." They made their first record while on an informal tour of German cities where they played in the streets. "We went on that busking trip hoping to make enough money to pay for Christmas presents. In Hamburg we were going to stay with a friend who happened to know a record producer at Deutsche Grammophon. When he heard us, he said he could arrange overnight sessions. We went in one night and played our pieces, and from what they recorded they were able to make an album."

That record, which dates from 1977, is the one issued in the U.S. in January—with a small exception. Eine Kleine Nachtmusik has been substituted for two shorter pieces. Three other albums have been released in Europe. "But Japan is where they've done best," Copley said. "One of them became Number Three on the classical charts, and for a short time we were outselling Herbert von Karajan!"

Between TV shows the Cambridge Buskers have continued to perform in the streets of German cities occasionally. Once they caused a riot when students resisted the police who responded to a complaint that the music was too loud. Another time, in Cologne, they got the attention of composer Karlheinz Stockhausen, who sent them one of his compositions he thought would sound good on their instruments. "He mailed us the music with a nice written dedication, and now we play it in concerts."

Copley and Ingram, who got their college degrees a couple of years ago, play mostly in concert halls now. It's difficult for them to play in the streets back in England because they are recognized from TV shows, and kids interrupt constantly to ask for autographs. "Once we were spotted by a representative of the Inland Revenue Service," Copley said. "He wanted to be sure we were reporting the proceeds of that bit of busking for taxes. It somehow took away your innocence as a busker if you have to file a tax return on it."

This is a complicated one. The name Sofie Menter (1846-1918) is not likely to ring any bells with many people today. Menter was a pianist and a pupil of Liszt, married to the cellist David Popper, and professor of piano in St. Petersburg. She "wrote" a Concerto on Hungarian Themes which was orchestrated by one Piotr Ilyich Tchaikovsky and premiered by the two of them in 1892 in Russia. The work was published by the Soviet Publishing Co. (and published again in the U.S. in 1902) and then forgotten.

Recent research, however, has disclosed that the concerto was almost certainly not written by Sofie Menter but by Franz Liszt and presented to Menter by Liszt in piano score. When
she offered it to Tchaikovsky for orchestrating she dared not mention this, for Tchaikovsky had an abiding dislike of Liszt and would never have taken on the assignment had he known the true authorship. A lost concerto by Liszt is of quite a different order of significance from a lost concerto by Menter. The job of disinterring the score became a matter of considerable importance. It has been accomplished by several scholars working independently, with the aid and encouragement of the young French pianist Cyprien Katsaris. And Katsaris has now recorded the concerto with Eugene Ormandy and the Philadelphia Orchestra. It will be released shortly by Angel. —J.G.

The unanticipated appearance on the American market of a group of five records of orchestral works of Béla Bartók, digitally recorded, on a totally new label, with an all-but-unknown conductor, and featuring Budapest’s two leading orchestras (the discs are glowingly reviewed by David Hall in this issue—see page 98), has aroused a small flurry of interest and curiosity about both Sefel Records and conductor Árpád Joó. Joseph Se- fel, the founder of Sefel Records, is a Hungarian-born Canadian citizen and businessman. The record company is an offshoot of Sefel Geophysical Corporation, which has holdings in many other holdings. Sefel instigated the Bartók project and approached Joó with the simple question, “How would you go about it?”

Árpád Joó (pronounced “Yo”) is a Hungarian-born U.S. citizen, a pupil of Zoltán Kodály, conductor, for the moment, of the Calgary Philharmonic Orchestra and formerly a concert pianist. Plans were originally made to record the Bartók in London, but Joó got the idea of going to Budapest instead. “Many people thought the project was completely mad from the beginning,” he says. “After all, flying all that digital recording equipment, the tape, the cables, the technicians into Hungary and dealing with scheduling was no picnic. We dubbed the project ‘Mission Impossible’. But somehow we did it.

The answer to the question of how it was done is very well indeed; the next question is, Will the project continue? Canada has never had a major classical record company. Will Sefel Records be it? ‘Absolutely,’ says Joó. ‘Mr. Seifel has long-range plans.’” Mr. Seifel has, indeed. He expects not to be in Calgary much longer, expects, most likely, not to be in any one place for long, but to be extremely busy nevertheless, guest conducting and recording. He has already recorded the Brahms Fourth Symphony with the London Symphony and may possibly do other things together with the two overtures and the Haydn Variations. He has a great interest in recording twentieth-century master, and his quartets, especially Nos. 3, 4, and 5, are probably played as often as those of any twentieth-century composer except Beethoven and Schubert. That puts him up there among the top five or six masters of this hallowed medium.

The pieces themselves run from good to great, and the days when perhaps two or three ensembles “owned” this music are gone. There are many good ensembles that can give exciting, vital, expressive performances of this music today—can and do, especially during the 1981 Bartók centenary. Nevertheless, the Végh Quartet recordings have a special interest stemming from the personal relationship of leader Sándor Végh with Bartók and from the Hungarian origins and constituency of the ensemble. These performances are not as brilliant or as flashy as some of the more familiar recordings of recent years, but the sound is pure, clarity and warmth are special. Quartets Nos. 1, 2, and 6, which perhaps suffer from a brilliant approach, come into their own here, and all the slow movements stand out. Curiously, the modernism and iconoclasms no longer seem so striking or important—these musicians are actually speaking their native language—but the playing has a kind of gentle, wise intensity and spirit. The recordings, made in France in 1972, are glowing. The production (all the notes are in French, I’m afraid) is excellent, and the silent, silky quality of the sound is as pure as, well, the snow on the Hungarian plain. —E.S.

WHEN a rock star brings out a new album, he usually books a lot of concerts performing the music on the album to stimulate sales of the record. That is not the case today—can and do, except for the album as ‘tour support’ for the album, but it’s not limited to the pop business. The French-Brazilian pianist Magda Tagliabue and her protegé French pianist Daniel Varsano have made an album of works by Gabriel Fauré which CBS Masterworks has just released in the United States. It’s no coincidence that the two pianists are booked for a series of three recitals in New York in February and March under the title Tagliaferro/Varsano and Friends. The “friends” are the French composers whose works they will play, and Fauré is, of course, included.

Although Tagliaferro, who is said to be ninety years old, and Varsano (twenty-eight) have been working together since 1971, this is their first joint album. When it was released in France, the press made a few remarks about Harold and Maude at the keyboard, but the bons mots were stilled when the record won a Grand Prix du Disque. —W.L.
l'Orchestre de Paris, Daniel Barenboim cond. DEUTSCHE GRAMMOPHON 2707 119 two discs $21.96.

Performance: Deeply felt
Recording: Big sound

This is a big-scale, somewhat sloppy, but warm and deeply felt performance of one of the greatest (in both senses) and most ecstatic works of Romanticism. Heaven knows the French have not usually done right by their native son, but here—with a little help from Israel (Barenboim for feeling), Spain (Domingo for a gorgeous Sanctus), and Germany (Deutsche Grammophon for a spectacular recording)—they do manage an impressive homage. Berlioz dismays the French because he has the bad taste to let loose a torrent of feeling. Here these matters are left to the conductor (and, in the Sanctus, to the soloist). Aside from a bit of toughness, the results are impressive, enjoyable, and properly transcendent. The recording is excellent in all respects except for the common European habit of pushing the chorus to the back—in this case, not so much as to lose anything essential.

RECORDING OF SPECIAL MERIT


Recording: Very good

This is an enchanting record, surely one of the most appealing piano-duet releases in years. The opus number for Souvenir de la Russie is given in quotation marks above because it was part of Brahms' disguise when, evidently in his late teens, he composed six fantasies on Russian songs and presented them under the pseudonym "G. W. Marks." His authorship seems to have been conclusively confirmed only about a dozen years ago, and this is apparently the first recording of any of the works under either name. The enjoyment that conductor Genndy Rozhdestvensky and his pianist wife Victoria Postnikova find in playing duets is unarguably evident in these charming pieces and indeed in the entire program. The familiar waltzes come off the disc filled with freshness and enthusiasm, and the shifting moods of the Schumann Variations—now pensive, now overtly virtuoso—benefit from similar vitality and commitment. In short, these performances that would be hard to match, let alone surpass, of music for the most part in the "discovery" category—and very happy discoveries these are. The sound is very good, and the pressing is impeccable. I do wish, though, that Op. 39 had not been interrupted for turnover; if the record had been laid out with the Souvenir and Op. 23 sharing a side, all the waltzes could have been together on the other side.

R.F.

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Performance: Good and bad
Recording: Good

Claudio Arrau has given us some fine Chopin at times during his seventy-eight years, but he has never been a very consistent Chopinist. The reasons, I think, have more to do with temperament than anything else; in the simplest terms, there seem to be pieces he generally plays well and others he generally does not. Here he offers quite wonderful performances of the four Impromptus, realizing their frequently rather Schumannesque fantasy with a most natural-sounding rhythmic freedom while holding them together beautifully. They have rarely sounded so good to me. On the other hand, in the Barcarolle—a work redolent of no composer other than Chopin himself—things go heavily and by fits and starts, rather as if Arrau’s gondola had run into rush-hour traffic. There is no smooth gliding motion, no long-range tension and relaxation, and, hence, no magic. And Arrau punches out the accompanimental figure like a contrapuntal voice where one really would rather feel it murmuring underneath. It seems quite antithetical to the music.

The five waltzes here are those generally not included in the “complete” set of fourteen. They are all early works, though not included in the “complete” set of fourteen. Bartók

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Stereo Review
the bucolic manner of Brahms' Second Symphony. Only in the finale do we get a hint of Stanford's own Celtic background.

Thea King performs both works very coolly, with great clarity and brilliance, and with hardly a trace of vibrato. She is ably backed by the Philharmonia players under Alan Francis. The recorded sound, like the playing, is a trifle dry but very clean. D.H.

**RECORDING OF SPECIAL MERIT**

**HANDEL:** *Water Music (complete).* Los Angeles Chamber Orchestra, Gerard Schwarz cond. DELOS DMS 3010 $17.98.

- **Performance:** Virtuoso
- **Recording:** Superb

**HANDEL:** *Water Music, Suite; Music for the Royal Fireworks.* Academy of Ancient Music, Christopher Hogwood cond. L'OISEAU-LYRE DSLO 595 $10.98.

- **Performance:** Insouciant
- **Recording:** Good

The Los Angeles Chamber Orchestra, conducted by Gerard Schwarz, plays with keen precision and tremendous vigor in this vital performance of Handel's complete *Water Music.* The most delightful thing about the performance, however, is the ornamentation. Nobody is left out; the oboes offer delicious swirls in the *bourées,* the horns bring astonishing virtuosity to their many hunting calls, and when the horns play antiphonally with the crisply decorated trumpets, we are led into an unsurpassed world of Baroque brilliance.

Although the Academy of Ancient Music produces an authentically mellow sound by using early instruments, their nonchalant approach here debilitates Handel's driving energy. Admittedly, period horns and trumpets cannot play intricate divisions à la Schwarz, but, even so, ornamentation is for the most part sorely lacking. One becomes painfully aware of just how many repeats Hogwood's readings are certainly more authentic than that of Schwarz, in this case.

- **Performance:** Authentic
- **Recording:** Good

**HARRIS:** *Quintet for Piano and Strings; String Quartet No. 3 (“Four Preludes and Fugues”).* Johanna Harris (piano); Blair Quartet. VARESE SARABANDE VC 81123 $8.98.

- **Performance:** Insouciant
- **Recording:** Good

(Continued on page 99)
The years since Béla Bartók's death in New York City in 1945, we have had any number of distinguished recordings of his music by major soloists and conductors. The just-passed Bartók centennial year was especially rich in such wide releases. But one of the year's finest recorded tributes to the Hungarian master—ranging with the Hungaroton label's completion of its integral recording of Bartók's works—comes from a most unexpected source, Canada's new Sefel label, and features a virtually unknown conductor, the thirty-three-year-old Arpád Joó.

Joó is a former pupil of Zoltán Kodály who now lives in Calgary, Alberta, where he is music director of the Calgary Philharmonic. Sefel Records is the creation of Joseph Sefel, a Hungarian-born Canadian businessman with firm ideas about quality. He has spared no expense in making this first release both a worthy tribute to Bartók and an effective showcase for his extraordinarily gifted young protégé. He brought Joó together with veteran producer Brian B. Culverhouse, the top Soundstream digital-recording engineers, and the two best orchestras in Hungary, the Budapest Philharmonic and the Budapest Symphony. The five discs were recorded in the superlative acoustic surround of the renovated nineteenth-century Vigadó ballroom/concert hall in Budapest.

Interpretively, Joó gives even such veteran Bartókians as Reiner, Ormandy, Bernstein, Dorati, Solti, and Kertész a real run for their money. Technically the recordings are absolutely first-rate. Moreover, Mr. Sefel's pursuit of excellence has extended to the pressing, packaging, and annotation of the records as well.

All of Bartók's orchestral output is represented here except for the Divertimento for Strings, the ballet The Wooden Prince, and the Music for Strings, Percussion, and Celeste. (The Miraculous Mandarin is unfortunately offered in the concert-suite version rather than in its entirety with the choral epilogue.) Listening to the works in chronological order of composition, from the symphonic poem Kossuth (1903) to the Concerto for Orchestra (1943), is an extraordinary listening experience.

Kossuth, whose program concerns the leader of the abortive 1848 Hungarian revolt against Austrian rule, is a full-blown, post-Lisztian piece complete with a quotation from the Emperor's Hymn and a reference to Liszt's Second Hungarian Rhapsody. It is highly effective in its way, and so is the resplendidly orchestrated First Suite (1905). Here, too, the feeling one gets is of Lisztian romantic nationalism but with an overlay of Dvořák in the third movement.

The Second Suite (1907) is a transitional work that reflects the beginnings of Bartók's field researches with Kodály into Magyar folk music. The second movement, with its elaborate fugue and stunning climax, is altogether masterly. Like Antal Doráti in his brilliant 1956 Mercury recording, Joó opts for Bartók's tightened 1943 version of this score (the one and only record of the original version was issued by Concert Hall in 1950). The Two Portraits, Op. 5 (1907/1908), are known in other forms. The first, Ideal, is the same as the first movement of the Violin Concerto No. 1, which was not performed in its original version until after Bartók's death. The second portrait, Grotesque, an orchestration of the Dances from the Emperor's Hymn and a reference to Liszt's Second Hungarian Rhapsody until after Bartók's death. The second portrait, Grotesque, an orchestration of the Dances from the Emperor's Hymn and a reference to Liszt's Second Hungarian Rhapsody, emerges here with a textural clarity and impact that can only be described as shattering.

Hearing the Concerto for Orchestra last, one realizes how Bartók in this final and deservedly popular symphonic masterpiece gathered up all the strands of his earlier work, even to motifs-resonances. Joó and the Budapest Symphony go all out for brilliance and intensity in a reading of razor-sharp clarity yet ample warmth. How else on these discs, the ideal microphone placement, made-to-order recording locale, and digital mastering have combined to produce a richly satisfying result.

London Records has also released new digital recordings of the Concerto for Orchestra and the Dance Suite, in this case by Sir Georg Solti and the Chicago Symphony. The verdict is quickly told. For my taste, Solti simply does not leave enough air between the notes for the music to breathe properly. The Chicago Symphony is not seen with the same clarity and impact that can only be described as shattering.

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genuine down-home Oklahoman with little formal background, mostly eschewed Americana in favor of a big and very traditional neo-Classical style. Harris’ 1936 Piano Quintet, with its Passacaglia, Cadenza, and Fugue, is perhaps his finest achievement in this vein. Serious, uncompromising, beautifully written, it has always been one of the most successful of his works. While much of Harris’ music has not held up well, I think there will always be a corner in the American chamber repertoire for this piece.

The Third String Quartet, written a year later in a similar manner, consists entirely of four modal preludes and fugues of such an unrelenting seriousness that it is close to self-defeating. The effect is not of a brilliant technical achievement—the great tradition updated—but of slightly pretentious meanderings. You would like to love, or at least enjoy, this music, but it won’t let you.

Johanna Harris, the composer’s widow, virtually owns the Piano Quintet and is obviously its most authoritative interpreter. The Blair Quartet is a fine ensemble, and the recordings, made in Denver, have excellent string sound; the piano recording is reasonably successful though a little lacking in presence.

E.S.

RECORDINGS OF SPECIAL MERIT

MAHLER: Kindertotenlieder; Five Rückert Songs. Christa Ludwig (mezzo-soprano); Berlin Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON 2531 147 $10.98, © 3301 147 $10.98.

MAHLER: Kindertotenlieder; Lieder eines Fahrenden Gesellen. Klara Takács (mezzo-soprano); Sándor Sólyom Nagy (baritone); Budapest Symphony Orchestra, György Lehel cond. HUNGAROTON SLPX 12044 $9.98 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Performances Both very good
Recordings DG slightly superior

Here are two excellent additions to the Mahler discography. Deutsche Grammophon offers a welcome pairing of two Ludwig/Karajan collaborations from around 1975 that were previously released as “fillers” with the Fifth Symphony (2707 081) and Das Lied von der Erde (2707 082). Christa Ludwig’s velvety mezzo imparts the proper tragic aura to both Rückert cycles. The intense performances are heightened by the luscious dark quality of the singer’s low register and her expert pointing up of textual nuances. Herbert von Karajan supports her singing with an orchestral background of exceptional refinement: textural details emerge even when the orchestra sounds too subdued for overall effect.

Mahler had a brief and stormy association with the Budapest Opera from 1889 to 1891, during which period his First Symphony was premiered there. That notwithstanding, his music has never been too popular in Hungary, and therefore the loving and quite idiomatic performances on this new Hungaroton disc come as a delightful surprise. Both soloists are first-class. Klára Takács (who may also be heard in the title role of Hungaroton’s recent recording of

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MENDELSSOHN: String Quartet No. 1, in E-flat Major, Op. 12 (see DVŐRAK)
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RECORDING OF SPECIAL MERIT
PONCHIELLI: La Gioconda. Montserrat Caballé (soprano), La Gioconda; Alfreda Hodgson (contralto), La Cieca; Luciano Pavarotti (tenor), Enzo Grimaldo; Nicolai Ghiaurov (bass); Alise Badoux; Agnes Baltsa (mezzo-soprano), Laura; Sherrill Milnes (baritone), Barnaba; John Del Carlo (baritone), Zuane; Regolo Romani (tenor), Issoe; Rodney Macann (bass), Barnabotto; others. London Opera Chorus; National Philharmonic Orchestra. Bruno Bartoletti cond. LONDON 0 LDR 73005 three discs $38.94, © LDR 5 73005 $38.94.

Performance Very good

Recording Excellent

The first digital La Gioconda is here, and it has a topnotch cast and lustrous recorded sound. While detractors of this much-maligned opera will again wonder what the fuss is all about, those who admire La Gioconda for its wealth of melodies and splendid vocal writing will have something to look forward to. Their enjoyment (and mine too, for I belong to the latter breed) will be somewhat tempered, however, for Maestro Bartoletti insists on finding more refined singing than Ponchielli lavished upon it. We are in Bartoletti’s debt for the polished orchestral playing, but his languid tempos at certain crucial points (the duet “Grimaldo!” is an especially jarring instance) mean that the essentially fourth act beginning with “Suicidio”) seems to curb the surging power of the music.

The singing is generally first-class. Montserrat Caballé’s ideas about La Gioconda seem to match those of the conductor. She conveys a kind of smoldering passion without any of the full-blooded earthiness Renata Tebaldi brought to the title role in an excellent earlier London set (OS 1388). But she rises to the many vocal challenges admirably and evokes memories of Zinka Milanov in the grand first-act passage. "Ah! con l’amor..." Luciano Pavarotti’s singing shows interminable signs of the old lyric magic (as in "Ve-

Performance Excellent
Recording Excellent

Carl Reinecke was one of the most beloved figures of his time, both professionally and personally, and his time happened to be a long one (1824-1910). He was eighty-four years old when he composed the Flute Concerto recorded here; it has, however, absolutely nothing "autumnal" or in any sense valedictory about it. It may not be an important work, or even a memorable one, but it is engaging. Whether James Galway's expert performance is more striking than the expert one Jean-Pierre Rampal recorded a few years ago, it would be reckless to try to measure. The clear advantages of the new release are the alert and involved orchestral contribution under Hiroyuki Iwaki and the excellent digital recording, which allows Reinecke's gift for color to be enjoyed to the full. The famous programmatic Undine sonata is a most apt coupling, and it is given a suitably dramatic performance in which boldness and subtlety are nicely balanced— as are the two instruments. In addition to providing eloquent partnership in the sonata, Philip Moll has contributed a most edifying note on the music, including a detailed account of the Undine legend. R.F.

RECORDING OF SPECIAL MERIT


Performance Bracing
Recording Sumptuous

SCHUBERT: Quintet in A Major for Piano and Strings, Op. 114 (D. 667, "Trout"). (Continued overleaf)
Sviatoslav Richter (piano); members of the Borodin Quartet; Georg Hörttagel (double-bass). ANGEL 0 DS-37846 $10.98.

Performance: Unpleasant
Recording: Likewise

Wolfgang Sawallisch has made other recordings as pianist, but I can’t remember any in which he played chamber music. According to the Eurodisc liner, he and the Endres Quartet “have been playing together for a long time,” and three of the four string players in this recording are principals in the orchestra of the Bavarian State Opera, of which Sawallisch is musical director. No surprise, then, that this is a beautifully integrated performance, with all five participants really breathing together and, by no means incidentally, playing quite beautifully. This is a wide-awake Trout, more evocative of an early morning on a cool stream, say, than an evening around a fire. The tempos throughout are just the slightest bit brisker than usual for this work; some listeners may be less than comfortable with this, while at least as many others will find it bracing and invigorating. The unsentimentalized approach does not lack sentiment or warmth of heart, and repeated exposures to the exceptionally handsome tone produced by all five participants and their most effective blend have persuaded me that this is one of the best in a large field of attractive versions. The sound is gorgeous and full-bodied, the pressing flawless.

The German bassist Georg Hörttagel has made so many recordings of the Trout that even he may have lost count. I wonder how he felt to find himself involved in this one. Sviatoslav Richter has given us some outstanding Schubert on his own, and it must have seemed quite a coup to get him together with members of the Borodin Quartet for the first digital recording of one of the most beloved works in all of chamber music, but it is not a happy listening experience. There are sudden stops and starts, gratuitous gear-shifting, exaggerated dynamic contrasts, and a good deal of less than lustrous sound from all concerned. The sound is a rather pointed reminder that the label “digital” is not by itself an assurance of excellence in this respect: the piano sounds plumy and the balances are not at all what they should be.

R.F.

RECORDING OF SPECIAL MERIT


Performance: Excellent
Recording: Excellent

It was exactly a year ago that I gave an enthusiastic welcome in these pages to these performers’ disc of Schubert’s Sonatinas, Op. 137 (DSLO 565). I am delighted that they have continued their exploration of this material, and I only hope the inclusion here of the Mendelssohn sonata does not indicate that this is all the Schubert we are to get from them, for the great Fantasy in C and the Rondeau Brillant would be no less welcome. As on the earlier disc, Jaap Schröder’s 1709 Strad is matched with a Georg Haschka fortepiano, ca. 1825, which, under Hogwood’s fingers, gives just the right character to this music. Treasureable as the Oistrakh/Bauer record of the Sonata in A and the Fantasy in C (Melodiya/An- gel SR-40194) will always be, Schröder and Hogwood are more persuasive still, and not because of the fortepiano alone (though it is a distinct advantage for its more authentic sound and the balance it makes possible). This is exceptionally sympathetic music making, with the sort of sweetness and comfortable affection that will conjure up images of the Schubertiads in the minds of many happy listeners. The Mendelssohn is a much less substantial work than the Schubert, but it deserves at least one first-rate recording, and that is what it has received here. Excellent on all counts!

R.F.

STANFORD: Clarinet Concerto in A Minor, Op. 80 (see FINZI)

TIPPETT: Symphony No. 4; Suite for the Birthday of Prince Charles (see Best of the Month, page 70)

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Schubert: Two Operatic Rarities

Unless you're a specialist in what has not been recorded, you might not know that Schubert wrote, or attempted to write, fifteen operas and operettas. Despite the (very) occasional concert performance and the even rarer recording (Alfonso und Estrella and Die Verschworenen have been recorded), the works are known, if they are known at all, mostly by reputation. Deutsche Grammophon has come to the rescue here, as they so often do, with a recording of as much as exists of two more of the operas, both Singspielen—that is, with spoken passages rather than sung recitative. Actually, though, we get no spoken passages in this recording because the libretto of Die Freunde von Salamanka has disappeared and we have only the music with its associated text, and Der Spiegelritter exists only as a fragment, one of Schubert's numerous unfinished works. Still, this is music we have not heard before by a great composer; that is justification enough for recording it.

General informed opinion has it that Schubert's operas failed because of atrocious librettos. It may be unfair to judge a lost libretto purely on the basis of the surviving sung texts, but that opinion seems to be at least partially right. Although Johann Mayrhofer's poems inspired some of Schubert's best lieder (Auflösung, Nachtwölken, Lied eines Schiffers an die Dioskuren), Schubert would have been better off setting the Vienna Taubenpost Directory than what he got from Mayrhofer for Die Freunde von Salamanka. With Der Spiegelritter the situation was different though equally deadly. August von Kotzebue's play was meant as a satire, but the fourteen-year-old Schubert, according to Walther Dürr, who wrote the annotations for the DG set, took it seriously. And so we have words that simply do not fly, a situation Schubert faced many times in his life and often overcame. That he didn't here is due at least in part to the fact that he was in the theater a different and far more conservative composer than he was in virtually any other area of music. Just why this should be, seeing that Schubert esteemed opera and certainly recognized it as the key to public success in Vienna, is a question for a study quite beyond me. But there is no question that the music stays pretty well within conventional boundaries harmonically and formally, and each time it seems about to soar, it is cut off to form a conventional aria da capo or it ends because the text will not carry it further.

That much said, there is still music worth listening to here. Der Spiegelritter depends too much on the military style, but it is interesting that the fourteen-year-old composer had already acquired the knack of drumming up that sort of excitement. Die Freunde (he was eighteen for that one) has happy moments in the concerted numbers and a couple of lovely if lightweight arias, plus that rara avis in Schubert, a first version of a tune famous in a later incarnation: the opening of the Duet (No. 12 here) returns nine years later as the fourth movement of the great Octet, D. 803. It is simply necessary not to set your expectations too high for this music; listened to on a lower level, it is charming stuff.

Deutsche Grammophon has presented these rarities in as good a light as possible, with the major roles taken by some very fine singers, especially Edith Mathis as Olivia and Hermann Prey as Fidelio (!). The choirs seem unable to get out the low notes, but Schubert's vocal demands are considerable. Theodor Guschlbauer leads the very good chorus and orchestra with infectious spirit, and the recording is excellent. The text, what exists of it, is given in German and English, the excellent notes in French as well.

—James Goodfriend

SCHUBERT: Die Freunde von Salamanka (D. 326). Edith Mathis (soprano), Olivia; Christine Weidinger (soprano), Eusebia; Carol Wyatt (mezzo-soprano), Laura; Thomas Moser (tenor), Alonso, Eberhard Büchner (baritone), Diego; Norbert Orth (tenor), Tomes, Hermann Prey (baritone), Fidelio; Robert Holl (bass), Der Alcalde; others. Der Spiegelritter (D. 111, Kurt Rydl) (bass), Der König; Edith Mathis (soprano), Die Königinnen; Thomas Moser (tenor), Prince Almador; Robert Holl (bass), Schmurzo; others. Chorus and Orchestra of the Austria Radio, Vienna, Theodor Guschlbauer cond. DEUTSCHE GRAMMOPHON 2707 126 two discs $21.96.
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