HI-FI READOUTS: they let you see what you hear

FIRST LAB TEST: The Revolutionary New Carver M-400 Power Amplifier plus...
- Scott Model 166 Speaker
- Pickering XSV/4000 Cartridge
- Technics RS-M24 Cassette Deck
- Yamaha P-750 Turntable

TONIO K. The voice of protest is heard again in the land

DISC SPECIALS: Carly Simon • Al Di Meola Elvis • Waylon Carl Ruggles • Bohuslav Martinů De Larrrocha's Mozart Tennstedt's Mahler

Conventional kazoo has paper cone.

WHAT'S GOOD FOR A KAZOO IS BAD FOR A SPEAKER.
Introducing the first low distortion speaker: The Pioneer HPM Polymer Graphite. With up to three times less distortion than conventional paper speakers.

Most high fidelity speakers today offer you little more than kazoo technology. And the paper cone you find in most conventional speakers is proof of it. Just as the paper cone in a conventional kazoo creates a buzzing noise, the paper cone in most conventional speakers creates distortion.

At Pioneer we've developed our new HPM speakers with Polymer Graphite cones instead of paper. This new material sets new lows in speaker distortion and new highs in speaker technology.

What good are low distortion components when you have high distortion speakers?

Most people believe that to get the most out of a recording all they need is components that give them the least amount of distortion.

But expensive components mean little when attached to conventional speakers. Even components with an amazing low level of distortion can't be appreciated when you're listening to them on speakers that most likely have ten times the amount.

So Pioneer engineers created Polymer Graphite, a new speaker cone material that gives you up to three times less distortion than paper.

Polymer Graphite reproduces sound. Paper and metal create it.

The perfect cone material should be rigid enough to significantly reduce distortion. It should be lightweight. And high in internal loss. So it sustains no vibrations and allows no artificial coloring to your music.

Unfortunately, these three attributes are not commonly found in any one speaker.

Paper cones are not rigid enough to keep from flexing. They tend to break up at high listening levels. As they alter their shape, they alter your music. What's more, over the years, their performance can deteriorate.

Metal cones, on the other hand are rigid enough to lower distortion. And can be light enough for quick response. Unfortunately they tend to ring and add their sound to your music.

Pioneer's new HPM speakers have woofer, tweeter and midrange made of Polymer Graphite.

Because Polymer Graphite is rigid, the wave that comes out of your speaker cone is virtually identical to the signal that went into it. Because it's so lightweight, it's responsive enough to accurately reproduce transients for an added sense of realism.

And because it's acoustically dead you'll hear nothing more and nothing less than music the way it was intended to be heard.

But that's not all. Pioneer's new HPM Polymer Graphite speakers have a horn loaded, high Polymer supertweeter that expands frequency response an additional octave to 50,000 hertz. A computer designed bass reflex cabinet. And much more.

So if you're in the market for high fidelity speakers, you can buy a paper speaker and get kazoo technology. Or you can buy a Polymer Graphite speaker and get Pioneer technology.

We bring it back alive.

Circle No. 66 on Reader Service Card.
Conventional speaker has paper cone.
Upgrading is for music lovers who can hear the difference. For them, Radio Shack has made "the difference" affordable... for example 30-28,000 Hz (±3 dB) frequency response, extended dynamic range, low distortion, low noise — you get it all in the easy-to-be-creative open reel format. Tape handling is no problem because the TR-3000 is totally logic controlled. A pushbutton-activated solenoid system controls all tape movement — you can switch functions instantly, without tape spills or snarls. Pause and mute controls even let you edit, electronically, as you record.

The TR-3000 has three motors. A precision servo-controlled capstan motor reduces wow and flutter to less than 0.06% WRMS. And two high-torque reel motors maintain constant tape tension for smooth, fast winding. Separate play, record and erase heads give you "off-the-tape" monitoring. Individual mike and line input controls work like a built-in mixer. High/low bias and EQ switches for an optimum match with any tape. 7⅛ and 3¾ ips speeds. And lots more. Realistically priced at only $499.95.* Check its superb sound and specs at one of our 7000 locations today!

*Retail price may vary at individual stores and dealers. Cat. No. 14-700. Illustrated metal reels an extra option.
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COVER: Frederic Marvin
Give it Stylus Care
With the new Discwasher SC-2 System.

The famous SC-1 stylus brush (standard of the record and hifi industries) now has a synergistic fluid called SC-2.

SC-2 Fluid enhances and speeds cleaning and yet protects diamond adhesives, cartridge mounting polymers and fine-metal cantilevers against the corrosive effects of many other “cleaners”.

The Discwasher SC-2 System. Stylus care you can finger as clearly superior.

SC-2 Stylus Care System
LUCIANO PAVAROTTI FOR PRESIDENT was the theme of a London Records ad aimed at dealers, but public response to such slogans as The People's Voice and Check His Records was so great that London could not meet the demand for campaign buttons and streamers. Unfortunately, his foreign birth (not his deals with an Anglo-German record conglomerate) disqualifies the tenor for the job of President of the United States. His albums "O Sole Mio" (OS 26560) and "Pavarotti's Greatest Hits" (PAV 2003/4) are among London's all-time best sellers.

VIDEOTAPABLE MUSIC PROGRAMS ON PBS this month include the Verdi Requiem in Exxon's Live from Lincoln Center series on October 22 at 8:00 p.m. Zubin Mehta will conduct the New York Philharmonic, and soloists will be Montserrat Caballé, Bianca Berini, Michael Svetlev, and Martti Talvela. Check local PBS stations for stereo simulcast information.

REAL ESTATE AND INTERNATIONAL STARS. Liverpool, home town of the Beatles, has rejected a proposal to name streets for them. Instead, a Liverpool home for old people will be named for Paul McCartney, 38, who, like George Harrison, still lives in Gt. Britain. Ringo Starr has digs in California, and John Lennon, now a New York cattle baron, lives at the Dakota, a classy apartment house where Lauren Bacall, Rex Reed, and Rosemary's Baby also hang their hats. The Dakota cited its problems with Lennon's groupies when it turned away Billy Joel this year.

UNPACK THOSE LAMÉ NEHRU JACKETS! The psychedelic revival is the latest splash in the British New Wave. Hot on the heels of England's Psychedelic Furs (the group) comes news that CBS has signed Roky Erickson, former lead singer with the Sixties cult band the 13th-Floor Elevators. Erickson's new band, Alien, is said to have a science fiction slant. Their first album, 'Alien,' is out in England, and the first single, due here momentarily, is Creature with the Atom Brain.

THE COMPACT PORTABLE VIDEO RECORDER introduced by Technicolor Audio-Visual is claimed to be the lightest unit of its kind on the market. It measures 4 1/2 x 9 1/2 x 3 inches and weighs only 7 1/2 pounds. Designed for use with a standard video color camera, the unit records picture and sound on 1/2-inch tape in a cassette slightly larger than an audio cassette. Aimed at the home-movie market, the VCR will record up to thirty minutes on one cassette. Price: $995. The tapes cost $8.95.

SALES OF HOME VIDEO TAPE RECORDERS so far this year indicate that the video-equipment industry is recession resistant. According to figures from the Electronic Industries Association, in the first thirty weeks of 1980 sales of HVTRs reached 336,914 units, up 64.6 per cent over sales in the same period last year.

FM ATLAS AND STATION DIRECTORY by Bruce F. Elving has been revised and updated for its sixth edition. The 112-page guide includes 49 pages of maps showing FM station location, call letters, and frequency. Nearly 5,000 FM stations in the United States and Canada are listed by frequency and by geographical location. To order send $4.50 plus 50¢ postage to FM Atlas, Box 251-KSC, Kearney, Nebraska 68847.

BLOCKBUSTER CLASSICAL PROGRAMMING on National Public Radio this month includes such live events as the St. Paul Chamber Orchestra led by Pinchas Zukerman (October 4 at 9:00 p.m. EST) and the opening concert of the Los Angeles Philharmonic season led by Carlo Maria Giulini (October 23 at 11:30 p.m. EST). Other broadcasts by satellite will be the international season of the San Francisco Opera on Friday nights at 11:00 EST from September 26 through December 5. Also beginning this month are the NPR debut concerts of the Cincinnati Symphony under Michael Gielen, a series of concerts of solo piano works by Brahms played by Detlef Kraus, and "Backstage with Richard Mohr," a series of talks about opera. Check local listings.
THE PERFORMER/AUDIENCE CONSPIRACY

I am somewhat too young to have seen Douglas Fairbanks Sr. on the silver screen anywhere but in reruns out of New York's Museum of Modern Art archives, but I did catch him on the tube mid-August in a timely segment on the arrival of the "talkies" in the documentary series Hollywood. I learned from that source that Fairbanks elected not to participate when the addition of the soundtrack revolutionized the film industry in the Twenties—whether because of an inability to read lines convincingly, an acronym that would have placed him instanter below the salt, or a vocal quality tending toward the coloratura I know not. The information did, however, cause me to reflect on a remark I made here last month to the effect that musical artists who plan to participate in the latest entertainment revolution had better be videogenic. Fairbanks' refusal to "go audio" suggested that talking pictures were beneath his dignity as a true film artist; one can easily imagine some musical recording star expressing similar reservations about "going video" today. Will studio-bound Glenn Gould, for example, ever be seen through the medium of the videodisc, hunched over the keyboard humming a tuneless obbligato to a striking new view of J. S. Bach's Desiring? One somehow doubts it, though it might be fun to have a videodisc remake of that madcap concert tour he conducted from a railroad flatcar some years ago through Canada's muskeg boondocks.

Just as the talking picture brought fore-
Introducing another Sony only. The MDR series open-air headphones. The smallest, lightest stereo headphones available today. Or tomorrow.

With our lightest at 40 grams, you will barely know you're wearing them. Yet the sound is dynamite.

Through a remarkable new audio breakthrough, our engineers have succeeded in reducing big-headphone technology down to the size of your listening channels.

The MDR series headphones' airy spaciousness delivers absolute clarity through an ultra-small driver unit that produces more than three times the energy of conventional circuits. And a new high-compliance diaphragm accurately reproduces the 20 to 20,000Hz bandwidth and improves low-range response.

That means you can listen to the heaviest of music for hours. Lightly. And know that you're hearing every nuance of the original recording from deep bass to the highest treble.

Listen to our new MDR series headphones. They're light. And heavy.

CIRCLE NO. 52 ON READER SERVICE CARD
Le Cube.

The ALLISON: SIX™ is our smallest loudspeaker system. It is an 11-inch cube incorporating the Allison® Room-Matched® design principle.

While compact, the model Six is not a "mini" system in any sense. Its low-frequency output is flat to below 50 Hz with reasonable system efficiency. The highest audible frequencies are reproduced smoothly and dispersed uniformly by the same convex-diaphragm tweeter used in the most expensive Allison models. Allison Sixes are accurate, full-range loudspeaker systems, without allowance for size or price.

Revue du Son, in a feature review, * said "La `petite' Allison Six est une grande enceinte (loudspeaker)."

If the reviewer is correct in his judgment, you can now buy a pair of great loudspeaker systems for about $250. You won't have to move out any furniture to make room for them.

Full-range performance is possible from loudspeakers that can be used as bookends on an open shelf. The Allison Six costs from $125 to $131, depending on shipping distance.

Descriptive literature, including complete specifications, is available on request.

For literature and information call (800) 225-4791 [in MA (617) 237-2670] or send coupon.


LETTERS TO THE EDITOR

Bouquets

- Once again I bought and am enjoying a terrific album because of a review in Stereo Review: Jerry Lee Lewis' "When Two Worlds Collide," reviewed by Joel Vance in July's "Best of the Month" section. After playing the disc only once, I had to agree that this man has GOT it, even though he hasn't become a Big Star. The Killer even puts new life into the old, old oldie Toot Toot Tootsie, and as for Rockin' Jerry Lee, When Two Worlds Collide, and Honky Tonk Stuff—anyone who doesn't like this kind of carryin' on is beyond all hope. This is happy listening, the kind of music that gets into your soul and your bones.

BOB STRUCK
Burlington, Iowa

- After reading Stereo Review for more than three years, I think it's time I thanked you in writing. I have bought a good many LPs and cassettes over the years—fifty to eighty a year—and for the last three years or so Stereo Review has been the major influence on my purchasing decisions. My tastes are widely varied, and the collecting has kept me broke but satisfied. From my perspective, your reviewers are batting about 800, excellent in any league. I particularly want to thank Joel Vance for his June review of the Darts album.

F. A. J. WOYCHIKON
Bellows Falls, Vt.

- This month's issue (August) marks my tenth anniversary as a Stereo Review reader. Unfortunately, now I can't afford the equipment I have learned to appreciate. Thanks, I guess.

ROD SWEETLAND
Sacramento, Calif.

Welcome to the club!

Rouson Fans

- The first thing we do when Stereo Review arrives in the mail is to leaf through it to find the hilarious cartoons by Rouson. Where can we write to Mr. Rouson to tell him how much we enjoy his work—every one an absolute riot? And can you tell us something about him?

VERNON AND MARGARET K. SMITH
Waynesville, N.C.

London-born John Rouson, now retired and living in Staten Island, New York, began his cartooning career in the mid-Thirties as a racing cartoonist for the London Sunday Express. By 1939 his work was appearing in two dailies, two weeklies, and on the BBC and in Punch. He quit cartooning to enlist in the Royal Navy as an ordnance seaman, and in 1946 he was discharged as a lieutenant commander. He came to the U.S. two years later and established himself as a syndicated cartoonist, at one point having four daily strips running.

Mr. Rouson explains his involvement with music: "Like all middle-class London schoolboys at that time, I had to take piano lessons. In a couple of years I reached such a state of proficiency that I was forced to appear at some parent-teacher meeting playing a duet with the piano teacher's son on the violin—an experience so terrifying that I never gave a thought to music for the next twenty years. My interest was reawakened by hearing an Earl Hines recording of Fifty-seven Varieties, since when I've practiced sporadically entirely for my own amusement. I consider myself to be in the van of keyboard thumpers, tenth class. I suppose Hines is still my favorite—except for Horowitz playing Chopin!"

Letters to Mr. Rouson may be addressed to him c/o Stereo Review, One Park Ave- nue, New York, N.Y. 10016.

All Is Vanity

- The "bleakness" that Steve Simels referred to in the August "Simels Live" is as much a product of self-serving criticism as of the music of the Seventies, perhaps more about sounding off than sound. It is not necessary for Mr. Simels to focus on his own stance; his topic should be the function of contemporary music in society. As he seems to understand, the self-conscious aspect, the parody of a stereotype, is what is funny; but rock is not only for the purposes of humor

(Continued on page 10)
Sony's inseparable separates.

A stylish new match in a thin new tuner and an integrated amplifier. Tune into style and grace with Sony’s new slim separates. Together they give you the compactness of a single receiver, with the higher-fi engineering of individual components.

Sony's sleek ST-J55 tuner and powerful TA-F55 integrated amplifier are a perfect pair. Both with the convenience of feather touch operation. In addition the F55 features an electronic volume switch with a built-in motor to give you smooth and easy stereo command.

Frequency synthesized tuning.
The tuner’s advanced technology is Sony sophisticated. Frequency synthesized tuning with a highly stable quartz-crystal oscillator locks onto the broadcasting signal and makes station selection precise and drift free. Sony sensational is the only description for our tuner’s masterful performance.

The ST-J55’s feather touch switches are set in a neat clean line for perfect visual operation. And you get impeccable operational ease with Memory Tuning, Auto Tuning and Manual Tuning.

Non-volatile memory with random memory preset.
The ST-J55’s MNOS memory makes total operation incredibly simple. From tuning to randomly presetting a total of 8 of your favorite FM/AM stations.

Pre-set frequencies and reception adjustments like Muting/Mode Pre-set are all memorized for problem-free tuning each time you turn the tuner on. And Sony’s non-volatile memory holds all information up to ten years without power or backup systems.

Sony's amplifier takes MM and MC cartridges for maximum virtuosity.
The ST-J55’s matching mate is Sony’s TA-F55 integrated amplifier. They’re a natural fit at exactly the same slim size. Sony’s technology gives you the combination of slim elegance and powerful 65W power. THD is 0.008%, one of the lowest in this class.

Pulse Power Supply, Sony’s revolutionary Heat Pipe, and Sony’s innovations in simple and straight signal processing circuitry construction all result in extremely clean and noise free sound quality.

Best of all, now you can choose practically any type of MC and MM cartridge for your choice of the most satisfying musical performance an audiophile can hope for. Just set the two position load selector for each MM and MC cartridge and appreciate the TA-F55’s virtuosity.

The final touches.
Of course, you get all the higher-fi standards in the TA-F55, like Gold Plated Phono Jacks, oxygen free copper wiring, metalized film resistors and polypropylene capacitors. It’s the synthesis of Sony technology and design.

Sony also supplies blank station labels so you can personalize your tuner. You can tag your pre-programmed frequencies or station names in a handy LED backlit slide out holder for at-a-glance identification.

Precision and stability are Sony assured.
The ST-J55 tuner and TA-F55 integrated amplifier. Two Sony quality engineered components, whose separate stability and precision are unmatchable for operational convenience and performance. Sony’s perfect pair. They’re inseparable.

SONY
CIRCLE NO. 53 ON READER SERVICE CARD
and realism. Everyone has to construct his own dream so that he may live in it, but only those who acknowledge their own fantasies for what they actually are display the sensitivity that is lacking in the work of those who blindly copy.

Yet when rock is good it is an exercise of ego; when criticism is poor, like Mr. Sim- els', it is also an exercise of ego, but without the perception of its own staging. All art offers an impossible dream and invites the audience to try to share it, with the fore- knowledge that it is not possible to do so. But criticism should not inform us of the critic's own limitations.

Robert Gordon
New York, N.Y.

The Editor replies: Why not? What better place to find them out? Should a critic conceal his limitations? Must we sneak up on him in the middle of the night, ask his wife, his bartender, or his psychiatrist what his weaknesses are? The impossible dream of criticism is that it can be objective; the im- possible dream of art is that it can commu- nicate universally. The inevitable failure to realize the dream in both spheres only proves us fallibly human. One cannot do better than listen to the voice of experience: says Harold C. Schonberg, in a recent val- edictory column celebrating his forty-four years as a music critic, twenty of them with the New York Times. "Criticism turns out to be nothing—nothing—more than the verbalization of one's responses to the ob- ject being criticized."

Allan Pettersson

I read with much interest David Hall's fine review of Allan Pettersson's Eighth Symphony in the August issue. I'm glad to see that Pettersson and his music are receiving some recognition and publicity in this country. Readers whose curiosity was piqued by this review may be interested to know that Pettersson has composed fifteen symphonies so far, the last in 1978-1979. Since then he has also completed a Con- certo for Alto Saxophone and Orchestra and a Violin Concerto.

Franklyn Muench
Sheboygan, Wis.

Musical Wonders

Who could possibly resist a challenge like Peter Reilly's reference (in his May re- view of Peggy Lee's "Close Enough for Love") to "the seven wonders of the world of popular entertainment"? I eagerly await publication of his list, but as a mental and musical exercise I made up my own:

(1) Stephen Sondheim. Anyone who could write the plea that is Being Alive or Anyone Can Whistle, or the gentleness (midst the mayhem!) of Nothing's Going to Harm You (from Sweeney Todd), cannot be completely heartless. Sondheim does not write musicals; he writes masterpieces.

(2) The composers and lyricists of the American musical stage. Matchless craft- men, all of them.

(3) Bette Midler. It never ceases to amaze me that she is able to sing with her tongue so firmly in cheek. Now that she's dismantled disco, I eagerly await her attack on New Wave.

(4) John Phillips. As leader of the Ma- mas and the Papas (for me the greatest vocal group ever), he produced the quintes- sence of vocal harmonies.

(5) The Manhattan Transfer. The only group I have heard which can match the vocal expertise of the Mamas and the Papas.

(6) Barbra Streisand (pre-"Butterfly"). Come on, Barbra, let's have the Streisand we all know and love, once again in the company of Arlen, Mercer, Porter, and so on. With their songs you are unbeatable, with most of today's pop unbearable.

(7) Cleo Laine. Her version of Send In the Clowns must be one of the musical high spots of the past few decades; a superb voice at all times.

R. A. Baker
Pietermaritzburg, South Africa

Peter Reilly replies: I fully agree on Sond- heim, Streisand, and Midler. Peggy Lee makes it four. How about Ethel Merman, Al Carmines, and Marvin Hamiltsch to make up a Magnificent Seven?

ABX Comparator

The correct address for the manufactur- er of the ABX Comparator discussed in July's "Technical Talk" is: ABX Company, P.O. Box 423, Troy, Mich. 48099.

ABX Company, 3101 West 8 Mile Road, Detroit, Mich. 48216
Introducing the TC-K81 discrete three-head tape cassette deck.

The superiority of three-head cassette tape decks is well known. With three heads you can achieve the individual optimum head gaps for record and playback. Without compromising the head gaps as in conventional two headed systems. You get a wider frequency range and a higher frequency response.

The real advance in three-head technology is Sony's TC-K81 discrete three-head cassette tape deck. Each head has its own individual casing and suspension systems. With Sony's three individual heads you get precise azimuth alignment* and equal record and playback head to tape pressure. Features that combination or other discrete three-head systems can't offer. And you don't have to worry about unwanted magnetic leakage flux, as in combination three-head systems, when you are monitoring the actual recorded signal. In short, three heads have never been better.

We also used Sendust and Ferrite for the heads in the TC-K81 to increase linearity and frequency response. S&F heads are ideal to get the most out of metal tapes. As well as Regular, Chrome and FeCr.

Sony's closed loop dual capstan drive system, unlike other dual capstan drives, assures equal torque distribution to both take-up and supply reels.

And our new cassette deck really shows its stuff in Bias Calibration and Record Level Calibration Systems. Two built-in oscillators and Multi-function LED Peak Meters let you adjust Bias and Record Level for flat frequency response to optimize the performance of any tape. Sony's quality shows on the inside with linear BSL (Brushless & Slotless) motors and a damped flywheel to eliminate resonance. Metallized film resistors and Polypropylene capacitors promise clear sound reproduction. And the TC-K81 has Dolby** IC, Headphone/Lineout attenuator and all the other sound quality standards to improve musical performance. You can pop, rock and bop. Or enjoy the airiest of arias with profound fidelity and Sony quality.

The TC-K81. See it. Hear it. And you'll say, yes.

*Factory aligned
**Dolby is a registered trademark of Dolby Laboratories
The continuing story of TDK sound achievement.

Part Four.

In previous chapters we've told you about the technological breakthroughs that make TDK tape so outstanding. We've shown you how TDK tape is wound on a perfectly circular hub/clamp assembly for the smoothest possible flow of sound. But the perfection of the first two phases would be wasted effort if tape travel were inconsistent or slowed down by excess friction. Part Four, the TDK bubble slip sheet, is one of our unique answers to reducing friction. On it rests TDK's reputation for smooth-running sound.

TDK engineers painstakingly studied tape travel. They found the edge of the tape comes into direct contact with the cassette at several points. At any of those critical spots, the tape can be slowed down, tilted away from the parallel, side-tracked or damaged. The need to reduce friction was evident. And it had to begin where the tape edge makes contact with the shell.

The TDK slip sheet first came into existence as a flat piece of paper. Our engineers knew it had to do more than reduce friction. It also had to maintain constant tape speed and perfect tape winding. Two formulations met the exacting TDK standards. Ultra-thin paper coated with silicone. And teflon coated with a fine layer of graphite. To further diminish the area of contact between tape and slip sheet, our engineers created the bubble concept.

Each TDK bubble slip sheet is computer-designed with twenty bubbles of varying diameters. Each bubble slip sheet is manufactured to micron tolerances to guarantee uniformity in height. In operation, the TDK bubble slip sheet maintains a constant running angle for the tape, minimizing friction. Tape winding is even and consistent. Your music is recorded and played back in a safe, reliable environment. Music is what it all comes back to.

That's why TDK considers all parts in a cassette equally important. And why every effort is made to achieve a perfect interplay between them. It's an achievement you'll hear every time you play your favorite music on TDK.

Music is the sum of its parts.
The "Speaker Lead Compensator" in NAD's Model 3040 integrated amplifier senses the current flow in the leads and produces a correction voltage to compensate for lead resistance. The 3040 also has a low-frequency Speaker EQ feature that extends the useful bass range of nearly all popular acoustic-suspension speakers by one octave while maintaining their effective Q, transient response, and phase behavior. Sharp-cutoff infrasonic filters remove rumble and noise signals below 20 Hz.

The Model 3040 is rated for a continuous output of 40 watts per channel into 8 ohms from 20 to 20,000 Hz with no more than 0.02 per cent distortion. On a short-term basis it can put out more than 110 watts into 4 ohms and more than 140 watts into 2-ohm loads. A rear-panel switch bridges the amplifier for mono operation, in which it has a continuous-output power rating of 100 watts into 8 ohms. Other features include soft clipping, dual LED power meters, selectable phono capacitance, two phono inputs, and an RIAA-equalization accuracy of ±0.3 dB. Price: $379.

Teac's Three-motor Moderate-price Open-reel Deck

It is claimed that Aiwa's HR-50U High-Com noise-reduction system can produce a 25-dB improvement in tape-recorder signal-to-noise ratio as well as increasing the total dynamic range to as much as 100 dB. The system can be used with any cassette or open-reel deck. Signals processed through the HR-50U are free, it is said, of the audible coloration and "breathing" possible with some other systems. To avoid encode-decode errors, the unit comes with infrasonic and multiplex filter functions. There are front-panel controls for tape sensitivity, a twelve-step peak-reading level display, and a bypass switch. Compression while recording is 2:1, expansion during playback is 1:2. Frequency response is given as 20 to 20,000 Hz ± 1 dB. Dimensions are 9½ x 9½ x 9½ inches. Price: $230.

The CR 610 from Jumetite Laboratories Ltd. is a modular two-way speaker system with a crossover frequency of 600 Hz. The treble module of this corner-mounted unit contains a ribbon speaker driving a vertical horn facing a reflector. The reflector directs the sound into the listening area and controls the dispersion pattern. Low frequencies are provided by two 10-inch woofers in an acoustic-suspension arrangement. Frequency range is given as 34 to 18,000 Hz, impedance as 8 ohms. The unit generates an 89-dB sound-pressure level measured at 1 meter with a 1-watt input. It can handle at least 75 watts peak input above 600 Hz and 200 watts transient input below 600 Hz. System height is 66 inches; required floor space in a corner is a 151/4-inch square. Price: $1,590 in oiled walnut; $2,010 in rosewood. Jumetite Laboratories Ltd., Dept. SR, 1300 Richards Street, Vancouver, B.C. V6B 3G6, Canada.

Aiwa's Add-on "High-Com" Noise Reducer

Teac's X-3 open-reel tape deck has a d.c. servo-controlled capstan motor and two induction-type reel motors. The unit has three heads and source/tape monitor switching. Other features include microphone/line mixing, a record-mute switch, two speeds (7½ and 3½ inches per second), separate two-position bias and equalization switches, and spring-loaded reel holders. The head cover is detachable for ease of maintenance and editing. Price: $550.

The two-speed Pro 100 belt-drive turntable from BSR has a removable "gentle-operating" multiphase spindle that can hold up to three records (a single-play spindle is also supplied). The d.c. turntable motor is part of a quartz-locked speed-control system. The straight, low-mass, statically balanced tone arm has a carbon-fiber head shell and its own separate motor. A LED display on the front panel shows speed, elapsed time, stylus-use time, or levelness of the unit. Vertical and lateral cueing are controlled by front-panel switches, as are pitch, speed, disc diameter, and the automatic functions. An infrared remote-control unit has switches for play, reject, vertical and lateral cueing, and volume up/down. The turntable is available without the remote control as the Pro 200. Prices: Pro 300, $299.95; Pro 200, $249.95.

BSR Multiplay Turntable with Remote Control

The Model 3040 is rated for a continuous output of 40 watts per channel into 8 ohms from 20 to 20,000 Hz with no more than 0.02 per cent distortion. On a short-term basis it can put out more than 110 watts into 4 ohms and more than 140 watts into 2-ohm loads. A rear-panel switch bridges the amplifier for mono operation, in which it has a continuous-output power rating of 100 watts into 8 ohms. Other features include soft clipping, dual LED power meters, selectable phono capacitance, two phono inputs, and an RIAA-equalization accuracy of ±0.3 dB. Price: $379.

Circle 120 on reader service card

Teac's Three-motor Moderate-price Open-reel Deck

Teac's X-3 open-reel tape deck has a d.c. servo-controlled capstan motor and two induction-type reel motors. The unit has three heads and source/tape monitor switching. Other features include microphone/line mixing, a record-mute switch, two speeds (7½ and 3½ inches per second), separate two-position bias and equalization switches, and spring-loaded reel holders. The head cover is detachable for ease of maintenance and editing. Price: $550.

Circle 123 on reader service card

BSR Multiplay Turntable with Remote Control

BSR Multiplay Turntable with Remote Control
Without fidelity in the low frequencies, no speaker can deliver full high fidelity.

But the reason for adding the Audio Pro B2-50 Subwoofer to your system goes much deeper than having the bass essential to "life-like" sound reproduction.

The powerful built-in amplifier and fully adjustable passive/electronic crossover of the B2-50 enable your main amp and speakers to operate more efficiently, with less distortion.

Even the best of systems will become far better with the addition of a subwoofer. And the speed, accuracy and power of Audio Pro's patented "Ace-Bass" principle make the B2-50 the best subwoofer system.

Dolby HX Circuit in Onkyo Cassette Deck

- Onkyo's TA-2060 is a three-head, two-motor, direct-drive, metal-tape-capable cassette deck with Sendust record and playback heads and a double-gap ferrite erase head. The unit has double Dolby-B circuits and the Dolby HX system of headroom extension. Frequency response is from 20 to 19,000 Hz ± 3 dB with metal tape. Signal-to-noise ratio is 60 dB (Dolby circuits off). Wow and flutter is given as 0.04 per cent weighted rms. The "Acubias" system lets the user adjust bias and equalization for any tape used; the system uses built-in tone generators with the adjustments monitored on the deck's peak-hold-type meters. The "Auto-fade" feature permits post-recording of fade-outs. Price: $449.95.

Circle 125 on reader service card

Sony Turntable Has Tone Arm with Computer Control

- The Biotracer tone arm in Sony's fully automatic PS-X75 turntable incorporates two linear electric motors to control all the tone arm's functions. Each of the motors is monitored by velocity sensors connected to a microcomputer. Stylus force is controlled electronically; the sensor system corrects for the effects of record warp and even electrostatic attraction of the unit's dust cover. Antiskating force is also electronically monitored and controlled, with the correct force applied regardless of tracking force, stylus shape, or other factors. The linear motor system is also claimed to dampen infrasonic resonances. The tone-arm motors allow control of both left/right and up/down arm movement without raising the dust cover or touching the arm.

The brushless, slotless direct-drive turntable motor in the PS-X75 is part of a Magnetdisc Servo Control system that monitors speed and corrects for deviations. Wow and flutter is given as less than 0.025 per cent (rms weighted) and rumble as −78 dB (DIN-B weighted). The turntable base is made of calcium carbonate, fiberglass, and a polyester binder. The rigid material is said to be acoustically inert and to absorb the high-level, low-frequency sounds that normally generate acoustic feedback. The PS-X75 measures about 6 ¾ x 19 ½ x 17 inches and weighs about 28½ pounds. Price: $500.

Circle 126 on reader service card

JVC Tuner Gives Better Reception Of Weak Signals

- The Quieting Slope Control in JVC's T-X3 tuner is an adjustment circuit that helps quiet the noise of weak FM signals by automatically varying the amount of high-frequency blend. When the signal strength falls below 30 microvolts (µV), the tuner increases its stereo 50-dB-quieting sensitivity from 36.8 to 31 dBf. The detector circuitry uses a phase-tracking loop to obtain an alternate-channel selectivity of 70 dB. Stereo decoding is by a crystal-controlled phase-locked-loop circuit. Specifications include 1.8 µV 50-dB-quieting sensitivity in mono, 0.10 per cent total harmonic distortion at 1,000 Hz in stereo, capture ratio of 1 dB, 50 dB stereo separation at 1,000 Hz, frequency response of 30 to 15,000 Hz ± 0.3, −2.0 dB, and subcarrier suppression of 50 dB. FM antenna input is 75 ohms, unbalanced. The AM section of the T-X3 has a sensitivity of 200 µV per meter with the built-in bar antenna. Dimensions are 3 ½ x 18 ½ x 14 ½ inches. Price: $219.95.

Circle 127 on reader service card

(Continued on page 16)
For years, Mitsubishi has been making brilliantly engineered, but expensive, separates.

Now, we're making brilliantly engineered, but affordable, receivers. Receivers that offer so much more for the money, they simply cannot be overlooked.

Because our new $390* R10 and $560* R20 (R20 shown) share much of the technology in our highly respected separates, they give you more power and meaningful features than anything else in their price range.

Like a switchable IF bandwidth control that lets you match receiver characteristics to varying signal conditions.

Like 60 watts per channel (R20) and 45 watts per channel (R10) minimum RMS at 8 ohms from 20Hz to 20kHz with no more than 0.02% total harmonic distortion.

Like sensitivity of 9.3dBf (1.6µV). FM signal-to-noise of 84dB mono, 80dB stereo. And phono signal-to-noise of 94dB.

The new R10 and R20.

For people who could never afford Mitsubishi, but always had an ear for it.

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Mesa’s Wedge-shape Acoustic-suspension Car Speakers

Mesa’s wedge-shape Model 20-ZX car speaker is a two-way system made up of a 2-inch cone tweeter and a pair of woofers, one 3½-inch active unit and a 3-inch passive unit directly behind it. Frequency response is 60 to 20,000 Hz with crossover at 6,000 Hz. Recommended for use with amplifiers ranging from 10 to 30 watts, the 20-ZX has an impedance of 4 ohms. The cabinet is black molded resin and asbestos with a black aluminum grille. The speakers measure 8½ x 4½ x 6 inches and weigh 3 pounds each. Price: $110 per pair.

Circle 129 on reader service card

Programmable Sansui Turntable

Sansui’s XR-Q11 turntable features an internal microcomputer system that can be programmed to play up to seven selections on a record side in any order. After programming, the unit’s operation is completely automatic from the initial cueing to the final arm return and shut-off. All controls are on the front panel outside the dust cover. The platter speed is monitored by magnetic heads that read markings on the inside of the platter; deviations trigger a fast-acting quartz-servo speed-correction circuit, which is claimed to be five times more accurate than conventional speed-control systems. Wow and flutter is given as 0.015 percent, turntable signal-to-noise ratio as 78 dB. The straight, low-mass tone arm is pivoted at the point that “minimizes vibration transfer.” For feedback isolation, the motor and arm are mounted on a rigid cast-zinc subassembly within the turntable base.

Price: $650.

Circle 130 on reader service card

NOTICE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturers. 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 subject to change.

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American Acoustics Labs Introduces a New Speaker Series

American Acoustics Labs’ Impression series of vented speaker systems have 1-inch soft-dome tweeters, 4½-inch midrange drivers isolated from the speaker-cabinet pressures, and woofers with closed-cell foam surrounds. The drivers in all systems are vertically aligned for better imaging and flush mounted to reduce the effects of diffraction. A high-frequency balance control is installed on the front panel of each speaker. There are four models in the line, ranging from the two-way IP-98 to the three-way, four-driver IP-920 (shown). All have nominal impedance ratings of 8 ohms and frequency responses that extend to 22,000 Hz ± 3 dB. The IP-920 has two 10-inch woofers and crossover points of 500 and 2,000 Hz. Dimensions are 35³/₄ x 14½ x 11½ inches. Weight is 52 pounds. Price: $598 per pair. American Acoustics Labs, Dept. SR, 629 West Cermak Road, Chicago, Ill. 60616.

Circle 129 on reader service card

New Products
latest audio equipment and accessories

FREE!
Introducing the bookshelf turntable.

Mitsubishi's new linear-tracking, vertical turntable. The LT-5V.
It fits where ordinary turntables won't. Like on a bookshelf.
It has a tangential tonearm instead of a pivot arm. So tracking error is infinitesimal.
It has an electronic logic system.

Which sets record speed, cues and returns the tonearm, or replays the record.
Its vertical design is less sensitive to feedback.
And its price is half that of other linear-tracking turntables.
Five sound, practical reasons to buy the new LT-5V.
And now for the real reason.
You can invite fellow audiophiles over to your place.
And bring them to their knees.

Call 800-447-4700 toll-free for the name of your nearest dealer. In Illinois, call 800-322-4400.
For information, write Mitsubishi Electric Sales, America Inc., Dept. 00, 3010 East Victoria St., Compton, CA 90221. In Canada: Melco Sales Canada, Ontario.

CIRCLE NO. 34 ON READER SERVICE CARD
THE SOUND YOU'LL NEVER GET FROM A CASSETTE DECK IS NOW HERE AT A CASSETTE DECK PRICE.

Teac's new X-3 open reel deck costs no more than a good cassette deck. But its fidelity is far superior to that of even the most expensive cassette deck. For a very simple reason. **More is better.**

Open reel tape running at 7½ ips is four times faster than standard cassette tape. And twice as wide. So the total tape volume of open reel is 16 times greater than cassette. That means there are 16 times more magnetic particles to imprint the signal. And that means you get as much signal as possible—especially high frequencies—all without distortion. Plus a much greater capacity to preserve dynamic range.

Cassette decks can't give you this kind of performance simply because there are inherent limitations in the cassette format. No matter how good the hardware. Even with improved software, the basic problems remain: saturation, overload, distortion. And disappointment.

And fidelity isn't the only thing you get more of with the X-3. You get more time. You don't have to stop in the middle of a recording to flip the tape. So you get an uninterrupted performance. The way it was meant to be heard.

**A classic idea.**
The X-3 is built the way all Teac machines are built—to last. And to perform. You get the classic, 3-motor, 3-head design that established Teac's reputation 25 years ago. And you get it for the price of a good cassette deck.

Which means you can finally have the sound you thought you couldn't afford. From Teac.

**Performance specifications**

- **Signal-to-noise ratio (overall)**
  - 58 dB (3% THD level, weighted)

- **Wow & flutter**
  - (NAB Weighted) 0.04% at 7½ ips; 0.06% at 3¾ ips.

- **Frequency Response**
  - (overall) 30–28,000 Hz at 7½ ips
  - 30–20,000 Hz at 3¾ ips

- **Playing time (both sides)**
  - 3 hours at 3¾ ips
  - with 1800 feet of one mil tape
Actual retail prices are determined by individual TEAC Dealers.
Digital Dilemma

Q: With all the talk about digital recording and equipment, I'm wondering what I will have to do when digital really gets here. Will I have to get all new digital recordings, or will I be able to play my standard records on digital turntables?

A. Your anxieties are premature, to say the least. It is probable that digitally encoded audio discs will be here sometime in the early Eighties, but standard LPs will probably also be produced for at least the next twenty years or so. Although videodiscs and digital audio discs will probably be playable on the same "turntable" (it would be ridiculous if separate machines were required), the standard LP record will require today's "old-fashioned" player.

Incidentally, the major advantage I see in digital discs is their ability to be played softer, not louder. Personally, I don't want to produce a greater average sound-pressure level in my living room, but I do want to be able to set the volume control on my equipment so as to hear a loud level during loud passages without being inundated by hum, hiss, and surface noise during soft passages. (For some other ramifications of loudness-vs.-softness question, see "Power and Dynamics" in the September "Audio Q. & A.")

Hum Loss

Q: I'm puzzled about a recent test report in which Julian Hirsch tested a very high-power basic amplifier and found the noise level to be 73 dB below a 1-watt reference output at the maximum gain setting of its input-level controls. However, at minimum gain the noise level was 64 dB, or 9 dB worse. Is there an explanation?

A. In most of Mr. Hirsch's reports, an A-weighting network is used to "weight" noise figures in accordance with standard measurement practices. The purpose of the weighting network is to adjust the measured figures so that they more closely reflect the audibility of the noise. Since the ear's sensitivity varies with frequency, the various compensating weighting curves adjust the meter response roughly to parallel that of the human ear. The A-weighting curve attenuates the meter reading by about -30 dB at 60 Hz based on a reference level of 0 dB at 1,000 Hz. This means that if there are equal-strength electrical-noise signals at 60 Hz and at 1,000 Hz, the 60-Hz noise will be heard and read (if A-weighted) as having 30 dB less strength than the 1,000-Hz noise.

To return to the specifics of reader Georgiadis' question: Mr. Hirsch tells me that when measuring the noise level of very high-power amplifiers he frequently doesn't use the A-weighting network because he doesn't want to risk the real possibility of its being destroyed by the output power involved. For that reason, the signal-to-noise-ratio figure on very-high-power amplifiers is not comparable to—or as low as—measurements made on some other amplifiers. However, since the figures are good enough that no noise is audible during listening tests, it was not felt that reader confusion would result.

As to why the noise measured lower with the gain control turned up, that can be explained by the presence of some hum picked up at the amplifier's input that canceled 9 dB worth of internal hum. Incidentally, when the distortion measured at the output of an amplifier reads marginally lower than the distortion in the input signal, the same sort of cancellation is taking place. In both cases, the noise and distortion figures usually have to be very low before measurable cancellation occurs.

Stereo-AM Rebuttal

Q: I was startled to read your response to Frank Marks' question in the July issue. I cannot fathom your dismissing AM stereo with a "so what" unless you are under the misapprehension (so common among radio engineers) that AM is limited in its fidelity by FCC mandate. The fact is that AM broadcasters in the United States...
AFTER 500 PLAYS OUR HIGH FIDELITY TAPE STILL DELIVERS HIGH FIDELITY.

If your old favorites don’t sound as good as they used to, the problem could be your recording tape.

Some tapes show their age more than others. And when a tape ages prematurely, the music on it does too.

What can happen is, the oxide particles that are bound onto tape loosen and fall off, taking some of your music with them.

At Maxell, we’ve developed a binding process that helps to prevent this. When oxide particles are bound onto our tape, they stay put. And so does your music.

So even after a Maxell recording is 500 plays old, you’ll swear it’s not a play over five.
Our ADC Integra phono-cartridge’s carbon fibre VS their plastic.

Once you compare the ADC Integra cartridge to the competition you soon realize there’s really no competition at all. Let’s start with the basics. Like the plastic our competitors use. A bit too basic for a design as revolutionary as the ADC Integra.

That’s why our engineers chose to precision mold the Integra from a special carbon fibre material pioneered for aerospace use. Combined with our unique integrated headshell/cartridge design, it makes the ADC Integra up to 50% lighter than conventional headshell and cartridge combinations. And because the Integra is lighter, it tracks better. And preserves your record collection longer. For most people that would be enough. But not for ADC. Our Integra’s carbon fibre material also eliminates any low frequency loss or flexing.

But the biggest advantage of all has to be that all the advantages of carbon fibre are available in three different Integra models. One for every kind of budget. All for one kind of sound...devastating. If you’d like to hear more, call Audio Dynamics Corp., toll-free (800) 243-9544 or your ADC dealer.

AM’s reputation for rotten audio quality is due mostly to the poor quality of conventional AM receiving equipment (even in high-fidelity receivers) and, to some extent, to the lack of effort to transmit AM at high fidelity. AM since hardly anybody can receive it that way. You are wrong in saying that for AM broadcasters the goal is “not higher fidelity.” AM broadcasters have been pushing hard for stereo AM for a long time, more for the improvement in receiver design that must result than for stereo itself.

As an example of what can be achieved with AM, station KEX in Portland, Oregon, currently broadcasts audio perfectly flat to beyond 15 kHz and with lower distortion than any commercial FM station on the West Coast. The lack of restriction of high frequencies makes the station sound incredibly clean and open. Any AM station can achieve the same, and many will when receivers reach the market that can reproduce AM accurately.

AM has a further advantage: the multipath problem that bedevils FM in urban areas is essentially nonexistent on AM. This has obvious advantages not only for cars, but also in many sections of our cities. In regard to noise reduction, the synchronous AM detector offers hope for great improvement; in any case, when heard from a good receiver AM is not as noisy as is commonly believed.

I’m afraid you have given a lot of audiophiles some incorrect impressions about the potential quality of AM stereo, and I hope you set the record straight.

Eric G. Norberg
Consolidated Communications Consultants
La Crescenta, Calif.

My “so what” was not really a reaction to any inherent technical audio inadequacy of stereo AM but instead was prompted by my view that no real effort would be made to realize its hi-fi potential for the vast majority of listeners. I know that stereo AM can work well since I have heard an impressive Sansui demonstration broadcast using their own low-powered transmitter and a prototype stereo-AM receiver. The sound quality was at least as good as that I normally hear on FM. So it’s not that I believe that stereo AM cannot be broadcast with high fidelity, it’s just that I suspect that usually it won’t be. The question is not really worth arguing about since time will resolve the issue. I truly wish Mr. Norberg good luck in his crusade to make stereo AM a new nationwide high-fidelity medium—but I just don’t think it’s going to happen.

Because the number of questions we receive each month is greater than we can reply to individually, only those letters selected for use in this column can be answered. Sorry!
WHY PAY FOR FRILLS IF WHAT YOU REALLY WANT IS PERFORMANCE?

INTRODUCING THE NEW AR93 AND AR94 HIGH TECH SPEAKERS

The frills are gone.

Instead of removable grills, chrome plating and a lot of brushed aluminum, AR has invested everything in what you'll hear.

The result: a pair of 3-way floor-standing speaker systems at prices you'd expect to pay for some 2-way bookshelf systems.

The AR93 has four drivers including a pair of side-firing woofers which eliminate interference from secondary reflections and are thus remarkably accurate all across the bass range.

The AR94 has three drivers. With a new AR cross-over system, its mid-range works with the woofer to act as dual front-firing woofers across the bass range.

You get added low-end punch in a 3-way system. Both speakers are bigger than anything in their price range, for more bass response. Both have vertically arranged drivers for sharpest stereo imaging, liquid cooled tweeters for improved power-handling, and the AR Acoustic Blanket* for smooth frequency response.

We set out to engineer more speaker for the money than ever. And in aiming for that goal something exciting happened. We achieved a stunningly handsome look. Sleek contemporary speakers, sheathed in a matte black, acoustically transparent fabric. A true blending of High Tech and Hi-Fi.

Speakers that please the eye. But above all, speakers that put your money where you can hear it.

For literature see your AR dealer or write AR at this address. Teledyne Acoustic Research, 10 American Drive, Norwood, MA 02062.

*CIRCLE NO. 71 ON READER SERVICE CARD

OCTOBER 1980
Crown makes American high-technology audio components, whose innovative designs and remarkable specifications established new performance standards for an entire industry. Crown amps, pre-amps, crossovers, equalizers and tuners are highly respected by audio enthusiasts. Performers, recording engineers and sound contractors choose Crown for their personal, and professional systems.

The Crown Information Package tells all about Crown and its products, possibly the finest collection of audio information easily available to you. Over 50 pages, including Crown technical papers on audio concepts, discussions of product design and operation, specifications, prices, dealer locations—and much more. Many illustrations in full color.

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CIRCLE NO. 15 ON READER SERVICE CARD

Audio Basics

By Robert Greene

BOOKS FOR BEGINNERS

Although these columns manage to convey some basic—and useful and necessary—information about various aspects of audio, there is simply too much information on most of the topics addressed to be adequately treated in one monthly column or, indeed, in an entire issue of the magazine. Moreover, Stereo Review is not so much an educational as a news medium, its primary function being to keep readers abreast of what is new and interesting in audio. And so, though reading these pages regularly for a couple of years will impart an impressive amount of education in the subject, a more efficient approach is to read one or two of the many introductory books available. Since there are so many, I have prepared a short guide to some of the best of them. All are available in paper covers, and any that you can’t find locally can be ordered from the publishers.

If you want to start small and at the right price—free—the J. C. Penney Co. (Stereo Dept., 1301 Avenue of the Americas, New York, N.Y. 10019) has put out a twenty-eight-page booklet called "Audio Components." It carries no advertising and is not slanted toward Penney’s own products. What it does is present the kind of really basic basic information you need to understand common audio terms, recognize various types of components and their functions, read specifications, budget your audio dollars, and obtain the full benefit of manufacturers’ warranties (a matter too often overlooked in advice to beginners).

The Institute of High Fidelity, or the IHF (2001 Eye Street, N.W., Washington, D.C. 20006), is a trade association of many of the manufacturers whose products you see advertised or written about in these pages. One of its purposes is to educate the public in the use of audio products, and to that end it has prepared an Official Guide to High Fidelity (207 pages, $5.50 postpaid within the U.S.). This goes considerably beyond Penney’s booklet, but it too is intended for the completely nontechnical reader and assumes no prior knowledge. It begins with an explanation of the rationale for using separate components in a hi-fi system and continues with chapters on selecting components, selecting and using loudspeakers (with an explanation of how they work), and on FM tuners and antennas, record-playing equipment, tape equipment, headphones, and accessories. Finally, there is a chapter on how to assemble and install a complete system. The book is structured rather like a textbook; each chapter begins with a summary of what it contains and ends with questions so you can test your understanding of what you’ve read. There is also a glossary of hi-fi terms and a series of tables with typical specifications for various kinds of equipment.

Another book we’ve been telling inquiring readers about for some time was recently updated: Gordon J. King’s Master Hi-Fi Installation (151 pages, $6.95 postpaid from Hayden Book Co., Inc., 50 Essex Street, Rochelle Park, N.J. 07662). This is roughly similar to the IHF Guide in intent and coverage, and a number of cleverly devised drawings are included for clarification. The wording occasionally betrays the book’s British origin, but there’s nothing that should cause problems for Americans.

A perennial basic text is Edgar Villchur’s Reproduction of Sound (92 pages, $2 plus (Continued on page 26)
Record Care, Part 1:
Aqueous Cleaning vs. Organic Solvents

Electron microscopy (Figure 1) shows the principal cause of record wear: small particles of microdust, deposited from the air by gravity, are ground along the record groove by the stylus. Surface noise goes up. Sound quality goes down.

Figure 1

Record etched by dust held to surface by “slick” treatment

In some record care products, organic solvents are used rather than water. Organic solvents such as ozone-gobbling chlorofluorocarbons, petroleum distillates (hexane, heptane) and alcohol concentrates are indeed speedy extractors and delivery solvents. They evaporate fast. Some organic solvents can dissolve vinyl stabilizers. Organic solvents may leave a “slick” looking record by treating the disc with other compounds carried in the solvent mix. In doing so, record contamination may also be dried back onto the disc in a nice even layer. Dust is often “held” to the record surface by “treatment.”

Figure 3

Electron micrograph (Figure 3) shows a record cleaned with the Discwasher D4 System. High technology record care leaves only a clean surface.

Figure 2

Drop of D4 Fluid on record

Figure 2 shows a drop of the aqueous Discwasher D4 Fluid, literally lifting dust and contamination out of record grooves. The extraordinarily complex D4 Fluid uses water pure enough for kidney dialysis, along with eleven chemically engineered additives that still results in lower dry-weight residue than most tap water. This formula is amazingly high in cleaning activity, uniquely safe for vinyl and vinyl additives, and preferentially “carries” contamination into the new Discwasher D4 pad.
LET'S COMPARE APPLES with APPLES:

Mura RED SET III vs. Sony MDR-3

Compare the specs Sony publishes.

Red Set III for about half the price of a Sony, all comparisons end.

Ask your audio dealer for a Red Set demonstration today.

MURA RED SET III

1.6 oz. of dynamic high fidelity!

MURA

You'll be hearing from us.

CIRCLE NO. 37 ON READER SERVICE CARD

EXPAND YOUR RECORD COLLECTION WITHOUT BUYING MORE RECORDS.

With the Pioneer RG-2 Dynamic Processor, you'll hear everything on your records that the artists put into them. Like the extreme loud and soft passages that are lost during the recording process. The RG-2 can help restore your music to its original condition. It not only expands dynamic range up to 16dB, but it also reduces tape hiss and other noise by as much as 6dB. And you'll be glad to know our range expander is in dynamic range up to 16dB, but it also reduces tape hiss and other noise on your records that the artists put into them.

Like the extreme loud and soft passages that are lost during the recording process. The RG-2 can help restore your music to its original condition. It not only expands dynamic range up to 16dB, but it also reduces tape hiss and other noise by as much as 6dB. And you'll be glad to know our range expander is in dynamic range up to 16dB, but it also reduces tape hiss and other noise on your records that the artists put into them.

As you can see, they're virtually identical.

Now look at the RED SET specs—real specs with limits: No peak or valley of more than 2dB from 1,000 Hz reference over the frequency range of 150 Hz to 19,000 Hz. Total distortion 0.3% at 100dB output from 100 to 20,000 Hz.

The RED SET's superior performance is the result of Mura's uncompromising selection of materials regardless of cost: Samarium cobalt (rare earth) magnets for maximum flux density, 60 micron anoxic copper plated aluminum wire for light weight with high efficiency coupling; tapered, formed mylar diaphragms for full frequency response—the dome shaped center portions are tweeters extending the highs to 20,000 Hz, the molded stiffeners in the outer cones prevent low frequency breakup and keep the speakers operating as air pistons down to 20 Hz.

When you consider that you can buy the Mura RED SET III for about half the price of a Sony, all comparisons end. Ask your audio dealer for a RED SET demonstration today.

CIRCLE NO. 67 ON READER SERVICE CARD

STereo REVIEW
When it comes to performance, size doesn't count...anymore.

MS650
DC
MINI -SPEAKER
A
...
up un
suowad quality cf
mini-spea
exac-1 what yogi
probably im aginted.
Minimal bass response. Minimal power handling capacity. Minimal definition.
That was until ADC perfected the
incredible new MS-650 mini-speaker
system. The only thing small about it, is
its size.
Here's why. Unlike conventional
mini-system drivers that can overheat
and distort under high power, both the
MS-650's 1" polyamide soft dome
tweeter and 6½" high compliance
woofer are speck'ly cooped with ferro-
fluid in the voice coil gap for better
frequency response, lower distortion,
and greater power handling.
They're so effective the new
MS-650 mini-speaker system can
handle up to 150 watts of power. But
what's even more amazing is that while
it can handle all that power, it doesn't
need it. A mere 20 watts input produces
an awesome 12dB output. That's
enough to wake the neighbors. And the
whole neighborhood. But that's not all.
To further enhance sound quality
the MS-650's feature an effective
combination of first and higher order
crossover networks for a smooth,
natural transition between high and
low frequencies. That's a big difference
between the crossover systems most
mini-speakers use.

But the differences don't stop
there. The MS-650's unique non-
parallel cabinet sides were computed
to allow a gradual termination of
midrange frequencies at the cabinet
edge. The sound you'll hear will be
more natural...at all levels. Even the
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effects of cabinet resonances, the
MS-650 is constructed of Kapur T.P.M., a
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Audio/Video News

By David Ranada

CBS MASTERSOUND

Prompted, no doubt, by the commercial success of such discs as the Tchaikovsky 1812 Overture on Telarc and Mobile Fidelity's series of half-speed-mastered repressings, a "major" label has finally entered the audiophile-disc market with new and revised pressing techniques, high-technology recording processes—and audiophile prices.

Mastersound, a new label from CBS covering pop, rock, jazz, and classical music, will release (1) half-speed-mastered discs from older multi-track analog tape masters, (2) digitally mastered recordings cut at playing speed, and (3) prerecorded cassettes utilizing chromium-dioxide tape, screw-fastened housings, and Dolby-B processing. Columbia's versions of these mastering and duplicating processes are the direct result of investigations conducted by the CBS Technology Center.

Possibly the most significant fruits of the research are the Mastersound discs themselves. They are made with an improved vinyl compound which, it is claimed, offers reduced noise and better molding characteristics than earlier formulations. The pressing process has also been modified to provide an altered disc cross section, a 12 per cent increase in disc weight, and more critical quality-control tests. The production changes have even extended into the final packaging. As with other audiophile releases, Mastersound inner sleeves are of soft plastic (with a paper stiffener) which will not scratch the disc surface. The customary outer shrink wrap has been replaced by a reusable heavy-gauge plastic envelope. The loose-fitting envelope will not warp its contents but will provide a fairly dust-proof, long-life enclosure. These developments, especially the new vinyl compound, are important because they might eventually diffuse into the rest of the CBS product line and into those of the other major record companies.

Of course, all this research would be pointless if the resulting discs showed no improvement in quality. Happily, this is not the case; sample copies I've heard of a half-speed-mastered Bruce Springsteen album and a digitally mastered recording of Leonard Bernstein leading the New York Philharmonic in Shostakovich's Fifth Symphony both sounded quite good.

The first thing that struck me when comparing the new version of the Springsteen album with its conventionally made equivalent was that the Mastersound disc was cut about 3 dB louder than the conventional disc. Unless this is compensated for in playback, any direct comparison between the new and old production processes will inevitably give the sonic edge to the new, louder product. However, with the overall volume levels equalized, the two discs sound very much alike. While the music is playing, the sonic limitations belong to the master tape, which does not seem to have that great a dynamic range.

The most important difference between the two pressings was the lower noise level on the Mastersound disc. Some crude measurements I made of the disc noise above 1,000 Hz indicated that the Mastersound pressing was 1 to 3 dB quieter than the conventional one—about equal in noise level to a Telarc or Deutsche Grammophon pressing. Molded-in transient noises (ticks and pops) were totally absent. The lower noise level, coupled with a 3-dB-higher recording level, makes the Mastersound pressing 4 to 6 dB quieter overall than the conventional CBS pressing.

However, the higher cutting level takes more groove space and therefore requires taking the groove closer to the center of the disc. Theoretically, as the tone arm approaches the label, tracing distortion is higher and mistracking is more likely—as is a rolloff in the disc's high-frequency response. While I heard none of these problems with the Springsteen album, they could very well occur with extremely demanding source material (or if a low-quality phono cartridge were used). The Shostakovich Fifth Symphony is such demanding material, and the Mastersound pressing passes the test with flying colors. Bernstein's excellent musical performance has much to do with the overall success of this recording, for I find that the recorded sound suffers somewhat from my own pet peeve: improper microphone technique (the pressing, however, is excellent). The disc, produced by John McClure, is relatively free of the sonic and musical aberrations caused by close-in multi-microphoning (also known as multiple-mono), which tends to lend a distinct sense of technological artificiality to recordings. The sound here is a bit more "distant" than is the norm for CBS sessions but the sonic perspectives do shift disconcertingly at times (during solo harp passages in particular).

There are quite a few problems with my Mastersound cassette copy of Stravinsky's Petrouchka. Not only is the recording of a lower quality than the high-speed copy (made at sixteen times playing speed) was apparently done at too high a level. On my copy at least, the tape seemed to have been driven into saturation at times, resulting in a distinct increase of distortion and a loss of high-frequency detail, which does not seem to have that great a dynamic range.

Recordings. The sound here is a bit more similarly close-in multi-microphoning (also known as multiple-mono), which tends to lend a distinct sense of technological artificiality to recordings. The sound here is a bit more "distant" than is the norm for CBS sessions but the sonic perspectives do shift disconcertingly at times (during solo harp passages in particular).

In sum, Mastersound has made a promising debut, one that would be particularly worthy of note if it were to inspire the rest of the large U.S. record companies to undertake a general overall improvement in disc and cassette quality. It is to be hoped that CBS will in future record a wider dynamic range on their master tapes while employing simpler, more natural-sounding microphone placements where musically appropriate. The enhanced quality of the sound would then be worthy of the Mastersound advances in pressing technology.


He created some of the world's most passionate music. Yet he died whispering the name of a woman he had never met.

She was his patroness...his confessor...his "Beloved Friend" in an intimate 14-year correspondence. She was the inspiration for his most romantic works. And yet he shrank from meeting her even when she invited it.

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Better Open Reel?

Q. If cassette-deck manufacturers can produce as good a copy of music as is possible on cassette tape, why can't open-reel machines produce much better results with 1/2-inch tape operating at 7 1/2 ips?

RON RAMPOLLA
Denver, Colo.

A. Good question! Cassette-tape tracks are 21 mils (0.021 inch) wide, and quarter-track open-reel stereo tracks are 42 mils wide, which gives a theoretical difference of 3 dB in signal-to-noise ratio: an improvement ratio of 2:1 in the power of the signal vs. the power of the noise. You can gain another 3 dB by going to 80-mil tracks—that is, "half-track" stereo—as the pros invariably do. And even when you double the speed, you get another 3-dB improvement (in theory) since, once again, you're pushing twice as much magnetic material past the playback head in a given period of time. Between the cassette speed (1/2 ips) and the usual open-reel home speed (7 1/2 ips) there are two such doublings (totaling 6 dB), which, coupled with the 3-dB improvement of the 42-mil track, totals 9 dB.

Don't you hear a 9-dB improvement between 7/12 ips-open-reel tapes and cassettes? That's a multiply unfair question, of course, for, in the first place, while we can easily detect differences of tenths of a decibel in an A/B comparison of pure noise signals, ten times as much difference (or more) would be required in, say, the 18-kHz response of a tape recorder before we can say we "heard" it with any confidence. Then, too, the Dolby noise-reduction circuits that are almost universal in cassette decks—but are rarely incorporated into open-reel decks—are designed to "fool" the ear.

In addition to these factors are the high-frequency "compression" and playback-equalization "time constants"; it would take several columns to discuss them fully. Reduced to basics, however, what it comes to is this: you can record more high-frequency information, at a higher recorded level, at a higher speed—but only you, the composer, and the instrumentalist know whether you need that additional capacity to record a specific musical selection. Except, perhaps, for archival purposes, there would be no reason in the world to use the most sophisticated studio mastering recorder you could find to record one of the early tinfoil Edison cylinders: you wouldn't be able to tell the "master copy" from what you could make with a $79.95 cassette deck! What higher tape speeds and wider tape tracks offer is a potential for improved performance, not a guarantee of audible improvement. That potential is very important to the professional and to the serious home recordist when the original sound source exceeds the limitations of the recording medium. For most home music this is not the case, which is why you don't hear that real 9-dB difference.

Four-track Mono Cassettes?

Q. Why doesn't somebody come out with a cassette deck that will record all four tracks monophonically, as most open-reel decks can do? It seems to me that this would involve only a couple of $1 switches.

DON BERIGAN
Houston, Tex.

A. Electronically, if you're willing to add a 15Ω resistor to your couple of $1 switches (to give the bias oscillator the same load it would have with stereo erase and records heads), you're right. Legally, on the other hand, there has been a problem posed by Phillips' insistence on format standardization as a condition of licensing the use of the phrase "compact cassette." Specifically, the problem was to ensure that a mono cassette deck could play a stereo tape. The restrictions seem to be easing, however, since Teac now has a deck (the Model 124 "Sinphase," reviewed in Stereophonic Review in September 1979) that permits a degree of four-channel mono recording.

At the same time, however, you should be aware that the amount of channel separation provided by the spacing of the magnetic tracks on a cassette tape is limited. It's one thing to record two parts of the same
AMPEX GM II HIGH BIAS TAPE.

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* From independent lab tests reported by Len Feldman in Audio Magazine, February, 1980. Write for your free reprint.

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Harmonic distortion of an untreated disc during first playing.
Harmonic distortion of an untreated disc after 100 playings.
Harmonic distortion of an identical disc, first playing after LIFESAVER treatment. Distortion is immediately reduced.
Harmonic distortion of a LIFESAVER-treated disc after 100 playings. Distortion remains lower than a new, untreated disc.

Compatibility Problem

Q. I have two cassette recorders: a stereo deck and a battery-operated mono portable. Tapes made on the component deck are fine when played on it, but when played on the portable they sound distorted. Is there any reason for this?

GARY W. CAPRIOTTI
Hamilton, Ontario

A. There are several possible explanations, starting with the very real possibility that your portable machine simply isn't designed to handle the frequency and dynamic (loud to soft) range of the recordings your component cassette deck can produce.

Not impossibly, however, you may be hitting the same problem that bedevils broadcasters and studios alike, namely, that some stereo signals won't "mix down" properly into mono. You probably expect to lose some high-frequency response when you play a good tape on your battery-operated portable, so you mentioned only "distortion." But a slight difference in the azimuth (perpendicularity) alignment between the mono playback head of your portable and the stereo head of your component deck can introduce phase differences between "left-channel" and "right-channel" signals that are discrete entities on the stereo tape but are automatically combined by a mono head that "reads" both tracks simultaneously. The odd reinforcements and cancellations within the overall combined signal often produce the "distortions" I suspect you are experiencing.

Timer Tricks

Q. Every cassette deck I see these days seems to have a switch for "timer record" and "timer playback"—using, of course, an external, accessory timer. I can understand the point of being able to switch on my recorder and tuner to record a selection being broadcast while I'm not at home. But what am I supposed to use the timer-controlled playback function for—entertaining my cat when I'm out?

WAYNE MILLWARD
Newton, Mass.

A. I must confess that when I first saw this "feature" on a cassette deck I had the same question. It is, I suppose, conceivable that some audiophiles like to fall asleep to music and (a) are unable to do so without wondering if the cassette will run out and shut off first, and (b) have a timer-controlled system that does not produce a turn-off "thump" loud enough to wake the dead. Alternatively, one might wish to use timer activation to wake up early in the morning to the final minute of Tchaikovsky's 1812 Overture rather than to a more conventional alarm clock.

STEREO REVIEW
Blue sky, clean air—a perfect day to hit the dirt. But that
good off-road trail is down the road some 90 miles.

No sweat. Getting there in your four-wheeler can really be
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SK 522T three-way surface mounts combined with
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Make tracks for your
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THE SPARKOMATIC SOUND.
FOR THE TRAVELIN' MAN'S EARS
AND WHAT'S IN BETWEEN.
Using human-engineering principles he learned while working with aircraft designers, West Coast resident Will Cloughley has built an audio-system housing he finds both practical and convenient. The equipment is arranged so that all electronic controls are within his easy reach from a rolling swivel chair that can be placed in front of the cabinet; the turntable and record collection are readily accessible when he stands up.

Each of the equipment compartments, which are designed to accept units up to 19 inches wide (standard rack-mounting size), is ventilated from below through ducts that are part of the cabinet's styling. A fan draws air in through slots in the front just beneath each equipment shelf, blows it through the electronics, and expels it at the rear.

Two drawers flank the B&O Model 4002 turntable (modified for use with a Grado Signature III cartridge) on the illuminated central shelf. At present these provide storage for record-cleaning accessories, but they can be removed to make room for a second turntable or other new equipment. Four of the lower drawers are specially built to hold boxed tape cassettes, each in its own slot with finger room for easy access.

The lower half of the cabinet has three vertical divisions. The leftmost one holds, from top to bottom, an Apt preamplifier, a Technics ST-9030 stereo FM tuner, and a Yamaha B-2 power amplifier. The two large chassis in the center portion (below the turntable) are both sections of a Technics RS-9900US cassette deck; the upper one holds the electronics and the lower one the transport mechanism. The two small units at the bottom are a Stax SRD-7 headphone energizer and a clock, with room between them for storing the Stax headphones. The righthand division of the lower cabinet holds a B.I.C. Beam Box antenna, a Nakamichi program timer, and an industrial multiple switching device that makes it unnecessary to run all the various components' a.c. power lines through the preamplifier's convenience sockets. The cabinet is made of solid oak and oak plywood throughout, and the upper half is detachable to facilitate moving. The back panel can be removed to give access to the wiring. The speaker systems that complete the installation are KEF Model 105s.

Mr. Cloughley works as a medical photographer and produces audiovisual material for which he does the sound recording and mixing. He is interested in music from India and in jazz, and he spends a great deal of time recording amateur musicians with whom he sometimes sits in.

Is your system an Installation of the Month? To find out whether it is, send a clear snapshot and a brief description of its components to STEREO REVIEW, Dept. IOTM, One Park Ave., New York 10016.
The Acoustic Matrix™ Enclosure of the Bose® 901 Series IV Direct/Reflecting® Speaker.

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The Acoustic Matrix™ enclosure contains 14 distinct regions which act as acoustical elements. Some isolate the nine Helical Voice Coil drivers as if each had a separate enclosure. In others, air moves at speeds up to 100 km/hour to reduce unnecessary cone motion. This virtually eliminates distortion while increasing low-frequency power output. Critical surfaces are aerodynamically shaped to control and smooth air motion.

The characteristics of this enclosure accurately complement the full-range drivers and Active Electronic Equalization of the Bose 901 system. Together, they can reproduce even the lowest bass notes with clarity and power unmatched by any speaker of conventional design. Regardless of size or price.

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MAKING GOOD SOUND BETTER

CIRCLE NO. 15 ON READER SERVICE CARD
An Important New Power-amplifier Design

The first-announced product of the Carver Corporation, the M-400 “magnetic-field” power amplifier, aroused quite a bit of speculation as to its “mysterious” operating principles. The circuit techniques necessary to produce a 200-watt-per-channel amplifier that is about one-fifth the size and weight and less than half the cost of similarly rated conventional designs are certainly of interest not only to technically minded audiophiles but to competing manufacturers as well. The Carver Corporation is currently negotiating licensing with a number of major manufacturers, so the new design approach is likely to be appearing in many receivers, integrated amplifiers, and sound-reinforcement systems in the next several years.

One of the several “secrets” of the Carver M-400 is a power supply whose output voltage tracks the audio-signal waveform, supplying the amplifier portion of the unit with just enough d.c. voltage to meet its moment-to-moment requirements. Not only does this relieve the amplifier’s power-output transistors of unnecessarily high power dissipation when the signal level does not require the full operating voltage (which is most of the time), but the novel methods of varying the power-supply voltage dynamically and of developing high levels of d.c. supply voltage from small, lightweight components are uniquely simple and efficient. (These methods will be described later.)

Designer Bob Carver likens the power supply’s operation to that of a rotating switch, or commutator, that selects the lowest supply voltage that will handle the instantaneous value of the signal. The power-supply output is used to power a more or less conventional linear-feedback circuit that would normally be able to deliver about 15 watts continuous output. When under the control of the commutator, this small amplifier has a 200-watt potential even while functioning as a clean 15-watt unit under low-signal conditions. The magnetic-field amplifier circuit operates coolest under idling or low-power conditions (which is the usual situation in home hi-fi listening), so the effective efficiency of the M-400 is therefore far higher than that of any conventional amplifier. Carver has taken advantage of the high efficiency of his design to virtually eliminate the usual heat sinks which account for much of the weight, bulk, and cost of a conventional power amplifier. (I say “virtually” because the chassis of the M-400 is its “heat sink,” aided by air passing through ventilating holes.)

The magnetic-field amplifier takes its name from a novel power-supply device that is dramatically lighter, smaller, and less costly than a conventional supply of similar capabilities. Most power supplies have a transformer whose a.c. output voltage is rectified, with the resulting d.c. voltage charging large capacitors. In addition to filtering hum components from the power-supply output, the capacitors form a reservoir that supplies short-term bursts of energy to the amplifier stage. The capacitors are replenished during the longer intervals when less power is required. As anyone who has ever lifted a 200-watt-per-channel (or larger) amplifier will appreciate, such a power supply can be very heavy, and it also accounts for a large part of the amplifier’s total bulk and cost.

The power-supply components inside the M-400 look superficially like those in a relatively low-power conventional supply. There’s a small transformer of normal appearance, but the filter capacitors are much smaller than one would expect to see in a high-power amplifier. The “transformer,” which Carver calls a “magnetic-field coil,” has unusual magnetic properties in addition to its normal transformer function of reducing the 120-volt a.c. input to a lower, more suitable voltage. Its primary current (the 120-volt a.c. input) is switched on and off by a “triac,” a power-switching semiconductor device. The triac is turned on during a varying portion of the 60-Hz cycle by control circuitry influenced by several factors, among them the power requirements of the audio signal itself.

A detailed technical explanation of the operation of the Carver M-400’s power supply is beyond the scope of this report, in essence, what it does is to store a large part of the energy required by the amplifier system in the magnetic field of the coil instead of relying entirely on conventional (and large and expensive) filter capacitors. Much of the primary current drawn from the power line by this supply is 90 degrees out of phase with the line voltage. This “quadrature” component of current does not represent power drawn from the line, so the true consumption of the M-400 (the part that shows up on electricity bills) is quite low. Still, the “amperage drawn by this amplifier can be surprisingly high under full-power operation; it is fused for 15 am-

Tested This Month

Scott Model 166 Speaker • Carver M-400 Power Amplifier
Pickering XSV/4000 Cartridge • Technics RS-M24 Cassette Deck
Yamaha P-750 Turntable
The Scott Model 166 is what is often called a “minispeaker,” although it is relatively large compared to some of the others currently available. But it is small enough to fit almost anywhere, and it has no pretensions to being a piece of furniture. It is not designed to be played at very high levels in a large room, but—as our tests showed—it will deliver a loud sound level in small- to medium-size rooms and is rated for a full frequency range (within the physical limitations imposed by its size).

The Model 166 is a two-way system whose 6½-inch acoustic-suspension woofer crosses over at 2,200 Hz to a 1-inch dome tweeter. The system impedance is nominal-ly 8 ohms, and it is designed to have at least 7 ohms impedance over the full audio range. The nominal rated power-handling ability of the Model 166 is 70 watts, and it can be used with amplifiers rated to deliver between 10 and 100 watts per channel. The frequency response is specified as 55 to 20,000 Hz ±4 dB, and the rated sensitivity is a rather high 92.5-dB sound-pressure level measured at 1 meter when driven by 1 watt of pink noise.

One of Scott’s stated goals in developing the Model 166 speaker was to make available the best possible reproduction for limited-space situations. It was also designed to be played at unusually high sound levels (for a small speaker), and to this end its voice coil employs high-temperature wire wound on a bronze form, and there is a ventilated pole piece to help cool the voice coil further. According to Scott, no special precautions are needed to prevent woofer burn-out even when the speaker is driven by a high-power amplifier.

The particle-board enclosure of the Scott Model 166 is finished in walnut-grain vinyl veneer. The removable grille is covered in dark brown cloth. The Model 166 is 13 inches high x 7½ inches wide x 6¼ inches deep, and it weighs 10¾ pounds. Suggested retail price is $119.95.

Laboratory Measurements. The recommended placement of the Scott Model 166 is against a wall at approximately ear level, and we installed our test speakers in that manner. The semi-reverberant-field frequency-response curve was spliced to a close-miked bass response curve, resulting in a composite frequency response flat within ±2 dB from 70 to 9,000 Hz. The high-frequency output rose smoothly above about 5,000 Hz to a maximum of +5 dB in the 17,000-Hz region, and it dropped off slightly at higher frequencies. The maximum bass output was at 100 Hz, where it was 4 dB higher than in the upper part of the woofer’s operating range; it fell off at the expected 12-dB-per-octave rate below the 85-Hz bass resonance. The overall vari-

(Continued on page 46)
1939...FIRST DIRECT-DRIVE TURNTABLE SYSTEM.
1951...FIRST MOVING-COIL CARTRIDGE.
1972...FIRST DIGITAL (PCM) RECORDING.

In 1939, while many turntable manufacturers were trying to make the transition from horn phonographs to electrical record players, Denon developed its first direct-drive turntable, (shown above). Denon engineers discovered that only a direct connection between motor and platter—free of the pulleys or belts found in more primitive drive mechanisms—could completely eliminate speed fluctuations that obscure musical detail.

Today, many turntable makers have discovered the virtues of direct-drive. It is now the accepted means of approaching state-of-the-art performance. But only one company has had 40 years to refine the direct-drive principle. It is the same company that 29 years ago developed another technology now in widespread use: the Moving-Coil Cartridge. It is the same company that changed the entire process of recording music by inventing digital (PCM) recording. The company is Denon.

1980...DENON'S DP-60-L DIRECT-DRIVE TURNTABLE.

The latest stage in Denon's refinement of direct-drive is the DP-60L Semi-Automatic Turntable. It uses a unique AC Servo-motor with a quartz "clock" speed-reference to achieve exceptional torque and speed accuracy, while eliminating the corrective speed surges that degrade the performance of other direct-drive turntables. The DP-60L is supplied with two plug-in tonearm wands—one straight and one S-shaped—to assure a precise match-up with the characteristics of any phono cartridge.

The result? Musically cleaner sound, free of sonic smearing. The Denon turntables for 1980: Six musical instruments from the company where innovation is a tradition.

CIRCLE NO. 16 ON READER SERVICE CARD
An important achievement in record quality

Proof-quality records that offer clearer sound, true fidelity, anti-static performance and are produced in a dust-free “Clean Room”

The records in this unique collection of The 100 Greatest Recordings of All Time have been produced to the highest standards possible. Each record is exceptional for its clarity as well as its tonal quality — capturing the beauty both of today’s finest performances and of the historic performances of the past.

A superior vinyl material, containing its own anti-static element, is used in the production of these records. This exclusive vinyl material, together with the careful process by which the pressing is made, results in a record that is more rigid, durable and resistant to dust. A record that has true fidelity, clearer sound quality and a long life.

Ordinary records (even new ones) can have dust particles embedded in their grooves, and the types of vinyls used increase surface noise. But because Franklin Mint records are produced from this exclusive vinyl formula, they effectively resist dust and capture a fuller sound.

To further assure their quality, the Franklin Mint records are pressed in a special “clean room,” similar to the facility in which the mint produces its flawless proof-quality coins. In this atmosphere-controlled clean room, technicians wear vinyl gloves and every precaution is taken to ensure protection for every record. Here, the most meticulous attention is paid to the pressing of the records — in order to greatly minimize noise, to assure a quieter, clearer record and to make certain that the full quality of each original recording is faithfully preserved.

Together, these important features enable The Franklin Mint Record Society to create a collection of proof-quality records — records that offer greater clarity of sound and are quieter and clearer. To attest to this high standard of proof quality, each record bears the distinctive mintmark of The Franklin Mint.

Most of the recordings in the collection are in full stereophonic sound. But naturally, the very early recordings are monaural. However, all of the records throughout the series reflect the highest fidelity possible — and all are playable on any stereo phonograph or system. No special equipment is needed.

In addition, the recordings of legendary greats such as Enrico Caruso, Rosa Ponselle, Feodor Chaliapin and Giovanni Martinelli have been remarkably improved by electronically removing imperfections that were present in the earlier recordings, thus enabling you to now hear these glorious voices more nearly as they sounded in the actual performances.

Rarely if ever have records of such distinction been produced. Rarely if ever has so much time and attention been devoted to their creation. And these are the superior records which you will receive when you become a subscriber to The 100 Greatest Recordings of All Time — the ultimate private library of recorded music.

**Or the first time in history, the world’s greatest works of music — and the greatest recorded performances of those works — have been brought together in one unique collection of distinctively high-quality records. Truly the ultimate collection of fine recorded music.**

These are the supreme masterpieces of man’s musical genius, performed by the most outstanding artists of the century. Together, they form a record library unprecedented — and unsurpassed — in the entire history of music. The 100 Greatest Recordings of All Time.

The greatest music — and the greatest performances

An international panel of renowned music authorities was appointed to participate in the selection of these great recordings. This distinguished panel considered countless recordings of each of the greatest works of music — a momentous task.

For instance, members of the panel reviewed 24 recordings of Beethoven’s 7th Symphony and chose the one recording they considered superior to all others: Toscanini with the New York Philharmonic.

Similarly, the recordings of other great symphonies, concertos, sonatas, rhapsodies, ballet and vocal music were reviewed and the most outstanding performances in each instance recommended.

The creation of this definitive collection has been made possible through the cooperation of leading record companies both here and abroad. And now, The 100 Greatest Recordings of All Time is being issued by The Franklin Mint Record Society.

Among the works chosen for this collection are immortal masterpieces by Beethoven, Brahms, Mozart, Tchaikovsky, Schubert, Rachmaninoff, Debussy, Verdi — performed by such superb artists as Vladimir Horowitz, Jascha Heifetz, Enrico
The Franklin Mint Record Society presents the ultimate private library of recorded music.

The 100 Greatest Recordings of All Time

A unique collection of the greatest performances ever recorded, selected by an international panel of music authorities and presented on 100 records of superb proof quality.

Caruso, Van Cliburn, Isaac Stern, Artur Rubinstein, Leontyne Price—with the world's finest orchestras under the direction of such great conductors as Toscanini, Ormandy, Bernstein, Stokowski, von Karajan, among others.

In every sense, the ultimate private library of recorded music—to be cherished for a lifetime, and presented as a legacy to later generations.

Handsome library cases provided
To house these magnificent proof-quality records, special library cases are provided for all 100 records in the collection. Each hardbound library case holds two long-playing 12" records and is attractively designed. Displayed in a bookshelf or cabinet, these handsome library cases will be an impressive addition to any home.

The advisory panel

The Advisory Panel
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SCHUYLER G. CHAPIN, Dean of the School of the Arts, Columbia University
FRANCO FERRARA, member of the faculty of the Academia di Santa Cecilia, Rome
R. GALLOIS MONTBRUN, Directeur, the Conservatoire National Superieur de Musique, Paris
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The 100 Greatest Recordings of All Time

Please mail by November 30, 1980.
Limit: One collection per subscriber.

The Franklin Mint Record Society
Franklin Center, Pennsylvania 19091

Please enter my subscription for The 100 Greatest Recordings of All Time, consisting of one hundred proof-quality records in specially designed library cases. I understand that I may discontinue my subscription at any time upon thirty days' written notice.

No payment is required at this time. I will be billed for each record in advance of shipment at $9.75* plus $1.75 for packaging, shipping and handling. My records will be sent to me at the rate of two per month.

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GUARANTEED PRICE: In spite of strong inflationary pressures in the record industry, the price of $9.75 per record will be guaranteed to each subscriber by The Franklin Mint Record Society for every record in the collection.
Popular to the specified 55- to 20,000-Hz limits of the speaker's response was ±6 dB.

The tweeter dispersion was very good up to 10,000 Hz, and above that frequency the output readings from the left and right speakers diverged by 6 to 8 dB. We measured the tweeter's sensitivity with an octave band of random noise centered at 1,000 Hz instead of the full-bandwidth pink noise used by Scott. Since our choice of frequency happened to fall in the lowest output range of the speaker, we obtained the slightly lower output readings of 88 dB sound-pressure level at 1 meter with 2.83 volts drive (1 watt into 8 ohms). This is still relatively high sensitivity for an acoustic-suspension system.

The bass distortion, not surprisingly, was higher than would be typical of a woofer of larger diameter. Even so, it could hardly be called excessive in the context of low-frequency loudspeaker distortion. With a 1-watt input to the speaker, the distortion was less than 1 per cent from 100 down to 90 Hz, rising smoothly to 3 per cent at 55 Hz and 6 per cent at 40 Hz. It was still only 10 per cent at 30 Hz, a figure that would have been noteworthy for a full-size speaker system, prior to the development of the acoustic-suspension design. The limitations of the small woofer became evident when we drove it at a 10-watt level. Starting from 1.5 to 2 per cent in the 100-Hz range, the distortion climbed rapidly to 10 per cent at 55 Hz and nearly 16 per cent at 35 Hz.

The impedance was between 6 and 8 ohms over almost the entire audio-frequency range, reaching its maximum of 22 ohms at the 85-Hz bass resonance and minimum of about 6 ohms at 3,200 Hz. The 1,000- and 10,000-Hz tone-burst waveforms were quite good except for a region around the crossover frequency in which the interference between the woofer and tweeter outputs prevented a clean burst from being picked up by the microphone. Although there is no clear agreement on its audible significance, the cancellation effect was unmistakable on a scope screen.

Comment. We were impressed by the well-balanced sound we heard from the Scott Model 166s. In fact, it was often hard to be sure whether we were hearing them or some of the much larger speakers set up nearby for comparison. The Model 166 does not sound at all bass-shy, and in side-by-side comparisons with some highly regarded speaker systems it proved to have very similar midrange and treble characteristics. Although in such comparisons the reduced low-bass output of the Model 166 was often apparent, it never sounded deficient in reproducing the lower frequencies of music programs when heard by itself.

Our distortion measurements, plus the inherent limitations of a very small bass driver, did not offer much promise for extending the low-end response of the speaker by equalization. Nevertheless, by means of a good octave-band equalizer and a pink-noise source, we were able to equalize the acoustic output of the speaker to make it nearly flat (at the listening location) from 32 to 20,000 Hz. Since this required some 15 dB of low-end boost (but relatively minor modifications elsewhere), we did not really expect the final sound quality to rival that of a larger speaker, and we were also dubious about applying high power to the speakers.

To our amazement, the Scott Model 166s took this equalization in their stride. When the pair was driven by the full output of a 120-watt-per-channel receiver, they sounded open and unstrained, with no obvious signs of distortion or stress. Even if they did not match the sound of some large floor-standing speakers, they certainly did not sound like minispeakers! However, the use of equalization does not really seem to be necessary to extract a full high-fidelity sound from these speakers (and even with equalization they will not be able to rattle the dishes and put cracks in a plaster wall!).

In short, except for its size, there is very little that is "mini" in the Scott Model 166. We have been living with a pair of them for several weeks and find them just as listenable as some speakers that outclass them by five times in price and a much larger ratio in weight. From where we sit, it sounds as if Scott has made just the right set of design compromises in the Model 166; the result is a remarkably fine-sounding loudspeaker system that will not strain even the flimsiest bookshelf, let alone a somewhat limited budget.

Circle 140 on reader service card

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**Carver M-400 Power Amplifier**

The Carver M-400 “magnetic-field” amplifier is a basic power amplifier quite unlike any other ever developed for high-fidelity applications. It is a nearly cubical, pale-gold-finished box about 7 inches on a side; it weighs less than 9 pounds. This small amplifier is rated to deliver 201 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.05 per cent total harmonic distortion. It can safely drive speaker-load impedances as low as 2 ohms without fan cooling, and it has a built-in mono mode of operation in which it can deliver more than 500 watts to an 8-ohm load.

In this month’s “Technical Talk” column there is a necessarily sketchy, much-simplified description of the way in which the Carver M-400, so light that it can be held in one hand, manages to develop its huge power output. In addition to this “much in little” aspect, the amplifier has a number of other novel features that recommend it. For example, no matter how efficient the M-400 might be, it must still be able to dissipate some heat even though it lacks the usual means—physical size—for doing so. Without the large thermal mass of a typical chassis-and-heat-sink system, the Carver M-400 can heat up with remarkable speed—and cool down just as fast. In normal service as part of a home music system, the average power output is low and the amplifier remains cool. If it is driven hard for some time, or if it is tested on the bench with continuous signals, its internal temperature could rise significantly, but it cannot get hot enough to be a hazard to external objects or people.

Apart from temperature considerations, any amplifier is subject to abuse from over-driving or use with a very low-impedance load that demands too much current from its output devices. Conventional amplifiers employ such means as current-limiting circuits, relays that disconnect the outputs under unsafe operating conditions, or output fuses to protect both the speakers and the output transistors. The Carver M-400 has what may well be the most comprehensive protection system ever used in a home-entertainment amplifier. It has neither relays nor any of the usual current-limiting circuits (which have been known to cause...

(Continued on page 48)
Its mother was a computer.
Its father was a Kenwood.

We think our new KR-770 is the most intelligent high performance receiver in the world. The heart of our new receiver is its remarkable brain. A microprocessor-controlled quartz synthesizer tuning section, which uses Kenwood's unique computerized digital frequency encoding system to provide incredibly accurate, drift-free AM and FM stereo reception.

There's also a lot of convenience engineered into our computer-memory receiver. Like automatic station scanning. Six AM and six FM digital tuning presets which you can program to instantly address your favorite stations.

And a lithium battery powered memory-safeguard system to save the programming in your receiver's digital memory in case of power loss. But there's more to our new KR-770 receiver than just brains. Take power, for instance. 80 watts per channel, minimum RMS at 8 ohms from 20 to 20,000 Hz with less than 0.02% total harmonic distortion.

And for performance, the KR-770 provides a long list of innovative Kenwood engineering features. Like Hi-Speed™ circuitry for exceptional musical clarity. DC to give crisp, clear bass response down to 0 Hz. Our new Zero Switching output circuits to eliminate crossover distortion. And wide and narrow IF band circuitry to maximize FM reception. You also get digital frequency read-out. LED indicators for power output, signal strength and function controls. Plus a built-in equalizer.

See your Kenwood dealer for a demonstration of the first computer good enough to be a Kenwood.

For the Kenwood dealer nearest you, see your Yellow Pages, or write Kenwood, P.O. Box 6213, Carson, CA 90749.
audible distortion on some amplifiers when they are triggered by program peaks). Instead, a comprehensive arrangement of protective sensing circuits operates through the "triac" of the magnetic-field power supply (see "Technical Talk"), shutting off the supply instantly if any improper operation is detected.

There are over-current and over-voltage trip circuits for protecting both the speakers and amplifier circuits against power-supply failures or shorted outputs. A d.c.-fault sensor shuts the amplifier down if a d.c. component appears at its outputs. A clipping detector senses the presence of the high-frequency components generated by sustained clipping; it will tolerate this for a brief period, but if the condition persists the power supply shuts down. A voice-coil temperature integrator monitors the long-term average power output, with frequency weighting to take account of the greater fragility of tweeters, and shuts the amplifier down before speaker damage can occur.

For even more protection, the M-400 has a differential low-frequency trip circuit that monitors the electrical sum of the two channel outputs. The very-low-frequency content of stereo program material is essentially in phase, so the sum of the two channel outputs is very low. However, if the pickup is dropped on the record, or if it is otherwise mishandled, a large vertical (out-of-phase) signal component will be generated, creating an error signal that immediately shuts off the amplifier. Thus, the M-400 can deliver large amounts of in-phase low-frequency power but will shut down during any improper operation that creates a significant amount of low-frequency, out-of-phase signal. According to Carver, this makes it almost impossible to damage a speaker by careless handling of the phono pickup or other signal source when using the M-400.

All of these protective systems operate through the triac to shut the amplifier down immediately. When this happens, the two vertical rows of power-display LEDs on the front panel blink randomly at reduced brightness. After a short period the amplifier returns to operation without any action on the part of the user (assuming that the fault has been corrected). In addition to these electronic protection circuits, the M-400 has both a thermal sensor on its chassis (it shuts off all primary power if it becomes too hot) and a 15-ampere line fuse.

Except for its unusual shape and compact dimensions, the Carver M-400 is externally much like any other power amplifier. It has no power switch and can be switched by a preamplifier. (Although its full-power 15-ampere rating is beyond the switching ratings of most preamplifiers, it draws very little current under normal conditions or when first turned on and should therefore cause no problems with a good preamplifier.) Recessed into the rear of the M-400 are the four speaker-binding-post terminals, the line-fuse holder, and a small switch that drops the power-supply voltages slightly for mono operation or when driving a 2-ohm load. The front-panel rows of red LEDs that indicate the approximate power output of each channel respond in only 1 millisecond, but they take 0.5 second to decay, making the lights clearly visible on short transients. The bottom lights of each row serve as "power-on" indicators. The M-400 is warranted for three years, including labor, parts, and shipping one way. Price: $349.

- Laboratory Measurements. Lacking either heat-radiating fins or a fan cooling system, the case of the M-400 heated up almost instantly when we operated it at one-third rated power for the FTC-mandated preconditioning period. Within a couple of minutes it switched off, and it eventually settled down to a cycling rate of about 50 seconds on and 95 seconds off.

We had been warned of this characteristic of the M-400, as well as its propensity for blowing its 15-ampere line fuses when both channels are continuously driven to or slightly beyond the clipping point, especially into load impedances less than 8 ohms. During our test-bench procedure, which took a couple of days, we blew a dozen 15-ampere fuses and the amplifier's protective system was activated many times. We mention this not to alarm the prospective user (test conditions are more severe than normal use) but to show how utterly foolproof the M-400 protective system seems to be. Before we had finished with the amplifier, we had deliberately tried to damage it by all the usual means, such as shorted outputs, driving it to hard clipping at high frequencies, and the like, but all it did was turn itself off in time to prevent any damage either.

(Continued on page 50)
The Delco-GM ETR™ electronically tuned receiver is a masterpiece of electronic design. A factory-engineered stereo system so advanced, it turns state-of-the-art into a work of art.

Just check these features. Automatic seek, Automatic scan, Digital quartz clock, and an eight-station electronic memory tuner.

And with ETR's sophisticated inner circuitry, the fine tuning and stereo adjustments are handled automatically. You don't have to fiddle with a collection of tiny buttons or extra knobs.

With Delco-GM, you get sound. Not switches. That's because Delco-GM has known for years that there's a lot more to auto sound than just putting home hi-fi on wheels. So don't be misled by false comparisons. Make your new car's stereo system a masterpiece with a Delco-GM ETR. Or look into the rest of our complete line of sophisticated stereo systems, including CB, cassettes, 8-tracks, equalizer/boosters, and extended range speakers. See your Chevrolet, Pontiac, Buick, Oldsmobile, Cadillac or GMC dealer for model availability.

Delco-GM Sound...a moving experience.
to itself or to its load. At least once during each of our power-vs.-distortion-vs.-frequency test sequences, the thermal breaker shut off the amplifier, which then required several minutes to return to operation. During prolonged listening tests at very high levels the amplifier never shut down or showed any signs of distress.

With both channels driving 8-ohm loads at 1,000 Hz, the outputs clipped at 300 watts per channel, for an IHF clipping-headroom rating of 1.74 dB. With 4- or 2-ohm loads, the line fuse blew before we reached the clipping point. Dynamic-power measurements using 20-millisecond tone bursts of a 1,000-Hz sine wave were used to measure the maximum short-term output into loads of different impedance ratings.

into 8 ohms, the dynamic output was 318 watts (IHF dynamic headroom = 2 dB). Into 4 and 2 ohms the tone-burst signal clipped at 446 and 433 watts per channel, respectively. We also used this test signal for the 8-ohm mono mode, obtaining an incredible output of 900 watts at the clipping point!

With both channels driving 8-ohm loads at 1,000 Hz, the harmonic distortion was an almost constant 0.01 per cent from 0.1 watt to 300 watts output. The intermodulation (IM) distortion was also nearly constant, between 0.024 and 0.036 per cent from 0.1 to 300 watts. We tried to make these distortion measurements with 4- and 2-ohm loads, but in each case the line fuse blew before we reached maximum power. Into 4 ohms, the distortion was in the range of 0.016 to 0.021 per cent from 1 to 200 watts. Into 2 ohms, the distortion was close to 0.03 per cent from 1 to 100 watts (the fuse blew before we reached 200 watts, and we decided not to sacrifice fuses ad infinitum in this test, having convinced ourselves that the M-400 could drive almost any load without damage to itself and without significant waveform distortion).

At the rated power output of 200 watts into 8 ohms, the distortion was close to 0.01 per cent from 20 to 1,000 Hz, increasing at higher frequencies to 0.05 per cent in the vicinity of 10,000 Hz and to a maximum of 0.067 per cent at 15,000 Hz. At reduced power outputs the distortion characteristics were similar, except that at frequencies below 1,000 Hz the distortion was typically well under 0.01 per cent. We measured the IHF IM distortion using test signals of 19,000 and 20,000 Hz whose combined peak value was equivalent to that of a full-power (200-watt) sine-wave signal. The third-order distortion at 18,000 Hz was at -64 dB (0.063 per cent) and the second-order component at 1,000 Hz was at -86 dB (0.005 per cent).

The manufacturer points out that, although the commutation system of the M-400 does produce "distortion" components harmonically related to the signal frequency, they are in quadrature to the same harmonic frequencies generated in the small linear amplifier within the M-400. It is certainly as an indication of true output because they are frequency dependent, with a reduced response at high frequencies. At 1,000 Hz or below it was not possible to light the maximum power lights (supposedly corresponding to 200 watts) and the "-5-dB" lights came on at 149 watts, or -1.3 dB. The -10-, -20-, and -40-dB lights lit at respective levels of -9, -14, and -21 dB referred to 200 watts.

- Comment. Anyone familiar with the requirements for a home-music-system amplifier will appreciate that the Carver M-400 is almost perfectly suited to that application. Its distortion and noise levels are entirely negligible, and its power-output capability is tremendous. It seems to be an in-destructible, and, indeed, an immortal amplifier with similar potential, it is designed to present a minimum threat to the health of one's speakers even when used carelessly (most powerful amplifiers must be used with considerable respect for their ability to destroy loudspeakers in a moment of incautious enthusiasm).

It became obvious during the time we had the amplifier for test that the Carver M-400 was designed to be listened to and not to be used merely as an exercise in measurement procedures (although it does teach powerful lessons in patience and humility). But even as an experiment the M-400 still did not seem quite real. It is hardly conceivable that a small, inexpensive, lightweight cube such as this could deliver as much clean power as any but a few of the largest conventional amplifiers on the market—but it does! Most high-power amplifiers have their Achilles' heels and can be damaged by certain modes of operation. No doubt the M-400 is no exception to that rule, but if there is a chink in its armor we could not find it.

How does the M-400 sound? Pretty much like any other high-quality amplifier you might name, most of them outweighing it between five or six times and costing two to four times as much. The only objectionable sounds we heard were four low-level "thumps" from the speakers when power was first applied. Also, the amplifier itself can emit some strange groans and buzzes that result from mechanical vibrations of its magnetic field-coil structure, but these were heard only under test conditions, never with program material.

In normal use the Carver M-400 runs quite cool (no warmer than a tuner or cassette deck). If ever there was a "turn-on and forget" amplifier, this is it. With the digital and audio age approaching, any really good music system will soon require an unheard-of reserve of audio power to handle the peak levels that are now compressed to fit the restricted dynamic range of analog recording. Until now, any amplifier suitable for that purpose has been too heavy for one person to lift and too expensive for most people to buy.

Consider, if you will, a pair of mono-connected Carver M-400 amplifiers with a continuous capability of 500 to 600 watts per channel (driving 8-ohm speaker loads) and—even more important—the ability to develop some 500 watts on brief peaks. All this for a total cost of $700, a total weight of 18 pounds, and dimensions

(Continued on page 52)
Supertuner II.
Lightning strikes again.

At last. A new Supertuner with FM reception so advanced, you simply have to hear it to believe it.

Because Supertuner II wasn’t designed just to sound good on paper or in a lab. It was developed to sound good in the real world, in moving cars.

To sort out stations in the stereo jungles of cities.

To pull in stations in the stereo wastelands of the open highway.

To adjust for signal changes anywhere.

So smoothly, you’re hardly aware it’s happening.

And Supertuner II isn’t just the good-sounding car stereo. It’s available with advanced cassette features like Auto Reverse with Automatic Tape Slack Canceller, an exclusive.

Plus, of course, a complete range of compatible speakers. All with superb engineering, performance and dependability you’ll find throughout Pioneer’s complete line.

So if you’d like to hear the best audio in motion, see your Pioneer auto-sound dealer now.

For Supertuner II.

The car stereo that’s taking the world by storm.

PIONEER
The Best Sound Going.

small enough to permit the pair of them to fit in almost anywhere unobtrusively.

By the way, the M-400 is specifically not recommended for commercial disco use, simply because its protective circuits are likely to become overprotective in the stressful circumstances of a commercial installation. For home use, however, the amplifier is hard to beat. Without question, the Carver M-400 is one of the most exciting electronic developments to appear on the hi-fi scene in some time, as well as being an unqualified bargain.

Circle 141 on reader service card
Music lovers expect uncommon products from Sansui. And Sansui delivers. The Sansui "Z" Series of synthesized digital receivers are designed and built with a loving logic that can be seen, touched and heard. Take the Sansui 5900Z, a reasonably priced receiver with every important feature you could possibly want for the heart of your high fidelity system.

SYNTHESIZED DIGITAL TUNING
You can't mistune a Sansui synthesized digital receiver. Not even a little. Press the up/down tuning buttons. The digital circuitry ensures that every station received is automatically locked in for lowest possible distortion, with its frequency indicated both on a digital readout and by an LED indicator along a numeric type dial.

TOUCH VOLUME CONTROL & LED PEAK POWER LEVEL INDICATOR
The Sansui 5900Z uses a pair of touch buttons to adjust the listening level. Relative volume control setting is indicated on a fluorescent display. Actual peak power amplifier output is shown by 14-segment LED indicators.

12 PRESET STATIONS
To make FM and AM tuning still easier, up to 12 user-selected stations may be "stored" in the 5900Z's memory circuits for instant recall. The last station received will be remembered when the tuner is turned on again; and memories are kept "live" even during a power outage.

DC-SERVO AMP FOR DEPENDABLE POWER
The leader in DC technology, Sansui uses a servo-controlled amplifier circuit in all "Z" receivers to eliminate unwanted ultra-low frequencies — like record warps — while maintaining the advantages of direct-coupled circuitry in their amplifier sections. The 5900Z delivers 75 watts/channel, min. RMS, both channels into 8 ohms, from 20-20,000Hz, with no more than 0.03% THD.

And there's more. Like LED's for every important function. Two Muting Mutes. Two tape deck connection with dubbing. And much more.

Visit your Sansui dealer and make sure you see all the wonderful stereo receivers in the Sansui "Z" Series. And expect great things. You won't be disappointed.
In the graph at left, the upper curve represents the smoothed, averaged frequency response of the cartridge's right and left channels; the distance (calibrated in decibels) between it and the lower curve represents the separation between the two channels. The inset oscilloscope photo shows the cartridge's response to a recorded 1,000-Hz square wave (see text), which indicates resonances and overall frequency response. At right is the cartridge's response to the intermodulation-distortion (IM) and 10.8-kHz tone-burst test bands of the TTR-102 and TTR-103 test records. These high velocities provide a severe test of a phono cartridge's performance. The intermodulation-distortion (IM) readings for any given cartridge can vary widely, depending on the particular IM test record used. The actual distortion figure measured is not as important as the maximum recorded-signal groove velocity at which the cartridge is able to track before a sudden and radical increase in distortion takes place. There are very few commercial phonograph discs that embody musical audio signals whose average velocities are much higher than about 15 centimeters per second.

qualities of relatively flat frequency response across the full audio range, excellent channel separation at all frequencies, high output, superb tracking ability at (effective-ly) a 1-gram force, and an exceptional immunity to the effects of load-capacitance changes add up to making the XSV/4000 a topflight performer. It also happens to sound as good as it measures, and we could not fault it in any way.

Record and playback levels register on a pair of eighteen-segment peak-reading fluorescent displays calibrated from −20 to +8 dB. The highest reading is held for approximately 2 seconds to make setting the record level easier. The Dolby-calibration mark falls at +3 dB. Large concentric knobs are used to control the recording level, and a single smaller knob adjusts the output level both at the rear jacks and at the front-panel headphone jack. Four pushbuttons set the bias and equalization of the RS-M24 for metal, CrO₂-type, ferrichrome, or ferric formulations, and similar buttons are used to turn the Dolby noise reduction on and off and to select between microphone and line-level record inputs. No mixing facilities are provided, but there is a pushbutton-operated RECORD MUTE function. The rear panel of the RS-M24 contains the customary phono-jack connectors for line-level inputs and outputs, plus a DIN-type socket for the $15 remote-control accessory. Overall, the RS-M24 measures approximately 17 x 4 1/8 x 10 1/4 inches (width, height, depth) and weighs about 11 pounds. Price: $250.

● Laboratory Measurements. Our sample of the RS-M24 was supplied with the tapes used to make its factory adjustment. These were: Maxell UD XL-I (ferric), Sony Duad (ferrichrome), Technics RT-60XA (CrO₂-type), and Technics RT-60MX (metal). Since the two Technics tapes are not widely marketed, we used the nearest generally available equivalents: TDK SA for the CrO₂-type and TDK MA for the metal-alloy tape.

(Continued on page 56)
Here's how to make a standard $5 tape outperform a $10 metal tape.

Record a standard $5 tape on one of the new Harman Kardon High Technology cassette decks with Dolby HX*. And a $10 metal tape on a conventional deck. Any conventional deck.

Now compare.

The Harman Kardon deck with Dolby HX will give you substantially better performance from the standard tape. More dynamic headroom. And better signal-to-noise ratio.

Yet the recording made on our Harman Kardon High Technology deck costs about half as much. Which can save you a small fortune if you plan a tape library of any size.

Of course our new High Technology decks are metal capable, too. So you can use Dolby HX and metal tape for performance that can't be topped by anything less than a professional quality open reel deck.

But Dolby HX is only part of the performance story.

Our heads cost more. And they deliver more.

The heads used in a cassette deck probably dictate the performance you'll get more than any other single component. That's why at Harman Kardon, we spent a lot more time and money on our head designs and materials. We started with Super Sendust Alloy, the costliest and most advanced material available. In manufacturing, we machine our head gaps to incredibly precise tolerances, and align them with equal care. Obviously, this process takes more time and costs more money. But it results in frequency response unheard of in a single speed cassette deck at any price.

Even our most economical deck, for instance, gives you ruler-flat frequency response from 15 Hz to an incredible 19,000 Hz from a conventional tape. You also get features like Dolby NR, a front panel bias fine trim, MPX filter and memory.

As you move on up the line, the specs just get better. And so do the features. Like the world's first headroom safety indicator to prevent tape saturation far more accurately than any peak level indicators. You'll also find built-in Dolby and bias test tones. Normal and slow meter ballistics. A fader control. Plus our exclusive Auto Program Search System that scans a tape automatically, sampling the beginning of each cut until you've located the one you want.

Yet the new Harman Kardon High Technology cassette decks do share one thing in common with the conventional decks. A conventional price tag.

So before you settle for a deck that will set you back $10 or more every time you want a quality recording, audition the new Harman Kardon Decks with Dolby HX.

You'll get performance that beats metal. At about half the price.

*Dolby and the double-D symbol are trademarks of Dolby Laboratories. Dolby HX is a standard feature on all Harman Kardon High Technology decks except the 100M.

The hk400XM with frequency response from 15-20kHz ± 3dB.
Playback frequency response was checked using Teac MTT-216 (120-μsec, ferric) and MTT-316 (70-μsec, CrO₂/metal/ferrichrome) test tapes. Response was within ±2 dB from the tapes' lower limit of 31.5 Hz up to the very highest tones, where it fell off slightly, being down 2.5 and 4 dB at 14,000 Hz in the 120- and 70-μsec positions. Since this high-end loss was not reflected in the overall record-playback response curves, we are inclined to believe it results from a difference in the azimuth alignment between our test tapes and those used by Technics.

Overall record-playback frequency response, measured at 20 dB below the 0-dB indication on the fluorescent display, showed the -3-dB points at 15.5 kHz (ferric), 17 kHz (CrO₂ and ferrichrome), and 18 kHz (metal). At the low-frequency end, response began to fall off gradually below approximately 50 Hz, being down by 3 dB at approximately 40 Hz but within ±3 dB down to 20 Hz. The metal tape had a 3-dB peak at 16.5 kHz, just before its upper limit, suggesting a slight under-bias condition. The 0-dB curves, however, show the very dramatic advantage of metal tape in high-frequency overload capability.

Third-harmonic distortion of a 1,000-Hz tone at the indicated 0-dB record level measured 0.8, 0.7, 1.2, and 0.6 per cent for the metal, CrO₂-type, ferrichrome, and ferric tape formulations, respectively. To reach the 3 per cent distortion level used to check signal-to-noise ratio required increasing the input signal by 7, 6.5, 5, and 9 dB for the four tape types, verifying the suggestion in the owner's manual that peak readings in the range of +3 to +6 dB are the most suitable for most recordings. On an unweighted basis, without Dolby-B noise reduction, the respective signal-to-noise ratios for the metal, CrO₂-type, ferrichrome, and ferric tapes measured 54.2, 54.2, 55.2, and 53.6 dB. With the Dolby system and CCIR weighting, these figures improved to 65.6, 66, 67.4, and 66 dB. Wow and flutter, checked with a Teac MTT-150A test tape, was 0.05 and 0.075 per cent on a weighted-rms and DIN-B peak-weighted basis.

A 1,000-Hz line-level input of 60 millivolts (0.06 volt) produced a 0-dB indication and an output level of 0.675 volt. The corresponding microphone-input sensitivity was 0.19 millivolt, with overload occurring at 18 mV. Headphone volume was more than adequate for either nominal 8-ohm or 600-ohm headphones. Fast-forward and rewind times were both 90 seconds for a C-60 cassette.

Dolby-level calibration fell precisely at the indicated (+3 dB) point on the fluorescent indicator, as measured with a TDK AC-313 test tape; the indicator had a fast attack, with the highest peak level held for approximately two seconds as specified. Dolby tracking accuracy was within 1 dB at -20- and -30-dB recording levels up to 14 kHz, above which responses fell off very sharply as a result of a built-in stereo-FM multiplex filter that is automatically inserted in the signal path when the Dolby circuitry is active.

**Comment.** As its modest price suggests, the RS-M24 is not designed to compete directly with the most sophisticated decks on the market, but within its intended arena it proved to be an excellent performer. When demonstration-quality prerecorded cassettes were played through a wide-range speaker system there was a slight dulling of the highest frequencies, which was also perceptible when we made copies of the most demanding discs and master tapes. On the other hand, for most tape, disc, and FM dubbing the loss in the copy was insignificant if the recording level was kept at the levels suggested in the owner's manual. The transport controls were a joy to use, infinitely superior to the customary "piano-key" mechanical levers. For readers seeking a quality cassette deck at a moderate price, the Technics RS-M24 is certainly worth serious consideration.

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Let Onkyo transport you to a world beyond electronics . . . to a world of more perfect sound. Where you'll hear music of such stunning purity and sensual richness, that you'll forget you're listening to an audio system.

That's the secret of Onkyo . . . and Onkyo's dramatic success. The unique ability to take you several steps beyond pure technology . . . to experience more exciting sound. And you'll find it in all our components . . . including all four of our new stereo tape decks.

The Onkyo TA-2050 is an outstanding example. It goes further than other tape decks . . . to harness the full performance potential of new metal tapes. One reason is Onkyo's exclusive "Accu-Bias" control system, which guides you to far more precise tape bias adjustments. Brighter, cleaner high notes are the reward.

The Onkyo TA-2050 also utilizes a full logic direct drive motor transport for extremely high reliability with minimum wow and flutter. A second motor handles fast forward and rewind functions. A special Hard-Permalloy record/playback head . . . and a ferrite erase head . . . provide optimum performance with all types of tape . . . both metal and conventional.

The Onkyo TA-2050 also provides a rich and important array of other high performance features . . . soft touch controls with IC logic . . . a Dolby* noise reduction system with switchable MPX filter . . . large, illuminated "peak-hold" meters for greater precision and convenience . . . a memory-stop/memory-play system . . . a timer mode selector . . . and full remote control capability when used with the optional RC-5 remote control unit.

Two valuable features of the TA-2050 are its instant muting and automatic fade in/fade out control systems . . . which permit far more professional recording effects. Musical passages can be "cut-in" or "cut-out" instantly . . . or "faded-in" or "faded-out" smoothly. And cassettes can be recorded right to the end . . . then rewound a short bit to overlay a professional "fade-out" effect.

Styling is superb. Brushed silver metal with elegant appointments . . . in a dramatically handsome new slim-line design. And the TA-2050 is just one of four important new metal tape-compatible stereo cassette tape decks from Onkyo.

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*TM of Dolby Laboratories
function of the distribution of its actual mass around the pivot axis; a large counterweight near the pivot results in a lower effective mass than would a smaller weight extending further behind the arm. Cartridges weighing from 2.5 to 10 grams can be balanced. The tracking force is supplied by a secondary weight that slides along the arm tube, reading against a scale calibrated from 0 to 3 grams at 0.1-gram intervals.

The head shell (two of which are supplied with the P-750) is molded of a mixture of resin and carbon fiber and plugs into the end of the tone arm, where it is retained by a knurled locking screw. It is not like the usual universal plug-in shell. The cartridge which mounts at an angle to the arm tube, can be moved in its mounting slots to set the correct overhang. Instead of using nuts on its cartridge-mounting screws, the Yamaha shell has a small aluminum bar that is tapped to receive the screws and also serves to stiffen the head shell. When installed correctly, the cartridge stylus is directly on the axis of the arm tube.

Next to the arm base is a flush-mounted antiskating adjustment dial, and on the other side of the arm is a lever marked FREE and LOCK. In its FREE position the entire tone arm can be moved up and down over a limited distance to set the arm parallel to the record with cartridges of differing heights. Once set, this adjustment is retained by moving the lever to LOCK. In use, the arm is raised and lowered underamped control by a curved cueing bar underneath it.

The Yamaha P-750 is finished entirely in silver grey. Its removable hinged plastic cover remains open at an angle or can be moved up and down over a limited distance to set the arm parallel to the record with cartridges of differing heights. Once set, this adjustment is retained by moving the lever to LOCK. In use, the arm is raised and lowered underamped control by a curved cueing bar underneath it.

The Yamaha P-750 is put into operation by pressing the PLAY button at the right of the base; this turns the motor on and causes the arm to index to the selected diameter and descend to the record. Playing can be interrupted at any time by pressing the CUT button next to PLAY or by returning the arm manually to its rest (it can be started in the manual mode as well, since lifting the arm from its rest starts the motor). At the end of play the arm lifts and returns to its rest automatically, shutting off the motor. Near the center of the control section is a REPEAT button which causes the record to be replayed indefinitely when it is engaged. To its right is a rectangular button that slides horizontally to operate the cueing mechanism. At its left limit the arm is in playing position, and moving it to the right raises the pickup smoothly.

A small red LED (LOCK) directly in front of the platter lights when the phase-locked-loop control circuit reaches its "locked" condition, signifying that the platter is turning smoothly. A button at the left of the unweighted rumble was a low-37 dB, improving to -63 dB with ARLL weighting. It consisted mostly of components in the 6- to 12-Hz range. The antiskating compensation was approximately correct when it was set to agree with the tracking force (or perhaps 0.5 gram higher). There was a slight outward shift of the tone arm during the cueing descent, amounting to about 2 seconds or less of repeated program each time the arm was raised and lowered. This shift was not the result of the antiskating tone arm and may have been due to a slight misalignment of the lift bar relative to the arm tube. The isolation of the player against base-conducted vibration, despite its soft rubber feet, was no better than average for a direct-drive turntable. There were transmissibilities of 20, 24, and 26 Hz when we excited the mounting feet with magnetic vibrators.}

**Comment.** In general, the Yamaha P-750 proved to be a fine record player whose arm had nearly ideal characteristics (optimum mass, non-ambiguous balancing, accurately accurate tracking-force calibration, and accurate antiskating compensation being a few of them). However, we were disappointed to find that it lacks an arm lock on its rest post or elsewhere. There is therefore a danger of someone sliding it post and turning on the motor, which could result in damage to the player from contact with the rotating turntable mat. We recommend keeping the cueing bar from its up position at all times when a record is not actually being played. Barring this criticism (which might not be as important to someone else as it is to us), the Yamaha P-750 impressed us as a thoroughly excellent record player. One could hardly expect any better performance, either subjective or measured, from a record player of conventional design.

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In 1957 Paul Klipsch designed a small loudspeaker that utilized the same tweeter and mid-range driver as the legendary KUPSCORN. He added a 12" woofer and maximized the cabinet volume for exceptional bass response. Until that time, Klipsch had built only corner speakers and the new design was for "against the wall" placement. When he described this accomplishment to a sales representative, the man said it was "heresy" to put so much KUPSCORN in such a small speaker that didn't even require a corner.

Because of its high efficiency, the KLIPSCH HERESY simply doesn't require expensive, high-powered amplifiers to reproduce the full bandwidth of dynamic sound. This helps you afford a better cartridge, turntable or tape deck.

For tonal detail, definition, imaging, transient response and durability, the KLIPSCH HERESY has no equal in its size. It will put you front row center, feeling the thunder of the bass, the impact of the drums, and the exhilaration of each crescendo.

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IN PURSING your favorite newspaper lately, you may have come across a story of an FBI raid on a record and tape bootlegging operation. In fact, there is a good chance that one or more bootlegged items are—unknowable to you—in your own collection. Counterfeit merchandise so expertly copied that even the record companies have found it difficult to discern whether it is their own product or not.

It is, of course, a matter of semantics, but in regard to recordings the term “bootleg” usually applies more to counterfeiting than to the unauthorized use of material. A counterfeiter will concentrate on current hit items, duplicate them in toto, and represent them as the original product; the profit margin is wide, for he pays neither production costs nor royalties, and all advertising is handled by the victimized label. A “pirate,” on the other hand, simply releases someone else’s recorded material on his own label—or with no label at all. Rock concerts and complete opera performances have been covertly recorded from the audience or off the air and sold to connoisseurs in unmarked albums, but the most common piratical efforts are those assembled by people we used to call “moldy figs,” dyed-in-the-wool collectors of vintage jazz whose “piratical” efforts are often motivated simply by a desire to make available performances that might otherwise remain forever secreted in some record company’s vaults. Though such releases usually make some profit, the return one can expect from sales of, say, “Louisville Lou” by Ladd’s Black Aces (to take an actual example) won’t soon buy a house in Malibu. I don’t condone the practice, but were it not for the so-called “pirate labels,” a thick slice of American music would be known today only to a handful of collectors lucky enough to get their hands on the now-rare original 78s.

Limited space precludes my delving here into the ethics involved, but when a company keeps an artist’s work off the market by neither issuing it nor allowing anyone else to do so, that work is, in fact, being suppressed. Record companies ought to be obligated, as a matter of artistic and cultural conscience, to make all recorded material available, if not in their own catalogs, then at least—through licensing—in those of other interested companies. Such an arrangement would be welcomed by many small labels now operating more or less covertly, and there is at least one precedent: Biograph, the legitimate offspring of Historical (a pirate label), made a unique arrangement with Columbia to issue some of the big company’s closeted treasures a few years back. Regrettably, the licensing fee proved to be unrealistically high for the long run, so the deal died after the release of only a handful of albums. But it was a step in the right direction, and Biograph has since blossomed on its own through leasing or buying masters from other, smaller companies. That pirate jazz labels want to go straight is evidenced by the fact that several of them have channeled their shadily acquired profits into legitimate ventures.

ONE such company is Stash, a label that until recently was best known for its thematic albums of “borrowed” vintage jazz (“Reefer Songs,” “AC-DC Blues,” etc.) but now boasts seven releases (with two more in the can) of its very own studio sessions featuring such established jazz names as Slam Stewart, Grady Tate, Jon Faddis, Hank Jones, and Milt Hinton. The most recent Stash release features nobody you are likely to recognize unless you already have the Widespread Depression Orchestra’s first Stash album, “Downtown Uproar” (ST-203). But if you like moderately large bands playing in a style that would not have seemed odd or out of place at Roseland some forty years ago, the WDO’s “Boogie in the Barnyard” (ST-206), a collection of fairly obscure Swing Era tunes, ought to cheer you up. Many bands like the WDO would remain unrecorded were it not for such small labels as Aviva, Biograph, Stash, and Blue Goose, all of which are pirates gone legit.

There isn’t much money to be made from pirating old jazz material, but if the big labels feel uncomfortable about having their past efforts put back on the market by unlicensed vendors, they can do one of two things to regularize the practice: lease the recordings to others or rerelease them themselves.
The finest reproduction of sound… matched with the advanced technical design, reliability and aesthetics that make NIKKO AUDIO the stereo components you cannot afford to overlook.

Even more so when you consider their extraordinary value for your money.

Shown here: The Gamma 20 frequency-synthesized digital tuner with 6-station programmable memory, Beta 20 preamplifier with performance, construction and many features of far more costly units, EQ-1 graphic equalizer, ND-790 metal cassette deck (with optional rack-mounts), Alpha 220 DC servo nonswitching power amplifier.

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Going on Record

By James Goodfriend

MUSIC AND THE GOOD LIFE

I got a three-page letter recently (and I do mean we; copies were sent to everyone from the chairman of the board on down) lambasting us for our less than favorable criticism of the new music of Kris Kristofferson, Bob Dylan, and Grace Slick. For those of you who have been too busy with other things to notice, Kristofferson and Slick have apparently put their sinful days behind them and found sobriety, and Dylan has found God (or maybe the other way around, if you look at his last album cover). The three have been exhibiting their new righteousness in their music as well as on television talk shows and in other nonmusical arenas. None of us at Stereo Review has any quarrel with what they say, but when they compose and when they sing their efforts have to be weighed in the balance just as before, when they were, as our letter-writer puts it, “stoned and tripped-out, lost persons.” We have found them recently, though de-stoned, somewhat wanting artistically.

I should point out to the writer of the letter (who seems to have the opposite impression, as well as to other readers, that none of us at Stereo Review exactly endorses a life of sin and shame. Although liquor and grass are not totally beyond our ken, a year’s supply for the entire staff would probably leave your average rock band cold turkey in a week. But we have noticed over the course of a few centuries (we include here in our own experience the reports of our predecessors) that the sort of dissatisfaction with life that often expresses itself through drugs, alcohol, and a straying from Judaeo-Christian ideals (Buddhist, Muslim, and others too) often goes strongly hand in hand with artistic creativity and accomplishment.

To put it the other way around, the person who has found himself, who is at peace with himself, who can accept with equanimity and even with joy his ultimate fate and all the slings and arrows along the way, is not likely to be artistically creative. Sigmund Freud said something about artists writing or composing or painting their way to normalcy (meaning they started fairly far ahead), and he might have added (I don’t remember if he did or not) that they never get there. Not while they’re creating, they don’t. So when Dylan, and Slick, and Kristofferson found inner peace (I am assuming that they did), something went out of their music: tension.

When you take tension out of music, what you have left is a nice warm bath. And when you add self-righteousness and proselytism to the lyrics, what you have is a very sticky warm bath that can be textually irritating at the same time that it is musically bland. Whatever feelings one may have for the person, the life, the real suffering, Ethel Waters was a far less interesting and affecting singer when she became but one more testimonial for the Billy Graham crusade than she was during the struggles of her life. Slick, Kristofferson, and Dylan promise to be the same.

There is another way to look at it. These three have what, in the long view of things, must be considered to be modest talents. For all their present or past popularity, it isn’t unfair to say that they will be long forgotten when Mozart is still current. Their talent is for a certain kind of music, a certain limited view of the world. When they step beyond that, they outstep their talents. You have to have more than the talent of a Bob Dylan to be both Bob Dylan and Mahalia Jackson in the same lifetime. It’s harder, by the way, to be a Mahalia Jackson than to be a Bob Dylan, and that is why we have fewer Mahalia Jacksons. Given life as we know it and read about it in the newspapers, it’s a lot easier—and maybe more to the point for most of us—to sing accurately and affectingly about hell on earth than about heaven.

Mozart, Beethoven, Schubert may very well have traded—however unconsciously—happy lives for the privilege of writing masterpieces. And their talents were extraordinary. Possibly there have been some who have made the trade the other way. We can never know. It’s too much to expect someone of lesser abilities to give us not just the music of the damned but the music of the saved too. It’s certainly too much to ask a critic to pretend that these artists can simply on the grounds that their moral transformations are admirable.
Making an accurate and faithful recording on most cassette decks requires a lot of practice, a lot of patience and a lot of jumping up and down. After all, with conventional decks, you have to adjust the recording levels as the music varies. But not with Technics RS-M51.

The first thing the RS-M51 does is select the proper bias and EQ levels for normal, CrO₂, or the new metal tapes, automatically. That makes life easy.

So does our Autorec sensor. Just push a button and wait seven seconds while the RS-M51 seeks the proper recording level. 16 red LED's tell you the deck is in the "search" mode. When the green LED lights up, you're ready to go.

For manual control of the recording level, there's also a fine-adjust switch which raises or lowers levels in precise 2 dB steps. While the RS-M51's two-color peak-hold FL meters show you the signal being recorded.

With the RS-M51's record/playback and sendust/ferrite erase heads, you'll not only hear superb dynamic range, you'll also get a wide frequency response: 20 Hz to 18 kHz with metal. And with an electronically controlled DC motor and dynamically balanced flywheel, wow and flutter is just a spec (0.045%), not a noise.

Technics RS-M51. Don't be surprised if its intelligence goes right to your head.

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HI-FI READOUTS

In a sense, with a multiplicity of useful audio-power displays and real-time analyzers on the market, audio has already gone video

By Ivan Berger
OCTOBER 1980

Uses fifty-two-step plasma displays that and some of the Nakamichi equipment use smaller decibel intervals between the advantage of being easier to see and plasma displays have another advantage: fast (almost instantaneous) response. Meter needles have physical inertia, but electronic displays do not, which means that they can respond to signal peaks faster and more completely. For example, Radio Shack's APM-200 readout (and quite a few cassette decks) not only has meters that show average signal levels but a series of LEDs to indicate peaks as well. It's possible to make meters that, with some electronic assistance, respond to peak as well as average levels, but they are more expensive.

Level Displays and Meters

Audiophiles with high-power amplifiers quite rightly want to know how much of the power they paid for is actually used and under what musical circumstances. And even those who have lower-power units may want to confirm a nagging suspicion that they're running out of power on fortissimos and transient peaks. Audio-output readouts can perform either function and a few others besides.

Signal-level meters have been with us for twenty or thirty years now, though those of long ago were mostly for line-level signals while today's are usually also designed to read speaker-level signals. Mechanical-meter models are still available, but more and more the trend is toward rows of LEDs, usually spaced in 3-dB steps.

Both meters and LED displays have their respective advantages. Meters, for some, seem to be more professional or elegant-looking than LED displays. And since a needle covers a continuum of points, one can read levels within a fraction of a decibel—provided, of course, that the meter is large and accurate enough and the signal level isn't changing too rapidly. LED arrays are visually interesting and useful, too, but if you want one you'll probably have to use a test-bench scope because, aside from those built into Sequerra and Marantz equipment, audio-component oscilloscopes vanished along with four-channel sound.

Hi-fi readout units range in price and capability all the way from the $39.95 handheld Realistic sound-level meter above to the $5,000, 50-pound, rack-mounting Badap spectrum analyzer from Crown shown on the facing page (see also page 67).

Three types of display modes are available, separately or together, on today's level readouts: average (similar to the standard VU meter in its easy-to-follow action), peak (faster moving and more indicative of actual maximum signal levels), and peak-hold (which displays the highest peak level that has occurred within the past fraction of a second or, in some models, the past 20 minutes or more). With the electronic displays, each spot can be individually controlled, the highest reading remaining on view while the line of other display spots continues to indicate the moment-to-moment peaks. A peak-hold meter needle stays immobilized at the peak reading.

If you want to know your system's maximum power demands, then a peak-reading display will be the most informative. If you're concerned about potential speaker damage, then an average reading may be more to the point, since the average power does more to heat up speaker components than short-lived peaks do (really powerful peaks can put excessive physical stress on a speaker cone assembly, but you'll hear that the instant it happens).

If the same peak-level reading shows up repeatedly on a separate-component level display, it can be a sign that your amplifier is clipping at that point. But it can also mean that your program material has been limited to some peak value already. On FM, in fact, that's extremely likely. If turning up the volume moves the peak limit up, then it's the program material that's limited; if not, it's your system.

If you're using an audio display to monitor recording levels from across the room (handy if your tape deck has the typical small meters), then your choice of peak or average will depend on which type of display you're used to judging recording levels by. Bear in mind that the "0" level of your external meter or display may not correspond to the one built into your recorder even if both are reading signals the same way (peak or average). The only way to keep the two displays synchronized is to control the signal level before it reaches either readout, a facility few stereo systems provide.

A peak-hold feature has some additional specialized uses. Observing the maximum output of your system while you listen to a record with the low-level passages just audible can determine the dynamic range you demand of your system. If the maximum reading is frequently the same as your amplifier's rated maximum output, then it's time to consider moving up to a more powerful amp or more efficient speakers. If the display can read line-level signals and has a long peak-hold (as the Technics SH-9020 does), you can also monitor the levels on a record before dubbing it as well. If you're taping something unattended (recording a radio program under timer control, for example), you can check your peak reading afterwards to make sure you neither under- nor over-modulated the tape.

Peak-hold is also useful if your display signals clearly when you're at your amplifier's maximum rated output. Audio Technology's 510B, whose LEDs are green below the yellow "0" LED and red above it, makes that process easy—if your amplifier's power is 25, 50, or 100 watts, the three switch-selectable 0-dB reference points in the
readouts...

"System/speaker/room equalization is easier using an RTA than it is by ear."

unit. And the reading won't depend too much on your speaker impedance—the 510B has a matching switch for speaker impedance. If you're building the Heathkit AD-1701, you can mark your amplifier's power easily by substituting a yellow or green LED for one of the red ones Heath provides, placing the substitute at the decibel level corresponding to your power level. Matching is one area where the power meters and displays built into amplifiers and receivers have a real advantage: their zero points are matched to their components' rated power (at least in theory). One disadvantage, to my mind, of most power indicators is that they read out in decibels instead of watts. It might be more audibly relevant to rate amplifier power in dBW (decibels relative to one watt) than in plain old watts, but the habits of years are hard to break and I still prefer to read my amplifier's output the old-fashioned way.

REAL-TIME ANALYZERS

Much of a writer's fun in doing an article on advanced audio equipment comes from the opportunity it gives him to get his hands on the subject matter. As part of my research on this one, for example, I examined seven real-time analyzers. Here's how, from a very personal, short-term-user's point of view, they stacked up (two others I didn't use are also discussed briefly).

- Audio Control C-101. This $549 unit is two components in one at a one-component price. The analyzer side of this equalizer-analyzer device is available separately (as the C50A) and is easy to use (thanks to big, closely spaced LEDs, plus a line of green LEDs across the display's middle that serves as a reference line during sound analysis or equalizing). The display can be run at either of two "decay" speeds. Slow is more accurate for equalizing, fast is more fun and more informative when "watching" the music. Sound-pressure level can also be measured. However, you cannot switch from the microphone input to direct, line-level connections without reaching behind the unit to unplug the mike. This might be a nuisance with custom-installed or rack-mounted systems. The equalizer side of the C-101 contains the usual ten sliders per channel (one per audible octave), a tape-monitor substitution switch, and provisions for equalizing the signal being fed to the tape. It also has a switchable infrasonic filter and a switchable rumble reducer that adds the two channels together at low frequencies to reduce vertical, out-of-phase turntable rumble with little effect on the bass.

The equalizer controls were convenient, with right and left sliders for each frequency band paired together. Some might find the yellow-brown control markings hard to read against the dark-brown front panel, but they gave me no trouble except in dim light.

- Crown RTA-2. A beautiful-looking machine, although beyond the price range ($2,595) of most home users. It naturally looks less like a home component than a lab component, and its one-third-octave display is three times as informative as the usual octave-band type (though it can be switched to an octave-band mode, simplifying the process of setting up ten-band equalizers—Crown recommends starting in the octave mode, then fine tuning in the one-third-octave mode during equalizing).

The RTA-2's display is a continuous oscilloscope trace rather than a grid of discrete LEDs, smaller variations in level show up clearly. And because the display is a scope, you can also use it to display other signals, such as FM multipath or stereo-phase "scrambled-egg" patterns. The scope has an automatic beam shut-off, so a steady, unmodulated signal won't burn a spot in the tube's phosphors.

The RTA-2 doesn't come with a calibrated mike, but it has instead a professional, three-conductor, XLR-type balanced-line microphone input. Good mikes for the RTA-2 shouldn't be hard to find.

- Eventide Clockworks. This, like Crown's RTA-2, is a one-third-octave analyzer. But the resemblance to the Crown unit ends there. For one thing, the Eventide has no display or control panel of its own but hooks directly into a home computer and uses the computer's keyboard and display. It also lacks a microphone input and comes without a microphone, though you can hook a microphone preamp to its line-level input. It sells for about $575.

The Eventide's output as seen on a computer display is an array of vertical bars. The exact nature of the display depends on the computer it's attached to. The version for an Apple home computer, for example, can produce a color display (if a color monitor or color TV is used). The version set up for the Commodore PET computer shows thirty-two labeled bars (one bar is for overall level) with on-screen lettering indicating the display mode and characteristics. On the version meant for Radio Shack's TRS-80 Series II, the decibel levels are easier to read but the frequencies are more difficult to make out. A "cursor" spot can be set beneath any bar, however, and the chosen bar's frequency will then be displayed in a corner of the screen.

- Irie IE-10A. This was the first handheld pocket-size real-time analyzer with built-in microphone, and it was designed for portability (see cover of October 1979 issue). It cannot be set up among your audio components without building some kind of stand, but you can carry it anywhere. The IE-10A can even be read in the dark because the graticule (like a graph) markings automatically light in dark rooms and turn off in bright environments, and the LED display itself grows brighter or dimmer to match room lighting. Thus it can be used for, say, in situ evaluation of car speakers, and it can be taken to live performances too. (In the "Family Circle" in the upper realms of the Metropolitan Opera...
ninth-octave segments.) The true spectrum analyzer, in contrast, sweeps slowly across the spectrum. This gives it much finer resolution—it can, for example, show the exact frequencies and relative levels of a tone and its harmonics—but it also makes the process rather slow and usually limits analysis to steady signals. RTAs, on the other hand, can respond to music and show the relative signal strengths in several frequency bands simultaneously and from moment to moment—in other words, in real time. This makes them extremely useful both for quick frequency-response measurements (and corrective equalization) and for the sheer pleasure of watching the music at play, so to speak. An RTA can be easily and handily combined with an equalizer (as Audio Control and JVC have done and, I suspect, others will be doing within the next year or two). Another very sophisticated step in this direction is dbx's 20/20, a combination that will automatically adjust audio-system response (as picked up by a microphone in the listening room) until it's flat. There are also, incidentally, equalizers with relative-level indicators, such as the units from Soundcraftsman and ADC.

System/speaker/room equalization is far easier using an RTA than it is by ear, though it's still not quite a snap. RTAs usually have built-in generators for "pink noise" (random noise with equal energy in each frequency band) and microphone inputs, and most come with reasonably flat, calibrated microphones to measure actual sound pressures. You simply feed the pink noise through your system (via an auxiliary input) to your speaker and set up the calibrated microphone at your listening position, and what you get is an instant picture of the combined frequency response of your system and your room. When the equalizer sliders (which usually correspond to the frequency bands on your RTA) are adjusted, their sonic effect is instantly displayed.

RTAs have other uses, too. Most of them have facilities for monitoring line-

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House, a full Wagnerian fortissimo registered only about 85 dB SPL, by the way, with very little energy above 4,000 Hz.) The display is closely spaced so that you see a frequency curve rather than a bunch of discrete dots. All in all, an incredibly well-engineered handicap—but priced, alas, accordingly: $750.

- **JVC SEA-80.** Like the Audio Control C-101, the $600 JVC SEA-80 analyzer has a built-in equalizer and a tape monitor with provision to equalize the signal fed to the tape. The equalizer controls are separately grouped for each channel. The display is small but clear, with the height of a blue vertical bar indicating signal level in each of ten frequency bands and an overall-level band. You can display either left, right, or left-plus-right signals. The display is less sensitive than the other units' and therefore needs a higher signal level. The lowest-displayed frequency band is the octave centered at 31.5 Hz; most of the others go down to the 16-Hz octave. A MEMORY button freezes the display for photography or transcription. The rear panel has a few extras: one switched and one unswitched a.c. outlet and a single-plug DIN tape-record/play jack in addition to the usual four phone jacks.

- **Phase Linear 1200.** Unlike the other analyzers, this one has output as well as input jacks, so you needn't connect up your tape-monitor or processor-loop jacks. For that reason, though, the $800 Phase Linear 1200 incorporates no tape-monitor jack of its own. (You can put it in a monitor loop, feeding the signal to the tape deck through it, but it will not display the tape recorder's output.) Also unlike the others, it has both single-dot and vertical-bar display modes. I find the single-dot mode easier to use when equalizing, as it shows me a frequency graph just like the graphs I am used to seeing in print. The bar-graph mode is more vivid and gives a better sense of energy levels; some prefer this mode for watching music. The display is also very clear, and it covers a wider range (twelve octaves, 16 to 31,500 Hz) than any of the others.

The unit is quite handsome and styled like a piece of rack-mounted equipment—which it almost is. The manual is a sheer delight—clear, comprehensible, and full of useful information—one of the best I've ever read. The Phase Linear, like the Audio Control and Scott analyzers, comes with a separate calibrated microphone. In addition to providing a scale, Phase Linear provides a lavalier clip so you can mount the mike in places where you can't use a stand.

- **H. H. Scott 830Z.** This $600 unit was the first of the home analyzers, and it incorporates quite a few useful features. It's the only one with both speaker-level and preamp-level inputs; it has separate input-level controls for both microphone and line inputs; it can display left, right, or left-plus-right line-level signals; it comes with a test record; and, in its SPL sound-measuring mode, it offers both A- and C-weighted measurements. The manual is fairly comprehensive, and the test record (of warble tones) is useful for checking cartridge responses (there's already a warble-tone generator in the $80Z for other response checks).

I found the LEDs so widely spaced that it was hard to "connect" them mentally into a single curve. As signal levels shift, there's a tendency for two vertically adjacent LEDs to be illuminated at once, signifying that the correct value lies somewhere between them. The display also has extra LEDs to indicate which decibel scale is in use—a handy touch.

A note on microphones: Those analyzers that come with their own microphones (the Audio Control, Phase Linear, and Scott models) have electret-condenser types that take their required power from the analyzers. Thus you can readily use the supplied microphones for recording. The analyzer manufacturer's cautions that the voltages that power their microphones can damage others plugged into their mike jacks.

It was a real breakthrough when real-time analyzers became affordable. Now they're getting smart—witness the dbx and Crown Badap analyzers, both of which use the power of microcomputers to increase their versatility or operating convenience.

The dbx 20/20 (about $1,300) works like any other ten-band equalizer and analyzer—except that it can perform its equalization automatically. All you need do is set up the microphone, switch on the pink noise, press a button, and step back. The analyzer's ten display bars level out as the pink noise smooths out to a more even rush of sound—all without a human hand on the equalizer controls. The whole process takes only a few seconds.

The Badap analyzer (now sold by Crown International for about $5,600) is self-contained, right down to its 9-inch color video display (see frontispiece). It already has built-in programs to do many of the things the Eventide unit described above promises, plus a few things made easier by color (such as displaying peak and average levels simultaneously in different colors).
level signals (the Scott 830Z has special provisions for monitoring speaker-level signals as well). This lets you use the analyzer to check frequency flatness practically anywhere within a system. You can, for example, fine-adjust phono-cartridge matching for the flattest response (pink-noise test records would be best for this; other frequency-test records can also be used, but not as easily). You can also use an analyzer's built-in test signal (virtually all home RTAs except the Eventide and Ivi have one) to check your tape recorder's frequency response with each of several different recording levels.

With the analyzer connected to your speaker output (using voltage-dropping resistors if necessary) you can monitor your system for excessive high-frequency energy, which is a sign of signal clipping and potential tweeter damage. Unfortunately, only the Scott analyzer is set up to monitor speaker outputs directly, and it would be best to check with the manufacturer on the feasibility of feeding the output of a reasonably powerful amplifier into the line-level input of an RTA. (A two-resistor voltage divider may be required.)

How much high-frequency energy is "excessive" depends on both the type of music and the quality of the recording. "Audiophile" records are likely to have more such energy than ordinary ones; jazz will frequently have more highs than classical, and really good rock or synthesizer recordings (rare as those are) will probably have more high frequencies yet.

Which brings us to another use for analyzers: they're helpful reminders of the frequency content of the material you intend to tape. If that material has a very hot high end, you have a choice of turning down the level or switching to metal tape (if your deck can use it) to avoid high-frequency saturation. The Spectro-Peak indicators on some JVC cassette decks (seven bands on the KD-A7; five bands on the KD-85 and KD-65) are there for just that purpose. These are all, of course, just visual reminders of things your ears could very well be telling you anyway. But additional reminders can be helpful, especially when a mistake might mean a hopelessly distorted tape or a blown tweeter.

Many RTAs also have an "SPL" mode so that they can be used, together with their microphones, to measure sound-pressure levels. That's of use in seeing just how loud you're playing your system, in checking the ambient noise levels in your room, and so forth. As with other well-made tools, you discover more uses for these various readouts—and becomes more skillful in their interpretation—the more accustomed one becomes to what they can do. In a sense, the "video era" has already arrived in the world of audio, and the addition of TV-tube images will only complete an already information-filled picture.

Several completely different electronics technologies go into the visible portions of today's audio displays: LEDs (light-emitting diodes), LCDs (liquid-crystal displays), CRTs (cathode-ray tubes), and plasma and fluorescent displays. Here's how they work.

- CRTs are about the last vacuum tubes still in common use (you remember tubes, don't you?). In a CRT, an electron "gun" at one end fires electrons through the vacuum at a screen of chemical phosphors covering the other end of the tube. The phosphors emit light when hit by the electrons. En route, the electrons pass between deflector plates which control just where on the phosphor screen the beam will hit.

Almost any "picture" can be drawn on a CRT, which makes them suitable for television, radar, computer terminals, oscilloscopes, and swept-spectrum analyzers. Their main advantage with real-time analyzers is that they display a continuous range of levels rather than dividing levels into a discrete number of steps. CRTs have some disadvantages—size, cost, and a need for very high voltages—and these are enough to eliminate their use in most home appliances except for television.

- LEDs are, after CRTs, the most familiar electronic display systems in the home. They can appear as discrete dots (as in audio-level displays), individual segments of digits (as in calculators and digitally synthesizing FM tuners), or as round or square elements in rows or columns that make up "matrix" displays (like those in most home real-time analyzers).

A LED, like all ordinary diodes, passes electricity in only one direction. When current flows through a LED, the LED's semiconductor material (usually gallium-arsenide phosphide or gallium phosphate) emits light. At present, red, green, yellow, and orange units are available. Blue LEDs have been made in the laboratory but are quite inefficient producers of light at this stage. LEDs respond practically instantaneously to input signals and have very long lifetimes.

- Plasma displays are also a bit like tubes, but, unlike CRTs, plasma tubes are flat and platelike and instead of a vacuum they're filled with a gas (argon or neon) that glows when a sufficiently high voltage is applied to it (argon glows blue, neon orange). Electrodes control where the voltage is applied and thus where the tube glows.

- Fluorescent displays are vacuum tubes—triodes, to be precise—with a cathode to emit electrons, a plate to attract them, and a grid to modulate the electron flow between them. But in this case the plates are coated with a substance that fluoresces (glows) brightly when electrons strike it. The plates can be spots on a bar-graph real-time analyzer display or digits in a calculator readout. Switching the plates on and off controls which spots light at any given instant.

- LCDs differ in one primary way from all the above. The other displays emit light; LCDs can only "shadow" or reflect it, depending on whether they're backed by reflectors or illuminated surfaces. LCDs are sandwiches of an organic liquid-crystal material between two slices of glass with a transparent, conductive coating on the inside of each slice. The desired spots or numbers are etched in the conductive coating. When a voltage is applied across opposing coatings, the sandwiched liquid crystal's light-polarizing properties change, producing a visible display. LCDs can come in a great variety of colors, patterns, and designs. They cannot respond as quickly as the purely electronic displays, but LCDs are now being made which are fast enough for most audio applications.
The micro processor controlled turntable that automatically selects and plays the tracks you want to hear.

Push the wireless remote control button and select track 1, track 3, track 6 or any other. The micro processor automatically moves the arm to play the selected track. You can repeat the same track, select another or play the entire record over again all by wireless remote control. And there’s an LED readout to indicate the track being played.

Since you can select the music you want to record, making tapes from your record collection becomes easier and more convenient than ever before.

The MT6360 Linear Drive turntable is not only great for really enjoying the music you like, but it’s a sophisticated audio component with some extraordinary design features.

Fisher’s exclusive Linear Drive. With Linear Drive, the only moving part is the platter itself. So, there’s virtually nothing to go wrong. And, no inherent turntable noise. (For you audiophiles, wow and flutter is just 0.035% and rumble is a low -70dB).

There’s a lot more. There’s a servo circuit that continuously monitors and locks in record speed.

Plus a strobe light and fine speed control so you can monitor the accuracy of speed and alter pitch.

The MT6360 has a viscous-damped “floating” tonearm with a specially designed integral stereo magnetic cartridge. And there’s even a muting circuit to eliminate that annoying “pop” you hear when the tonearm touches down.

It’s what you’d expect from the new Fisher. We invented high fidelity over 40 years ago. And never stopped innovating. So check out the new MT6360 at your Fisher dealer. One demonstration of the automatic track selector will change, forever, the way you listen to records.

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FISHER
The first name in high fidelity.
STEREO REVIEW has not in the past paid much attention to so-called "music systems" (assemblages of components or quasi-components from a single manufacturer intended to be bought as a ready-to-play package) because it is generally felt that the consumer willing to inform himself could do better making his own individual component choices. Furthermore, such music systems have traditionally been bottom-of-the-barrel affairs, specializing in chrome-covered plastic and 3-watts-per-channel outputs.

At the Chicago show this year there appeared quite a number of "super" music systems, components put together with some care by the manufacturer, often with lavish and expensive detail. The typical super system is composed of separates—sometimes even separate preamplifier, power amplifier, and tuner.

The enormous car-stereo exhibits at the Summer Consumer Electronics Show would have provided few revelations for regular readers of this magazine. Our June 1980 report on car stereo, still on some newsstands as the CES began, covered much of the equipment that made its official debut in Chicago. But there were enough new introductions to uncover some trends and make former ones stand out more clearly. There was also a disappointment—only a handful of manufacturers (Alpine, Craig, Clarion, Jensen, and Sony) seemed to use the new Ad Hoc Committee specification system in their literature (see "Audio/Video News," January 1980). On the other hand, as time goes on (especially now that the January 1980). On the other hand, as time goes on (especially now that the Electronics Industry Association's Ad Hoc Committee has been absorbed by the new specification system), there are likely to be more and more finely adjusted. (Sony uses diagonal sliders on its nine-band model to achieve more even travel with a shallow panel design.)

The third trend in equalizers (and some in-dash units as well) is toward LED displays of two basic types. Kenwood has LEDs on their equalizer sliders to give a fast, visual indication of their settings even in the dark. (Jensen equalizers, incidentally, have illuminated control panels.) That's probably a help to the driver. However, quite a few other manufacturers (Audio/Technics, Sony, Clarion, Jensen) have now joined the companies (including Alpine, Craig, Clarion, Jensen, Kenwood, and Sony) making their own individual component choices. Furthermore, such music systems have traditionally been bottom-of-the-barrel affairs, specializing in chrome-covered plastic and 3-watts-per-channel outputs.

One major trend was toward the incorporation of five-band equalizers into in-dash stereo units: among those doing this were Audiobahn, American Audio, Audiodox, Fujitsu Ten, Knickerbocker, Roadstar, and Sound Barrier. For separate equalizers, there were at least three design trends: one is toward very compact designs such as Alpine's new Model 3011 (1½ x 5⅞ x 3⅛ inches), Clarion's EE 115 (3½ x 2½ x 2 x 2), Mobile Audio Development's MA 7P seven-band Micro (1⅞ x 5⅛ x 1⅜), and Sony's nine-band KE-9 (1⅞ x 5⅜ x 7). A second equalizer trend is to large, flat equalizers, typified by the Jensen and Zapco models, which can be slid or swung into concealed positions after being set. That saves space, lets you guard your equalizer settings from the fingers of curious passengers, and makes the equalizers less obvious targets for theft. It also leaves enough panel room for longer slide controls, which can be more finely adjusted. (Sony uses diagonal sliders on its nine-band model to achieve long travel with a shallow panel design.)

The third trend in equalizers (and some in-dash units as well) is toward LED displays of two basic types. Kenwood has LEDs on their equalizer sliders to give a fast, visual indication of their settings even in the dark. (Jensen equalizers, incidentally, have illuminated control panels.) That's probably a help to the driver. However, quite a few other manufacturers (Audio/Technics, Sony, Clarion, Jensen) have now joined the companies (including Alpine, Craig, Clarion, Jensen, Kenwood, and Sony) offering it. More and more in-dash units now have preamplifier-output jacks either as their only outputs or in combination with low-power built-in amplifiers. As Alpine points out, this lets the user buy a complete unit now, then upgrade it later with the addition...
of a higher-power separate power amp. On Sony's XR-77, however, the built-in 12-watt-per-channel amplifier can be used to feed the front speakers while the preamp outputs are used with a larger amplifier for the rear ones. (Since the rear speakers usually have heavier woofers to take advantage of the large trunk enclosure behind them, and since they're further from the driver, they usually require or can take more power.)

Other features that appeared at CES are too new to have become trends yet (if they ever will): Clarion's knobless $900 PE-959A, able to switch stations at up to ten programmed times, made its debut. Mitsubishi announced "pinch-off protection" (the pinch roller retracts when the power is off). Panasonic showed its second overhead "Cookpit" model, the RM-310; unlike the earlier RM-610, one lets the driver see the FM tuning dial without assuming a supine position. Panasonic and Alpine had models with search-sensitivity controls to determine what signal strengths their built-in seek-or-scan circuits find acceptable and what they will ignore as too weak. Sony's XR-50 has a "System EQ" switch that will determine what signal strengths their built-in seek-or-scan circuits find acceptable and what they will ignore as too weak. Sony's XR-77, however, the built-in amplifier, preamplifier, tuner, and cassette deck, the whole works bearing a suggested price of $1,634.80. The latter system consists of integrated amplifier, analog tuner, and deck for $670. More such systems are available from Sony, U.S. Pioneer (which became a leader in this type of merchandising with the introduction of the Component Ensemble Series a few years ago), Mitsubishi, Hitachi, Onkyo, Toshiba, Sharp, Philips, Kenwood (with seven systems), and Cybernet, a company just making a full-scale entry into the U.S. market. The prices for these companies' systems top out at about $1,300, but JVC's go on to $1,700 and those from Fisher, as noted above, to $2,700. And, further, Teac has indicated that it will be offering such package-purchase opportunities in the immediate future.

In amplifiers, Clarion showed an ultra-compact, 12-watt-per-channel stereo model, the GA 301E (1 x 5 1/2 x 4 inches), while Alpine went to the opposite extreme with a 150-watt-per-channel "MOSFET Incremental Voltage" amplifier to sell for about $500. The Alpine amplifier has a two-stage pulse-regulated power supply (to draw less current from the car's battery at low power levels) and is designed to shut off automatically if its temperature rises above 85 degrees C or if the voltage of the car's electrical system drops below 10 volts. And Zapco showed an elaborate amplifier at 75 continuous watts per channel (150 total watts) with such features as a separate power module and an optional "energy storage module" that increases the amplifier's total power to 165 watts rms.

Most new speaker models were designed for either higher power-handling capacity or shallower mounting: alas, the two goals are somewhat antithetical. Perhaps falling in the greater-power-handling category are several new four-way loudspeakers. Among the entries: Jensen's QuadraX and units from Mitsubishi and Sparkomatic.

The number of new add-on tweeters or midrange/tweeter modules increased too: Alpine, Clarion, Magnum, Sound Barrier, and others had new models on view. Clarion's are especially interesting in that they can be either separately mounted or installed coaxially in the grilles of their new matching woofers (the grilles have removable panels to permit this). Pioneer's TS-1600 and Jensen's J2000 were the most distinctive-looking new car speakers. The Pioneer, designed for rear-deck mounting, has a tweeter that sticks up periscope-like above its 6 1/2-inch woofer, "directing the highs straight ahead at the listener through diffuser plates." The Jensen is a golden metal tube with a woofer at one end, a passive radiator at the other, and a tweeter in the middle. Self-amplified speakers were introduced by Sony, Sound Barrier, Concord, and others. Sound Barrier's offerings included models in enclosures as well as those designed for flush mounting. And Concord's Equadyne speaker uses the same "dynamic compliance" active impedance-control system as the power amplifiers from this company that we described in June.

Some of the new domestic cars pose speaker-installation problems, problems the speaker industry has been working hard at solving. The new car designs have forced production of a host of new speaker sizes (4 x 10-, 5 x 7-, and 6 x 8-inch ovals, for example, or 3 1/2-inch round ones), with most speaker manufacturers offering one or all of them. But the aptly named Adapt-a-Sound, a simple plastic accessory, permits installation of 6 x 9-inch speakers in the trunks of many cars taking any of the above oval speaker sizes (though not the 3 1/2-inch round).

The more you get of today's high-performance sound gear, the more you'll want to keep it (and the more light-fingered persons will want to keep it for you). And so this summer's CES also saw new burglar-alarm models from Auto Page and Page Alert (to summon you by radio when your car's being molested) plus the debut of Burbank's "Audio Safe," a tough-looking locking cover for your stereo equipment.
TONIO K.

Just what the Eighties needed: a Dada-ist
Get Ready Man

By Steve Simels
TONIO K.'s first album, "Life in the Foodchain," appeared at the offices of Stereoplay without much fanfare. In fact, it arrived without even a cover, being what is referred to as a "test pressing." There was no biographical data supplied with it (who was this guy?), no lyric sheet—nothing but a record and a song listing. Noting, however, that the concluding tune was entitled "H.A.T.R.E.D.," I decided to give the mysterious disc a spin, since I had been known to assert that life is short and you might as well hate as many people as humanly possible in the time allotted to you.

Soon, my headphones were filled with the delicate, plaintive sounds of a solo acoustic guitar in the great folkie tradition, sounds I had come to detest after hearing them on my college lawn for longer than I care to think about. And then I heard a voice: choked, mournful, and pretty undistinguished. It was singing these lyrics, in tones more conversational than musical:

Now I know it's not unusual;
It's nothing so unique;
There's probably hundreds of wonderful
love affairs
That go bad in this town every week
(it's a big town).

But of them others, them sad-hearted lovers,
Could cry in their beer, what the hey.
It didn't concern me, was none of my business.
I never had nothin' to say.
But suddenly darlin', the table has turned,
You have left me for somebody new.
And now it's hard to express the resentment
I feel.
For the years that I've wasted on you.

Then a dead stop. Softly, seductively, the singer declared, "But let me kind of put this another way. Okay?" At which point all hell broke loose. What sounded like the world's loudest, fastest punk band crashed in around my ears with a Ramones-ish redo of the preceding verse, followed by a five-minute rant that was considerably angrier and ended with the recording studio being blown up. Needless to say, by the time all this aural carnage was over, I was persuaded. Tonio K., whoever he was, was clearly my kind of guy.

Further exposure to the man's work altered my opinion not one whit. The rest of the album turned out to be a crazed, brilliant meditation on what he described in one tune as "the Funky Western Civilization"; it made me laugh and it made me think and sometimes it even made me want to dance, which is more than can be said of 99 percent of the albums currently before the public. (And when I finally got a "real" copy of "Foodchain" it turned out to have the cleverest packaging job of the year to boot.) A few weeks later, I caught one of K.'s rare live appearances and was equally impressed. His on-stage character was a bomb-throwing anarchist out of an old Charlie Chaplin comedy, which struck me as one of the most appropriate rock-and-roll metaphors I'd ever seen. So, when I heard that the man was in town recently to promote his latest-and-greatest platter, "Amerika" (this time on Arista, which may never be the same), I decided I had to find out if there was in fact a real person perpetrating these outrages on an unsuspecting public.

AM relieved to say that there is. Tonio, clad in a rocker's leather jacket and shades, met me at the Arista offices in Manhattan, where we discussed a variety of subjects ranging from the infallibility of hamsters (more on that later) to the current global situation, and he turned out to be every bit the engaging wiseguy his songs had suggested. He walked it, as they used to say, like he told it. For the record, he's around thirty ("I could be over or under"), a California kid (he grew up in the San Joaquin Valley area), and an ex-greas- er, and he will not disclose his real name (I asked him). When asked to cite his influences, he reels off Dada-ists from New York," he told me. "They can't believe I grew up on a farm in a pastoral California setting. The only thing I can say about that that makes any sense to me is that, with my atti-tude, if I had grown up in New York I would have been dead ten years ago."

But how did that obsession with the Dada movement begin?
"That," he said, grinning, "is a good story. That's such a good story you may think I made it up. It's from high school; my friends and I were into this creative-vandalism trip. "See, I was doing airbrush art because I had cousins in central California who had hot rods on the cover of Hot Rod magazine; that was my first deviate focal point. And through them I met this guy Ed "Big Daddy" Roth, who was the most famous airbrush artist, did all the sweat shirts and stuff. And I was inspired by him to become an airbrush artist.

"So anyway, we got into a trip where we would steal books out of the library, bring them back to my place, and then I would alter the pictures. Airbrush them . . . add dicks and tits, the usual teenage humor. But it was always with this bizarre edge, because we wouldn't just ruin the books. We returned them in the overnight book return and nobody was any the wiser. And we would just do these little alterations so somebody could be reading along and they would look at the pictures twice, and it would be all wrong. Unfortunately, of course, we were never able to gauge their reactions. We had a pretty good idea, though.

"So one day we were walking through the Fresno County Public Library, just grabbing books, and I literally randomly grabbed a book off the stack and it was a Dada book. I don't remember which one. We opened it up to check it out and make sure it was worth defacing before we stole it, and we started going through it and suddenly we thought, 'Look at this stuff—it's better than what we're doing.' I was a fan from that point on.'

He paused for a second. "Those guys were just great. Like, for instance, this guy Marinetti, the Italian futurist writer and painter, was invited by the Nazi hierarchy in 1933 to some cultural dinner in Berlin where everybody short of Hitler was in attendance. So he and Schwitters were sitting at this horseshoe table, and at all the other tables were storm troopers and the ministers for this and that.

"There was all this stifled conversation, and finally the Nazi host asked Marinetti to make a speech. He said he would be very happy to, that he was so carried away with the moment, in fact,
that he was going to make this speech in French—probably to twist it in their side a little—and then he recited this completely outside poem called The Raid at Adrianople, resplendent with shrieks and howls and siren noises. Everybody was totally shocked; they didn't know what to do. For his finale, he was standing up on the curved table in the middle of the rostrum, and he collapsed over the table after whatever howling he did, grabbed hold of the tablecloth with both hands, and slid to the floor pulling everything into the laps of Himmler, Hess, Goebbels, and all those people. Schnitterts at that point jumped up and began reciting Anna Bloom, a nonsense phonetic poem of his, from his table in the audience, and they all left Germany very shortly after that.

**AHA... I see.** Certainly this bears out K.'s 1979 assertion that "Dada was very rock-and-roll." And I can imagine an unsuspecting listener's reacting to "Life in the Foodchain" in much the same way as whoever found his handiwork in the Fresno Library. But let's talk about the new album, I suggested. While I love it dearly, it is somewhat more serious than its predecessor. It's almost doom-ridden, in fact.

Tonio seemed to agree. "I know, it is that," he said, "and sometimes I wonder if people want that in their daily entertainment quotient. But it could be time to get serious; there may be a few more people than those comedy lovers out there who need stuff like this.

"I just have this feeling that we're heading downhill. We clicked into and clocked into a whole new thing in the Eighties. Suddenly there was the end of 1979, and then Iran, and then we clicked into Afghanistan practically on New Year's Day. We're into some stuff now we may not be able to back out of.

"I mean, the Texans, when they're out of gas, will start a war. Texas being a state of mind, as they say, they just won't stand for it.* Look what's happening over there now [our discussion took place the morning after the aborted Iranian hostage rescue]. They hate us, not to mention they want Israel, which we won't give them. They'll cut off the oil, which they are doing progressively and will do finally one of these days or years. That's when the trouble will start. Pretty bleak."

Too depressing even to contemplate, I suggested, a grey cloud forming above my brow. "Of course," he said, "the optimistic side of that is I could be totally full of it, and I hope that I am. Somebody please prove me wrong."

It must be rough on somebody as er, sensitive as Tonio to deal with the news media, at least given the current geopolitical climate. "I just don't do it," he said. "I don't have a TV, and I never read the papers. Can't stand 'em. I literally go into anxiety swoops and get faint when I hear that stuff."

Oh sure, I thought. And pigs have wings. But enough of these bald-faced lies. Let's talk about... hamsters. Any truth to the rumor that a hamster actually programmed "Amerika"?

Tonio nodded, as if to say "Of course." "Yeah, I have this hamster, John Paul III, who lives in Vatican City, which is an elaborate habitrail on my back porch (it goes over the ceiling and has a north vestibule and an east wing and on and on). And John Paul also has a mouse companion, the ever faithful Father Mickey.

"Now we had three songs we'd done for the new album: The Night Fast Rodney Went Crazy, Doggytown (which is actually hilarious), and You Make It Way Too Hard. Clive [Davis, Arista president] hated Doggytown. John [Devirian, Tonio's manager] didn't think we had done Too Hard as well as we could have, which I was sort of in agreement with, and Nick [van Maarth, his producer and guitarist] hated and continues to hate Fast Rodney. I sort of like and dislike them all equally.

"So we were trying to decide which of the three to use, and I called everybody I knew and gave them the three names, and there was no majority opinion. So finally I decided the hell with this, because John Paul III had what I call the sphere of enlightenment, one of those little clear plastic balls that you insert the hamster in, and by walking in it he's able to move around the house.

"So I put John Paul in the sphere of enlightenment, put a piece of legal paper down with Rodney written on it, Doggytown written on it, and You Make It Way Too Hard, the object being that whichever one he rolled over first in his obviously enlightened state of infallibility would be it. And he rolled over Rodney, which I was actually glad about. I mean, we paid Flo and Eddie a lot of money to sing on it."

That makes as much sense, I allowed, as, say, the American presidential-primary system.

"Oh yeah," Tonio said. "Inscribed on the inner groove of the album are the words 'hamster's choice.'"

**At this point, the wisdom of Tonio's contention that there is really nothing left to say seemed inescapable. Still, I couldn't leave without finding the answer to one last nagging question: was Tonio secretly a Believer? Given papal rodents, references on his new album to the Book of Revelations, and the recent example of Bob Dylan (a major formative influence on the young K.), it seemed at least plausible.**

I've had those thoughts since about '72," he said seriously. "There's a song that will be on the next record called Hey John that I wrote back then and can be updated, which I'm gonna do, which is about how uncanny all the prophecy is, all that we're going through. Read the headlines and then cross-reference them with Daniel, Isaiah, and Revelations."

I must have looked a trifle pained, because suddenly he leaned forward earnestly. "Mind you," he said grinning, "I'm much too cool to be a Christian."

As I mentioned earlier, this Tonio K. is my kind of guy. He'll probably hate me for saying this, but I think we should run him for President. Say about 1984.

---

* Top airplay in Houston mid-July: Bomb Iran, by Vince Vance and the Valiants.
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Carly Simon and Son
(Photo by Peter Simon)
Among the elite of big-time, big-money pop music—where Ripe can turn to Rotten overnight—conscious growth and careful maturation are the easy-does-it exception rather than the greedy rule. For growth (taking risks) and maturation (acting your own age) are, unfortunately, two of the things successful pop artists most often fear: “Who needs a one-way ticket to Tasteful Obscurity, to the limbo of good reviews, cult audiences, and no sales?”

Carly Simon, a member of the pop elite by any definition, is also one of the happy exceptions. “Come Upstairs,” her latest album for Warner Bros., is not only filled with risks, some daring and impromptu, others cannily calculated, but also with a wry, grown-up self-awareness that is light years away from the squishy self-absorption of so many of her contemporaries. And it is an album that continues the upward arc of a career that’s been a success almost from its very beginnings. It seems hard (at least for me) to accept the fact that Carly Simon has been around for almost a decade now, hard to remember that in 1980 she’s no longer the bright-eyed kid in the graduating class but a young matron trying to juggle a family life along with a musical career. I have no idea how the family life is going, but the career is obviously sizzling. She has no idea how the family life is going, but the career is obviously sizzling. She has

Come Upstairs and The Three of Us in the Dark are both brilliant examples of her ability to explore contemporary sexual tensions in a uniquely ambivalent style. She’s moved away from her earlier intellectualized, girlish, even rather angry stance (You’re So Vain, Vengeance, We’re So Close) to a softer, more catlike subtlety, engaged but not committed. Her work somehow seems a lot more wondrously for it and therefore a lot more appropriate to the Eighties, a time when the First Fine Fiery Flush of Women’s Lib seems to have cooled down to a more reflective, less activist mood (given my druthers, I’d take Colette over Simone de Beauvoir any day of the semaine). Come Upstairs is either about passion suddenly lit between two people who’ve known each other for years or about passion rekindled. It’s a Carly Simon song, so of course you’re never quite sure. But the precise meaning isn’t nearly as important as the rich variety of moods that suffuses the lyric from initial impulse to final lines: “Yeah, I’ll give you some fire/I’ll give you myself/And I will show you my desire.” The Three of Us in the Dark is perhaps about the memory of a past lover intruding upon a current relationship, maybe about another, more critical self doing the same. But, then again, it is the Eighties, and one never knows about these new designs for living, do one? Anyway, it’s a lovely song beautifully performed by Simon with an accompaniment as cool and as white as moonlight.

Jesse is a serio-comic ramble about a girl who is trying to swear off said Jesse’s charms—but she ends up obsessively chasing after him the moment she hears he’s back in town. Musically this is probably the strongest track on the album, with a fine freewheeling spirit that commands the participation of what must be the entire Taylor family including daughter Sarah Marie (she’s credited with the “la-las”). There are other good things here too, such as Stardust, a rock number about that by-now fairly tattered and quite justly abused figure the Macho Rock Star, and Them, yet another exercise in ambiguity; it might be about any minority group (Short People?), but it has a special poignancy in that it is seen through the eyes of a girl who, though she vowed to resist Them, has instead become one of their conquests.

“Come Upstairs” is one of those albums that it’s a pleasure to report on because it not only dignifies but enlarges the pop scene. Granted that Carly Simon has always made the right friends and found the best colleagues, that she’s managed her career with a calm shrewdness that belies her years, and that she evidently listens with more
The Complete Music of Carl Ruggles: Reaching for the Sublime—All the Time

My personal association with the American composer Carl Ruggles and his music goes back to the 1960s, a time of rediscovery for the work of many of the great American musical pioneers. I had the privilege of knowing this crusty, opinionated old New Englander in his last years and of writing about him for this magazine (in the American Composers Series, September 1966). I was subsequently able to arrange the first recording of his Sun-Treader, which at that time had never even been performed in this country! I also helped to rediscover Vox Clamans in Deserto and brought it out in its first modern performance in Hunter College's New Image of Sound series.

Why was I so attracted to Ruggles? Why am I still? Ruggles is austere, difficult, uncompromising (qualities I no longer consider to be automatic virtues), but he is an exemplar of the best in the good-old-fashioned American character: honesty, ruggedness, self-reliance, eccentric individuality, and, yes, vision. Ruggles will never be as popular as Charles Ives or played as often as Edgard Varèse, but, I’m happy to say, he has finally reached deserved recognition as one of the great originals of American art.

Conductor Michael Tilson Thomas was an early Rugglesite—at least, considering his years, in the recent revival of the music. He gave one of the early Sun-Treader performances, played a tape of it for Ruggles (who never heard it live), and later recorded it. Now he has assembled for CBS—with love and a lot of passion—the complete Ruggles. It is astonishing that this important and imposing creative output could be comprehended in less than a dozen titles, four record sides, less than an hour and a half of music. Compared with Ruggles, Anton Webern was almost verbose. Nonetheless, every one of Ruggles’ compositions was a titanic struggle with a recalcitrant universe, worked and reworked, revised, boned, and polished. All of them are craggy, dissonant, contrapuntal, mystical, reaching for the outer limits.

But is the collection “complete”? To all intents and purposes. Ruggles destroyed most of his early music; only a few bits and pieces, not recorded in the new release, are said to survive. Even so, it is a collection that features a surprising amount of unfamiliar material. Besides Vox Clamans (never before recorded?), there are two versions of Angels (the original for six trumpets and a later one for trumpets and trombones), an orchestral piece called Men (not the piece from Men and Mountains, but one intended for a symphony to be called Men and Angels), a revised coda to Men and Mountains, an orchestral version of Evocations (better known in its original piano form, which is also here), and, most astonishingly, Ruggles’ final composition, a hymn tune called Exaltation, written in memory of his wife Charlotte.

None of this—not even the hymn tune, so different from the rest of his work—really changes our view of him, but it is all material of the highest interest, and it is most vividly presented in these recordings. The process of cultural assimilation of this difficult music and musical style is quite remarkable. The pain, the agony, of getting it to sound like anything at all in performance is largely gone, leaving the qualities of agony and ecstasy in the music to speak for themselves—but then, so it was with Ives at first. The greater ease with the music is particularly noticeable in comparing Thomas’ earlier recording of Sun-Treader with this one; though it’s not perfectly polished, the lights and shadows of the later version are far more pronounced.

Be fairly warned: even in these latter-day performances and recordings, there is nothing easy about this music, there is no comic relief, no letting up of the battle with the universe. Ruggles’ aim was nothing less than the sublime—and the sublime virtually all of the time. There is therefore an awful lot of reaching for the infinite packed into a dense, intense, dissonant space. It is, in fact, a lifetime’s worth, the lifetime of one of those big, rugged individualists who are—or once were—the real, though often disprized, glory of American art.

—Peter Reilly


Al Di Meola: Adept Eclecticism Weaves an Exciting Tapestry of Sound

Guitar virtuoso Al Di Meola quickly became a favorite with lovers of fusion music three years ago when he began recording on his own after serving an apprenticeship with Chick Corea’s Return to Forever. Somehow, though, he couldn’t manage to produce an album that would appeal to a more traditional audience as well, those with a limited appetite for the frenetic rhythms and frequently rasping rock-derived textures of this “new music.” No one would deny his mastery of technique and his ability to create aural fireworks on both the electric and acoustic guitar, but there were times when sheer power and virtuosic display seemed to overwhelm or take the place of musical content.

(Continued on page 83)
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With all this, the R-S33 has plenty of other features to recommend it: direct-coupling, a sensitive tuner section with linear-phase IF filters, two tape monitors with equalizer and dubbing facilities, LEC power meters, and JVC's triple power protection system.

So if you're interested in getting more without paying more, call 800-221-7502 toll free for the location of your nearest JVC dealer (in N.Y. State 212-476-8300). Once you've heard the R-S33, you'll have no doubts about which receiver gives you the most for your money.
"...an outstanding product on any absolute scale of measurement without regard to price." - STEREO REVIEW

Read more of what Stereo Review magazine had to say about the Yamaha CR-840 receiver:

"The harmonic distortion of the CR-840 was so low that without the most advanced test instruments it would have been impossible to measure it.

When speaking of the OTS (Optimum Tuning System), an easy-to-use Yamaha feature that automatically locks in the exact center of the tuned channel—for the lowest possible distortion, Stereo Review said, "The muting and OTS systems operated flawlessly."

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In summing up their reaction to the CR-840, Stereo Review said, "Suffice it to say that they (Yamaha) make it possible for a moderate-price receiver to provide performance that would have been unimaginable only a short time ago."

And the CR-840 is only one example in Yamaha's fine line of receivers. For instance, High Fidelity magazine's comment about the Yamaha CR-640 receiver: "From what we've seen, the Yamaha CR-640 is unique in its price range."

And Audio magazine has remarks on the Yamaha CR-2040 receiver: "Without a doubt, the Yamaha CR-2040 is the most intelligently engineered receiver that the company has yet produced, and that's no small feat, since Yamaha products have, over the last few years, shown a degree of sophistication, human engineering, and audio engineering expertise which has set them apart from run-of-the-mill receivers."

Now that you've listened to what the three leading audio magazines had to say about Yamaha receivers, why not listen for yourself? Your Yamaha Audio Specialty Dealer is listed in the Yellow Pages.

To obtain the complete test report on each of these receivers, write: Yamaha International Corp., Audio Division, P.O. Box 6600, Buena Park, CA 90622.

Quotes excerpted from June 1979 issues of Stereo Review, High Fidelity and Audio magazines. All rights reserved.
Chick Corea himself, whose influence is apparent on far more than the three tracks where he plays piano: Di Meola’s percussive style, his affinity for Latin rhythms, his whole musical philosophy were developed during the years he spent with Return to Forever, the band that made fusion a mainstay of contemporary American music. Corea’skeyboard here is brilliantly incisive, a quick summary of his contributions to a decade that shaped Di Meola. It is not too much, I think, to call Al Di Meola the Chick Corea of the guitar. As for the music, you may call it what you will, but call “Splendid Hotel” a simply splendid album. —Phyl Garland

**AL DI MEOLA: Splendid Hotel.** Al Di Meola (electric and acoustic guitars, celeste, vocals); Philippe Saisse (keyboards, marimba); Chick Corea (acoustic piano); Robbie Gonzales (drums); Eddie Colon (percussion); Anthony Jackson (bass guitar); other musicians. *Alien Chase on Arabian Desert; Silent Story in Her Eyes; Roller Jubilee; Two to Tango; Al Di’s Dream Theme; Dinner Music of the Gods; Splendiddo Sundance; I Can Tell; Spanish Eyes; Isfahan; Bianca’s Midnight Lullaby.* COLUMBIA C2X 36270 two discs $9.98, © CAX 36270 $9.98.

Now, however, with the release of a superb new double album for Columbia, the twenty-four-year-old Di Meola has come into his musical maturity, weaving an awesomely exciting tapestry of sound whose adept eclecticism defies category. It might still be called fusion music, but he has extended the genre’s range by dealing more directly with the strains that feed this contemporary hybrid: elements of classical, popular, jazz, and Latin music are all held together through the strength of an overarching artistic concept.

Many of these selections will appeal immediately to Di Meola’s long-standing fans, and others are likely to gain new ones for him. His gifts for fantasy and electronic effects infuse *Alien Chase on Arabian Desert,* described as an extraterrestrial being’s initial impression of Earth. Similar fusion pyrotechnics are apparent on *Dinner Music of the Gods* and *Splendiddo Sundance,* a sequel to the *Mediterranean Sundance* on his “Elegant Gypsy” album. But he turns to the lushly romantic lyricism of Brazil (home of some of the world’s greatest guitarists) for his composition *Silent Story in Her Eyes,* and he captures a spirit of urbane lightheartedness on *Roller Jubilee.*

Remembering how all too many instrumentalists sound when they try to sing, one might be prepared to wince at Di Meola’s vocal debut on *I Can Tell,* but it’s not all that bad. One of the highlights is *Isfahan,* a work composed by Chick Corea for classical guitar and featuring the Columbus Boychoir with strings. It summons up a feeling of mystic antiquity not easily forgotten.

Special guests on this outing are guitarist Les Paul, that pioneer of overdubbing years ago, who sits in (for what he says will be his last recording) on the evergreen *Spanish Eyes.* Then there is

In 1976 and 1977 Václav Neumann and the Czech Philharmonic taped all six of Bohuslav Martinů’s symphonies for Supraphon, an especially commendable enterprise since all six symphonies are eminently worthwhile, most of them haven’t been available for years, and Nos. 1 and 2 had never been recorded before. The First Symphony was released here last year, on a disc filled out with Martinů’s *Inventions* (Supraphon C 4 10 2166); a final disc, comprising Symphonies Nos. 3, 4, and 5, should be turning up shortly. In the meantime we have a most attractive pairing of the Second Symphony, probably the most ingratiating of the six, with the one that brought the cycle to its brilliant conclusion four years before the composer’s death. Listeners who have yet to acquaint themselves with Martinů’s music could hardly ask for a happier introduction to it.

Martinů (1890-1959) did not become a symphonist until he was in his fifties. He composed his first five symphonies during the years he spent in this country (1941-1946), and four of them were introduced by American orchestras. His last symphony, too, was composed for Charles Munch and the same orchestra that had given the premières of the First and Third, the Boston Symphony. It won the prize of the New York Music Critics Circle for the best work performed in New York City in 1955.

The Second Symphony, which preceded the Sixth by ten years, was described by Martinů as “calme et lyrique”; the work, he said, was his way of reacting to the Second World War with “serene ideas expressed in calm concept and order” rather than “any professional and technical expression of torture.” As if in overt rejection of any oppressive thought, the last two of the work’s four movements are dancelike and rather jolly, though there is a citation of the most inflammatory phrase from the *Marseillaise* all but buried in the third movement. War-time connotations aside, the Second Symphony is a solid delight, and the splendid performance can only make us wonder how so fine a work could have fallen into such thorough neglect since its Cleveland première thirty-seven years ago. The recording may eventually prove effective in correcting that situation; in the meantime it enables a larger audience than can fit into any hall to experience Martinů at his most appealing. One of the most welcome orchestral releases of the year.

—Richard Freed

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Performance: Intriguing
Recording: Very good

Joan Armatrading is a performer who resolutely and cheerfully keeps her audience at a distance. She refuses to divulge anything too personal about her life, offers few clues about the meanings of some of her more ambiguous lyrics, lives in seclusion, tours only occasionally, and records fairly regularly. She does not believe, on the available evidence, that her audience is entitled to anything more than her best efforts as a musician; her psyche is none of their business. Good for her!

The title cut of this, her latest album, celebrates her happiness in privacy. The melody is quirky and arresting. The most bizarre song is Simon, the portrait of a jealous younger brother who wants to kill his womanizing sibling. When she's not coating on automatic, Armatrading writes lyrics that are full of sly winks, oblique sexual references, hilarious coquetry, and down-to-earth mockery of herself, her listeners, and pop stardom itself. She is evidently having a fine time keeping everybody guessing about the relation between her intriguing music and her private life, and I must say it's a pleasure playing her game.

JEFF BECK: There and Back. Jeff Beck (guitar); instrumental accompaniment. Star Cycle; Too Much to Lose; You Never Know; The Pump; and four others. Epic FE 35684 $8.98, © FEA 35684 $8.98, © FET 35684 $8.98.

Performance: Indulgent
Recording: Ponderous

Jeff Beck is a brilliant, sloppy, indulgent, wayward, bold, and half-hearted guitarist all at once. There's no denying his talent and technical prowess, but he simply can't make up his mind what he wants to do. This outing is about equally divided between lyricism (in the poetic sense) and gobbledygook. When Beck wallows in excess—simply throwing his technique around—he is boring. When he has an idea for a real melodic line he abandons it after the first phrase and simply modulates his way through. All we get are flashes of his real, undeniable talent. It is frustrating to listen...
to a musician who will do anything except make a decision.

The album title suggests that Beck is in a fallow period. "I've been there and back" is a slang phrase used by musicians, soldiers, whores, and others to mean "I have experienced everything there is to experience, so nothing surprises me any more." Beck has, after all, been a practicing musician for almost twenty years, and a deservedly honored one, but it must be difficult for him to wake up in the morning with the dread of a new day, but it must be difficult for him to compete with himself, when he realizes that astonishing as he first was. There comes a time in a musician's life when he has to compete with himself, when he realizes that his original, instinctual approach may no longer be valid and he is no longer sure whether he is playing for the adventure of it or simply to maintain his reputation. It is an uncomfortable time, one in which musicians don't know what decisions to make, and the resultant music is likely to be ambiguous and amorphous, as Beck's is.

J.V.

NATALIE COLE: Don't Look Back. Natalie Cole (vocals); instrumental accompaniment. Hold On; I'm Getting to Know You; Danger Up Ahead; Cole-Blooded; and five others. Capitol ST-12079 $7.98, © 8XT-12079 $7.98, © 4XT-12079 $7.98.

Performance: Off the tracks
Recording: Good

Considering Natalie Cole's sensational debut on records several years ago, when she seemed to be one of the most vivid, exciting, and direct young MOR singers to emerge in a long time, the title "Don't Look Back" has a certain irony. She is by now so far off the track of what seemed to be her original direction that listening to this album is like watching the Orient Express pull into a siding at the Jersey City freight yards. I was tempted just to dismiss Cole's latest with a shrug until I reached the Stairway to Heaven. That's a combination of the material (a well-chosen repertoire of blues, standards, and pop tunes), the band (which includes the legendary trumpetist Jabbie Smith and plays arrangements by Lars Edgren and Orange Kellin, Swedes who closely adhere to the genuine New Orleans style), and the marvelous comic finesse of Topsy Chapman.

One Mo' Time originated in New Orleans almost three years ago, but having made it all the way from there to the Gate, which qualifies as an off-Broadway theater, its producers have no intention of taking the show on to the Great White Way. That's a wise decision, I think, because the intimacy of a club is crucial to the show's success. It is remarkable that One Mo' Time works at all, for none of its four principal players has much talent for dancing, singing, or acting, the three skills the production mostly calls for. What saves the show is a combination of the material (a well-chosen repertoire of songs that made their way onto 78s in the era being portrayed), the band (which includes the legendary trumpetist Jabbie Smith and plays arrangements by Lars Edgren and Orange Kellin, Swedes who closely adhere to the genuine New Orleans style), and the marvelous comic finesse of Topsy Chapman.

How does it all work on vinyl? Well for the most part, but you do miss Chapman's visual humor, and I think anyone who has seen the show will lament the absence of Get On Out of Here, a very funny number

with some cutting dialogue originally delivered by Liza Brown and Ann Johnson on a 1929 Columbia side. Just why that number was cut from the record while such dull, out-of-context fare as The Graveyard was retained is hard to understand. But there is plenty here to enjoy, and if the voices are limited, there is no skimping on the old spirit. One Mo' Time succeeds where Linda Hopkins' Me and Bessie failed because Vernel Bagneris—who conceived and directed the production—obviously did his

homework; he has truly captured the flavor of what went on over half a century ago in such theaters as the Lyric in New Orleans, the Koppin in Detroit, the Lafayette in New York, and the "81" in Birmingham.

Finally, it should be mentioned that the album was recorded live during actual performance. That is unusual for an original-cast set, but in this case essential, because vaudeville needs an audience, and the spirit that carries these performances could hardly have been conjured up in a soundproof studio.

—Chris Alberson

ONE MO' TIME (Vernel Bagneris). Original-cast recording. Vernel Bagneris, Topsy Chapman, Thais Clark, Sylvia "Kuumba" Williams, John Stell, Jabbo Smith (vocals); New Orleans Blues Serenaders, Orange Kellin cond.: Down in Honky Tonk Town; Kiss Me Sweet; Miss Jenny's Ball; Cake Walkin' Babies from Home; I've Got What It Takes; C. C. Rider; The Graveyard; He's Funny That Way; Kitchen Man; Wait Till You See My Baby Do the Charleston; Love; Louise; New Orleans Hop Scop Blues; Everybody Loves My Baby; You've Got the Right Key but the Wrong Keyhole; After You've Gone; Papa De Da Da; Muddy Water; There'll Be a Hot Time in the Old Town Tonight. Warner Bros. HS 3454 $8.98, © W 3454 $8.98, © W5 3454 $8.98.
Am
erica, it has been observed, is the only country ever to go from barbarism to
deadence without passing through civiliza-
tion, and if one accepts that premise it be-
comes obvious that the late Elvis Presley
was the quintessential American artist.
In his youth, he rose from obscurity in a Hor-
tio Alger story beyond anyone's wildest
dreams; he went on to serve his country
faithfully and patriotically, taming his wild-
er side and becoming a model citizen; and,
in the end, he ate himself to death. And all
the while he remained an utter enigma; per-
haps no public person in our lifetime has
ever maintained such a sphinx-like presence
in our midst. No wonder critic Nick
Tosches called him "a mystery that will
never be solved," and no wonder so many
writers, undaunted by the mythic weight of
the man and his accomplishments, have at-
tempted solutions.

RCA's mammoth new Presley anniver-
sary retrospective (it's been twenty-five years
since the King signed with Little Nipper)
attempts a solution too, promising to be the
definitive Elvis, but in the end it only muddies
the waters further—we still don't know
who Elvis was. That means, of course, that
it's probably definitive after all. In any case,
So what do we get? A lot of throwaway,
frankly. One disc is devoted to alternate
takes of ephemera from his movies (not par-
ticularly cosmic stuff, such as Follow That
Dream and A Dog's Life), some of which
allows us to hear El breaking up between
vocals; another rehashes still-available live
albums and documents his TV specials.
And one entire side is devoted to a deadly
dull speed-freak monologue in which Elvis
attempts to discuss the pressures of celebri-
ty. Then there are some singles (forgettable,
with the exception of a gritty Hi-Heel
Sneakers) that never made it onto LP, some
reasonably affecting things done live at the
piano, and finally a Vegas concert from
1975 that sounds like every other live show
released from 1969 on.

The first two records, however, almost
justify purchase of this very expensive sou-
venir. Shows from Vegas in 1956 and Ha-
waii in 1961, though their sound is not of
the best, nonetheless reveal that the pre-
Beatles-era Presley really was as revolution-
ary and electrifying as contemporary ac-
counts indicate; the idea of audiences riot-
ing seems not at all farfetched when you
hear some of this stuff. Elvis, with Bill,
Scotty, D. J., and the rest, had a great, blis-
tering rock-and-roll band, and if your only
impressions of Elvis come from the

D. W. Griffith overkill of the Vegas years,
this may come as a revelation. Would that
these were videodiscs!

In the end, though, the set's successes and
failures are mostly irrelevant; Elvis is such
an icon that nothing I write or that RCA
packages will have the slightest impact on
his legend. Consider: a matter of hours after
RCA let it be known that there was such a
thing as a limited-edition, eight-record,
$69.95, twenty-fifth-anniversary Presley
package available, they were so deluged
with phone calls, telegrams, and what not
else that they had to call a meeting to up the
original pressing order of 250,000. Millions
will probably buy the thing, and the ques-
tion then is whether you want to blow a
month's worth of lunch money to be one of
them. Those who, like that Boston lady with
the hats, already have their Elvis records
will want to check the song list below care-
fully before deciding; latecomers will be
able to play catch-up with a vengeance. In
any case, Long Live the King.

—Steve Simels

ELVIS PRESLEY: Elvis Aron Presley; El-
vis Presley (vocals, piano, guitar); other
musicians. Heartbreak Hotel; Long Tall
Sally; Blue Suede Shoes; Money Honey;
An Elvis Monologue; Heartbreak Hotel;
All Shook Up; A Fool Such As I; I Got a
Woman; Love Me; Introductions; Such a
Night; Reconsider Baby; I Need Your Love
Tonight; That's All Right; Don't Be Cruel;
One Night; Are You Lonesome Tonight?
It's Now or Never; Swing Down Sweet
Chariot; Hound Dog; They Remind Me
Too Much of You; Tonight Is So Right for
Our Love; Follow That Dream; Wild in the
Country; Datin'; Shoppin' Around; Can't
Help Falling in Love; Do; For Your Precious
I'm Falling in Love Tonight; Thanks to the
Rolling Sea; Jailhouse Rock; Suspicious
Minds; Lawdy Miss Clawdy/Boy Baby
You Want Me to Do; Blue Christmas; You
Gave Me a Mountain; Welcome to My
World; Trying to Get to You; I'll Remem-
ber My Baby; Introductions; Such a
Dream and A Dog's Life), some of which
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Sneakers) that never made it onto LP, some
reasonably affecting things done live at the
piano, and finally a Vegas concert from
1975 that sounds like every other live show
released from 1969 on.

Remember when Ed Sullivan had him cut off at the hips?

Presley Preserved

One Night; Are You Lonesome Tonight; A Fool Such As I; I Got a
Woman; Love Me; Introductions; Such a
Night; Reconsider Baby; I Need Your Love
Tonight; That's All Right; Don't Be Cruel;
One Night; Are You Lonesome Tonight?
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hear some of this stuff. Elvis, with Bill,
Scotty, D. J., and the rest, had a great, blis-
tering rock-and-roll band, and if your only
impressions of Elvis come from the
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a lot of us are still cut to exploit a gimmick to turn a buck. Having your lead singer comport himself like a robot and your guitarist sound primitive may have started as honest attempts at expression, but take a little look around and you'll see they're only gimmicks now. Hill seems to be in a different world from all that, even if it is recognizable as one we lost or threw away.

Yet, if Hill were an American, he would be too young for his style. He's under thirty, and Americans under thirty, polls indicate, are about as far to the right as the baby boomers were to the left. Americans his age, as a group, don't go around in beads and long hair; in the primaries, according to the CBS poll, they preferred Carter to Kennedy. Again: whither Canada? In particular, whither Canadian youth? The Canadian magazine Saturday Night about a year ago took a poll of college students in Toronto, Dan Hill's home town, and the results seemed to indicate the kids were as liberal as America's college kids used to be. Teddy Kennedy and Jane Fonda were among their most admired figures, they had a deep mistrust of big business, and so on.

Musically, this means that there isn't so much of a big-brother/little-brother gap in Canadian tastes, maybe not as much polarization in general. At any rate, Hill's songs in this album are slightly less personal than in the past, but no less emotional and no less involved lyrically. All but two run longer than four minutes; not all of them are wordy, but you remember the album as being wordy. As in the past, I think Hill's own environment, so the question of how conscious or unconscious comment upon its environment looms, for the moment, larger than the music itself. Probably because it's an environment many of us would like to capture—or recapture—for ourselves.

—Noel Coppage

DAN HILL: IF DREAMS HAD WINGS. Dan Hill (vocals, guitar); Larry Knechtel (piano); Bob Mann (guitar); Tom Szczesniak (bass); Larrie Londin (drums); other musicians. Path of Least Resistance; I Still Reach for You; Ghost; Island; Perfect Man; My Love for You; More Than Just a Little Harder; If Dreams Had Wings. Columbia FE 35441 $8.98, © FEA 35441 $8.98, © FCT 36553 $8.98.

Performance: Fundamentalist babble. Recording: Good

I can understand that Dylan followers are dismayed with his Born Again phase, but I wonder why they are so angry about it. Could some kind of association be taking place and their feelings about other twice-born celebrities be coming into play? Or do they feel that Dylan has abrogated some kind of responsibility? Whatever, he has managed to stir people up once again; you have to give him that. It is even more puzzling to me that a person with a history of being a recluse should take up with fundamentalism, since loners with high IQs like Dylan's usually opt for something a little more esoteric. "I've tried everything else," he tells audiences, but he can't mean everything; it's for me, right with me, but it sure does play hell, pardon the expression, with his songwriting. If you've been to a few revival meetings, you can forget about the lyrics in this one; you've heard them. They may be heartfelt but they are the same babble of simplistic platitudes with the same emotional base: if you get, all too often, from the reformed you've heard them. They may be heartfelt but they are the same babble of simplistic platitudes with the same emotional base: if you get, all too often, from the reformed.

Dylan is almost certain to grow out of this, if only because it is so intellectually vacuous and boring. To deny that you have a mind is just as unacceptable in the long run as denying that you have a soul.

THE ENGLISH BEAT: I JUST CAN'T STOP IT. The English Beat (vocals and instruments). Mirror in the Bathroom; Hands Off . . . She's Mine; Two Swords; Twist and Crawl; Tears of a Clown; Rough Rider; and eight others. Sire SRK 6091 $7.98, © M5S 6091 $7.98.

Performance: Eerie. Recording: Fine

The English Beat, in England, is simply the Beat, but for American consumption the group is so identified to avoid confusion with the power-pop band of the same name that the band has been renamed The English Beat. The English Beat is so identified to avoid confusion with the American Beat. In any case, musically there's no way anybody could mistake the two, since the EBs are the latest product of the British ska revival. To my ears ska (like rockabilly, heavy metal, or mainstream punk) has such narrow stylistic limits that it quickly palls, but the EBs, at least so far, have something identifiably their own: a deadpan beatnik cool and a believable obsession with paranoia and drugs. They play like a drugged-out Fifty West Coast jazz combo jamming late at night in a Jamaican livestock barn, so it's not surprising that Smokey Robinson's Tears of a Clown suits them. Weird, but compelling.

(Continued on page 90)
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The Hitachi Class G Turbo-Power Receivers. Nothing is as powerful as an idea whose time has come.
I went to see Waylon Jennings one time when he and Jessi Colter were living in a large rented house south of Nashville. There was a lot of terrorism and hostage-taking going on then, and he was worried about the prospect of somebody kidnapping his kids, his manager told me. He wouldn't let anyone photograph the house or divulge its location. However, parked at the edge of the yard, out by the road, was his Cadillac with one of those special gold-colored grilles and a license plate that said WAYLON.

Well, every one of us is a mess of contradictions. You could extrapolate some symbolism from this little vignette and speculate that Waylon is similarly contradictory, or ambiguous, about fame and privacy in general. And there would probably be some truth in it. If there hadn't already been an Elvis Presley, it isn't farfetched to imagine Waylon having become a similar kind of figure. He has the vocal equipment, and I think he has the charisma, and he is comfortable in rock as long as it is a little bit countertenored, a requirement Elvis (more or less) tacitly accommodated too. But that territory was pre-empted, and Waylon came up to the big time as a sort of second-fiddle figure (bass player) for Buddy Holly in his brief post-Crickets period. Lately he has seemed content to behave, as somebody said, like a junior partner in the so-called Outlaws. There are some who believe Waylon still hasn't made the commercial or artistic splash he could make because he doesn't have the killer instinct—which in this case would not mean polishing off all opponents so much as vaulching the final distance to the top and leaving them in the dust. This view is, of course, an extension of the ambiguous-about-fame idea.

There may be some truth in it. But the vignette we started with also parallels the apparent Waylon, an arbitrary mix of macho and hippie, and the Waylon who comes out in a quiet chat once he starts to trust you a bit. He is a sensitive, intelligent, inquisitive man, his self-education having put him somewhere between the working class, where his roots are and where his early music mostly woun up, and the educated people who talk about principles and concepts and other abstractions rather than about guitars and pick-up-trucks. Waylon has done a lot of thinking about how the good-old-boy environment shapes the psyche and what can be done about straightening out some of the resulting kinks.

His new RCA album, "Music Man," like many of his albums, reflects this in-between positioning Waylon has known for so long. For—I know from experience—on you grow up in the rural South, you can never forget that's at least part of who and what you still are. Yet if you've experienced anything like a decent sampling of the rest of the world you truly can't go home again. It's still innocent back there, no longer your world.

"MUSIC MAN" combines an acknowledgment of his roots—the Johnny and Jack song What About You, Ernest Tubb's Waltz Across Texas—with the kind of stuff his mind leads him to now, such as Jimmy Buffett's He Went to Paris and J. J. Cale's Clyde (in a non-verbal way) and the Steely Dan pop song Do It Again. He wrote two of the songs himself, about par for the course. (Jennings is not a prolific songwriter, but, given his interpretive powers as a singer, who would want him to be?) Both of them—It's Alright and Theme from the Dukes of Hazzard (would that the show were as good as the song)—have a sly, put-on, tongue-in-cheek kind of humor about them, as has most of his writing over the last few years, going back to Waymore's Blues in "Dreamin' My Dreams." Earlier, though, he used to write "straight" hard-country songs like I Think It's Time She Learned. Here he chooses one, Harlan Howard's blues-based Nashville Winmin, that edges toward the same kind of loose whimsy his newer songs have.

Another element in his interests—and in his albums, of course—is interpretation. A lot of his albums have a few reasonably familiar songs that aren't likely to make another commercial run at this time; he just wants you to hear how he does them. He invariably does them well, and sometimes his cover of Johnny Cash's I Walk the Line is a good recent example—he remakes them, revealing qualities dormant in them all these months or years. The ones in "Music Man" (Kenny Rogers' Sweet Music Man and Colter's Storms Never Last) don't need rewriting, so they don't get it; Jennings' bigger, mellower voice caressing each note is the attraction.

OVERALL, while the album could use more profile in places, it's pretty satisfying and has no major weaknesses. There is a small weakness in the dragged-out ending to Waltz Across Texas, with Jennings indulging himself a bit on the banjo, and the programming makes the start of the album suggest it's going to be bluesier than it really is. Such trivia mean only that it wouldn't be ideal as your first Waylon album; as an uptown one, it works fine, amplifying some of what we think we know and some of what we know we feel about the man. Which is what it seems designed to do, rather than, say, vaulch him the rest of the way to the top.

NOEL COPPAGE

WAYLON JENNINGS: Music Man. Waylon Jennings (vocals, guitar); Richie Albright (drums); Jerry Reed (guitar); Ralph Mooney (steel, dobro); Jerry Bridges (bass); other musicians. Clyde; It's Alright; Theme from the Dukes of Hazzard; Nashville Winmin; Do It Again; Sweet Music Man; Storms Never Last; He Went to Paris; What About You; Waltz Across Texas. RCA AHL1-3602 $7.98, © AHK1-3602 $7.98, © AHK1-3602 $7.98.
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C. Push the new stylus into position in the cartridge until the stylus grip touches the cartridge body.

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EMMYLOU HARRIS’ latest, “Roses in the Snow” (Warner Bros.), is a bluegrass album and a curiosity. Although her voice sounds as lovely and healthy as ever, Harris has downplayed her part in the album, bringing in a plethora of guest stars, harmony singers, and duet partners—to the point where, on back-to-back cuts, all she does is sing harmony. More curious still (when you try to fit this into the pattern of her other albums) is the stylistic direction she’s taken. If she and her producer–sideman–husband Brian Ahern have a master plan, or answers to the question of what she and Amher are up to. Is she going native? Going whole hog with the audience that seems to like her the most? I don’t see how that could work, as you can’t be provincial after you’ve (figuratively or literally) seen Paree. It’s like innocence; when it’s gone, it’s gone for good. Or is this a matter of pushing the message a little harder? Is this record also aimed beyond the provinces? Aside from guitarist Tony Rice, the musicians aren’t particularly known for the bluegrass company they keep, being the nucleus of Harris’ own Hot Band, and the decision this represents may be in part an attempt to bridge the two worlds of her music and mission. Or it simply may have been in the interest of freshness and the album a one-shot sort of project. It certainly works as a vehicle to make you wonder just a little what she’ll do next.

It also works as something to listen to now, although not as well as it could. I don’t mind the guest stars: Johnny Cash, Linda Ronstadt, the Whites, and Dolly Parton singing harmony on various tunes and Willie Nelson taking a guitar break. Ricky Skaggs, Harris’ more-or-less-regular fiddle player, does a fine job in the vocal duets, although the more of these people you hear, of course (and you hear a lot of them), the less you can hear of the ostensible star, Emmylou Harris. More bothersome is the odd collection of songs. The Boxer doesn’t do much for the rest of the project, and the bluegrass arrangement doesn’t do much for The Boxer. Green Pastures has a hitch in its melody that calls undue attention to itself; something just as quaint and more charming could have been found for that slot. And neither is Darkest Hour Is Just Before Dawn the strongest representation of bluegrass stalwart Ralph Stanley.

Still, of course, this is a pretty good album. I don’t think Emmylou Harris could make a bad one. The picking is fresh, and clear and clean and timely, and the vocals, if not quite Harris’ best, are quite comprehensible. Harris vocals can be—bluegrass, after all, doesn’t give one much room—are the best some of these songs ever had. I have the feeling she stepped into the project and then backed off a bit, letting more and more other voices and sounds be heard, possibly because of the nature of the songs. The album gives me mixed readings on whether she’s enjoying this trek back into the hills. I guess is she’ll now drift back toward the outside world again in any case. I hope so. She’s needed there.

—Noel Coppage

RECORDING OF SPECIAL MERIT

MILLIE JACKSON: For Men Only. Millie Jackson (vocals); vocal and instrumental accompaniment. Never Givin’ Up; Gimme What You Got; This Is It; If That Don’t Turn You On, I Wish That I Could Hurt That Way Again; and five others. POLYDOR SP-1-6727 $7.98, © 8T-1-6727 $7.98, © CT-1-6727 $7.98. Performance: Lusty Recording: Good

H-e-r-e’s Millie!, back with a delightfully bad-mouthed message “For Men Only,” or so the album says, though it’s the ladies who’ll probably get the biggest kick from her main rap here, which leads into Kenny Loggins’ This Is It. She starts with a symphonic tone, contrasting with the guy who’s having a hard time because he’s out of a job and his woman has to work. Then, when he’s soffent up, she turns around and attacks, letting him have it with both fists! For all that, she does far more singing than talking here, and I miss her fresh mouth on the second side. Still, it’s always a joy to hear her belt out a number in her heady, blues-derived style. The knockout here is her own composition Despair, with other choice tracks being This Is It and If That Don’t Turn You On.

Al Jarreau has become known largely for his remarkable ability to duplicate vocally the sounds of musical instruments (he has been called the man with a whole orchestra in his throat), but he minimizes his reliance on these special effects this time out, nevertheless achieving equally gratifying results. Never Givin’ Up and Gimme What You Got are marked by swift-paced, rhythmically insistent accompaniment, the sort of songs that hug the ear immediately and make you want to hear them again. Jarreau uses fuller tones on these than he has in the past, sounding at times like a muscular Johnny Mathis.

This would not be a true Al Jarreau album if there were no touches of experimen-

EMMYLOU HARRIS: Roses in the Snow. Emmylou Harris (vocals, guitar); Ricky Skaggs (vocals, fiddle, guitar); Albert Lee (mandolin, guitar); Emory Gordy (bass); Tony Rice (guitar); Brian Ahern (guitar); other musicians. Roses in the Snow; Wayfaring Stranger; Green Pastures; The Boxer; Darkest Hour Is Just Before Dawn; I’ll Go Stepping Too; You’re Learning; Jordan; Miss the Mississippi; Gold Watch and Chain. WARNER BROS. BSK 3422 $7.98, © M8 3422 $7.98, © M5 3422 $7.98.

The Moodies’ grandiose questions (what’s it all about, etc.) were sung by Hayward. I still find his voice quietly distinctive and attractive, and here the questions and palaver have been scaled down to human proportions and the songs, half of them written by Hayward, are consistently unpreposterous and pleasant. But the way they’re done suggests Hayward isn’t terribly adventurous about stretching out, growing, trying new things, that sort of stuff. Instead, he seems to want to re-create the Moody Blues. Manicovani with teeth, Joel Vance once called that sound. I rather liked it, on occasion, ten years ago when the context was different. Now Hayward’s old Moodies sound revisited against stagnation—or perhaps, if you’re into Zen, the sound of a dead horse being beaten.

N.C.

RECORDING OF SPECIAL MERIT
Chasing the Crown; Little Jeannie; Sartorial Eloquence; White Lady White Powder; Dear God; and four others. MCA MCA-5121 $8.98, © MCAT-5121 $8.98, © MCAC-5121 $8.98.

Performance: Glittering
Recording: Good

Elton John wrote most of these songs during a restorative stay in Grasse, a village in the South of France where he apparently spent his free time pondering the imponderable and scrutinizing the inscrutable, at least to judge from two of the cuts here, Chasing the Crown and Dear God. The latter is a real biggie, with such luminaries as Bruce Johnson, Toni Tennille, and Peter Noone doing back-up vocals and Elton himself singing the lead with enough fervor to ignite Satan’s red support hose. But Elton hasn’t gone all goody-goody on us: White Lady White Powder is a steamy paean to you know what.

The three least successful entries in this fun album—Take Me Back, Little Jeannie, and Sartorial Eloquence—show Elton with nothing really to say yet saying it pretty well anyway. They’re carried by his innate talent as an entertainer—and it’s been clear for a long time just how big that talent is. His zany but meticulous musicianship, high-spirited style, and ability to give a totally involved and involving performance are unique, as much in evidence now as when he first burst onto the charts. The production here has the same kind of momentum as his performances, with a fine, free-wheeling sound to it that seems to suggest spontaneity no matter how many overdubs were used. “21 at 33” is another triumph for Elton John.

P.R.

RECORDING OF SPECIAL MERIT

CHAKA KHAN: Naughty. Chaka Khan (vocals); vocal and instrumental accompaniment. Clouds; Get Ready, Get Set; Move Me No Mountain; Nothing’s Gonna Take You Away; So Naughty; and five others. WARNER BROS. BSK 3385 $7.98, © M8 3385 $7.98, © MS 3385 $7.98.

Performance: Spectacular
Recording: Excellent

Chaka Khan must have seven lungs—at least she sings as though she does. I’ve never before heard such power as she projects on her sonically spectacular new album. Indeed, after listening to “Naughty,” I wonder how she kept from overwhelming her previous back-up group, Rufus, instruments and all, during her long tenure with them.

Yet power and a magnificence of delivery are only two of the elements that lift her second solo album into the “very special” category. A masterly production by Arif Mardin, it features finely wrought arrangements that are played by musicians fully up to them, including Leon Pendarvis, Richard Tee, Phil Upchurch, Jeff Mironov, and Randy Brecker, with Cissy Houston shouting out background vocals as part of an apparent cast of thousands. The bass lines are the best I’ve heard on a pop album in months. The songs were obviously tailored to showcase Khan’s penetrating voice, but they are sufficiently varied also to display her softer side, as on the lovely Move Me No Mountain and Papillon (a.k.a Hot Butterfly), a lilting little sliver of a song that makes you want to sing along. The opener, Ashford and Simpson’s Clouds, blasts off like a spacecraft bound for the other side of Pluto and reminds us all of the extraordinary heights this songwriting team is capable of reaching. These are only some of the highlights; the album pulsates with vigor, and it should establish Chaka Khan as one of the top singers of the year.

P.G.

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CIRCLE NO. 41 ON READER SERVICE CARD
CAN a middle-aged nursing teacher from Middletown, Connecticut, find happiness by recording ten fairly obscure Tommy Wolf songs with a local trio for a minor label that has been dormant since the mid-Sixties? If that nursing teacher happens to be named Bobbi Rogers, the answer, obviously, is a startling and resounding "Yes!" A registered nurse, Miss Rogers also sings at a piano bar, mostly on weekends, but "Tommy Wolf Can Really Hang You Up the Most," the superb album with which she belatedly steps out of Middletown, could easily offer her the option of expanding that schedule as well as her sphere of musical activity.

What we are talking about is not the sultry come-hither singing style shaped to perfection by Sarah Vaughan, but rather the intimate, slightly whimsical, and decidedly white style designed to go with martinis and basic black in the Fifties. It's a jazz-oriented, flexible way of singing that hugs the upper register just below the altitudes staked out by Helen Kane and Rose Murphy. Blossom Dearie seems to have graduated from that school, and I think the late and very wonderful Beverly Kenney might well have been at the top of the class. Like Miss Kenney, Bobbi Rogers pays close attention to her material and shows a healthy respect for it. She has a knack for unfolding intricately woven lyrics and laying them out, displaying them, in a way that preserves their often rather fragile sophistication. Yet her style is natural, never mannered.

"Tommy Wolf Can Really Hang You Up the Most" is a double discovery, for it not only reveals the talent of Bobbi Rogers but also brings to light the almost equally hidden assets of songwriter Tommy Wolf, Wolf and lyricist Fran Landesman—who collaborated with him on all but two of the songs in this album—had only one bona fide hit, *Spring Can Really Hang You Up the Most,* but it is obvious from this collection that their united talent was vastly greater than their commercial success up to now would seem to indicate.

Miss Rogers owes her recording debut to Mort Fega, a dedicated former New York jazz disc jockey who with this release reactivates his Focus label (on which he previously preserved outstanding performances by Earl Hines, Carmen McRae, Bob Dorough, and Chuck Wayne). However, the debt to Fega is not Miss Rogers' alone; we all owe him our gratitude for bringing into focus (!) a delightful singer and some of the most memorable songs this side of Alec Wilder. Incidentally, composer Wolf, who died only a few months before the album was made, could come up with some pretty good lyrics himself, as we hear on his own "I've Never Been Anything" and Victor Feldman's "A Face Like Yours," but mostly he wrote music—challenging music, for his are not always the easiest songs to sing. Bobbi Rogers meets that challenge head on, breezing through the difficult program with the sympathetic piano accompaniment of Chick Cicchetti, who is also responsible for writing the arrangements. Mr. Cicchetti, who has worked with the Hartford Symphony for several years, is also stepping out of the Middletown orbit, having recently been made musical director for the international tenor heart-throb Sergio Franchi.

If there is any justice in this music world, Bobbi Rogers will be heard from again and again, and these and more of the late Tommy Wolf's songs will find their way into the repertoires of other singers with the skill and perception to handle them as well as they are handled here. And while we're at the wishing well, let us hope—with admitted selfishness—that someone will have the good sense to return Mort Fega to the jazz-starved New York airwaves. Better still, let’s hear his love and enthusiasm for jazz on Public Radio’s national hookup.

—Chris Albertson

**BOBBI ROGERS: Tommy Wolf Can Really Hang You Up the Most.** Bobbi Rogers (vocals); Chick Cicchetti (piano); Ronnie Bedford (drums); Russ Elliott (bass). "I've Never Been Anything; Say Cheese; You Smell So Good; A Face Like Yours; Spring Can Really Hang You Up the Most; There Are Days When I Don't Think of You At All; I'm Alright 'Til You Touch Me; It's Nice Weather for Ducks; Apples on the Lilac Tree; It Isn’t So Good It Couldn’t Get Better. Focus 337 $8.98 (from Focus Productions, P.O. Box 17311, West Hartford, Conn. 06117; add $1 for overseas orders).
THE RITCHIE FAMILY: Give Me a Break. The Ritchie Family (vocals); instru-
mentation. Performance: Good Recording: Good

This is, of course, utter junk, but it's interesting junk on a couple of levels. The big
news is that the group has finally tipped their hand about their sexual orientation.
They've played a "maybe yes, maybe no" game since their career began at the height
of glitter hysteria, but this time they've practically spelled it out: the cover photo
has the boys decked out in short hair and leather, and Freddie Mercury especially
looks like he's auditioning for the title role in Christopher Street Proctologist. The
joke is that their audience won't get it for a moment, but that's what Queen has been
about since day one—putting one over on the kids.

The album itself? Well, it's a wee bit less ornate than usual, though there are suitably
operatic touches. The new songs run a trendy gamut from Police-influenced neo-
reggae (Don't Try Suicide) to power pop (Need Your Loving Tonight) to rockabilly
(Crazy Little Thing Called Love), and they are uniformly smarmy, indifferently con-
structed, performed with surgical precision, and filled with all the soul and passion of a
tin of anchovies. In other words, both their music and attitude here run true to form.
Queen continues to market (successfully) the least thinly veiled contempt for its pub-
lric of any band in the history of rock-and-roll. At this point, much as it sickens me, I'm
forced to admire the gall with which they bring it off.

S.S.

HELEN REDDY: Take What You Find. Helen Reddy (vocals); instrumental accom-
paniment. Killer Barracuda; That Plane; Wizard in the Wind; Midnight Sunshine;
and six others. Capitol, SOO-12068 $8.98, © 8X00-12068 $8.98, © 4X00-12068
$8.98.

Performance: Cool Recording: Good

If Helen Reddy were a building, she'd be one of those stainless-steel-and-glass num-
bers where you can't open the windows. If she were a vegetable she'd be a cucumber,
a very cool one indeed. As it is, she's a singer of some popularity (or at least high visibili-
ty on TV). Technically, she's pretty good, well. At this point, much as it sickens me, I'm
forced to admire the gall with which they bring it off.

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CIRCLE NO. 42 ON READER SERVICE CARD
A “Barnum” Souvenir

Even before the opening number in the big Broadway hit Barnum, the audience is already having a good time. Acrobats and prestidigitators climb about the balconies warming up the “suckers,” two pianists trump out an overture in period style, and by the time Jim Dale (as P. T. Barnum) bounds on stage to sing the hustler’s anthem There’s a Sucker Born Every Minute, you find yourself glad to be one of them. As Barnum races unicycle-like along the trajectory of its protagonist’s career from boarding-house operator to world fame as the head ringmaster of humbuggery, the stage bustles busily every minute—with clowns, bricklayers, acrobats, tumblers, gymnasts, juggling, a marching band, everything up to and including a fake elephant. The whole three-ring show balances everything up to and including a fake elephant. The whole three-ring show balances everything up to and including a fake elephant.

In addition to the principals, Leonard John Crofoot, as the twenty-five-inch-high General Tom Thumb, sings Bigger Isn’t Better; Terri White, as “the oldest woman in the world,” croaks out Thank God I’m Old; and Marianne Tatum, playing Jenny Lind, “the Swedish Nightingale” (whom Phineas imported to America and subsequently fell for), warbles her way through Love Makes Such Fools of Us All. There are patches of chatty dialogue leading into the numbers, a large chorus, a pair of pianists, and a full-size orchestra playing the numbers, a large chorus, a pair of pianists, and a full-size orchestra playing the numbers, a large chorus, a pair of pianists, and a full-size orchestra playing the numbers, a large chorus, a pair of pianists, and a full-size orchestra playing the numbers, a large chorus, a pair of pianists, and a full-size orchestra playing the numbers, a large chorus, a pair of pianists, and a full-size orchestra playing the numbers. If you could play album covers this would be the record of the year. Inside, however, it’s a lot less exciting. Songwriter/producers Bernard Edwards and Nile Rodgers of Chic have ground out eight routine disco songs for Diana Ross, the most beautiful thing to come out of Detroit since the 1932 Packard roadster. She performs them coolly and professionally enough, but the true disco style calls for plain old sweat, something she wisely refuses to produce. After all, love goddesses may, on occasion, glow a little, perspire even, but sweat? Never!—Paul Kresh


Performance: Good

Recording: Good

Diana Ross (vocals); instrumental accompaniment. I’m Coming Out; Give Up; Tenderness; Upside Down; My Old Piano; and three others. MOTOWN M8-936-M1 $7.98, © M8-936-H $7.98, © M75-936-H $7.98.

Performance: Professional

Recording: Good

If you could play album covers this would be the record of the year. Inside, however, it’s a lot less exciting. Songwriter/producers Bernard Edwards and Nile Rodgers of Chic have ground out eight routine disco songs for Diana Ross, the most beautiful thing to come out of Detroit since the 1932 Packard roadster. She performs them coolly and professionally enough, but the true disco style calls for plain old sweat, something she wisely refuses to produce. After all, love goddesses may, on occasion, glow a little, perspire even, but sweat? Never!—P.R.

CARLY SIMON: Come Upstairs (see Best of the Month, page 78)

RECORDING OF SPECIAL MERIT

HANK WILLIAMS JR.: Habits Old and New. Hank Williams Jr. (vocals, guitar, keyboards); instrumental accompaniment. Old Habits; Dinosaur; Kaw-Liga; Here I Am Fallin’ Again; The Blues Man; All in and Belolo obviously know what kind of music dancers like, and they and the Ritchie Family serve it up hot. I.C.

RECORDING OF SPECIAL MERIT
Hank Williams Jr. is now older than his legendary daddy ever got—but still not old enough to have gotten his crazy family life out of his system. Here again are several fiercely autobiographical songs (they usually say, in effect, "I've been through hellish times, but it's better now"), two written by his father, several references to the first Hank in other songs, and a cover photo that has him posing on the fender of the Cadillac convertible in which Hank Senior, twenty-nine years old, took his last ride.

If it takes sadness to make soul, then Hank Junior ought to have a ton of it; his music is heart-rending, but the pain is beneath the surface. His writing is more specific than his father's was, but less direct in some ways; he seems to bleed internally where his father bled externally. He's done quite a job, I'd say, just to stay alive and sane, and he is damned good. This is not the strongest album he's ever made, as the songs are uniformly good second-stringers and not top guns, but it's up there—the singing may be the best he's ever done through a whole album. There is so much more to it, at a given instant, than the particular note he's holding and the syllable he's enunciating, and when you wade into it, it's more ambiguous than what you found back in his father's voice. Which means, among other things, that there's some semblance of hope in it. This album won't exactly make you cry, but it'll make you feel for all of us poor wretches who have parents or children.

N.C.

**WRECKLESS ERIC: Big Smash.** Wreckless Eric (vocals, guitar); vocal and instrumental accompaniment. A Pop Song; Break My Mind; Semaphore Signals; Hit and Miss Judy; Take the Cash (K.A.S.H.); Reconnex Cherie; Walking on the Surface of the Moon; I Wish It Would Rain; Let's Go to the Pictures; and sixteen others. Epic/STIFF 36463 $9.98.

**Performance:** Erratic brilliance

**Recording:** Variable

Wreckless Eric Goulden is a blunt and puckish Cockney kid with a cynical and erotic view of the world, a surprising talent for lyrics, and a rasping voice that alternately fascinates and repels. Because of all this, the Stiff label has never quite known what to do with him, and this double-disc seems to have gotten his crazy family life out of his system. Here again are several fiercely autobiographical songs (they usually say, in effect, "I've been through hellish times, but it's better now"), two written by his father, several references to the first Hank in other songs, and a cover photo that has him posing on the fender of the Cadillac convertible in which Hank Senior, twenty-nine years old, took his last ride.

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N.C.

**YACHTS: Yachts Without Radar.** Yachts (vocals and instrumentalists). Don't Call Us; I Couldn't Get Along Without You; The Lash; Life Saving's Easy; March of the Moderates; There's a Ghost in My House; and four others. POLYDOOR/RADAR PD-16270 $7.98, © ET-1-6270 $7.98, © CT-1-6270 $7.98.

**Recording:** Good

**Performance:** Very good

The Yachts are a well-drilled and highly theatrical quartet from Liverpool. Their arrangements are full of zip and dash, and their material treats life's carnival humorously but without complacency. There's some didacticism in this, as the Yachts seem to be trying to demonstrate how ridiculous people can behave by chronicling, à la Pete Townshend, the absurdities of a collection of loveless snobs, fools, dilettantes, and losers. It's not surprising that this is one of Townshend's favorite groups. Like the Who, the Yachts make the most of just four instruments, managing to have an orchestral sound quality that fits their theatrical performing style. And, like Townshend himself, as writers the Yachts seem unable to decide whether their characters are merely victims or are self-destructive, which tends to blunt the point of their satire. Nevertheless, the Yachts are distinctively entertaining, and I strongly recommend that you hear them.

J.V.

(Continued on page 101)
Once I asked the late Cannonball Adderley a question that seems to produce a different answer from each person it is addressed to: "What is a jazz singer?" Without the slightest hesitation, Adderley replied: "A vocalist who would treat a song not as it was written, but as someone like me might play it. A jazz singer is the same as a jazz musician except that she or he uses the vocal cords as an instrument." I always remember that reply, because it is simple and to the point. If we absolutely must subdivide music and place it in little frames, then we must also be prepared to explain why without going into a thesis-length analysis. Since jazz criticism began, there have been those who would take up several pages of print to say what Cannonball put into just a few words.

One distinguished practitioner of the jazz singer's art is Mel Tormé, whose professional career began with the Coon-Sanders Orchestra in 1929 (when he was four years old) and very much continues. His recent Gryphon release bears the title "A New Album," still appropriate even though it was recorded (in London) three years ago. It is a lavish production with what at times sounds like a full symphony orchestra and some wonderful supporting solos by saxophonist Phil Woods. Tormé chose the songs himself, weighting the program heavily in favor of sentimental love ballads because—or so he speculates in his liner notes—he was still feeling the ache of his own broken marriage.

The arrangements nudge Tormé along with suitable drama and respect. Arranger Chris Gunning rarely gets so carried away as to lose the thread woven by his singer; there are occasional (tolerable) lapses here and there, but only on one track, Janis Ian's "Stars," does Gunning actually take over. In his notes, Tormé calls "A New Album" the "finest album I have ever made." Artists often feel that way about their latest effort, but I think he really means it, and my ears tell me there is justification for his claim.

Lena Horne was eight years old when little Melvin Tormé made his professional debut, but she didn't make hers until much later. In the course of doing some research a few years back, I came across a 1936 newspaper with a photograph of a young lady wielding a baton. "Pretty Miss Helena Horne, just out of high school, conducts the Noble Sissle Orchestra in the famous leader's absence," read the caption. "We understand she's a fine chirper, too."

They understood correctly, of course, but who could have predicted that "Helena" (Sissle didn't think the name "Lena" had enough class), the chirping conductor (or conducting chirper), would not only still be singing but sound better than ever almost fifty years later? Before you do the sensible thing and rush out to buy "Lena and Gabor," Horne's new Gryphon release, check your collection for a 1969 Skye album with the same title (SK-15). Except for the cover and the slightly different order of the ten selections, the albums are identical. The musical arrangements, by the late and extremely gifted Gary McFarland, are perfect, as is the small studio band that plays them. This band was, in fact, the nucleus of what eventually became the group Stuff. Lena Horne herself is superb as she defiantly closes the generation gap of the late Sixties by singing a youthful program (including four Beatles tunes) as if each song had been written expressly for her. I recall being quite impressed when this album first came out, but I am even more impressed now; just like Horne herself, the album has a Dorian Gray agelessness about it. Only the material gives away the recording's real age, but not to its detriment, for this is a well-chosen program from a period that saw both a resurgence of ballad writing and the entry of rock music into the adult world.

Hungarian-born guitarist Gabor Szabo gets equal billing but plays more of a supporting role. Szabo founded the short-lived Skye label in partnership with Cal Tjader and Gary McFarland, and Szabo and McFarland also share producer credits on this album, which may well be the finest Lena Horne has made in her long, illustrious career. If, indeed, there is a more carefully conceived, better performed album by this extraordinary artist, I have not heard it. Horne is usually not thought of as a "jazz singer," and certainly neither Tormé is limited to any single musical frame. But make no mistake about it: both Lena Horne and Mel Tormé can sing jazz or pop with the best of the "chirpers."

—Chris Albertson


STereo Review
CLARE FISCHER BIG BAND: Duality.
Clare Fischer Big Band (instrumentals).
Liz Anne; Waltz; Come Sunday; This Is Always; One; and four others. DISCOVERY DS-807 $8.98.

Performance: Sixties vintage
Recording: Good

Listening to this album is like returning to the West Coast in the early Sixties, which is where and when pianist Clare Fischer first built his reputation as an arranger and composer of extraordinary sensitivity.

Though just released, the material in “Duality” was actually recorded in 1966 or 1969—depending on which part of the back cover one reads. Just why it has taken so long to make the recording available is neither explained nor readily apparent. There are some rough spots here and there, such as a misfiring trumpet in Come Sunday, but if that were all that stood in the way a remedy could easily have been found.

In the main, Fischer's writing holds up, and when his music sounds dated, as it occasionally does, it is because he employs harmonic devices characteristic of much of early-Sixties film and television scoring. This is particularly true of side two, a session wholly devoted to the big band (which consists of top West Coast studio musicians). The first half has a different and, I think, more interesting character, being, to quote Fischer's own description, "basically trio improvisations with the band as a foil." Still, this is really not Clare Fischer at his best, and perhaps that is what accounts for the long delay.

C.A.

RECORDING OF SPECIAL MERIT
ANITA O’DAY: Live at the City. Anita O’Day (vocals); Norman Simmons (piano); Rob Fisher (bass); Greg Smith (baritone flute); John Poole (drums). In a Mellow Tone; Hershey Bar; Emily; Four Brothers; Blue Skies; and five others. EMILY ER-102479 $7.98 (from Emily Records, P.O. Box 123, North Haven, Conn. 06473).

Performance: Stunning
Recording: Very good

Anita O’Day’s latest release is another happy signal that 1980 may turn out to be her year—at last! After a previous rise and fall that would do credit to a gaudy old Lana Turner script (or a gaudy new Diana Ross one), Ms. O’Day is audibly and spectacularly on the rise again. This album recorded live (with all the intros and audience chitchat included) at the City club in San Francisco is a real stunner. For almost an hour O’Day drenches her audience with the kind...

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of elegant musicianship and phosphorescent performing that transcends time or age or faddish labels. Lightly, lovingly, expertly, expectedly, she burnishes the old standards (Blue Skies, Emily, In a Mello-Tone) to a deep, warm gleam. Less expectedly, what she does with the relatively new What Are You Doing the Rest of Your Life? is a revelation. The Michel LeGrand music for this gasyper has a certain sentimental charm, but the lyrics by Marilyn and Alan Bergman are halvah of the stickiest sort. O'Day sails through it with a cool class and clean style it has never inspired in any other performer, transforming it into a moving, adult mood piece. Anita O'Day is now one of our best contemporary pop singers. P.R.

**RECORDING OF SPECIAL MERIT**

**STEPHEN ROANE: Siblings.** Stephen Roane, Cecil McBee, Ron McClure (bass); Richie Beirach (piano); Bill Connors (guitar). Collin Walcott (tabla); Freddie Waits (drums). Mothlight; Song for Cetaceans; When Silence Rings; Tuesdays; and five others. LABOR LAB-2 $7.98.

Performance: **Formidable**  
Recording: **Excellent**

I don't know anything about Stephen Roane beyond what I have learned from "Siblings," his debut album: namely, that he has studied bass with the pre-eminent Richard Davis and that he has made one of the finest albums released so far this year. Oddly enough, Roane does not play on the gently strolling opening track, Mothlight, but he composed it—as he did the rest of the album—almost as much instrumental music in that field as on the performing end. Mothlight is engagingly played by an outstanding trio consisting of Cecil McBee, Ron McClure, and Freddie Waits, and it is followed by Roane's solo, Song for Cetaceans. Roane shuffles his esteemed colleagues to create almost as many instrumental combinations on the album as there are selections, but there is also an overall sound here, a kind of romantic, semiclassical sound. Stephen Roane's debut will be a hard act to follow.

C.A.

**BEN WEBSTER: Soulville.** Ben Webster (tenor saxophone); Oscar Peterson (piano); Ray Brown (bass); other musicians. Makin' Whoopee; Ill Wind; Bye Bye Blackbird; Sunday; This Can't Be Love; When Your Lover Has Gone; Time on My Hands; Lover Come Back to Me; and six others. VERVE VE-2-2536 two discs $8.98. © CT-2-2536 $8.98.

Performance: **Sweet butter**  
Recording: **Very good**

Profusely recorded and widely imitated, Ben Webster shares with Coleman Hawkins and Chu Berry credit for making the tenor saxophone the most popular horn instrument in jazz. In these Verve recordings, made in 1956 and 1957 with excellent rhythm sections headed by Oscar Peterson, Webster was in top form, his ideas flowing like melted butter through a bed of rice. It can be argued that these sessions weren't Webster's crowning achievements, that he had mellowed since his earlier days with El-Herpes, that he composed it—as he did the rest of the album—almost as much instrumental music in that field as on the performing end. Webster's playing is so smooth and controlled that he was a master of the ballad. This record belongs on your jazz shelf.

C.A.

**LESTER YOUNG: At Olivia Davis' Patio Lounge.** Lester Young (tenor saxophone); Bill Potts (piano); Norman Williams (bass); Jim Lucht (drums). A Foggy Day; Tea for Two; Jeepsers Creepers; When You're Smiling: I Can't Get Started; and two others. PABLO LIVE ® 2308-219 $8.98.

Performance: **Interesting find**  
Recording: **Defies circumstances**

When Lester Young appeared at Olivia Davis' Patio Lounge in Washington, D.C., on Friday night, December 7, 1956, he had to perform with the house rhythm section. Capable as pianist Bill Potts' group was, it matched neither Coleman Hawkins' groups nor those that Norman Granz had furnished Young. Nevertheless, judging from what can be heard on this disc, I am sure the saxophonist didn't find this club experience painful. Unlike most privately made on-location recordings, the Patio Lounge date was taped with excellent equipment (belonging to Potts), and the result, now released for the first time, is technically on a par with most mid-Fifties commercial output. Musically, there is no need to make apologies for this album. It contains a true master's wonderful variations on mostly familiar themes, and it will enrich any receptive listener's musical mind.

C.A.
THEATER • FILMS

BEN BAGLEY'S E. Y. HARBURG RE-VISITED. Tammy Grimes, Carleton Carpenter, Blossom Dearie, Helen Gallagher, E. Y. Harburg, Patrice Munsel, Arthur Siegel (vocals); chorus and orchestra. Hold On to Your Hats; Sing the Merry; Where Have We Met Before; Showgirl Couplets; and four others.

PAINTED SMILES PS 1372 $8.98.

Recording: Okay to wonderful
Performance: Very good

E. Y. ("Yip") Harburg grew up poor in New York City, where he was born in 1898, but he gave up all attempts at a business career after the 1929 crash, started writing songs for such shows as Finian's Rainbow and Jass. And it is certain that without his lyrics came the theme song of the Great Depression, You Spare a Dime?, which practically made him rich was, ironically, Brother, Can You Spare a Dime?, which practically made him rich?

Harburg is better served by the other songs here, from a variety of forgotten hits and flops. He himself sings the once-topical Saroyan from Bagley's Shoestring '37ревue and Fancy Meeting You from Stagestruck. Patrice Munsel sounds wonderful in Vernon Duke's Where Have We Met Before, and Tammy Grimes does more than justice to Moon About Town from the 1934 Ziegfeld Follies.

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103
Early Jazz in Film Shorts

Duke Ellington in the 1929 RCA Gramercy short feature "Black and Tan."

So much of our knowledge of jazz in its most creative formative periods is based on either written accounts or recordings of the music that we frequently forget that the early masters, whom we now revere for the power of their artistry, were often tough pragmatists facing difficult life situations. A major component of their success was showmanship. They had to know not only how to pack a house but how to hold the audience's attention through clever banter, glittering charm, physical antics—and at times, if they were black, downright clownishness. Indeed, the efforts of black musicians to transcend the demeaning circumstances of their environment without sacrificing artistic quality are some of the greatest feats of courage in the history of American show business. That bitterness has not been dominant in their autobiographical accounts is a triumph of the human spirit.

A most significant view of the black musician as one who had to sell himself as well as his music can be found in the filmed short subjects made at the end of the Twenties and in the early Thirties. While a few dogged collectors have made it a point to seek out this valuable visual evidence of evolving jazz, the general public has had an opportunity to view these films only if they live in New York City, with its wealth of repertory and revival film theaters, or near college campuses where jazz film festivals are occasionally held. This situation is now rectified to some extent by the release of two albums on the Biograph label containing the soundtracks of early film shorts featuring Duke Ellington, Bessie Smith, Louis Armstrong, and Cab Calloway. Most fittingly, one album is devoted entirely to Ellington films, for he was the consummate showman.

Included is the eighteen-minute soundtrack of Black and Tan, Ellington's 1929 cinematic debut. Ideally, of course, one should see the film itself, which contains some brilliant photography and captures at least a hint of the flavor of the old Cotton Club days. But the soundtrack, though at times a bit fuzzy, conveys the essence of the tortuously contrived story line with its stereotypical black images. There is the Duke, a struggling young musician, composing his music on the night-club scene accompanying lovely Fredi Washington, whose dance to the Cotton Club Stomp unfortunately cannot be seen on disc. Yet one gets a sufficient feeling of Ellington's so-called "jungle music" of that period, with its inventive, clustered interplay of horns. The closing death scene of this film is memorable for the work of the Hall Johnson Choir, which weaves a spiritual content into the Black and Tan Fantasy in a version not available elsewhere on records.

There are other treasures on this fascinating disc. The second side holds two nine-minute soundtracks. A Bundle of Blues, from 1933, features Ellington's longtime vocalist Ivie Anderson singing Stormy Weather. A study in Ellington moods called Symphony in Black, filmed in 1935, showcases the nineteen-year-old Billie Holiday singing a short blues lament in a style as distinctive and firmly developed as the one that was to mark her later work. These are moments to remember.

The second album is far less satisfying except for the nine-minute opening segment devoted to Bessie Smith's only film appearance (in St. Louis Blues, 1929). The majesty of her voice comes through on the time-worn soundtrack, and it is easy to see how she has influenced virtually every great black woman singer who has followed her, from Mahalia Jackson to Aretha Franklin. But the Louis Armstrong offering, Rhapso dy in Black and Blue, from 1932, is most disturbing. It readily demonstrates why so many blacks came to regard Armstrong with shame rather than the respect he deserved. Here the clown all but completely obscures the artist. Guttural cackles predominate, and the fleeting sound of Armstrong's golden horn is buried in the igno miny of minstrelsy. Certainly he deserved better than this, but he was not tall, light skinned, and handsome, like some others, and even his genius was not enough to make up the difference.

The second half of the album is given over to the work of Cab Calloway, a singer who was more showman than musician, though his band contained fine artists. The second half of the album is given over to the work of Cab Calloway, a singer who was more showman than musician, though his band contained fine artists. The second half of the album is given over to the work of Cab Calloway, a singer who was more showman than musician, though his band contained fine artists. The second half of the album is given over to the work of Cab Calloway, a singer who was more showman than musician, though his band contained fine artists. There are pleasantly diverting excursions into Calloway's brand of scat-singing, but they lack substance. Quite likely these films are best appreciated when seen as well as heard.

In all, these two albums are valuable musically, and the dialogue and other recorded sounds included may help bring the general public just a little closer to understanding how these artists made it through.

—Phyl Garland


Ray Simpson. In the anti-disco title song, in the deliciously upbeat Magic Night, even in the remake of the group’s giant hit YMCA, Simpson’s warm, musical voice is a vast improvement on the ho-ho-calling of former lead singer Victor Willis. But the album’s real highlights are not Village People songs at all. Presented here without the on-screen audience noise that almost buries it in the movie, the Ritchie Family’s Give Me a Break! is the most exciting disco production in the album, and David London’s Samanthana, though considerably shortened, runs a close second. These are true syntheses for the Eighties of Fifties rock ‘n’ roll and the dance energy of disco. Finally, remember how terrible movie albums used to sound? Well, forget it; this one has been remastered for home listening in superb high fidelity.

COLE PORTER MUSICALS. Let’s Face It. Reconstruction of 1931 production. Danny Kaye, Mary Jane Walsh, Hildegarde (vocals); various choruses, orchestras, and conductors. Red, Hot, and Blue. Selections from 1936 production. Ethel Merman, Yvonne Printemps (vocals); various orchestras and conductors. Leave It to Me! Selections from 1938 production. Mary Martin (vocals); Eddie Duchin and His Orchestra. SMITHSONIAN COLLECTION © 2016 $7.99 (plus $1.89 postage and handling from Smithsonian Customer Service, P.O. Box 10230, Des Moines, Iowa 50336).

Performance: Happy
Recording: Good remastering

The producers of the Smithsonian Institution’s series of “archival reconstructions” of American musical shows are sometimes driven to curious lengths to assemble an album. In this case, there were apparently only enough historic recordings of material from three separate Cole Porter musicals to make up a single record, and some of the sources used are patently secondhand. For example, Hildegarde never appeared in Let’s Face It, though she did record some of its songs; since the originals are unavailable, her versions appear in this “reconstruction.” The pickings seem to have been so slim for Leave It to Me! that one of the three tracks devoted to it here is an instrumental medley played by Eddie Duchin and His Orchestra, who certainly were not in the pit at the Imperial in New York when the show was running; they also accompany star Mary Martin in two recordings of songs from the show.

But never mind all that. What matters is that these are three happy scores from a time when “book musicals” were not expected to be serious or realistic or preach an uplifting message. Where else can one hear Merman belting out such delights as Down in the Depths (on the 90th Floor), It’s De-Lovely, and Ridin’ High, or Danny Kaye sailing triumphantly through Let’s Not Talk About Love and the tongue-twisting Melody in 4F (for which his wife Sylvia Fine supplied the words), or Mary Martin’s show-stopping My Heart Belongs to Daddy? And there are loads of historic photographs and conscientious notes by Richard C. Norton complete with plot summaries, production histories, and recollections of that “happy era” in the American musical theater. A happy release indeed. P.K.
Who says Romance is dead? Not me, not TED NUGENT (he of the endless guitar solos and "Scream Dream," Epic FE 36404), and not ANN WILSON of Heart ("Bebe LeStrange," Epic FE 36371) either. Doubt it? Here are two out of the three at a listening party in Manhattan celebrating Ann's album, and for the occasion irrepressible Ted has his... er... Heart on. Frankly, Ted, it would have been more macho to wear it without the tee-shirt.

Former hippie dream-date GRACE SLICK looks as stylish as ever at RCA's New York City recording studios during sessions for her latest ("Dreams," RCA AFL1-3544). The startled dis-appointment Grace displays here may be the result of her discovery, just seconds before the picture was snapped, that RCA's Little Nipper mascot can't make sense of a sales report either.

The knife-wielding gentleman having a go at his thirtieth birthday cake is TEDDY PENDERGRASS ("Teddy," Philadelphia International FZ 36003). The bash was at Manhattan's Magique disco, and the young women, members of the New York Cosmos' cheerleading squad, performed a cheer especially for the occasion (all I got for my thirtieth birthday was an autographed picture of Estelle Winwood).

POP ROTOGRAVURE

By Steve Simels
In their never-ending search for cheap thrills, the Rock Star Smart Set has turned to Games of Chance! By way of proof, we offer this clandestine photo of squeaky-clean NEIL SEDAKA, his teenage daughter (!) Daria, and champion pool shark Steve Mizerak engaged in an illegal triple play on the verdant baize. The shocking goings on took place at a party celebrating the release of Neil’s new (what else?) “In the Pocket” (Elektra SE-259).

The Punk Meets the Godfather: Two generations of white New York street soul cross paths during promotional junkets. They are BILLY JOEL (“Glass Houses,” Columbia FC 36384) and Sixties veteran and ex-Rascal FELIX CAVALIERE (“Castles in the Air,” Epic JE 35990). For those of you too young to remember the Sixties, Felix is the one with the beard.

Anarchy in Burbank: I didn’t believe it myself until I saw it, but, as this picture proves, JOHN LYDON (a.k.a. Rotten) of anti-pop group Public Image Ltd. really did make an appearance on TV’s institutional perennial American Bandstand lip-synching two numbers from his “Second Edition” (Island 2WX 3288). That is not, by the way, Frankie Avalon pleading for “one more chance” up front.

Desperately attempting to hold up his trousers, noted bel canto tenor WRECKLESS ERIC (“Big Smash,” Stiff/Epic E2 36463) is found here braced backstage in Manhattan between ex-Meat Loaf warblers Karla DeVito and Ellen Foley. (Funny ... it seems we’ve run a shot of Ms. Foley the last two Rotos in a row; does she simply get around, or do I have a thing for blondes?)

We now take you backstage at the Palace in Houston, Texas, where we find GLEN TILBROOK (left) of the English pop group Squeeze (“Argy Bargy,” A&M SP 4812), hot-shot Linda Ronstadt producer PETER ASHER (second from left), and some other industry types involved in a bizarre Fifties sex practice: Getting Pinned. Oh, well, as my grandmother used to say, they can do what they like—as long as they don’t frighten the horses.
Classical Discs and Tapes

Recording of Special Merit


Performance: Stunning
Recording: Well-balanced

André Bernard is one of those rare trumpeters whose playing combines brilliance, lyricism, and good taste. No matter what he plays, it sounds right. For example, the Albinoni concerto here was originally written for oboe, but Bernard makes it a convincing trumpet work, no small feat. In the Hertel concerto he demonstrates his ability to blend with another soloist, Heinz Holliger, whose merits as an oboist are well known. The Hummel concerto, a strange but typical mixture of Mozart and Rossini, is brought off brilliantly, and Bernard's good taste saves the last movement, which borders on kitsch.

George Malcolm keeps the English Chamber Orchestra firmly in control and provides no mere accompaniment but strong support that perfectly complements the trumpet sound.

J. S. BACH: St. Matthew Passion (BWV 244). Edith Mathis (soprano); Janet Baker (mezzo-soprano); Dietrich Fischer-Dieskau (tenor); Jesus Heintze (counter-tenor); Dietrich Fischer-Dieskau (baritone); Matti Salminen (bass); Munich Bach Choir; Regensburg Domspatzen; Munich Bach Orchestra; Karl Richter cond. Archiv 2712 005 four discs $39.92. © 3-3376 016 $29.94.

Performance: Good
Recording: Very good

Karl Richter's approach to Bach is a logical continuation of the Germanic style of Bruno Walter. Top-ranking international soloists join massed choral and orchestral forces, the score is treated as gospel, and the performance is presented as a religious experience. The style is really late-Romantic, with sumptuous sonorities moving in spacious tempos and long legato lines slowly and seamlessly unfolding. This approach has very little to do with the "historical" performance practices favored by so many groups performing Baroque music today, but Bach's music transcends performance styles. Good singing and technical perfection, in both of which this album abounds, allow Bach's overpowering vision to shine forth unblemished.

The most striking element of this performance is Peter Schreier's Evangelist. Beginning in a somewhat measured and pompous manner, Schreier builds up the drama of the action by quickening the tempos and adding vocal excitement. The other characters fall in, and the turba is beautifully treated highly individually. The mood of the congregation in Bach's time, are also treated highly individually. The mood of each voice in the group of action, the super phrasing follows grammatical structure rather than obeying the fermatas that were used to delineate the versification.

Although one may take exception to some of Richter's excessively slow tempos or to his general approach, one cannot fault the seriousness and effectiveness of the grand plan. The result is truly impressive.


Performance: Wired
Recording: The same

In his liner notes, Allan Kozinn argues that these performances are nothing more than transcriptions—a contemporary equivalent of Bach/Busoni, Bach/Stokowski, or Bach/Segovia. Well, maybe. It just so happens that I have been listening to some Bach/Segovia lately, and there is one rather basic difference. Bach/Segovia and all the other tandem Bachs are live-performance pieces; Bach/Carlos is not performance music but was laboriously assembled on tape in the studio.

And "laboriously" is the word. This complete set has been almost twelve years in the making. An early form of the Third Brandenburg appeared in 1968 on the famous "Switched-On Bach" album. Over the years more than half of the music here has appeared in various forms on various other Carlos albums. Don't think that twelve years is enough time for the controversy over Bach/Carlos to settle down. The offensive cadenza has been removed from No. 3, but just try the andante of No. 2 for some real electronic creepy-crawlies. Most of this is music-box Baroque, and some people may find it, well, mechanical. But when Carlos and her producer/collaborator Rachel Elkind-Torre do depart from the straight and narrow—a bit of ornamentation, a tem-
vored a more deliberate pacing for the music than all his colleagues, but it is stylistically unsailable. London’s recording, too, is superior in terms of vocal clarity and orchestral sumptuousness. The sound of this DG release is satisfactory, but not always transparent enough.


These two viola concertos are among the most charming and grateful works in their respective composers’ outputs. The Bartók, finished only in a sketch at the composer’s death, was realized by his pupil Tibor Serly. The Hindemith, written for the composer to play himself, dates from the mid Thirties; it is Gebrauchsmusik or “music for use” (the term was closely associated with Hinde-mith) at its most attractive.

Daniel Benyamini is a great violinist but not a great violist. The Bartók is particularly difficult music and not always entirely idiomatic for the instrument; Benyamini’s struggle to play it is, now and then, quite palpable. Otherwise, though, these are reasonable-sounding performances. E.S.

RECORDING OF SPECIAL MERIT


Double reeds were rampant in the Rococo and well into the Romantic period, and they came in a number of varieties. The main survivors are the oboe and bassoon, but between them was an alto instrument that’s still around: the so-called English horn (from the French cor anglais, which is probably a corruption of cor anglais, meaning a horn with a bend in it). Beethoven’s early set of Mozart variations and very respectable middle-period trio are neatly performed here by Heinz Holliger and company on oboes and English horn, the instruments for which they were written. However, the Op. 17 sonata was written for the French horn, with the cello as an alternative possibility. Holliger plays it very well indeed on the English horn, making this version, however “inauthentic,” more than acceptable. Holliger, who is Swiss, introduced a very suave and beautiful French (almost American) oboe style to the German-speaking countries, where a heavier oboe sound has long predominated. He is doubtless the most brilliant and musical oboist in Europe today, and he is obviously the reason for this album—although his collaborators are certainly all on his level. E.S.

(Continued overleaf)

Choral Triumph for Digital

The digital recording technique is triumphant in Telarc’s new release coupling the Prologue to Boito’s opera Mefistofele and Verdi’s ‘Te Deum.’ The powerful choral and orchestral climaxes are undistorted, pianissimo passages emerge from absolutely silent grooves, and the dynamic contrasts are sometimes stunning. In addition, there is a depth to the sound that allows its survival. Here, for example, is an entire section of the Te Deum. John Cheek (bass); Morehouse-Spelman Chorus; Young Singers of Callan- wolde; Atlanta Symphony Chorus and Orchestra, Robert Shaw cond. TELARC DG 10045 $17.98.

Performance: Excellent Recording: Excellent

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(Continued overleaf)
The very size of Mahler's Ninth Symphony seems to bring out the best in virtually every conductor and orchestra that records it. There are at least seven distinguished recorded performances, and each of them has its own special character. The particular accomplishment of conductor Klaus Tennstedt in his new Angel recording with the London Philharmonic is to bring the symphony's intellectual and lyrical aspects into balance with its searing expressionistic elements.

There have been more dramatic realizations than Tennstedt's of the death-haunted opening movement, but I have heard no other in which the rhythmic Ur motives have been so fascinatingly integrated into the whole structure. Most other performances convey more savagery and sarcasm in the Ländler and Rondo-Burleske movements, but none so wonderfully reveals—and with no loss of expressivity—the fine polyphonic details. Indeed, I was totally bowled over by the polyphonic tour de force of Tennstedt's reading of the Rondo-Burleske, which also manages—through phrasing, coloration, and dynamics—to bring out to superb effect the movement's pensive, phantasmagoric aspects.

The clearly intended climax and interpretative high point of this recording is in the finale, which has an almost chamber-music-like transparency of texture. The movement takes the form of one long, carefully graded, perfectly sustained crescendo, which allows the climax, when it finally arrives, to make its impact with transcendent power. Tennstedt's careful attention in the early part of the finale to motivic relationships with the preceding movements is revelatory, and his realization of the long-drawn-out, otherworldly last pages defies verbal description; it simply must be heard.

The EMI recording is excellent, particularly in its capturing of fine details of line and texture. Some other recordings, notably those conducted by Carlo Maria Giulini (Deutsche Grammophon) and Wyn Morris (Peters International), may be marginally superior in coping with Mahler's huge peaks of full-orchestral sound, but this one is more than adequate in such passages. The important thing in any case is Tennstedt's vision of Mahler's score as a whole, which has produced what is probably the most spiritualized realization of it that we are likely to have on records for some time to come.

—David Hall

MAHLER: Symphony No. 9, in D Major. London Philharmonic Orchestra, Klaus Tennstedt cond. ANGEL SZB-3899 two discs $17.96, © 4ZZS-3899 $17.96.

BERG: Chamber Concerto: Adagio (see SCHOENBERG)

BRAHMS: Sonatas Nos. 1 and 2 for Clarinet and Piano, Op. 120. Bruce Nolan (clarinet); Robert Spillman (piano). GOLDEN CREST RE-7094 $6.98.

Performance: Restrained rhapsody

Recording: Very good

Brahms wrote these two sonatas for clarinet and piano (they are also sometimes performed on viola and piano) toward the end of his life; they were the last chamber pieces he composed. He wrote them for the clarinetist Richard Muhlfeld, for whom he had earlier written his Clarinet Trio and Clarinet Quintet. Both sonatas are somber, contemplative works that seem to lament the passing of the many friends Brahms had lost and, perhaps, the imminent end of his own life. Nonetheless, the composer's music was never more songful than it is here, especially in the opening movement of the second sonata, and even the melancholy brooding on things that were and are no more is relieved by unexpected passages in a less somber mood. Pianist Daniel Barenboim has recorded highly perceptive readings of these works: the clarinet versions with Ger-vase de Peyer for Angel (now available on Seraphim) and the viola versions with Pinchas Zukerman for Deutsche Grammophon. The playing here by clarinetist Bruce Nolan and pianist Robert Spillman cannot really compare with those landmark performances, but there is a pure and unaffected quality in the approach of these two young Americans that is refreshing. They present with clarity, forbearance, and precision a music that can suffer from too emotional a treatment.

P.K.

BRITTEN: Serenade for Tenor, Horn, and Strings, Op. 31. Robert Tear (tenor); Dale (Continued on page 112)
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Performance: Big and bold  
Recording: Excellent

Robert Tear, who is, after all, the soloist in both works, gives rather short shrift in the billings. Carlo Maria Giulini’s photograph alone is on the cover, and his name is nearly as big as Britten’s, while Tear’s, Dale Clevenger’s, and those of the two orchestras appear in the smallest letters of all. But it must have been Giulini’s decision, surely, to give these works the “symphonic” cast they have in these performances: here both seem bigger and more extravedted than they do in the similar coupling with Peter Pears, Barry Tuckwell (in the Serenade), and the composer conducting (London OS 26161). The music can take this bold, brisk approach well enough, but it becomes a different sort of experience from the intimate one we are accustomed to.

Tear often seems to be imitating Pears, and in this particular repertoire that must be hard to avoid doing, but he is more impressive in his own right on this record than in anything I can remember hearing earlier, particularly in *Les Illuminations* (which was not written for Pears, as many assume, but was introduced by the soprano Sophie Wyss). Most impressive of all, though, is the Chicago Symphony’s glorious first horn, Dale Clevenger, whose stunning account of his demanding part in the Serenade must inspire something close to awe on the part of his colleagues as well as among listeners who have never attempted to play the instrument. The string choirs of both the American and English orchestras are at their most brilliant too, and Deutsche Grammophon’s engineers have come through with outstanding sound. Much as there is to admire here, though, the uniquely authoritative and hardly less brilliant Pears/Britten disc still affords the deeper pleasure.  

*R.F.*

**RECORDING OF SPECIAL MERIT**

**DVOŘÁK: The Jacobin.** Karel Průša (tenor), Count Vílem; Vaclav Zítěk (baritone), Bohus; Rene Tucek (baritone), Adolf; Marcela Machotková (soprano), Julie; Karel Berman (bass), the Burggrafe, Beno Blachut (tenor), Benda; others. Karel Ninclay’s Chorus; Kuna Mixed Chorus; Brno State Philharmonic Orchestra, Jiří Pinkas cond. Supraphon 1112 2481/3 three discs $26.94 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Performance: Idiomatic  
Recording: Favorws voices

I must admit that I had never heard of *The Jacobin* before this recording arrived, but it is described in the reference books as Dvořák’s most successful and popular opera after *Rusalka*—in Czechoslovakia at least. I can quite understand why. This is your basic ethnic folk-national life-in-a-village comic opera. It is certainly in a class with *The Bartered Bride* and even a mite more serious, more high-minded.

Unlike *Rusalka*, which is high-Romantic music drama written under Wagnerian influence, *The Jacobin* stays close to the forms and melodies of folk song and dance. The local count’s only son is accused of being a “Jacobin”—that is, a radical who favors overthrowing the nobility, freeing the serfs, and redistributing the land—and is therefore disinheritied. But this is comic opera. Eventually the trickery of the scheming burggrave and evil cousin Adolf is exposed, and everything is set to rights. Somewhere along the way, the political overtones of the opening are dissipated. My guess is that the final act was rather heavily cut—but whether by the Austro-Hungarian censors of 1890 or more recent editors I cannot say. But no one, I’m sure, listens to *The Jacobin* for its political sophistication. Love of country is its real message, and that is expressed with joy, charm, tenderness, and nostalgia. It is impossible not to like this work, and I am surprised that it has made so little headway outside its homeland.

The recorded performance is, appropriately, a provincial Czech one. Brno, the home town of Leos Janáček, might be described as the metropolis of provincial Czechoslovakia. No one would confuse the

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Brno Opera with one of the big, star-studded international companies, but this is a highly idiomatic and enjoyable performance. (Excellent local repertory opera is, in fact, far more significant to the continuing development of opera and music theater than most of the grander jet-set efforts of the famous houses.) The singing—vocal portrayals of the characters I would call it—is charming and affecting on a uniformly high level. As might be expected, the choral singing is the high point. The orchestral playing usually sounds better than adequate, but it is not favored at all in this recording. A constant spotlight on the voices undoubtedly promotes clarity of language—obviously an important factor for a Czech audience. Those of us who don’t know the language must make do with a libretto in “Opera English”; there are no original texts, and no further information about the work is provided.

In spite of such shortcomings, I recommend this recording. Both the music and the performance everywhere give off a heady mixture of warmth, involvement, love, and musicality. Who could ask for more?

E.S.

FALLA: *Suite Populaire Espagnole* (see SARASATE)

**RECORDING OF SPECIAL MERIT**


Performance: Beautiful

Recording: Perfect

Thanks to the efforts of William Christie, Johann Caspar Ferdinand Fischer (d. 1746) is alive and well again through his music. Although Fischer is highly praised in music histories and cited as an important influence on J. S. Bach, his music has heretofore generally remained on library shelves, seldom being realized in actual sound. Stylistically, his *Le Parnasse Musical*, a collection of nine suites each dedicated to one of the muses, constitutes the missing link between Froberger, who brought the style of the French clavecinists to Germany, and Bach, who brought that style to its height in his keyboard suites. Closer to the French style than comparable works of the Leipzig master, Fischer’s preludes are freer in texture and frequently resort to arpeggios of rich and compelling chord progressions. The suites are grandiose in their number of movements; the dances are utterly charming, the chaconnes and passacaglias hypnotic in their ingenious accumulation of figurations, which drive to powerful climaxes worthy of Bach.

Christie is a superb musician who plays for musical values rather than brilliance. Although he observes all of the French mannerisms of rhythmic alteration and articulation, he brings a long legato line and a warmth to the music that are so frequently lacking in this style of playing. Rhythmically, he understands the difference between the rhapsodic freedom required in the unmeasured preludes and the controlled rhythms required by the dance movements. His vitality is never strait-jacketed nor his freedom chaotically overextended. It is the rare harpsichordist who can find the right balance between these two extremes. This disc is a very important addition to the catalog.

S.L.


Performance: Idiomatic

Recording: Agreeable

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**OCTOBER 1980**
I have decided to believe in Santa Claus after all. Just two years ago in these pages I reported on a startling performance of Mozart's A Minor Sonata No. 8 (K. 310) by pianist Alicia de Larrocha at Lincoln Center's twelfth annual Mostly Mozart Festival, calling it the most stunning Mozart playing I had ever heard and hoping for its early incarnation on disc—and here it is. Thank you, Santa. Mme. de Larrocha herself has characterized the sonata as the finest Mozart ever wrote, perhaps the finest anyone ever wrote. Without in any way meaning to suggest that pure music carries with it an implicit, subnotational, easily interpreted biographical "program," it is worth noting that the composer wrote this sonata in Paris in 1778 shortly after the death of his mother; the miracle of the second-movement Andante, anguished and moving, surely suggests that there were serious personal matters on his mind at the time. If you love the piano, if you love Mozart, if you love Alicia de Larrocha, this superb recording titled "Mostly Mozart Volume Four" is just as surely for you.

—William Anderson


Recording: Excellent
Performance: Exquisite

If Handel wrote these sonatas at the age of ten—for which there is more than a little evidence—he certainly outstripped even Mozart in precocity. Chances are he worked them later on in life, but, be that as it may, this is chamber music of the highest order, full of daring harmonies, ingenious counterpoint, and exuberant rhythms. The sonatas transcend their historic period and must be considered on a par with the finest chamber music of Mozart, Haydn, Beethoven, and Brahms. The performers here, who as yet have no collective name, do them full justice, too. The use of a bassoon for the bass line is felicitous, and the sonority of two velvety oboes with a prickly harpsichord is wonderfully sensual. Although Baroque articulation is not used, rich ornamentation has been added. The sinuous phrases are carefully molded, and the ensemble and balance are perfect. One could not ask for more.

It is also edifying to see that Nonesuch has what continues to strike me as a dryish character (not a fault of the recording itself, which is rich and full as well as exceptionally well balanced). I could do with the warmth, the wit, and the sheer heartiness Haydn wrote into these works. The Juilliard Quartet's recent three-disc set of the complete Op. 20 (Columbia M3 34593) and the Amadeus' of Opp. 71 and 74 (Deutsche Grammophon 2709 090) show how it should be done.

—R.F.


Performance: No. 97 first-rate
Recording: Very good

Leonard Bernstein's reading of Haydn's festive Symphony No. 97 is tops. The tempo is well chosen (it's especially important to keep the adagio moving), the balance between the strings is well worked out, and all the amusing effects in the menuetto and final presto assai are neatly underscored. This is, in fact, one of the finest recordings of this symphony currently available.

The Symphony No. 98 is, however, another story. In the opening movement Bernstein first sets a rather slow tempo for an allegro, then speeds it up and keeps fooling around with it. The opening of the exposition repeat is quicker than the first time, a most unsettling experience. In the adagio there are ensemble problems in the accompanying figurations and some ragged entrances. Despite Haydn's allegro marking for the menuetto, Bernstein nearly kills it with an allegretto tempo, and the trio simply limps. The finale depends on a devilish contrast between an almost string-quartet texture and the full orchestra; the two elements must be held together in order to reveal Haydn's splendid architectural plan. Bernstein does not manage to hold them together—he lets the brass take over whenever it gets a chance—and the movement falls apart. A pity.

—S.L.

Haydn: Symphony No. 100, in G Major ("Military"). Mostly Mozart Festival Or.
(Continued on page 116)
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choir, Johannes Somary cond. VAN-GUARD VA-25000 $12.98.

Performance: Good
Recording: State-of-the-art

The two sides of this record derive from different tape masters, one digital and the other analog, of the same performance as recorded through the same microphone setup and identically mixed on the same console. It is a delightful conceit, and the variables have obviously been reduced to the minimum, but the release does not necessarily provide an answer to the question of the relative advantages, from a listener's perspective, of the two recording technologies. The trouble is that one is faced with the impossible need to discriminate between degrees of perfection.

The recording locale, the Masonic Temple on 23rd Street in New York City, has an ideal acoustic ambiance for the modest-size Mostly Mozart Festival Orchestra, and in consequence the presence, reverberation characteristic, and coloration are just right in both recordings. The balances also are flawless, allowing the celebrated percussion-battery episodes in the second and last movements (whence the nickname "Military") to come across with splendid though unexaggerated presence and Klang. I listened to the disc the first time around using electrostatic headphones to eliminate the factor of room coloration, and I was able to detect a slight qualitative difference between the digital and analog sides: the former seemed more "open" with respect to the upper partials of the frequency spectrum, but the latter seemed a bit warmer in overall ambiance. There was no detectable difference in dynamic range. I then arranged a blind playback using loudspeakers in a fairly warm-toned, all-wood-rathered 20 x 30-foot room. I didn't let myself know which side was playing at any one time, and I found it impossible to tell from listening.

For the performance, Johannes Somary's reading is imbued with elegance and vitality but lacks the personal character that some other renowned conductors have brought to this music. I also regret that he did not use the classic right/left setup for the first and second violins.

In any case, I compliment Vanguard on their excellent realization of a provocative idea—but I trust they will not feel it necessary to produce all their future audiophile releases in this dual digital/analog format! D.H.

HERTEL: Concerto a 6 for Trumpet, Oboe, and Strings (see ALBINONI)
HINDEMITH: Der Schwanendreher (see BARTOK)
HUMMEL: Concerto in E-flat Major for Trumpet and Orchestra (see ALBINONI)
DIETZ: Chansons et Dances, Op. 50 (see GOUNOD)

RECORDING OF SPECIAL MERIT

MAHLER: Songs of a Wayfarer; Five Rückert Songs; Two Songs from Des Knaben Wunderhorn. Frederica von Stade (mez-zo-soprano); London Philharmonic Orches-
(RContinued on page 119)
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REVIEW.
Deutsche Grammophon has done the lion’s share of recording it. Those of you who remember DG’s thrilling album of Zelenka’s orchestral music (see March 1980, “Best of the Month”) will be equally delighted with a new two-disc set of his trio sonatas.

The sonatas are striking because of their dimensions and the musical technique displayed in them. Zelenka was a master at spinning out a motive with constant variation and contrapuntal play. Each movement is tightly woven using one or two motives, and the composer’s imagination in the handling of them seems inexhaustible. He also had his own characteristic vocabulary, best savored here in the Fifth Sonata with its curious modal unisons.

Although these pieces are labeled trio sonatas, they are in fact closer to being quartets. Zelenka calls for a continuo of double-bass and bassoon, but he more often than not gives the bassoon an independent obbligato line so that it joins the dialogue of the oboes, leaving the double-bass and harpsichord to fill the role of continuo. The result is a rich and complex texture.

Zelenka’s writing is virtuosic in the extreme; it is hard to think of any other trio sonatas of such sustained difficulty and brilliance. The instrumentalists on this record are put through a technical and musical ordeal—which they survive with exceptional style.

Zelenka’s writing is virtuosic in the extreme; it is hard to think of any other trio sonatas of such sustained difficulty and brilliance. The instrumentalists on this record are put through a technical and musical ordeal—which they survive with exceptional style.

The Schoenberg Chamber Symphony is one of the landmarks of twentieth-century musical history. Schoenberg virtually invented the form and make-up of the chamber orchestra for this work. Yet the piece tends to strain at the bonds of the chamber orchestra, and I have never heard a completely satisfactory performance of the original version—which may be one reason it has never made its way into anybody’s repertoire. The orchestral transcription that Schoenberg made years later doesn’t quite seem to work either; it is completely logical only on paper. In view of all this, the first recorded performance, which is aglow with spontaneity, wit, and sheer delight in realizing the full the specific character of every one of these intriguing pieces. Far more than a convenient way to collect all the Spanish Dances together, this is a classic matching of interpreter and material. I, and I believe any violinist’s noblest companion, the masterful coloratura, could pass for new, and George Jellinek’s exceptionally informative notes are reprinted from the original issue. Lovers of fine fiddling will want both of these records, but Ricci’s is the one no one should let himself miss.

R.F.
produce a sound like a modernized, expressionist Mahler, and they don’t try. The epic lines of the music emerge without tears, without strain.

The Debussy piece here is really just an oddity; we have heard L’Après-midi d’un Faune too many times in its full orchestral dress, and this chamber version adds little to our understanding or enjoyment of it. The adagio from Berg’s Chamber Concerto for Piano, Violin, and Thirteen Winds is a very introspective, rather long, and beautiful movement, and it is quite comprehensible in Berg’s own trio arrangement for violin, clarinet, and piano. But the real prize on this record is the Schoenberg.

E.S.

SCHUBERT: Sonata in A Major, Op. 120; Impromptu in A-flat Major, Op. 90, No. 4 (see SCHUMANN)

RECORDING OF SPECIAL MERIT


Performance: Great
Recording: Superb


Performance: Schubert good
Recording: Dull

Bella Davidovich came out of the Soviet Union in 1978 with a reputation as one of those Russian piano superstars. It’s well deserved. Hers is a superb Carnaval, full of fantasy and poetry, as witty and personal and brilliantly played as, well, Rachmaninoff’s—still the benchmark in Carnaval playing after all these years. All the same remarks apply to the less familiar but very beautiful Humoreske—not at all what you might think, but a large-scale, quietly lyrical/pastoral work of great charm. Davidovich is one helluva strong player, but she is no showoff; everything is personal, phrased, articulated, sung out, intense, highly poetic. Great playing, and very well recorded too.

Alas, Carnaval is not Alicia de Larrocha’s cup of tea; her performance is limp. The Schubert on the other side is something else. This is beautiful, singing, lyrical playing of a very special quality. I thought the piano sound was a bit dull, though. E.S.


Performance: Petrouchka excellent
Recording: Very nice

This is a major portion of Stravinsky’s solo-piano output. Most of it was written in the early 1920s (Tango was written in 1940, and, of course, the Petrouchka music was originally written before World War I). The Petrouchka pieces are just right for the gifted young Hungarian pianist Ders6 Ránki; he is at home with the exoticism, the flair, the technical brilliance, the picturesque expression. And he is quite jaunty in

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the amusing Piano Rag Music and the rather creepy Tango. But those two neo-Classical masterpieces, the Piano Sonata and, especially, the Serenade in A Major, seem to have him a bit baffled. He gives them cool, reticent performances that suggest he is never really quite sure what it was he intended to say with and about this music.

E.S.

RECORDING OF SPECIAL MERIT

TALLIS: Missa Puer Natus Est; Suscipe Quaeque Domine; Salvator Mundi. The Clerkes of Oxenford, David Wulstan cond. Nonesuch H-71378 $5.98.

Performance: Lucid
Recording: Sonorous

The full triadic sound the English have always favored in their music is splendidly displayed in this collection of choral music by Thomas Tallis, the teacher of William Byrd. Writing for seven parts, Tallis devised an incredibly lush sonority that flows without break as each voice traces its individual melody. One of the most striking effects is achieved by dwelling on one triad and moving the voices around in the manner of bell peals. This is really grandiose music whose sound was intended to fill cavernous cathedrals.

The Clerkes of Oxenford produce a unique tonal quality. Although women sopranos are used instead of boys, they sing purely and without vibrato. The weight of the sonority is carried by the tenors and countertenors, with a slightly softer bass part. The effect is radiant; one listens from the middle out, as it were, and is aware of all the inner movement. Conductor David Wulstan keeps the flow constant but with a sense of dignity that lends just the right flavor to the music. It is thrilling to hear Tallis done this way and to realize the achievement of the English music of this period, which is so often considered insular. The sound is not Continental, but the artistry is as great.

S.L.


Performance: Freewheeling
Recording: Brilliant, full-bodied


Performance: Elegant, poised
Recording: A mite congested

There are some thirty-one recordings of the Tchaikovsky First Piano Concerto currently available. Certainly there is a reading for (Continued on page 124)
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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 sweeps up 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 recorded in the left channel with reference tones in the right, to check leakage from left to right.

- **Separation, left-to-right.** Uses test tones consisting of one-third octave bands of pink noise recorded in the left channel with reference tones in the right. Same as Test 3, with channels reversed.

- **Cartridge tracking, low frequency.** Uses a single 300-Hz tone that repeatedly sweeps to a high level, producing buzzy tones if the cartridge is misaligned or inferior.

- **Channel balance.** Two random-phase noise signals, one in each channel, produce sounds heard separately to allow accurate setting of channel balance.

**Cartridge and speaker phasing.** A low-frequency signal alternates in and out of phase in the two channels to allow proper phasing of cartridge and speakers.

**Low-frequency noise.** A very low-level orchestral passage, followed by a section of "quiet groove," allows analysis of low-frequency noise.

**Turntable flutter.** A passage of piano music is recorded three times with increasing amounts of flutter. The degree to which the record player's flutter "masks" the test passages indicates the severity of turntable flutter.

**Frequency-response sweep, 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 channel.

**Frequency-response sweep, 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.

**Intermodulation distortion.** A phono cartridge's intermodulation distortion can be measured directly using a standard IM meter designed to analyze an SMPTE signal.

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

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every taste, and the three under review here are as different from one another as anyone could possibly imagine.

Andrei Gavrilov, a Tchaikovsky Competition laureate (1974), is a real firebrand in the first movement, and he is abetted in full measure by Ricardo Matioli and the Philadelphia Orchestra. This is an all-out whisk kid treatment: fiercely blaring horns summon the soloist to the fray, whereupon Gavrilov—with Horowitzian elan and comparably brilliant and unerring dexterity—lungs into the music with freewheeling ritardis and returns to tempo that are far beyond anything I have encountered before. The free approach actually works better in the slow movement, and the finale is done brilliantly with a more than usually broad treatment of the coda.

Claudio Arrau, in complete contrast to Gavrilov, adopts a stately and aristocratic approach to the music. There is no attempt to wow the listener, and Arrau and conductor Colin Davis stress the lyrical substance. If Arrau at seventy-seven cannot match Gavrilov's dexterity in the central section of the slow movement, he shows himself a true master of rubato, and the lyrical episodes of the finale. The Philips Boston recording seems to have been rather closely miked, and the sound is somewhat congested as a result. Despite some over-reverberation in it, I find Arrau's 1961 recording on Seraphim (S-60020) more agreeable, and it is, moreover, a more sonorous and wonderful performance of the Weber Konzertstück—music I suspect is more congenial to Arrau than Tchaikovsky's is.

The real prize among these three discs is the Deutsche Grammophon Privilege reissue of the 1971 recording by Martha Argerich with her husband, Charles Dutoit, conducting. Here's a performance with ebullience, great style, and, on the part of Miss Argerich, sovereign command of keyboard coloration, notably in the slow movement. Dutoit and the Royal Philharmonic come through with a stunning orchestral collaboration throughout. Gavrilov, adopting a stately and aristocratic treatment of the coda.

The final judgment. A duet for two sopranos is carefully balanced by one for tenor and bass. Each soloist has his chance; there are no weak arias, and the chorus interjects powerful statements at appropriate moments. The Deutsche Grammophon Privilege reissue of the 1971 recording by Martha Argerich with her husband, Charles Dutoit, conducting. Here's a performance with ebullience, great style, and, on the part of Miss Argerich, sovereign command of keyboard coloration, notably in the slow movement. Dutoit and the Royal Philharmonic come through with a stunning orchestral collaboration throughout. Gavrilov, adopting a stately and aristocratic treatment of the coda.
his German versions are both fluent and admirably faithful. Deutsche Grammophon's recorded sound—rich, natural, and well balanced—rounds out a fine presentation.

My dulled critical senses, however, awoke as I began listening to the singing. This is Dietrich Fischer-Dieskau's third go at the Italian Songbook. His first, with Irmgard Seefried (DG 138 035/36, long deleted), back in the early 1960s, captured him in his vocal prime; the second (Angel S-3703), in which Elisabeth Schwarzkopf was his partner, came about ten years later and remains a very strong contender in the active catalog. Fischer-Dieskau's consummate artistry is too well known to require new testimonials, but equally known are the vocal limitations and mannerisms that characterize his current singing. He can still convey tenderness and devotion with a mesmerizing rapture (Sterb'ich, So HUI! in Blumen on side three is a good example). The outer sections of Benedeit die Sel'ge Mutter attain a similar quality of spirituality, but the contrasting middle section now goes beyond controlled passion to become violent. In general, I find his singing overdrawn and given to dynamic stress at the expense of lyric flow.

There is no such overinterpretation, however, in Christa Ludwig's contribution, which is warmly colored, appealingly feminine, and, when called for, convincingly passionate. At times her vibrato obscures the pitch of some of Wolf's trickily chromatic writing, and some of the songs could do with a little more humor, but I found much pleasure in her singing. Daniel Barenboim's contribution is also very significant: technically imposing, richly resonant, and sensitive to nuances.

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Since Arthur Fiedler's death in July 1979, the shelves of record stores have been bulging with rereleases of the records that helped make the whitetailed conductor of the Boston Pops Orchestra so famous during his half-century career. RCA has obviously gone to a great deal of trouble to make this three-record package a distinguished historical documentation of that career, from a listener's point of view.

The company for which Fiedler made hundreds of recordings has some fascinating stuff in its vaults, and some real jewels are on display here: the witty Cailliet Variations on Pop Goes the Weasel, an opus that has never been recorded before; the wonderful Reminiscences by Arthur Fiedler; and a recording with the Pops of Gershwin's I Got Rhythm variations and Jésus María Sánchez in the final pages of what is probably the best Rhapsody in Blue ever released.

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Leonarda Productions, which published the Katherine Hoover composition as well as producing her disc, is identified as "a non-profit tax-exempt corporation formed to promote contemporary music and music by historical women composers." This disc, we are further advised, was "made possible in part by Festivals I and II of Women's Music, presented by the Women's Interart Center, New York City." The major offering here is the trio by Louise Farrenc (1804-1875), which occupies an entire side. Though it does not seem to go anywhere in particular, its four movements are very well crafted (in a Mendelssohnian mold), with some especially attractive material for the cello as well as the flute. Ludmilla Ulehla's Elegy for a Whale, commissioned for a National Whale Symposium in 1975, is one piece on the disc taken from a live performance (May 8, 1978), incorporates the taped sounds of real whales; it is not the first composition to do so but is no less effective for all that—a pleasantly provocative ten minutes' worth. Lili Boulanger (1893-1918), sister of the late Nadia Boulanger, is known for some large-scale choral works. Her broadly expressive little nocturne and somewhat more expanded, pianissimo evocation of a spring morning, the two of which frame the sequence of shorter pieces, are models of Gallic taste, while the Pastorale of Germaine Tailleferre, the only female member of "Les Six," is an enchanting quasi-sicilienne. Hoover's own piece, part of a cycle based on figures in Barbara Tuchman's historical study A Distant Mirror, is delicately evocative in a time-stands-still frame. The performances are uniformly handsome, and the sound is quite good. Carol Wincenc's MHS disc represents, I understand, the inauguration of a series of showcases of Naumburg Competition winners to be presented on this label. Her program is almost entirely French, a phenomenon no more surprising in relation to the flute than an all-Spanish program for the guitar. In the two famous unaccompanied pieces by Debussy and Honegger, and in Poulsen's similarly familiar sonata, Wincenc discloses a superb feeling for mood (wit, in particular) as well as a steady and gorgeous tone that makes one ready to listen to anything she might have to offer. And what she offers in addition to these well-known items is a clutch of really lovely discoveries. I had not known, till I read

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OCTOBER 1980
MIKLÓS SZENTHELYI is a twenty-nine-year-old Hungarian violinist who studied with Denes Kovacs, has concertized fairly extensively in Europe, and was the soloist with the Budapest Symphony Orchestra on its North American tour in 1979. To say that his name is not a household word here is only to belabor the obvious. But maybe it should be a household word. Szenthelyi plays Kreisler with great skill, great elegance, and great charm. His tone is sweet, his intonation superb, and his old-style musicianship just about all-encompassing. His sister Judit Szenthelyi is no mean pianist either, and how wonderful (and how rare!) to hear ensemble playing in this repertoire on the level of a well-rehearsed Mozart sonata. A lovely and lovable record.

—James Goodfriend

KREISLER: Praeludium and Allegro (Pugnani); Canzoncetta; Romance; Liebesfreud; Liebesleid; Schön Rosmarin; Madrigal; Allegretto (Boccherini); Caprice Viennais; Toy Soldiers’ March; Chanson Louis XIII and Pavane (L. Couperin); La Gitana; Rondeau on a Theme of Beethoven; Cavatina; Polichinelle, Serenade; Recitative and Scherzo Caprice, Op. 6. Miklos Szenthelyi (violin); Judit Szenthelyi (piano). HUNGAROTON SLPX 12141 $8.98 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Harris Goldsmith’s excellent annotation, that Philippe Gaubert, better remembered as a conductor than as a composer, was also a flutist. His sonata, in any event, is eminently worthy of the attention it receives here, as is the slight but delectable Enesco item. Wincenc, by no means incidentally, has no mere accompanist but a superb partner in the person of András Schiff. All in all, a distinguished production, with suitably luscious, natural sound.

RECORDING OF SPECIAL MERIT


Performance: Aristocratic
Recording: Good

Bernard Thomas, a member of the London Pro Musica, has chosen for this record a group of sixteenth-century pieces that demonstrate the flexibility of instrumentation in Renaissance chamber music. Most of the works here are madrigals or chansons originally published in arrangements for
solo voice and various combinations of lute, organ, viol, etc., and they are fascinating music. There are also some fine lute solos and a wonderful viol fantasia.

The album is dominated by the beautiful singing of countertenor Kevin Smith, who possesses an exceptionally rich voice that is perfect for the music. The rest of the performers (Bernard Thomas, flute and recorder; Christopher Wilson, lute; Trevor Jones, viol and rebec) are also excellent; they play with elegance and great restraint, giving us the true flavor of Renaissance aristocracy. But I wonder who plays the organ so well. Whoever it is is not credited on the album.

S.L.

RECORDINGS OF SPECIAL MERIT

CARLOS MONTOYA: Flamenco Direct, Volume I. Tango Antiguo; Levante; Caribe Aflamencado; Fandango; Taranto; Varaciones; Aires de Genil; Malaga. Carlos Montoya (guitar). CRYSTAL CLEAR © CCS-6004 $19.98.


Performances: Glorious

Recordings: Stunning

Carlos Montoya is one of the great Flamenco guitarists of this century. He has been recording for many decades, but, according to the lively liner notes by his wife Sally, he regards these two discs as "the closest to hearing him and his guitar in person." He is right. His playing is remarkable, but even more remarkable is the sound captured on these direct-to-disc recordings. Since no editing is possible in this process, what he gave in two three-hour sessions is precisely what you get, and that is pretty wonderful even at the high list price.

Among the selections, played with that peculiar combination of fire and ice that makes for first-rate Flamenco, are a Moorish-flavored Zambrera from the gypsy caves in the hills of Granada, an improvised Bu-lerias from the town of Jerez, a Zapateaco during which you can all but see the toe and heel movements of a Flamenco dancer, a Tango Antiguo from Seville, a Fandango from Huelva, a Malagueña from Málaga, and a Guajira from Cuba that exemplifies Latin American influence on the music of Spain. Everything is filtered through the inventive musical mind of Montoya himself, who has really developed a new music out of the old sources. A resounding Ole! for both albums.

P.K.

MUSIC OF ANCIENT GREECE. Stasimon from "Orestes"; First Delphic Hymn to Apollo; Techessa's Lament; Hymn to the Sun; Hymn to the Muse; Hymn to Nemesis; Epitaph of Seikilos; First Pythian Ode; Fragments of Contrapolionopolis; and thirteen others. Atrium Musicae of Madrid. Gregorio Paniagua cond. HARMONIA MUNDI HM 1015 $8.98 (from Brilly Imports, 155 North San Vincente, Beverly Hills, Calif. 90211).

Performance: Effective

Recording: Good

Although music played an integral part in the daily life of classical Greece and many theses on the subject have come down to us, mostly theoretical, we know very little about the actual sound of ancient Greek music. Extant visual representations of musicians playing and scattered bits and pieces of an enigmatic musical notation present more puzzles than solutions. Nonetheless, Gregorio Paniagua has bravely tackled the problem, devising a method of reading the notation, reconstructing many of the ancient instruments, and training a body of musicians to perform the music.

The musical results of this enterprise are curious. Oddly enough, my first reaction to the exotic modes, the breathy flute, the snarling aulos, the gutty plucked sounds, and the delicate percussion was to compare it all to the kabuki music of Japan. At other times I was reminded of Gregorian chant. At all times, however, the sound is unique and intriguing. To question its authenticity is pointless; one must accept Paniagua's vision of classical Greek music for what it is—an educated and imaginative guess—and enjoy it as something fresh and exotic. The proceeds of this UNESCO-sponsored record, incidentally, will go toward restoration of the Acropolis in Athens. S.L. (Continued overleaf)

Performance: Fun Recording: Skillfully restored

You can learn all about Emile Berliner, inventor of the phonograph disc, from the back cover of this album, and on the record, from original Berliner discs made between 1894 and 1899, are some of the darndest things you ever heard. There's a monologue on drinking by George Graham, surprisingly distinct considering its age, which ought to have a sobering effect on the most unrepentant listener. There are cornet and trombone and saxophone solos, wobbly soprano, Italian tenors, and barbershop quartets. There are stints on the banjo, spirituals, yodeling songs, the Carnival of Venice (they're still making records of that), and enough Sousa-like marches to start a small military school. Some of the selections are too long, but most are fun, and the sound, cleaned up by some valiant anonymous engineer, is better than you might expect.

MISHA RAITZIN: Sings Songs of His People. Jerusalem; Der Becher; Sim Sha-

ster, a tour de force of a musical monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue in which a rabbi harangues God for afflicting His people but ends up by making a monologue

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NEW FOLKS AT HOME

A t the risk of tooting my own horn, I am proud to say that although I grew up in the Sixties I was never a folkie. A lot of my friends were, of course, and they tolerated me because I went to the same "Ban the Bomb" rallies they did, but as far as I was concerned rock-&-roll was the only way to go. This probably had something to do with my then overactive hormones; somehow folkie girls (they were still called beatniks in those days) all seemed to have fat thighs, bad skin, and a tendency to wear black tights, none of which I was nuts about. Consequently, when I got old enough to haunt Greenwich Village, I managed to miss the shrine known as Folk City, which of course was the place where everybody who was anybody (Dylan, Baez, Collins, the whole crew) played at some point. Me, I was around the corner listening to the Byrds or the Blues Project.

This adolescent snobbery got tempered over the years; it became obvious to me that a lot of the artists I respected had roots in the folk tradition (the Lovin' Spoonful, for instance), and after Dylan went electric distinctions got thoroughly blurred (was an electric blues band like Paul Butterfield's rock or folk? Who knew?). But Folk City remained Folk City—no rockers needed permission to play. As a perhaps inevitable result, the crowds got smaller, the purists (on both sides of the stage) got crankier, and throughout the late Sixties and early Seventies both the club and the scene that nurtured it seemed ready to die a long-overdue death. It became, in fact, faintly embarrassing, even to some old-timers.

Then something changed. A lot of quirk-ky, original, post-folkie folkies began to emerge there—Willie Nile, the Roches, Steve Forbert—and they seemed to flourish for the same reasons that, way downtown, the punks were flourishing: as a reaction against and comment on the utter vapidity of the commercial music scene run by the Don Kirshners of this world. Suddenly the folkies had a reason for being again. So, inigated by the promise of some intelligent music, this year I finally, belatedly, made the pilgrimage to West Third Street, and, sure enough, there was a legitimate, thorougly lively scene happening.

This was not an accident. The commercial success of Forbert and friends has been somewhat inspirational, and Robbie Wolaver, who took over the management of the club this year, has made a determined effort to keep the place as unpredictable as possible, his only criterion for booking acts seems to be Are They Interesting? And so, along with acoustic types, he's also featured blues acts, jazz, New Wave, cabaret, and all sorts of unclassifiable weirdos. "I want this to be a place where people are discovered," he told me, and given the ears he's demonstrated lately I don't doubt for a moment that he'll succeed.

AND so, on an average night at Folk City you might see . . . Andy Breckman waxing surreal about what a good day he's had (after all, he didn't throw up and he wasn't hit by a bus); Erik Fraendel, a superb acoustic guitarist who may also be the only songwriter ever to pay tribute to TV's Superman (Nobody Grieves for George Reeves); Frank Maya and the Decals, a Talking Heads-ish bunch featuring a lead singer who suggests a cross between Frank Sinatra and a bag lady who sounds like Bobby Short on acid; June Dafgard and the Rhythm Dogs, who, while doubtless ready for a Broadway production of Janis Joplin Mania, still purvey impressive contemporary soul/blues; Horace Johnson and the Tractors, a gritty rock-and-raunch outfit who seem to pick up where John Fogerty and Creedence left off; the Bermuda Triangle, the first-ever folkies to cover Aerosmith songs on autoharp—they just may have invented punk-folk; Judy Castelli, a striking, intense singer-songwriter with a striking, rangey alto that sounds like nobody's you've ever heard; the Lili Anel Band, two sisters who do pop-jazz the way Phoebe Snow wishes she could; and Frank Christian, another guitar virtuoso (he's known to back up many Folk City stalwarts), who has an utterly winning deadpan cool. And there seem to be more new folkies to cover.
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