VIDEO GOES AUDIO

STEREO TV IN JAPAN: A preview of the hardware
STEREO TV IN THE U.S.: How soon will it be here?

Julian Hirsch discusses

AMPLIFIER OUTPUT-CURRENT RATINGS

EQUIPMENT TEST REPORTS:
- Kenwood KA-1000 Integrated Amplifier
- Realistic STA-2250 Stereo Receiver
- SAE 2401 Power Amplifier
- Soundcraftsmen AE2420-R “Scan-Alyzer”
- 3D Acoustics Three-piece Speaker System

DISC SPECIALS:
Don McLean: “Chain Lightning”
Warren Zevon: “Stand in the Fire”
Blondie: “Autoamerican”
The new “42nd Street”
and... Todd Rundgren,
Peter Allen
MONTEVERDI: Return of Ulysses
ROSSINI: William Tell
and... Gidon Kremer,
Heinz Holliger
In hi-fi, up until now, sound was the whole picture.

Since the very beginning, hi-fi has appealed to one sense: your hearing. The rest was up to your imagination.

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One of the most surprising parts of this new technology is that it's affordable.
The Pioneer LaserDisc player has a suggested retail price of $749. (Optional remote control just $50 more.)

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Irrespective of how much we say here, the true magic of LaserDisc can only be appreciated in person. So we've arranged for a personal demonstration in your area. Just call us at 800-621-5199, and we'll give you the names of the stores nearest you. Go by all means. You won't believe your eyes. Or your ears.

* Suggested retail price. Actual price set by dealer. **(In Illinois 800-972-5855).

CIRCLE NO. 45 ON READER SERVICE CARD.
Five Important Reasons To Own This New Realistic Digital Synthesized Receiver.

1. The microprocessor controlled, digital synthesized, quartz locked tuner.
Don't let the technical terms frighten you. Simply put, the tuner is computerized. Incredibly accurate. Very easy to use. Even easier to love. When you tune this new Realistic, soft-touch buttons take you to the exact center of the channel you want. Select the search mode and gain instant access to all 109 AM and 99 FM broadcast frequencies. Or choose the automatic mode and stop only at stronger stations. Either way, a triple muting system silences tuning noise, and a quartz crystal reference corrects the circuit over 11 million times each second. Two major causes of distortion — drift and tuning error — are eliminated. With the STA-2250 you get a clean, uncluttered front panel featuring a six-step LED signal strength readout and a bright LED frequency display you can easily read from across a room.

2. The programmable 16-station memory.
You can also store eight AM and eight FM stations in the computer memory for instant pushbutton recall. Adding or changing memorized stations is easy, and memory contents are protected for one hour, if AC power fails, or if you need to unplug the receiver.

3. Power and protection.
The STA-2250's audio amplifier delivers a powerful 50 watts per channel, minimum rms into 8 ohms, from 20-20,000 Hz, with no more than 0.02% total harmonic distortion. You get complete protection against overdriving, overheating and speaker wiring shorts. The sophisticated muting system even protects your speakers and ears from "thumps" and "pops" when you select sound sources.

4. The heart of a complete system.
The STA-2250 is a very versatile control center. Use the 40-step volume/balance control and 11-step bass, treble and midrange controls to adjust the response exactly the way you want it. You also get A-B-Both speaker switching, inputs and dub/monitor controls for two tape decks, hi and lo filters and more. All enclosed in a walnut veneer (not plastic or metal) cabinet.

5. We build it. We back it.
Engineering and manufacturing the STA-2250 in our own factory helps us to price it lower, and also eliminates buck passing when it comes to quality control and service. As with every Realistic stereo receiver, you get a two-year parts and labor limited warranty, honored wherever you see the Radio Shack sign. So if you are starting or upgrading a stereo system, audition the STA-2250 at one of our 7500+ locations today. Once you compare its effortless tuning and flawless musical performance with receivers costing hundreds more, you'll know why we put reason number six on a separate line.

The Amazing Realistic STA-2250:
Only $429.95* at

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THE NATIONWIDE SUPERMARKET OF SOUND®

*Retail price may vary at individual stores and dealers.
The Equipment

NEW PRODUCTS
Roundup of the latest audio equipment and accessories

AUDIO QUESTIONS AND ANSWERS
Stylus Cleaning, One-brand Systems, Bass Pops

TAPE TALK
Overload from Warps, Wow/Flutter Audibility, Hot Heads

TECHNICAL TALK
Amplifier Output-current Ratings

EQUIPMENT TEST REPORTS
Hirsch-Hauk Laboratories test results on the 3D Acoustics three-piece speaker system, Kenwood KA-1000 integrated amplifier, SAE 2401 power amplifier, Soundcraftsmen AE2420-R "Scan-Alyzer," and Realistic STA-2250 stereo receiver

STEREO TV IN THE U.S.
We may be feeding it into our hi-fi systems by mid-1982

STEREO TV IN JAPAN
A preview of some of the hardware shortly to be ours

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How long will your phonograph records last?
How many times can you safely play records without degrading sound quality?
Using quality playback equipment, the factors of Record Longevity are twofold and closely interrelated: the record must be kept free of contamination, and the stylus must be kept clean during playback.
Scanning electron microscopy clearly shows the need and contribution of both record cleaning and stylus care.
Exhaustive research shows that with proper record/stylus care, an entire "life span" of 200 play events will not damage record surface quality or fidelity. (Most albums are played a total of 50 times or less.)

Results of D4 Record Care:
Clean central radius due to capillary attraction of D4 Fluid into D4 pad fabric.
Microdust-free stylus path due to exclusive D4 "spiral fiber" particle holding.
No wall-slurry of "lubricant" products.

Results of SC-2 Stylus Care:
Reduced wall abrasion due to uncontaminated diamond face.
Cleaned stylus leaves no welded-in particles.

There is no substitute for the valid research you get with Discwasher products. Ask for them where better dealers take interest in a longer "life span" for you.
DIGITAL FLASH: Matsushita Electric of Japan (parent company of Technics and JVC) has announced that it will manufacture playback equipment for the laser-read Sony/Philips Compact Disc (CD) digital audio system. Matsushita also plans to produce equipment for the AHD digital audio disc system developed by JVC. The AHD system is compatible with the VHD videodisc system, a stylus-read grooveless disc not yet marketed in this country. Since Matsushita's announcement means that three major manufacturers will be producing equipment for the CD system, this gives CD the lead in the effort to establish world-wide standards for home digital audio.

THE METROPOLITAN OPERA has released the eighth in its series of Historic Broadcast Recordings, Verdi's Un Ballo in Maschera from the Texaco-sponsored broadcast performance of December 14, 1940. Heading the cast are Zinka Milanov and Jussi Bjoerling, both long associated with the Met. Alexander Sved, Bruna Castagna, and Stella Andreva are among the other singers. Ettore Panizza conducts. Boxed in a felt slipcase, the three-disc set will be sent to all contributors of $125 or more to the Metropolitan Opera Fund, Box 930, New York, N.Y. 10023.

ON NPR THIS MONTH the St. Louis Symphony begins a series of twenty-six live-on-tape concerts under music director Leonard Slatkin. Included are world-premiere performances of such works as David Del Tredici's 1980 Pulitzer-Prize-winning In Memory of a Summer Day and John Williams' violin concerto. The American Music Festival series, nine Sunday concerts at the National Gallery of Art in Washington, begins April 5. It will include the world première of a flute concerto by John La Montaine. Also bowing in April are Wind Works, a series of concerts by wind ensembles with commentary by Frederick Fennell, and St. Paul Sunday Morning, concerts and conversation by members of the St. Paul Chamber Orchestra. Check local National Public Radio stations.

THE ASSOCIATION OF RECORDED SOUND Collections will meet this year in Chapel Hill, N. C., under the auspices of the University of North Carolina's Department of Music and WUNC-FM, the local public radio station. ARSC is a nonprofit organization of private collectors, institutions, and librarians interested in all aspects of recorded sound. Speakers at this year's convention include Bob Pinson of the Country Music Foundation, Dan Morgenstern of the Institute of Jazz Studies, and Martin Williams of the Smithsonian. Attendance is open to nonmembers as well as members of ASMC. Write Kathryn Logan, Music Library, 106 Hill Hall, University of North Carolina, Chapel Hill, N. C. 27514, or call (919) 966-1113.

A $4,000 SCHOLARSHIP to study music at the undergraduate level is offered to qualified men by Saint Vincent College. Write Joseph Bronder, Music Department, Saint Vincent College, Latrobe, Pa. 15650.

MUSIC MAKES STRANGE BEDFELLOWS. Nicky "Topper" Headon, drummer for the Clash, has just played his strangest gig ever: as percussionist with the New Philharmonia Orchestra (at Albert Hall in London) in a performance of Tchaikovsky's proto-punk classic, the 1812 Overture. The Philharmonia's kettle drums, which had been stolen, were offered for sale to Headon. He suspected foul play, made inquiries, and reunited orchestra and hardware. The New Philharmonia invited him to perform with them as a thank-you.

GROWTH OF THE HOME VIDEO INDUSTRY continues to be strong according to 1980 U. S. sales figures released by the Electronic Industries Association. TV receiver sales of 16,447,792 were the highest since 1972, and the sales of 804,663 home videotape recorders were 69.3 per cent above the number of units sold in 1979. Akira Harada, a spokesman for Matsushita, estimates that world-wide VCR sales will exceed six million units in 1981, of which 27 per cent will be sold in the U. S.
Speaking of Music...

By William Anderson

THE EISENHOWER WALTZES

Among music's greatest charms is the power it has over memory, a mere snatch of melody being sufficient to winkle an isolated incident out of the penetralium of the past for instant replay on the video monitor of the mind. Brahms' Liebestler Waltzes (Opp. 52 and 65) do that for me every time I hear them, and a newly released performance by the Los Angeles Vocal Arts Ensemble (Nonesuch D-79008) has reminded me once again of School Days, specifically a spring night in the late Forties when the men of the Columbia College Glee Club, together with the ladies of the Barnard College glee club, presented the Op. 52 Waltzes in concert.

Columbia's president at the time was Dwight David Eisenhower, fresh from his European crusade and placed on "hold" while strategists in smoke-filled rooms planned his coming bid for the White House. Campaign tactics were to have Ike maintain a high profile, meaning that he spent a lot of time off-campus addressing "alumni groups" on subjects having little discoverable bearing on the state of the football team (Columbia did dump Navy somewhere along in there nonetheless). Luck would have it, he was in residence the night of the Glee Club concert, and we sent him a special invitation. He didn't show. Which is why, after the concert, we choristers trudged determinedly across campus to the President's House, deployed ourselves in the street before the President's House, and fired off a set of Liebestler Waltzes, from the top, a cappella, all over again. Ike descended in robe and slippers to thank us from the stoop, shooing us off to bed while Mamie waved from above.

It is unlikely that President Eisenhower was ever again awakened by the Liebestler Waltzes, or that he would have recognized them if he were. For thirty years, however, they have been sufficiently in the forefront of my own musical consciousness that I am always surprised to find knowledgeable music listeners who have not yet discovered them. For all too many concertgoers, Johannes Brahms is four symphonies and a Requiem, a simplicism that leaves the greater part of his musical output unexplored. After all, he began his years in Vienna as conductor of the Wiener Singschule, and a case might be made that, as a composer, he is almost as important to German song as Franz Schubert. I cannot think of a better place to start proving it than with these delightful waltzes. The new Nonesuch release is particularly welcome since I find it superior in both sonic quality (it's digital) and in performance sweep to any other version currently in the catalog.

There are thirty-three of these waltzes, and familiarity has taught me to love them all indiscriminately. Pressed, I would recommend Ein Kleiner, Hübscher Vogel and Es Bebet das Geschütze from Op. 52, Nein, Geliebter, Setze Dich and especially Zum Schluss from Op. 65. The last is the only song with a lyric by Goethe (the others are by a minor poet, Georg Friedrich Daumer) and not, strictly speaking, a waltz. In other words, the dance is over, and we have Brahms' own little An die Musik: "Muses ... You alone give us solace/And soothe all torment." Just so.

[Contributing Editors]

Paul Kresh
Stoddard Lincoln
Rick MITZ
Lincoln PERRY
Peter Reilly
Ebet Roberts
Charles Rodriguez
Eric SALZMAN
Craig Stark
Joel VANCE

[Assistant to the Publishing Director]

Pearly Harrington
"I don't care if you are going all the way to Spokane, you don't have a Jensen 15 band variable parameter equalizer."

Jensen innovations in car audio have not been with gimmicks or gadgets, but with meaningful advances in sound performance. And by using Jensen computer designed components together in a system, you can drive their high performance even higher.

The Jensen T-415 AM/FM stereo cassette tuner

The heart of your car audio system is a tuner like the T-415. Its tape section has true audiophile features: Auto Reverse to instantly play the other side of a cassette or, after rewinding, automatically play the same side again. Auto Load Mechanism that gently lowers and locks your tape into play position. Syntox® Ceramic Tape Heads that extend tape head life while minimizing oxide build up. And Dolby® Noise Reduction. The T-415 also has playback capability for metal tape.

The tuner section of the T-415 has refinements such as Auto High Blend Circuitry. It's a special IC that automatically adjusts the high frequency separation when FM stereo reception conditions are poor. And it has the convenience of pre-set tuning.

The Jensen A-124 power amplifier

An ideal power amplifier for the T-415 tuner is the 100 watt Jensen A-124. Its high grade and heavy duty components fully protect it against input overload, FM interference, reversed polarity and thermal overload. The A-124 features switchable low impedance inputs and switchable bi-amp. Its frequency response is 20 to 20,000Hz, ±1.5dB and its signal/noise ratio is 80dB.

Then, because you know sound, add a Jensen EQ-400 Equalizer with 15 selectable turnover frequencies to fine tune music to your taste and your car’s environment. And, of course, complete your system with Jensen Triax® Three-Way Speakers, the most widely imitated car stereo speakers in the world. Surround yourself with a Jensen car audio system. You’ll hear the difference meaningful innovation makes.

When it’s the sound that moves you.


CIRCLE NO. 21 ON READER SERVICE CARD
LETTERS TO THE EDITOR

Digital Audio

☆ Hooray for the Sony/Philips partnership and their digital-audio Compact Disc player (“Audio/Video News,” February). But why do we have to wait until late 1982 for it? I’d buy a digital player made for PolyGram software today. After twenty-five years as an audiophile, I’m fed up with noisy surfaces, inner-groove distortion, stylus, arms, rumble, flutter, wow, record care, brushes, lotions, noise-removal devices, expanders, dyna-warps, etc. ad nauseam! Let’s go, Sony/Philips; the market for the digital audio disc is here!

WILLIAM R. GARTON II
Fairport, N.Y.

Aaron Copland

☆ In the February issue I particularly enjoyed Eric Salzman’s article on the composer Aaron Copland, who won Stereo Review’s Certificate of Merit for outstanding contributions to the quality of American musical life, but the article does not say anything about how Mr. Copland was chosen for the award. Who made the choice? Looking at the photographs of him, I can imagine seeing his craggly face on a musical Mt. Rushmore. Who have been the other winners of this award whose faces might also appear along with Mr. Copland’s on such a monument?

JOHN BAKER
Chapel Hill, N.C.

Members of the magazine’s editorial staff meet every year to choose the recipient of the Certificate of Merit. It was first awarded in 1975 to the cabaret singer Mabel Mercer. The editors’ subsequent choices have been violinist Jascha Heifetz (1976), conductor Arthur Fiedler (1977), composer Richard Rodgers (1978), opera singer Beverly Sills (1979), and jazz pianist Earl “Fatha” Hines (1980).

Forgotten Weill

☆ In his February review of the new recording of Kurt Weill’s Silverlake, Peter Reilly asks, “Anybody else remember Firebrand of Florence?” I don’t, but in Little Me Patrick Dennis writes: “Although World War II had brought its share of illness, death, unhappiness and inconvenience, it proved a tremendous ‘shot in the arm for the living theatre.’” Were it not for the very existence of total war would such exquisite musical attractions as Rosalinda, Up in Central Park, Follow the Girls, Song of Norway, Laughing Room Only, Firebrand of Florence, and Hats Off to Ice have been produced at all?” (page 213). This was, of course, meant facetiously. Firebrand is not in August company here!

How did the reviewers treat Firebrand of Florence at the time? How long was its run? Is it worthy of revival on Broadway? Is it likely ever to be recorded? Has it had any productions of late? Finally, what the hell is a firebrand?

DONALD E. CLARK
Mountain View, Calif.

Peter Reilly replies: The Firebrand of Florence opened and closed, in 1945. It was an expensive failure despite Weill’s music, lyrics by Ira Gershwin, and a book by Edwin Justin Mayer. All that remains of it is Lotte Lenya’s recording of Sing Me Not a Ballad on an old Columbia album, “September Song” (KL 5229). A “firebrand” is someone who stirs up trouble or incites revolution. For example, “Renaissance Boys” in January! It is time for the reviews of Weill to be recorded. Has it had any productions of late? Finally, what the hell is a firebrand?

DONALD E. CLARK
Mountain View, Calif.

Renaissance Boys Again

☆ Thank you, William Anderson, for “Renaissance Boys” in January! It is time that someone spoke up against the utter asinity of what passes for popular music today. There was a time, in the days of the big bands, when popular music was not only entertainment but also, as it were, food for thought. Not any more! Noise and a stress on sexuality seem to be the gist today. I am glad that I also like classical music and have a wealth of 78s of the big bands.

J. A. MALSI
Chadron, Neb.

☆ Far be it from me to talk Editor William Anderson out of having a little fun with his January editorial. Believe me, all the people I talk to these days are out looking for some signs of the Rebirth of the Great American Musical. Where do these groundswell movements get started? Who’s behind them all? The Great Satan Gees, don’t ask me. Why, I can’t even pronounce “Elvis Era” without having to go look up what it all means in some back issue of Rolling Stone. How dumb can you get, right? Oh, by the way, could you explain exactly how the Japanese are going to shrink a whole audience down to family size? What else haven’t you been telling us about the new laser-read videodiscs?

RICH LEE
St. Petersburg, Fla.

(Continued on page 10)
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 an analog 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. RMV, 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 Modes. Two Tape deck connection with cubbing. 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.
Pro Simels
Eliot Levin
Miami, Fla.

Format Change
- After reading the January issue I must write and tell you how pleased I was with one change in the editorial format of Stereo Review, namely, the new "Classical Music Briefs" section. As a classical-music enthusiast, I was delighted to read the news.

Dubbing Ethics
- Janies Goodfriend makes a valid point in his December "Going on Record" about the connection between home taping of records and the subsequent downfall of some record companies. Taping as such is both illegal and unethical, but maybe the record companies inadvertently share the blame for its rise. Consider the pop-music fans who will feel the same about "Popular Music Briefs". My congratulations on an excellent change.
Vern F. Newbold
Salt Lake City, Utah

Pro-EQ Third-Octave Improves Sound Systems
Dramatic improvement in sound quality is immediately achieved with this new 1/3-2/3-octave High-Performance Equalizer. Adding an EQ enhances the sound of your system by enabling precise tonal adjustment to suit your preferences.

Your fine sound system can sound even better when you add-on a high-performance engineered Equalizer, Analyzer, Preamplifier or Amplifier from Soundcraftsmen. Separate add-on components, made in the U.S., and designed specifically to improve and enhance your already fine sound system.

Soundcraftsmen
"Guaranteed to improve any fine component and enhance sound system"

7 New Class “H” Amps, 125w to 750w, from $549.
Vari-Portional Analog Logic power supply, now with patent-pending Auto-Buffer automatic lo-impedance (2-ohm) circuitry... clipping lines... non-limited output... T.I.M. <0.03%... Rated Power 260kHz @ 8 ohms <0.1%THD, S/N >105dB.

The Equalizer you buy should have all 10 of these features:
- Real-Time Frequency Analyzer Test-Record
- Computone-Chart Memory System
- Two Zero-Gain controls
- EQ Tape Record
- Tape Monitor
- EQ defeat • ±16±12dB octave gain
- S/N 105dB • THD 0.01%
- Cabinet included

$249 (includes T.T.

FREE! 16-page Full-Color Brochure
includes TEST REPORTS, complete specifications, Class "H" amplifier REPORT, EQ COMPARISON CHART, and the "WHYS & HOWS" of equalization—easy-to-understand explanation of the relationship of acoustics to your environment. Also contains many unique IDEAS on "How the Soundcraftsmen Equalizer can measurably enhance your listening pleasures. How typical room problems can be eliminated by Equalization."

A 10-POINT "DO-IT-YOURSELF" EQ evaluation checklist so you can FIND OUT FOR YOURSELF WHAT EQ CAN DO FOR YOU!

SEND $5.00 FOR EQUALIZER-EVALUATION KIT: 1-12" LP TEST RECORD:
1 SET OF COMPUTONE CHARTS, 1 COMPARISON CONNECTOR CABLE, AND 1 INSTRUCTION FOLDER.

CIRCLE NO. 39 ON READER SERVICE CARD

Russ Matthews
Soper, Calif.

- As strong an argument as James Goodfriend makes against home piracy (December "Going on Record"), I'm afraid that his plea will not be heeded by most people. It's a matter of economics, and to most Americans this is more important than artistic survival. Typically, two $6 records can easily fit on a single high-quality $3 cassette, making it about four times more costly to buy records than blank tapes. The loss in sound quality in the process is not possible (0.1dB accuracy) with Spectrum-Analyzer Record, Computone-Charts. $499.

Elie Levin
Miami, Fla.

- I am only nineteen and a classical-music fanatic. The prospect Mr. Goodfriend presents dismayes me, but look at the facts. A study by the Roper Organization found that 69 per cent of blank tape is bought for copying music; CBS Records says that the U.S. record industry loses between $700 million and $800 million in annual sales because of home taping. Between 1973 and 1979 blank-tape sales in America more than doubled, whereas record sales actually declined a bit! In spite of the efforts of Mr. Goodfriend and others, I am not optimistic about any changes in this trend.

Michael J. Wroble
St. Louis, Mo.

Music Editor James Goodfriend replies: Why not tape it indeed? That is precisely the point. It is easy to be honest when a policeman is around, more difficult for some people when one is not. There is literally no chance for a taper to be caught and punished for his act. Therefore, appeals to ethics and honesty can have only a limited effect. So I appeal also to the taper's long-term self-interest in that the more he tapes now, the less there will be to buy or tape in the future. The record's price tag has no bearing on the matter, only the price of blank tape does. Mr. Wroble's letter offers the statistics of what is happening. I will continue to argue against it, but I am not optimistic about the matter either.
Introducing a new class of tweeter performance.
The upper frequencies of music reproduced with accuracy, power, depth and subtlety that you've never heard from a bookshelf speaker before. To advance the state-of-the-art of tweeter behavior, JBL engineers utilized laser holography to study cone diaphragm movement—while the cones were energized as in actual use. They were able to see motion that can't be detected with the naked eye (even through a microscope).

The resulting tweeter component for the L112 is a lightweight phenolic vapor-deposition aluminum-coated dome radiator with a copper voice coil that offers an optimum combination of strength, mass and rigidity. It's at the leading edge of technology. It performs with exceptionally smooth response, wide dispersion, and it handles high power levels. You'll hear harmonics you've never heard before. Combined with the newly developed 044 tweeter is a 5" mid-range driver with a large 7/8" voice coil and stiffened cone that provides transients incredibly close to a live performance.

The L112's Symmetrical Field Geometry 12" woofer delivers low frequencies with extremely low distortion. Lower than any bookshelf speaker we've ever tested. You'll hear crisp, clean, powerful bass all the way down to the lowest notes.

And a new High Resolution Dividing Network controls the L112's drivers throughout their full operating range...for sound so coherent, it will seem that only one extremely wide-range transducer is responsible—not three!

Each L112 is crafted at our Northridge, California facility, inspected and tested in over 50 test stations and beautifully hand-finished with oiled and rubbed American walnut veneer.

Get to know the new upper class. At your JBL dealer. James B. Lansing Sound, Inc., 8500 Balboa Blvd, Northridge, CA 91329.
The continuing story of TDK sound achievement.  

Part Ten.

Inside the die-cast aluminum cassette housing, TDK brings together the full force of its revolutionary tape technology. Part Ten contains the ultimate mechanical perfection of the Reference Standard Mechanism. Around its precision seamless rollers and past its dual spring pressure pad flows TDK's unique metal-alloy tape. It's composed of ultra-fine metal particles called FINAVINX, whose recording capacity is four times as great as TDK's Super Avilyn. A special polymer coating makes this metal virtually impervious to oxidation.

To sharply define the difference between this cassette and any other, TDK encased it within two clear sheets of plastic. These sheets are thirty percent harder than the plastic used in ordinary cassettes. Die-cut, transparent liner sheets maintain a physical clarity that's matched by the crystal clarity of sound. Six precision screws seal the shells and resist vibration. This state-of-the-art cassette is called MA-R. The effect is futuristic. But TDK does nothing merely for effect.

For example, Part Ten has the structural strength to withstand warpage, temperature, and humidity changes. In situations where stability and stress are critical factors, as in portables or car stereos, a bump in the road can throw a curve in the music. MA-R is warranted to perform un-interruptedly.

Because TDK has an unswerving commitment to music, it is the driving force behind every technological breakthrough. Part Ten plays as important a role in the MA-R's performance as its unique metal tape. The added stability of structure and mechanism allows a more precise reproduction of music. TDK firmly believes a small cassette is governed by the same laws as a large orchestra. Music is the sum of its parts.
Dual Turntable Has Double Suspension, 78-rpm Speed

- The Dual 608 semi-automatic, single-play, direct-drive turntable has an ultra-low-mass (ULM) tone arm, two suspension-isolation systems, and a tunable tone-arm anti-resonance filter. The "Hydrodynamic" suspension system floats the motor, platter, and tone arm on four fluid-filled shock absorbers, and four additional acoustic isolators are tunable to attenuate acoustic feedback or the effects of external shock. The anti-resonance filter can match the tone arm to any cartridge for minimum low-frequency resonance. An internal frequency generator precisely regulates the high-torque d.c.-servo direct-drive platter motor. The turntable will operate at 78, 33⅓, and 45 rpm. All controls (speed, pitch adjustment, and tone-arm lift) are located on the front panel. The dust-cover hinge is designed to allow the turntable to be placed close to a wall. The unit is available with an Ortofon ULM cartridge factory-installed. Price: $329.95; with ULM cartridge, $439.95.

Akai Cassette Deck With Microcomputer

- Akai's GX-F95 has a built-in microcomputer that can automatically determine bias, equalization, and tape sensitivity for any cassette-tape formulation. Source/tape monitoring is provided by the Twin-Field Super GX Combo head. Other features of the deck include illuminated full-logic sole-noid touch controls, two twenty-four-segment, two-color fluorescent displays with peak or VL characteristics, memory rewind with automatic replay, two electronically controlled d.c. motors, and an electronic tape/time counter. Record muting, multiplex filters, and Dolby-B noise reduction are switchable. The hinged cover conceals most function controls. The built-in timer functions in both record and play modes, and there is an optional remote-control unit. Stated frequency response is 25 to 21,000 Hz; signal-to-noise ratio is greater than 62 dB (weighted, without Dolby-B, with metal tape). Wow-and-flutter is less than 0.025 per cent (weighted rms) and distortion less than 0.6 per cent (metal tape, 1,000 Hz, 0-VU recording level). Price: $1,195.

Three-way, Four-driver Jensen System

- The Jensen System 500 is an acoustic-suspension speaker system with a 1-inch soft-dome tweeter working in conjunction with a 2-inch rear-firing driver designed to reflect high-frequency sound energy off a back wall to supplement the dispersion of the front-firing driver. Both the high-frequency drivers and the 5-inch molded-cone midrange are acoustically isolated from the 12-inch woofer, which has a variable-density cone and a high-power, epoxid-core voice-coil assembly. Crossover frequencies are 760 and 4,200 Hz. Vertical driver alignment helps eliminate cancellation effects in the horizontal plane due to interference between adjacent drivers at the crossovers. Treble and midrange controls with 10-dB ranges are provided. Usable frequency response is specified as 25 to 25,000 Hz. System impedance is nominally 8 ohms (5 ohms minimum). The system will produce a 90-dB sound-pressure level, measured at 1 meter, with a 1-watt input. Minimum rec-ommended amplifier power is 10 watts. Dimensions are 29 x 15 x 11⅜ inches. Weight is 45 pounds. Price: $290.

Audio Control's Budget-price Equalizer / Analyzer

- Audio Control's D-11 stereo octave-band graphic equalizer permits equalization of room or speaker characteristics through its built-in warble-tone generator.
**New Products**

latest audio equipment and accessories

**JBL's Improved Floor-standing Speaker System**

- The JBL 115OA speaker is said to incorporate advances in high-frequency-driver and crossover technology. The 1-inch high-frequency dome radiator, formed of lightweight phenolic material coated with aluminum, is claimed to have greater power-handling capacity, and the high-resolution dividing network provides the system with improved transient response. A 5-inch mid-range driver handles frequencies between 1,100 and 3,700 Hz. The 12-inch low-frequency driver in combination with a passive radiator handles frequencies below 1,100 Hz. Nominal system impedance is 8 ohms. System sensitivity is 89-dB sound-pressure level at 1 meter with a 1-watt input. Dimensions are 41/2 x 17 x 13 inches; weight is 80 pounds. The enclosure’s finish is American black walnut and the grille is available in brown, rust, or tan. Price: $695.

  *Circle 125 on reader service card*

**Electro-Harmonix Stereo Enhancer and Quad Synthesizer**

- Electro-Harmonix's Ambitron employs matrixing techniques, filtering, and analog delay to re-create the acoustic spaciousness of a concert hall. Claimed benefits include compensation for the short reverberation times of the home listening environment and of program material, improved stereo separation, and synthesis of a realistic stereo effect from mono signals. The device generates rear-channel reverberation signals with a high proportion of out-of-phase information to duplicate natural echo and acoustic cancellations. Controls include adjustments for input and output level, reverberation, ambiance, and delay. Price: $349.95. Electro-Harmonix, 27 West 23rd Street, New York, N.Y. 10010.

  *Circle 126 on reader service card*

**Low-price Cassette Deck From Radio Shack**

- The Realistic SCT-24 stereo cassette deck has two tape-selector switches that provide correct bias and equalization for optimum results with ferric, chrome, or metal tapes. The deck has switchable Dolby-B circuitry and switchable multiplex filters. Five-step peak-reading LED meters show input levels from -13 to +3 VU. An automatic end-of-tape stop mechanism protects the motor, drive components, and tape from damage. A level adjustment matches the deck’s output to any system. A headphone jack and two microphone inputs are included. Price: $149.95.

  *Circle 127 on reader service card*

(Continued on page 16)
Free details on a different kind of record club

offering... BACH, BEETHOVEN, BRAHMS, FLEETWOOD MAC, LINDA RONSTADT, CHICAGO, KANSAS BARRY MANILOW, BOSTON, ELTON JOHN, JAMES TAYLOR, JEAN-LUC PONTY, CROSBY, STILLS & NASH, STEVE MILLER BAND, PETER FRAMPTON, BARBRA STREISAND, EAGLES, CHUCK MANGIONE and every other composer and artist in print.

You can now own every record or tape that you may ever want at tremendous savings and with no continuing purchase obligations. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

TREMENDOUS SAVINGS on every record and tape in print—no "agree-to-purchase" obligations of any kind.

DISCOUNTS OF 43% TO 73% off mfg. suggested list ...special catalog features hundreds of titles and artists.

ALL LABELS AVAILABLE including most imports through special custom ordering service. If we don't stock it we'll get it for you.

SCHWANN CATALOG lists thousands of titles; classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country.

DISCOUNT DIVIDEND CERTIFICATES Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

NEWSLETTERS. Happenings in the world of music; concerts, critiques, new releases ... special super-sale discounts of up to 73%.

DISCOUNT ACCESSORY GUIDE Diamond needles, cloths, tape cleaners, etc. Discount Music Club is your complete one stop music and accessory buying service.

QUICK SERVICE. Same day shipping on many orders...rarely later than the next several days. Partial shipments always made in the event of unforeseen delay...all at no extra cost to you.

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Discount Music Club is an no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want...when you want...or not at all if you choose.

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CIRCLE NO. 10 ON READER SERVICE CARD

APRIL 1981
New Car Stereo Products
latest automotive audio equipment and accessories

Under-dash Tape-Player / Equalizer
From Alpine

The under-dash Model 5400 from Alpine Electronics of America is a combined power amp and auto-reverse cassette player with Dolby noise reduction and five-band graphic equalizer. Features include detented volume and balance controls, fast-forward and rewind, a loudness switch, and tape-direction and power-level indicators. The range of the equalizer is ±12 dB at center frequencies of 60, 250, 1,000, 3,500, and 10,000 Hz. Tape wow-and-flutter is rated at 0.1 per cent wrms, signal-to-noise ratio (with Dolby) is 65 dB, and frequency response (with metal tape) is 40 to 16,000 Hz.

The rated power output at 4 ohms, both channels driven, is 16 watts per channel with 8 per cent total harmonic distortion or 8 watts per channel with 0.08 per cent THD from 40 to 20,000 Hz. Use of the built-in DIN jack with other DIN-equipped units will automatically adjust output to the proper level. The Model 5400 also automatically disengages the cassette from its playing position when the car's ignition is switched off. Weighing about 3 pounds, the 5400 measures 6¼ x 5⅜ x 2 inches. Price: $299.95.

Circle 128 on reader service card

Sparkomatic's Compact Equalizer / Booster

Sparkomatic's GE 50 five-band graphic equalizer incorporates a booster to increase the power of radios and tape players. The center-detented slide controls operate at 60, 250, 1,000, 3,500, and 10,000 Hz with a range of ±12 dB. The GE 50 features LED power-level indicators and a fader control for front-to-rear speaker balance. Power output is 20 watts rms per channel from 20 to 20,000 Hz with 1 per cent total harmonic distortion. Input impedance is 52 ohms (for connection to speaker outputs) and rated output load is 4 to 8 ohms. When the GE 50's switch is in the off position, it is completely bypassed and the speakers are fed directly from the main source. Small enough to fit subcompact cars, the GE 50 measures only 4¾ x 1½ x 4¾ inches. Price: $69.95.

Circle 130 on reader service card

Jensen's Shallow Full-range Speaker For Small Cars

As part of its comprehensive new line of autosound equipment, Jensen Sound Laboratories has introduced a small, full-range speaker, the 4" ThinMount, designed for use in the limited mounting space available in X-body and compact imported cars. The very shallow speaker will fit in the dashboard, doors, or rear compartments of such cars. Price: $44.95.

Circle 132 on reader service card

NOTE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturers, who will respond directly to reader requests for further information.

Domestic inflation and fluctuations in the value of the dollar overseas affect the price of merchandise imported into this country. Please be aware that prices quoted in this issue are therefore subject to change.
Designed for Accuracy

The unique design of the head assembly for the Reference Series Model 105.2 and Model 105.4 is just one example of KEF's world-renowned research and engineering excellence.

Each unit is housed in its own enclosure of selected dimensions to support optimum radiation over the operating frequency range, and is scientifically shaped to avoid unwanted secondary wave formation.

The outstanding acclaim for the Model 105.2 created a demand for a system of similar performance and accuracy from a smaller enclosure, and at a more affordable price. Hence the Model 105.4.

Like all Reference Series Speaker Systems, the Model 105.4 is a product of KEF's "Total System" design approach, where the drive units, filter network and enclosure are developed together to achieve a targeted response.

And like all Reference Series products, it also features the unique S-STOP, a self-powered circuit designed by KEF for total protection against accidental overload and fault conditions.

Of course, the ultimate criteria is in listening. Visit your KEF dealer and listen to the new Reference Series Model 105.4. For his name, write:
KEF Electronics, Ltd.
% Intratec, P.O. Box 17414
Dulles International Airport
Washington, D.C. 20041

KEF The Speaker Engineers
CIRCLE NO. 24 ON READER SERVICE CARD
**Audio Q. and A.**

By Larry Klein

Technical Director Klein is impressed by a pair of Sony broadcast-quality videotape recorders.

**Why Stylus Cleaning?**

Q. If I keep my records in top condition, why is it necessary to use a stylus cleaner?

BARBARA PEDERSEN
Lake Worth, Fla.

A. If you never play them, it's not. However, a rotating turntable platter often sets up convection currents in the surrounding air. This deposits on the record its pad or brush, then I suspect there is little reason to use a stylus cleaner. New records, however, may have some fine debris in the grooves left over from the manufacturing process, and this may accumulate on the stylus during the first playings.

**One-brand Systems**

Q. Lately there seems to be a profusion of one-brand audio systems on the market, usually housed in vertical rack-like cabinets with record players on top. Where did all these systems suddenly come from and are they worthwhile or merely attractively packaged lo-fi components?

ARNOLD PACKER
Boston, Mass.

A. An appreciation of the socio-economics of the international hi-fi marketplace is necessary to understand what's going on. First of all, 65 per cent of U.S. homes have a ready-to-go electronic jigsaw puzzle. To be sure, the choices available in this "whole system" form won't be nearly as flexible as hi-fi component displays and sales. Also, the Japanese biannual bonus system is well suited to large discretionary purchases such as hi-fi.

On the other hand, most U.S. consumers continue to regard hi-fi equipment as somewhat mysterious and esoteric. They see it as difficult to hook up and use, and, most of all, intimidating to buy—or at least so say the pundits trying to explain the comparative lack of sales in the U.S. Add to that the fact that most of us get our cash in small, continuous dollops rather than in large biannual bonanzas.

Now let's consider these socio-economic realities from the standpoint of the Japanese, whose giant audio-equipment factories must continue to produce (and sell) hi-fi. First, the Japanese quite naturally continue to court the already committed audiophile with new, better, more feature-packed and attractively designed hardware. (Unlike "planned obsolescence" in the generally accepted meaning of the term, the new products do not make the old models obsolete; they are aimed at the avid audiophile who is dedicated to owning the very latest audio technology, features, and appearance—plus perhaps marginally improved sound.) Secondly, there are other Japanese products and marketing efforts aimed at that frustrating market, the 88 per cent of U.S. homes without any hi-fi equipment. This year's marketing strategy involves, as reader Packer has noticed, all-in-one, pseudo-rack systems. These have several apparent virtues: (1) they can be sold in department stores rather than audio or specialty shops, (2) they are all one brand, and (3) they are pre-matched and assembled. Thus the neophyte customer is relieved of (1) dealing with a potentially off-putting "audiophile" salesperson, (2) choosing from hundreds of components on the basis of little-understood factors, and (3) putting together an electronic jigsaw puzzle.

This sales strategy makes sense for a manufacturer provided there is a large enough group of consumers who are not willing to study their buying options but who are ready to spend $1,000 or more for a system setup. To be sure, the choices available in this "whole system" form won't be nearly as flexible as hi-fi component displays and sales. Also, the Japanese biannual bonus system is well suited to large discretionary purchases such as hi-fi.

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How to get 50% more sound without turning up the volume.

There's a whole range of sound in a live performance that you never hear from your stereo system. And it's not a question of turning up the volume.

The problem is in the records you play. When recording engineers master a record, they electronically eliminate up to half the music. They literally compress the sound to make it "fit" on the vinyl record.

Fortunately, there's one solution to the problem: dbx Dynamic Range Expanders.

A dbx Dynamic Range Expander in your system restores most of the lost music. And it reduces annoying record surface noise by as much as 20 dB. So instead of a compressed 50 or 60 dB of dynamic range, you get a full 75 to 90 dB. The loud passages begin to thunder. The softs are truly subtle. All your music comes to life.

And you can use a dbx Dynamic Range Expander not only with your records, but also with tapes and FM broadcasts.

Visit your authorized dbx retailer for a demonstration of the 1BX, 2BX and 3BX Dynamic Range Expanders. Then select the model that's best for your system.

Because there's a lot more to music than has been reaching your ears.


Making good sound better

CIRCLE NO. 8 ON READER SERVICE CARD
Our ADC Integra phono-cartridge's tracking angle adjustment

VS

their no adjustment at all.

If you're looking for conventional sound, take a look at our competitors. You'll find exactly what you want. But if you're looking for something more, take a look at the revolutionary ADC Integra. It's the first carbon fibre integrated headshell/cartridge with vertical tracking angle adjustment. It's simple... great ideas usually are. All you do is make one easy set-up adjustment. Once it's made, you're guaranteed of an optimum match for the vertical tracking angle record companies use to cut their masters. There are no compromises, no matter what turntable you use. Integra's vertical tracking angle adjustment is calibrated in degree increments from -89 to +89. Enough to compensate for all tonearm heights. That kind of tracking angle accuracy is a big advantage. But the biggest advantage of all has to be the fact that it's available in three ADC 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.

appeal to those who take pleasure in the shopping process, who enjoy owning esoteric equipment, who plan to add on and upgrade continuously, or whose listening situations or locations require special capabilities. But preassembled rack systems should appeal to those who want to own hi-fi equipment simply as a means to an end—music listening—rather than (to whatever degree) as an end in itself, and who also want the look and feel of quality (and the systems are at least good).

However, there are some potential pitfalls for the system buyer to be aware of. Although there are not likely to be significant audible differences among the different brands of electronic components, the speakers that come with the systems are going to make large differences, for better or worse, in the ultimate sound quality delivered. No matter how good the electronic elements in the system, the buyer has to make sure that the speakers that come with it are capable of revealing its virtues. Unfortunately, I can't provide any quick advice as to how to do that. Making sure that the speakers are of the same brand as the rest of the system is no guarantee of sonic quality, nor is the substitution of other speakers of different known or unknown brands. All that I can offer is the speaker-buying advice that has been appearing for years in our August issue. Our most recent condensed words of wisdom on the subject can be yours for a stamped, self-addressed envelope plus 30¢ in stamps or coins sent to Stereo Review, Dept. SA, One Park Avenue, New York, N.Y. 10016.

Pop Goes the...

Q I recently played a prerecorded cassette (which had an incredible amount of bass) on a very good deck matched with a 100-watt receiver and speakers rated at 125 watts. The receiver's bass and treble controls were set at +3. On bass peaks I heard very loud "pops," which disappeared when I lowered the bass control. What caused this and is it likely that anything was damaged?

THOMAS GALLAGHER
Buffalo, N.Y.

A The probable cause of the popping sound was overload in either the receiver's amplifier or (most probably) the speaker(s). If the receiver was the source, you probably heard the protective circuits acting up in protest against some peculiar characteristic of your bass-boosted speaker that was reflected back to the amplifier's output stage.

If you had described your problem as "snapping" rather than "popping," I would have suggested that what you were hearing was the rear of the speaker's voice coil hitting the back plate of its magnet assembly as a result of excessive low-bass excursion. You can tell the difference between the two sounds because the pop is an electrically generated sound, while the snap is a purely mechanical one with a crisper high-end and superior transient response. In either case, if the system sounds okay, nothing was damaged, but I would avoid a repeat performance—even as a test to see if you can distinguish a pop from a snap.
Incredible Sound/Affordable Price  “Our advice is not to buy speakers until you’ve heard the Polks.” Musician Magazine

Polk Tri-Laminate Polymer Driver For Life-Like Clarity and Detail

sound that adapts itself ideally to all kinds of music...the kind of open, uncolored, perfectly imaged sound we thought began at twice the price...Sound quite magnificent with a good mid-powered popular brand receiver...They make the popular speakers in their price range seem dim, colored, boxy and just plain insufficient.” Musician Magazine

“Exceptionally pleasing sonic balance...Polk’s key design goals have definitely been realized...transient response is absolutely first rate...hemispherical dispersion is superb...Open, boxless, three dimensional quality...frequency response covers the entire audible range with commendable flatness...sensitivity is adequate for use with a 10 watt amplifier, yet it could absorb the full output of a 200 watt amplifier without damage...certainly a very fine speaker.” Stereo Review

Better sound in your home Polk Audio loudspeakers will give you more listening pleasure and greater long term satisfaction from your music, your records and your hi-fi system. They offer the best sound for the money available on the market and are affordably priced from less than $125 each to less than $400 each.

Simply use the free reader service card to receive detailed information, copies of the expert’s rave reviews and the location nearest you for auditioning the incredible, affordable Polks.

Polk Audio, Inc. 1205 S. Carey St., Balto., Md. 21230

Incredible Sound/Affordable Price

Monitor Series Loudspeakers
TDK brings two new standards to open reel.

TDK now announces two breakthroughs in open reel. TDK GX Studio Mastering tape: an ultra refined particle lets it handle the critical demands of live music mastering. And TDK LX Professional Studio tape, with a super refined particle that gives it a performance ideal for professional and audiophile use.

A unique polishing and binding process makes dropouts practically a thing of the past. A special graphite and carbon backcoating on all GX and some LX reduces friction for smooth winding while preventing static and diminishing wow and flutter. At last your music is heard the way you intended to hear it.

Listen to TDK GX and LX. They could open up a whole new world and flutter. At last your music is heard the way you intended to hear it.

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**Tape Talk**

**By Craig Stark**

**Overload from Warps**

**Q.** When I tape some of my records on a top-quality cassette deck, the copies contain a "wavering" or "warbling" quality that is not heard when playing the disc itself. The problem seems to occur only when recording at high (0 to +3 dB) peak levels, and the wavering seems to correspond to the rise and fall of the tone arm and cartridge as they track warps in the record. Can you explain what's happening and what I can do about it?

**A.** What is happening is that the record warps are interpreted by your phono cartridge as a high-level infrasonic signal. When such a signal is passed on to your recorder, it overloads the tape, creating intermodulation products (which you hear as the "wavering") with the regular program content. Sometimes recorders respond to warp signals by cutting off or by severe distortion. A deck that "rolled off" the low frequencies very sharply (as many less expensive recorders do) would not have this problem. Your only current recourse are to (1) record the warped discs at a slightly lower record-level setting, (2) use a preamp whose tape outputs have passed through a high-pass filter, or (3) use a damped tone arm and/or cartridge.

**Wow / Flutter Audibility**

**Q.** I'm considering buying a cassette deck that has a wow/flutter spec of 0.06 per cent "WRMS" or weighted rms (0.17 per cent DIN peak-weighted), while some other decks list figures of 0.03 per cent (weighted rms). All other specs being equal, would there be an audible difference between such decks? Also, what is the difference between weighted rms and DIN peak-weighted?

**A.** Let me start my answer with a perhaps impolitic remark: in my personal and professional opinion, so-called "weighted rms" or "WRMS" ("weighted root-mean-square") wow/flutter figures are nearly meaningless when applied to cassette (or open-reel) decks. However, there are severe practical problems in making the much more meaningful DIN (Deutsche Industrie Normen, or German industrial standard) peak-weighted measurements—problems currently being assessed by the Electronic Industries Association's Tape Recorder Standards Committee on which I serve.

Just what is "wow and flutter"? In an ideal recorder the tape would flow past the record and playback heads absolutely smoothly, at a constant rate, and in such a case there would be no wow/flutter to consider. In an actual machine, however, the capstan and the pinch-roller are never absolutely round, and the bearings within which they rotate have a certain amount of play in them; the take-up tension and the holdback tension are not perfectly constant; the layer-to-layer adhesion in the tape varies somewhat, and if the tape pack isn't perfectly flat, additional variations may be induced when the tape "ticks" against a reel flange. The net result is that tape speed across the head varies from instant to instant. If a steady 3,000-Hz tone varies, in practice, between 3,003 and 2,997, the percentage of wow/flutter is 0.1. The rate at which these variations recur may be slow ("wow") or relatively rapid ("flutter"); the degree to which they are audibly objectionable depends upon the combination of percentage and rate plus—still another factor!—the sensitivity of the individual's ears (some people can tolerate more wow/flutter than others). Still further, some kinds of music—solo piano and flute, for example—show up wow/flutter more than others.

With all of these factors to consider, how do you "objectively" measure wow/flutter in a tape machine? Extensive psychoacoustic tests on human subjects have established a weighting curve that applies to the repetition rate of the frequency variations, and this curve is applied to both weighted-rms and DIN peak-weighted measurements. Where the two standards differ, however, is in how the meters used register the percentage of the pitch variations. The DIN measurement tries to follow the instantaneous ("peak") variations at their maximum points; the weighted-rms procedure tries to...
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find an average variation (the square root of the sum of each variation squared). Just as there is a difference between the peak power an amplifier may have to deliver in a given instant and the average power it turns out over a period of time, so there is a difference between peak wow/flutter and average (“rms”) wow/flutter, even when the repetition rate (“weighted”) is the same.

A weighted-rms flutter specification gives the best-looking (lowest) number on a spec sheet, which is why it is favored for advertising purposes. It is also the easiest to read on a meter because the meter has been intentionally “damped” to give a very steady reading that automatically eliminates occasional wildly varying swings of the pointer. The ear, however, tends to respond to the “peak” values—those very wide-swinging variations an “averaging” meter ignores (“averages out”). A “pure” DIN peak-weighted measurement, on the other hand, might give an extremely unflattering numerical measurement for an outstanding tape deck based on a single wide swing of the meter needle that occurred only once in 30 minutes of music—and perhaps it was a fault in the tape rather than the deck. This is why nearly everyone involved in testing recorders professionally “fudges” the absolute DIN peak-weighted measurements slightly, even though we tend to distrust profoundly the automatic “fudging” involved in weighted-rms flutter readings.

In answer to your first question, however, if there's a difference of more than 2:1 between a weighted-rms and a DIN peak-weighted wow/flutter spec, I'd be very wary about buying the deck in question. Given honest and experienced testers, the DIN specification is more likely to be meaningful, and, speaking for myself, I find a DIN spec much over 0.1 per cent wow/flutter likely to be audibly objectionable.

Hot Heads
Q. I clean and demagnetize the heads on my open-reel deck meticulously, but I've noticed that in less than 200 hours of actual use the face of the erase head has changed from a shiny silver to a dull bronze color. The deck seems to work all right, but is this something I should be concerned about?

ROBERT L. DOERR
Dayton, Ohio

A. The only time this ever happened to me was owing to excessive current running through the erase head and overheating it. This can lead to head burnout or—in my case—to a tape's actually being melted when stopped in the record mode but physically up against the head.

The test I would propose is rather simple. Put the machine into "record" with no tape in it (a bit of masking tape will hold back the automatic shutoff arm to "fool" the deck) and leave it on for 10 to 15 minutes. Then touch the erase head (at first, gingerly!) with your finger. If you get burned, you have the problem I experienced and should see a serviceman. If the head face is only moderately warm, don't worry about the color change.
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*For a complete text of the reviews quoted in this ad write to Empire Scientific Corp., Garden City, NY 11530

CIRCLE NO. 14 ON READER SERVICE CARD
Technical Talk

By Julian D. Hirsch

— Amplifier Output-current Ratings —

Given the sophistication of today's test equipment, it is not too difficult to find "new" methods of measurement and find things to measure. However, it is not so easy to find tests that correlate totally with the "sound" of an amplifier.

The problem is that amplifiers tend to sound pretty much alike if they are operated within their ratings and have identical frequency-response characteristics into the speaker load. I am ignoring the real or imagined subtle differences that are the favorite debating points of hard-core audiophiles, since not only are they sometimes unmeasurable, but they are not necessarily audible except to those who find them important. It is my view (and I am certainly not alone in holding it) that a power amplifier whose noise and hum are less than about -65 dB relative to the line, which has inherent harmonic distortion consisting largely of low-order (second and third) harmonics, whose noise and hum are less than about -65 dB relative to 1 watt, which has enough power for a comfortable listening level with about 10 dB in reserve so that it never clips, and, further, which has a frequency response flat within about ±1 dB from 30 to 15,000 Hz should sound pretty much like any other power amplifier meeting (or exceeding) the same criteria.

Obviously what I am describing is far below the performance level of many, if not most, of today's amplifiers. It is also true that an amplifier apparently meeting all of the listed minimum criteria can, under some conditions, sound downright bad, and that a similarly rated amplifier can, under the very same conditions, be perfectly satisfactory. The reason, of course, is that the bad-sounding amplifier is not really meeting the stated criteria, though it may seem to be.

There is a major fallacy in the assumption that an amplifier can deliver enough power to its speakers simply because it can deliver the power to 8-ohm resistive test-bench loads. Unfortunately, speakers are not resistors. For a speaker "looks" to an amplifier like a combination of resistance, inductance, and capacitance. Furthermore, the total impedance (the combined effect of those three elements) varies widely with frequency and may under some conditions be much less than the speaker's rated impedance (it can be higher too, but that usually causes no problems).

Let us, for the moment, ignore the reactive (inductive or capacitive) nature of the speaker impedance and consider only its resistive impedance. The typical amplifier behaves much like a constant-voltage source whose output is affected only slightly by the output load impedance. Thus, a load will draw current from the amplifier, in accordance with Ohm's law, inversely proportional to its impedance.

This operation can be compared with the usual a.c. power-distribution system in the home, where the constant-voltage source (nominally 120 volts) is made available throughout the house. The current drawn from the line depends on the loads that are plugged into it. A single 100-watt light bulb draws less than 1 ampere, but a 1,500-watt radiant heater draws about 12 amperes from the line. This is somewhat analogous to an amplifier driving either an 8-ohm speaker or a pair of speakers whose parallelled impedance may drop to 2 or 3 ohms at some frequency.

Both the audio and the home power-distribution systems are designed to handle loads of varying impedance. What happens if one turns on a toaster plugged into the same circuit already powering an electric heater? Since most home circuits are fused for 15 amperes, the result is a blown fuse or a tripped circuit breaker, either of which will prevent excessive current from passing through the house wiring (which would be a fire hazard). If this happens, the fuse or breaker is replaced or reset and no harm is done.

In the parallel situation with an audio system, the amplifier also has a finite current-delivering capability, a function of its design and power rating. Attempting to draw too much current will drop the output-signal voltage and (more important) cause severe distortion. In most real amplifiers, of course, protective safeguards will be triggered before such problems occur.

The simplest and most common safety precaution is to place fuses in the d.c. power-supply outputs within the amplifier to limit the current that can be drawn from the power supply by the output stage (and ultimately delivered to the load). Fuses are often placed in the speaker-output circuits as well, and this is equivalent to a fuse within an appliance or at the wall socket in the home. Such a fuse will interrupt the excessive load current directly before one...
disconnect the speakers or to shut off the stage. Some protective systems use relays to do this as a safety precaution as it is in power wiring. The most obvious result of trying to pull too much current from an amplifier's output stage is distortion. However, in real-life (rather than test-bench) circumstances, by virtue of the transient and dynamic nature of music, the overcurrent condition is usually present for only a small fraction of the time. It is therefore likely to be audibly disturbing long before the amplifier overheats. Some types of music (mostly rock) with limited dynamic range will at times produce current surges that are likely to be much more disturbing than their short duration allows. The most obvious result of trying to pull too much current from an amplifier's output stage is distortion. However, in real-life circumstances, by virtue of the transient and dynamic nature of music, the overcurrent condition is usually present for only a small fraction of the time. It is therefore likely to be audibly disturbing long before the amplifier overheats. Some types of music (mostly rock) with limited dynamic range will at times produce current surges that are likely to be much more disturbing than their short duration allows.

Unfortunately, some protective systems have unpleasant side effects. When the current through an inductive load is suddenly interrupted, a very large voltage "spike" can appear across the speaker terminals. Even if this does not damage the output transistors, it can be heard as a pop, a click, or some other disturbing sound. Some recent amplifier designs (such as those by Apt, Haller, NAD, and Threshold, among others) have avoided this problem by omitting the usual protection circuits entirely. If simple output-fuse protection is used, the worst that can happen from a large overload is a blown fuse. Fuse protection is most successful in an amplifier with a relatively high current capacity (not necessarily a high power capacity, which would require a large power supply and heat sinks). On the assumption that excessive load currents will be drawn for only short intervals, it is merely necessary that the output transistors be able to deliver that current safely for the required time (and preferably without severe distortion) and that the power supply be able to provide that "burst" of current without too much drop in supply voltage.

I am experimenting with a special simulated speaker load in testing amplifiers, although one is already defined in the current IHF amplifier standard. The IHF load calls for unreasonably high values of inductance and capacitance, and it is rather impractical for testing any but low-power amplifiers. Normally, I measure amplifiers with resistive loads of 2, 4, and 8 ohms, plotting the maximum undistorted current capability of the amplifier to be measured into almost any load impedance. The same signal is used for the overload-recovery test, which (one would think) should reveal any "nastiness" occurring during or immediately following a severe overload of the amplifier. We have been surprised, therefore, to find that no amplifier we have tested in this manner, even into 2-ohm loads, has exhibited any untoward behavior after being overloaded 10 dB by this signal. In most cases, full normal operation is restored in 2 to 10 microseconds after the cessation of the overload.

Dynamic-power output tests into low load impedances show the amplifier's actual current-delivering capabilities (independently of its power-handling constraints), and from these one can infer what its power limits are likely to be with unusually low load impedances (excluding possible interactions with highly reactive loads). For example, a 100-watt amplifier should be able to deliver 28.3 volts to an 8-ohm load, which will draw 3.5 amperes from the amplifier. If the load is reduced to 4 ohms, a theoretically perfect constant-voltage source will still develop its 28.3-volt output, but the current will double to 7 amperes and the power output will be 200 watts.

Most amplifiers do not behave in exactly the same way because they are not true constant-voltage sources, due to limitations in their output transistors, a protective system, or the inability of the power supply to deliver the higher current. The dynamic test eliminates the power-supply regulation as a factor (since in most cases the filter capacitors have stored enough charge to supply the output current for the duration of the 20-millisecond burst). If that test shows less than twice as much power output into 4 ohms as into 8 ohms, the limitation is in the output stage or its protective system. Most amplifiers can deliver about 50 percent more short-term power into 4 ohms than into 8 ohms.

If the differences between amplifiers are not always clear-cut when driving normal load impedances, they certainly become apparent when we apply the severe test of driving 2-ohm loads. This is not entirely unrealistic, since I have measured a number of nominally 8-ohm speakers whose impedance drops as low as 3 ohms at some frequency, and attempting to drive such speakers in parallel with any other speaker could easily load the amplifier with 2 ohms or less. Our hypothetical amplifier, in the unlikely event that it could sustain a 28.3-volt output across 2 ohms, would be delivering more than 14 amperes to the load, or 400 watts.

Almost no amplifier can maintain a reasonably constant output voltage when the load impedance is reduced from 8 to 2 ohms. Nevertheless, some amplifiers can deliver much more short-term current (and therefore power) to low-impedance loads than others having equal capabilities into 8 ohms. Even if it cannot be proved (by these tests) that they are audibly superior to amplifiers with less current capacity, I think it reasonable to expect that a high-current amplifier should be able to drive unusually low load impedances with less likelihood of distortion or other unpleasantness than would be the case with an amplifier having more of a tendency to current limiting. This quality does not have anything to do with price or even with power rating, being solely an expression of the designer's philosophy—"a philosophy that I happen to share.

Test Reports begin on page 30

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ALTHOUGH three-piece speaker systems (a bass module and two small satellites) are as old as stereo itself, they seem to be enjoying renewed popularity these days. Usually they take the form of a pair of conventional speakers, either bookshelf or compact floor-standing units, to which the user has added an accessory "subwoofer" to extend the bass response. However, a number of such systems are now being offered by several manufacturers.

The advantage of this configuration is obvious: the smaller speakers can fit into the room decor more easily, yet the effective bass response of the system can match or surpass that of a pair of large speakers. Sometimes the bass module has separate sections for the two channels, and sometimes the left and right channels are mixed and heard through a single bass speaker. The effect in either case is much the same, since the combined bass is usually limited to frequencies below about 100 Hz, where there is little or no stereo information. For the same reason, the bass module can be located almost anywhere in the room, regardless of the placement of the satellites.

The Three Piece Loudspeaker System from 3D Acoustics (5 Sunrise Plaza, Valley Stream, N.Y. 11581) is a moderate-price system consisting of a pair of very compact two-way speakers (the 3D6) and a common-bass speaker (10B). For convenience, we will refer to the complete system as the 3D6/10B. Each 3D6 satellite is in an oiled-walnut-veneer wooden cabinet measuring 14 inches high, 8½ inches wide, and 7¼ inches deep and weighing 13¼ pounds. Each sealed enclosure contains a 5-inch cone speaker crossing over at 2,000 Hz to a 1-inch dome tweeter. The spring-loaded input terminals are recessed into the rear of the cabinet.

The 10B bass module is a floor-standing unit whose finish matches that of the satellites. It is 24 inches high, 16 inches wide, and 12 inches deep; it weighs 37 pounds. The bass unit is supported about 2 inches from the floor at its corners, and its single downward-facing driver radiates into the room through the four “slots” between the floor and the base of the cabinet. The bass driver is a nominal 10 inches in diameter and handles the mixed bass from both channels. Its enclosure is vented through a 2¼-inch-diameter port located behind a narrow black grille on a sloping panel across the upper front of the cabinet. The outputs of the two amplifier channels are connected to spring-loaded input terminals (8 ohms nominal) on the back of the 10B. Next to them are output terminals to which are connected the left and right 3D6 satellites. The 100-Hz crossover network between the woofer and the other speakers is located in the 10B, and the system has no level or balance adjustments. Its power rating is 30 watts minimum, 150 watts maximum, per channel.

Although the installation instructions suggest placing the satellites against a wall, 3D Acoustics also manufactures accessory metal stands for the system; these support the 3D6 speakers 27 inches from the floor and allow them to be located some distance from the wall. The bass unit should be located against a wall for best response. The price of the complete 3D6/10B system is $400 on the East Coast, $450 in the West. A pair of SS-1 stands is $65.

Laboratory Measurements. The 3D6 speakers were placed on their stands about 2 feet from the wall and 8 feet apart. Their response in the reverberant field of the room was averaged and smoothed over the measurement range of 100 to 20,000 Hz. Frequency response of the bass unit was measured by laying the 10B on its side and placing the microphone close to the woofer cone. A second curve was plotted on the same chart with the microphone placed at the opening of the port.

(Continued on page 32)
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SCOTCH RECORD CARE SYSTEM. THE TRUTH COMES OUT.

CIRCLE NO. 26 ON READER SERVICE CARD
test reports

The acoustic contribution of the port was so much smaller than that of the cone that it could be ignored in determining the total bass response. The woofer output reached its maximum at 70 Hz and fell off at lower and higher frequencies (the high-frequency rolloff was due to the internal crossover network). The smoothed middle- and high-frequency curve, corrected for the known room response, was spliced to the bass curve to form an overall composite response curve. It was very smooth, with a broadly depressed midrange output between 400 and 1,500 Hz. The extreme-high-frequency output was remarkably uniform, varying only ±0.5 dB from 7,000 to 20,000 Hz. The dispersion of the dome tweeters was good, with diverging response curves from the left and right speakers appearing only above 7,000 Hz (one of them measured on its axis and the other about 30 degrees off axis). The overall frequency-response curve of the system was within ±3.5 dB from 40 to 20,000 Hz, representing excellent performance for any speaker system measured in a "live" room.

The woofer distortion at a nominal 1-watt (2.83-volt) input was very low (less than 0.5 per cent) down to 60 Hz, rising to 2.8 per cent at 35 Hz and 6.3 per cent at 30 Hz. A 10-dB power increase resulted in distortion readings under 1 per cent down to 70 Hz; they increased to 3.2 per cent at 40 Hz and were still only 6.3 per cent at 30 Hz. The system impedances averaged about 4 ohms from 20 to 100 Hz, rose to a maximum of about 60 ohms at 1,250 Hz, and fell to an average of 6 to 7 ohms between 4,000 and 20,000 Hz. This is a relatively insensitive speaker system, since an input of 2.83 volts of pink noise in the octave centered at 1,000 Hz produced a sound-pressure level of only 83.5 dB when measured at a 1-meter distance.

Comment. Our measurements of the 3D 3D6/10B combination suggest that it is a rather good system in respect to frequency response, smoothness, and distortion. However, our listening tests revealed that the measurements do not adequately describe its remarkable performance.

We use the term "remarkable" advisedly, especially in view of the modest price of the system. The sound was immediately heard to be open and sweet, with no strain or spatial discontinuity between the satellites and the bass speaker. When we compared this system with a pair of very fine speakers located next to the satellites (which were on their stands), we found to our amazement that the two were frequently indistinguishable in an A-B comparison, except for occasional spatial differences that were of no consequence (since there was no way to determine which, if either, was more "natural"). This was difficult to accept, since the comparison speakers cost almost ten times as much as the 3D system, so we listened over a period of weeks using both discs and FM sources, and still had to conclude that the two sounded so much alike that we usually had to look at the switches on the comparator panel to determine which was playing!

The smooth, extended high-end response of the 3D6 left nothing to be desired (each of the satellites has four-plate damping sheets on three sides of the tweeter, presumably to smooth its polar response, but this was the only external sign of special construction techniques). The midrange dip, incidentally, was never audible as such. This may have been due in part to the acoustics of our listening room, since the comparison speakers exhibited a similar, but much smaller, dip when measured under identical conditions.

The only consistent sonic difference we heard between the speakers was a feeling of added warmth in the sound from the 3D system, probably due to its slightly emphasized output in the 60- to 150-Hz range. It was not at all objectionable and would not have been noticeable except in comparison with the other speakers, which were very flat through that range.

Another genuine difference between the two systems was in their ability to handle very high amplifier-power levels. When we drove them with peak amplifier outputs of 200 watts or more, the sound of the 3D was slightly less "open" and we could sense the onset of compression in the program peaks (the sound did not get "mushy" or otherwise distorted, however). The comparison speakers, on the other hand, were totally unstrained at any power level we used.

We do not wish to imply that the three-piece 3D system is in all instances necessarily better than (or even as good as) some other speakers costing many times its price. In our room it definitely was (with the exceptions noted), but no doubt things would be different in a totally different environment. We can say, however, that in our listening room we have never heard a speaker (played at reasonable levels) that sounded significantly better than this one, aside from the questions of their ability to play louder or to produce another octave of clean bass. In our comparisons we used other systems selling at prices from double to ten times that of the 3D; they were all very fine-sounding speakers, and the 3D was just as fine. The 3D three-piece system is a real "sleeper," the sort of discovery that adds spice to a reviewer's life and prevents him from becoming jaded by constant exposure to look-alike and sound-alike components at ever-increasing prices. This is really something unusual. Hear it if you possibly can!

Kenwood KA-1000 Integrated Amplifier

The top-of-the-line integrated amplifier in the new Kenwood "Purist" Series is the KA-1000, rated at 100 watts per channel into 8-ohm loads from 20 to 20,000 Hz with no more than 0.005 per cent total harmonic distortion. The most unusual feature of the KA-1000 (and of the two less expensive amplifiers in the Purist Series) is Sigma Drive, an auxiliary negative-feedback arrangement that includes the speaker cables within the loop. The result, as Kenwood puts it, is "effectively place the amplifier across the speaker terminals." Special 13-foot speaker cables are supplied with the [Continued on page 34]
Professional I.
The one tape that stands up when you crank it up.

BASF
Professional I
90

Professional II.
The world's quietest tape puts nothing between you and your music.

BASF
Professional II
90

Professional III.
The only car tape that eliminates the car.

BASF
Professional III
90

Premium ferric oxide tapes have more headroom which allows higher maximum recording levels (MRL). Among all premium ferric oxides PRO I has the best MRL for loud recordings. Uniform maghemitic particles provide increased headroom for very accurate and loud recordings with virtually no distortion. In the fundamental music range (20Hz-20kHz) PRO I can be recorded louder and driven harder than even high bias tapes. PRO I is the internationally accepted reference tape. Although the bias point is specifically matched to the Type I normal/ferric position on today's high quality cassette decks.

High bias tapes consistently provide wider frequency response and less tape noise (hiss or background noise) than any other tape type. Among premium high bias tapes PRO II is in a class by itself. It is the second generation chromium dioxide tape with superior frequency response and outstanding sensitivity in the critical 10kHz-20kHz frequency range. It also has the lowest background noise of any other competitive tape available today. PRO II will capture the many subtle harmonics of the most demanding recordings and play them back with the reality and presence of a live performance. PRO II is the tape for the Type II/chrome/high bias position that comes closest to Metal tape performance for half the price.

Ferrichrome tapes combine the benefits of chromium dioxide and ferric oxide tapes for superior performance in car decks. The top layer is pure chromium dioxide for unsurpassed highs and low background noise. The bottom layer is ferric oxide for superior lows and great middle frequencies. And it also gives you higher recording levels, so you get clearer, louder playback without cranking up your volume control to compensate. PRO III is the ideal tape for car stereo systems and performs just as well in the home on the Type III/ferrichrome position.

"The guarantee of a lifetime."
All BASF tape cassettes come with a lifetime guarantee. Should any BASF cassette ever fail—except for abuse or mishandling—simply return it to BASF for a free replacement.

Potentiated "Jam-Proof" Security Mechanism (SM).
All BASF tape cassettes come with our exclusive SM—Security Mechanism. Two precision arms actually "guide" the tape in a smooth, exact and consistent track, so that winding is always even, no matter how often the cassette is played. SM puts an end to tape jamming.

GARUARANTEE
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BASF

Crosby Drive, Bedford, Massachusetts 01730

CIRCLE NO. 3 ON READER SERVICE CARD
In addition to two heavy conductors for the speaker drive, these cables include a pair of lighter-gauge wires to carry the feedback signals from the speaker terminals to special Sigma Drive binding posts in the rear of the amplifier.

Among the benefits claimed for Sigma Drive are a very large increase in effective damping factor (rated at a minimum of 600 at the speaker end of the cable), compared with any conventional output system, and a considerable reduction in the distortion of the electrical signal supplied to the speaker. Kenwood states that an amplifier—even one as advanced as the KA-1000—produces far more distortion at the speaker than is measured directly at the amplifier output because of the impedance of the connecting cable and the nonlinear impedance of the speaker. Sigma Drive makes the extremely low distortion of the amplifier more readily available to the speaker.

Kenwood engineers also believe that the presence of magnetic materials in the immediate vicinity of signal circuits can introduce measurably significant amounts of distortion. To eliminate such effects, they have made the KA-1000 entirely of nonmagnetic materials—aluminum top cover and front panel, molded plastic sides and trim. The power supply is a separate unit, connected to the amplifier through a 3-foot cable. Separate power transformers are used for the left and right channels, and, according to Kenwood, there are actually five separate power supplies in the KA-1000.

In addition to Sigma Drive, the Kenwood KA-1000 has wide-band circuitry with full d.c. coupling from the preamplifier’s high-level inputs to the speaker outputs (a low-frequency filter can be switched in to provide d.c. isolation as well as some attenuation of turntable rumble). The output stages use a “zero-switching” bias system to minimize crossover distortion. The heat from the plastic-cased output transistors is conducted to a refrigerant which circulates in a closed system to heat-radiating fins. The entire cooling system is contained within the amplifier cabinet.

From the front, the Kenwood KA-1000 presents a distinctive appearance, with the lower portion of its panel covered by a smoked-glass panel behind which can be seen a number of bar-knob and pushbutton controls. The glass panel hinges down for access to these controls, most of which are used infrequently. The upper part of the panel, which is silver grey like the rest of the amplifier, contains a flat rectangular power switch at the left and a large rectangular transparent plate (FADER) at the right. To the left of the fader plate is a horizontal-slider volume control, below which are five input-selector pushbuttons. The volume slider sets the listening level when the fader plate is illuminated from the rear by a pale blue light. Touching the plate lightly causes the volume to fade smoothly down to zero over a period of a second or two, and another touch returns it to the preset value over the same time period. This feature, which replaces the “audio muting” feature of many amplifiers, accomplishes much the same result, but Kenwood’s system drops the volume to zero instead of making the usual 20-dB reduction, and it changes with a smooth fading action that encourages its use. As the signal fades, the blue light behind the touch plate fades with it, so the status of the system can be seen at a glance. In addition, the position of the volume slider gives an indication of how loud the sound can be expected to be when the signal is fully restored.

The program-selector buttons offer a choice of TAPe A, TAPE B, AUX, TUNER, and PHONO inputs. Their identifying markings are below their buttons on the hinged glass panel. Red lights next to smaller markings on the metal panel behind the door also show the program selection. Behind the hinged panel is a REC OUT knob switch that selects the recording-output program independently of the program being played. It duplicates the PHONO AUX and TUNER sources, plus two dummy positions for transferring programs from one tape deck to another. In its off setting, the tape outputs are completely isolated from the signal path.

The bass and treble tone controls can be bypassed by a pushbutton that completely removes all active tone-control circuits from the signal path (this also permits a d.c. response through the entire amplifier). In addition, there are turnover-frequency buttons for the tone controls, giving a choice of 200 or 400 Hz for the bass and 3 or 6 kHz for the treble control.

The balance control is center-detented and, like the tone controls, can be completely bypassed by a button that removes the balance control from the amplifier circuit. Other pushbuttons activate the loudness compensation, select either DC COUPLED or SUBSONIC FILTER operation, and choose stereo or mono mode.

The KA-1000 has two phono inputs, selectable from the front panel by a pushbutton. In the rear of the amplifier is a slide switch that provides phono-input terminating resistances of 33, 47, or 100 kilohms. Another front-panel switch converts the phono preamplifier from a moving-magnet (MM) cartridge input to a high-gain, 100-ohm moving-coil (MC) cartridge input.

The remaining front-panel control is a knob-operated speaker switch controlling two pairs of speaker outputs. Only the SPEAKER A outputs include the Sigma Drive terminals, and a red light above the speaker switch indicates when it is in use. There is an A + B position that drives both sets of speakers simultaneously, but it does not use the Sigma Drive. If only the SPEAKER A terminals are used, it is easy to check the audible effects of Sigma Drive by switching to A + B, which disables that circuit. A headphone jack is located next to the speaker switch.

The Kenwood KA-1000 amplifier is about 17 3/4 inches wide, 14 3/4 inches deep, and 4 3/8 inches high. Because its power supply is separate, the amplifier unit weighs only about 13 1/2 pounds. The power-supply unit, which matches the amplifier in appearance, is 5 1/2 inches wide, 14 3/4 inches deep, and 4 3/8 inches high, and it weighs about 18 1/2 pounds. On its rear panel are three switched a.c. outlets and one unswitched outlet. The two units can be placed side by side or the power supply can be located anywhere within its cable length of the amplifier (it has no controls). The suggested retail price of the Kenwood KA-1000 is $795.

Laboratory Measurements. The 1-hour preconditioning period at one-third rated power made the top of the KA-1000 uncom-
WHY SPEND $200 MORE ON A BETTER TAPE DECK WHEN ALL YOU NEED IS $2 MORE FOR A BETTER TAPE.

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

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

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

So if you’d like to get better sound out of your tape system, you don’t have to put more money into it. Just put in our new tape.

maxell
IT’S WORTH IT.
measurements demonstrated the extraordinary linearity of the Kenwood circuits through most of the audio range. The distortion at 1,000 Hz was undetectable below 10 watts output into 8 ohms, being below the noise level and our measurement limit of 0.0003 per cent. It measured between 0.0005 and 0.001 per cent from 10 to 100 watts output. With 4-ohm loads the results were generally similar: levels of 0.0005 to 0.0007 per cent were measured in the 10- to 50-watt range and 0.008 per cent at 100 watts. Even when we drove 2-ohm loads (for which the amplifier is specifically not rated, being recommended for use only with speakers rated at 4 ohms or higher) the distortion was typically between 0.0015 and 0.002 per cent up to 40 watts, reaching 0.01 per cent at 50 watts.

At the rated 100-watt output, the distortion was under 0.001 per cent from 20 to 1,000 Hz, and it rose linearly at higher frequencies to the rated 0.005 per cent at 8,000 Hz and 0.01 per cent at 20,000 Hz. At lower power outputs the distortion was still lower. These measurements were made with the amplifier gain set to 20 dB below maximum, in accordance with IHF measurement standards. When the distortion is measured at maximum gain setting, the amplifier meets the published rating of 0.005 per cent at 20,000 Hz.

Our measurements were made through the complete amplifier (aux input to output loads) with the tone controls and balance control bypassed. The sensitivity at maximum gain for a reference output of 1 watt was 16 millivolts (mV); through the MM phono input it was 0.23 mV. No measurements were made using the MC input. Under reference-gain conditions (0.5 volt into aux or 5 mV into phono producing a 1-watt output) the A-weighted signal-to-noise ratio (S/N) readings were −80 and −78 dB for aux and phono, respectively, referred to 1 watt. Relative to the amplifier's rated power, the S/N readings were −100 and −98 dB.

The phono input overloaded at 270 to 290 millivolts depending on frequency (referred to equivalent 1,000-Hz values). The phono-input impedances measured 110, 50, and 34 kilohms for the positions marked 100, 47, and 33 kilohms. The phono-input capacitance was 150 picofarads. The MC input resistance was 130 ohms.

The amplifier was stable with capacitive loads as great as 3 microfarads across the resistive loads. We measured its IHF intermodulation distortion using equal-amplitude signals, at 19,000 and 20,000 Hz, whose combined peak value was equivalent to that of a sine-wave signal at 100 watts output. The third-order IM distortion at 18,000 Hz was −83 dB and the second-order distortion at 1,000 Hz was −84 dB, both referred to 100 watts output. The amplifier rise time was 6 microseconds at the IHF standard-gain setting but improved to 1 microsecond (approximately as rated) with maximum gain. The slew rate was about 100 volts per microsecond, quite close to the rated 120 volts per microsecond, and the IHF slew factor exceeded our measurement limit of 25.

With the 400-Hz and 3-kHz turnover settings, the tone controls caused considerable change of overall gain; halfway settings of the controls produced a gain change of 2 to 3 dB, with little alteration of frequency response. With the other crossover settings (200 Hz and 6 kHz) the gain was fairly constant and there was a good control effect at the frequency extremes (although the treble control had negligible effect in the first half of its rotation from center). The controls are not detented, but the bypass switch makes it easy to return to a flat-response condition whenever one desires.

The loudness compensation boosted only the lower frequencies, below about 1,000 Hz, as the volume was lowered. The "subsonic filter," which has a gradual 6-dB-per-octave slope below its rated cutoff frequency of 18 Hz, reduced the response by 2.5 dB at 20 Hz with very slight gain reduction as high as 100 Hz. The RIAA phono equalization was extremely accurate, deviating only ±0.5 dB from 20 to 20,000 Hz, which is within our normal measurement-error range. There was a slight interaction between cartridge inducance and phono response at frequencies above 7,000 Hz, depending on the specific cartridge used. In one case, the output rose to +1.2 dB at 15,000 Hz and +2.5 dB at 20,000 Hz, while with another cartridge the total change was +1, −0.5 dB up to 20,000 Hz.

All the preceding measurements were made using the Sigma Drive circuit and with the test loads connected to the amplifier via its special four-wire cables. To evaluate the action of the Sigma Drive, it was necessary to simulate the connection of a high-quality three-way system (the KEF 105.2) and measured the response and distortion at the speaker terminals. To exaggerate the effect of long connecting cables, we also made measurements with an extra impedance in series with the speaker line at the amplifier where it would allow the Sigma Drive to operate with full effectiveness. For some measurements we used a 4-ohm resistor, and for others we used a large series inductor measuring 0.7 ohm and 2.5 millihenries.

First, we measured the distortion at the speaker through the KA-1000 cables using a 10-watt drive level at 40 Hz. The only measurable distortions were a 0.013 per cent second harmonic and several higher-order harmonics of indeterminate amplitude that we attribute to the test equipment. The distortion was the same with or without the Sigma Drive in operation.

Since the amplifier has less than 0.0005 per cent distortion under the same conditions when driving an 8-ohm resistor load, it appears that the complex nature of a speaker load can increase the distortion by about thirty times, although in our view it is still completely negligible. When we inserted the 4-ohm resistance in the speaker line (with Sigma Drive off) the second-harmonic distortion rose to −47 dB (0.45 per cent). Though hardly likely to be audible under any conditions, this distortion level can no longer be summarily dismissed since it is not far below the levels attained by some good speaker systems at the frequency and power levels we used. There was also a third harmonic, at 120 Hz, at a −60 dB (0.1 per cent) level. Switching in the Sigma Drive reduced these distortion levels by 12 to 15 dB, certainly a very substantial improvement. The 80- and 120-Hz components were now, respectively, −63 and −72 dB (0.07 and 0.025 per cent), which
Two Paths to the Pinnacle
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An entirely new design...but one true to the Nakamichi 70C tradition.
A unique blend of beauty and technology as ravishing to the eye as to the ear. And now...a choice of 700ZX cassette recorders.
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are truly negligible compared to any speaker distortions.

One would also expect Sigma Drive to correct for any frequency-response changes caused by the impedance of the speaker cables. With a purely resistive impedance, these effects would merely follow the impedance characteristic of the speaker; with series inductance they would also show up as a loss of high-frequency output. This was tested by using our spectrum analyzer as a frequency-response plotter, with the same series impedances used for the distortion tests. With the 4-ohm series resistance and Sigma Drive off, the voltage at the speaker terminals varied about 2 dB over the range of frequencies up to 2,000 Hz. Turning on the Sigma Drive reduced the total variation to about 0.5 dB.

The series inductance had a more pronounced effect, reducing the speaker-drive voltage rapidly above 1,000 Hz as well as introducing several smaller irregularities at lower frequencies. The Sigma Drive eliminated the high-frequency roll off, actually converting it to a slight increase in output. Finally, an overall sweep from 0 to 20,000 Hz without Sigma Drive showed a drop in voltage of about 9 dB in the upper part of that range, caused by the impedance of the series inductor. The Sigma Drive converted this to a nearly flat response, varying only ±2 dB over the full range.

Comment. In the KA-1000, Kenwood engineers concentrated on improving certain specific areas of performance according to their perception of the importance of those characteristics. Our measurements show that they have succeeded quite well in attaining their goals. However, we wish that the KA-1000’s controls had been more versatile and effective and the control labeling more visible.

On the plus side of the ledger, the separate recording-output selector is a welcome feature, as is the smooth action of the fader, which mutes and restores the program so smoothly and unobtrusively that one is hardly aware of the action. The amplifier is dead quiet and, needless to say, utterly clean sounding.

Which brings us to Sigma Drive, the KA-1000’s most unusual feature. Our measurements confirm that it does just what is claimed for it, effectively compensating for the presence of the speaker cables. Despite Kenwood’s claim that it makes a “striking” difference in the sound, however, we never found more than the most subtle smoothing and “warming” of the frequency balance when it was switched in, and then only with certain program material. Its effect would also be quite dependent on the particular speakers used. The action of this circuit can be measured more easily than heard, which is an interesting inversion of the all-too-common case of subjective qualities that cannot be explained by any conventional measurements.

The longer the speaker leads, and the smaller their gauge, the more advantage will be realized from Sigma Drive. Thus, the special four-wire cables supplied with the amplifier are the least likely to disclose its merits. If they are not used and longer speaker leads are needed, it will be necessary to run a second pair of leads back from each speaker to the Sigma Drive feedback terminals on the amplifier, but they carry almost no current and can therefore be of very small gauge. Judging by the effectiveness with which the Sigma Drive compensated for a 4-ohm connecting resistance (corresponding to hundreds of feet of speaker wire) there should be little need for any user of the KA-1000 to invest in any of the special “low-loss” cables on the market. The KA-1000 will not be at its best with very-low-impedance speaker loads, and if your speaker drops much below 4 ohms we would not recommend its use (nor would Kenwood). On the other hand, we cannot imagine a cleaner-sounding amplifier, nor one which can come closer to equaling its test-bench performance when driving real loudspeaker systems.

Whatever the reasons, this was an amplifier we especially enjoyed using and listening to. On a subliminal level, which may be one of the best ways to judge a very highly refined amplifier or other component, we found the KA-1000 to be one of the best-sounding amplifiers available. Even if the full benefits of Sigma Drive probably cannot be realized under rather special conditions, and even though it produced no spectacular results in our installation, we consider it to be a genuine step in the right direction and, unlike some other circuit developments of recent years, not at all in the “gimmick” category.

Circle 140 on reader service card

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The SAE “01” Series “Dual High Resolution” power amplifiers have been designed, according to their manufacturer, to drive real loudspeaker loads rather than being optimized for laboratory bench measurements using resistive loads. The three models that presently make up the series have identical electrical characteristics except for their power ratings. The most powerful, the 2401, was tested for this report. The rationale for the design of the “01” Series amplifiers is the acknowledged fact that loudspeakers are not only reactive loads (exhibiting the properties of capacitors or inductors at different frequencies in addition to their resistive components) but...
"I gave my kid brother my turntable. I gave him my tuner. I gave him my tape deck. But I kept my AR's."

Most good speakers sound fine when they're new. But what about next year? And the year after? Will they start to sound tired and send you looking for something better? Not if they're AR's. We build accurate speakers. Because no matter what kind of music you like, accuracy is the standard. It's the way a speaker should sound.

So we build AR's to stay accurate. It's nothing for us to hear from owners who've had theirs for 10 or 15 years. They've upgraded the rest of their system, but they still can't find an excuse to replace their AR's.

The reason AR's sound so good for so long is basic. We build nothing but speakers. We design all the components that go into them and build them in our own plant. All our effort goes into making the perfect speaker. For example, every AR, yours included, has passed more than 70 quality control tests before it's shipped.

That's why AR can cover you with a full (not limited) 5-year warranty. It covers parts. It covers labor. And it also promises that your AR's will perform to within 1 dB of design specs (as per AR warranty statement).

Isn't that the kind of quality assurance you want with your new speakers?
are also nonlinear. Since a dynamic speaker acts as a motor, its voice-coil motion generates a "back emf" that tries to drive currents in the reverse direction through the amplifier's output terminals. For the amplifier to be insensitive to this reverse-signal component, it must have a high damping factor (low internal impedance) over the entire audio-frequency range.

Most amplifiers have a high damping factor at low frequencies because of the considerable negative feedback employed in their circuits. At higher frequencies the damping factor decreases toward what SAE calls the "natural" damping factor, which is determined by (among other things) the number of output devices used, the power-supply capability and its regulation, and the shape of its power-supply response. They have a very-high-speed current-delivering and -absorbing ability to deal with the dual problems of driving a speaker load and absorbing the return signals from its voice coils without distortion.

The SAE 2401 is rated to deliver 250 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.025 per cent total harmonic distortion. The 4-ohm rating over the same frequency range and with the same distortion limits is 375 watts per channel. The rated damping factor, referred to 8 ohms, is 65 at 100 Hz and 60 from 20 to 20,000 Hz. The rated input sensitivity is 0.14 volt for a 1-watt output or 2.24 volts for rated output, and the output noise (A-weighted) is 90 dB below 1 watt. The current slew-rate specification is 20 amperes per microsecond. The amplifier is protected against improper load or drive conditions by a combination of a reset, thermal cutoff, and a low-impedance load-sensing circuit.

The SAE 2401 is finished in black and has heavy-duty handles on its front panel, which is slotted for rack mounting. On the front panel are two parallel rows of red LEDs that show the instantaneously output power of the amplifier in 3-dB steps from rated output to —36 dB, plus a pair of LEDs that light to show that the amplifier is turned on (there are square pushbuttons on the panel to turn it on and off). Two sets of five-way binding posts on the rear apron of the amplifier supply the speaker outputs, and near each edge of the rear apron are two phono-jack inputs. For each channel there is a "normal" input whose frequency response is essentially flat down to 1 Hz and a "hi-pass" input whose response falls at 6 dB per octave below 20 Hz. The heavy-duty power cord has a three-pin grounding plug.

The power transistors are mounted along the left and right sides of the amplifier, and their heat-radiating "fins" resemble a cluster of rods extending horizontally from the transistors. Cooling air passes over them by convection, entering at the bottom and exiting from the top of the amplifier without the assistance of a cooling fan. Most of the center of the amplifier is occupied by a large power transformer and the filter capacitors. The SAE 2401 is 19 inches wide, 12 1/2 inches deep, and 7 inches high. It weighs 57 pounds. Price: $950.

Laboratory Measurements. Although the top of the SAE 2401 became quite hot at times during our tests (and its thermal cutoff shut down the amplifier a few times during our tests with 2-ohm loads), it never reached uncomfortable or dangerous temperatures. The output waveform clipped at 325 and 576 watts per channel into 8- and 4-ohm loads, respectively, at 1,000 Hz. When we measured the clipping power into 2 ohms, we were able to drive only one channel at a time. The amplifier itself was not the limiting factor; our test-bench 15-kilowatt line fuse blew before we reached clipping when we tried to drive both channels. This can be explained by the enormous sine-wave clipping power we measured into a 2-ohm load—925 watts per channel! Obviously, attempting to drive both channels to that power output at the same time would overtax the current rating of any home electrical wiring (15 to 20 amperes).

The IHF clipping-headroom rating of the SAE 2401 into 8 and 4 ohms was 1.14 and 1.86 dB. We also measured the dynamic-output power with the tone-burst signal specified in the IHF amplifier test standard. Into loads of 8, 4, and 2 ohms, respectively, the maximum nonclipped short-term power output was 370, 670, and 950 watts per channel. Thus, the IHF dynamic headroom rating for 8 and 4 ohms was 1.7 and 2.5 dB.

At 1,000 Hz, the distortion with 8-ohm loads was less than 0.004 per cent up to more than 270 watts output, reaching 0.165 per cent at 300 watts. The distortion was slightly higher when driving 4 ohms; measuring between 0.0045 and 0.0085 per cent for power outputs between 1 and 500 watts per channel. Even 2-ohm loads did not result in objectionable distortion; it was about 0.01 per cent up to 500 watts and reached 0.09 per cent at 700 watts (this was with only one channel driven, for the reasons stated earlier).

Across the full audio-frequency range the
The anatomy of a breakthrough in sound reproduction. Technics Honeycomb Disc speaker system.

You're looking at the heart of a revolutionary new speaker system—the flat honeycomb drivers of Technics new Honeycomb Disc speakers. A new shape that takes sound beyond the range of traditional cone-shaped speakers to capture the full energy and dynamic range of today's new recording technologies. It's the essence of a true sonic breakthrough.

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

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

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

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

Now that you've seen what a sonic breakthrough looks like, listen to Technics—and hear what one sounds like.
distortion varied only slightly with power and hardly more with frequency. Typically, it was about 0.003 per cent from 20 to 2,000 Hz and rose smoothly to about 0.01 per cent at 20,000 Hz at power outputs from one-tenth-rated to full-rated power into 8 ohms. The sensitivity of the amplifier was exactly as rated, with a 0.14-volt input driving it to 1-watt output, and the output noise level (A-weighted) was better than our -90-dB measurement limit.

The power-output LEDs responded fairly well to peak levels, although their response time seemed to be closer to that of a standard VU meter than to genuine peak-reading indicators. With 300-millisecond tone bursts (the standard test for VU-meter ballistic response) the LEDs read 3 dB low, and with 20-millisecond bursts they read 12 dB low. On continuous signals, their calibration was approximately correct. The amplifier's frequency response was flat from 5 to 20,000 Hz, down 1 dB at 60 kHz, and down 3 dB at 125 kHz. Its IHF slew factor was 3, and the IHF overload recovery time was less than our 2-microsecond resolution.

SAE suggests certain measurements and tests to show the superiority of their amplifier over others when driving real speaker loads. These involve the use of asymmetrical pulse signals, which we did not have available. However, we were able to infer some of the special qualities of the amplifier from a standard IHF two-tone IM measurement, using equal-amplitude input signals at 19,000 and 20,000 Hz. When their combined peak-output amplitude was equivalent to that of a 250-watt sine-wave signal, the third-order IM product at 18,000 Hz was 89 dB below 250 watts, which is very close to the residual distortion of our spectrum analyzer. Even more impressive and revealing was the total absence of a second-order (difference frequency) component at 1,000 Hz. That distortion component would show the degree of asymmetry in the amplifier (whose circuits are said to be completely symmetrical throughout). This was the first amplifier we have tested which did not produce any detectable second-order distortion in this test (down to our measurement "floor" of less than 100 dB). These tests would seem to confirm SAE's claims for high linearity and symmetry of the amplifier's response to both positive- and negative-going signals.

**Comment.** Like most manufacturers of high-performance amplifiers, SAE urges that their products be judged by listening. As we have said on many occasions, the audible distinctions between power amplifiers tend to be so subtle and (to us, at least) so insignificant that we cannot use this as a basis for judging amplifier quality. We did make A-B comparisons against another amplifier of roughly similar ratings (which was not at all comparable to the SAE 2401 in its current-output capability) using good speakers that could absorb the full output of either amplifier. We did not hear any differences at all between the two amplifiers (nor did we expect to—which may account in part for why we did not, but that is another story!).

Disregarding sound quality for the moment, it was much easier to appreciate the advantages of the SAE 2401 from our experience in testing and using it as a part of a music system. Part of this appreciation concerns what it does not do. It has absolutely no vices or quirks that we could find. There is no fan to degrade ambient noise level, it runs completely (and literally) cool in normal operation, yet is not fazed in the least by treatment brutal enough to make its top cover quite hot. It makes no sounds, either electronic or acoustic, transient or otherwise, to mar the simple act of turning it on or off (there is a few seconds' delay on turn-on before the internal relay connects the speaker outputs). Its colorful LED power readout actually gives a useful indication of the amplifier's power output rather than merely serving a cosmetic function, as is so often the case.

The SAE 2401 is an extremely powerful amplifier in terms of what it can actually deliver to real speaker loads. Lacking a schematic diagram, we do not know whether it has any of the usual current-limiting circuits to protect its output transistors, but its behavior does not suggest any such circuits. The fact that SAE says it will deliver a 20-amperes-per-microsecond current slew rate into a 1-ohm load suggests to us that only the output transistors and the power supply limit the current it can deliver to its loads. When we test amplifiers as power amplifiers in this one, we tend to operate them cautiously, having had too many of them self-destruct or at least burn out inaccessible fuses when pushed to their limits or beyond. We were impressed by the fact that the SAE 2401 never winked or faultered even when pouring almost a kilowatt of clean power from one channel into a 2-ohm load, and by the fact that the only failure during our tests was of the 15-ampere line fuse in our test-bench wiring.

Naturally, we would not attempt to judge the validity of SAE's claims solely on the basis of limited listening with only a couple of types of speakers. That is one of the problems with subjective evaluation of any audio component—somewhere there may be a unique combination of program material, loudspeakers, amplifier characteristics, and/or room acoustics that will reveal some special merit (or fault), but it is not practicable to have on hand, or to search out and set up, such special conditions from among the near infinity of possible acoustic circumstances and component combinations.

Still, our experience with the SAE 2401 indicates that it is as near to being an unbreakable amplifier as we have seen, capable of clean power outputs beyond any reasonable listening requirements (and probably beyond the ability of most speakers to absorb, so caution is advised). In spite of this, it can be picked up by one man (though not too casually), does not require a special power line unless you plan to drive both channels to full power into loads of 2 ohms or less, and is completely silent in operation. All things considered, even the 2401's moderately high price does not seem at all unreasonable for what it delivers. It is clear that the SAE 2401 is a most impressive amplifier by any criteria.

"For the money that is one helluva massive woofer, sir!"

Circle 141 on reader service card
Soundcraftsmen AE2420-R “Scan-Alyzer”

Soundcraftsmen’s AE2420-R “Scan-Alyzer” combines a ten-octave graphic equalizer and a pink-noise generator whose output can be limited to the specific frequency ranges covered by the equalizer’s individual filters. The unit can be used for equalizing or measuring the frequency response of an amplifier, a three-head tape deck, or, with a calibrated microphone (not furnished), an entire listening room, including the speakers.

The unique feature of the AE2420-R is a “differential-comparator” circuit that removes most of the usual sources of error from the measurement process. The internal pink-noise signal (which contains equal energy in each octave of frequency) not only drives the external device being tested, but is internally rectified, and the resulting d.c. signal is connected to one input of a highly sensitive voltage-comparator circuit. The output signal returning from the device under test (or the microphone, in the case of acoustic measurements) is also rectified and directed to the other input of the comparator.

The comparator output is displayed by two red LEDs on the front panel. One lights when the outgoing signal level exceeds the returning signal level, the other when the returning signal exceeds the outgoing signal. When the two signals are exactly equal (within 0.1 dB) the two lights are of equal brightness or flicker on and off alternately. To their right are standard pushbutton switches for power and the test microphone’s input-circuit impedance. A or B channel (left or right), and change the test microphone’s input-circuit impedance. A knob marked SCAN-ALYZER BAND SELECT controls the noise bandwidth delivered to the external device through the line or tape outputs in the rear of the unit. Its setting supplies a full audio-band signal. The others, numbered from I to 10, correspond to the numbers on the equalizer’s channel controls. Each of them passes the pink noise through a bandpass filter whose frequency and shape correspond to those of the similarly numbered equalizer filter. The SCAN-ALYZER INPUT ADJUST knob is a level control for the differential comparator circuit; this is set for equal brightness of the two LEDs before beginning the equalization process.

The lower portion of the front panel contains pushbutton switches for power and several equalizer functions, plus a number of controls and jacks used with the Scan-Alyzer portion of the unit. The equalizer controls include an EQ DEFEAT (bypass) button, EQ TAPE RECORD (which connects the equalizer into the signal path going to the tape recorder instead of in the playback line), TAPE MON (replacing the tape-monitoring function of the associated amplifier when the AE2420-R is connected into one of its tape loops), and LED DEFEAT, which extinguishes the LEDs in the event that their flashing proves distracting.

At the right of the panel are Scan-Alyzer buttons that turn on the pink-noise source, connect the instrument to analyze either the A or B channel (left or right), and change the test microphone’s input-circuit impedance. A knob marked STEREO IN and EXT EQ OUT, that bypass the internal equalizer of the AE2420-R so that the Scan-Alyzer can be used with an external equalizer.

A knob marked SCAN-ALYZER BAND SELECT controls the noise bandwidth delivered to the external device through the line or tape outputs in the rear of the unit. Its setting supplies a full audio-band signal. The others, numbered from I to 10, correspond to the numbers on the equalizer’s channel controls. Each of them passes the pink noise through a bandpass filter whose frequency and shape correspond to those of the similarly numbered equalizer filter. The SCAN-ALYZER INPUT ADJUST knob is a level control for the differential comparator circuit; this is set for equal brightness of the two LEDs before beginning the equalization process.

The AE2420-R was 11 1/4 inches wide, 11 1/4 inches deep, and 5 1/4 inches high; it weighs 20 pounds. Price: $499.

Laboratory Measurements. The average output level of the full-spectrum pink noise was 260 millivolts. Its spectrum closely matched that of another laboratory pink-noise generator when both were displayed on our spectrum-analyzer screen. The gain of the AE2420-R was 1 1/2 with all controls centered, and its A-weighted noise level was below our 100-microvolt-minimum measurement capability.

The line output clipped at 9 volts, and its distortion was very low at any level below clipping. It measured between 0.001 and 0.003 per cent up to 3 volts and only 0.05 per cent at 5 volts. The square-wave response, with all controls centered, was free of ringing or other aberrations and had a rise time of 2 microseconds.

The bandpass shapes of the various equalizer filters were virtually identical, indicative of equal effective "Q" values, and they had typical maximum control ranges of +14 to -13 dB. The ability of the AE2420-R to equalize a non-flat frequency response was demonstrated by passing its noise-output signals through a network which produced a response that rose more than 20 dB below 100 and above 7,000 Hz, peaking at 35 and 19,000 Hz. The controls of the Scan-Alyzer were operated according to instructions, enabling us to complete the equalization in less than a minute. The resulting overall response, plotted on the same chart as the external-device response, showed that its variation had been reduced from +22, -0 dB between 20 and 20,000 Hz to only ±2 dB between 30 and 16,000 Hz. Although it might have been possible to improve slightly on our equalization accuracy by further adjustment of the controls, we feel that Soundcraftsmen’s claims for speedy and accurate equalization were amply confirmed by our experience.

Comment. The principal application of the Soundcraftsmen AE2420-R will probably be for room and speaker equalization.

(Continued on page 46)
Come to Marlboro

Country.

Marlboro Red or Longhorn 100's—
you get a lot to like.
Although it certainly could be used for equalizing a tape recorder, as suggested by the manufacturer, the present state of tape-recorder performance hardly warrants its use for that purpose. As the manufacturer points out, the overall accuracy of the room equalization is limited by the microphone response and its calibration.

The equalization process is very simple and rapid. After the AE2420-R is connected to the system according to instructions and the microphone is located at the point in the room for which the system is to be equalized, the pink-noise signal is supplied to one stereo channel (selected by the front-panel buttons). With a sound level high enough to override any room noise and the Scan-Alyzer BAND SELECT set to ALL with all other controls centered, the Scan-Alyzer INPUT ADJUST is set for equal brightness of the indicator LEDs.

The BAND SELECT switch is then set successively to each of the octave bands and the corresponding equalizer slider is moved until the two lights show equal signal levels. Since adjacent sliders will interact to some degree, it is necessary to repeat the adjustments in reverse sequence (from 10 down to 1) and then to repeat the entire process once or twice. Since only a second or two is required for each adjustment, the complete equalization process takes only a couple of minutes. A similar procedure is then followed for the other stereo channel.

We used our calibrated Bruel & Kjaer microphone for room equalization and had no difficulty finding the settings for our room and speakers. However, it is our experience that precisely equalizing a home listening room (as opposed to a large hall or a public-address installation) rarely improves the sound quality, and in this case a "flat" response measured near our listening position gave a listening quality far inferior to the unequalized sound. In any case, such equalization is effective only at the microphone position, and a move of a few inches can change the situation radically. This, of course, is a problem not unique to the Scan-Alyzer but rather a difficulty encountered with any home room-equalization device.

Although the differential comparator has a resolution of 0.1 dB, the randomly varying pink-noise waveform almost never allows both lights to glow with equal brightness. Instead, they flicker on and off alternately, and the adjustment must be made so that they appear to be on for equal amounts of time as one watches them. We were rather surprised to find that the repeatability of the equalizer settings (and thus their probable accuracy) was nevertheless a small fraction of a decibel, considerably more accurate than any of the more usual equalization indicators such as real-time spectrum analyzers (which rarely have a level resolution better than 1 or 2 dB).

To summarize, the AE2420-R is a very good octave-band equalizer (and test instrument) whose effectiveness is greatly enhanced by the rapidity with which it can be adjusted with its built-in pink-noise generator and switchable filters.

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**Realistic STA-2250 Stereo Receiver**

A LITTLE over a year ago, Radio Shack was one of the first hi-fi manufacturers to introduce a full-featured, digitally synthesizing AM/FM stereo receiver. The Realistic STA-2200 boasted an exceptional array of performance and convenience features as well as a relatively high selling price.

Although the STA-2200 is still in the Realistic line, the new Model STA-2250 brings its essential qualities, plus a few improvements, down to a much lower price range. The STA-2250 is rated to deliver 50 watts per channel into 8-ohm loads from 20 to 20,000 Hz with no more than 0.02 percent total harmonic distortion (compared to 60 watts at the same distortion level for the STA-2200). The unit's tuned-in frequency is shown on a large blue-green four-digit fluorescent display in the upper center of the front panel. It is flanked by a five-segment green LED signal-strength indicator and a green STEREO light. When the tuner section is not in use, these displays are blanked. To their right are eight small round buttons for the programmable station memories, plus a MEMORY SET button and light. To store the frequency of a station in the memory, the MEMORY SET button is pressed (lighting the indicator next to it), and pressing any of the station memory buttons assigns that frequency to its memory. Each button can be used for an FM and an AM station, for a total of sixteen stored frequencies. The memory will not be lost during brief power interruptions (up to an hour), but a longer period with the receiver unplugged will erase the programmed station memories, which will then have to be reprogrammed.

Five rectangular pushbuttons to the left of the display panel control the filters (MPX, TON and HIGH), MONO mode selection, and the loudness compensation. The other controls form a row across the bottom of the panel. For the most part, they are conventional knobs and switches. A rotary control selects the input source (AM, FM, FM with MUTING, PHONO, and AUX) and there are separate tone-control knobs for the bass, midrange, and treble ranges. Each has eleven detented settings, with the center being a fully "off" flat-response condition. Below the frequency readout are two large concentric knobs for volume and balance (the latter with a center detent). Other controls include pushbuttons for individual speaker selection of two sets of outputs and the power switch with an adjacent red pilot light. There is a headphone jack on the panel. Next to the input selector are two three-position lever switches for the tape-dubbing and monitor functions with two tape decks (it is possible to dub from either deck to the other without interrupting one's listening to a regular program source).

The tuning controls of the STA-2250 are two large rectangular buttons, marked DOWN and UP, mounted at a slight upward.
since the receiver will stop only when a receivable signal is interpreted.

The rear apron of the STA-2250 contains phono jacks for the inputs and outputs, with DIN sockets paralleling the functions of each set of tape-recording jacks. Simple screw terminals are used for speaker outputs and antenna connections, and the terminal plates for speaker A are paralleled with phono jacks for simplified connection to phono inputs and outputs, with antenna connections, and the terminal plate for speaker B has a black metal top and rear. The wooden side plates are walnut veneered. The receiver at about 76 watts, well before clipping occurred. The first time this happened, we were at a loss as to how to get the amplifier working again. The instructions do not explicitly state that the power must be turned off for a while and reapply to turn the receiver on after the protection has tripped, although this is implicit in the manufacturer's suggested trouble-shooting procedure.

The IHF clipping headroom was 1.37 dB, based on the STA-2250's 8-ohm ratings. Since it is not rated for the other impedances, we can only note the maximum power outputs we measured at the clipping points. With the tone-burst test signals of the IHF dynamic-power test, we measured maximum unclipped outputs of 81 watts, 128 watts, and 156 watts per channel into 8-, 4-, and 2-ohm loads, respectively. The maximum 2-ohm power, even with the 20-millisecond tone burst of this test, was limited by the tripping of the protection circuit. The 8-ohm dynamic-headroom rating of the amplifier was 2.1 dB. The overload-recovery time was less than 5 microseconds, a totally negligible figure, and complex loads had no effect on the amplifier's waveform or its stability. The IHF slew factor was greater than our measurement limit of 25.

The amplifier sensitivity for a 1-watt reference output was 22.5 millivolts (mV) through the AUX input and 0.29 mV through the PHONO input. The respective A-weighted noise levels were -81 and -79 dB, referred to 1 watt. The phono preamplifier overloaded with a 180-mV 1,000-Hz input. Equivalent overload inputs at 20 and 20,000 Hz were 240 and 115 mV. The phono-input impedance was 47,000 ohms in parallel with 270 picofarads. This capacitance is slightly high, although most modern record players will add only about 100 picofarads to it, placing the total capacitance within the usable range for most good cartridges.

We also measured the amplifier's intermodulation distortion with two equal-amplitude input signals, at 19,000 and 20,000 Hz, whose combined peak value was equivalent to that of a sine-wave signal of 50 watts output. The third-order distortion at 18,000 Hz was -67 dB and the 1,000-Hz second-order product was -84 dB, both referred to a 50-watt output. The amplifier tone controls had conventional characteristics. We noted that the midrange control affected frequencies from 300 to 4,000 Hz, although it had relatively little effect near those extremes. With the knobs at their center positions, the frequency response was perfectly flat, obviating the need for a tone-control bypass switch. The loudness contours were well chosen, affecting only the lowest frequencies (under 200 Hz) and to a slight extent the frequencies above 7,000 Hz when the volume setting was reduced. The cutoff slope of the low-frequency filter appeared to be approaching 12 dB per octave below the audio range, but the high filter had a gradual 6-dB-per-octave slope. Their respective -3-dB response frequencies were 40 and 6,000 Hz. The RIAA phono equalization was accurate within 1 dB overall from 35 to 20,000 Hz. There was a slight change in the high-frequency phono response when it was measured through the inductance of a typical magnetic phono cartridge (about a 2-dB variation).

The FM tuner section had an IHF usable sensitivity of 11.8 dBf (2.1 microvolts, or μV) in mono. The stereo sensitivity was set
by the switching threshold of 21 dBf (6 µV). The 50-dB-quieting sensitivity was 13.8 dBf (2.6 µV) in mono and 37.8 dBf (40 µV) in stereo. At a 65-dBf (1,000-µV) input the distortion was 0.19 per cent in mono and 0.11 per cent in stereo. The respective noise levels were —72.5 and —68 dB. A two-tone intermodulation-distortion measurement was made with the signal generator modulated 100 per cent by equal-amplitude signals at 14,000 and 15,000 Hz. Spectrum analysis showed third-order distortion components at 13,000 and 16,000 Hz at a —45-dB level relative to the primary modulating tones, and a second-order component at 1,000 Hz at 50 dB relative to 100 per cent modulation at that frequency. The stereo frequency response was flat within ±0.7 dB from 30 to 15,000 Hz. It was at its maximum at the high-frequency end of that range, but the suppression of the 19-kHz pilot carrier to a low —70-dB level in the audio outputs suggests the use of either very effective filters or a pilot-canceling circuit in the tuner section. The tuner's stereo crosstalk was low and very uniform, changing from about —42 dB at 30 Hz to —37 dB over most of the audio range and dropping to —32 dB at 15,000 Hz.

The FM-tuner capture ratio was 1.5 dB at 45 dBf (100-µV) input, and the AM rejection was 62 dB at that level (both figures were slightly better at 65 dBf). The image rejection was an excellent 90 dB. Alternate-channel selectivity was also excellent at 81 dB, and the adjacent-channel selectivity was 4.4 dB. The muting and stereo thresholds were identical at 21 dBf (6 µV). The tuner hum level was —68 dB. The AM-tuner frequency response was down 6 dB at 30 and 3,100 Hz.

Comment. When we tested the Realistic STA-2200 receiver we were highly impressed with its absolute performance and with the value it represented at its $600 price. The new STA-2250 made an even greater impression on us, since it is in many ways improved over the STA-2200 and certainly shows no signs of any performance sacrifice. The principal omissions in the new model, compared with the older one, are the deletion of the Dolby FM decoder and the clock, plus a few control simplifications such as removing the power indicators, selectable tone-control turnover frequencies and bypass switch, and automatic scanning of the programmed channels. The only significant omissions in the STA-2250, in our opinion, are the separate preamplifier outputs/main-amplifier inputs found on the STA-2200.

To counter these deletions, the lower-price (by $170) STA-2250 has more memories (eight compared to six), a midrange tone control, audio filters, and what we consider to be an improved front-panel layout. Also, in the FM tuner we found image-rejection and selectivity characteristics, among other things, that were outstanding for a receiver in this price range.

Despite the manufacturer's repeated warnings about not using the STA-2250 with load impedances of less than 4 ohms, it seems better able to cope with such operation than most receivers we have tested. The protection circuit is highly effective (it gave the impression of being infallible, but that is always a risky inference), and we doubt that anything could be damaged if one were to use the receiver with a low-impedance loudspeaker load. Even though the output shut off at some 158 watts into 2 ohms with a 20-millisecond signal repeated twice per second, the waveform distortion was negligible at that point, and we doubt that most very brief program peaks would trip the protection system.

Although we do not allow the AM performance of a receiver to affect our overall appraisal of its merit, it is worth mentioning that the STA-2250, whose AM frequency response is no better than that of similar receivers, sounds very much better than most of them. This is because it has a high effective sensitivity and does not seem to be susceptible to the buzzing interference that usually makes AM reception a practical impossibility at our location. By assigning the AM and FM outlets of a well-known good-music station to the same programmed button, we could make A-B comparisons between them; the STA-2250 acquitted itself very creditably, the major difference being the expected loss of high-frequency response in AM reception. From the standpoint of noise and distortion there was remarkably little difference.

When the STA-2200 first appeared, fully digital receivers were far from common. Today, most manufacturers include at least one such product in their line, so the STA-2250 is not unique even in its price range. Nevertheless, it impresses us as being at least as good a buy as its predecessor, and it comfortably met or surpassed all of the performance ratings for which we could test. We found it a thoroughly fine receiver at a very reasonable price.
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MUSICAL CLARITY

To the truly uninitiated, the clarity of musical sound as it comes off a record is completely a function of the latest and best in reproducing equipment and the latest and best in recording techniques. But, with all due respect to digital recording and $2,500 amplifiers, these technological contributions are only the tip of the iceberg. Musical clarity, the quality that allows us to hear the details in a musical performance, rests on a whole lot of other things.

Yes, recording and reproducing equipment are important. You aren't going to hear low organ pedal tones if your speakers don't go below 80 Hertz, and if the recording came off a Pentron tape deck operating at 3 3/4 ips, a great deal of the original sound will simply not be there. But he who does the recording as well as what is also critical. There have been bad digital and bad direct-to-disc recordings (and many bad quadraphonic ones), and producer Robert von Bahr, for example, who owns and operates Bahr Records in Sweden, does not employ digital techniques or direct-to-disc or even use Dolby noise reduction—and yet he produces records of superb musical clarity.

Going back a step further, clarity also depends on the performing musicians and what instruments they play. Some instruments are easier to record than others and some instrumentalists may be easier to record than others. But forget about recording and consider the comparative transparency of instruments in performance. Schubert's Trout Quintet, for example, is scored for piano, violin, viola, cello, and bass. In most performances you will simply not hear the bass at any time the left hand of the pianist is playing; the opacity of tone of the lower register of the modern piano simply covers it. But there was a recording once (BASF K168 20314, with Jorg Demus and members of the Collegium Aureum—alas, no longer in the catalog) in which pianist Demus performed on a Conrad Graf piano of the early nineteenth century whose tonal transparency allowed the bass and cello to come through it and give us the Trout as Schubert meant it to be heard. There is no miracle of modern recording technique that could have accomplished the same thing.

Similar things can happen in orchestral music. For some years now the preferred orchestral sound of many conductors has been a smooth, homogenous blend, a sort of overall organ-like sound that changed subtly as instruments (siops) were added or subtracted. As effective as it might be in certain music, that sound was inimical to clarity—for example, of the wind-band/strings opposition in much Classical music. Other conductors have sought such clarity, but with modern instruments and a modern, vibrato-laden way of playing them it was only partially achieved. The new series on L'Oiseau-Lyre of the symphonies of Mozart (Volume 4 is reviewed in this issue) by the Academy of Ancient Music under Christopher Hogwood and Jaap Schroder shows the difference. Using authentic instruments (old instruments or reproductions thereof), the ensemble makes audible virtually every internal detail of the music. Again, no recording technique, no reproducing equipment could have accomplished a similar feat starting from the base of a standard orchestra.

But the final determinant of musical clarity lies not with equipment, techniques, performers, or instruments, but with the listener. An individual's physical range of hearing is a factor, of course, but what I am really referring to is the psychological matter of familiarity with the music. There is perhaps nothing that will make a clarinet or bassoon obbligato in an orchestral work quite so audible as the knowledge that it is supposed to be there. One may note how decisively or how subtly it is there, but one always hears it, unless it is not there at all, in which case one most dramatically hears its absence. Such an absence, I might add, is something you can hear no other way. The next best thing to knowing the music is being able to follow the printed score. The very appearance on the page of a line for viola will make that viola more audible to you than anything a player or engineer can do short of completely distorting the music. Do you really want to hear what's going on in music? A record chosen on a musical basis and a few dollars invested in a score may let you hear more than a $20 "audiophile" disc and $20,000 worth of equipment.
Dolby C-type Noise Reduction

Dolby C is a new noise reduction system developed by Dolby Laboratories for consumer tape recording. It provides 20 dB of noise reduction above about 1 kHz, compared to the standard Dolby B-type system's 10 dB of noise reduction above about 4 kHz. Like the original system, the new Dolby C-type system operates without side effects on virtually all kinds of program material. It does not replace the standard Dolby B system, but will supplement it in a number of new high-performance cassette decks appearing in 1981.

How Dolby C works: dual-level processing

In some respects, Dolby C-type noise reduction operates like Dolby B. When a recording is made, the middle and higher frequencies of low-level signals are selectively boosted, while loud signals are essentially untouched. On playback, the previously-boosted signals are attenuated to where they were in the original program material, thus restoring proper musical balance while simultaneously effecting noise reduction. With Dolby C, signals are boosted and attenuated more than with Dolby B. In addition, Dolby C operates down to a lower frequency to maintain subjectively uniform noise reduction across the audible range.

Dolby C-type noise reduction is based upon a new and unique dual-level processing scheme. Two sliding-band processors operate in tandem at different levels to solve the problem of achieving 20 dB of compression and expansion without introducing undesirable side effects. Dolby C also incorporates several other new developments which reduce the effects of high-frequency tape saturation and minimize encode-decode errors, so that the new system puts no special demands on the user and requires no special recorder adjustments.

What Dolby C means to cassette recording

Combined with good tape formulations and a well-engineered cassette deck, Dolby C reduces tape noise to a level below the noise of virtually any program source available now or likely to be available in the foreseeable future. In fact, even at high listening levels, tape noise is lower than the ambient noise in many listening rooms. Thus for all intents and purposes, with Dolby C-type noise reduction, tape noise in cassette recording will no longer be of any practical consequence.

Availability

The following manufacturers have announced plans to develop products incorporating Dolby C-type noise reduction:

- Advent
- Aiwa
- Akai
- Alpine Electronics
- BASF
- Chunisa
- Crown (Japan)
- Denon (Nippon Columbia)
- Dual
- Hitachi
- JVC (Victor)
- Lux
- Marantz
- Mitsubishi
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Stereo TV in the U.S.

Your audio system will soon have a whole new program source to play with

By Ivan Berger

The sound quality of commercial television will probably never be an audiophile's dream, but it is becoming less of a nightmare every day. Today's TV sound is better than ever; tomorrow's will not only be still cleaner but will be in stereo as well—and with noise reduction to boot. Japan has stereo television already, which is one reason why Japanese sets with speakers on each side of the screen have been coming over here lately. The sets that reach the U.S. market aren't true stereo models yet, though a few are set up to provide pseudo-stereo effects. Sony, for instance, has a side-to-side delay network on its consoles and, among the domestic makers, J. C. Penney and RCA use phase-shifting networks. (The delay approach sounds more like true stereo—or less unlike it, depending on your point of view.) Some U.S.-made sets with two speakers flanking the screen but without pseudo-stereo have also appeared, apparently more in an effort to improve the sound (and/or sales) than to yield any stereo effect.

But stereo TV has for some time been a hit in Japan. Within less than a year after a late-1978 introduction, about 10 per cent of all TV sets sold in Japan had built-in multiplex decoders, while virtually all other new models had output jacks for external multiplex-decoder accessories (some were available even before stereo broadcasting began). The Japanese system is currently undergoing trials here, along with two other, U.S.-developed systems from Zenith and Telesonics. (A fourth system, by Quasar, has been withdrawn from competition.) The systems are undergoing lab tests by the Multi-Channel TV Sound Subcommittee of the Electronic Industries Association, and broadcast tests over Chicago station WTTW (they have already tested the Telesonics system) will probably be finished by the time you read this.

"Provided there are no problems," says subcommittee chairman Tom Keller, "we should report our findings to the FCC in late spring or early summer. How fast the FCC responds depends on how clean the proposal is; if we go in with a proposal that everyone agrees to, I think it will go through the commission very fast; NTSC (the U.S. color system) went through fairly fast. [On the other hand, the stereo-FM decision dragged on through five years of FCC hearings, and the commission spurned an early-Sixties proposal for stereo TV on the grounds that a wide sound spread with a tiny picture made no sense. Listeners to today's stereo simulcasts know better. —I.B.] But if there is a lot of controversy, or if anyone files against, as happened with AM stereo, I think we've got a problem. Anyone can talk to the commission—\(\) we're not the only one. We're just trying to streamline things for the FCC."

Stereo won't be all we will get. Following the Japanese pattern, we'll probably have bilingual-sound capability too, despite the fearsome technical demands this imposes for very low cross-talk between channels. (In the Japanese system, there is automatic switching of the TV receiver to either the bilingual or stereo mode by means of a pilot tone broadcast by the station. In the bilingual mode, channel separation is enhanced at the expense of fidelity. For stereo, fidelity is preserved, and at least \(30\) dB of separation is maintained. With a bilingual broadcast, a manual switch enables the listener to choose the language channel desired.) We'll have noise reduction as well—and we'll need it: stereo broadcasts on TV's FM sound channels will be inherently noisier than mono ones, just as they are on the FM broadcast band. And since TV's soundtrack is less strongly modulated (it covers a range of \(\pm 25\) kHz, as opposed to \(\pm 75\) kHz), it has a smaller signal-to-noise ratio to start with. Some sort of noise reduction is therefore a must.

Noise Reduction

So far, three companding (compression/expansion) noise-reduction systems have been submitted for test—one each from Dolby, dbx, and CBS Technology.

- The Dolby system is essentially today's Dolby B, as used on virtually every audio cassette deck (and on a few videocassette ones). It reduces high-frequency noise by almost \(10\) dB.

- The dbx system is, according to the company, "a very different kind of animal" (from the familiar dbx tape- and record-noise reducers. That's because its compression and expansion ratio is much milder than the \(2:1\) ratio dbx users are familiar with. Otherwise, though, both dbx systems are similar, with linear compression and expansion over the entire frequency band.

- The CBS system is the same one they've developed for disc decoding and encoding. Unlike dbx's disc system, this one is claimed to be compatible—that is, a decoder isn't necessary to hear the encoded disc well reproduced, though it is needed to realize the noise reduction. Nonetheless, CBS Technology claims \(20\) dB of wide-band noise reduction from it.Signals \(40\) dB or more below the average level are companded 2:1, while those above that —40-dB level are untouched. "The effect," says CBS Technology, "is not heard on most pop music—no great mystery, as pop is usually highly compressed to begin with. On classical music, a panel of five hundred experienced classical-record listeners did not perceive any alteration in dynamic range when listening to the CBS system without decoders. Again, that's not a great surprise: our compres-
STEREO TV, U.S.

"As an indication of things to come, some new audio products at the Winter CES sported selector-switch positions that were labeled 'TV' or 'Video.'"

Stereo Broadcasts

Stereo TV broadcasts will probably be on the air pretty quickly once a stereo system is approved. The facilities to feed stereo sound to stations all over the country already exist. The PBS DATE (Digital Audio Television) satellite system (which is also capable of handling quadraphonic sound) and AT&T's diplexed land lines have taken care of that. If you've noticed an increase in TV/stereo-FM simulcasts in the past year or two, that's why.

More and more broadcasting studios and networks now have multichannel sound consoles too. They're not just for stereo, but to permit multitrack recording on separate audio recording decks synchronized to their video decks. Programs already taped this way over the past few years can easily be remixed to stereo for rebroadcast.

Why have stations been using multichannel tape for mono broadcasts? For improved sound. Older video decks have limited fidelity, especially as their soundtracks are on the easily damaged edge of the tape and their rotating video heads could vibrate the tape, causing flutter; professional audio decks obviously can run rings around themsonically. And multitrack decks help the audio engineer in another way, letting him use multiple microphones for selective sound enhancement. Final adjustments to sound balance can then be made after cast and crew have gone home and are off the time card (TV is one area where there's a real economic advantage to "fixing it in the mix"). In practice, though, mixing down from multichannel doesn't so much mean cheaper sound with equal quality as it does better sound for little extra cost.

Improved Studio Sound

Multiple mikes—and multitrack audio tapes—are just one way TV broadcasters have improved the sound they transmit. Another very important development is the use of new, full-frequency transmission systems that let listeners around the country hear as wide a frequency range as listeners in the city of the program's origin. Until the late Seventies, this wasn't the case, since TV sound was fed to remote stations by telephone lines with telephone-like frequency limitations. These lines rolled off high frequencies at about 5 kHz, while the TV sound channel has 15-kHz capabilities. Both PBS' DATE and AT&T's diplex system (which feeds sound with the video signal) are also 15-kHz systems.

Interestingly enough, rock music has made a contribution too, by making it fashionable for musicians to be seen with microphones in their hands. When the sound man's main duty was to keep the boom mikes and their shadows out of the picture, his opportunities for clear, close-up sound were limited.

Physical limitations of TV studios impose other obstacles to good sound. A few—mainly converted radio stations—have good acoustics for the microphone. But many—such as old theaters—were not designed with microphones in mind. Nor were the sets before which the shows are enacted. Another problem is background noise, a problem Time described way back in 1968:

Aswarm with crew, performers, musicians, cameras, dollies, cranes, lights and scenery, the studios are about as compatible to quality sound reproduction as the Youngstown Sheet and Tube Co. would be.

When video soundtracks are "sweetened" by the later addition of laughs, applause, sound effects, and equalization, the sound goes through more "generations," more losses (though Dolby A—now available as an add-on for studio videotape decks—helps somewhat). And some TV stations compress their audio to a degree that would make a rock FM station blush—a problem that can become acute when commercials with already compressed soundtracks are transmitted.

Nevertheless, TV sound engineers are finally being given some of the tools they need to do a better job. Over the years, microphones have been improved, and more directional models have appeared, while signal-handling
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electronics have become cleaner too. Some of the new 1-inch videotape recorders (with, incidentally, stereo capability) have far better sound than the old 2-inch decks. And movie soundtracks, which provide much of the sound heard on TV, have been improving over the past few years too.

Improved Home Sound

The impact of all this new broadcast technology is already being felt in the home: TV sets with audio-output jacks to feed external hi-fi systems, sets whose built-in audio systems are capable of a reasonable degree of fidelity. There's no question that these sets owe their existence to such broadcast advances. Back in the early Seventies, companies like GTE Sylvania were quoted as saying they'd pay attention to their sets' sound when—and only when—better sound was broadcast to justify it. What seemed a cop-out at the time is proving to be prophecy, with the manufacturers apparently intending to be as good as their word.

Audio-output jacks have always been with us: Clairtone and Fleetwood were advertising component-TV chassis with such jacks (and optional sound systems) back in the Fifties. Many an amplifier or preamp of the period even featured an input labeled "TV"—though either lack of demand or poor-quality signals to feed through such inputs led to their being relabeled with a noncommittal "Aux." Heathkit has had audio-output jacks on its TV receivers since it began making them. Zenith, Tatung, RCA, Quasar, JVC, Hitachi, Magnavox, GE, and others have them too. And as an indication of things to come, some new audio products at the Winter CES (see next month's issue for a full report) sported selector-switch positions that were labeled "TV" or "Video."

Sound improvements within the set generally consist of more powerful amplifiers (up to 12 watts or so), more and bigger speakers, and decent baffling to coax maximum bass from those speakers. Quasar, Magnavox, RCA, GE, and Zenith have taken this route too—at least in their more expensive consoles. In its "Super Sound" series GTE Sylvania has probably taken this approach further than anyone else, at least for the time being, with two-way bass-reflex speaker systems, separate bass and treble controls that boost as well as cut, a high filter, and an amplifier delivering 8 watts rms from 40 to 15,000 Hz at less than 0.5 per cent distortion.

Today's top-of-the-line TV sets definitely sound better than the best ones of yesteryear. But this could—and should—be only the beginning. As the trade magazine Broadcast Management/Engineering put it recently:

A changeover to a new (stereo) audio system brings a probably never-to-be-repeated chance to upgrade audio performance in general, both at the transmitter and at the receiver. If this opportunity is compromised, receiver design, in particular, may be irretrievably frozen at a lower level than the best.... the receiver has inherent faults, particularly in control of noise, that demand a substantial redesign to get us to really top-grade TV sound.

Approaches to this redesign have been announced not only in Japan but in Europe Grundig and Siemens, for example, have developed a new "Quasi-Parallel" TV-receiver sound system that not only has the advantages of today's "intercarrier" sound system (which does not greatly distort or lose sound if the tuner's local oscillator frequency drifts slightly) but of yesterday's "split-sound" systems (which did not produce the annoying "intercarrier buzz" of today's intercarrier system). Performance is claimed to include a 50-dB signal-to-noise ratio.

The Japanese approach, recently shown in Japan by Sony, is to build a home TV system, like today's hi-fi sound systems, from individual components: display monitors, tuners, and audio output systems. The system is already used in the design of broadcast video equipment. With TV components, you could choose exactly the screen size, tuner sensitivity, and sound quality desired. You could run separate screens from the same tuner (a small one for personal viewing and a big one for watching spectacular action films, for instance), then disconnect one from the system to use it as a monitor for your video tape or disc machine. With the TV picture tube's horizontal oscillator in a separate video-monitor component, its 15,750-Hz output is less likely to leak into the audio section where it might cause tweeter damage. It also becomes far easier to provide audio output flat to 15,000 Hz without having to contend with an unwanted 15,750-Hz noise signal.

Still another familiar advantage of the component approach is that it will let the individual video buyer spend his money where it will do him the most good. The fringe-area listener, for example, will be able to spend more for a super-sensitive tuner, while the cable viewer who needs less sensitivity might prefer to spend his money on a bigger screen. Some options, such as high-quality sound systems, are already available, of course: they are called hi-fi components.

A few other video components are already available here in the U.S., videocassette and -disc machines being the most obvious examples. But TV-sound tuners are components too. Pioneer's TVX-9500, which has been dropped from its line, was the best known of these. But there are others still available: Finco's T-82 Teletuner ($189.95); Radio Shack's new Realistic TV-20 ($79.95); and several TV-sound components from Rhoades (P.O. Box 1052, Dept SR, Columbia, Tenn. 38401). No reason why you can't get a little jump on the future right now.
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Stereo Review
Threws a Party...

to celebrate its Record of the Year Awards for the 1980 publishing year at New York's St. Regis Hotel on January 13. Twelve awards and twenty-four honorable mentions (see February 1981 issue) were toasted, with a special salute to guest of honor Aaron Copland, recipient of this year's Certificate of Merit (for outstanding contributions to the quality of American musical life). He is shown above (1) accepting the original of the Al Hirschfield drawing that appeared on February's cover from young American conductor Michael Tilson Thomas, also an award winner for his CBS album "The Complete Music of Carl Ruggles." A clutch of younger composers gathers (2) to tender congratulations: John Corigliano, 1980 Pulitzer Prize winner David Del Tredici, Morton Gould—Copland and Thomas—and Lee Hoiby. Copland displays his Certificate of Merit while chatting with Thomas (3) and accepts the felicitations of (4) Popsinger Lee Roy Reams (of the cast of the Broadway hit 42nd Street). (5) Harpsichordist Igor Kipnis, and (6) lyricists Adolph Green and Betty Comden. In a party mood are (7) publicist (and Stereo Reviewer) Joel Vance, reviewer Paul Kresh, and CBS Records publicists Jane Berg and Hope Antman. (8) Ubiquitous J. Vance again with Jack Romann, Baldwin Piano's artists representative, and pianist Ruth Lorenzo.

(9) Carly Simon was an award winner too (for her "Come Upstairs" album), and sister Lucy helps her cope with two glasses and one squirming daughter (10) Singer Margaret Whiting was on hand, comparing notes with cabaret artist Ronny Whyte. (11) Stereo Review's pop-music arbiters Paulette Weiss and Steve Silenlis pose with jazz violinist LeRoy Jenkins, (12) Executing William Anderson welcomes actress Beatrice Straight (currently appearing in the movie thriller The Formula), and (13) Music Editor James Goodfriend and wife Carol get a smile out of Czech pianist Ivan Moravec. (14) Pop-music Editor Weiss again, with publicists David I. Saltidor and Adrianna Kaege, lead singer with the pop group Coconuts. (15) Focus Records Mort Fega closes in on singers Barbara Lea and Bobbi Rogers while (16) composer Charles Strouse (Bye, Bye Birdie, Annie) talks shop with Betty Comden and (17) actor Jack Weston (soon to appear in Woody Allen's new play, The Floating Lightbulb) finds it hard to credit the point that Stereo Review Managing Editor Louise Bouchia is making. (18) Beth Wernick and Denmis Fine, both of Arista's publicity department, chaperone Paulette Weiss and Gregory "Screamin'" Fleeman, head honcho of G. F. and the Fleewomen, but busy Paulette is on her own with (19) Willie Nile (his latest is Golden Down) and Polydor Records Ken Reynolds. (20) Mark Johnson (of the Alligators) and Willie Nile toss off a bumper to the future of rock-and-roll, and (21) Stereo Review Publisher Sidney Holtz, opera fan, gets to deliver a personal message to Met heroine Licia Albanese. (Credits: 1. 2, 4, 7, 8, 9, 11, 14, 15, 18, 19—Ebet Roberts; 3, 5, 6, 10, 12, 13, 16, 17, 21—David Gould; 20—Richard E. Aaron.)
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STEREO TV IN JAPAN
A preview of the kind of "modular" components that are being readied for the American market

By Richard E. Varner and Aske Dam

For the American audio and video enthusiast, stereo-sound TV is an as yet unrealized technology, but multiplex stereo and bilingual TV audio have been a reality in Japan since October 1978. Tokyo's audiences were the first to get the new TV broadcasts with upgraded sound, and by the end of 1980 fully 70 per cent of the island country was receiving some type of stereophonic TV programming.

Color-TV ownership in Japan already approaches 100 per cent, and stereo sound is but another aspect of the TV medium that the country's avid TV viewers have greeted enthusiastically. According to a spokesman from the Electronic Industries Association of Japan (EIAJ), 2.5 million stereo-TV sets or adaptors have been sold since 1978, and stereo TVs accounted for about 20 per cent of domestic TV shipments during 1980 alone.

However, just as in the early years of color broadcasting, the diffusion of stereo-sound hardware is running far ahead of the programming being produced to take advantage of it. For example, NTV, a Tokyo-based commercial broadcasting company with sixty affiliates nationwide, is one of the leaders in providing stereophonic and bilingual programs, but their total weekly two-channel transmissions amounts to only twenty hours, a mere 16 per cent of NTV's total on-the-air time. The Japanese Public Broadcasting Organization, NHK, produces a little more than four hours a week of two-channel programs for their Tokyo audience, just under 4 per cent of NHK's total broadcasting time.

Still, some kind of stereo broadcast from one of seven broadcasting stations is available in Tokyo every day of the week. Prime-time TV in Japan is referred to as the "golden hours," and on a typical evening the golden hours might feature a half-hour stereo show called "Music Fair" with several top popular singers. There might also be a quiz program featuring a group of Japanese stars, the quiz master's voice coming over the left channel and the guests' over the right. A very worthwhile NHK documentary film about the fabled Chinese "Silk Road" has been broadcast with stereo background music, sound recorded on location being transmitted via the right channel and narration via the left.

Sporting events such as Japanese baseball have been very popular in stereo, and stereophonic sound does enhance the immediacy, the feeling of being right there in the crowd when "Mr. O," the local home-run king, smacks another long one to left field: ziiiiiiiaanng... whizzes the baseball from right speaker to left. During the day there are seven bilingual news broadcasts, and at the push of a button the viewer can choose to listen in to English or in Japanese. The late-afternoon viewing audience can tune in to Ameri-
STEREO TV, JAPAN

"Stereo-sound TV seems to be the forerunner of a whole range of new components for audio/visual systems."

can films broadcast bilingually, and later in the evening Starsky and Hutch will be seen battling U.S. crime on the Japanese airwaves—in a choice of English or Japanese. A really eager viewer might even be up at 6:00 a.m. for a stereo version of the Morning Show.

Equipment Categories

In the huge Akihabara electronics shopping area in Tokyo, store shelves are stocked with about five different categories of stereophonic TV equipment. The first, and unquestionably the most popular, is the stereo TV set. To give an idea of the magnitude of the selection, there are eleven different manufacturers producing approximately ninety different models of stereo TV! A stereo TV set is much like a conventional set except that it has stereo amplifiers and speakers. Matsushita's Model TH20-B15 stereo TV console is typical. It costs 218,000 yen (at 200 yen to the dollar that's $1,090) and its built-in stereo amp, rated at 10 watts per channel, feeds a pair of two-way speaker systems built into the TV cabinet. Sharp's 20-inch CT-2083 has 5.5 watts per channel and sells for 179,000 yen ($895). Over two million stereo TV sets have been sold in Japan so far at prices ranging from $500 to $3,500.

The second category includes more or less standard TV sets that are specially equipped with output jacks to which a stereo-TV adaptor can be connected. One such is JVC's 26-inch C-2669 ($1,140) to be used with the CS-15 "Multi Sound TV Adaptor" ($150). The adaptors come with built-in low-power amplifiers meant to be connected to external speakers and/or with line-output jacks for connection to a hi-fi component system. About 71,000 such adaptors have been sold to date.

The third category of stereo TV equipment is intended for use with conventional TV sets that don't have multiplex output jacks. Typical of this category is Hitachi's FTM-4500 "TV Stereodual Sound Tuner" ($260). It features a built-in "soft touch" electronic tuner that enables both audio and video to be selected simultaneously. Line-output terminals make it possible to connect the FTM-4500 directly to a hi-fi system. This tuner also features a built-in r.f. converter that functions like the one in a VCR—meaning that TV signals from the FTM-4500 can be fed directly to the antenna terminals of a conventional TV set and received via Channels 1 or 2, one or the other of which is usually unused in Japan. This enables the viewer to tune both the stereo audio and video portions of a program from the adaptor. This category of stereo TV equipment also includes units with built-in amplifiers that can drive speaker systems.

The fourth category of stereophonic TV equipment consists of VCRs capable of receiving, recording, and reproducing stereophonic sound. Typical of these is JVC's HR-3750, a VHS model selling for $1,340. This is a top-of-the-line model featuring audio-noise-reduction circuitry, LED audio-level display, and both automatic and manual control of the audio recording level.

Winding up the five different types of stereophonic TV equipment are the small (some not so small) portable radio/cassette players with built-in stereo TV tuners; some of these even have built-in TV picture tubes—for example, Hitachi's K-62MX ($479). While the program is being viewed on the black-and-white picture tube, the audio portion can be recorded in stereo on the audio cassette recorder.

One trend in Japanese stereo TV is toward "personalized" viewing and lis-
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In one of JVC's 14-inch stereo TV sets, for example, stereo listening can be done only with headphones. In December 1980, Sony further advanced the technology of such headphone listening by introducing the H-AIR headphones with built-in remote-control TV tuner and power switch. Together with the 10-inch KV-10P2 TV set, they make up the new P-AIR-10, selling for $499. Sony also has the smallest stereo-sound TV adaptor on the market, the MLV-50 ($64); it too is designed for use with headphones.

The top-end VCR models equipped with stereo-sound capability include Hitachi's Mastacs and Sony's J-9. Matsushita's MacLord VCR requires an additional TV-sound multiplex adaptor. All three of these VCRs sell for just under $1,500.

**Modular TV**

Without a doubt, the most exciting aspect of the entire Japanese stereophonic-television scene is the concept of an "expanded component system" and what many are already calling "modular TV." Several diverse fields seem to be converging. The TV set is no longer regarded as a stand-alone device but rather as a "video monitor" designed to deliver visual information within an expanded component system. Unlike a TV set, a video monitor is equipped with input terminals to receive signals from other video-output components in the system.

An early indication of the emergence of a video monitor for consumers was Hitachi's October 1979 announcement of a "color monitor" which had neither TV tuner nor speakers. The 26-inch unit ($1,000) had two video-input terminals and was intended for use with a separate receiver designed to provide both video and stereo-audio tuning.

Then, in February 1980, Sony introduced its own super-high-quality Trinitron color monitor "Profeel" (Professional Feeling). Profeel color monitors already account for 15 per cent of Sony's domestic color-TV shipments. The Profeel line includes a series of color monitors ranging from a 27-inch to a 5-inch unit, all with the same simple, basic design.

Expanded component systems of the future may be used with several other up-and-coming audio/visual technologies as well. One showroom in Tokyo's Ginza is exhibiting a color monitor that uses the Japanese Videotex system called CAPTAIN (Character And Pattern Telephone Access Information Network). The system requires an additional component, the Videotext Adaptor, which will make it possible to call up 100,000 pages of printed and graphic information for display on the color monitor. Going one step further, in November 1980 Hitachi exhibited a system that will add sound to the silent Videotext images.

Already opening up several new dimensions to TV viewing and listening in Japan, stereo-sound TV equipment seems to be the forerunner of a whole range of new components for audio/visual systems. It is only a matter of time—a short time—before they start reaching the American market.

Richard E. Varner and Aske Dam are freelance correspondents residing in Japan who work as a technical team reporting on home and commercial electronic products.
"Only connect," said English novelist E. M. Forster when asked The Secret of It All. "Hang in, just hang in," replied octogenarian actress Ruth Gordon when similarly cornered. Forster, who lived into his nineties, was talking about the collision of cultures and, on a more immediate level, about realistic expectations in human relationships. Ms. Gordon, still before the cameras in her eighty-fifth year, was talking about the ups and downs of her theatrical career. Interesting, then, that young Don McLean's new Millenium release "Chain Lightning" so aptly mirrors the life wisdom of both Cambridge don and Broadway actress. Interesting, but hardly surprising. After all, they are all three artists of considerable accomplishment who know that they can speak only for themselves, that they can teach only from their own experiences, that the very uniqueness of their talent excuses them from striking any momentarily fashionable attitudes or posing as spokesmen for their own generations.

Don McLean "connects" in many ways in his new album—most effectively, perhaps, when he gives you his experience of the way he has heard, the way he has thought of, and the way he now feels he must perform several well-loved songs of the Fifties. His stunning new version of the old Roy Orbison hit Crying, for example, is performed in a kind of pop bel canto unlike anything you've heard before or are likely to hear soon again (it's still Orbison's song, but it is now also McLean's). He does a dramatic and deeply moving performance of Paul Anka's It Doesn't Matter Anymore that is even better than Linda Ronstadt's temporarily definitive version of a season or so back. He also adds an aura of high, desperate romance to the old Hank Williams weeper Your Cheating Heart, and his nouvelle cuisine approach to that rock-and-roll ra-gout known as Lotta Lovin' brings out each mystical musical ingredient with an up-to-the-minute, almost digital clarity. But perhaps the biggest surprise for fans will be his runaway success with the Skyliners' standard Since I Don't Have You. He takes the vocal line up, up, and away into an uncharted region between falsetto and some as yet uninvited new musical instrument. It is simply the most joyous bit of pop singing he has ever done, filled with spontaneity and an almost palatable sense of wondering delight in musical discovery.

However fine his performances of genre material—and I would rank them as virtuoso level—Don McLean is also one of our finest popular composers. Over the past ten years such albums as "Tapestry," "American Pie," and "Vincent" have proved that he is not only one of the few original melodic talents currently at work in American popular music, but that he has the ability to connect his melodies to lyrics that are genuinely meaningful. Genesis (In the Beginning), with a lyric surprisingly drawn from the Good Book, not the rock group, is a magical ballad sung with the cool, controlled passion that has always been McLean's trademark. The title song, Chain Lightning, is a moody, folk-style piece delivered with just a touch of pale spookiness. It's Just the Sun is a pure, calypso-accented delight, and Words and Music an infectiously vigorous foot stomper.

If "Chain Lightning" fulfills, in every artstic sense, Forster's injunction to "connect," its release is also a happy affirmation of Ruth Gordon's wry philosophy of "hanging in." The album was recorded in 1978, but it failed to touch the delicately tuned musical sensibilities of the geniuses at—for example—become a "Son of Vincent" would have been a safe— and—safe rip-off of his own work—an "American Pie à la Mod" or a "Son of Vincent" would have been right up the old commercial alley.

So, McLean picked himself and his tapes up and took a three-year walk. That's a long gamble in any popular artist's career, but it has paid off hand-
somely. First released in England on EMI, “Chain Lightning” has gone gold in Europe and Crying has already had a six-week ride at the top of the English charts. At the time of writing, the album has been out only a week in the U.S.: Crying is on the charts and that distant roar you hear is the fast-mounting air play. Don McLean doesn’t have to prove anything to his fans, of course, but how sweet it must be to demonstrate, yet once again, that pop-music success comes not because of but despite the sage timidity of the Guardians of the Bottom Line. —Peter Reilly

Warren Zevon’s “Stand in the Fire”: First Great Live Album of the Eighties

Critics (myself included) pretty much exhausted their superlatives on Warren Zevon’s first three Asylum albums, and with justice. It was obvious that Zevon was the most interesting American singer/songwriter of the late Seventies, and certainly the only one who could legitimately be called a rocker. The combination of his remarkably intelligent music (pomp-rock fans should check out his Copland-meets-Eno orchestration at the end of 1975’s Desperadoes Under the Eaves), his abilities as a bandleader, his pop sensibility (the whole of the “Excitable Boy” album can be viewed as the bastard child of Leiber and Stoller’s work with the Coasters), and his witty, one-of-a-kind lyrical perspective (something between John Lennon and Raymond Chandler) was particularly potent. And he actually had hit records, which meant that real people liked him as much as the critics.

But his live shows were another matter. He’s terrific, was the consensus, but isn’t it a shame the manic intensity of his songs doesn’t have an analog in his performing style? Why couldn’t he loosen up, become a bit more of the showman? Last year’s tour in support of “Bad Luck Streak in Dancing School” put an end to that, however. Zevon danced around like a buffoon, stripped shirtless in a manner suggesting that he is an avatar of Mark Farner of Grand Funk Railroad, and generally carried on like a hyperactive teenager perfecting his arena-rock moves in front of a bedroom mirror. It was well intentioned, but it was also, to say the least, embarrassing, and a lot of Zevon loyalists began to wonder if he was as good as they’d cracked him up to be.

Well, now comes “Stand in the Fire,” a live document of that very tour, and it proves that, without the topless visuals, Zevon is even better than we suspected. In fact, he’s made the first great live album of the Eighties; in its combination of brilliantly mad material and raunched-out guitar attack, it’s worthy of comparison to the Stones’ heretofore incomparable “Get Your Ya-Yas Out.”

Some of the fun is purely technical. Unlike most recent live records from major artists, “Stand in the Fire” was recorded in a small club, and the result is a remarkable immediacy. You not only feel you’re there, you feel almost as if you’re breathing down Zevon’s neck. There’s none of the cavernous unreality of say, the current Eagles or Fleetwood Mac sets. Instead, there’s the glorious sensation of having a raucous rock-and-roll band jamming for the sheer hell of it in your basement.

And what a band! Zevon apparently found the little-known musicians who back him here performing covers of his tunes at some dive of a bar, and while they are the least photogenic ensemble in recent memory (no teen idols here!) they nonetheless respond to the big-league challenge with everything they’ve got: it’s a joy to hear them shred the parts originally played by the Asylum fat cats who normally back Jackson Browne and Linda Ronstadt. Perhaps not since Dylan and the Band has there been such a felicitous match of solo artist and back-up; in fact, with only one or two exceptions, the performances here make the original versions sound positively effete. Excitable Boy, for example, has not a hint of the Fifties revivalism inherent in the studio take; there is instead a coiled-spring intensity and a truly classic rave-up. Likewise the ever-popular Werewolves of London (complete with some hysterical lyrical changes courtesy of the composer). As done here, it has an over-the-edge feel that suggests a rock equivalent of such trash-film classics as The Texas Chain Saw Massacre.

WARREN ZEVON: he could annihilate your house plants
The rest of the record? Well, the new songs are wonderful. The title tune is one of the best on-with-the-show openers anyone has ever penned, and The Sin, a lyrically explicit punk pastiche about cruelty and guilt, simply wipes the floor with most of what Elvis Costello has written on those subjects. Either one could be a hit single as is, and if there's any justice one of them will be (think of the radio segue out of the latest limp Barbara Streisand kitsch!)

Best of all, the pacing is merely brilliant: to paraphrase Sam Goldwyn, the album begins with a hurricane and then builds to a climax.

In short, this is the L.A. rock album for people who've always hated L.A. rock, a genre classic, and an exhilarating document of one of the great warped sensibilities of our time. If this man had a slightly better voice he'd be thoroughly dangerous; as it is, he's made a record that could annihilate your house plants.

—Steve Simels

WARREN ZEVON: Stand in the Fire

Warren Zevon (vocals, guitar, piano); David Landau (guitar); Zeke Zirngiebel (guitar); Bob Harris (keyboards); Roberto Pinon (bass); Marty Stinger (drums). Stand in the Fire; Jeannie Needs a Shooter; Excitable Boy; Mohammed's Radio; Were-wolves of London; Lawyers, Guns and Money; The Sin, Poor, Poor Pitiful Me; I'll Sleep When I'm Dead; Bo Diddley's a Gunlinger/Bo Diddley. ASYLUM 5E-519 $8.98, SC5-519 $8.98, ST8-519 $8.98.

Infectious Spontaneity, Superb Sound for Fascinating Franck Piano/Orchestra Works

How does Robert von Bahr find all those splendid performers he has introduced on his Bis label? Are they really that special, or is it an illusion enhanced by the crisply realistic sound this independent Swedish producer achieves with his relatively unelaborate means? Kerstin Åberg, I'm convinced, is not only really that good, but must have been born with some special circuitry attuned to the music of César Franck, whose two concerted works—Les Djinns and the Symphonic Variations (both with the Gothenburg Symphony Orchestra under Okko Kamu)—are big solo piece, the Prelude, Chorale, and Fugue, she plays on a new Bis release.

A line on the album jacket lists the numbers, but not the titles, of a few earlier recordings Åberg made for this label; whatever they may be, I'm sorry I missed them, but I'm very glad I did not miss this one, for I've never heard any of these works more persuasively set forth. Les Djinns, in particular, is revelatory. This tone poem for piano and orchestra after Victor Hugo is not a very familiar work; we encounter it only on records, and no prior recording of it, not even Richter's (which I admit to recalling only dimly now, and which was certainly recorded dimly), made it nearly so attractive. The pacing is broad, the momentum superb, the atmosphere enchanting, the pianism itself marvelous.

The same level of performance is evident in the much better-known Variations, and in both the orchestral contribution under Kamu is not only first-rate in its own right but exceptionally well integrated with Åberg every delightful step of the way. There is no letdown in the Prelude, Chorale, and Fugue, either. Åberg takes a rather deliberate view of the long middle section, but again, as in Les Djinns, her expansiveness is effectively balanced by an unfailing sense of momentum that evokes a most enlivening feeling of spontaneity. How infectious her exceptional response to these works becomes! What fascinating pieces they are, after all! This is a stunning release in every respect.

—Richard Freed


Blondie's "Autoamerican": An Album of Good Tunes, Stylish Lyrics, and Impressive Performances

My friends look at me as if I've finally gone over the edge, but I say unto you as I do unto them: check out the new Blondie album "Autoamerican." The people who make up Blondie may not have a "Sgt. Pepper" in them, but this is their "Tusk" at very least. It starts with a grandiose and well done instrumental written by Chris Stein, letting you know right off that this is a project with some ambition behind it, and then it goes on to deal with a variety of music evoking the past, present, and future with some startling vocal and instrumental textures and colors. It's the most pleasant surprise I've experienced since the first time I managed to pick Wildwood Flower (Continued on page 74)
CAMEL
Where a man belongs.

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9 mg tar.

9 mg. “tar”, 0.8 mg. nicotine av. per cigarette by FTC method.
Blondie's Chris Stein and Deborah Harry: partners in an ambitious project.

(I'm acoustic) without messing it up.

Deborah Harry doesn't dominate this album the way she has the others, nor does the hit-and-filler policy obtain.

I had always thought there was something striking and necessary about both the sound and look of Harry and that the rest of the band was just competent back-up for her. Not so in this case. And, too, most of Blondie's hits had struck me as clever melodic thievery, pastiches of bits of other songs (and, indeed, 'Here's Looking at You,' a period piece by Harry and Stein, sounds far too much like 'Give Me the Simple Life'), but this album is full of good and not-too-derivative tunes.

The lyrics don't compare to Pink Floyd's or Ian Anderson's big-project lyrics, having no big thematic ideas behind them, but they pass the time with style and an attractive, off-beat humor.

It's the performances that are most impressive. The instruments are lively and quick, often surprisingly appropriate, and they complement Harry's salty vocals beautifully. The band is definitely more versatile—and seemingly more committed—than I've given it credit for being in the past. I'll happily amend that assessment and vow to cut down on the snide remarks (there's still Heart to pick on) as soon as I can stop dancing around the room here.

—Noel Coppage

BLONDIE: Autoamerican. Deborah Harry (vocals); Clem Burke (drums); Jim Destri (keyboards); Nigel Harrison (bass); Frank Infante, Chris Stein (guitars). Europa; Live It Up; Here's Looking at You; The Tide Is High; Angels on the Balcony; Go Through It; Do the Dark; Rapture; Faces; T-Birds; Walk Like Me, Follow Me. CHRYSALIS CHE 1290 $7.98, © CH 1290 $7.98, © 8CH 1290 $7.98.

Heinz Holliger and Friends: Splendid Performances of Works For Oboe and Strings

SWISS oboist Heinz Holliger and four Italian members of I Musici got together in Japan to make a superb digital recording of German eighteenth-century music, and it is now available in these United States on the Denon label as an import. That's the (geographical) way it goes nowadays in the classical-music business.

The Mozart adagio on the recording is an oddity: late and unfinished, it had to be completed by other hands from a sketch of twenty-eight complete measures and only the English horn part for the rest. It is a tribute to modern musical scholarship that such restorations can be effected, as here, with not a seam showing. The quartet by Johann Christian Bach, once thought to be by Joseph Haydn, is a rich and appealing work that deserves the splendid performance it gets. The two Michael Haydn pieces are much slighter, but they are not without their subtle charms. Holliger is a simply wonderful oboist—and English hornist as well—and the string players are excellent partners. The PCM/digital recording is superb, with a tight, clean sound that is nevertheless not lacking in the proper spaciousness.

—Eric Salzman

HEINZ HOLLIGER: Chamber Music for Oboe and Strings. Mozart: Adagio in C Major for English Horn, Violin, Viola, and Cello (K. 380a); M. Haydn: Divertimento for Oboe, Violin, and Bass (P. 99); Quartet in C Major for English Horn, Violin, Cello, and Bass (P. 115). J. C. Bach: Quartet in B-flat Major for Oboe, Violin, Viola, and Cello. Heinz Holliger (oboist and English horn); Antonio Salvatore (violin); Massimo Paris (viola); Vito Paternoster (cello); Lucio Bucarello (bass). DENON 0 OX 7185 ND $15.

London's New William Tell: An Operatic Masterpiece Gets the All-star Cast It Deserves

THE nineteenth-century English critic Francis Toye was at least partly right when he observed that Guillaume Tell is "a splendid monument to Rossini's musicianship, but it is not Rossini himself, as the lighter operas are, because ... Rossini had nothing of the heroic in his nature, and a subject like William Tell, to come wholly alive, demands such a quality." And yet, though he failed to break away from his buffo style and to find a musical expression worthy of lofty sentiments and grand aspirations in his earlier Semiramide and Otello, Rossini did succeed in doing so with William Tell; it is unquestionably a masterpiece. Bellini, Meyerbeer, Berlioz, and Verdi hailed it as such, and their view has not been challenged by posterity despite recurrent reservations about the opera's stageworthiness. Owing to its
length and the awkwardness of its construction, *Tell* has suffered neglect as well as insensitive mutilations in the past, but now its musical riches are ours to enjoy either in the original French, as issued by Angel several years ago (S-3793), or in London's newly released Italian version.

The Angel set, which I reviewed here in December 1973, is a first-class effort, but the new recording is even better; all the London principals, for example, are stronger than their Angel counterparts. One of this opera's intrinsic problems is an episodic construction that causes the audience to lose sight of the hero for long stretches of time. But Sherrill Milnes, in outstanding voice throughout in the title role, makes so commanding an impression that his heroic presence seems to animate every scene, even those in which he does not appear.

Luciano Pavarotti sings the role of Arnold, a character whose romantic involvement initially weakens his patriotic resolve; he also leaves the stage on occasion, but his returns—a brilliant show-stopper of an aria ("O mio sarit") and several ensembles in which he plays a crucial part—never fail to be musically rousing. Pavarotti rises to the vocal challenges unstintingly, pouring out effortless high Cs and displaying, in one passage at least ("Carl, onesti e dolci accenti," Act II), the honeyed tones and phrasing of his early years. Mirella Freni (Matilde) sings the haunting "Selva opaca" with sensitive lyricism, but she is equally convincing in her scene with Ferruccio Mazzoli (Gessler), where angry passions are called for.

Except for the tonally undernourished tenor who sings the role of the Fisherman (his, unfortunately, is the first voice we hear), the minor roles are also in good hands. Nicolai Ghiaurov is a substantial Gualtiero (Walter), John Tomlinson brings a rich tone to the music of the ill-fated Melchthal, Mazzoli is an appropriately menacing Gessler, and Piero de Palma, that king of the comprimari, can still make a substantial contribution after some thirty years of service. The rest are competent or better.

Leaving the conductor for last seems a bit unfair, because Riccardo Chailly directs the opera with great vitality and conviction, sustaining a dramatically effective momentum throughout. The credit is largely his that in the beautiful but at times repetitious ensembles (such as the trio for Matilde, Edwige, and Jenny in Act IV) beauty reigns while possibly tedious length is barely noticed. The familiar overture, too, gets a model rendition, with special praise due the cello principal.

Unlike the first Guglielmo Tell (Cetra 1952, later Everest), this edition is, to the best of my knowledge, complete. The familiar dance sequence, *Passo a sei*, is given not in context but as an appendix. One can understand the reason for this, but nothing is said about it in the notes. The album production is not quite on the level maintained by London's sister companies Deutsche Grammophonic and Philips, but the performance is tops. —George Jellinek

ROSSINI: William Tell. Sherrill Milnes (bass), William Tell, Elizabeth Connell (mezzo-soprano), Edwige; Della Jones (soprano), Jemmy; Luciano Pavarotti (tenor), Arnold; John Tomlinson (bass), Melchthal; Ferruccio Mazzoli (bass), Gessler; Mirella Freni (soprano), Matilde; Piero de Palma (tenor), Rodolfo; Nicolai Ghiaurov (bass), Gualtiero; Richard van Allan (bass), Leutoldo; Cesar Antonio Suarez (tenor), Fisherman; John Nobel (baritone), a Hunter. Ambrosian Opera Chorus; National Philharmonic Orchestra; Riccardo Chailly cond. LONDON OSA 1446 four discs $39.94, @ OSA5 1446 $39.94.

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**BEST OF THE MONTH:**

**RECENT SELECTIONS YOU MAY HAVE MISSED**

**CLASSICAL**

- Beethoven: Piano Concerto No. 1, in C Major, Op. 15. DEUTSCHE GRAMMOPHON 2513 302. "The work has not been better served in its many recordings. (January)
- Luciano Pavarotti, Vincenzo Avanzini. LONDON 10210. "Every selection represents rich-toned, committed, exceptional vocalism." (March)
- Rachmaninoff: Piano Sonata Nos. 1 and 2; Polka on a Theme by V. A. C. M. 3064-1. "A triumphant final volume in Ruth Lee's survey." (January)
- Ravel: Boléro. RPSO SPAIN; Alfons Beltz. RCA ARCD-1866. "Razor-sharp performances, a blockbuster digital recording." (February)
- Schubert: Winterreise. DEUTSCHE GRAMMOPHON T921 118. "The one to have." (February)
- Shostakovitch: Symphony No. 12, Op. 113 ("Soviet Far") ANGEL 52 3761. "Probably Andre Previn's finest recording to date." (March)
- Verdi: Rigoletto. DEUTSCHE GRAMMOPHON 2740 225. "Gust's ponderously lyrical view ... places this new set above all others." (January)

**POPULAR**

- Roy Acuff: Sings Hank Williams (For the First Time). ELEKTRA 60-287. "One master pays tribute to another ... should become a collector's item." (March)
- Bobby Bare: Drunk and Crazy. COLUMBIA JC 38785. "Sermonic country rock ... basically art-hypocrisy in a good-old-boy mode." (February)
- Ron Carter: New York Stick. MILESTONE M-9096. "For those who know real jazz from polyester." (January)
- Aretha Franklin: Aretha. ARISTA AL 9538. "The Queen of Soul back in peak form." (February)
- Donny Hathaway: In Performance. ATLANTIC SD 10328. "A posthumous edition is a treasurable legacy." (March)
- Michael Wycoff: Come to My World. RCA APL-3823. "A polished debut album by a promising young multi-talent." (March)
- Neil Young: Hawks & Doves. REPRISE HS 2297. "Back to basics with one of the originals." (March)
Popular Music Briefs

John Lennon's final live performances, with Elton John at Madison Square Garden in 1975, are finally being released, as a single, by DJM Records. Lennon dueted with Elton on the Beatles' 'I Saw Her Standing There' (which John introduced as having been sung originally by 'an old estranged fiancé called Paul') and Lucy in the Sky with Diamonds, plus his own 'Whatever Gets You Through the Night (I Saw Her ...') was available previously as the B-side of Elton's 'Philadelphia Freedom.' EMI owns the album rights to the entire concert, excerpts from which have appeared on Elton's 'Here and There' LP; they may yet issue the whole thing.

The Grateful Dead concert reported on in the January issue has gotten the band in a bit of legal hot water. New York's Radio City Music Hall, where the concert was staged, is suing the Dead to the merry tune of $1,250,000 to prevent the release of a live album, a videodisc, and a poster the group planned to document the event. The Hall was not amused by 'references to illegal drugs and sex acts during the performances' or by the poster, allegedly showing 'two macabre skeletons' leaning on the Music Hall's exterior, which the Dead wanted to use as the cover of its Arista album. The concert was also witnessed by some twenty thousand macabre Dead Heads in Long Island's Nassau Coliseum via closed-circuit TV.

Fantasy Records has lately made a most embarrassing discovery: its current hit 'Creedence Clearwater Revival: The Royal Albert Hall Concert' was not recorded at the historic London pleasure palace but rather somewhere in Oakland. The error, blamed on 'inadequate master-tape labeling' (should we inaugurate an Understatement of the Year contest?), is being corrected by a shamefaced Fantasy. Future pressings will be labeled 'Creedence Clearwater Revival: The Concert.'

ABBA, the Swedish hitmakers whose music earnings now exceed $100 million worldwide, will soon be selling public stock in a new subsidiary, a real-estate firm they acquired six months ago. Further, according to artistic business manager Stig Anderson, the group, already Sweden's most profitable business organization, plans to list their Polar Group of companies on the New York and London stock exchanges in two years. All this enables the band to stay at home and off welfare in Sweden: without such diversification, the group would have to deal with that country's 85 per cent tax bite. Talk about national treasures.

The late and great John Lennon was the客家 格拉斯耐特 Lou Reed, who got out of his contract with RCA Records by forcing them to release "Metal Machine Music," a not exactly prize-winning two-record set consisting entirely of electronic feedback, has nonetheless re-signed with RCA after five years with Arista. No word on whether "M.M.M.".

A dam and the Ants, whose "Kings of the Wild Frontier" album for Epic had the honor of displacing John Lennon and Yoko Ono's "Double Fantasy" from the number-one spot on the British charts, may be on their way to becoming the first big cult band of the Eighties in Los Angeles (where else?), for example, there is already an antsy copy band, called Mad Society, whose members dress up in Ants-like Indian garb and whose lead singer is a mere twelve years old! One might conclude that some pretty fast PR footsie has been choreographed for the group, whose records (only just released in this country) sound like warmed-over Gary Glitter but whose costumes owe something to the Village People. Is nothing new?
will be reissued, but a new studio album will be forthcoming this year. WEA (England) has released John Lennon's Woman single in cassette form, an experimental packaging move that several American labels are watching with interest. The next WEA cassette will be new Pretenders material.

Queen's Another One Bites the Dust, which has sold three and a half million copies to date, has been declared the biggest-selling single of 1980 by Variety. The disco-flavored tune has been adopted as the theme song of the Detroit Lions football team. Though Robert Stigwood's Times Square, the film that was supposed to do for New Wave rock what Saturday Night Fever did for disco, died the death in the U.S. it has just opened in England, where it may face a similar fate. Said the Melody Maker critic: "It deserves a place in the next edition of The Fifty Worst Movies of All Time, perhaps eclipsing even Santa Claus Meets the Martians." Jazz great Sonny Rollins will be the surprising featured soloist on at least one cut of the new Rolling Stones album, still scheduled for early summer release. Former Sex Pistil Johnny Rotten is talking of abandoning his singing career (currently with Public Image Ltd.) for the small screen. The enfant terrible of punk rock is a fan of the long-running English TV soap Crossroads and covets the role of the black-sheep son on the show. Rotten has confessed to having "started liaisons [sic] with certain members of the cast about getting a job." Sting, bass player of the Police, turned down (smart fellow) the role of the punk rocker in Neil Diamond's ill-received remake of The Jazz Singer. New York area cult favorites Shrapnel recently made a cameo appearance (as themselves) in Marvel Comics' The Amazing Spiderman (does that count as a gig?). And former Playboy Playmate and inconstant girl friend Bebe Buell (ex of Todd Rundgren and Elvis Costello, among others) debuted her new band, the B-Sides, as the opening act for Rick Derringer in New York recently. She shouldn't give up her day job. —S.S.

Disc and Tape Reviews

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

ABBA: Super Trouper. ABBA (vocals and instrumentals). Super Trouper; On and On and On; Our Last Summer; The Piper; The Way Old Friends Do; and five others. ATLANTIC SD 16023 $8.98, © CS 16023 $8.98, © TP 16023 $8.98.

Performance: Ambitious
Recording: Very good

It would appear that Benny Andersson and Bjorn Ulvaeus—writers, arrangers, producers and the middle 50 percent of ABBA—are reaching for higher things than pop/rock. Having assimilated all the characteristics of American and British songwriting and production, they now seem to be aiming for what Americans would understand as Broadway-musical potential—and they might just make target.

"Super Trouper" contains some of the usual ABBA staples—formula ballads like The Winner Takes It All and calculated hit-single items like the title tune. But there is something different and more ambitious about Happy New Year, a look back at the 1970s as a decade when, unlike the 1960s, nothing stirred people to embrace a cause with passion. Several other selections also break ABBA's commercial pop-hit pattern. The Piper, for instance, is a highly orchestrated but unabashed neo-folk song, and The Way Old Friends Do is extremely sentimental. ABBA has always been polished, but I welcome their new substance. J.V.

JON ANDERSON: Song of Seven. Jon Anderson (vocals, keyboards), instrumental accompaniment. For You for Me; Some Are Born; Don't Forget (Nostalgia); Heart of the Matter; Hear It; and four others. ATLANTIC SD 16021 $8.98, © CS 16021 $8.98, © TP 16021 $8.98.

Performance: Airy
Recording: Good

Jon Anderson doesn't seem quite as annoying here as he did when he perpetrated similar stuff for Yes. There are subtle improvements in his writing, although he still comes on now and then like a witch doctor from outer space. As singers go he's almost all stylist, but his piping, reedy voice is one of those you recognize instantly. Days, an uncharacteristically filled with concrete imagery, is sophomoric in concept (a snippet of "lyric poetry" that is all lush, romantic description), but it is craftily rendered and it has a nice tune. Don't Forget (Nostalgia) is quite a skillful evocation of the feel of Fifty-Fives rock-and-roll, and Take Your Time is decent and surprisingly down to earth. The rest is spotty. The title song, running over eleven minutes, doesn't sound too bad (many of these arrangements are reminiscent of Yes' but simpler and usually more sensible), but the lyrics are like the Anderson of old—would-be mystical but without reference points that might suggest Anderson knows what the hell he's talking about; in a word, vague. Some of the album, though, could go with some of your moods. N.C.

THE BLACKBYRDS: Better Days. The Blackbyrds (vocals and instrumentals), vocal and instrumental accompaniment. Dancing, Dancin', Better Days; Do It Girl; Love Don't Strike Twice; What We Have Is Right; and five others. FANTASY F-9602 $7.98.

Performance: So-so
Recording: Fine

The now Byrd-less Blackbyrds are still creating dance-tempo r-&-b/pop hybrids, but whether these new days, without the group's founder and original producer Donald Byrd, are truly better days is open to doubt. The ten songs in this new album are sung in the group's familiar strong, tightly harmonized style. But song after song is punched out with a percussive monotony that wears thin very quickly.

It's a shame, because the aggressive production drowns some subtle, jazz-oriented musicianship. The title song, especially, has interesting, jagged solo instrumentals going on that I wished I could hear better. The ballad Do It Girl has enormous potential, but it too is pounded out of shape. Only when the rhythm section contributes to a song's intent, instead of laying effects on (Continued on page 79)
Under a tin roof in a hurricane: miking 42nd Street's tap-happy choristers

Nostalgia Pays Off: the New "42nd Street"

Hearing "42nd Street," that ultimate example of the movie musical, coming out of our loudspeakers in a new RCA recording is just about as unlikely an event as seeing the long-gone French liner Normandie slipping once again into its West Side Manhattan berth. One would have thought that this celluloid relic was permanently locked in the amber of the Thirties, to be taken out and admired occasionally only by film cultists, but producer David Merrick had the bright idea of remounting it on Broadway (where it always really belonged) as a stage musical. Under the brilliant direction of Gower Champion (who, sad to say, died the day of the New York premiere), "42nd Street" promptly emerged as perhaps the superhit of the Eighties.

The new "42nd Street," thank goodness, isn't all that new, at least from what I hear in the original-cast recording. It still has the same delightfully lame-brained script, now rewritten by Michael Stewart. For those of you without total recall, it is the oft-told tale of the Chorus Girl (Wanda Richert) who, under the driving guidance of the megalomaniacal Director (Jerry Orbach) trying for a comeback, is able, on short notice, to take over for the incapacitated Star (Tammy Grimes) and become a Brilliant Success. And it still has, praise be, the wonderful songs of Harry Warren and Al Dubin, including such fixtures of hit parades past as Young and Healthy, Shadow Waltz, You're Getting to Be a Habit with Me, Lun

laby of Broadway, Shuffle Off to Buffalo, We're in the Money, Dames, and 42nd Street. All are nearly a half-century old, and believe me when I tell you that your ears will find them fresher than mint after twenty years of rock, punk, and new-wave noise.

The performances are merely marvelous. Tammy Grimes, whose voice has deepened and darkened over the years so that it now sounds like musk on the rocks, sings such things as The Shadow Waltz and (particularly) You're Getting to Be a Habit with a kind of spaced-out ritard in her phrasing and a theatrical grandeur in her diction that make her sound like some glorious hybrid of Tallulah and Sophie Tucker. She isn't camping; she's doing something far more difficult and daring. She's re-creating, for contemporary ears, the sound of what legit singing stars of the past sounded like, contributing in the process that extra note of personal flamboyance without which no one ever got to be a star in the old days.

Jerry Orbach sings only one number, but it is the immortal Lullaby of Broadway. He not only brings to it all of his savvy as one of Broadway's best leading men, but is also able to suggest—vocally—the aviator-goggles-and-white-silk-scarf grandiloquence of Julian March, the character he plays. This number alone, with its massed choral effects, its thunderous tap routines (haven't you too always found something oddly ominous in those Busby Berkeley production numbers?), and its wonderful use of stereo is worth the price of the album. The production, by Thomas Z. Shepard, has the style and dash few recorded musicals deserve these days—and even fewer get.

Wanda Richert is just fine as ingenue Peggy Sawyer. She fails to duplicate the ripe Noo Yawk idiom Ruby Keeler lavished on the part in the movie, but she does have enough stamina and know-how to keep up with Ms. Grimes in their duet About a Quarter to Nine and more than enough high spirits for the huge 42nd Street. Carole Cook is something of a discovery. She has two numbers in which she absolutely shines, the raucous and very funny Getting Out of Town and the lilting Go Into Your Dance. Whenever I heard her on the album, even only as part of a production number, my ears perked up. There's something very "right," in the sense of Broadway theater singing, in everything she does, a commanding ease and naturalness.

The rest of the cast sound as well-rehearsed, as part-perfect, and as demonically tap-happy as they would if the "real" Julian March had been directing them. The sonics are superb, particularly in the tap-dancing numbers, which make you feel as if you're trapped under a tin roof in a hurricane. The whole album has the speed and snap that always characterized the work of director Gower Champion. It is therefore a fitting memorial—but of the celebratory kind.

-Peter Reilly

top, does the album come together in truly satisfying music. It happens in the Latinized Without Your Love and the genuinely exciting disco-ized Do You Want to Dance, but it doesn't happen often enough. I.C

GEORGE BURNS: In Nashville. George dates. He produced this session and has given us an emotional, even manic, and best not left entirely in charge of himself or his recording dates. He produced this session and has given the vocal work to Paul Jacobs, who provides yeoman service but nothing beyond that. Nor is the band more than proficient: that good old rocker Dizzy Miss Lizzie doesn't have the easy glide it should have, though everyone hammers away at it most indistressingly. Buchanan's essay of Secret Love is a mistake; despite his sentimental nature, he finds it hard to be gentle and throttles the tune instead of caressing it. My Sonata, which he wrote, is more successful. He is, of course, unique in his long blues pieces, and Blues for Gary is a violently exciting tour de coeur. Let's hope that next time he finds a band that can support his voice. Burns ambles his way through such hogwash as Inflatable Dream and Sonatas, Blues for Gary; Dizzy Miss Lizzie; My Babe; Dr. Rock and Roll; and four others. WATERHOUSE 12 $7.98.

Performance: Furious
Recording: Very good

Roy Buchanan is such a dominant personality and stylist on the guitar that he's heard to his best advantage in the company of his peers, who keep him on an even keel because they can (or almost can) keep up with him. Unfortunately, when he's backed by a functional but undistinguished group, as he is here, he swamps everybody else and might as well be giving a solo recital.

Buchanan is a great talent—impulsive, emotional, even manic, and best not left entirely in charge of himself or his recording dates. He produced this session and has given the vocal work to Paul Jacobs, who provides yeoman service but nothing beyond that. Nor is the band more than proficient: that good old rocker Dizzy Miss Lizzie doesn't have the easy glide it should have, though everyone hammers away at it most indistressingly. Buchanan's essay of Secret Love is a mistake; despite his sentimental nature, he finds it hard to be gentle and throttles the tune instead of caressing it. My Sonata, which he wrote, is more successful. He is, of course, unique in his long blues pieces, and Blues for Gary is a violently exciting tour de coeur. Let's hope that next time he finds a band that can support his voice.

ROY BUCHANAN: My Babe. Roy Buchanan (guitar); Paul Jacobs (vocals, keyboards); Gordon Johnson (bass); Ron Foster, Dan Brubeck, Richard Crooks (drums). My Sonata; Blues for Gary; Dizzy Miss Lizzie; My Babe; Dr. Rock and Roll; and four others. MERCURY SRM-1-6001 $7.98.

Performance: Still behavin'
Recording: Good

It seems (and it's probably true) that I've been hearing George Burns sing Ain't Misbehavin' all of my life. He sings it yet again here, and this rendition is as much fun as all the others. This time out he's been fitted with a "Nashville sound," which is to say that there are several guitars strumming along in the background as well as a saccharine chorus that tracks his every vocal move. No matter. Burns ambles his way through such hogwash as Inflatable Dream (about high prices) and the syrupy It's Good to See You Smiling Again with all his familiar, old-time, vaudevillian charm. Jolson he's not. Chevalier he's not. Burns, thank God, he is.


GEORGE BURNS: In Nashville. George dates. He produced this session and has given the vocal work to Paul Jacobs, who provides yeoman service but nothing beyond that. Nor is the band more than proficient: that good old rocker Dizzy Miss Lizzie doesn't have the easy glide it should have, though everyone hammers away at it most indistressingly. Buchanan's essay of Secret Love is a mistake; despite his sentimental nature, he finds it hard to be gentle and throttles the tune instead of caressing it. My Sonata, which he wrote, is more successful. He is, of course, unique in his long blues pieces, and Blues for Gary is a violently exciting tour de coeur. Let's hope that next time he finds a band that can support his voice.
Strung Out: Love Shock; and five others. 20th Century-Fox T-619 $7.98, ® C-619 $7.98, ® 8-619 $7.98.

Performance: Smooth  Recording: Good

While "Heavenly Body" is hardly remarkable, it is smoothly executed and spirited enough to stimulate at least a few ripples of interest. For the most part, the first side is pretty standard stuff, typical of male soul interest. For the most part, the first side is enough to stimulate at least a few ripples of interest. "Heavenly Body" is hardly remarkable.

Two sentimental goodies, All I Wanna Do Is Have You Seen Her, followed by pretty standard stuff, typical of male soul interest. For the most part, the first side is enough to stimulate at least a few ripples of interest. "Heavenly Body" is hardly remarkable.

For the most part, the first side is enough to stimulate at least a few ripples of interest. "Heavenly Body" is hardly remarkable.

These boys have the touch, all right. They've obviously heard the new smooth black sound washing over the land, and they have adapted its strings and sweet harmonies to their own busy, funky rhythms. The result—especially in up-tempo songs such as Too Tight and in the ballad Give Your Love to Me, with its powerful vocal—is spontaneous-sounding and very likable. Furthermore, the arrangements throughout "Touch" give free rein to Con Funk Shun's instrumental talents. Not one song is allowed to stagnate; each repeat is actually a variation of either the rhythm or the melody, incorporating lots of imaginative musicianship. Two examples: the excellent trumpet and guitar breaks in Kidnapped! and the dramatic workout the strings get in Welcome Back to Love.

CON FUNK SHUN: Touch. Con Funk Shun (vocals and instruments); vocal and instrumental accompaniment. Too Tight: Lady's Wild; Pride and Glory; Welcome Back to Love; Play Wid'n; and four others. 20th Century-Fox T-619 $7.98, ® MCR-4-14002 $7.98, ® MC8-14002 $7.98.

Performance: Poo Funk Fun  Recording: Okay

I have the feeling that the days of The Jazz Singer as a star-making vehicle, as it was for George Jessel on the stage and for Al Jolson at the birth of the talkies, are over. And then some. Gene Shalit, commenting on Neil Diamond's performance in the new movie version of it, said, "Neil Diamond can act the way a lox can sing." I wish there were something that punchy I could say about this new album, which contains twelve of Diamond's original songs (and two adaptations, Kol Nidre and Adon Olom) from this new motion picture. Lacking the punch, I'll feint: always a turgid talent, Neil Diamond reaches a state of lugubriousness here that would make a group of hired professional mourners sound like the Supremes.

NEIL DIAMOND: The Jazz Singer. Neil Diamond (vocals); vocal and instrumental accompaniment. Love on the Rocks; Hello Again; America; Songs of Life; Summer-love; You Baby; and eight others. Capitol SWAY-12120 $9.98, ® 4XV-12120 $9.98, ® 8XV-12120 $9.98.

Performance: Lugubrious  Recording: Good

DR. HOOK: Rising. Dr. Hook (vocals and instrumental). Girls Can Get It; Body Talkin'; That Didn't Hurt Too Bad; Blown Away; S.O.S. for Love; Doin' It; and four others. Casablanca NBLP 7251 $7.98, ® NBLP 7251 $7.98, ® NBLR 7251 $7.98.

Performance: Up and down  Recording: Good

John Hartford once wrote a song about his poor old prurient interest, and that's largely what the title here refers to, but without Hartford's sense of humor, an ingredient Dr. Hook once held dear. A lot of the songs are about, you know, doing it, and I hope doing it is not so mundane for you as several of these songs are for me. A couple of them, however, are interesting treatments of a related subject, leave-taking. Blown Away, written by Sam Weedman, and Before the Tears, by Even Stevens and Paul Overstreet. Both also profit from some good, intense vocal harmonies. And there is a strange, narrative thing by Ray Sawyer, 99 and Me, but what it mainly does is wear out a well-worn theme. The overall quality is about as varied as the program. I don't mind Dr. Hook changing and trying new things, and some of the changes do look like growth; I just don't see why their old sense of humor had to be left behind. It could have done wonders for some of these tunes.

Performance: Smooth  Recording: Good
THE EAGLES: Eagles Live. The Eagles (vocals and instrumentalists); other musicians. Hotel California; Heartache Tonight; I Can't Tell You Why; The Long Run; New Kid in Town; Life's Been Good; Take It to the Limit; Desperado; and seven others. ATLANTIC SD 2-7004-B two discs $13.98, © CS 2-7004-B $13.98, © TP 2-7004-B $13.98.

Performance: Good
Recording: Mostly very good

Jumping on the Eagles is quite fashionable these days. Although this album is just more of the Eagles' greatest hits with a little crowd noise, as an introduction to the group it's not bad at all. I say, if our children are going to learn the L.A. sound anyway, and they are, better they should learn it from the Eagles. They aren't innovators, but they do what they do with some style and taste, and they are of some use socially. Hotel California gave every kid in Middle America a better idea of what the Golden State feels like. Life in the Fast Lane was a title whose time had come, and so forth. Of course, if you have a big Eagles collection it's not bad at all. I say, if our children are going to learn the L.A. sound anyway, and they are, better they should learn it from the Eagles. They aren't innovators, but they do what they do with some style and taste, and they are of some use socially. Hotel California gave every kid in Middle America a better idea of what the Golden State feels like. Life in the Fast Lane was a title whose time had come, and so forth. Of course, if you have a big Eagles collection it's not bad at all.
HERE we are in the first flush of the Square Revolution of the Eighties, and supposedly everyone is gazing dreamily back at the Fifties as if that decade had been a social Nirvana and a cultural Eldorado. So how come Peter Allen, hip, slick, sophisticated, and liberated, whose new album, "Bi-Coastal," is out on A&M, is such a hit? Does his huge audience really know what he's been talking about, how antithetical his view of life is to our current wallow in retro morality? It's hard to believe that they've all been missing the point. At any rate, after this new album there can be no doubt at all as to what he means. The only question is whether a mass audience will knowingly accept it.

Of course, Allen's is hardly the first case of a marked sexual ambivalence stated in the work of a popular songwriter or performer. Many rock groups have touched on it, composer-performers of both sexes have coyly dropped hints, and the songs of the broadest double-entendres and the sassiest coquetry are rife with the most sophisticated, and liberated, whose new album, "Bi-Coastal," is out on A&M, is such a hit? Does his huge audience really know what he's been talking about, how antithetical his view of life is to our current wallow in retro morality? It's hard to believe that they've all been missing the point. At any rate, after this new album there can be no doubt at all as to what he means. The only question is whether a mass audience will knowingly accept it.

Of course, Allen's is hardly the first case of a marked sexual ambivalence stated in the work of a popular songwriter or performer. Many rock groups have touched on it, composer-performers of both sexes have coyly dropped hints, and the songs of the very great Cole Porter are rife with the broadest double-entendres and the sassiest insinuations. In Porter's day probably only the international set, theater people, and those "nice young men who sell antiques" found its anthem.

There is one track here, however, that surprises me, coming as it does from an artist of Allen's caliber and character. I Could Really Show You Around has a kind of sinister sleaze. It's the first Dirty Old Man song, straightforwardly performed, that I've ever come across: "I can tell you're big-city bound/By the way you came off the Greyhound/I could dress you up and then we could live it down/You could be surrounded by luxury.../All you have to do is let me take you home..." I don't really know which part of Allen's audience this is meant to entertain, inform, or amuse, but one thing is sure: Manhattan's notorious Port Authority Bus Terminal has found its anthem.

Allen's usual fine songwriting form is more evident on several other selections, including the delightful Pass This Time, the galvanic Fly Away (released as a single with Simon), and the poignant When This Love Affair Is Over. In performance his usual dash and spirit are evident throughout the album. Peter Allen may be getting perilously close to insisting that he is one of the only true Free Spirits left, but he is still a very gifted entertainer.

—Peter Reilly
for the movie of the same name, as a sort of overture and added an excellent selection of other songs old and new, her own and other peoples', and the result is a fine theme album on the subject of having to work for a living. It is a theme that involves Dolly emotionally, and that makes an important difference—to me, anyway—between this and her last few pop albums. In addition to being all surface, most of Dolly's recent hits have been trivialized by cute or smart-ass arrangements. This one is a bit overproduced in spots, and I think that Dolly (trying too hard?) oversings a couple of numbers, but the caring is there, and it gives purpose to the lovely, lilting tones she makes. Her reading of Woody Guthrie's *Deportee* is near-revisionist and very moving. And I was gratified to find Mike Settle's *But You Know I Love You* among the songs. Kenny Rogers and the First Edition recorded it about ten years ago, and it's been in my head ever since. Almost every song here is exemplary, and the album should appeal to workers on both sides of the collar-color barrier. It even appeals to people like me who play for a living. N.C.

**RECORDING OF SPECIAL MERIT**

LOU RAWLS: *Shades of Blue*. Lou Rawls (vocals); vocal and instrumental accompaniment. Cottage for Sale; Did You Ever Love a Woman; Be Anything (But Be Mine); You've Lost That Lovin' Feelin'; and four others. PHILADELPHIA INTERNATIONAL JZ 36774 $7.98, © JZT 36774 $7.98, © JZA 36774 $7.98.

Performance: Oozing blue stuff  
Recording: Very good

Although it was almost twenty years ago, I still recall the first time I heard a Capitol album entitled "Stormy Monday" and how impressed I was with this new singer, Lou Rawls, and the way he delivered some familiar blues material associated with Bessie Smith, Big Bill Broonzy, and Leroy Carr. Before coming up front on that release with the Les McCann Trio, Rawls had spent time with the Pilgrim Travelers, a gospel group that also included Sam Cooke, laying a solid foundation for a career that is now documented by nearly fifty albums.

I mention all this because the tone of Rawls' new album, "Shades of Blue," reminds me of "Stormy Monday." The voice has matured, of course, and the style has crystallized, but the soul and regard for tradition are intact. This is reflected not only in the music, but also in the photos that adorn the album sleeve: Rawls photographed by and with James Van Der Zee, a legendary black photographer. Then too, the album is produced by Joel Dorn, a man well-versed in the rich history of black music. But before you begin to think that this is some sort of documentary, let me assure you that it is simply a well-thought-out, expertly performed trek through music by Jimmy Reed, Phil Spector, Willie Dixon, and others whose sounds Rawls has absorbed over the years. There is also a rap of the kind Rawls pioneered and perfected long before Isaac Hayes dipped his vocal chords in the same honey jar. Do I love this album? You bet.

C.A.

(Continued overleaf)
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REO SPEEDWAGON: Hi Infidelity. REO Speedwagon (vocals and instrumentals) Don't Let Him Go, Tough Guys, Shakin' It Loose, Keep On Loving You, Take It on the Run, and five others. Epic FE 36844 $8.98, @ FET 36844 $8.98, @ FEA 36844 $8.98.

Performance Good Recording: Good

REO Speedwagon is the kind of standard touring band that can fill a hall in Moline, Illinois, on Saturday night and thrill the teenage citizenry. They've been at it for quite some time, and, though they're often a bit sleazy and infantile, they still know how to let loose with no-nonsense rock-and-roll.

Oddly enough, the lyrics are better than you'd expect from a band of this type. I Wish You Were There and Out of Season are applaudable attempts to rise above the average. Tough Guys is a teenybopper teaser in which the band really blasts out; it's a healthy reminder that the basic function of rock is to excite. I only wish they'd found a melody to match the lyrics on Keep On Loving You. "You should have known by the tone of my voice/But you didn't listen/You played dead but you never bled/Instead you laid still in the grass/All coiled up and his-sin."

—Paul Kresh

THE GUINNESS CHOIR: In Dublin's Fair City. The Guinness Choir (vocals); instrumental accompaniment. Cockles and Mussels/Father O'Flynn; I Know Where I'm Going; The Star of the County Down; Trotlin' to the Fair; Believe Me If All Those Endearing Young Charms; The Real Old Mountain Dew; I Have a Bonnet Trimmed with Blue, The Girl I Left Behind Me, The Irish Washerwoman, The Derry Air, The Flight of the Earl; The Last Rose of Summer; Leprechaun; Down by the Sally Gardens; She Moved Through the Fair, Lilliburlero. Olympic 6169 $5.98.
Two cuts here show that one of disco's more successful engineers, Jim Burgess, is still alive and well. The seven singing instrumentalists called Rhyze put forth a mellow sound with the safe, close harmonies you expect of pop these days. Their orchestrations are decidedly retro: lots of big-band horns and more than a touch of swing. But on 'Free and Do Your Dance' Burgess effectively surrounds their sound with tasteful, beat-focused productions. The beat also wins out over the strings on the album's best song, the joy-filled 'Relax and Enjoy.' But be warned: there's barely a glimmer of surprise in this overly sweet album.

JOHNNY RIVERS: Borrowed Time. Johnny Rivers (vocals), vocal and instrumental accompaniment. China; Borrowed Time; Dreamer; Living Alone; Give It Up For Love; and five others. RSO RS-1-3082 $7.98, © 703-C $7.98.

Performance: Too sweet
Recording: Okay

Johnny Rivers has sailed blithely on for fifteen years without changing much, though he does pull a surprise now and then (I fondly remember his update of Rockin' Pneumonia and the Boogie Woogie Flu in 1972). A sturdy vocalist with a rather limited range, Rivers still has a distinctive New Orleans accent he's never entirely lost. What keeps him in business is his choice of material: from Memphis in 1965 to Slow Dancin' in 1979, he's always shown a great deal of common sense about what songs to sing. There have been times, though, when the sailing was a little too blithe, and this is one of them. The material is adequate, but nothing grabs you. Dreamer by Moon Martin and Living Alone by Phil Everly are the two best songs and performances, but both are minor items that can neither carry nor validate the album. Rivers seems to be waiting for something to happen. Let's hope something will next time.

THE ROMANTICS: National Breakout. The Romantics (vocals and instrumental). Tommy, Poor Little Rich Girl; Stone Pony; National Breakout; A Night Like This; and six others. NEPEMKOR JZ 36881 $7.98, © JZT 36881 $7.98.

Performance: Good
Recording: Heavy

What happens when a cliché meets a bromide? Or, to put it another way, what happens when a combo from Detroit takes its inspiration from the 1960s British Invasion? Usually you get a third-generation heavy-metal band trying to sound British, but in the case of the Romantics what you get is—dare I say it?—youthful vigor and charm. There's absolutely nothing original about the Romantics, but they are a convincing, lean, and muscular dance band, second-rate in musical conception but first-rate in execution. They don't have any ideas but they do have the chops, and their album is therefore a lot of fun.

(Continued on page 87)
Rundgren Faces the Beatles

Although Todd Rundgren's focus is partly on video these days, he is still active as a musician. "Deface the Music." Rundgren's latest album as generalissimo of Utopia, is a highly controversial tribute to the Beatles. That it was released shortly before the death of John Lennon is a sadly ironic coincidence.

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The critical and popular brouhaha over Rundgren's irreverence demonstrates anew that, even after all these years, we still expect too much from the Beatles. We didn't believe John when he said, "The dream is over"; for some of us it never died, and only John's death truly convinced us the group would never reform. But the Beatles' human limitations and failings cannot invalidate their musical legacy. Todd Rundgren and Utopia have fondly but clear-sightedly reminded us of that legacy, and "Deface the Music" leaves the Beatles still lovable, warts and all.

—Joel Vance

UTOPIA: Deface the Music. Utopia (vocals and instruments): I Just Want to Touch You; Where Does the World Go to Hide; Silly Boy; Alone. That's Not Right; Take It Home; Hoi Poloi; Life Goes On; Feel Too Good; Always Late; All Smiles; Everybody Else Is Wrong, which juxtaposes the too similar A Day in the Life and I Am the Walrus.

Just Want to Touch You, a combination of From Me to You and I Want to Hold Your Hand from around 1963. The next cut, Crystal Ball, mixes Can't Buy Me Love with I'll Cry Instead. The third, Where Does the World Go to Hide, is a real gem because it so beautifully recalls the period in 1964-1965 when Lennon and McCartney were farming material out to other artists: Rundgren here re-creates the Peter and Gordon sound of World Without Love.

As the album progresses, it traces the development of both the Beatles' sophisticated technique and their emotional defenses against a fame they couldn't foresee and were unprepared to handle. Hoi Poloi (sic), based on Penny Lane structurally, mocks the British establishment's swooning acceptance of the Beatles. Feel Too Good (a blend of Fixing a Hole and Getting Better) and Always Late (a ragout of When I'm 64 and Ob-la-di. Ob-la-da) are two songs about jerks. It's worth noting that Rundgren's lyrics give them a decidedly American context. In the Beatles songs the fool is rather endearing (the British love eccentricities), but in American terms a loser is just a loser.

All Smiles is a pastiche of several Beatles-period McCartney ballads, and it deftly parodies Paul's reedy, plaintive attempts to convince listeners that he has written something substantial when he really hasn't. Besides an extended coda recalling Michelle, which is famous because of its melody although the lyrics are pap, there are references to Here, There and Everywhere, a little-remembered tune of exquisite craft both melodically and lyrically, and the typically inconsequential And I Love Her.

Rundgren's survey sensibly cuts off around 1967, when the Beatles had yielded up "Sgt. Pepper" and begun their decline with the soundtrack of Magical Mystery Tour. They had run out of new things to say and were repeating themselves, a point driven home by Rundgren's finale, Everybody Else Is Wrong, which juxtaposes the too similar A Day in the Life and I Am the Walrus.

Performance: Totally likable.
Recording: Fine.

The five Tavares brothers have made a successful career out of a special combination of music inventions.
of smooth, cool, tightly harmonized vocals and catchy funk-inspired rhythms, and they haven’t changed that combination in their newest album (their tenth). But “Love Uprising” is also filled with easy-listening charm and enriched by Benjamin Wright Jr.’s productions. The orchestral settings here are bigger, more ambitious, and more interesting than those of Tavares’ other recent albums.

There is one song here—a soul ballad called Loneliness—that ranks with the best stuff the group has ever recorded. The beautiful melody and truly fresh, staggered vocal back-ups are irresistible. Knock the Wall Down, complete with a big horn section and a tripping, happy beat, and a “praise the Lord, clap your hands” delight called Do You Believe in Love are two more of my favorites. But the whole album is a pleasure to listen to, one of the most enjoyable I’ve heard lately.

J.V.

RECORDINGS OF SPECIAL MERIT

GEORGE THOROGOOD AND THE DESTROYERS: More. George Thorogood (guitar, vocals); the Destroyers (instruments). I’m Wanted; Kids from Philly; One Way Ticket; Bottom of the Sea; Night Time; and five others. ROUNDER 3045 $7.98.

Performance: Wonderful
Recording: Good

For white kids, there are really only two ways to approach the blues. The first is the Eric Clapton/Paul Butterfield purist route, which entails practicing fifteen hours a day, developing a drug habit, and convincing yourself that you are really a seventy-five-year-old black sharecropper from Mississippi. This is an honorable tradition, and some very fine music has come from it, but it probably isn’t much fun as a life style. The second approach is to just get out there and bash, and authenticity be damned, which is what George Thorogood does. His singing is as white as Moby Dick, there are innumerable guitarists who can cut him technically, and “existentially” he’s about as “inside” the blues as Al Martino. But he’s terrific fun, so who cares?

Thorogood’s new album is, of course, a delight. It contains no surprises, no innovations, and should not be taken seriously on any level. Particularly noteworthy: the old Stranglopes’ hit Night Time, which makes the punk connection particularly explicit, and Slim Harpo’s sublime Tip On In (better known as Scratch My Back played sideways). Thorogood will probably be making music like this until he’s too old to hold his guitar, and I say more power to him.

WARRIOR ZEVON: Stand in the Fire (see Best of the Month, page 70)

COLLECTION

RECORDING OF SPECIAL MERIT

BLUES DELUXE. Muddy Waters: Clouds in My Heart; Koko Taylor: Hey Bartender; Willie Dixon: Wang Dang Doodle; Lonnie Brooks: Sweet Home Chicago; Son Seals: Don’t Throw Your Love on Me So Strong. Mighty Joe Young: Need a Friend. XRT 9301 $5.98 (from Alligator Records, P.O. Box 60234, Chicago, Ill. 60660).

Performance: Very good
Recording: Very good

These are live recordings from a Chicago summer festival featuring some of the city’s most notable blues people—one titan—in whom the town takes an understandable pride. Muddy Waters, one of the few remaining exponents of the Delta-area Southern tradition of blues singing from the 1920s, is beyond comparison. He is sensual, commonsensical, and regal. Waters’ home base since the 1940s has been Chicago; he absorbed from and contributed much to the South Side blues style which the other five performers represent so well.

Mighty Joe Young’s Need a Friend (“Talk about the blues, I got ‘em/Nothin’ in my pockets but the bottom”) is delightful. Koko Taylor has a fine time—and sees that everyone else does too—with Hey Bartender, and Son Seals gives a fine reading to Albert King’s Don’t Throw Your Love on Me So Strong. Willie Dixon, better known as a songwriter for many of the Chicago blues greats of the 1950s and 1960s, performs his own Wang Dang Doodle, originally cut by Howlin’ Wolf. Lonnie Brooks offers a proud and muscular version of Sweet Home Chicago. This is a most enjoyable collection.

J.V.
HENRY "RED" ALLEN & COLEMAN HAWKINS—1933. Henry "Red" Allen (trumpet); Coleman Hawkins (tenor saxophone); Dicky Wells, J. C. Higginbotham (trombone); Russell Procope, Benny Carter, Chu Berry, HiltonJefferson (reeds); Wayman Carver (flute), Lawrence Lucie, Bernard Addison (guitar); John Kirby (bass); Big Sid Catlett (drums); other musicians.

Someday, Sweetheart: How Come You Do Me Like You Do?, Heartbreak Blues; Jamaica Shout; Hush My Mouth (If I Ain't Goin' South); Dark Clouds; My Galvalence Gal; Ain'tcha Got Jazz?, and seven others.

SMITHSONIAN COLLECTION $R022 $8.98 (plus $1.89 handling charge from Smithsonian Institution, P.O. Box 10230, Des Moines, Iowa 50336).

Performance: Classic jazz

Recording: Fine mono transfers

Trumpeter Henry Allen and tenor saxophonist Coleman Hawkins were never partners as such, but they did work together on a number of occasions, and, because they were both on the same wavelength and both extraordinarily musical, those occasions teemed with memorable moments. Fifteen of their recordings together have been gathered by the Smithsonian Institution into an album that no true lover of the jazz tradition should be without.

All the recordings are from 1933, and the combined personnel list reads like a Who's Who of Swing's earliest days, when jazz men followed Pied Piper Louis Armstrong into phase two. Like Armstrong, Henry "Red" Allen was from New Orleans, but he had his own distinct style of playing (though his singing was strictly from the Armstrong mold). It is hard to argue with those who contend that, but for Armstrong, Allen would have been the trumpet king; lacking his esteemed colleague's flair for showmanship, however, Allen would never have become the international pop star Armstrong was. In any case, Allen's clear, crisp tone, biting attack, and melodic invention are as high a quality as any.

Hawkins, in contrast, often reached far beyond the borders of jazz. His historic recording of Body and Soul, made in 1926, won him a great new following as well as renewed respect from the jazz community, and his rhapsodic recordings with strings were popular FM fare in the Fifties and Sixties. I find it hard to pick favorites in this set, but I have always particularly enjoyed flutist Wayman Carver's work on a series of sides produced for British Decca by bandleader/bassist Spike Hughes (the notes erroneously attribute production to John Hammond), and two of these, Sweet Sue, Just You and How Come You Do Me Like You Do?, had both Allen and Hawkins in the band, so those tracks have been included here.

My only complaint about this album is that the discographical information is incomplete and poorly laid out, but what a treat the music is for the ears.
not to be Faulknerian about it, but my grandfather's uncle, I believe it was, had a narrow escape from Jesse James and a dozen or so of Quantrill's Raiders one time in western Kentucky. He had been bad-mouthing them and they'd heard about it, and when he met the horsemens on the road they recognized him though he didn't recognize them. They asked him to ride along—to show them, they said, where a third party lived. After a few miles, they met a friend of his (my grandfather's uncle's, that is) who managed, by hand signals, to tell him to get the hell out of there, and at the next opportunity he spurred his horse off into the woods.

A lot of families in the West and Midwest probably have similar stories. Although my own personal favorite outlaw was Sam Bass (because he was literary; he used to write funny letters to the editors of Texas papers, taunting the law for not catching him), Jesse James is clearly the people's choice among your legendary bad men. Now A&M has chosen to tell his story, in song, for its first "country" album. It isn't really a country album, despite the presence of Johnny Cash, Emmylou Harris, and Charlie Daniels and despite Levon Helm's Southern accent. It is a rock album designed to appeal to urban cowboys, most of whom would, as Larry L. King has said, die of exposure if they were outdoors longer than two hours.

Still, it isn't too bad. Oh, the story may be a bit familiar, coming this soon after The Long Riders. And it has that western-movie habit of hiring a great cast to make up for a mediocore script. Harris, the outstanding voice here, plays the cousin Jesse married, and she has a couple of decent songs to sing. Daniels is impressive as Cole Younger because he has such a flair for narrative, and Helm (Jesse) and Cash (brother Frank) manage to elevate the mundane stuff they have to sing, which serves the story line more than it serves music.

The album needs one really good piece of music to tie it together, or maybe a recurring instrumental theme like Pictures at an Exhibition (they should have asked John Williams to write one). As it is, you have to want the story (or be content with the stars) more than you want real songs. Then again, it wouldn't go too badly in an urban cowboy's apartment, the sound bouncing now off a Bloomingdale's Stetson, now off a Cuisinart.

The Legend of Jesse James

Levon Helm, Johnny Cash, Charlie Daniels, Emmylou Harris, Albert Lee (vocals); instrumental accompaniment: Quantrill's Guerillas: Northfield—the Plan; High Walls; One More Shot; Six Gun Shooting; Help Him; Jesus; Riding with Jesse James; Northfield—the Disaster; Heaven Ain't Ready; For You Yet; Wish We Were Back in Missouri; Have You Heard the News?; Hunt Them Down; Ride of the Redlegs; The Old Clay County; The Death of Me. Recorded 1981. A&M SP-3718 $8.98, © CS-3718 $8.98, © 87-3718 $8.98.

Performance: Superb
Recording: Very good

In my past praise of Chico Freeman, I don't believe I have left a single superlative unissued. I have to have to repeat myself, so let me just say that his new Contemporary release is exquisite. If that does not suffice for you, perhaps I should add that "Peaceful Heart, Gentile Spirit" embodies all that is vital to the making of jazz. This is music of substance, an eclectic blend of the very finest ingredients that ought to satisfy a wide range of tastes. Rhythmic excitement, melodic beauty, stunningly shaded orchestral colorations, whimsy, and deep emotion are just some of the experiences awaiting you in the work of Chico Freeman, clearly my choice as the most valuable player of 1981.

The NUMA Band

Russ Irvinson (trumpet, flugelhorn); Jack Baron (soprano and tenor saxophone, flute); Bob Sutter (keyboards); Ernie Denov (guitar); Dave Lang (piano) and his men is sufficiently strong to mask any casualness. Ford has yet to develop the strong character of the more outstanding of jazz, but I have no doubt that he will. In the meantime, we can enjoy the true jazz spirit and melodic invention with which he feeds his surging horn, the sensibility with which he approaches such gentle material as Billy Strayhorn's Chelsea Bridge, and the originality that shines through his compositions.

Recording of Special Merit

CHICO FREEMAN: Peaceful Heart, Gentile Spirit. Chico Freeman (flutes, clarinet, soprano and tenor saxophone), James Newton (flute); Jack Hoggard (vibraphone); Kenny Kirkland (piano); John Koenig (cello); Buster Williams (bass); Billy Hart (drums); Paulinho da Costa, Efrain Toro (percussion). Freedom Swing Song; Morning Prayer; Look Up; and two others. CONTEMPORARY 14005 $7.98.

Performance: Superb
Recording: Very good

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Recording of Special Merit

HELEN HUMES. Helen Humes (vocals); Connie Berry (piano); Charlie Howard (guitar), Al Aunty (bass), Summer. More Than You Know, Come Rain or Come Shine, Ain't Misbehavin', Embraceable You, and five others. AUDIOPHILE AP 107 $7.98.

Performance: Triumphant
Recording: Excellent

Helen Humes is one of the great, triumphant survivors in the world of jazz/r--b singers. She's been around for more than forty years but sounds as startlingly good today as she did in 1938 when she was sharing the vocals with Jimmy Rushing in the old Count Basie Band. This release features her in such loveables as Embraceable You, the wonderful old Harold Arlen Come Rain or Come Shine, and a vigorous Honesty Buck. Almost any night of the week you can flip on the tube and hear young and not-so-young singers (Aretha Franklin and Della Reese among them) who have been influenced by Helen Humes' style. Here's your chance to hear the real thing. Don't miss it.

THE NUMA BAND. Russ Irvinson (trumpet, flugelhorn); Jack Baron (soprano and tenor saxophone, flute); Bob Sutter (keyboards); Ernie Denov (guitar); Dave Lang (piano)
Although the Numa Band is an energetic jazz septet with plenty of enthusiasm. Doubtless you can hear their type of music anywhere in the country, even in the suburbs, but they go at it with unusual heartiness. The writing and arrangements are rather pedestrian -at times they sound almost like the Average White Band playing Pick Up the Pieces—but each soloist leaps into his spot with glee. The best track is a blues ballad, Doin' It Again and Again, with some fluent guitar by Ernie Denov and effectively moody organ chords by Bob Sutter.

Now for the sound, since the liner notes make such a point of it: the session was live, with no overdubbing, and the engineers used a stereo digital recorder for the tape, which was transferred directly to disc with no editing. The sound is excellent, but the present fascination—especially of small labels—with recording techniques reminds me of the early days of "hi-fi" when labels pressed home the point of it: the session was live, of the early days of "hi-fi" when labels pressed home the point of it: the session was live, the album turns out to be something of a product to demonstrate their prowess in the studio. Super sound means nothing if what is recorded is ordinary.

Bucky and John Jr. Pizzarelli: 2 X 7 = Pizzarelli. Bucky Pizzarelli, John Pizzarelli Jr. (guitars). Love for Sale; Pretty Women; Nuages; Sutton Mutine. Undecided, This Nearly Was Mine; and six others. STASH ST 207 $7.98.

Performance: Good Recording: Good

Bucky Pizzarelli and his son John combine forces here for a series of duets on seven-string guitars. Technically it's just fine; Bucky is a superb player and John is obviously headlining for the big time. Musically, in the matter of arrangements and attack, the album turns out to be something of a bore. Porter's Love for Sale barely survives -and performed that way. Look, I know it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just fine, it's just 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Post-disco:
D. C. LaRue

The new, post-disco style of D. C. LaRue on "Star, Baby," his latest Casablanca album, sounds a lot like that of Mick Jagger, of all people. This is not such a giant step musically for the man who wrote On Your Knees for Grace Jones, but it is light years removed from the disco milieu that originally nurtured him. LaRue's aggressive, theatrical, talk-a-song delivery in Mesmerized, Boys Can't Fake It, and most of the other tracks here is as arrogant as it would be coming from Jagger or any of his New Wave imitators. The rhythmically attractive settings, however, hearken back to the pure, mindless fun of disco. It's a remarkable sort of fusion to attempt, and when it works the results are stunning.

It certainly works in the title song, for instance, where LaRue gives an ironic twist to the cliche of the lonely star. He seems to be saying that stardom is the best cure for a broken heart, not its cause, though the lyrics are ambiguous enough to make other interpretations possible. The lyrics of So Much for L.A. also show LaRue's serious side: "I've been to parties at Chasen's/You know, I find it a drag/And if you go dancing at Studio One/They all think you're a fag.../So much for L.A." Lines like that don't come along every day.

For all their thoughtfulness, Star, Baby, and So Much for L.A. are fun songs, the latter especially being a happy, dance-energized production. Jake Box is even dancier, with a beautifully developed disco arrangement underpinning its strong, personal observations of dance-hall Romes and girls with hennaed hair and fishnet stockings.

Vocal resemblance aside, "Star, Baby" is the work of a thoroughly individual performer. I don't know where D. C. LaRue's sudden surge of conviction came from, but I think we may have another major talent in our midst.

—Irv Cohn

D. C. LAURUE: Star, Baby, D. C. LaRue (vocals); vocal and instrumental accompaniment. Boys Can't Fake It; Meter Men; She's About a Mover, Star, Baby; Reactor #2; So Much for L.A.; Jake Box; Into the Ozone. CASABLANCA NBLP 7247 $7.98, © NBL5 7247 $7.98, © NBL8 7247 $7.98.

Performance: Great
Recording: Fine mono restoration

If you haven't heard Django Reinhardt yet, prepare yourself for a revelatory experience in jazz guitar. No one before or since (he died in 1953) combined his sound, ideas, and energy. Succeeding generations of musicians and listeners have been enthralled with hennaed hair and fishnet stockings.

Django's most fertile recording period was in the late 1930s when, with violinist Stéphane Grappelli, he fronted the Quintet of the Hot Club of France. This package on Inner City includes many selections not previously available in the United States, and they are wowsers. Among the new items are 'Ise a Muggin'; a rarer song by violinist Stuff Smith; it's sung here by Freddie Tay-
lor, who also glides through I Can't Give You Anything but Love. Duke Ellington's In a Sentimental Mood is gorgeous. James P. Johnson's Charleston is taken for a rousing ride, and The Sheik of Araby is taken to the cleaners. And so on.

There isn't any adequate way to describe the effect of Django's playing (to me it always suggested diamonds thrown into a sunbeam), but I assure you it is stupendous. There are two more volumes in the Inner City series, one of Django's compositions and the other of his solo, duet, and trio dates. I heartily recommend you latch on to all three. The man was a genius. J.V.

SONNY ROLLINS: Love at First Sight. Sonny Rollins (tenor saxophone); George Duke (keyboards); Stanley Clarke (electric bass); Al Foster (drums); Bill Summers (percussion). Little Lu; The Very Thought of You; Caress; and three others. MILESTONE M-9098 $7.98.

Performance: Fine Rollins, but . . .

Recording: Odd balance

I don't know how he does it, but Sonny Rollins (still one of the greatest tenor saxophonists around, quite possibly the greatest) has managed to overcome the relative mediocrity of his accompaniment and give some stunning performances on this, his latest album. Pianist George Duke and bassist Stanley Clarke, men of great jazz potential who were bitten by the chart bug before they could show us more than the tip of their talent, here prove that they have spent too much time in fusionland, and drummer Al Foster sounds uninspired. Rollins deserves meritorious mention for rising above his surroundings, but those responsible for the recorded sound deserve several demerits for the awkward balance.

C.A.

CYBILL SHEPHERD: Mad About the Boy. Cybill Shepherd (vocals); Stan Getz (tenor saxophone); instrumental accompaniment. Triste; Speak Low; Do It Again; This Masquerade; I'm Old Fashioned; and five others. INNER CITY IC 1097 $7.98.

Performance: No

Recording: Good

Cybill Shepherd's film career is in the doldrums and her progress as a pop singer hasn't exactly been meteoric. This album, recorded in 1976 and only now released, may help explain why. The only excuse for its release would have to be Stan Getz's fine and stylish work on tenor saxophone. Shepherd's attempts to elucidate the complexities of lyrics by Noel Coward (Mad About the Boy) or Lorenz Hart (If Never Entered My Mind) left me as bewildered as I would be if a waiter in a Chinese restaurant suddenly burst into a medley of Ethel Merman's greatest hits.

P.R.

RECORDING OF SPECIAL MERIT

SMITHSONIAN JAZZ REPERTORY ENSEMBLE: Music of Fats Wailer and James P. Johnson. Bob Wilber (clarinet, soprano saxophone); Dick Hyman (piano, organ); Dick Wellstood (piano); Jimmy Maxwell (trumpet); Jack Gale (trombone); Major Holley (string bass); Panama Francis (drums). Caprice Rag; Old Fashioned (Continued on page 95)
THE guitar boom that started with the folk-music fad in the late Fifties and rode the rock wave through the Sixties to the Seventies has given us a handful of players who are making their mark in jazz as we go into the Eighties. As the younger guitarists—men such as Larry Coryell, Steve Kahn, and Ralph Towner—explore new paths, they are ever mindful of those trod by such esteemed predecessors as Lonnie Johnson, Django Reinhardt, and Charlie Christian. Having won the ears of rock and fusion fans, the recent crop of jazz-oriented guitarists is in a good position to open the minds of new generations of listeners to the musical riches of the past half-dozen decades.

Four splendid new jazz-guitar albums offer tangible evidence of the instrument's ability to survive even the most severe pollution of the jazz waters. Larry Coryell and Steve Kahn have each crossed over into fusion and rock with great success, but neither has turned his back on jazz; when they toured together in the mid-Seventies, they played the compositions of some of their jazz colleagues with gentle, sensitive, acoustic sounds when a juiced-up, plugged-in approach would surely have won them a wider audience. Since then, both have delivered excellent albums on a variety of labels, and their latest individual sets, on Arista/Novus, are stunning examples of the depth of their listening experience and the heights to which they have brought their art.

Kahn's "Evidence" features compositions by Wayne Shorter, Joe Zawinul, Lee Morgan, and Horace Silver on one side and an 18½-minute medley of Thelonious Monk tunes on the other. The material is all interesting in itself, but Kahn's handling of it (assisted by guitarist David Russell Young) is what makes this album a remarkable asset to a jazz library. I would have preferred less reverb on Kahn's guitar, for even though the empty-ballroom sound does not obscure the creativity here, greater presence would have made this an even more palatable offering.

Coryell's acoustic sound on "Standing Ovation" does have presence, and the album—dedicated to the memory of pianist Bill Evans—is generally more pleasing to the ear than Kahn's. That is not to say that I find it musically superior; it is rather like considering two fine pieces of prose and favoring one over the other because it is set in a more pleasant typeface. Coryell's album features mostly his own compositions, but there is also a Spiritaul Dance by the Indian musician Dr. L. Subramaniam, who plays violin and tambura in a hot evocation of Oriental traditions. For about two minutes here, Coryell switches to piano, but that is not where he is at his best. Listen to him draw from the blues tradition on Sweet Shuffle, combine it with Spanish traditions on Moon, and flip the pages of guitar history in the course of Ravel and Wonderful Wolfgang. Standing ovation? Yes; in this case it is definitely called for.

A more introspective approach to the guitar is found on Ralph Towner's new ECM release, "Solo Concert." Towner has recorded prolifically in various contexts but perhaps most notably as a member of Oregon, the chamber group that grew out of the Paul Winter Consort ten years ago and, as far as I know, continues to thrive. Classically trained, Towner plays with tremendous facility and an engaging sense of dynamics. There is less of a pure jazz feeling in his work than in that of Coryell or Kahn, and Towner's direction seems to come more from South America than the American South; but when the creative impulse comes from the player's soul, it matters only that he is communicating and not what language he does it in.

GUITARS of a different generation are heard on another live album, "Great Guitars at the Winery," a Concord Jazz release featuring Charlie Byrd, Barney Kessel, and Herb Ellis, who as a group go, appropriately enough, under the name Great Guitars. This, their fourth album, was recorded last summer at the annual "Vintage Sounds" concert held in the Paul Masson Mountain Winery in Saratoga, California. You know Masson—he's the guy who will let nothing be sold before its time (whatever that means), so it is fitting that this album's program is dominated by tunes that are as tasty today as when people first tapped their feet and swayed their bodies to them decades ago. Messrs. Byrd, Kessel, and Ellis uncork each tune with tender care and let it bubble delicately into the air; if the bubbles occasionally send a quiver through your body, you can be sure that it is by design. Nothing flat about this album.

—Chris Alberston

STEVE KAHN: Evidence. Steve Kahn (guitars, percussion); David Russell Young (guitars). Infant Eyes; In a Silent Way; Melancholiee, Threesome, Peace; Thelonious Monk Medley: Think of One; Monk's Mood; Little Rootie Tootie; Monk's Dream; Pannonica; Bye-Ya, Ruby, My Dear; Friday the Thirteenth. ARISTA/NOVUS AN 3023 $7.98.

LARRY CORYELL: Standing Ovation. Larry Coryell (guitars, piano); Dr. L. Subramaniam (violin, tambura on Spiritual Dance). Discotexas; Excerpt from "A Lark Descending" [sic] by Vaughan Williams; Ravel; Wonderful Wolfgang; Piano Improvisation; Sweet Shuffle; Moon; Park It Where You Want It; Spiritual Dance. ARISTA/NOVUS AN 3024 $7.98.

RALPH TOWNER: Solo Concert. Ralph Towner (guitars). Spirit Lake; Ralph's Piano Waltz; Train of Thought; Zoetrope; Nardis; Chelsea Courtyard; Timeless. ECM ECM-1-1173 $8.98, © M5E-1173 $8.98.

CHARLIE BYRD/BARNEY KESSEL/HERB ELLIS: Great Guitars at the Winery. Charlie Byrd, Barney Kessel, Herb Ellis (guitars); Joe Byrd (bass); Jimmie Smith (drums). Broadway; Air Mail Special; Body and Soul; You Took Advantage of Me; So Danco Samba; Sheik of Araby; Straighten Up and Fly Right; Just in Time. The Talk of the Town. CONCORD JAZZ CJ-131 $7.98.
Dick Hyman and Dick Wellstood are eminently qualified to represent the music of James P. Johnson and Fats Waller. Only two pianists besides Johnson ever did justice to the romantic poetry of his Snowy Morning Blues; one is Hyman and the other the as yet unrecorded Mike Lipskin. Wellstood's jubilant rendering of Waller's A Handful of Keys and emotional paraphrase of his Minor Drag solo are certificated of good taste. The pleasure is doubled when Wellstood and Hyman double up. Hyman plays a discreet and delicate organ counterpoint to Wellstood's piano on Waller's Jitterbug Waltz, and they have a splendid carefree time playing three-handed piano on Johnson's If I Could Be with You One Hour Tonight. Further delights are provided by the supporting combo, in which Bob Wilber and Panama Francis are standouts.

Now to quibble. I would have preferred an equal number of Johnson and Waller compositions (it's six to four in favor of Johnson), and I think a more careful selection could have been made from the Waller catalog. But this Smithsonian album is thoroughly annotated and well recorded—a handsome package for eye and ear. J.V.

RECORDING OF SPECIAL MERIT

WEATHER REPORT: Night Passage. Warner Bros. HS 3499 $8.98, © W5 3499 $8.98. (instrumentals). Night Passage: Dream Clock, Port of Entry, Rockin' in Rhythm, and four others. ARC/ Columbia J 36793 $7.98, © JCT 36793 $7.98. (surrealistic; they use modern circuitry to enhance their sounds and all, that is intelligible, even enjoyable. This is one "Night Passage" I can recommend."

Performance: Very good
Recording: Very good

If we must have space-age jazz, Weather Report seems to be about the best group we've got to get it off the ground. Perhaps that is because the prime movers of this ensemble, keyboardist Joe Zawinul and saxophonist Wayne Shorter, are no overnight fusion wonders. As veteran jazz performers, they use modern circuitry to enhance their basic jazz concepts. At times this combination of tradition and experimentation produces dazzling effects, as when Shorter's saxophone combines with Zawinul's synthesizer, or when Weather Report is brought to dance-like proportions of Duke Ellington's Rockin' in Rhythm. It may sound like an extraterrestrial reed section composed of little green swingers, but it works.

Weather Report's approach is almost surrealistic; they begin with recognizable structures, then bend and reshape them into dream-like configurations. The resultant sound images range from the frenetic visions of Fast City to the ethereal shadings of Dream Clock and the drifting, time-warp effects of Forlorn. By building on the solid ground of older forms, Weather Report makes the listeners, if anything, more conscious of the textures, eerie electronic sounds and all, that is intelligible, even enjoyable. This is one "Night Passage" I can recommend.

P.G.
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**Nonchalant; A Penny for Your Thoughts**

*PAINTED SMILES PS 1373 $8.98.*

**Performance** Fun
**Recording** Very good

Here's yet another package of vintage nostalgia from the label with the smiling pink lips. This time producer Ben Bagley has put together a perfectly lovely group of lesser-known songs from the pen of the prolific Harold Arlen and balanced them with some suave and subtle stuff by Vernon Duke. From Arlen's Life Begins at 8:40, a Broadway revue that harks all the way back to 1934, there's a medley of winners originally sung by Bert Lahr, Luella Gear, and Ray Bolger, lovingly reconstructed here by Sandy Duncan, Helen Gallagher, Jamie Rocco, and Arthur Siegel. Mr. Siegel and the quiet-voiced Blossom Dearie are especially endearing in Such Unusual Weather from a 1951 MGM musical that never got made. Several breezy numbers that should not have been cut out of Jamaica get glowing treatments from Dolores Gray and Tammy Grimes, and touching indeed is Miss Dearie's way with Promise Not to Love Me, which Arlen wrote in memory of his late wife Anya.

Vernon Duke, born Vladimir Dukelsky, is represented by relatively forgotten items from such shows as Banjo Eyes, Walk a Little Faster (words by E.Y. Harburg), The Lady Comes Across, and Sadie Thompson (words by Howard Dietz). Among them is a Big Apple tribute of 1941 with witty lyrics by John Latouche; That's Life ("Just when you're getting ahead/Bingo! You're dead"), appropriately entrusted to Mr. Siegel; and So Nonchalant, brought off as coolly as you please by Miss Duncan. Nothing as memorable as April in Paris or Sophisticated Lady in the lot, but all of it smooth and most of it very amusing.

**FLASH GORDON** (Queen). Original soundtrack recording. Queen (vocals and instrumentals). ELEKTRA 5E-518 $8.98, © 5C5-518 $8.98, © 5T8-518 $8.98.

**Performance** Star+recks
**Recording** Good

Well, Dino DiLaurentis, the King of the Clinkers (as the New York Times calls him) has done it again. His remake of the charming old Buster Crabbe Flash Gordon serials is a witless, shoddily made, incoherent piece of camp inanity without a single redeeming virtue beyond an amusingly hammy performance from Max Von Sydow. Its special effects are bargain basement, Lorenzo Semple's script makes his old Batman TV series look like Crime and Punishment, and the film fails on almost every possible level: as pastiche, as tribute, as adventure. Somewhere Alex Raymond, the pulp genius who created and illustrated the brilliant newspaper comic strip that begat this latest adaptation, must be turning in his grave.

Queen's music for all this is brilliant in a perverse way—every bit as disjointed, insipid, and inappropriate as the work of everybody else connected with the project. Somewhere Franz Liszt, whose music was profitably loaned for the Buster Crabbe version, must be turning in his grave. S.S.

(Continued on page 99)
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RECORDING OF SPECIAL MERIT


Performance: Excellent
Recording: Very good

There are pleasures galore in this generous album made up mostly of traditional ballads from such far-flung parts of the world as Herefordshire in England, the Bahamas Islands, and Lake George in the Adirondacks. A lot of the material is unfamiliar, which makes it even more interesting. Teresina Huxtable, Carol Christensen, and Liz Hood are three intrepid young women who have collected these songs and, with the help of some skilled instrumentalists, harmonize on them to a fare-thee-well. One, The Flying Cloud, is fodder for the scenario of a full-length adventure movie: its hero, shipped to the “burning shores of Africa” as a crew member on a slave ship, becomes a pirate and undergoes absolutely hair-raising ordeals at sea. Other ballads deal with temerarious matters, such as the dangers of “courtin’ too slow” and a 1715 alliance that didn’t last between France and Scotland. There’s even a tango “in the style of the Spanish fan-dango” written by Teresina Huxtable herself to conclude with a flourish a varied and distinguished compilation.

P.K.

DAVE VAN RONK: Somebody Else, Not Me. Dave Van Ronk (vocals, guitar). Michigan Water; Somebody Else, Not Me; Old Hannah: Old Blue, Casey Jones, and five others. PHILIP PH 1065 $7.98.

Performance: The hard stuff
Recording: Very good

Dave Van Ronk goes back to the heady ear- liest days of Eric Andersen, Tom Rush, Joan Baez, and Bob Dylan. His name is not obscure, having cropped up in countless books and articles about that era and about Dylan, but a lot of people who know about him have never heard his music, with one possible exception: his version of Cocaine is an about the old heroes—the way they were

Recording: Very good
Performance: The hard stuff

Band, but quite a nice time machine for un-

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matters, such as the dangers of “courtin’

too slow” and a 1715 alliance that didn’t

last between France and Scotland. There’s
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lan, but a lot of people who know about him
have never heard his music, with one possi-
ble exception: his version of Cocaine is an
about the old heroes—the way they were

meant to be slurred. Strong stuff, I guess,
for someone weaned on the Little River
Band, but quite a nice time machine for un-
reconstructed folkies.

N.C.
Krzysztof Penderecki was in the United States in January for the U.S. premiere of his Te Deum by Mstislav Rostropovich and the National Symphony in both Washington, D.C., and New York. The Polish composer is a relaxed and confident man in his mid-forties who speaks English fluently and with hardly an accent, more a citizen of the world than a Polish national, though he continues, by choice, to reside in Poland.

Penderecki has clear-cut views on music today and the place of his own music. "I am a professional composer," he said. "I can write any sort of music and I think I understand music. If I hear a piece that I cannot understand, I think that there must be something wrong. I hear much music today from which I cannot glean any personality. If I can't recognize who composed something, what good is it? It's just so much empty sound.

I have always been particularly interested in strings and voices. In my early pieces I explored writing for strings to an extent that I could not take any further. With the St Luke Passion I began to find new things in music. There is some of my older style of writing in it, but I also rediscovered for myself the counterpart of the late sixteenth century. In my recent music what I have attempted to do is to pick up the mainstream of music that was cut off earlier in this century, say around 1910." When asked about the unusual (for this century) prevalence of religious themes in his work, the composer replied simply, "I was born in Eastern Poland, near the Russian border. I grew up going to church every day. Religion was part of my childhood background.

Penderecki has been enormously impressed by performances in this country ("The brass players are spectacular and the large choruses are the best in the world—such enthusiasm!") and has virtually come under the spell of Rostropovich as a conductor. The great cellist, no matter what he plays or conducts, is a full-blooded romanticist, but, as Penderecki says, "Of course, my music is very romantic." It is also much appreciated. The Te Deum found receptive audiences and rave reviews in both cities. Recording plans are now being discussed. —J.G.

Exclusive contracts with classical artists belong to the record industry's past—with a few exceptions such as Leon-tyre Price and Van Cliburn on RCA Red Seal and Luciano Pavarotti and Alicia de Larrocha on London. CBS Masterworks has just made another exception by signing a new long-term contract with the young American conductor Michael Tilson Thomas.

Thomas is exceptional in other ways. At a time when career prospects for American conductors are generally considered to be grim, he is a welcome guest conductor with the finest orchestras in Europe and, perhaps more surprisingly, in the United States. In a two-month European tour last fall he conducted the Berlin Philharmonic, the Concertgebouw Orchestra of Amsterdam, the Opera Orchestra of Marseilles, the Maggio Musicale Orchestra in Florence, the orchestra of the Accademia di Santa Cecilia in Rome, and the Philharmonia Orchestra in London.

This season in the United States he is conducting the American Symphony Orchestra of Carnegie Hall, the Baltimore Symphony, the Buffalo Philharmonic, the Chicago Symphony, and the Detroit Symphony. Having conducted the American premiere of the three-act version of Berg's Lulu in Santa Fe in 1979, he intends to move more in the direction of opera and will make his New York City Opera debut on April 9 conducting Janáček's The Cunning Little Vixen.

Thomas won a 1980 STEREO Review Record of the Year Award for his CBS recording of all the music of Carl Ruggles. Awaiting release on CBS are his recordings of two more Beethoven symphonies in his series with the English Chamber Orchestra, Stravinsky's Petrouchka, Prokofiev's Lt. Kijé, and a half-speed-mastered version of Offenbach's Carmina Burana with the Cleveland Orchestra.

Asked to comment on the plight of the American conductor today, Thomas said: "The day of the American composer has come. The day of the American conductor will also come. I am not at all worried about it." —W.L.

The Leventritt Foundation, which helps the careers of young musicians, has just bestowed a Gold Medal Award (its highest honor) for the first time in ten years. The recipient is the nineteen-year-old Philippine pianist Cecile Licad.

From 1940 to 1976 the Leventritt Foundation selected young artists through international competitions. Musicians who won the Gold Medal Award during those years include the pianists Eugene Istomin, Alexis Weissenberg, Joseph Kalichstein, Gary Graffman, and Van Cliburn and the violinists Itzhak Perlman, Kyung Wha Chung, and Pinchas Zukerman. In 1977 the Foundation's directors rejected competitions and now make their selections after observing talented musicians over a prolonged period.

Alicia Adamek
Miss Licad began her musical studies in the Philippines and continued them at the Curtis Institute in Philadelphia, where she studied for five years with Rudolf Serkin, Seymour Lipkin, and Mieczyslaw Horszowski. In addition to a $10,000 prize, the Leventritt award includes appearances with the world's foremost orchestras over a three-year period, beginning in September 1981 with the New York Philharmonic under Zubin Mehta. Miss Licad is about to sign a recording contract with CBS Masterworks, so we should all be able to hear her soon.

Record pirates are not the only ones who make live recordings of concerts by international opera stars. CBS Masterworks is scheduled to record two song recitals by the young American diva Frederica von Stade at Alice Tully Hall at Lincoln Center in New York on April 5 and 8. Pianist Martin Katz will accompany her. CBS will record the recitals digitally, a technological feat that is, for the present at least, still beyond the pirates.

For an account of Miss Von Stade’s latest operatic recording, see the review of Monteverdi’s Il Ritorno d’Ulisse in Patria on the next page. Her recent CBS album of French songs with the Boston Symphony under Seiji Ozawa will be reviewed here next month.

<i>The</i> <b>Moss Music Group</b> has signed a licensing agreement with the Soviet Melodiya label which will give MMG first-refusal rights in the United States and Canada on all Melodiya products. In past years Melodiya recordings have appeared here on the Angel and CBS labels, as well as, occasionally, on Westminster Monitor, and Ultraphone. New Melodiya recordings, some of them digital, will appear on MMG’s new full-price label as well as on their mid-price lines (Turnabout, Candide, Vox). The first release is scheduled for June 1981 and will feature recordings by Emil Gilels, Sviatoslav Richter, Lazar Berman, Eugene Svetlanov, Vladimir Spivakov, Viktor Tretyakov, Gennady Rozhdestvensky, and the Bolshoi Opera.

<i>"I suppose that one of my problems is that I don’t look like a pianist," says pianist Robert Silverman, "When I’m introduced to people they don’t immediately envisage me seated at the keyboard whirling my way through Beethoven’s Hammerklavier Nobody knows I can play until I play." In this, Silverman joins a sizable group of eminent keyboard artists who don’t look the part, some of whom—Solomon, for example—just happen to be among his favorites. "My other problem," says Silverman, "is being Canadian.

With the retirement of Glenn Gould from the concert stage, Silverman is probably Canada’s pre-eminent “live” pianist. He plays regularly with the major Canadian orchestras, he teaches at the University of Toronto, he broadcasts for the CBC. ‘Being Canadian is not just a physical thing,’ he says, ‘but a state of mind. All my records are on American labels because there really is no Canadian classical company. That’s a tangible thing. But there is also this attitude that if it’s Canadian it can’t be much good, and most Canadians seem to share that. It’s a kind of diffidence—people in the States had to tell me how good I was before I believed it.’

Silverman has a string of top-flight records in the catalog (on Orion) and has just recorded (digitally) the Rachmaninoff Second Sonata for another label. He also has a collection of reviews of his concerts from both Canadian and American critics (including New York and Chicago) of the sort that should draw managers and booking agents like flies. He doesn’t have a U.S. manager. Is it because he’s Canadian? —J.G.

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**Disc and Tape Reviews**

**By RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH**

**STODDARD LINCOLN • ERIC SALZMAN**

- stereo cassette  - digital-master recording  - quadraphonic disc
- eight-track stereo cartridge  - direct-to-disc  - monophonic recording

The first listing is the one reviewed; other formats, if available, follow.

**RECORDING OF SPECIAL MERIT**

**BOIELDIEU: Harp Concerto in C Major. DITTERSDORF: Harp Concerto in A Major. HANDEL: Harp Concerto in B-flat Major, Op. 4, No. 6.**


**Performance:** Joyously involved  **Recording:** Rich and well balanced

Marisa Robles plays with such vitality, such joyous involvement, and such gorgeous tone that one can do with this record is enjoy it heartily. There are other recordings of all three works, perhaps equally fine in the case of the Boieldieu and Handel, but none has quite the same degree of charm or is recorded nearly so handsomely. The Dittersdorf, actually a transcription from one of his keyboard concertos by Karl Hermann Pitly, has been recorded on both the harpsichord and the piano as well as several times on the harp; to my ear there has been no performance, using any of the three instruments, nearly as delightful as this new one. My only complaint here concerns the layout: the record breaks for turnover between the first and second movements of the Dittersdorf concerto. Of course that does make it possible to include the Handel, and it is quite a substantial bonus. The accompaniment under Iona Brown is a good deal more than adequate, and the sound is especially rich and well balanced.

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**BORODIN: String Quartet No. 2, in D Major. DVORÁK: String Quartet No. 12, in F Major, Op. 96 ("American").**

Concord String Quartet. Turnabout TVC 37009 $4.98. © CT 7009 $4.98.

**Performance:** Eloquent  **Recording:** Good

My exposure to the Concord Quartet has been limited to its recordings of contemporary music. But ever since first hearing these players in the Robberg Third Quartet (Nonesuch H-71283), I’ve been curious about how they might sound in Beethoven, Schubert, and just such works as they perform on this Turnabout release. It is an eminently enjoyable record, and on the Borodin side at least, that frequent, rarely is more fetching; although it has an engaging vigor and straightforwardness, it is rather unsubtle and the finale tends to be a little headlong. Nonetheless, the group’s playing throughout both works is always handsome, always extremely musical, always well balanced. Overall, I think this package is highly competitive with the Quartetto Italiano’s similar coupling on Philips (802 814) at twice the Turnabout price. Though there are desirable versions of the Dvořák, there is no superior one at present of the Borodin. (I wish Seraphim, or perhaps Odyssey, would reissue the incomparable mono recording by the Komitas Quartet formerly on Angel 35239). Nice, warm sound. —R.F.

(Continued on page 103)
Monteverdi’s “Return of Ulysses”

The score of Claudio Monteverdi's opera Il Ritorno d'Ulisse in Patria, like that of his Incoronazione di Poppea, has survived in skeletal form: we have the vocal lines accompanied by figured bass and a few ambiguous rubrics indicating instrumental usage. Conductor Raymond Leppard, whose reconstructions of other Monteverdi and Cavalli operas have been successfully mounted in European and American houses, subjected Il Ritorno d'Ulisse to a particularly lush re-creation for the 1979 Glyndebourne Festival production, and the result was recorded and has now been released on CBS.

Leppard's version is so lush, in fact, that it should, in all fairness, be billed as a work by Monteverdi/Leppard. Taking his cue from the rich battery of instruments that Monteverdi himself listed in the preface to L’Orfeo, Leppard has the continuo realized by harp, lutes, guitar, harpsichords, and organ—underlined, what is more, by cellos and double-basses! To all this he has added the sonorities of modern strings, woodwinds, and brass. The overall sound is extremely effective. It should be pointed out nevertheless that the number and variety of instruments available to Monteverdi at Mantua for the première of L’Orfeo far surpassed the comparatively meager forces he had at the public opera house in Venice where Il Ritorno d'Ulisse was first given. Probably a simpler orchestration using strings and harpsichord would be closer to the original.

Leppard's addition of sinfonias where the action calls for them is certainly justified historically, but his use of the instruments involved seems influenced more by nineteenth-century operatic practice. Where Monteverdi would have used simple chords to accompany the dramatic monody, Leppard provides a complex instrumental accompaniment which, while reflecting the emotion, tends to straitjacket the singer's declamation. Some of the orchestral effects and tone painting verge on overkill. The harmonic language and rhythms here may be Monteverdian, but the sonorities are Straussian.

For all that, Leppard is a superb musician who understands drama. His version of Il Ritorno d'Ulisse may not be historically faithful, but it is stunning—no mere skeleton, but an effective opera full of drama and lyricism. One should also give full credit to the original composer, however, for the work has withstood the ravages of time and remained effective in its modern dress because of Monteverdi's genius at setting words. The libretto is full of subtle characterizations, tense drama, and striking contrasts, and Monteverdi catches every verbal nuance in so powerful a way that in the end it is his creation rather than any aspect of the reconstruction that makes the deepest impression.

The recorded performance is superb. The complex character of Penelope, Ulysses' wife, is beautifully set forth by Frederica von Stade. Her yearning for Ulysses' return as the opera opens seems heartfelt, and her coquetish response to the three malevolent suitors is full of sinister charm. The high-light of her interpretation is the aria "Foglialo il ciel che mia vita," which is infused with a warm glow of unquenchable hope. Even her expressions of doubt about Ulysses' identity near the end ring true. Richard Stillwell's portrayal of Ulysses presents him as steadfast and uncompromising. He moves with singleness of purpose toward the exquisite final love duet with Penelope.

The three suitors are wonderfully characterized, each a distinct individual even though their purposes are the same. It is a joy also to hear Richard Lewis as the faithful old shepherd; his sense of style is perfect for Monteverdi's vocal writing. Alexander Oliver is effective too as Iro, with an extremely moving mixture of the comic and the tragic in his final monologue. And so on for the rest of the long list of characters. Each singer remains true to his own character while contributing to the overall splendor of the timeless drama.

In many respects the finest of Monteverdi's stage works, Il Ritorno d'Ulisse is a powerful opera. L'Orfeo, though charming, reveals one character only, Incoronazione di Poppea, though also powerful, is in the end morally disturbing. Il Ritorna, however, presents a variety of fully developed characters who triumph over evil. A universal theme is expressed in an excellent libretto and projected in powerful music. We are fortunate to have such a superb performance of it committed to records.

—Stoddard Lincoln

MONTEVERDI: Il Ritorno d'Ulisse in Patria. Frederica van Stade (soprano), Penelope; Richard Stillwell (baritone), Ulisse; Patrick Power (tenor), Telemaque; Nuccio Condo (soprano), Ericlea; Richard Lewis (tenor), Eumete; Patricia Parker (soprano), Melanto; Max-Rene Cosotti (tenor), Eurimaeco; Ann Murray (soprano), Minerva; Roger Bryson (bass), Nettuno; others. Glyndebourne Chorus; London Philharmonic Orchestra, Raymond Leppard cond. CBS M3 35910 three discs $26.94.
BRAHMS: Liebeslieder Waltzes, Opp. 52 and 65 (see Speaking of Music, page 6)

RECORDING OF SPECIAL MERIT


Performance: Impressive
Recording: Ditto

Except for the celebrity of its author, these pieces seem to me to have a lot going against them. This is difficult modern music of the kind that is now distinctly out of fashion. The three orchestras play three separate—separate but equal—four-movement pieces, each with its characteristic themes, harmonies, colors, and rhythms. Carter uses the term "symphony" in its original meaning of "sounding together": the three orchestras and their independent musics literally fit together in a giant musical jigsaw puzzle. The work is four years old now, Boulez is gone from the New York Philharmonic, minimalism is the dominant force in new music, and even non-minimalists (such as this writer) tend to incorporate tonal elements into their music and to avoid intellectual puzzles and complexities—something critics and audiences in this country never liked very much anyway.

Actually, reputation is quite misleading. The Symphony of Three Orchestras is one of the best new orchestral works produced anywhere in quite a while, and it is a simply and eminently listenable piece of music—that is, a work of invention, fantasy, profile, and individuality. In my view, it takes a certain kind of oversophistication (admittedly encouraged by Carter and his reputation) to listen complexly when the real appeal and value of the music lie in qualities of directness and immediacy!

The cycle A Mirror on Which to Dwell, a setting of six wonderful Elizabeth Bishop poems, was written for the excellent Speculum Musicae ensemble as part of the Bicentennial festivities (just as the symphony was written for the New York Philharmonic on a similar commission). I like A Mirror less well than the symphony only in its treatment of the voice, which is less imaginative, less individual than the instrumental writing—not that the part isn’t beautifully sung by Susan Davenny Wyner. Speculum Musicae is one of the finest new-music ensembles anywhere, and, if the same cannot be said of the New York Philharmonic, the performance and recording of both works here are still pretty impressive.


Performance: Evocative
Recording: Lacks focus

It would appear that more pianists have been willing to take on recording all thirty-two Beethoven sonatas than to tackle Debussy’s twenty-four Préludes, but virtually all of the relatively few integral recordings of the Préludes in the last several years have been of more than passing interest, the most striking surely being Paul Jacobs’ re-

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On CBS Masterworks Records and Tapes.
Louis Nicolas Clérambault. Addressing himself to the high-flown passions of Orpheus and Medea, Clérambault etched their grief, joy, and hope in a telling and subtle musical language that only a Frenchman could have created. The fragile vocal lines are exquisitely detailed in their declamation and ornamentation, and there is plenty of passion beneath the polished Gallic veneer.

Accompanied on an Archiv recording by early instruments, soprano Rachel Yakar displays an aristocratic vocalism rarely encountered today. Trills and appoggiaturas come naturally to her, and the ornamentation never seems excessive. Her French diction is excellent, her word coloration effective. Where Clérambault's music allows the passion to rise to the surface in the form of Italianate coloratura, Yakar never loses her French sound or breaks the line of the music for the sake of mere brilliance. The instrumentalists offer firm support in their intricate obbligati. The balance and ensemble here are so fine that one is conscious only of the high quality of the music; the authentic performance practice seems unfazed and appropriate. This is vocal chamber music at its best. —Stoddard Lincoln

Clérambault: Orphée, Médée. Rachel Yakar (soprano); Reinhard Goebel (violin); Wilbert Hazelzet (flute); Charles Medlam (viola da gamba); Alan Curtis (harpsichord). Archiv 2533 442 $9.98.

Inspired, but certainly not enslaved, by the Italian cantata, the French cantata emerged in its full glory in the music of cent Nonesuch set (HB-73031). Ernest Ulmer, too, clearly seems to be "inside" this music. His approach is neither as big and bold as Claudio Arrau's in his realization of Book I (Philips 9500 676) nor as sharpened etched as Jacobs', but it is beautifully evocative in a more understated, half-hit manner that seems to underscore the impressionistic character of the music. Although so much is admirable, even stimulating, on these four sides, I found myself put off a bit by the lack of contrast between the respective pieces, and the sound is less clearly focused than it might be, particularly in the opening of side one, where there seems to be a waver. The Jacobs set, which is well documented as well as economical, remains the one to have. —R.F.

Dittersdorf: Harp Concerto in A Major (see Boieldieu).

Recordings of Special Merit

Dvorák: String Quartet No. 12, in F Major, Op. 96 (see Borodin).


Performance: Very good

Recording: Excellent, clear sound

Debussy's opera now so completely represents Maeterlinck's Pelléas et Mélisande to us that it is hard to imagine it in any other form. But it was, of course, originally a play, and a number of other distinguished composers wrote music for it over the years, mostly incidental music for theater performances. Sibelius wrote his attractive— but very Nordic and not very symbolist— Pelléas score for a Swedish translation of the play produced in 1905. Fauré, closer emotionally and artistically to the spirit of the original, wrote incidental music for a London production of 1898. This was boiled down considerably to a suite of six numbers, including one song (curiously enough, the song did not, for various reasons, end up in the Debussy opera); it is here sung— very beautifully but utterly incomprehensibly (no text provided either)—in what is described as the original English translation.

The Schoenberg is quite a different sort of work. Apparently without knowing that Debussy was working on an opera based on the play, the Viennese composer conceived a similar plan; eventually the project was turned into a giant symphonic poem à la Richard Strauss— one of the last gasps of Romanticism stretched to its limits. Schoenberg's Pelléas, which appeared in the first few years of this century, is already a way station to atonal expressionism. It seems strange that Schoenberg would have even attempted to interpret a work that is the antithesis of the Wagnerian tradition, but very Nordic and not very symbolist— Pelléas score for a Swedish translation of the play produced in 1905. Fauré, closer emotionally and artistically to the spirit of the original, wrote incidental music for a London production of 1898. This was boiled down considerably to a suite of six numbers, including one song (curiously enough, the song did not, for various reasons, end up in the Debussy opera); it is here sung— very beautifully but utterly incomprehensibly (no text provided either)—in what is described as the original English translation.

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How ironic that Schoenberg uses it as a springboard to our Tristan! If Schoenberg stretches the nineteenth century to its limits, he also stretches the capabilities of the orchestra. My first thought was that the Rotterdam Philharmonic, even under as talented a leader as David Zinman, would not be able to do the score justice. I was wrong. The Schoenberg is actually the major success of this set; the reading is both clear (it can be a mess) and powerful. The Sibelius and Faure scores are interesting to hear, but a little slow—re- fined goes a long way, and the playing is not quite elegant enough for the music. —E.S.

Franck: Les Djinns; Symphonic Variations; Prelude, Chorale, and Fugue (see Best of the Month, page 71).

Recordings of Special Merit

Gounod: Mireille. Mirella Freni (soprano); Giorgio Tozzi (tenor), Vincent Jane Rhodes (mezzo-soprano), Taven; Jose Van Dam (baritone); Ourrias, Gabriel
Bacquier (bass-baritone), Ramon; Michèle Command (soprano), Clémence, Voice from Heaven; Christine Barbaxes (soprano), Vincenette; Marc Vento (bass), Ambroise; Orchestra and Chorus of the Capitole de Toulouse, Michel Plasson cond. ANGEL S 3705 three discs $27.94.

Performance: Good to very good
Recording: Excellent

On the surface, the story of Gounod's Mireille is conventional operatic material: a thwarted romance of two lovers torn apart by squabbling families, malice, and prejudice. A surprisingly successful combination of realistic and mythical elements lifts the libretto above routine, but what gives Mireille a truly distinctive character is its glorification of Provençal customs and folk traditions (inherent in the Frederic Mistral poem Mireio, on which Michel Carré's libretto was based and to which Gounod responded with unbounded enthusiasm). Naturally, an opera so dependent upon local color is not likely to achieve international popularity, but in France Mireille has always been well received. An important revival at the 1954 Aix-en-Provence Festival even produced a fine complete recording with Janette Vivalda and Nicolai Gedda in the lead roles and André Cluytens conducting. That version (Angel 3533) disappeared many years ago, but its most welcome successor is likely to make many new friends for this worthy and beautiful opera.

Although the prevailing mood is lyrical and idyllic—and it is in such passages where Gounod's music is most persuasive—Mireille is not without passion, even violence. Most of the latter is linked with the character of the bull-tamer Ourrias, a rival of Mireille's lover Vincent. Ourrias wounds Vincent, almost killing him, and is punished for his sins in the haunted Val d'Enfer (Valley of Hell). The role is compellingly interpreted by José Van Dam, an always vital singing actor. As the cross-lobed lovers, Mirella Freni (baptismally predestined for the part) and Alain Vanzo bring commendable artistry to music that at times severely strains their vocal resources. Miss Freni, in particular, has been heard in steadier voice on past occasions, but in their duets and other lyrical portions both artists do some remarkable and unselfconscious work. The Robert Linn concertino on the other hand, twenty-minute melodic line for the soloist accompanied by a percussion "orchestra" that includes brake drums, coffee cans, flower pots, and a double bass played with beaters. The use of Esperanto is no mere affectation; Harrison concieves of his music as part of the world tradition rather than merely the Western one. In fact, without any obvious exoticism at all, he achieves a rather remarkable and unselfconscious blend of Eastern and Western musical ideas. Although the concerto was written for Anahid Ajemian, it has long been associated with Eudice Shapiro. She plays it beautifully here with excellent assistance from William Kraft's percussion group.

The Robert Linn concertino on the other
side of the disc is a rather staid bit of well-done (in any sense) neo-Classicism. The recording is on the dry side; for whatever it's worth, the disc itself is a beautiful translucent blue.

E.S.

RECORDING OF SPECIAL MERIT


Recording: Very fine

Performance: Virile

Interpretively, this first digitally mastered Planets does not reach the peaks achieved by Sir Adrian Boult and Bernard Haitink in their analog recordings, but Sir Alexander Gibson and his Scots players and singers do come through with a reading of solid distinction that is superbly recorded despite the somewhat tight sound of Henry Wood Hall in Glasgow. Mars is really menacing here, Venus emerges with unusual tonal purity thanks to the digital technology, and the evanescent textures of Mercury have never been heard to better advantage. Jupiter sounds delightfully lively and unpomposus, and Gibson's broad pacing of Saturn lends its slow, sad procession and the subterranean sonic blob. The glassy tonal fabric of Neptune achieves a truly chilly effect, and Gibson's broad pacing of Saturn lends to its slow, sad procession and the subterranean sonority that characterizes the opening movement is tempered by a subtle relaxation in lyrical passages. The slow movement is tender without ever becoming merely sentimental, and the scherzo has a nice contrast between the driving pulse of the outer sections and the sweetly lyrical middle episode with its prominent solo violin. The crescendo leading to the finale is really spectacular, almost Brucknerian in its expansion both of dynamics and sonority.

All told, this is an excellent record. The digital mastering has done justice to the full tonal spectrum, whether in the inner detail of the Mendelssohn or in the clarifying of instrumental textures in the Schumann, but the greater part of the credit belongs to Tennstedt himself and the magnificent orchestra he is leading.

KLAUS TENNENSTEDT: excellent Mendelssohn and Schumann

by expertly done nuances in the bucolic trio section with its gentle horn fanfares. In the final Saltarello Tennstedt sets a sizzling pace, and the Berlin players stay with him all the way.

The Schumann D Minor Symphony gets its first digital treatment here, and musically it is a most satisfying experience. The ruggedness that characterizes the opening movement is tempered by a subtle relaxation in lyrical passages. The slow movement is tender without ever becoming merely sentimental, and the scherzo has a nice contrast between the driving pulse of the outer sections and the sweetly lyrical middle episode with its prominent solo violin. The crescendo leading to the finale is really spectacular, almost Brucknerian in its expansion both of dynamics and sonority.

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KLAUS TENNENSTEDT: excellent Mendelssohn and Schumann

MOZART: The Symphonies, Volume 4, No. 25, in G Minor (K. 183); No. 28, in C Major (K. 200); No. 29, in A Major (K. 201); No. 30, in D Major (K. 204); Symphony in D Major (K. 203); Symphony in D Major (K. 204); Symphony in D Major ("La Finta Giardiniera."). K 196[121]. Academy of Ancient Music, Jaap Schroder (conductor) and Christopher Hogwood (harpsichord continuo), co-conductors. L'OEIL DE LA MUSA D17003 three discs $29.94, © K170K33 $29.94.

Performance: Authentic

RECORDING OF SPECIAL MERIT

This is Volume 4 of a projected seven-volume set of the complete Mozart symphonies (sixty-four, numbered and unnumbered) and the second volume of the set to be released in the U.S. (Volume 3 was ecstatically reviewed here by Igor Kipnis last May.) It has the same virtues as its predecessor: correct editions, an orchestra of authentic instruments led by both the concertmaster and the harpsichordist, spirited playing, excellent recording, and almost unbelievable transparency of orchestral sound. Actually, the balance seems even a little bit better in this volume than before. Naturally, not everything is ne plus ultra. Symphonies 25 and 29, for example, have been recorded in the past by some very eminent conductors and fine orchestras, and the earlier warmhearted versions brought to us by them as Bruno Walter and Colin Davis is not to be found here; in fact, in this set those two symphonies seem brilliant and hard-driven, though clear as crystal. But when things go right (as they most often do) they really go right. The Prestissimo finale of K. 203 must be heard to be believed. Such verve! Such dynamics! Such articulation! Such clarity! It is a whole new experience in listening. And the symphony built on the cornerstone is La Finta Giardiniera too. What wonderful charm and high spirits!

But points of interpretation aside, the value of this series is that it allows us to hear Mozart's symphonies as we have never heard them before. The early works in the volumes thus far are surely fascinating enough, but what we are really waiting for is the opportunity to hear this kind of transparent performance style applied to the complexities of some of the later, greater works. We'll just have to wait for Volumes 5 (Haffner) and 6 (Paris, Linz, Prague, Jupiter, and Great G Minor) for that.

An informative booklet comes with each volume, but the concordances to the Mozart symphonies included in it has some confusing points and some errors. K. 102 is listed as being in this volume, but seems to have been changed in some place. —James Goodfriend


Performance: Sinewy

RECORDING OF SPECIAL MERIT

Admittedly, the price differential between the first digitally mastered Pictures—$17.98 for Lorin Maazel and the Cleveland Orchestra on Telarc—and this new one with Sir Georg Solti and the Chicago Symphony is not to be dismissed lightly. The sonics of the two discs differ considerably,
but this is as much a consequence of interpretative differences as of such factors as hall acoustics and microphone placement. In sum, Solti's reading can be described as muscular, thrusting, Toscaninian, whereas Maazel's more freely poetic way with the music is akin to that of Serge Koussevitzky, who commissioned the Ravel orchestration, and Rafael Kubelik, whose 1952 recording was an interpretive/sonic landmark in its day.

I frankly prefer the Maazel disc for both interpretation and sound. Cleveland's Masonic Auditorium seems to have more of the right kind of "magic" than Chicago's Medinah Temple. But it is also clear that London opted for more close-up microphoning, and there are some very impressive passages. The handling of the "Ballet of Unhatched Chicks" seems to give each of the little beasts its own personality, and the "Hut on Fowl's Leg" bursts forth from the speakers with unparalleled ferocity. Like Maazel, Solti takes a very solemn view of the "Great Gate of Kiev" finale, ending it with an almost Brucknerian aura. Rather less understandable is the pause at the end of the "Market Place at Limoges" where the musical shock pulse comes straight into the gloomy, brassy grandeur of "Catacombs."

The somewhat dry, precise character of Solti's music making lends itself remarkably well, I feel, to the Ravelian dry tone of Le Tombeau de Couperin. Here the Chi- cagoleans are in absolutely top form (none of the shuffling feet and such that give a somewhat restive atmosphere to Pictures). Solti does marvels with the dissonant aspects of the "Forlane movement, and the final "Rigaudon" is distinguished by absolutely razor-sharp orchestral execution. D.H.

RAVEL: Le Tombeau de Couperin (see MUSSORGSKY/RAVEL.)

ROSSINI: William Tell (see Best of the Month, page 74)

SCHOENBERG: Chamber Symphony No. 1, Op. 9; Five Pieces for Orchestra, Op. 16.
Los Angeles Chamber Orchestra, Gerard Schwarz cond. NONESUCH O D-79001 $11.98.

Performance: Brilliant. Recording: Very good

The Five Pieces for Orchestra are among the most dramatic and highly evocative of Schoenberg's works, and when well played in the original full-orchestra version they can hardly fail to make a powerful impact. It was because Schoenberg's Society for Private Performances, organized in Vienna in 1918, could not afford the services of a large orchestra that the composer and his son-in-law/pupil Felix Greisule worked out a chamber-orchestra score for a dozen players: string quintet with double-bass, flute, oboe, clarinet, bassoon, horn, celesta, and harp. As played here by Gerard Schwarz's virtuoso group, the chamber version seems wholly ingenious, fascinating, and revelatory. The recording is especially revelatory in its clarification of musical texture, especially ingenious in its wonderfully effective use of the chamber orchestra both as "chamber pedal" and in places as a color source. Although the catalytic climax of the fourth piece, Perpetua, can hardly be conveyed by a chamber group, the skeletal version of the concluding Obligatory Re- ceptive seems to me a good way to get at the heart of the full orchestral score.

The 1906 Chamber Symphony for Fifteen Players finds the composer halfway between Richard Strauss and the "other plan- ets" explored in later creations, free of a tonal base and dense in texture and event. The density of the later pages of Op. 9 presents problems in realization, as much because of acoustical considerations as in terms of execution and balance. I have a special fondness for the old Pierre Boulez/Domaine Musicales recording, which was done in a bright acoustic and in a performance that conveyed superbly the nervous excitation of the piece (it was available for a time on Everest 3192). If this digitally master- tered recording of the Chamber Symphony runs a little behind Boulez's, it is not the fault of the execution, which is masterly, but because the recording locale lacks enough brightness to give sparkle to the sound and to relieve the opaqueness of the denser portions of the score. Even digital technology and the most skilled microphone placement can do little to overcome acoustic deficiencies; indeed, they tend to emphasize them. D.H.

SCHOENBERG: Pelleas und Melisande
(see FAURE)

SCHUMANN: Symphony No. 4, in D Minor, Op. 120 (see MENDELSSOHN)

SIBELIUS: Pelleas et Melisande (see FAURE)

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CIRCLE NO. 16 ON READER SERVICE CARD

STEREO REVIEW

107
aware of Strauss' subtle virtuosity in thematic transformation.

Mehta's way with the music is also on the extrovert side, but with a somewhat more rhapsodic touch in the pages that follow the thunderous climax of the "Science Fugue." This approach seems to underline the liabilities of the score's one major weak episode, the "Dance Song" with its prominent solo violin; by maintaining the basic pulse Ormandy manages to gloss over things here very neatly. For sound buffs, the most exciting section is the "Conventicent" episode with its sweeping orchestral gestures, octave trumpet fanfares, and dense, coruscating high percussion and woodwind parts. Both of the new recordings come through here with flying colors.

Episode for episode, the Ormandy reading is much the more exciting and convincing, and it also has a decided sonic edge. The room ambiance has just the right degree of brightness and reverberation to make the most of Strauss' scoring, and the Angel recording crew did a wonderful job making the most of Strauss' scoring, and the recording job is definitely in the blockbuster class.

If you already own the analog recording by Mehta or Karajan, or the later Reiner/Chicago Symphony one, it is worth hanging on. But the new Ormandy reading belongs in this elite company, and the recording job is definitely in the blockbuster class.

D.H.

RECORDINGS OF SPECIAL MERIT

VIVALDI: Il Cimento dell'Armonia e dell'Invenzione, Op. 8: Concertos Nos. 5-10 (RV 253, 180, 242, 332, 236, 362); Simon Standage (Baroque violin); Trevor Pinnock (harpichord); the English Concert, Trevor Pinnock cond. VANGUARD VSD-71273 $7.98.

VIVALDI: Il Cimento dell'Armonia e dell'Invenzione, Op. 8: Concertos Nos. 11 and 12 (RV 210, 178), Flute Concerto in D Major, Op. 44, No. 7 (RV 429); Cello Concerto in B Minor, Op. 16, No. 10 (RV 424); Simon Standage (Baroque violin); Stephen Preston (Baroque flute); Anthony Pleeth (Baroque cello); Trevor Pinnock (harpichord); the English Concert, Trevor Pinnock cond. VANGUARD VSD-71274 $7.98.

Performances: Elegant
Recordings: Excellent

The Four Seasons, the first four concertos of Vivaldi's Il Cimento, are so universally celebrated that one tends to forget that there are eight other excellent concertos where they came from. Although they lack the programmatic interest of The Seasons (except for No. 5, La Tempesta di Mare), they are strong works that show Vivaldi in a particularly virile and imaginative frame of mind. If you have the first volume of the English Concert's Il Cimento (imported CRD 1025), you will want these to finish the set, and if you do not have any of them, you owe it to yourself to rush out and get these because of the fine music and performances. There is even the bonus of a concerto each for flute and cello.

The English Concert is certainly the most satisfying chamber orchestra today among those that employ original instruments and observe authentic performance practice (as it is understood now). Under the direction of Trevor Pinnock, the musicians play old instruments for musical purposes rather than as historic demonstrations. Each ensemble's sound is pure and transparent, everything seems natural rather than studied, and the careful articulation and precise ensemble shed new light on Vivaldi's concertos. The music's rhythmic vitality, which is frequently treated as animalistic grossness by performers of modern instruments, takes on an unexpected elegance, and charm softens the rough edges.

The soloists are all tops, and never does one feel that they are attempting to overcome the limitations of an earlier technology. They are virtuosos and express themselves fully. Only in the area of ornamentation is there a lack of freedom and imagination. The few ornaments here are far too chaste, and I wished that the musicians would simply let loose. But what they do offer is of such high quality that this is a minor complaint.

S.L.

COLLECTIONS

RECORDING OF SPECIAL MERIT


Performance: Irresistible
Recording: Transparent

Cécile Chaminade, once known only by her Scarf Dance for piano, is at last beginning to build up a discography, which now includes two recordings each of her Concerto stuck for piano and orchestra and the concerto on this new disc. The concerto, a one-movement piece running exactly seven
and a half minutes here, is quite a charmer and is most seductively played. The only real concerto on this record is the one by Ibert, and it is also the most familiar of the four works. Fauré himself (or his amanuensis, Koechlin) orchestrated a small section of his brief Fantaisie, originally for flute and piano, for use in his incidental music for Pelléas et Mélisande. James Galway’s scoring of that section is more like the Sicilienne in Pelléas or Debussy’s treatment of the Satie Gymnopédies, and his setting of the remainder is appropriately light and delicate, with nothing to distract from the eloquence of the solo line and more than a few imaginative little touches for the horns or lower strings. All the performances show the incredible Irishman at the top of his form, with first-rate partnership from Charles Dutoit and transparent sound. A must for flute fanciers and well-nigh irresistible, I think, to anyone with ears. R.F.


Performance: Virtuosic
Recording: Excellent

Having raked in the shekels for their “Greatest Hits of 1720” and its sequel, “Greatest Hits of 1721,” Richard Kapp and his Philharmonia Virtuosi skip to the last decade of the same century to provide a program that amounts to a compendium of musical clichés of the period. It should make a mint. The pieces are intriguingly dressed for the occasion—Mr. Kapp’s settings of Für Elise (as a kind of tiny concerto for piano and orchestra), the Turkish March from The Ruins of Athens, and the Minuet in G prove that those hardy survivors can wear just about anything and still be attractive—but is Chick Corea really the ideal pianist for the Andante from Mozart’s Piano Concerto No. 21 (“Elvira Madigan”)? No matter; at least he plays all the notes, and who knows what love of the classics might be instilled through repeated hearings of these miniature masterpieces! Besides, if Mr. Corea seems a little out of his depth in Mozart, flutist Herbert Laws and trumpeter Edward Carroll acquit themselves superbly in their assignments, and the Philharmonia Virtuosi, thanks in part to the digital recording process, have never sounded more virtuosic.

P.K.

HEINZ HOLLIGER: Chamber Music for Oboe and Strings (see Best of the Month, page 74)

THIS IS A TYPICAL GROUP of visitors to Jack Daniel’s Hollow: there’ll never be another group quite like them.

The threesome on the left came all the way from Mt. Pleasant, Texas. The bearded man and his wife are a California pair. And the folks standing at the back of the bunch are from towns like Norcross, Ga. and Hermann, Mo. There’s no predicting where our next visitor’s group will hail from. But one of these days, we hope it includes you.

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Connoisseur Society temporarily ceased producing discs some two years ago and has concentrated instead on building up a high-quality cassette line, which now includes more than fifty releases. This “Laboratory Series” of cassettes, produced in collaboration with InSync Laboratories, offers not only some of the best of Connoisseur Society’s previous recordings but newly made ones as well, all on Dolby-processed, chromium-dioxide tape and duplicated in real time, not by a high-speed process. The label’s disc recordings of piano performances by Ivan Moravec, Ruth Laredo, and Antonio Barbosa were among the finest sonic achievements prior to the advent of that format too. The state of the art in that format as well, all on Dolby-processed, chromium-dioxide tape and duplicated in real time, not by a high-speed process. The label’s disc recordings of piano performances by Ivan Moravec, Ruth Laredo, and Antonio Barbosa were among the finest sonic achievements prior to the advent of digitally mastered and direct-cut “super-discs,” and the new cassette line represents the state of the art in that format too.

The latest Connoisseur Society/InSync cassettes duplicate some of the repertoire, but not the performances, of earlier releases, and comparisons are instructive. Antonio Barbosa shows far greater stylistic control in his new recording of a number of Liszt’s transcriptions of Schubert songs than Oxana Yablonskaya did on her earlier one, and he also has the benefit of better-defined sonics. As for the music itself, at his best Liszt was able to transform the songs into miniature tone poems (for instance, Gretchen am Spinnrade, Wohin?, Auf dem Wasser zu Singen, and Horch, Horch die Lerche). If his version of Die Forelle seems rather over-elaborate, he made of Der Erlkönig a celebrated virtuoso vehicle (Josef Hofmann made a remarkable recording of it in the early years of this century).

Comparison of Ruth Laredo’s new recording of Scriabin’s Sonata No. 9 with her 1970 one on C-4017 reveals a greater freedom of phrasing and richness of coloration in the remake. Her treatments of several Debussy pieces and of the youthful Prokofiev Sonata No. 3 on the same new cassette are similarly less “uptight” than previously, and her reading of the (in)famous Rachmaninoff C-sharp Minor Prelude is a sonic tour de force.

On his new cassette, David Bar-Illan gives a super-virile treatment to the end movements of Schubert’s Wanderer Fantasy, which suits the work well when it is done as tastefully as it is here. It is really a first-rate performance all around. His performance of the Mendelssohn Rondo Capriccioso is luxurious in the introductory an-dante, perhaps a bit hectic in the virtuosic main part. Impetuosity dominates Bar-Illan’s reading of the Schumann G Minor Sonata too, but this work can also take such an approach easily.

Wanda Wilkomirska, that formidable queen of violinists from Poland, completes her survey of Karol Szymanowski’s music for violin and piano (the Op. 30 Mythes are on InSync C 4010). One hears the Notturno e Tarantella relatively frequently as a virtuoso encore, but the other pieces on this cassette are virtually unknown. Best among them are the excerpts from the great Harnasie ballet score (the Postlude and the Highlanders’ Dance, grouped here under a single title) and the exquisite Berceuse from the same last period of the composer’s creative life. The Op. 23 Romance strikes me as lengthy relative to its musical substance, as does the early D Minor Sonata, for all its violinistic know-how (it seems to be rather a Franckian essay but without the terseness of that composer’s masterly Sonata in A Major).

There is little left to be desired in these cassettes in terms of frequency range and balance, both musically and sonically. My only sonic criticism is that the level may be a bit too high, and there is a slight but audible pre-echo in almost all the new releases—perhaps a characteristic of chromium-dioxide tapes. For the price of $14.98 apiece, however, cassette buyers deserve nothing but the best.

David Hall


SCHUBERT/LISZT: Die Forelle; Der Erlkönig; Auf dem Wasser zu Singen; Du Bist die Ruh; Horch, Horch die Lerche; Wohin?: Frühlingsglaube; Gretchen am Spinnrade; Ave Maria. Antonio Barbosa (piano). CONNOISSEUR SOCIETY/INSYNC © C 4058 $14.98.


Connoisseur Society/InSync cassettes are available for $14.98 plus $1 postage and handling for the first cassette, 25¢ for each additional one, from InSync Laboratories, Inc., 2211 Broadway, New York 10024.
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Kremer's Tchaikovsky

Still in his thirties, and still not everywhere recognized, Gidon Kremer has already become one of the handful of great interpretive musicians of our time. Performing ability he has in abundance, but it becomes more and more evident that his real importance lies in his rethinking of the violin repertoire both as a whole and in its previously most standardized parts. Certainly he has rethought the Tchaikovsky concerto. There are almost limitless fine recordings of this attractive warhorse, but I have never heard another like Kremer's, just released on Deutsche Grammophon.

It seems to me that Kremer has turned his back on the whole Leopold Auer tradition of performing the concerto and given us an interpretation that differs not so much in tempo and dynamics as in the excision of the sages of technical wizardry that do not call attention to itself. The Thirteenth Variation is usually grand, dramatic where it is often mindlessly heroic. There are almost limitless fine recordings of this attractive warhorse, but I have never heard another like Kremer's, just released on Deutsche Grammophon.

Overall, the digital recording seems excellent without calling attention to itself save at those moments when the dynamic range gratefully exceeds what one expects. A startling disc, and certainly a rendition of this work is far more fragile than the concerto and dramatically there is far less at stake.

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All in all, these 4-driver Kossfire speakers were created to fill the void between loudspeakers that cost too much and those that promise too much and deliver too little. The superb performance of Kossfire speakers will amaze you. But then, so will their price. And that's a promise!